DOCKET NO. 499 – Homeland Towers, LLC and New Cingular Wireless PCS, LLC d/b/a AT&T application for a Certificate of Environmental Compatibility and Public Need for the construction, maintenance, and operation of a telecommunications facility located at 16 Coote Hill Road, Sherman, Connecticut.	}	Connecticut
	}	Siting Council
	}	August 26, 2021

Findings of Fact

Introduction

1. Homeland Towers, LLC and New Cingular Wireless PCS, LLC d/b/a AT&T (Applicants), in accordance with provisions of Connecticut General Statutes (C.G.S.) §16-50g, et seq, applied to the Connecticut Siting Council (Council) on March 12, 2021 for a Certificate of Environmental Compatibility and Public Need (Certificate) for the construction, maintenance, and operation of a 170-foot monopole wireless telecommunications facility at 16 Coote Hill Road in Sherman, Connecticut (refer to Figure 1). (Applicants 1, p. 1)

2. Homeland Towers, LLC (HT) is a New York limited liability company with offices at 9 Harmony Street, Danbury, Connecticut. HT currently owns and/or operates numerous tower facilities in Connecticut. HT would construct, maintain and own the proposed facility and would be the Certificate Holder. (Applicants 1, pp. 4-5)

3. AT&T is a Delaware limited liability company with an office located at 84 Deerfield Lane in Meriden, Connecticut. AT&T is licensed by the Federal Communications Commission (FCC) to provide personal wireless communication service to Connecticut. (Applicants 1, p. 5; Attachment 1, Radio Frequency Analysis Report, p. 1)

4. The party in this proceeding is the Applicants. The Intervenor in this proceeding is Stan Greenbaum. (Transcript 1- May 25, 2021, 2:00 p.m. [Tr. 1]. pp. 4, 8-9)

5. The purpose of the proposed facility is to provide reliable wireless communications services for AT&T customers in the State Route 37 and State Route 39 area of southern Sherman. (Applicants 1, p. 12)

6. Pursuant to C.G.S. §16-50*l* (b), the Applicants provided public notice of the filing of the application that was published in the Town Tribune on March 4, and March 11, 2021. (Applicants 1, p. 8; Applicants 2)

7. Pursuant to C.G.S. §16-50*l* (b), notice of the application was provided to all abutting property owners by certified mail. All but two of the certified mail receipts from abutting property owners were received. The Applicants resent notice by first class mail to the two abutters on March 29, 2021. (Applicants 1, pp. 7-8, Attachment 12; Applicants 4, response 1)

8. Pursuant to C.G.S. §16-50*l* (b), on March 11, 2021, the Applicants provided notice to all federal, state and local officials and agencies listed therein. (Applicants 1, pp. 7-8, Attachment 13)

Procedural Matters

9. On March 10, 2020, Governor Lamont issued a Declaration of Public Health and Civil Preparedness Emergencies, proclaiming a state of emergency throughout the state as a result of the COVID-19 pandemic. (Council Administrative Notice Item No. 54)

10. On March 12, 2020, Governor Lamont issued Executive Order No. (EO) 7 ordering a prohibition of large gatherings, among other orders and directives. (Council Administrative Notice Item No. 54)

11. On March 14, 2020, and as subsequently extended, Governor Lamont issued EO 7B ordering suspension of in-person open meeting requirements of all public agencies under CGS §1-225. The Freedom of Information Act defines "meeting" in relevant part as "any hearing or other proceeding of a public agency." (Council Administrative Notice Item No. 54, CGS §1-200, et seq. 2021)

12. EO 7B 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. 54)

13. On March 25, 2020 and as subsequently extended, Governor Lamont issued EO 7M allowing for an extension of all statutory and regulatory deadlines of administrative agencies for a period of no longer than 90 days. (Executive Order No. EO 7M)

14. Upon receipt of the application, the Council sent a letter to the Town of Sherman (Town) on March 15, 2021, as notification that the application was received and is being processed, in accordance with C.G.S. §16-50gg. (Record)

15. During a regular Council meeting on April 4, 2021, the application was deemed complete pursuant to Regulations of Connecticut State Agencies (R.C.S.A.) §16-50*l*-1a and the public hearing schedule was approved by the Council. (Record)

16. Pursuant to Governor Lamont's EO 7B, as extended, and 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 Danbury News-Times on April 15, 2021. (Record)

17. Pursuant to Governor Lamont's EO 7B, as extended, and C.G.S. §16-50m, on April 12, 2021, the Council sent a letter to the Town to provide notification of the scheduled public hearing and to invite the Town to participate. (Record)

18. In compliance with Governor Lamont's EO 7 prohibition of large gatherings, the Council's Hearing Notice did not refer to a public field review of the proposed site. (Record)

19. On April 21, 2021, in lieu of an in-person field review of the proposed site, the Council requested that the Applicants submit photographic documentation of site-specific features into the record intended to serve as a "virtual" field review of the site. On May 11, 2021, the Applicants submitted such information in response to the Council's interrogatories. (Record; Applicants 4, response 38)

20. Field reviews are not an integral part of the public hearing process. The purpose of a site visit is an investigative tool to acquaint members of a reviewing commission with the subject property. (Council Administrative Notice Items No. 55 & No. 56)

21. On April 28, 2021, the Council held a pre-hearing teleconference 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 remote public hearing via Zoom conferencing were also discussed. (Council Pre-Hearing Conference and remote hearing procedure Memoranda, dated April 21, 2021 and April 29, 2021)

22. On May 6, 2021, 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 Docket 366. (Record)

23. On May 10, 2021, in compliance with R.C.S.A. §16-50j-21, the Applicants installed a four-foot by six-foot sign at the Route 37/Coote Hill Road intersection. The sign was relocated on May 12, 2021 in the same general area to improve sightlines for vehicles exiting Coote Hill Road. The sign presented information regarding the project and the Council's public hearing. (Applicants 7, response 40)

24. Pursuant to C.G.S. §16-50m, the Council, after giving due notice thereof, held a remote public hearing on May 25, 2021, beginning with the evidentiary session at 2:00 p.m. and continuing with the public comment session at 6:30 p.m. via Zoom conferencing. The Council provided access information for video/computer access or audio only telephone access. (Council's Hearing Notice dated April 12, 2021; Tr. 1, p. 1; Transcript 2 – May 25, 2021, 6:30 p.m. [Tr. 2], p. 126)

25. In compliance with Governor Lamont's EO 7B:
    a) The public had the ability to view and listen to the remote public hearing in real-time, by computer, smartphone, tablet or telephone;
    b) The remote public hearing was recorded and transcribed, and such recording and transcript were posted on the Council's website on May 26, 2021, and June 25, 2021, respectively;
    c) The Hearing Notice, Hearing Program, Citizens Guide for Siting Council Procedures and Instructions for Public Access to the Remote Hearing were posted on the agency's website;
    d) The record of the proceeding is available on the Council's website for public inspection prior to, during and after the remote public hearing; and
    e) The Council, parties and intervenors provided their information for identification purposes during the remote public hearing.

    (Hearing Notice dated April 12, 2021; Tr. 1; Tr. 2; Record)

26. The Council continued the remote evidentiary hearing session via Zoom conferencing on June 24, 2021, beginning at 2:00 p.m. (Council's Continued Hearing Memo dated May 26, 2021; Transcript 3- June 24, 2021 – 2:00 p.m. [Tr. 3], p. 163)

27. On June 24, 2021, the Council issued a Protective Order related to the disclosure of compensation and financial information in the Letter Agreement between HT and the owner of Coote Hill Road. (Council Memoranda dated June 25, 2021)

State Agency Comment

28. Pursuant to C.G.S. § 16-50j (g), on April 12, 2021, the following state agencies were solicited by the Council to submit written comments regarding the proposed facility: Department of Energy and Environmental Protection (DEEP); Department of Public Health (DPH); Council on Environmental Quality (CEQ); Public Utilities Regulatory Authority (PURA); Office of Policy and Management (OPM); Department of Economic and Community Development (DECD); Department of Agriculture (DOAg); Department of Transportation (DOT); Connecticut Airport Authority (CAA); Department of Emergency Services and Public Protection (DESPP); and State Historic Preservation Office (SHPO). (Record)

29. The Council received comments from CAA[1] and CEQ[2] on April 14 and April 29, 2021, respectively. These comments are addressed in the following sections of this document: Public Safety; Environmental Considerations; and Visibility. (Record)

30. No other agencies responded with comment on the application. (Record)

31. 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. Connecticut Siting Council*, 284 Conn. 455 (2007)).

