

DOCKET NO. 513 - Cellco Partnership d/b/a Verizon Wireless } Connecticut
application for a Certificate of Environmental Compatibility and Public }
Need for the construction, maintenance, and operation of a } Siting
telecommunications facility located at Parcel No. 258-10C-001, Mason }
Hill Road, Litchfield, Connecticut. } Council

June 22, 2023

Findings of Fact

Introduction

1. Cellco Partnership d/b/a Verizon Wireless (Cellco), in accordance with provisions of Connecticut General Statutes (C.G.S.) § 16-50g, *et seq*, applied to the Connecticut Siting Council (Council) on March 1, 2023, for a Certificate of Environmental Compatibility and Public Need (Certificate) for the construction, maintenance, and operation of a 110-foot monopole wireless telecommunications facility at Parcel No. 258-10C-001, Mason Hill Road, Litchfield, Connecticut (refer to Figure 1). (Cellco 1, pp. i, iii)
2. Cellco is a Delaware Partnership with an administrative office located at 20 Alexander Drive, Wallingford, Connecticut. Cellco is licensed by the Federal Communications Commission (FCC) to provide personal wireless communication service in the State of Connecticut. (Cellco 1, p. 2)
3. The party to this proceeding is Cellco. (Record)
4. The purpose of the proposed facility is to provide reliable wireless communications services for Cellco customers in portions of southeast Litchfield and northern Thomaston. (Cellco 1, pp. 6-7, Attachment 6)
5. Under C.G.S. §16-50p(b), there is a presumption of public need for personal wireless services and the Council is limited to consideration of a specific need for any proposed facility to be used to provide such services to the public. (C.G.S. §16-50p(b) (2023))
6. Also under C.G.S. §16-50p(b), the Council must examine whether the proposed facility may be shared with any public or private entity that provides service to the public if the shared use is technically, legally, environmentally and economically feasible and meets public safety concerns, and may impose reasonable conditions as it deems necessary to promote the immediate and shared use of telecommunications facilities and avoid the unnecessary proliferation of such facilities consistent with the state tower sharing policy. (C.G.S. §16-50p(b) (2023); C.G.S. §16-50aa (2023))
7. Pursuant to C.G.S. § 16-50l (b), Cellco provided public notice of the filing of the application that was published in the Republican-American on February 22 and February 23, 2023. (Cellco 1 p. 3; Cellco 2)
8. Pursuant to C.G.S. § 16-50l (b), Cellco provided notice of the application to all abutting property owners by certified mail on February 22, 2023. One certified mail receipt was not received. Cellco resent notice to this abutter by first class mail on April 3, 2023. (Cellco 1 pp. 3-4, Attachment 4; Cellco 4, response 2)
9. On February 28, 2023, Cellco provided notice to all federal, state and local officials and agencies listed in C.G.S. § 16-50l (b). (Cellco 1, Attachment 2)

Procedural Matters

10. Public Act (PA) 22-3 took effect on April 30, 2022. It permits public agencies to hold remote meetings under the Freedom of Information Act (FOIA) and the Uniform Administrative Procedure Act. FOIA defines “meeting” in relevant part as “any hearing or other proceeding of a public agency.” (Council Administrative Notice Item No. 59; C.G.S. §1-200, *et seq.* (2023))
11. PA 22-3 allows public agencies to hold remote meetings provided that:
 - a) The public has the ability to view or listen to each meeting or proceeding in real-time, by telephone, video, or other technology;
 - b) Any such meeting or proceeding is recorded or transcribed and such recording or transcript shall be posted on the agency’s website within seven (7) days of the meeting or proceeding;
 - c) The required notice and agenda for each meeting or proceeding is posted on the agency’s website and shall include information on how the meeting will be conducted and how the public can access it any materials relevant to matters on the agenda shall be submitted to the agency and posted on the agency’s website for public inspection prior to, during and after the meeting; and
 - d) All speakers taking part in any such meeting shall clearly state their name and title before speaking on each occasion they speak.(Council Administrative Notice Item No. 59)
12. Upon receipt of the application, on March 2, 2023 the Council sent a letter to the Town of Litchfield (Town) and the Town of Thomaston, which is located within 2,500 feet of the proposed facility site, as notification that the application was received and is being processed, in accordance with C.G.S. §16-50gg. No comments from these municipalities were received. (Record)
13. Local zoning regulations do not apply to facilities under the exclusive jurisdiction of the Council. Pursuant to C.G.S §16-50x, the Council has exclusive jurisdiction over telecommunications facilities throughout the state. It shall consider any location preferences provided by the host municipality under C.G.S §16-50gg as the Council shall deem appropriate. (C.G.S. §16-50x (2023))
14. During a regular Council meeting on March 16, 2023, the application was deemed complete pursuant to Regulations of Connecticut State Agencies (R.C.S.A.) § 16-50/-1a and the public hearing schedule was approved by the Council. (Record)
15. Pursuant to C.G.S. § 16-50m, on March 17, 2023, the Council sent a letter to the Towns of Litchfield and Thomaston to provide notification of the scheduled public hearing via Zoom conferencing and to invite the municipalities to participate. (Record)
16. Pursuant to C.G.S. § 16-50m, the Council published legal notice of the date and time of the remote public hearing via Zoom conferencing in the Republican-American on March 18, 2023. (Record; Transcript 1 – May 4, 2023 - 2:00 p.m. [Tr. 1], p. 4)
17. The Council’s Hearing Notice did not refer to a public field review of the proposed site. Field reviews are neither required by statute nor an integral part of the public hearing process. The purpose of a field review is an investigative tool to acquaint members of a reviewing commission with the subject property. (Record; *Manor Development Corp. v. Conservation Comm. of Simsbury*, 180 Conn. 692, 701 (1980); *Grimes v. Conservation Comm. of Litchfield*, 243 Conn. 266, 278 (1997))

18. On March 20, 2023, in lieu of an in-person field review of the proposed site, the Council requested that Cellco submit photographic documentation of site-specific features into the record intended to serve as a “virtual” field review of the site. On April 10, 2023, Cellco submitted such information in response to the Council’s interrogatories. (Record; Cellco 4, Response 34; Tr.1, 22-23)
19. On March 15, 2023, pursuant to C.G.S. §16-50o, Cellco filed a Motion for Protective Order related to the disclosure of the monthly rent and financial terms contained within the lease agreement for the proposed site. (Cellco 3)
20. On March 30, 2023, the Council issued a Protective Order related to the disclosure of the monthly rent and financial terms contained within the lease agreement for the proposed site, pursuant to C.G.S. §1-210(b) and consistent with the Conclusions of Law adopted in Council Docket 366. (Record)
21. Pursuant to C.G.S. §16-50p(g), the Council shall in no way be limited by Cellco already having acquired land or an interest therein for the purpose of constructing the proposed facility. (C.G.S. §16-50p(g) (2023); *Corcoran v. Conn. Siting Council*, 284 Conn. 455 (2007))
22. The Council’s evaluation criteria under C.G.S. §16-50p does not include the consideration of property ownership or property values nor is the Council otherwise obligated to take into account the status of property ownership or property values. (Tr. 2, p. 9; Tr. 3, p. 6; C.G.S. §16-50p (2023); *Westport v. Conn. Siting Council*, 47 Conn. Supp. 382 (2001); *Goldfisher v. Conn. Siting Council*, 95 Conn. App. 193 (2006))
23. On March 29, 2023, the Council held a pre-hearing conference on procedural matters for parties and intervenors to discuss the requirements for pre-filed testimony, exhibit lists, administrative notice lists, expected witness lists and filing of pre-hearing interrogatories. Procedures for the public hearing via Zoom remote conferencing were also discussed. (Council Pre-Hearing Conference and Remote Hearing Procedure Memoranda, dated March 22, 2023)
24. In compliance with R.C.S.A. § 16-50j-21, on April 17, 2023 Cellco installed a four-foot by six-foot sign along Mason Hill Road in the vicinity of the proposed access drive to the site. The sign presented information regarding the proposed telecommunications facility and the Council’s public hearing. (Cellco 5; Tr. 1, p. 4)
25. Pursuant to C.G.S. § 16-50m, the Council gave due notice of a public hearing to be held on May 4, 2023, beginning with the evidentiary session at 2:00 p.m. and continuing with the public comment session at 6:30 p.m. via Zoom remote conferencing. The Council provided information for video/computer access or audio only telephone access. (Council’s Hearing Notice dated March 17, 2023; Tr. 1, p. 1; Transcript 2 – May 4, 2023 - 6:30 p.m. [Tr. 2], p. 78)
26. The 6:30 p.m. public comment session afforded interested persons the opportunity to provide oral limited appearance statements. Interested persons were also afforded an opportunity to provide written limited appearance statements at any time up to 30 days after the close of the evidentiary record. Limited appearance statements in this proceeding, whether oral or written, were not provided under oath nor subject to cross examination. (Tr. 1, pp. 5-6; Tr. 2, p. 80; C.G.S. §16-50n(f) (2023))
27. During the public comment session of the Council’s hearing held on May 4, 2023, no members of the public made oral limited appearance statements about the proposed facility. (Tr. 2, p. 80)