Municipal Consultation

32. On October 13, 2020, the Applicants submitted a technical report for the proposed facility to Town officials. (Applicants 1, p. 25)

33. A public information meeting was held during a Town Board of Selectman meeting on November 21, 2020. The meeting was attended by over 65 people both in support of and against the proposal. At this meeting, the Town requested a balloon float at the site to simulate the height of the proposed tower. The balloon float was held on January 31, 2021 from approximately 8:30 a.m. to 12:00 p.m. (Applicants 1, pp. 25-26, Attachment 11)

34. On December 3, 2020, the Town Planning & Zoning Commission submitted comments that included but was not limited to, a request for a detailed erosion and control plan to ensure construction and related water management does not impact adjacent properties and Lake Mauweehoo. Other comments included the condition and safe use of Coote Hill Road to access the site as well as maintenance of the proposed access drive. (Applicants 1, pp. 25-26, Attachment 11)

35. Subsequent to the Board of Selectmen meeting, the Applicants shifted the proposed tower location approximately 185 feet northwest of the initial tower location to reduce potential impacts to a state-listed species. (Applicants 1, Attachment 1, Bulk File – Technical Report; Applicants 1, p. 26 and Attachments 4, 5 and 10)

36. On March 15, 2021, the Sherman Telecommunications Committee (STC) submitted comments to the Council in support of the Project. (Record)

[1] DO499-STATEMEMO-CommentsRecd-CAA.pdf (ct.gov)
[2] DO499-STATEMEMO-CommentsRecd-CEQ.pdf (ct.gov)

37. On March 16, 2021, the Sherman Conservation Commission submitted comments to the Council that expressed concerns regarding the environmental impact of the project and recommended low impact development techniques. (Record)

38. On May 12, 2021, the Sherman Conservation Commission submitted additional comments to the Council recommending the Applicants adhere to DEEP and U.S. Fish and Wildlife Service (USFWS) guidelines for species protection. (Record)

39. On May 17, 2021, the Town Planning & Zoning Commission submitted comments to the Council regarding concerns and mitigation of potential impacts to wetlands, adjacent properties and Lake Mauweehoo and safety concerns from the use of Coote Hill Road to access the tower site. (Record)

40. The Sherman Volunteer Fire Department (SVFD) submitted a letter to HT dated April 22, 2021 in support of the proposed project. (Applicants 5)

41. First Selectman Don Lowe made a limited appearance statement into the record at the May 25, 2021 Public Comment Session expressing support for the proposed facility to increase safety along State Route 37 and State Route 39 corridors. (Tr. 2, pp. 133-136)

42. Terri Hahn of the STC made a limited appearance statement into the record at the May 25, 2021 Public Comment Session stating the southern Sherman area was an underserved area of Town and expressed support for the proposed facility. (Tr. 2, pp. 146-147)

43. Kris Fazzone of the SVFD made a limited appearance statement into the record at the May 25, 2021 Public Comment Session stating the tower is necessary to facilitate emergency communications. (Tr. 2, pp. 137-139)

Public Need for Service

44. 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)

45. In issuing cellular licenses, the Federal government has preempted the determination of public need for cellular service by the states and has established design standards to ensure technical integrity and nationwide compatibility among all systems. AT&T is licensed by the FCC to provide personal wireless communication service to Connecticut. (Council Administrative Notice Item No. 4 – Telecommunications Act of 1996; Applicants 1, p. 5)

46. 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)

47. 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)

48. 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)

49. 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)

50. 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)

51. 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)

52. 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)

53. 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)

54. 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)

55. 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)

56. 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. (Conn. Gen. Stat. §16-50aa)

57. On April 12, 2021, 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 May 18, 2021. No carriers responded to the Council's solicitation. (Record)

58. On May 7, 2021, Verizon contacted HT, expressing interest in locating at the 156-foot level of the tower in the future. Verizon did not provide a timetable for co-location on the proposed facility. (Applicants 4, response 23)

59. In addition to AT&T, the facility is designed to accommodate three other wireless carriers and emergency communication antennas. (Applicants 1, p. 15; Tr. 2, p. 132)

60. Two 22-foot tall municipal whip antennas would be installed at the top of the tower for Town Public Works and Fire Department communications. A dish antenna would also be installed at the top of the tower to provide emergency communication connectivity for the Town to another site in Wingdale, New York. . Two whip antennas for use by the Litchfield County Dispatch would be installed at the 100 foot level of the tower. (Applicants 1, Attachment 4; Tr. 1, p. 57; Tr. 2, pp. 131-132)

61. Both the Town and the Litchfield County Dispatch would locate on the facility immediately after the completion of construction. (Applicants 7, Late File 1; Tr. 1, pp. 47-49)

AT&T Existing and Proposed Wireless Services

62. AT&T has a significant coverage deficiency in its wireless communications network in a majority of the southern section of Sherman, specifically along State Route 37 and State Route 39 and surrounding areas.. (Applicants 1, Tab 1)

63. AT&T is located on 4 towers within four miles of the site. None of these facilities provide adequate coverage to the proposed service area. (Applicants 1, Attachment 1)

64. AT&T performed coverage modeling and a drive test which demonstrated deficient service in southern Sherman (refer to Figures 2 & 3). (Applicants 1, Attachment 1; Applicants 7 – Late File Attachment 3)

65. AT&T would provide digital voice and data services to the proposed service area using 4th Generation services over LTE technology in the 700 MHz and 1900 MHz frequency bands (4G). (Applicants 1, Attachment 1)

66. AT&T's 700 MHz and 1900 MHz 4G technology is designed to a threshold of -83 dBm and -86 dBm, respectively, for reliable, high quality service and -93 dBm and -96 dBm respectively, for a minimum acceptable level of service. (Applicants 1, Attachment 1)

67. AT&T's 700 MHz frequency provides the largest area of service and therefore defines the coverage footprint of the AT&T wireless network. Other frequencies that may be deployed at the site (850 MHz, 1900 MHz, 2100 MHz and 2300 MHz) would provide capacity for AT&T's network, offloading traffic from the 700 MHz frequency, thereby maximizing service available to customers the farthest away from the facility. (Applicants 1, Attachment 1, Applicants 4, response 13; Tr. 1, pp. 113-114)

68. AT&T's proposed facility would support 5G services. The facility would not offer 5G+ broadband service at this time. (Applicants 4, response 14)

69. AT&T proposes to locate at the 166-foot level of the tower to provide reliable service to a portion of the Southern Sherman area. Specifically, 700 MHz service provided by the site includes, but is not limited to, the following;

Area (mi²):	(≥ -83 dBm)	2.68
	(≥ -93 dBm)	4.86
Roadway (mi):	Main (-93 dBm):	5.3
	Secondary (-93 dBm):	18.1
	Total (-93 dBm):	**23.4**

The roadways include 2.4 miles of new service on State Route 37 and 2.8 miles of new service on State Route 39. Refer to Figure 4. (Applicants 1, Attachment 1; Applicants 4, response 15)

70. AT&T's proposed antenna installation at 166 feet above ground level (agl) is the minimum height required to achieve its coverage objectives. Lowering the tower by 20 feet would cause coverage degradation on State Route 39 southeast of the site. For example, at a threshold of -93 dBm, a 0.25-mile coverage gap would occur on this road. At a threshold of -83 dBm, the coverage gap would be approximately 0.75 mile. (Applicants 8, responses 50, 51, & 68; Tr. 1, pp. 65-66)

71. Coverage modeling by Allegiant, a wireless consultant for Intervenor Greenbaum, indicated a reduction of the tower from 170 feet to 120 feet at the proposed site would cause coverage gaps (-93 dBm) on Route 37 northwest (0.3 mile gap) and on Leach Hollow Road (0.1 mile) north of the site. At a threshold of -83 dBm, coverage gaps would occur in residential areas west of State Route 39 near the New Fairfield Town line, the southwest portion of the Timber Trails area and in the Cozier Hill Road area. (Greenbaum 4, Attachment 12)

72. AT&T's modeling indicates that a reduction in AT&T's antenna height to 120 feet would cause an approximate 0.8 mile coverage gap on Route 39 southeast of the site and two 0.25 mile gaps on Route 37 west of the site (-83 dBm) and in residential areas adjacent to these roads. (Applicants 8, response 51)

73. Allegiant's coverage model (-83 dBm) with the Coote Hill Road site at 120 feet in conjunction with collocation at 60 feet on an existing tower located at Tower Hill Road in Patterson, New York (Tower Hill Road site) indicates coverage would increase in the southwestern corner of Sherman in the area of Parker Road, northwest of the State Route 37 corridor, but would not provide coverage to deficient areas on State Routes 37 and 39. (Greenbaum 4, Attachment 12; Tr. 3, pp 277-280)

74. There are two large residential communities in southern Sherman - Deer Run Shores located approximately 1.4 miles northeast of the site and east of State Route 39, and Timber Trails, located approximately 0.35 mile west of the site and primarily southeast of State Route 37. (Applicants 4, response 8; Applicants 7, response 43)

75. The proposed site would not be able to provide coverage to the Deer Run Shores area due to terrain that effectively blocks service. Approximately half of the Timber Trails area would receive coverage from the site. (Greenbaum 12; Tr. 3, pp. 192-193)

Site Selection

76. Existing facilities surrounding the site are not able to provide adequate service to the proposed service area. (Applicants 1, Attachment 1)

77. AT&T began searching for a site in the mid-2000's and secured a site at 32 Leach Hollow Road in 2009. Due to opposition to a tower at this site, AT&T did not present a technical report to the Town. (Applicants 1, Attachment 2)

78. On June 12, 2013 AT&T presented a technical report to the Town for a 170-foot tower at 16 Coote Hill Road. As part of the consultation process, AT&T evaluated several properties including a property at 26 Wagon Wheel Road owned by the Naromi Land Trust. (Applicants 1, pp. 5, 15, Attachment 2; Greenbaum 2; Tr. 3, pp 283-285, 288)

79. In June 2013, the Town retained RCC Consultants (RCC) to analyze Cellular Communications in Town. On September 26, 2013, RCC appeared before the Town Board of Selectman to present an analysis of AT&T's coverage from various potential tower locations, and at different tower heights at the 16 Coote Hill Road site. The analysis concluded that reducing the height of the proposed Coote Hill Road tower from 170 feet to 120 feet would reduce coverage by 3.9 percent. (Greenbaum 2; Greenbaum 4, Attachment 12; Tr. 3, p. 286)

80. In 2014, AT&T made a business decision not to pursue the 16 Coote Hill Road site. (Applicants 1, pp. 5, 15, Attachment 2; Greenbaum 2; Tr. 3, pp 283-285, 288)

81. In 2015, HT, independent of AT&T, began searching for a suitable site for a tower facility. (Applicants 1, pp. 5, 15, Attachment 2)

82. HT investigated 42 potential sites in southern Sherman. Of that, 10 landowners expressed initial interest in leasing space for a tower. These sites were rejected as follows;
    a) **7 Old Stone Lane, Sherman**–10.6-acre property. The property owner requested that HT construct a bridge that was suitable to support a residential subdivision and subsequently decided not to pursue a tower lease:
    b) **0 Route 37 South, Sherman (Map/Lots: 9/54 & 9/75)** – 5.0 & 15.2 acres. These sites were rejected by AT&T's radio frequency engineer;
    c) **0 Wagon Wheel Road, Sherman** – 5.4 acres. The site was rejected by AT&T's radio frequency engineer;
    d) **104 Route 37 South, Sherman** – 2.0-acres. The site was rejected by AT&T's radio frequency engineer;

e) **0 Wakeman Hill Road, Sherman** – 166.9-acres. The site was rejected by AT&T's radio frequency engineer;
f) **0 Route 37 South, Sherman (Map/Lot 9/9) –** 11.7-acres. The site was rejected due to wetlands across a majority of the parcel;
g) **Wagon Wheel Road, Sherman (Map/Lot: 52/11)** – 55.8 acres. The site was rejected by AT&T's radio frequency engineer;
h) **Long Meadow Trail, Sherman (Map/Lot: 46-1)** – 94.0 acres. The property owner ultimately decided against a lease for a tower site due to aesthetic concerns;
i) **2-4 Memory Lane, Sherman** – 11.7 acres – The site was rejected by AT&T's radio frequency engineer; and
j) **60 Leach Hollow Road, Sherman** – 14.2 acres. The property owner ultimately decided against a lease for a tower site due to radio frequency concerns.

(Applicants 1, Tab 2; Applicants 4, response 7; Tr. 1, pp 66-67)

83. Of the 42 investigated sites, 7 properties are owned by the Northwest Connecticut Land Conservancy (formerly Naromi Land Trust). Although representatives of HT made a field visit of several of the parcels with land trust members in September 2015, including properties on Wagon Wheel Road near the proposed site, the land trust subsequently decided not to enter into a lease agreement with HT for any of their properties. (Applicants 1, Attachment 2; Applicants 8, response 61; Greenbaum 2; Tr. 1, pp. 79-82; Tr. 3, pp. 240-242)

84. Intervenor Greenbaum indicated that a tower located at the summit of Wanzer Mountain, on land owned by Timber Trails Associates, would be able to serve the southern Sherman area. (Greenbaum 4, Attachment 11, Attachment 12)

85. During its site search, HT investigated properties owned by Timber Trails Associates, including the summit of Wanzer Mountain. HT conducted a field visit of potential sites with a representative of Timber Trails Associates in 2015. For the field visit, HT determined that construction of a tower on the Wanzer Mountain summit is not feasible due to steep terrain, with grades of over 30 percent. (Tr. 3, pp. 203-205, 243-245)

86. The existing Tower Hill Road site in Patterson, New York is located approximately 2.4 miles west of the proposed facility. Intervenor Greenbaum suggested that AT&T could use this tower in conjunction with a shorter tower at the proposed site to provide coverage to the southern Sherman area. (Greenbaum 2; Greenbaum 4, Attachment 12; Tr. 3, 271-272)

87. The Tower Hill Road site is not tall enough to overcome steep terrain challenges along Route 37 that extends along a deep, narrow valley. Wireless service along State Route 37 from the Tower Hill location would be minimal. (Applicants 7, Late File #2; Greenbaum 2; Greenbaum 4, Attachment 12; Tr. 3, pp. 248-249, 271-272)

88. Small cells, distributed antenna systems and other similar technologies are not feasible to provide coverage to the southern Sherman area as their service footprint is limited. The proposed Sherman tower facility would provide wireless service over several square miles that include main and secondary roads as well as residential area. Thus, repeaters, small cells/microcells, distributed antenna systems and other types of transmitting technologies would not be practical or feasible methods to address the coverage needs in southern Sherman. (Applicants 1, pp. 14-15, Attachment 1)

Facility Description

89. Pursuant to Regulations of Connecticut State Agencies (RCSA) §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. (RCSA §16-50j-2a(29))

90. The proposed site is located on an approximate 19.87-acre parcel at 16 Coote Hill Road in Sherman. The proposed site location is depicted on Figure 5. (Applicants 1, pp. 15-16)

91. The subject property is in a Farm-Residence zone and is developed with a residence. (Applicants 1, p. 22)

92. Land use in the area of the site consists of single family residential and forest land. (Applicants 1, Attachment 3, Attachment 4)

93. The proposed tower site is located in a forested area in the southern portion of the property. (Applicants 1, Attachment 4)

94. The tower is at an elevation of approximately 878 feet above mean sea level (amsl). (Applicants 1, Attachment 3, Attachment 4)

95. The proposed facility would consist of a 170-foot monopole within a 75-foot by 75-foot leased area. The tower would be designed to support a minimum of four levels of platform-mounted antennas (including AT&T) as well as municipal emergency services antennas (refer to Figure 6). (Applicants 1, Attachment 4; Applicants 8, response 49)

96. AT&T would install 9 panel antennas and 15 remote radio heads on an antenna platform at a centerline height of 166 feet agl. (Applicants 1, Attachment 4)

97. A 48-foot by 50-foot fenced equipment compound would be established at the base of the tower. The size of the equipment compound would be able to accommodate the equipment of AT&T, the Town and three other tower users. If enough space was not available in the proposed compound for future carrier needs, the compound fence could be expanded within the lease area to create more space. (Applicants 1, Attachment 4; Tr. 1, pp. 84-85)

98. AT&T would install equipment cabinets and a 15-kilowatt propane-fueled emergency backup generator on concrete pads within the compound. (Applicants 1, Attachment 4; Applicants 4, response 24; Tr. 1, pp. 59-60)

99. The proposed equipment compound would be enclosed by an eight-foot high chain-link fence with a vehicle access gate. (Applicants 1, Attachment 4)

100. Access to the site would use a portion of existing paved driveway (415 feet) that extends from Coote Hill Road. HT would construct a 1,625-foot gravel driveway extending northeast along the property line, then turning southeast through the property to the tower site, generally following an existing logging path (refer to Figures 7A & 7B) Relocating the access drive away from the property line to a location to the west of the residence is not possible due to the landlord's use of the property. (Applicants 1, Attachment 4; Tr. 1, pp. 21-22, 103-105; Tr. 3, pp. 217-219)

101. The gravel access road would have a 12-foot wide travel surface. (Tr. 1, p. 20)

102. Utilities (telephone and electricity) would be installed within a trench extending from meter boards adjacent to the compound to an electrical transformer near the residential driveway entrance and a utility pole on Coote Hill Road. Some trenching adjacent to the utility pole would be required to connect the telephone fiber to the local network. (Applicants 1, Attachment 4; Tr. 1, pp. 92-93; Tr. 3, pp. 250-251)

103. Coote Hill Road is a private road that extends southeast from State Route 37. The Council does not have jurisdiction over HT's use of the private road to access the site. HT's use of Coote Hill Road to access the site is subject to an agreement with the owner of Coote Hill Road. (RCSA §16-50j-2a(29); Applicants 1, Attachment 4; Tr. 1, pp. 18-20)

104. HT and the owner of Coote Hill Road executed an agreement for HT's use of the private road to access the site. HT will contribute to a Road Maintenance Fund and accept responsibility for repair of any damage to the road caused by HT and/or its agents. (Applicant 8, response 2; Applicant 9)

105. The nearest property boundary from the proposed tower is approximately 102 feet to the southwest (8 Coote Hill Road). (Applicants 1, p. 23, Attachment 4)

106. The nearest off site residence is located approximately 809 feet to the east of the tower site (39 Mauweehoo Hill Road). No other off-site residences are located within 1,000 feet of the tower. (Applicants 1, p. 23, Attachment 3, Attachment 4)

107. Site construction would commence following Council approval of a Development and Management Plan (D&M Plan) for the project and is expected take 8 weeks. After AT&T's equipment installation, cell site integration and system testing would require two additional weeks. (Applicants 1, p. 27)

108. The estimated cost of the proposed facility is:

Tower and Foundation	$170,000
Site Development	145,000
Utility Installation	60,000
Facility Installation	45,000
Subtotal: Homeland Towers Cost	**$420,000**
AT&T Antennas and Equipment	$250,000
Subtotal: AT&T Costs	**$250,000**
Total Estimated Costs	**$670,000**

(Applicants 1, p. 27)

109. HT would recover construction costs associated with the facility by the revenue generated from leasing space on the facility to other wireless providers. AT&T would recover the costs of its equipment through customer subscriptions. (Applicants 4, response 2)

110. It is anticipated each carrier located on the tower would visit the site once a month using a light duty van or truck. HT, as owner of the tower, would periodically inspect the site. (Applicants 1, p. 6; Applicants 8 response 60; Tr. 1, p. 38; Tr. 3, pp. 220-221)

Public Safety

111. 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)

112. The proposed facility would be in compliance with the requirements of the 911 Act and would provide Enhanced 911 services. (Applicants 1, p. 13)

113. 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)