28. In compliance with PA 22-3:
- a) The public had the ability to view and listen to the remote public hearings in real-time, by computer, smartphone, tablet or telephone;
 - b) The remote public hearings were recorded and transcribed, and such recordings and transcripts were posted on the Council's website on May 4, 2023 and May 11, 2023; respectively;
 - c) The Hearing Notice, Hearing Program, Citizens Guide for Siting Council Procedures and Instructions for Public Access to the Remote Hearings were posted on the Council's website;
 - d) Prior to, during and after the remote public hearings, the record of the proceeding has been, and remains, available on the Council's website for public inspection; and
 - e) The Council, parties and intervenors provided their information for identification purposes during the remote public hearings.
- (Hearing Notice dated March 17, 2023; Tr. 1; Tr. 2; Record)
29. The purpose of discovery is to provide the Council, parties and intervenors access to all relevant information in an efficient and timely manner to ensure that a complete and accurate record is compiled. (R.C.S.A. §16-50j-22a (2023))
30. In an administrative proceeding, irrelevant, immaterial or unduly repetitious evidence shall be excluded, and an agency has the right to believe or disbelieve the evidence presented by any witness, even an expert, in whole or in part. (C.G.S. §4-178 (2023); *Dore v. Commissioner of Motor Vehicles*, 62 Conn. App. 604 (2001); R.C.S.A. §16-50j-25).
31. Pursuant to C.G.S. §16-50n(f), at the conclusion of the hearing session held on May 4, 2023, the Council closed the evidentiary record for Docket 513 and established June 3, 2023 as the deadline for public comments and the submission of briefs and proposed findings of fact. (Record)
32. Constitutional principles permit an administrative agency to organize its hearing schedule so as to balance its interest in reasonable, orderly and non-repetitive proceedings against the risk of erroneous deprivation of a private interest. It is not unconstitutional for the Council, in good faith, to balance its statutory time constraints against the desire of a party, intervenor or CEPA intervenor for more time to present their objections to a proposal. (*Concerned Citizens of Sterling v. Conn. Siting Council*, 215 Conn. 474 (1990); *Pet v. Dept. of Public Health*, 228 Conn. 651 (1994); *FairwindCT, Inc. v. Conn. Siting Council*, 313 Conn. 669 (2014))
33. On June 2, 2023, Cellco submitted a post-hearing brief. (Record)

State Agency Comment

34. Pursuant to C.G.S. § 16-50j (g), on March 17, 2023, 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); DOT; Connecticut Airport Authority (CAA); Department of Emergency Services and Public Protection (DESPP); and State Historic Preservation Office (SHPO). (Record)

35. On March 22, 2023, the Council received comments from CEQ related to visibility, water quality and wildlife.¹ Wildlife, wetlands, and visibility, among other environmental concerns, are addressed in the Environmental Considerations section of this document, pursuant to C.G.S. §16-50p. (Record; C.G.S. §16-50p (2023))
36. On March 22, 2023, the Council received comments from the CAA² related to the deployment of 5G C-band technology and coordination with the Federal Aviation Administration (FAA). FAA concerns are addressed in the Public Health and Safety section of this document, pursuant to C.G.S. §16-50p. (Record; C.G.S. §16-50p (2023))
37. While the Council is obligated to consult with and solicit comments from state agencies by statute, the Council is not required to abide by the comments from state agencies. (*Corcoran v. Conn. Siting Council*, 284 Conn. 455 (2007)).

Municipal Consultation

38. Pursuant to C.G.S. § 16-50l(f), Cellco commenced the 90-day pre-application municipal consultation process on October 27, 2022, by submitting a Technical Report to the Litchfield First Selectperson. (Cellco 1, p. 20; Attachment 17; Cellco 1a)
39. On December 2, 2022, at the request of the Town, Cellco participated in a hybrid Public Information Meeting (PIM) at Town Hall, that was attended by Town officials and residents (approximately 20 people total). Notice of the PIM was published in the Republican-American and was sent to all abutting property owners. Concerns discussed at the PIM included, but were not limited to, radio frequency emissions, property values, visibility, site alternatives, and safety issues. (Cellco 1, p. 20; Attachment 17; Cellco 1a; Cellco 4, response 4)
40. On January 9, 2023, Cellco conducted a balloon float as part a Visual Assessment of the facility. Residents who gave their contact information at the PIM were notified by email of the balloon float. (Cellco 1, p. 20, Attachment 9; Cellco 4, response 4)
41. On January 23, 2023, Cellco submitted information regarding radio-frequency emissions to the Chairperson of the Town Planning and Zoning Commission. (Cellco 1, p. 20, Attachment 17)

Public Need for Service

42. 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 – Telecommunications Act of 1996)
43. In issuing cellular licenses, the Federal government has preempted the determination of public need for cellular service by the states and has established design standards to ensure technical integrity and nationwide compatibility among all systems. (Council Administrative Notice Item No. 4 – Telecommunications Act of 1996)

¹[CEQ Comments dated March 22, 2023](#)

²[CAA Comments dated March 22, 2023](#)

44. 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 – Telecommunications Act of 1996)
45. 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 – Telecommunications Act of 1996)
46. 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 – Telecommunications Act of 1996)
47. 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 – Telecommunications Act of 1996)
48. In December 2009, President Barack Obama recognized cell phone towers as critical infrastructure vital to the United States. The Department of Homeland Security, in collaboration with other federal stakeholders, state, local, and tribal governments, and private sector partners, has developed the National Infrastructure Protection Plan (NIPP) to establish a framework for securing resources and maintaining resilience from all hazards during an event or emergency. (Council Administrative Notice Item No. 11 –Presidential Proclamation 8460, Critical Infrastructure Protection)
49. In February 2012, Congress adopted the Middle Class Tax Relief and Job Creation Act (also referred to as the Spectrum Act) to advance wireless broadband service for both public safety and commercial users. The Act established the First Responder Network Authority (FirstNet) 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 – Middle Class Tax Relief and Job Creation Act of 2012)
50. 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 – Presidential Executive Order 13616, Accelerating Broadband Infrastructure Development; Council Administrative Notice Item No. 23 – FCC Wireless Infrastructure Report and Order)

51. Pursuant to Section 6409(a) of 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. (Council Administrative Notice Item No. 8 – Middle Class Tax Relief and Job Creation Act of 2012; Council Administrative Notice Item No. 23 – FCC Wireless Infrastructure Report and Order)
52. In June 2020, the FCC issued a declaratory ruling that heights of existing towers located outside of the public right-of-way could increase by up to 20 feet plus the height of a new antenna without constituting a substantial change in the physical dimensions of a tower. (Council Administrative Notice Item No. 27)
53. In November 2020, the FCC issued an order that ground excavation or deployment up to 30 feet in any direction beyond the site boundary of existing towers located outside of the public right-of-way does not constitute a substantial change in the physical dimensions of a tower (Council Administrative Notice Item No. 28)
54. 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 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. (C.G.S. §16-50aa (2023))
55. On March 17, 2023, the Council sent correspondence to other telecommunications carriers requesting that carriers interested in locating on the proposed facility in the foreseeable future to notify the Council by April 27, 2023. No carriers responded to the Council's solicitation. (Record)
56. The facility would be designed to accommodate four wireless carriers and local emergency service providers and municipal antennas. (Cellco 1, p.12)
57. The Town did not express an interest in co-locating emergency services antennas on the proposed facility. (Tr. 1, p. 29)

Cellco's Existing and Proposed Wireless Services

58. Cellco has a significant coverage deficiency in its wireless communications network in the Northfield area of Litchfield and the northern portion of Thomaston. (Cellco 1, pp. 6-7, Attachment 6)
59. Roads in the area without adequate service include, but are not limited to, State Route 254 (Northfield Road), Mason Hill Road, Hopkins Road, Main Street, and Knife Shop Road. (Cellco 1, Attachment 6)
60. Cellco currently operates five facilities within a four-mile radius of the proposed site. None of these facilities provide adequate coverage to the proposed service area (refer to Figure 2). (Cellco 1, pp. 8-9; Attachment 6, Attachment 8)
61. Cellco proposes to operate 700 MHz, 850 MHz, 1900 MHz, 2100 MHz and 3700 MHz frequencies from a tower height of 105 feet above ground level (agl). The 3700 MHz frequency is capable of supporting 5G services. (Cellco 1, p. 8, Attachment 6)

62. The 700 MHz frequency handles most of Cellco’s wireless traffic and has the largest coverage footprint. All of the frequencies transmit voice and data services. Cellco’s network hands off customers seamlessly between frequencies for cell site load balancing. (Cellco 1, Attachment 6; Cellco 4, response 15)
63. Cellco designs its network using a -95 dB Reference Signal Received Power (RSRP) standard for reliable in-vehicle service and -85 dB RSRP standard for reliable in-building service. (Cellco 1, p. 7, Cellco 4, response 16)
64. Cellco’s installation on the tower at 110 feet agl would provide the following wireless services:

Street Name	700 MHz coverage in miles		850 MHz coverage in miles		1900 MHz coverage in miles		2100 MHz coverage in miles		3700 MHz coverage in miles	
	RSRP -85 dBm	RSRP -95 dBm	RSRP -85 dBm	RSRP -95 dBm	RSRP -85 dBm	RSRP -95 dBm	RSRP -85 dBm	RSRP -95 dBm	RSRP -85 dBm	RSRP -95 dBm
RTE 254	2	3.6	1.36	2.9	0.28	1.23	0	0.53	0.07	1
Mason Hill Rd	0.51	0.57	0.45	0.5	0.35	0.48	0.2	0.39	0.5	0.6
Overall Coverage Footprint (Square Miles)	2.55	5.79	1.56	4.02	0.33	1.16	0.12	0.66	0.17	0.93

(refer to Figure 3 for 700 MHz service). (Cellco 1, p. 8)

65. Propagation models of the proposed site indicates several areas approximately 0.2-0.5 miles south/southwest of the proposed site, east of Route 254, would not have reliable service due to hilly terrain. These areas are located in a deep valley associated with Northfield Brook and is comprised of property owned by the US Army Corps of Engineers (USACE) for flood control. (Cellco 1, Attachment 6; Council Administrative Notice Item No. 80; Tr. 1, pp. 45-46, 64-65)
66. In addition to providing reliable service to the surrounding area, the proposed site would also provide capacity relief to Cellco’s existing Bethlehem NE CT facility, approximately 4.4 miles west of the site. This site is currently operating in-exhaust in the Alpha sector in its low band frequencies (700 MHz and 850 MHz) which partially serves portions of State Route 254. (Cellco 1, Attachment 6; Cellco 4, response 21)
67. Lowering the height of Cellco’s proposed antennas would reduce the coverage footprint, resulting in nonreliable service to areas of State Route 254 and local roads to the south and east of the site. (Cellco 4, response 17)

Site Selection

68. Cellco issued a search ring for the site in October 2021. (Cellco 1, Attachment 8)
69. There are no existing towers, buildings, or other structures within the search area that would meet Cellco’s coverage objectives. (Cellco 1, Attachment 8)
70. An Eversource Energy (Eversource) right-of-way (ROW) for a 115-kilovolt (kV) electric transmission line and associated transmission structures is located immediately north of the site. Collocation on the existing transmission structures is not feasible due to access and maintenance constraints, as well as disruptions to Eversource’s operation of the electric transmission system. In addition, the transmission towers in the ROW are too short to use from a radio-frequency

perspective and would require an approximate 18-foot extension to achieve coverage objectives. (Cellco 1, Attachment 8; Cellco 4 response 7; Tr. 1, p. 24)

71. Cellco investigated 11 sites within their search area as follows:

- a) **Mason Hill Road, Litchfield** (the proposed site): a 8.1-acre parcel Cellco selected as the proposed site and entered into a lease agreement with the property owner;
- b) **58 Old Northfield Road, Litchfield**: a 5.5-acre residential parcel. Landowner did not respond to letter inquiry;
- c) **12 Lattin Hill Road, Litchfield**: After initial discussion, the landowner did not respond further inquires. Additionally, the site was ultimately rejected by Cellco's radio frequency engineer;
- d) **Old Northfield Road (parcel 256-017-025), Litchfield**: a 6.8-acre vacant parcel. After initial discussions with the landowner, the site was rejected by Cellco's radio frequency engineer;
- e) **728 Northfield Road, Litchfield**: a 11.2-acre residential parcel. After initial discussions with the landowner, the site was rejected by Cellco's radio frequency engineer;
- f) **74 Knife Shop Road, Litchfield**: a 10.5-acre residential parcel. Landowner did not respond to letter inquiry;
- g) **170 Mason Hill Road, Litchfield**: a 25.4-acre vacant parcel. After several discussions with the landowner, lease terms could not be agreed upon;
- h) **670 Walnut Hill Road, Thomaston**: a 28.2-acre residential parcel. Landowner did not respond to letter inquiry;
- i) **528 Walnut Hill Road, Thomaston**: a 2.6-acre residential parcel. Landowner did not respond to letter inquiry;
- j) **230 Litchfield Street, Thomaston**: a 43.6-acre residential parcel. After initial discussions with the landowner, the site was rejected by Cellco's radio frequency engineer; and
- k) **158 Main Street, Thomaston**: a 1.5-acre parcel containing an existing lattice tower operated by the Police Department. After initial discussions with the Town of Thomaston regarding potential tower sharing, the site was rejected by Cellco's radio frequency engineer due to redundant coverage with other Cellco sites.

(Cellco 1, Attachment 8; Tr. 1, p. 55)

72. The Council has no authority to compel a parcel owner to sell or lease property, or portions thereof, for the purpose of siting a facility nor shall the Council be limited in any way by the applicant having already acquired land or an interest therein for the purpose of constructing a facility. (*Corcoran v. Conn. Siting Council*, 284 Conn. 455 (2007); C.G.S. §16-50p(g)(2023))

73. For any site to be considered a feasible and prudent alternative to a proposed facility site, it must be available to host the proposed facility. The Council has no authority to force a property owner to agree to sell or lease land, or any portion thereof, as a primary or alternative location for a proposed facility. (*Corcoran v. Conn. Siting Council*, 284 Conn. 455 (2007))

Small Cells and Distributed Antenna Systems

74. A series of small cells or a Distributed Antenna System (DAS) to serve the area is not cost effective or feasible given the number of facilities required and encumbrances on existing utility poles such as transformers, risers, and streetlights that would limit a carrier's ability to use the pole. While the number of small cells that would be required to provide comparable service is unknown, it is expected to be a large number given the size of the service area. (Cellco 4, response 8)

75. Small cell limitations include a reduction in the number of frequencies deployed, the lack of structure sharing with other carriers, and the lack of space for emergency backup power. (Cellco 4, response 8)
76. To provide wireless service to the proposed service area would require a significant number of small cell deployments either on existing utility poles or on new utility poles along roadways or on private parcels throughout the proposed service area and would not be economically viable as a replacement for a single tower site. Small cell equipment at each pole would include antennas, radio and electrical equipment, a meter box, and cabling. The estimated cost of each small cell deployment is between \$70,000 to \$75,000. (Cellco 4, response 8)

Facility Description

77. Pursuant to R.C.S.A. §16-50j-2a(29), “Site” means a contiguous parcel of property with specified boundaries, including, but not limited to, the leased area, right-of-way, access and easements on which a facility and associated equipment is located, shall be located or is proposed to be located. (R.C.S.A. §16-50j-2a(29) (2023))
78. The proposed site is located on an approximate 8.17-acre undeveloped, forested parcel (No. 258-10C-001) located on the south side of Mason Hill Road in Litchfield (refer to Figure 1). (Cellco 1, Attachment 1)
79. The host parcel is zoned rural-residential. The Eversource electric transmission line ROW traverses the central portion of the host parcel in a north-south orientation. The ROW contains three 115-kV transmission lines in a 185-foot wide managed portion of the 250-foot wide ROW. (Cellco 1, p. 18, Attachment 1, Cellco 6, p. 1; Council Administrative Notice Item No. 35)
80. The Litchfield-Thomaston boundary comprises the southern property boundary line. The landowner owns an abutting, 30-acre property to the southeast, located in Thomaston. (Cellco 1, p. 4, Attachment 1)
81. Land use immediately surrounding the site consists of rural residential and vacant land. (Cellco 1, Attachment 1)
82. The Application proposed a site within the wooded, eastern portion of the Eversource ROW, 10 feet from its eastern boundary. (Cellco 1, Attachment 1; Cellco 4, response 29)
83. After determining Eversource would not allow a tower within the ROW, Cellco shifted the location of the tower 55 feet northeast of the originally proposed location and out of the ROW. This new location is referred to as the Alternate Location. It is located in the wooded, eastern portion of the parcel and south of Mason Hill Road (refer to Figure 4). (Cellco 6, pp. 1-3, Attachment 1)
84. Cellco removed the original location of the facility from Council consideration. (Tr. 1, p. 11)
85. The proposed facility would consist of a 110-foot monopole. The tower would be designed to support four wireless carrier antennas as well as municipal emergency services antennas. (Cellco 1, p. 12; Cellco 6, p. 3)
86. Cellco would install nine antennas and six remote radio heads at a tower centerline height of 105 feet agl (refer to Figure 5). (Cellco 1, Attachment 1)

87. A 2,355 square foot equipment compound would be constructed at the base of the tower. The south, east and west sides of the compound would be supported by a three to five-foot high modular block retaining wall (refer to Figure 6). (Cellco 6, p. 2, Attachment 1)
88. Within the compound, Cellco would install equipment cabinets, covered with a steel canopy, on a 10-foot by 16-foot concrete pad. (Cellco 1, Attachment 1; Cellco 6, Attachment 1)
89. The proposed equipment compound would be surrounded by an eight-foot high chain link fence. The proposed compound fence would have a locked, double swing vehicle access gate. (Cellco 1, Attachment 1; Cellco 6, Attachment 1)
90. Access to the site would be from a new approximately 70 foot long, 15-foot wide, access drive extending from Mason Hill Road to the compound. The access drive would descend at a 25-30 percent grade before leveling along the north edge of the compound. The steep portion of the access drive, approximately 40 feet, would be paved to control erosion and stormwater run-off. The remaining, level portion would be composed of gravel. (Cellco 6, Attachment 1; Tr. 1, pp. 12-16)
91. Cellco intends to construct a gravel compound vehicle turn around area that extends onto the Eversource ROW by 30 feet. Cellco would need to obtain an agreement from Eversource to use the existing ROW for the turnaround area. In the event an agreement could not be reached, Cellco could construct the turnaround area to the north of the access gate. (Cellco 4, response 13, Attachment 1; Tr. 1, pp. 18-19, 38-39, 51)
92. Power and telco utilities would extend underground from a meter board adjacent to the compound gate and along the eastern edge of the access drive to a new utility pole on the south side of Mason Hill Road. An overhead line would extend from the new pole to an existing pole located on the north side of the road. (Cellco 6, Attachment 1)
93. An access drive using existing gravel roads within the managed portion of the Eversource ROW and a new gravel drive extension through wooded areas of the ROW could be developed but this alternative would be more disruptive than the proposed route due to its proximity to a watercourse, its overall length and the amount of tree clearing required. (Cellco 1, Attachment 1; Tr. 1, pp. pp. 17-18, 39-40)
94. The site does not use water or require a water connection. (Cellco 1, Attachment 1)
95. Development of the site would disturb less than an acre of land (approximately 0.15 acre). Construction would require 218 cubic yards of fill and 25 cubic yards of cut. (Cellco 6, Attachment 1; Tr. 1, pp. 19-20)
96. The proposed Alternate Location tower is approximately 37 feet from the west edge of the Eversource ROW and 141 feet from the nearest transmission line. (Cellco 6, revised response 29)
97. The nearest property boundary from the Alternate Location compound is approximately 40 feet to the north (Mason Hill Road right-of-way). The paved portion of Mason Hill Road is approximately 75 feet to the north. (Cellco 6, Attachment 1)
98. The nearest residence from the Alternate Location tower is approximately 350 feet to the north at 250 Mason Hill Road. (Cellco 6, revised response 12)
99. There are approximately 36 residences within 1,000 feet of the proposed tower. (Cellco 1, p. 14)