114. The proposed facility would be capable of supporting text-to-911 service. (Applicants 4, response 26)

115. 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. The facility would support the WARN alert system. (Council Administrative Notice No. 5 – FCC WARN Act; Applicants 1, pp. 13-14)

116. AT&T's equipment would be designed to support FirstNet services. FirstNet is a federal program to provide emergency communications to areas with deficient wireless service by establishing a nationwide wireless broadband communications network that is dedicated to first responders and public safety entities. It provides dedicated spectrum to first responders over other users thereby eliminating network congestion and improving emergency communications. (Applicants 1, pp. 4-5, 14, Attachment 1)

117. AT&T and FirstNet work together to determine which sites in coverage deficient areas are prioritized. (Applicants 1, Attachment 1; Tr. 1, pp. 50-52)

118. FirstNet is a subscriber service available to local emergency entities that would allow preferred wireless service on AT&T's 700 MHz system during emergencies. (Tr. 1, pp. 78-79)

119. FirstNet is independent of the Town's proposed emergency/municipal communication system proposed to be installed on the tower. (Tr. 1, pp. 56-58)

120. FirstNet services would be provided from AT&T's 700 MHz 4G LTE equipment. No additional antennas or base station cabinets are required. (Applicants 4, response 27; Tr. 1, pp. 50-52)

121. Pursuant to C.G.S. §16-50p(a)(3)(G), the tower would be constructed in accordance with the current governing standard in the State of Connecticut for tower design in accordance with the currently adopted International Building Code. (Applicants 4, response 12)

122. The Applicants used the FCC TOWAIR screening tool to determine the proposed tower would not be an obstruction or hazard to air navigation and would not require obstruction marking or lighting. HT has filed Form 7460-Notice of Proposed Construction or Alteration with the Federal Aviation Administration. (Applicants 1, Attachment 4; Applicants 7, response 41)

123. The equipment compound would be enclosed by an eight-foot fence with locked, gated access. AT&T's equipment is within a metal cabinet equipped with a silent intrusion alarm. (Applicants 4, response 10)

124. The tower setback radius* would extend on the property to the southwest by 76 feet. the horizontal distance equal to the tower height that extends radially from the center of the tower. (Applicants 1, p. 23)

125. HT would design a tower yield point on the tower at a height of 68 feet agl to ensure any tower collapse remains within the boundaries of the subject property. (Applicants 1, p. 23)

126. Noise from operation of the heating, air-conditioning and ventilation system for AT&T's equipment would be minimal (similar to existing ambient noise) and would comply with DEEP Noise Control Regulations. A sound study determined this equipment would emit a noise level of 37 dBm at the nearest property line which is below the DEEP nighttime noise threshold of 45 dBA. (Applicants 1, Attachment 9)

127. 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); Applicants 1, p. 24)

128. Coote Hill Road is a narrow, paved dead-end road extending from Route 37. The road has one or two locations on each side where vehicles can pass. (Greenbaum 4, Attachment 10; Tr. 3, pp. 266-267)

129. The Applicants have discussed traffic concerns with the Town and intend to have a flagger on Route 37 to direct construction vehicles into and out of Coote Hill Road. Details for traffic management would be provided in the D&M Plan. (Applicants 8, response 9; Tr. 1, pp. 75-76)

130. The cumulative worst-case maximum power density from the radio frequency emissions from the operation of AT&T's, the Town's and Litchfield County Dispatch's antennas is 6.6 percent of the standard* for the General Public/Uncontrolled Maximum Permissible Exposure, as adopted by the FCC, at the base of the proposed tower. This calculation was based on methodology prescribed by the FCC Office of Engineering and Technology Bulletin No. 65E, Edition 97-01 (August 1997) that assumes all panel antennas in a sector would be pointed at the base of the tower and all channels would be operating simultaneously, which creates the highest possible power density levels. Under normal operation, the antennas would be oriented outward, directing radio frequency emissions away from the tower, thus resulting in significantly lower power density levels in areas around the tower.

*This includes a 10 dB off-beam pattern loss for directional panel antennas and a 20 dB off-beam pattern loss for the highly focused parabolic microwave dish to account for the lower relative gain below the antennas. (Applicants 1, Attachment 7; Council Administrative Notice Item No. 2 – FCC OET Bulletin No. 65)

Emergency Backup Power

131. 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. 50)

132. Consistent with the findings and recommendations of the Panel, and in accordance with C.G.S. §16-50*ll*, 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. 33 – Council Docket No. 432)

133. 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. Every year since 2006, AT&T, Sprint/T-Mobile, and Verizon have certified their compliance with the CTIA Business Continuity/Disaster Recovery Program and the Communications Security, Reliability and Interoperability Council standards and best practices to ensure network reliability during power outages. (Council Administrative Notice Item No. 33 – Council Docket No. 432)

134. For emergency power, AT&T proposes a 15-kilowatt propane fueled generator and an associated 500 gallon fuel tank for its own use. It could run for approximately 4.7 days before refueling is necessary, assuming AT&T's equipment is operation at 100 percent. (Applicants 4, response 25; Tr. 1, pp. 59-62)

135. Telecommunication carriers typically have their own emergency generators and associated fuel tanks since they operate their equipment and networks individually, in accordance with their specifications. Additionally, shared generators/tanks have one contingency point so that if the single shared generator is inoperable, then none of the carriers would have emergency power. (Tr. 1, pp. 63-64).

136. The generator would be remotely tested periodically to ensure proper operation. (Applicants 1, Attachment 5)

137. 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)

138. The generator would comply with all applicable DEEP regulations (Applicants 1, Attachment 5)

Environmental Considerations

139. The Inland Wetlands and Watercourses Act (IWWA), CGS §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. (CGS §22a-36, et seq.)

140. 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. (CGS §22a-42a)

141. 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. (CGS §22a-41)

142. The site property contains a forested hillside seep wetland system that is composed of two larger areas near the north and south property lines that are connected by two narrow seasonal intermittent watercourses that drain to the northwest. A forested upland area surrounded by the wetlands and intermittent watercourses. (Applicants 1, Attachment 6)

143. The nearest wetland to the compound area is located 79 feet to the northwest. (Applicants 1, Attachment 6)

144. The proposed access drive would cross the two intermittent watercourses at their narrowest point. Given the location of the wetland on the property, there are no alternative routes to avoid wetland impact. The proposed route minimizes wetland disturbance to the extent possible. (Applicants 1, Attachment 6)

145. The intermittent watercourse access drive crossings would utilize 24-inch culverts - one for the western crossing and two for the eastern crossing - that would be installed in accordance with natural stream crossing design standards/guidelines from the U.S. Army Corps of Engineers (USACE) and DEEP. The pipes would be embedded 12 inches below the existing intermittent watercourse channel surface and backfilled with natural stream substrate materials allowing for aquatic organism movement through the crossings while maintaining existing surface flow. (Applicants 1, Attachment 6; Applicants 5)

146. The two crossings are designed to fully convey large storm events without risk of overtopping or washing out the access drive or creating an erosive force within the wetland system. The crossings are located in an area with well defined, incised banks and are large enough to prevent the creation of erosive force within the wetland. (Applicants 1, Attachment 6)

147. Approximately 1,545 square feet of wetlands would be impacted to construct the access drive crossings (360 square feet for the western crossing and 1,185 square feet for the eastern crossing). (Applicants 1, Attachment 6)

148. The Applicants would file a USACE Self-Verification Notification Form for the watercourse crossings. (Applicants 5)

149. HT 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. (Applicants 1, Attachment 6; Tr. 1, pp. 114-115)

150. Disturbed areas adjacent to the wetland crossings would be seeded with a native wetland seed mix to re-establish vegetative cover. (Applicants 1, Attachment 6)

151. To reduce the wetland impact at the two crossings, HT would examine the feasibility of installing open bottom box culverts in the D&M Plan phase of the project. It may be possible to span each watercourse entirely so that wetland impacts would be temporary, rather than permanent. (Tr. 3, pp. 255-257)

152. Stormwater control during construction would be controlled using swales/check dams and erosion and sedimentation barriers such as silt sox and fencing. In areas where the silt sox extend parallel to a construction slope, "j-hooks" would be incorporated to control water velocity. In steeper terrain, two rows of barriers would be used to ensure sediment is contained within the construction area. (Applicants 1, Attachment 4; Tr. 1, pp. 31-33)

153. Post-construction drainage along the access drive would either sheet flow across the drive and drain overland or would be controlled by a series of grass-lined swales. In areas where there are swales, the access drive would be pitched so that stormwater would flow into the swales. The swales would feature check dams every 100 feet to control velocity and would discharge on splash pads before flowing into the downgradient wetlands. (Applicants 1, Attachment 4; Tr. 1, pp. 33-36; Tr. 3, pp. 237-238)

154. The total area of disturbance is approximately 1.53 acres. Pursuant to CGS Section 22a-430b, a DEEP-issued Stormwater Permit is required prior to commencement of construction. The permit requires implementation of a Stormwater Pollution Control Plan to prevent the movement of sediments off construction sites into nearby water bodies and to address the impacts of stormwater discharges from a project after construction is complete. (CGS Section 22a-430b; Applicants 4, response 37; Applicants 6, response 28)

155. DEEP would independently review the proposed construction footprint, stormwater management measures, and erosion and sediment controls prior to issuing a Stormwater Permit. In accordance with the Stormwater Permit, the project would be designed and constructed consistent with the *2002 Connecticut Guidelines for Soil Erosion and Sedimentation Control* and the *2004 Stormwater Quality Manual*. (Applicants 1, Attachment 6; Applicants 5)