100. A geotechnical survey would be performed prior to construction to evaluate existing subsurface conditions within the project area as part of the Development and Management (D&M) Plan. The geotechnical survey would be used to design the tower and foundation and potential stormwater controls. It would involve using a track-mounted boring rig. Some minor tree/brush clearing may be required to allow access for the drill rig to the boring locations. (Tr. 1, pp. 20-21)
101. A D&M Plan is a condition of a Council final decision that must be met prior to commencement of construction and constitutes the “nuts and bolts” of a facility approved by the Council. (C.G.S. §16-50p (2023); R.C.S.A. §16-50j-75, *et seq.*; *Town of Westport v. Conn. Siting Council*, 260 Conn. 266 (2002))
102. Cellco does not anticipate blasting to construct the site. If ledge is encountered, the tower foundation could be installed using core drilling or rock anchors. (Tr, 1, p. 21)
103. Site construction would commence following Council approval of a D&M Plan for the facility. Cellco anticipates the facility would be constructed within 6 to 8 weeks. After construction is completed, site testing/integration would take approximately 2 weeks. (Cellco 1, p. 22)
104. A copy or notice of the filing of a D&M Plan with the Council, is required to be provided to the service list for comment. (R.C.S.A. §16-50j-75(e))
105. The Council has statutory authority to order a D&M Plan and the Council’s D&M Plan process has been upheld by the Connecticut Supreme Court. (C.G.S. §16-50p (2023); *FairwindCT, Inc. v. Conn. Siting Council*, 313 Conn. 669 (2014))
106. Once operational, Cellco would access the site for periodic maintenance visits. (Cellco 1, p. 8)
107. The estimated cost of the proposed facility is:
- | | |
|-------------------------------------|-------------------------|
| Tower and Foundation | \$150,000 |
| Radio equipment/antennas | \$390,000 |
| Emergency Back-up Generator | \$ 25,000 |
| Miscellaneous/Utilities | \$ 25,000 |
| <u>Total Estimated Costs</u> | <u>\$590,000</u> |
- (Cellco 1, p. 22)
108. Cellco would recover the construction cost of the facility from its business services and customer subscriptions. (Cellco 4, response 3)
109. Neither the Project, nor any portion thereof, is proposed to be undertaken by state departments, institutions or agencies or to be funded in whole or in part by the state through any grant or contract. (Cellco 4, response 1; C.G.S. §22a-1, *et seq.* (2023))

Public Health and Safety

110. 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 - Wireless Communications and Public Safety Act of 1999)

111. The proposed facility would be in compliance with the requirements of the 911 Act and would provide Enhanced 911 services. (Cellco 1, p. 5)
112. Wireless carriers have voluntarily begun supporting text-to-911 services nationwide in areas where municipal Public Safety Answering Points (PSAP) 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 Item No. 22 – FCC Text-to-911: Quick Facts & FAQs)
113. Cellco's proposed equipment installations would be capable of supporting text-to-911 service. (Cellco 4, response 25)
114. 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 enabled mobile devices to receive geographically-targeted, text 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 – FCC WARN Act)
115. Cellco's proposed equipment would provide WEA services. (Cellco 4, response 26)
116. Pursuant to C.G.S. §16-50p(a)(3)(G), the tower would be constructed in accordance with the current Connecticut Building Code for tower design in accordance with the currently adopted International Building Code. (Cellco 1, Attachment 1)
117. The tower would be designed to the Telecommunications Industry Association 222-H Structural Standards for Steel Antenna Towers and Antenna Supporting Structures. These standards require that the tower, antennas and antenna-mounts be designed to withstand a wind speed of 151 to 161 mph. (Cellco 1, Attachment 1)
118. The tower would not require notice to the Federal Aviation Administration or constitute an obstruction or hazard to air navigation and therefore would not require any obstruction marking or lighting. (Cellco 1, p. 21)
119. Cellco's equipment cabinets would be equipped with silent intrusion and system alarms. The facility would be visited monthly for maintenance activities. The equipment compound would be enclosed by an eight-foot fence with locked, gated access. (Cellco 4, response 9)
120. The tower setback radius* for the proposed Alternate Location would extend onto the Eversource ROW on the host parcel by approximately 40 feet. Cellco could design the tower yield point at the 70-foot level of the tower to ensure the tower setback radius remains outside of the boundaries of the ROW. (Tr 1, p. 41-42)
*The horizontal distance equal to the tower height that extends radially from the center of the tower.
121. Operational noise from the facility would comply with DEEP Noise Control Regulations. The equipment cabinet would emit noise levels <60 dBA at a distance of five feet. The associated cabinet cooling fans would emit some noise, but at relatively low levels. (R.C.S.A. §22a-69-1.8; Cellco 4, response 28; Tr. 1, pp. 43-44)

122. Construction noise is exempt from the DEEP Noise Control Regulations §22a-69-1.8(g), which includes, but is not limited to, “physical activity at a site necessary or incidental to the erection, placement, demolition, assembling, altering, blasting, cleaning, repairing, installing, or equipping of buildings or other structures, public or private highways, roads, premises, parks, utility lines, or other property.” (R.C.S.A. §22a-69-1.8(g))
123. There would be no nighttime lighting of the facility except for a work light for the equipment cabinets that are operated by motion or a timer switch. (Tr. 1 pp. 28-29)
124. The proposed site is not located within a Federal Emergency Management Agency designated 100-year or 500-year flood zone. (Cellco 1, p. 20)
125. The site is not within a state-designated aquifer protection area. (Cellco 4, response 27)
126. The cumulative worst-case maximum power density from the radio frequency emissions from the operation of Cellco’s antennas is approximately 10.5% of the standard for the General Public/Uncontrolled Maximum Permissible Exposure, as adopted by the FCC, at a horizontal distance of approximately 375 feet from the tower using the proposed antenna configuration. This calculation was based on methodology prescribed by the FCC Office of Engineering and Technology Bulletin No. 65E, Edition 97-01 (August 1997) using far-field methodology that assumes all channels would be operating simultaneously, which creates the highest possible power density levels. (Cellco 1, p. 17, Attachment 15; Council Administrative Notice Item No. 2 – FCC OET Bulletin No. 65)

Emergency Backup Power

127. 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. (Final Report of the Two Storm Panel, (Council Administrative Notice Item No. 55)
128. Consistent with the findings and recommendations of the Panel, and in accordance with C.G.S. §16-50//, the Council, in consultation and coordination with DEEP, DESPP and PURA, 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. (Council Administrative Notice Item No. 34 – Council Docket No. 432)
129. Commercial Mobile Radio Service (CMRS) providers are licensed by and are under the jurisdiction and authority of the FCC. At present, no standards for backup power for CMRS providers have been promulgated by the FCC. (Council Administrative Notice Item No. 34 – Council Docket No. 432)
130. For backup power, Cellco proposes a 30-kilowatt propane fueled emergency backup generator. A 500-gallon propane tank would be installed on a concrete pad within the compound, capable of supplying backup power for 7.7 days before refueling is required. The storage tank would be installed to include a 10-foot radius for a “no spark” safety zone. (Cellco 1, Attachment 1; Cellco 4, response 22, response 23)
131. Cellco would also install an eight-hour capacity battery as a backup power source. (Cellco 4, response 23)

132. Cellco's generator would be tested twice a month during daytime hours. (Tr. 1, p. 35)
133. 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 DEEP Noise Control Regulations. (R.C.S.A. §22a-69-1.8)

Environmental Considerations

Air and Water Quality

134. Operation of the proposed facility would not produce air emissions, excluding operation of the emergency backup generator. (Cellco 1, p. 21)
135. Pursuant to R.C.S.A. §22a-174-3b, the generator would be managed to comply with DEEP's "permit by rule" criteria and would comply with air emissions. Therefore, the generator would be exempt from general air permit requirements. (Cellco 1, pp. 21-22; R.C.S.A. §22a-174-3b)
136. The Inland Wetlands and Watercourses Act (IWWA), C.G.S. §22a-36, *et seq.*, contains a specific legislative finding that the inland wetlands and watercourses of the state are an indispensable and irreplaceable but fragile natural resource with which the citizens of the state have been endowed, and the preservation and protection of the wetlands and watercourses from random, unnecessary, undesirable and unregulated uses, disturbance or destruction is in the public interest and is essential to the health, welfare and safety of the citizens of the state. (C.G.S. §22a-36, *et seq.* (2023))
137. The IWWA grants regulatory agencies with the authority to regulate upland review areas in its discretion if it finds such regulations necessary to protect wetlands or watercourses from activity that will likely affect those areas. (C.G.S. §22a-42a (2023))
138. The IWWA forbids regulatory agencies from issuing a permit for a regulated activity unless it finds on the basis of the record that a feasible and prudent alternative does not exist. (C.G.S. §22a-41 (2023))
139. A wetland inspection, limited to the host parcel, was conducted on August 11, 2022. It identified two wetland areas; one in the wooded, eastern portion of the host parcel (Wetland 1) and the other to the west of the Eversource ROW (Wetland 2). No potential vernal pools were identified on the host parcel. (Cellco 1, Attachment 11)
140. The proposed Alternate Location is located 33 feet west of Wetland 1. The construction limit of disturbance is approximately 25 feet from Wetland 1. (Cellco 1, Attachment 11)
141. Wetland 1 is a forested wetland associated with hillside seeps. An intermittent watercourse is located along the south extent of the wetland associated with a pond on an adjacent parcel. (Cellco 1, Attachment 11)
142. To mitigate potential effects to Wetland 1, Cellco would implement a wetland protection plan during construction that includes an independent environmental compliance monitor to ensure erosion and sedimentation control measures are installed and maintained, contractor training, provisions for fuel storage and spill remediation, herbicide, pesticide and salt restrictions, and site inspection reporting. (Cellco 6, p. 3; Cellco 1, Attachment 11; Tr. 1, pp. 65-67)

143. After construction is completed, Cellco would implement a wetland buffer enhancement plan that includes the planting of native forest understory shrubs and the application of a wetland seed mix for disturbed soils along the south and east sides of the compound to enhance wildlife and water quality. To minimize disturbance in the buffer area, plantings would be installed by hand. Plantings would be inspected after one year and replaced, if necessary. (Cellco 6, Attachment 1, Attachment 3; Tr. 1, pp. 59-61)
144. Stormwater at the site would be controlled by the installation of a riprap-lined swale along the northwest side of the paved portion of the access road. The access road would be pitched towards the swale to direct concentrated stormwater away from the wetland. The swale would discharge to a riprap level spreader on the north side of the compound. Final details of the swale and level spreader would be provided in the D&M Plan. (Cellco 6, Attachment 1; Tr. 1, pp. 14-17, 61)
145. Cellco would establish erosion and sedimentation controls consistent with the *2002 Connecticut Guidelines for Soil Erosion and Sediment Control*. (Cellco 1, Attachment 11)
146. Pursuant to C.G.S. §22a-430b, a DEEP Stormwater Permit is required for any disturbance greater than 1 acre. The construction LOD for the proposed Alternate Location is approximately 5,100 square feet, therefore the project would not require a DEEP Stormwater Permit. (C.G.S. §22a-430b; DEEP General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities. (Cellco 6, Attachment 1; DEEP-WPED-GP-015)
147. The proposed Alternate Location is not located within an aquifer protection area or public water supply watershed. (Cellco 4, response 27)