156. Erosion control blankets (ECB) would be installed to stabilize disturbed slopes greater than 3:1. ECB would be primarily located in the compound area and along the access drive west of the wetland. (Applicants 1, Attachment 4; Tr. 1, pp. 26-27)

157. The project would require approximately 1,663 cubic yards of fill and approximately 986 cubic yards of excavation. HT would utilize as much of this material as possible for fill to avoid importing fill to the site. Additionally, there will be approximately 712 cubic yards of crushed stone for surfacing of the compound and access drive. (Applicants 1, Attachment 3; Tr. 1, pp .109-110)

158. Approximately 90 trees over 6-inches diameter at breast height would be removed to develop the site. For trees adjacent to the construction areas, HT does not anticipate root damage that would affect the integrity of the trees. (Applicants 1, Attachment 6; Tr. 1, pp. 24-25, 30-31)

159. The forest at the site is part of a larger core forest block that extends from Pootatuck State Forest. Most of the forest on the property is considered perforated forest due to adjacent residential development and associated driveways. Approximately 1.1 acres of core forest would be directly impacted by the Project. (Applicants 6, response 38; Applicants 7 Late File, Attachment 7

160. Site grading would be required to create a level compound area. Grading would also be required to establish the access drive and adjacent swales. The steepest portion of the access drive is in the area of the compound where the slope is approximately 9 percent. (Applicants 1, Attachment 4; Tr. 1, pp. 37-38)

161. Currently, the existing forest on the host property does not have invasive species. To maintain this high quality characteristic and to prevent invasive from encroaching onto sensitive core forest habitat used by the Northern slimy salamander, the Applicants would implement an invasive species control plan upon

completion of construction to prevent invasive species from taking hold in the disturbed areas of the site. (Applicants 1, Attachment 6; Applicants 6, response 38; Tr. 1, pp. 115-116)

162. The site is not located in an area mapped as prime farmland soil. (Applicants 5)

163. The site is not located in the Federal Emergency Management Agency Zone designated 100-year or 500-year flood zone. (Applicants 1, Bulk File-a, p 12)

164. The site is not located within a state-designated aquifer protection area. (Council Administrative Notice 73)

165. The Applicants would install a propane fueled emergency generator rather than a diesel-fueled generator as a preventative measure to protect groundwater quality due to the presence of nearby private drinking water wells. The proposed facility would not affect the water quality of the nearby private water wells. (Applicants 5)

166. The Applicants consulted with the DEEP Natural Diversity Database Program prior to submission of the application to the Council. On October 6, 2020, DEEP issued a preliminary NDDB assessment, identifying five state listed species known in the area of the site property: Northern slimy salamander, little brown bat, red bat, eastern box turtle, and eastern hognose snake. (Applicants 1, Attachment 10)

167. The Applicants performed a field survey for one of the species (Northern slimy salamander) in November 2020. Based on this survey, the Applicants relocated the tower on the host property approximately 185 feet to the northwest, and 24 feet lower in elevation, in order to avoid sensitive habitat for the salamander. Relocating the tower did reduce the buffer to the on-site wetland. (Applicants 1, Attachment 10; Applicants 4, response 18; Tr. 1, pp. 112-113; Tr. 2, pp. 253-254)

168. Lowering the elevation of the tower did not materially affect AT&T's coverage objectives. (Applicants 4, response 18)

169. Based on the relocation of the tower site to avoid the Northern slimy salamander, the Applicants filed a new NDDB review request to DEEP. DEEP responded on January 9, 2021 listing the same five species initially identified in DEEP's October 6, 2020 correspondence. DEEP concurred with the relocation of the tower outside of sensitive salamander habitat and did not recommend any further mitigation measures for this species. DEEP recommended construction mitigation measures for the four other species. (Applicants 1, Attachment 10; Applicants Late File #4)

170. The Applicants would develop a NDDB species protection plan in accordance with DEEP's recommendations that would include contractor education, site inspections isolation barriers, and tree clearing restrictions. (Applicants 1, Attachment 10; Applicants 5)

171. DEEP recommended that site clearing occur between November 1 and March 30 to protect the two bat species. The Applicants would adhere to the site clearing recommendation. (Applicants 1, Attachment 10; Tr. 1, pp. 99-100; Tr. 3, p. 254)

172. The site is within the range of the northern long-eared bat (NLEB), a federally-listed threatened 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 site. The Applicants submitted information to the USFWS using its Information, Planning, and Conservation System (IPaC). The USFWS submitted correspondence to the Applicants based on the IPaC submission stating that any take of NLEB that may

occur as a result of site construction is not prohibited under Endangered Species Act, Section 4(d) rule adopted for this species at 50 CFR §17.40(o). (Applicants 1, Attachment 10)

173. The tree clearing restriction for the red bat and little brown bat would also be protective of any NLEB that occurs in the site area. (Applicants 1, Attachment 10)

174. The proposed facility is not located adjacent to an Important Bird Area (IBA), as designated by the National Audubon Society. The nearest IBA to the proposed site is the Shepaug Forest Block located approximately 7.7 miles to the northeast, spanning several towns. The proposed facility would not affect the IBA. (Applicants 1, Attachment 10)

175. The proposed facility would comply with the USFWS telecommunications tower guidelines for minimizing the potential for impact to bird species. (Applicants 1, Attachment 10)

176. No historic resources were identified within 0.5 miles of the site. For the previous AT&T tower proposal in 2013 on the host parcel, the SHPO determined that a 170-foot tower at Coote Hill Road would have no effect on historic properties. The Applicants would submit a request for a new determination to SHPO if the proposed project is approved. (Applicants 1, Attachment 5)

177. The Applicants anticipate removing ledge within the construction area by chipping; however, if blasting is required, it would be conducted in accordance with state and Town regulations. The Town follows the Federal Bureau of Mining Rules and Regulations for blasting. A pre-meeting would be held to discuss the project with the Fire Marshall and pre-blast surveys would be offered for residences, generally for homes within 150 feet of the blast location. (Applicants 4, response 9; Applicants 7 Late File #3; Tr. 1, p. 26)

Visibility

178. The Applicants used a combination of predictive computer model, in-field analysis, and review of various data sources to evaluate the visibility of the proposed facility on both a quantitative and qualitative basis. (Applicants 1, Attachment 8)

179. On January 31, 2021, the Applicants conducted an in-field visibility analysis of the proposed tower by flying a 4-foot diameter balloon to a height of 170 feet agl at the 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. (Applicants 1, Attachment 8)

180. Information obtained during the field reconnaissance was incorporated into mapping data layers, including observations of the field reconnaissance, photo-simulation locations, areas that experienced land use changes, and places where the initial modeling was found to over- or under-predict visibility to produce a predictive viewshed map for areas within a two-mile radius (8,042 acres) of the site (Study Area). (Applicants 1, Attachment 8)

181. The final Study Area viewshed map depicts areas where year-round and seasonal visibility (leaf-off conditions) could occur within a two-mile radius of the sites, based on computer modeling, aerial imagery review and in-field observations from publicly-accessible locations. Photographs towards the tower location are also shown. (Applicants 1, Attachment 8)

182. Based on the final viewshed analysis, the proposed tower would be visible year-round from approximately 5 acres (0.06 %) of the Study Area (refer to Figure 8). The tower would be seasonally visible (leaf-off conditions) from approximately 29 acres (0.36%) of the Study Area. (Applicants 1, Attachment 8)

183. Generally, year-round and seasonal views of portions of the facility would occur primarily from two areas, the Route 37/Coburn Road East area, approximately 0.6 to 0.8-mile northwest of the site and the Route 39 area, approximately 0.8 to 1.0-mile northeast of the site. (Applicants 1, Attachment 8)

184. Approximately 5 residences within 0.5 miles of the proposed facility (excluding the landlords) would have seasonal views of the facility. (Applicants 4, response 34)

185. For the Route 37/Coburn Road East area, year-round views of the facility would occur from, but are not limited to, a portion of the west shoreline of Lake Mauweehoo, Lake Mauweehoo Club property and from 2 residences in the area of the Route 37-Leach Hollow Road. Open field areas adjacent to several residences in the Route 37- Memory Lane area would also have year-round views. (Applicant 1, Attachment 8)

186. For the Route 39 area, a 0.4-mile section of road would have seasonal views interspersed with year-round views in select areas. (Applicants 1, Attachment 8)

187. Intervenor Greenbaum conducted a crane test to study the visual impact of the tower. The crane, with a mast extended to 170 feet agl, was set up in the driveway of 39 Mauweehoo Hill Road, which is approximately 400 feet north of the proposed site. The crane was set up at the same elevation as the proposed tower. A photo was taken from the 80-88 Route 39 South area to demonstrate visibility of the proposed tower (60-70 feet above treeline). (Greenbaum 4, visibility analysis)

188. The host property is forested. No landscaping is proposed. (Applicants 1, Attachment 4)

189. Pursuant to CGS §16-50p(a)(3)(F), no public schools or commercial child day care facilities are located within 250 feet of the site. No such facilities are within two miles of the site. (Applicants 1, Attachment 8)

190. According to the Town Plan of Conservation and Development, two local scenic roads, Leach Hollow Road and Cozier Hill Road, are located approximately 0.6-mile northwest and 1.3 miles north of the proposed site, respectively. Year-round and seasonal views of the upper portion of the tower would occur from Leach Hollow Road in the Route 37/Lake Mauweehoo area. No visibility of the tower would occur from Cozier Hill Road; however, the tower would be visible from 26 Cozier Hill Road but the tower would have a mountainside in the backdrop rather than be silhouetted against the sky. (Applicants 1 Bulk File a; Attachment 8; Greenbaum 4c; Tr. 3, pp. 281-282)

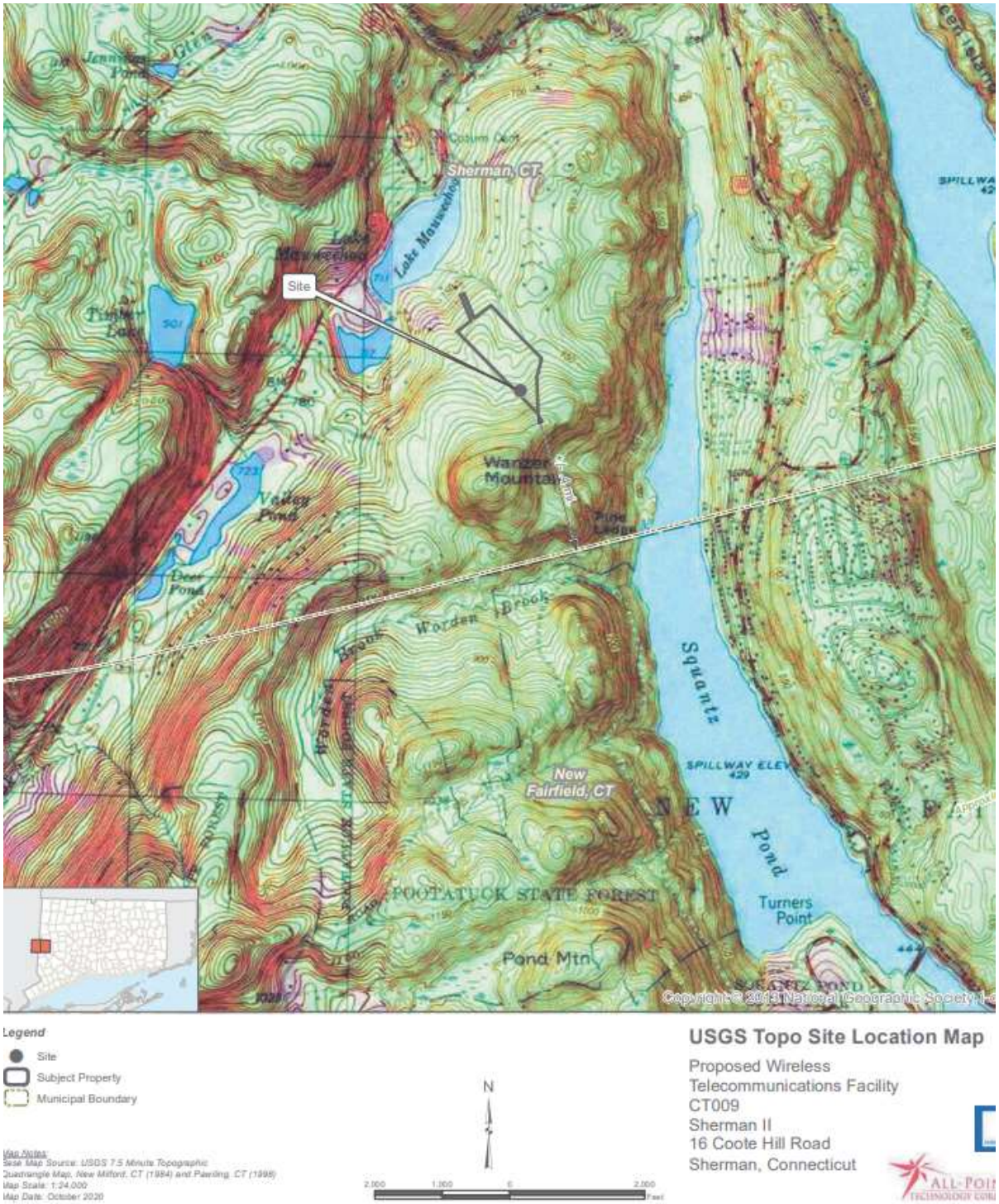
191. There are hiking trails approximately 0.6 miles south of the site within the Pootatuck State Forest. The tower would not be visible from these trails. (Applicants 1, Attachment 8)

192. The tower would have a galvanized grey finish. (Applicants 4, response 11)

193. Due to the height above treeline of the proposed facility when viewed from nearby areas, a two-tone tower painting scheme (blue upper half - brown lower half), would not be effective as the tower would stand out when compared to a tower with a galvanized steel finish. (Tr. 1, pp. 71-72)

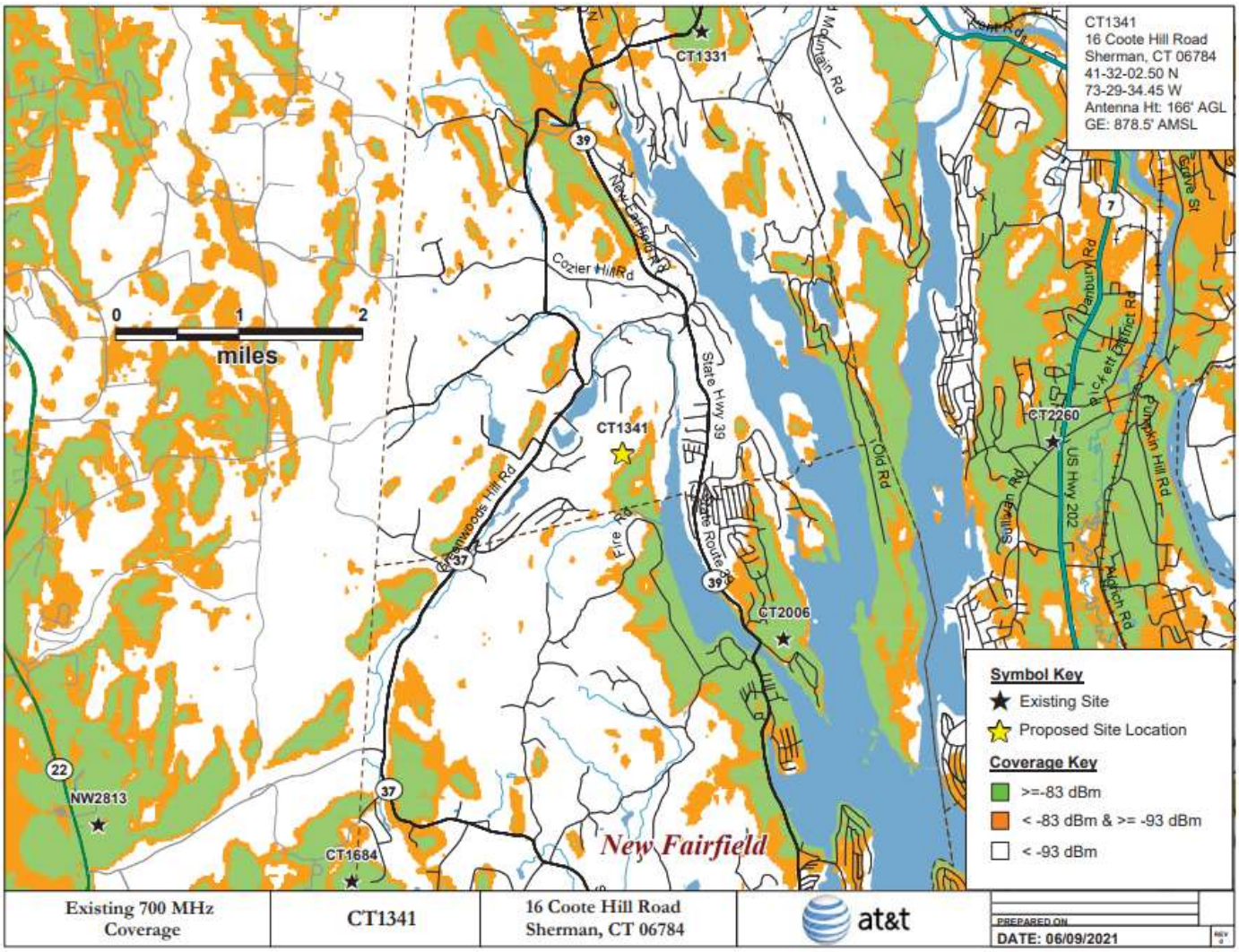
194. Installing antennas in a flush-mount configuration on the tower to reduce the visual profile of an antenna platform would limit the number of antennas at each tower level, thus requiring a taller tower to accommodate all of the proposed antennas. AT&T would require 2 ten-foot sections of the tower to accommodate flush-mount antennas. (Applicants 4, response 17)