Forests and Parks

148. Humaston Brook State Park is approximately 0.4 miles west of the site at its closest point. There would be no direct impacts to the park. (Cellco 6, Attachment 2; Council Administrative Notice Item No. 82)
149. Approximately 9 trees with a diameter of six inches or greater at breast height would be removed to construct the Alternate Location. (Cellco 6, Attachment 1; Tr. 1, pp. 67-68)

Fish and Wildlife

150. DEEP Natural Diversity Database (NDDB) maps show approximate locations of state-listed endangered, threatened, and special concern species and can be used to find areas of potential conservation concern. (Council Administrative Notice Item No. 76)
151. The proposed Alternate Location is not located within a NDDB buffer area, and thus, Cellco did not consult with the DEEP NDDB program. (Cellco 1, p. 15; Council Administrative Notice Item No. 76)
152. The site is within the range of the northern long-eared bat (NLEB), a federally-listed endangered species and state-listed endangered species. There are no known NLEB hibernacula or known maternity roost trees within 0.25 miles and 150-feet, respectively, of the proposed Alternate Location. (Cellco 1, Attachment 10)

153. Cellco performed a US Fish and Wildlife Service (USFWS) Information, Planning, and Conservation System (IPaC) analysis that determined the Project would not have an effect on NLEB. At the time the IPaC analysis was conducted, the NLEB was a federally-threatened species. The USFWS re-listed the NLEB as federally-endangered on March 31, 2023. Cellco subsequently performed an additional analysis using the new USFWS NLEB planning tool which determined the Project would not likely have an adverse effect on NLEB. (Council Administrative Notice No. 30; Cellco 1, Attachment 10; Tr. 1, pp. 26-28)
154. Due the forested nature of the site, Cellco would implement recommended measures for NLEB conservation including but not limited to:
- Conducting tree removal activities outside of the NLEB pup season (June 1-July 31) and active season (April 1-October 31) to minimize impacts to pups at roosts that may be present;
 - Use herbicides and pesticides only if unavoidable. If necessary, spot treatment is preferred over aerial application; and
 - Minimize exterior lighting, opting for down-shielded, motion-sensor security lights instead of constant illumination
- (Cellco 1, Attachment 10; Tr. 1, p. pp. 26-28)
155. The proposed Alternate Location is not located adjacent to an Important Bird Area (IBA), as designated by the National Audubon Society. The nearest IBA is the White Memorial Foundation property in Litchfield, approximately 3.4 miles northwest of the proposed Alternate Location. The proposed facility would not affect the IBA. (Cellco 1, Attachment 12)
156. The proposed Alternate Location is located 1.7 miles west of the Naugatuck River, a potential migratory bird flyway, and 0.35 mile west of the Northfield Brook riparian corridor, a potential secondary migratory bird flyway. The proposed facility is not anticipated to have an adverse effect on migratory birds due to its short height, monopole design, and distance from these riparian corridors. (Cellco 1, Attachment 12)
157. The proposed Alternate Location would comply with the USFWS telecommunications tower guidelines for minimizing the potential for impact to bird species. The tower would be less than 199 feet in height, not use guy-wires for support and would not be lit at night. (Cellco 1, Attachment 12)

Agriculture and Soils

158. A narrow band of prime farmland soils (identified by soil mapping) is located in a wooded area along the northern portion of the property. The access road would be developed through this area. The host parcel does not contain agricultural fields. (Cellco 1, Attachment 14)

Scenic, Historic and Recreational Values

159. Cellco conducted cultural resources review in January 2023 and identified two locations listed on the National Register of Historic Places (Northfield Knife Co. Site and Catlin Howard House), both approximately 0.5 miles north/northwest of the host parcel. The proposed tower would not be visible from these listed resources. Cellco would file a historic resources report with SHPO if the Application is approved by the Council. (Cellco 1, Attachment 13; Cellco 4, response 31)

160. There are no state-designated scenic roads within two-miles of the proposed Alternate Location. The Town Plan of Conservation and Development did not identify any specific scenic roads or areas. (Cellco 1d; Cellco 6, Attachment 2)
161. There are no “blue-blazed” hiking trails maintained by the Connecticut Forest and Park Association within two-miles of the site. (Cellco 6, Attachment 2; Council Administrative Notice Item No. 80)
162. Pursuant to C.G.S. §16-50p(b), the Council shall examine whether the proposed facility would be located in an area of the state which the Council, in consultation with DEEP and any affected municipalities, finds to be a relatively undisturbed area that possesses scenic quality of local, regional or state-wide significance and the latest facility design options intended to minimize aesthetic and environmental impacts. The Council may deny an application for a certificate if it determines that the proposed facility would substantially affect the scenic quality of its location or surrounding neighborhood and no public safety concerns require that the proposed facility be constructed in such a location. (C.G.S. §16-50p(b) (2023))
163. No comments were received from the OPM or DEEP regarding impacts to scenic quality or resources. (Record)

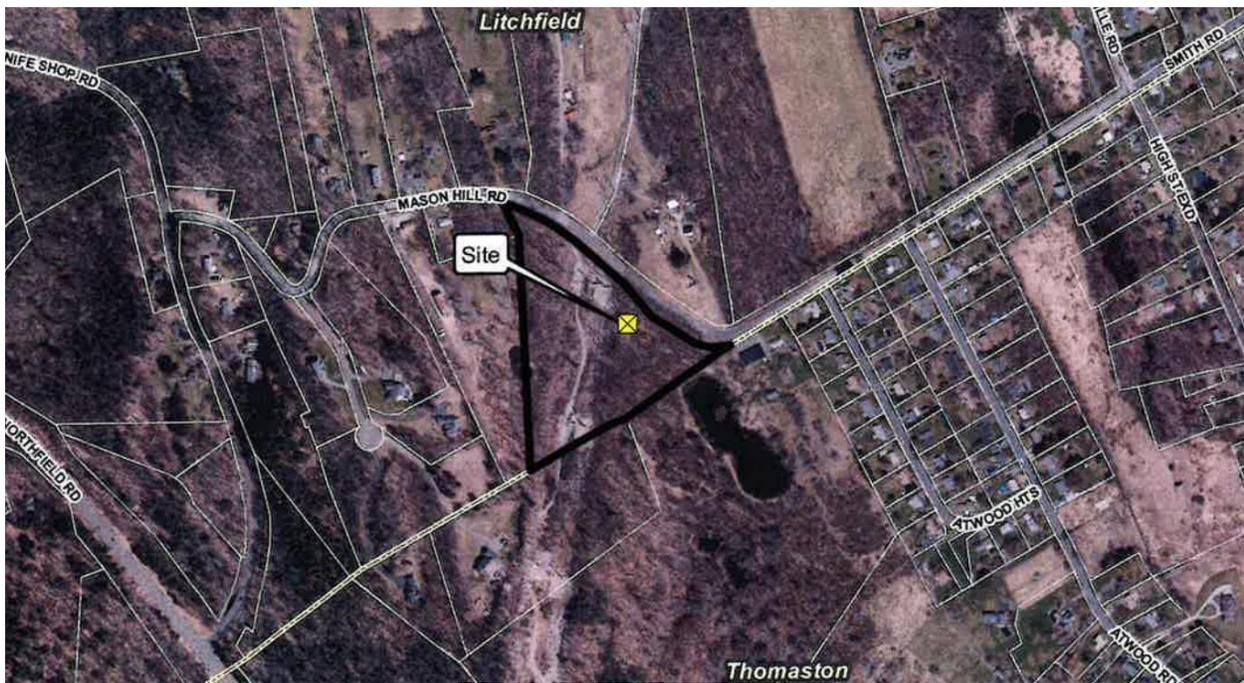
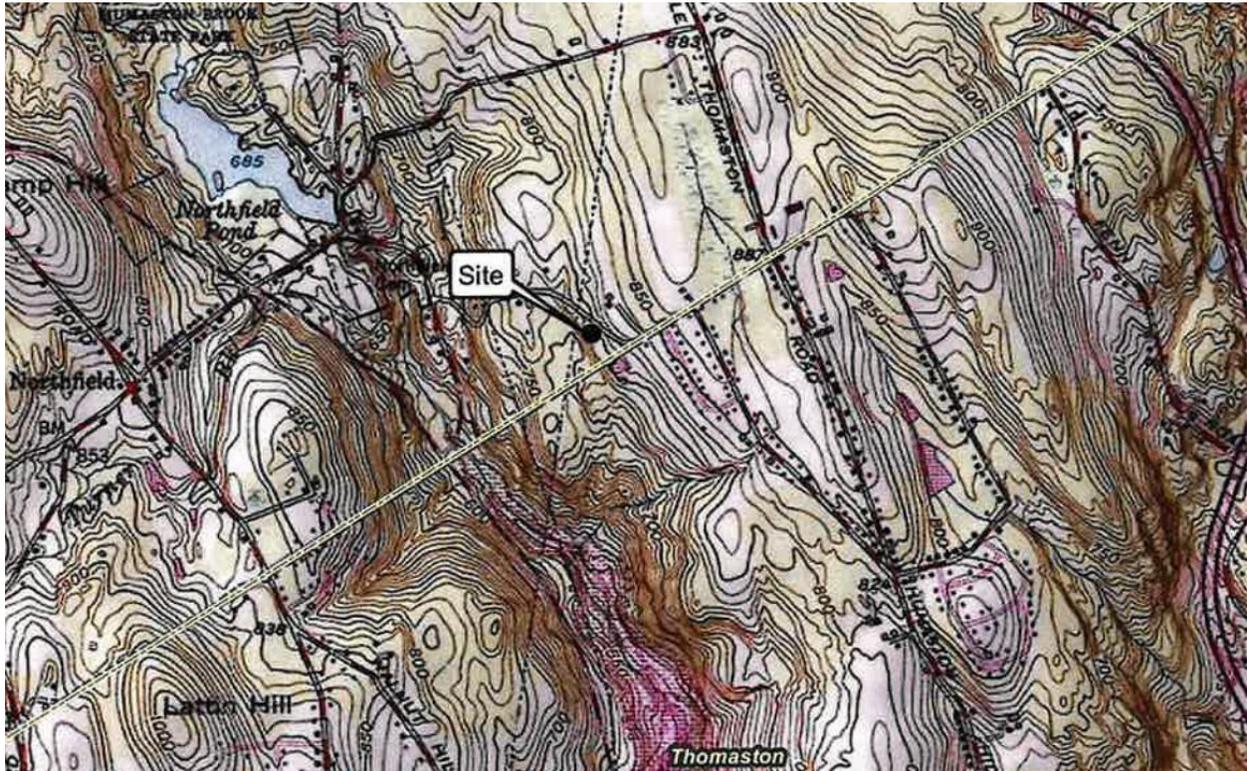
Visibility

164. Property owners have no right to an unobstructed view from structures built on adjacent property except where there is an express statutory provision or there is a contract or restrictive covenant protecting the private right to a view or vista. (*Mayer v. Historic District Comm’n of Town of Groton*, 325 Conn. 765 (2017); C.G.S. §47-25 (2023))
165. Cellco used a combination of predictive computer models, in-field analysis, and a review of various data sources to evaluate the visibility of the proposed Alternate Location. (Cellco 1, Attachment 9)
166. On March 9, 2023, Cellco conducted a balloon test and field reconnaissance at the initial proposed tower site as part of its Application Visibility Analysis. The balloon test consisted of flying a four-foot diameter helium filled balloon to a height of approximately 110-feet agl at the proposed site. An in-field reconnaissance was then performed from publicly accessible locations in the surrounding area to determine where the proposed tower would be visible. The in-field reconnaissance included photographs taken from various areas around the site. (Cellco 1, Attachment 9)
167. Relocation of the proposed site 55 feet to the northwest to the Alternate Location would not significantly alter the visibility of the tower as depicted in the visual analysis photographs and tower simulations. (Tr. 1, pp. 32-34, 56-57)
168. A viewshed map was developed using computer modeling and in-field observations from local and State roads and other publicly-accessible locations. It depicts areas with year-round visibility within a two-mile radius (8,042 acres) of the site (Study Area). (Cellco 1, Attachment 9; Cellco 6, p. 4, Attachment 2)
169. Based on the final viewshed analysis (refer to Figure 7), the proposed tower would be visible year-round from approximately 17 acres (0.2% of the Study Area).
170. Year-round visibility within a half-mile would be primarily from the adjacent Eversource ROW, open areas north of Mason Hill Road across from the site, along the west side of Atwood Heights

and Atwood Street east/southeast of the site, and open areas south of Mason Hill Road west of the site. Year-round views beyond a half-mile include open field areas approximately 1.0-1.6 miles to the west and south, and along Kennedy Drive, a residential street 0.6 miles southwest of the site. (Cellco 1, Attachment 9; Cellco 6, Attachment 2)

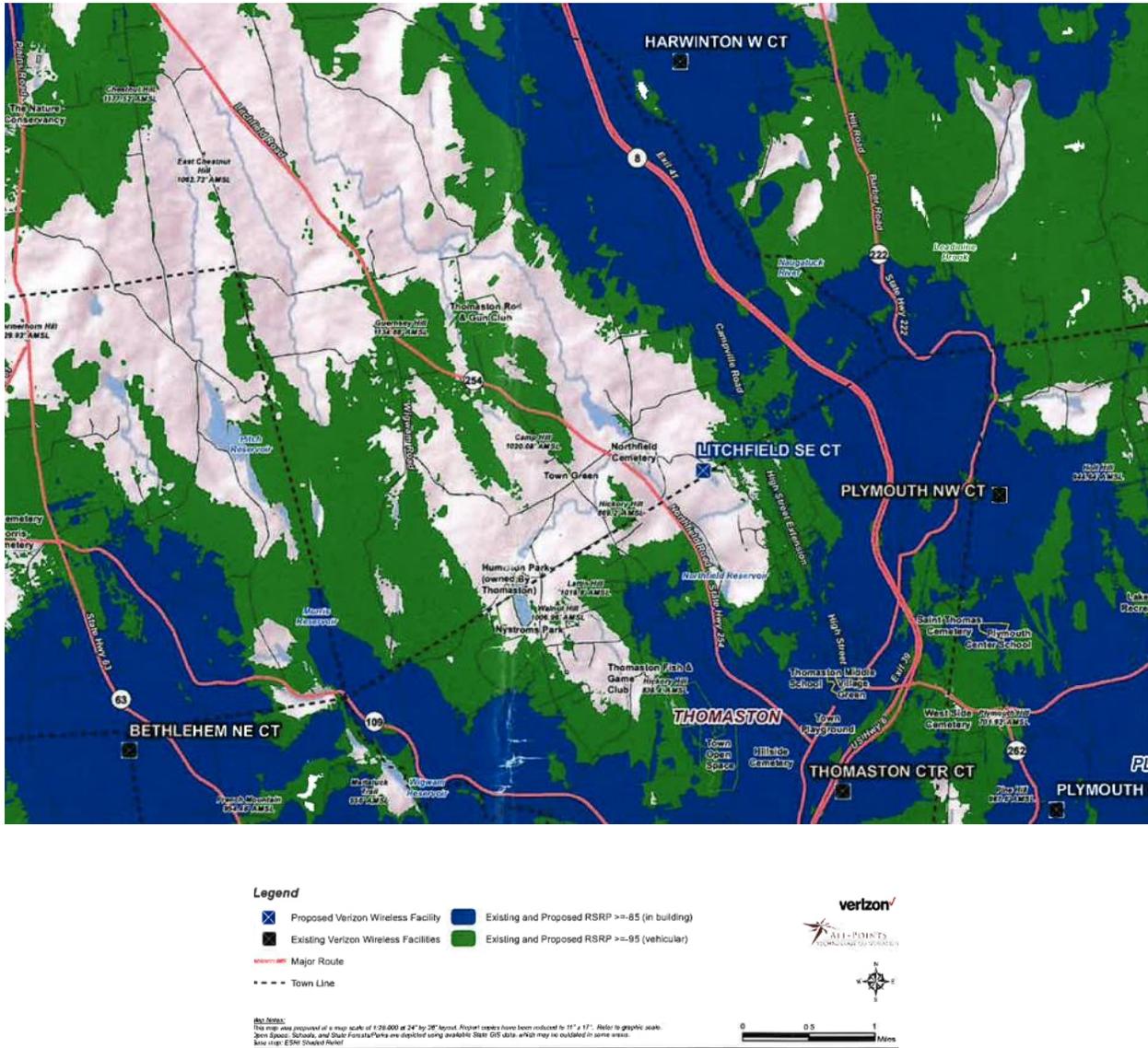
171. The tower would be seasonally visible (leaf-off conditions) from approximately 67 acres (0.8%) of the Study Area. Areas with seasonal views within a half-mile generally extend to the south/southeast and to the southwest in residential, forested and open areas. (Cellco 1, Attachment 9; Cellco 6, Attachment 2)
172. Approximately 31 residences within 0.5 miles of the proposed facility would have seasonal views of the facility. Approximately 10 residences would have year-round views of the upper 10 - 30 feet of the tower. Most of the residences are scattered through the surrounding area. The Atwood Heights and Atwood Street area east/southeast of the site, contains the highest concentration of residences with potential year-round/seasonal views. (Cellco 6, revised response 33; Tr. 1 pp. 29-31, 56-57)
173. The upper portion of the tower would be visible from the northwest portion of Northfield Pond within Humaston Brook State Park. No other visibility is anticipated from the park or surrounding Mattatuck State Forest due to dense tree cover and hilly terrain. (Cellco 6, Attachment 2; Council Administrative Notice Item No. 80; Tr. 1, pp. 55-56)
174. The upper portion of the tower would be visible from a flood control dam, (approximately 1.0 mile to the south of the site, and within the Northfield Brook Lake area operated by the USACE. The area is open for passive recreational activities and picnicking. No other areas of the recreational area would have views of the proposed tower. (Cellco 6, Attachment 2; Council Administrative Notice Item No. 80; Tr. 1, pp. 34-35, 62-63)
175. The proposed Alternate Location is adjacent to electric transmission structures extending to approximately 95 feet agl and that are visible to the surrounding area. The proposed tower would have similar visibility characteristics as the transmission structures. (Tr. 1, pp. 57-58)
176. Installing antennas on a tower in a flush-mount configuration to reduce the tower's visual profile would result in multiple tower heights necessary to accommodate the proposed number of antennas, as each flush-mount tower level typically allows for only three antennas. This would significantly increase the proposed height of the tower. In addition, flush-mounted antennas would affect the performance of the network by not allowing beamforming – the efficient transmitting of signals between 700 MHz antennas and 800 MHz antennas. In order for beamforming to be optimized, the antennas need to be placed next to each other on a horizontal plane. (Cellco 4, response 18; Tr. 1, pp. 25-26)
177. Pursuant to C.G.S. §16-50p(a)(3)(F), for a telecommunications proposed to be installed on land near a building containing a school, the facility will not be less than 250 feet from the building containing the school unless the location is acceptable to the chief elected official of the municipality or the Council finds that the facility will not have a substantial adverse effect on the aesthetics or scenic quality of the neighborhood in which such school is located. (C.G.S. §16-50p(a)(3)(F) (2023))
178. No schools or commercial child day care facilities are located within 250 feet of the site. The nearest building containing a school or commercial child day care is the Litchfield Montessori School is approximately 0.65-mile northwest of the site. (Cellco 1, Attachment 9)