Figure 1: Site Location



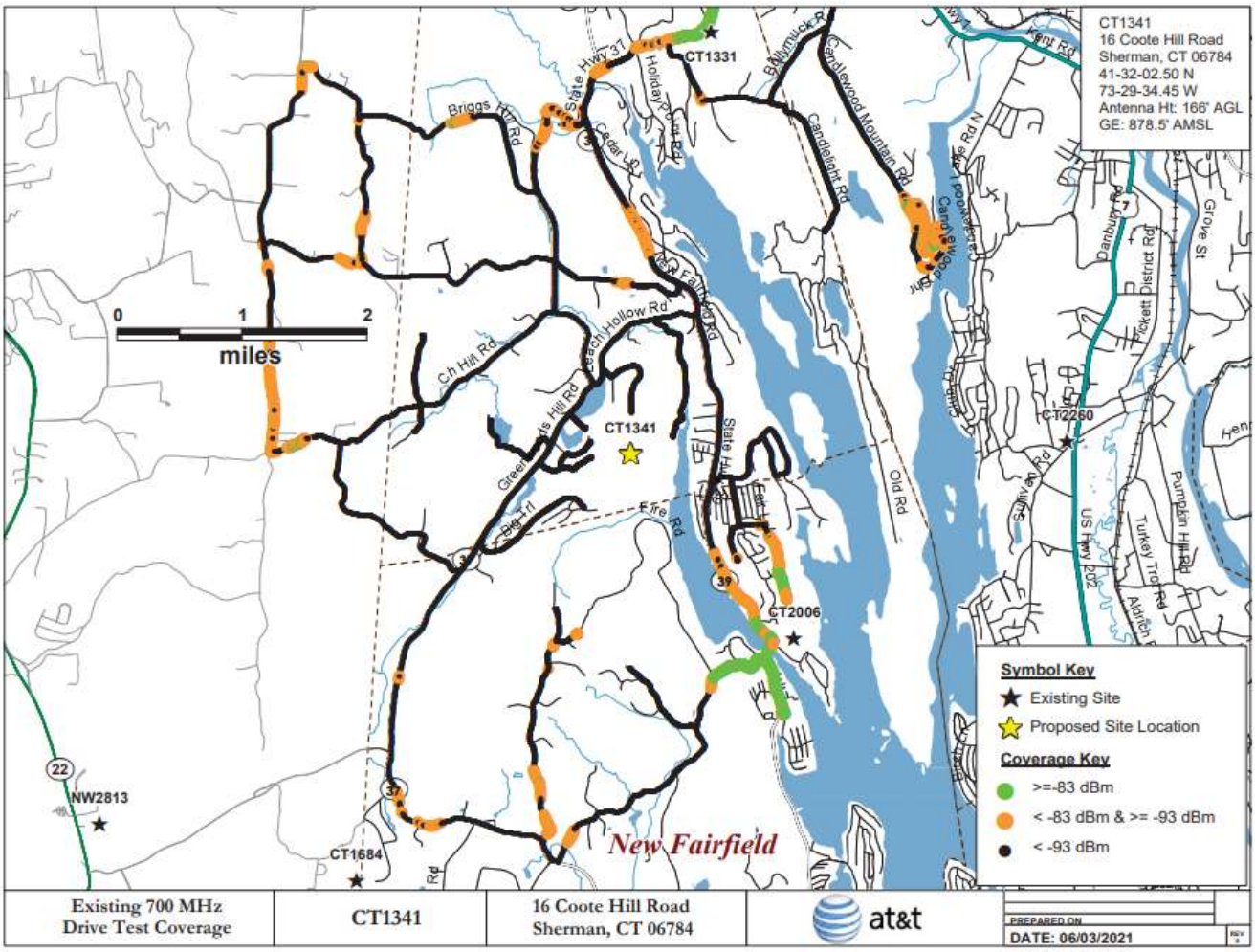
(Applicants 1, Attachment 4)

Figure 2: Existing AT&T 700 MHz Coverage



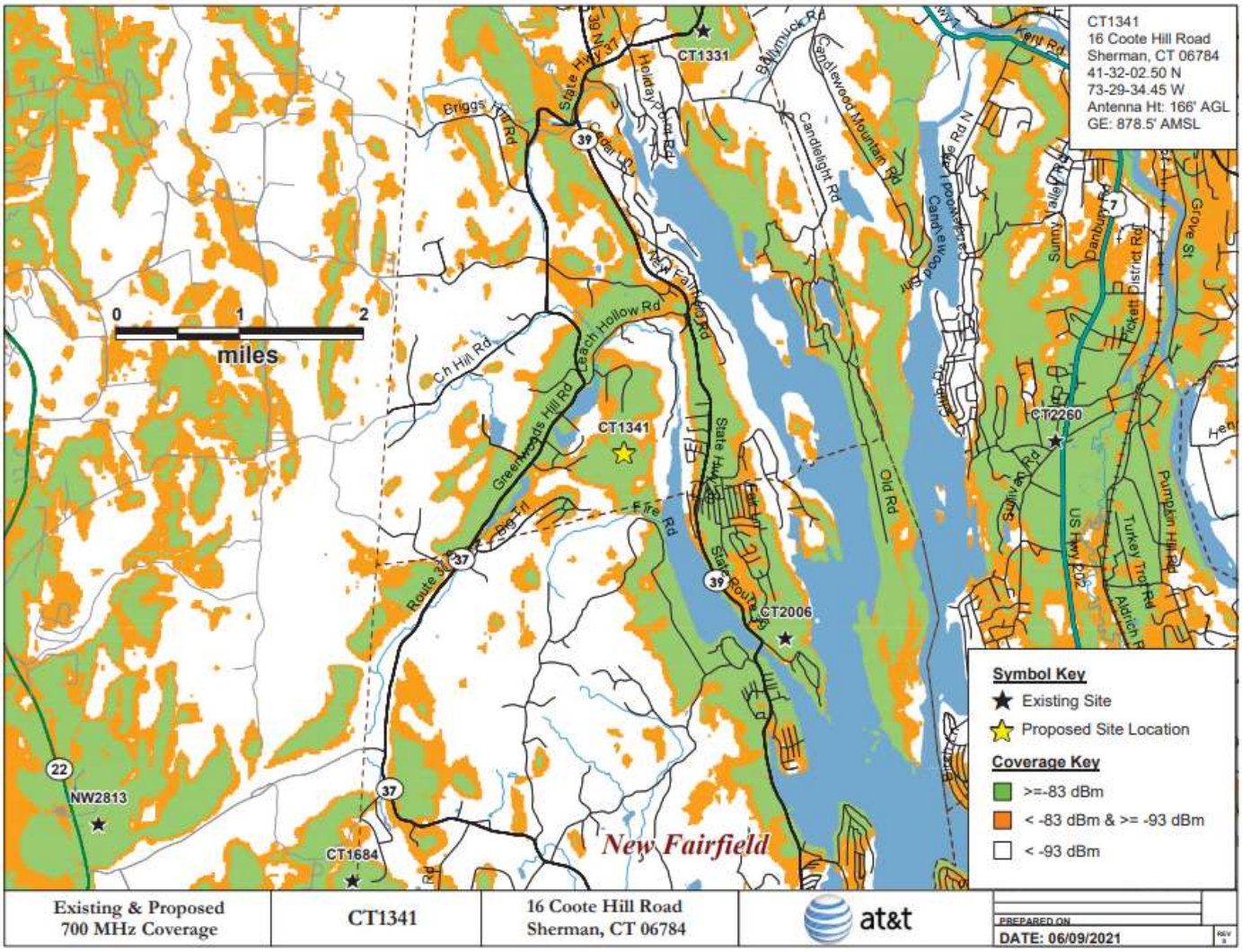
(Applicants 7, Attachment 5)

Figure 3: AT&T Drive Test of Existing 700 MHz Coverage



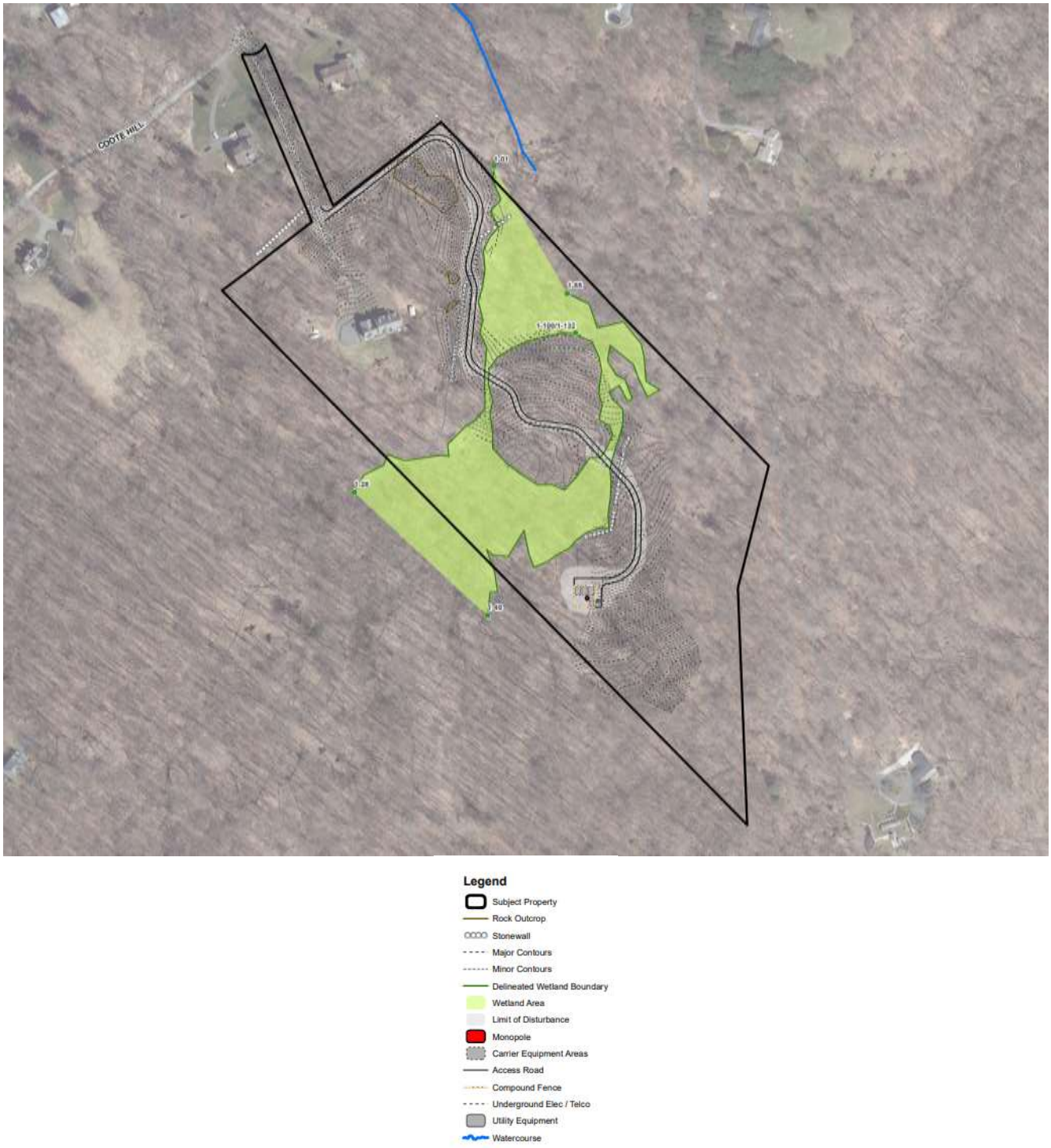
(Applicants 7, Attachment 5)