Figure 1 – Approximate Site Location



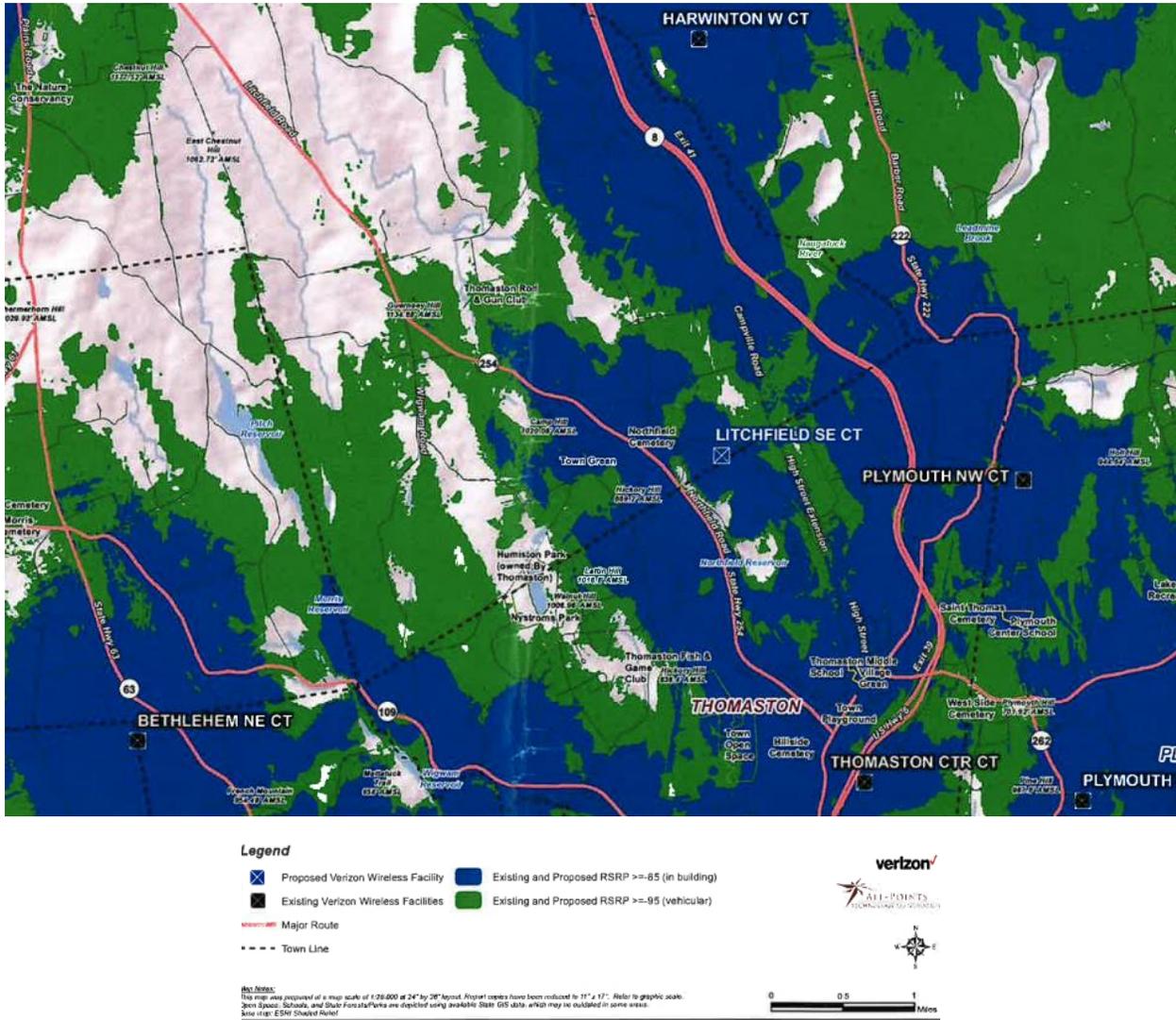
 Subject Property

Figure 2– Cellco Existing 700 MHz Coverage



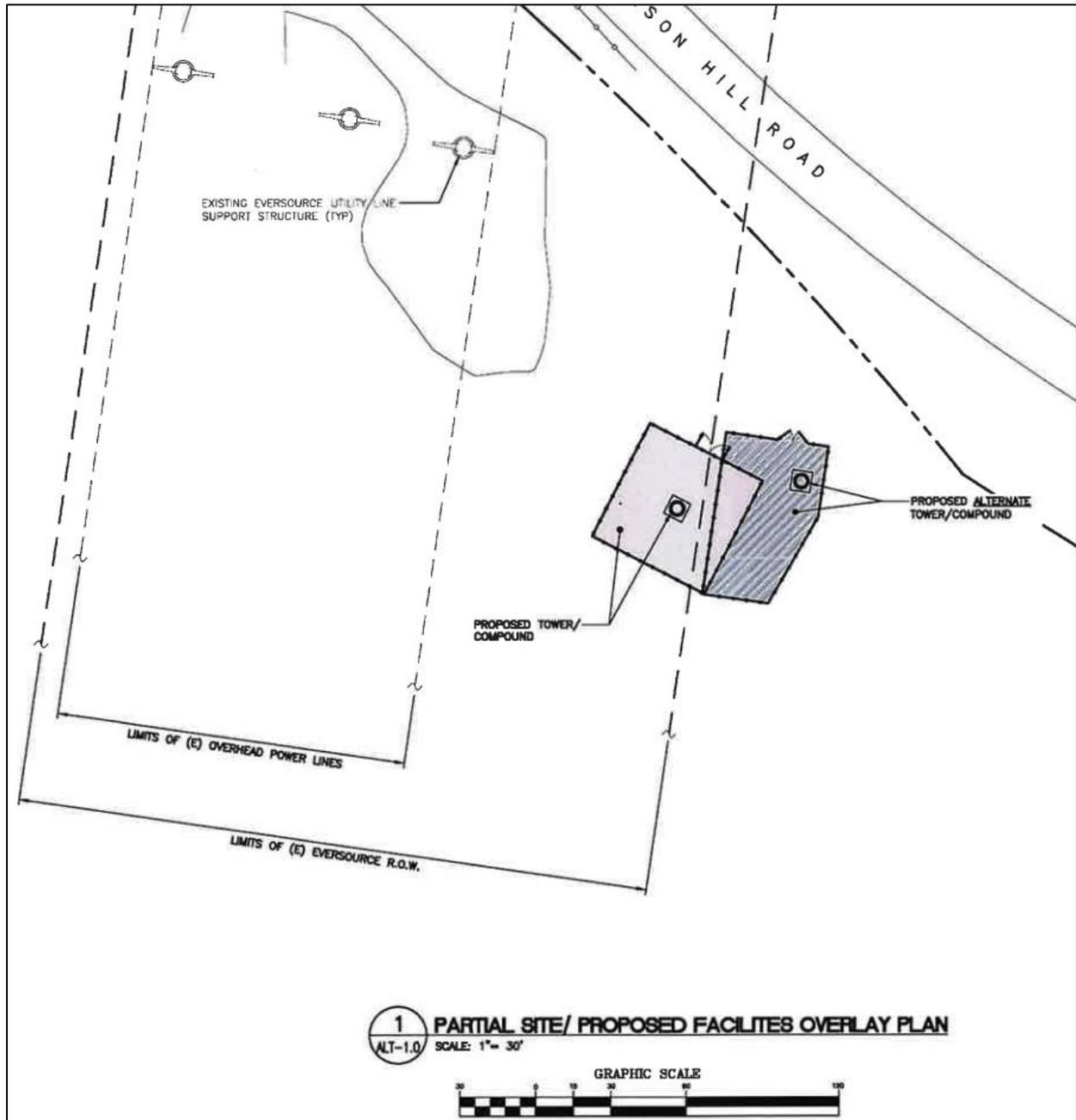
(Cellco 1, Attachment 6)

Figure 3– Cellco Proposed 700 MHz Coverage



(Cellco 1, Attachment 6)

Figure 4- Comparison of the original site and Proposed Alternate Location



(Cellco 6, Attachment 1)

Figure 5 - Tower Profile

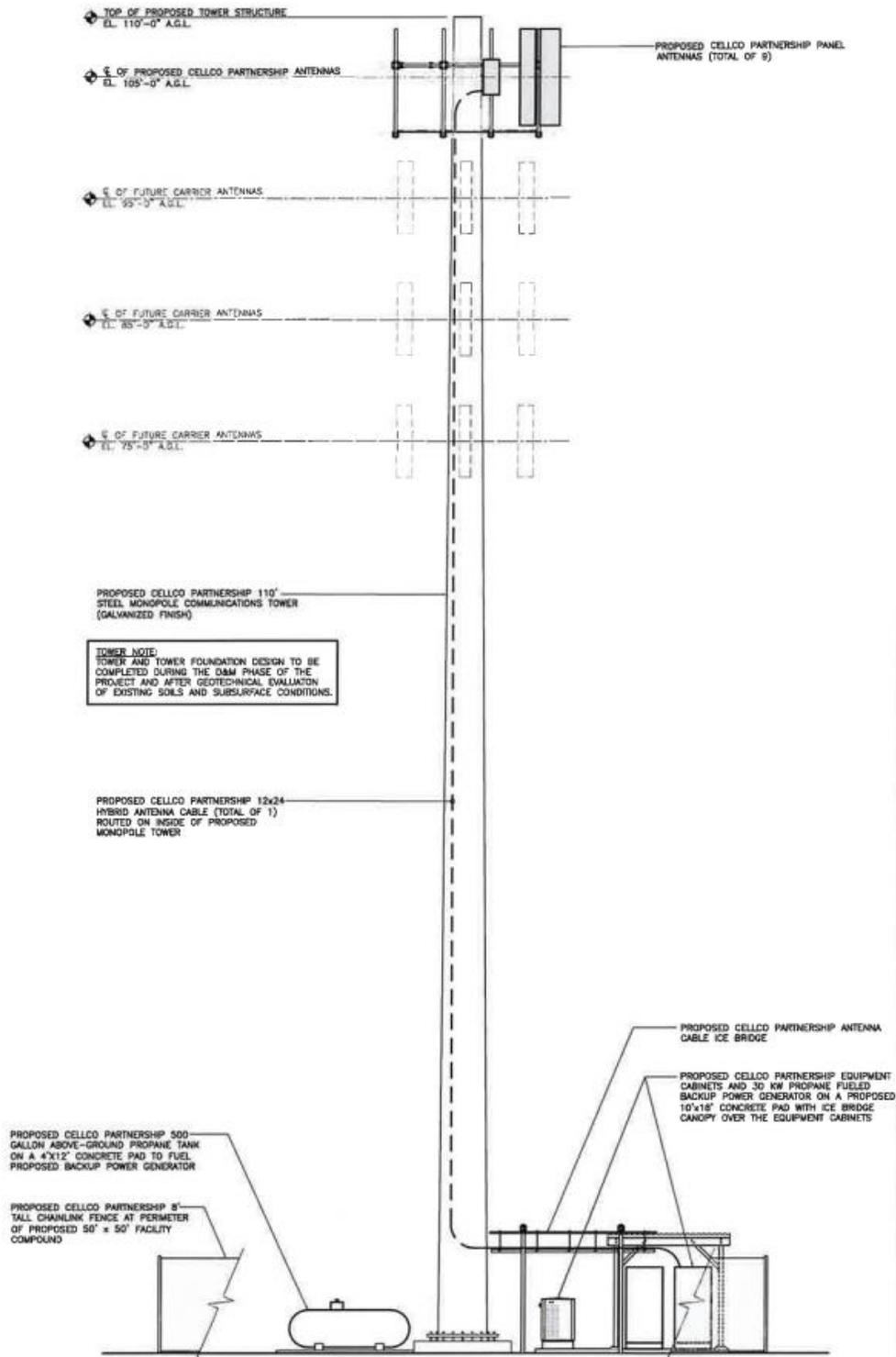
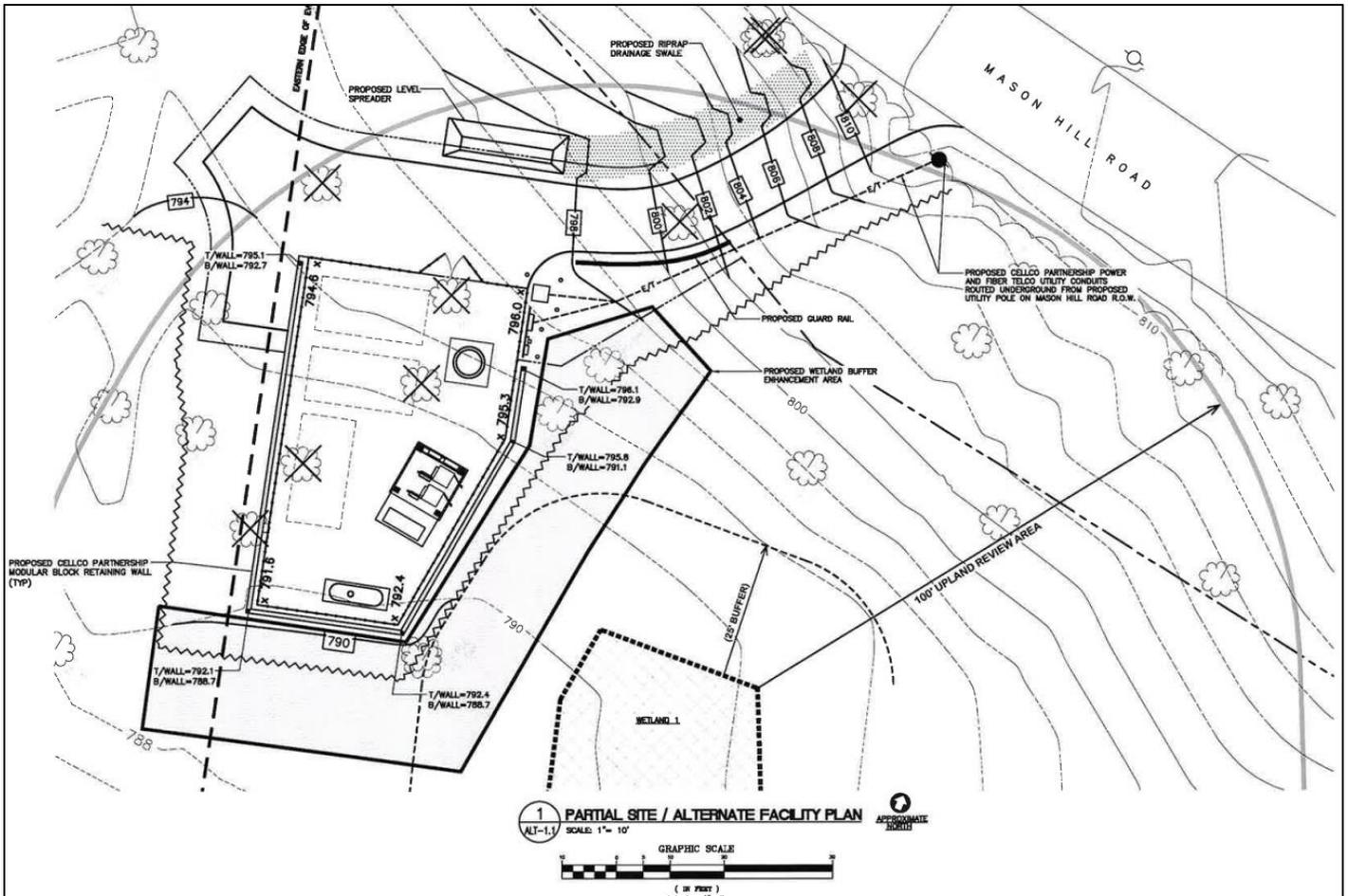
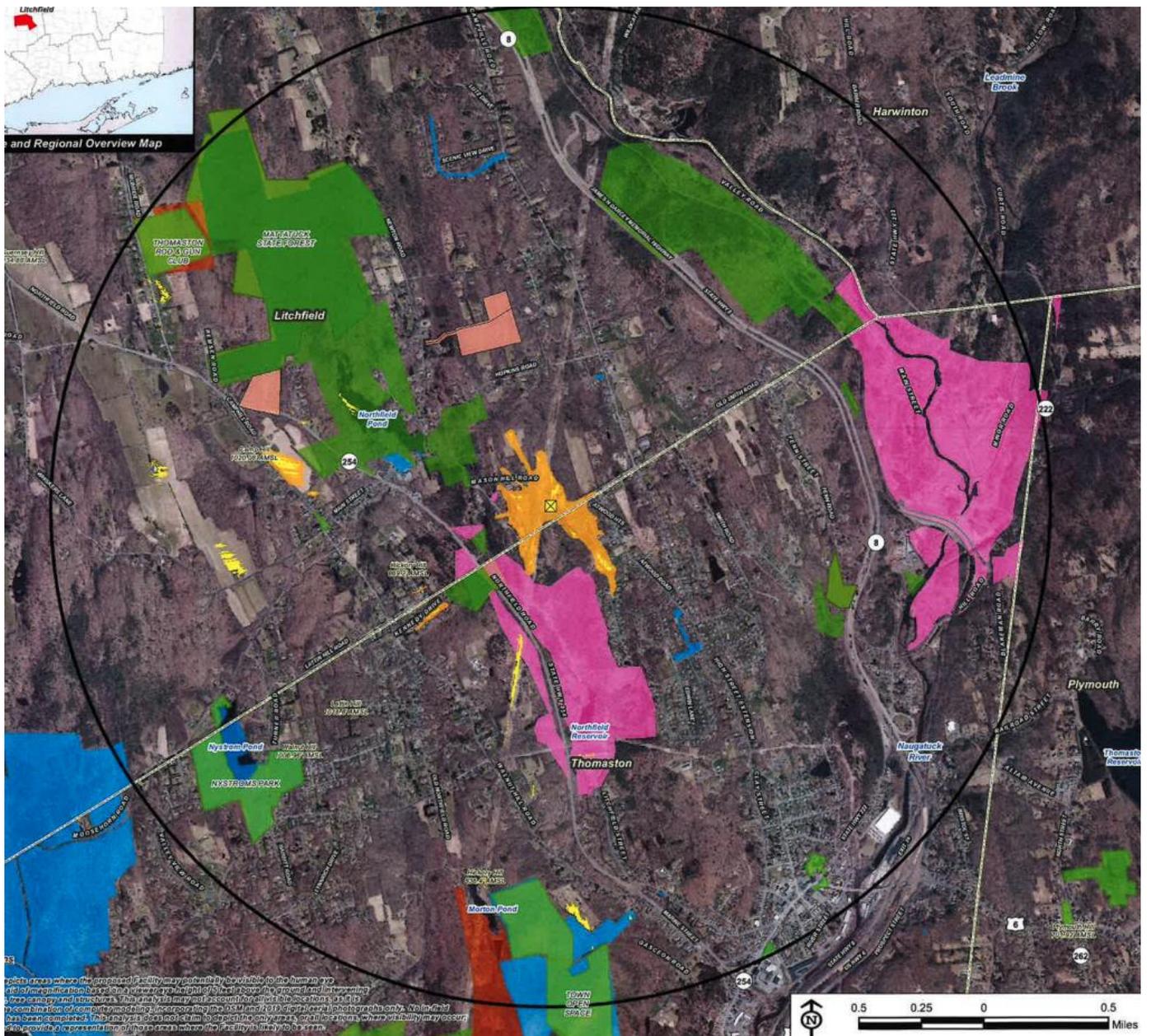


Figure 6 – Alternate Location Site Plan



SITE/SURVEY PLAN SYMBOLS LEGEND	
	PROPERTY LINE
	TIMBER GUARD RAIL (EXISTING)
	ACCESS DRIVE (EXISTING)
	UTILITY POLE (EXISTING)
	UTILITY POLE (PROPOSED)
	TREELINE (EXISTING)
	OVERHEAD WIRES (EXISTING)
	TREE >6" (EXISTING)
	TREE >6" TO BE REMOVED
	2' CONTOUR LINE
	10' CONTOUR LINE
	GRAVEL ACCESS DRIVE (PROPOSED)
	GRADING LINE/ELEVATION
	SPOT ELEVATION (PROPOSED)
	U/G ELECT. AND TELCO UTILITY CONDUITS (PROPOSED)
	ACCESS EASEMENT (PROPOSED)
	SILTATION FENCE/COMPOST FILTER SOCK EROSION CONTROL

Figure 7 – Visibility Analysis



- Legend**
- Proposed Site
 - Study Area (2-Mile Radius)
 - Predicted Year-Round Visibility (17 Acres)
 - Areas of Potential Seasonal Visibility (87 Acres)
 - Municipal Boundary
 - Trail
 - Scenic Highway
 - DEEP Boat Launches
 - Municipal and Private Open Space Property
 - State Forest/Park
 - Protected Open Space Property**
 - Federal
 - Land Trust
 - Municipal