Figure 4: Proposed AT&T 700 MHz Coverage with Existing Coverage from Surrounding Sites



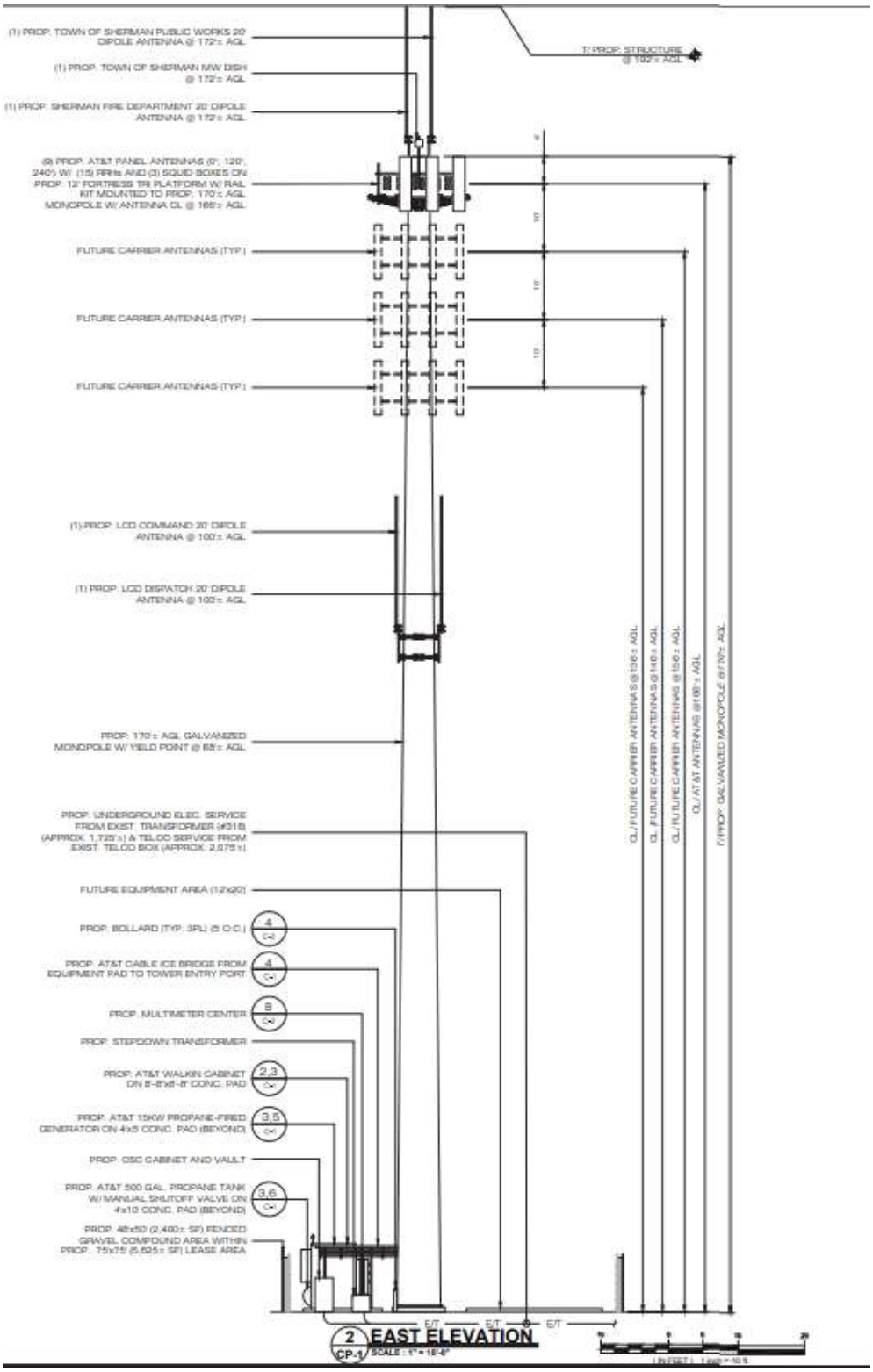
(Applicants 7, Attachment 5)

Figure 5: Site Location on property



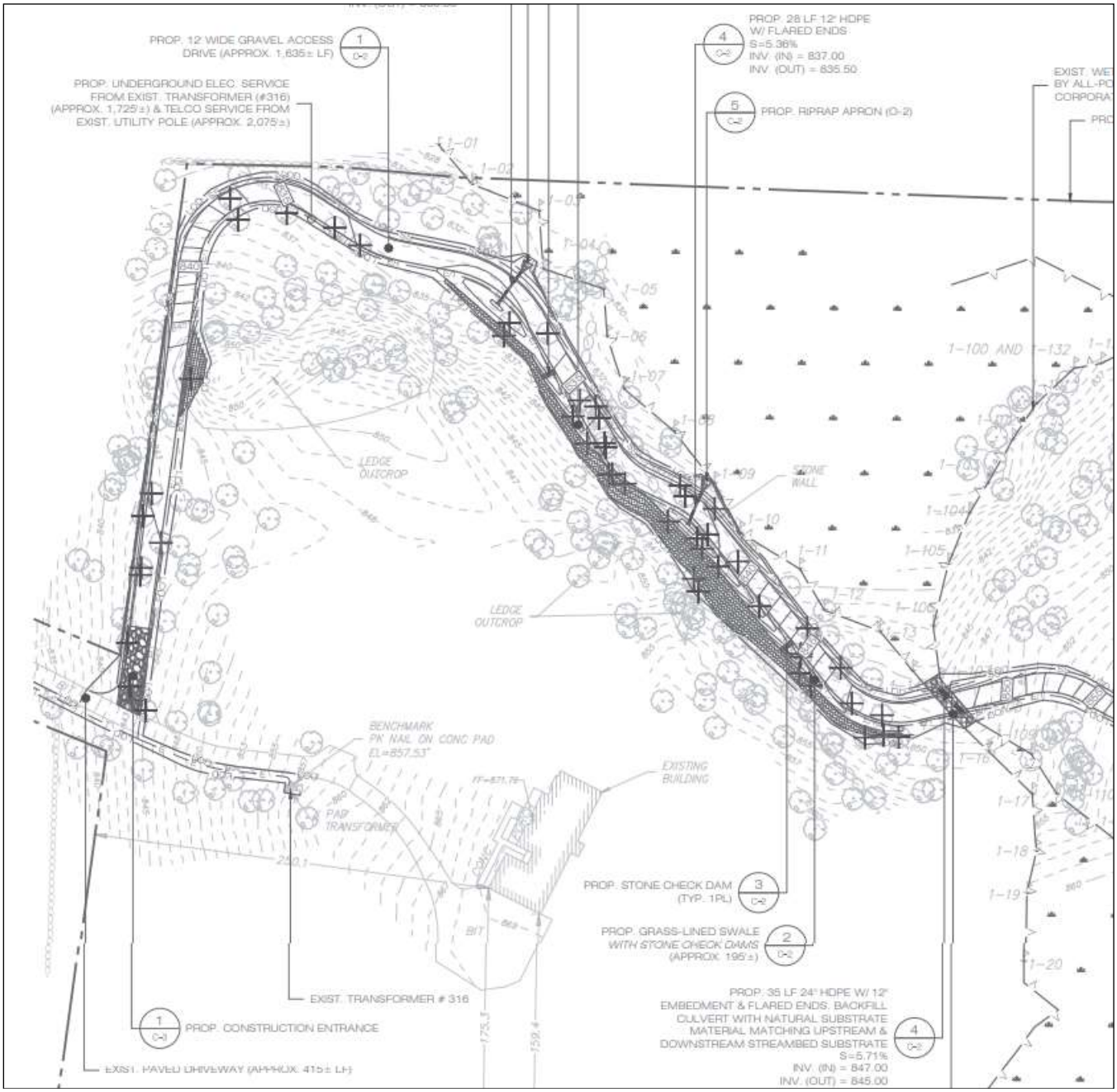
(Applicants 1, Attachment 6)

Figure 6: Compound/tower profile



(Applicant 1 Attachment 6)

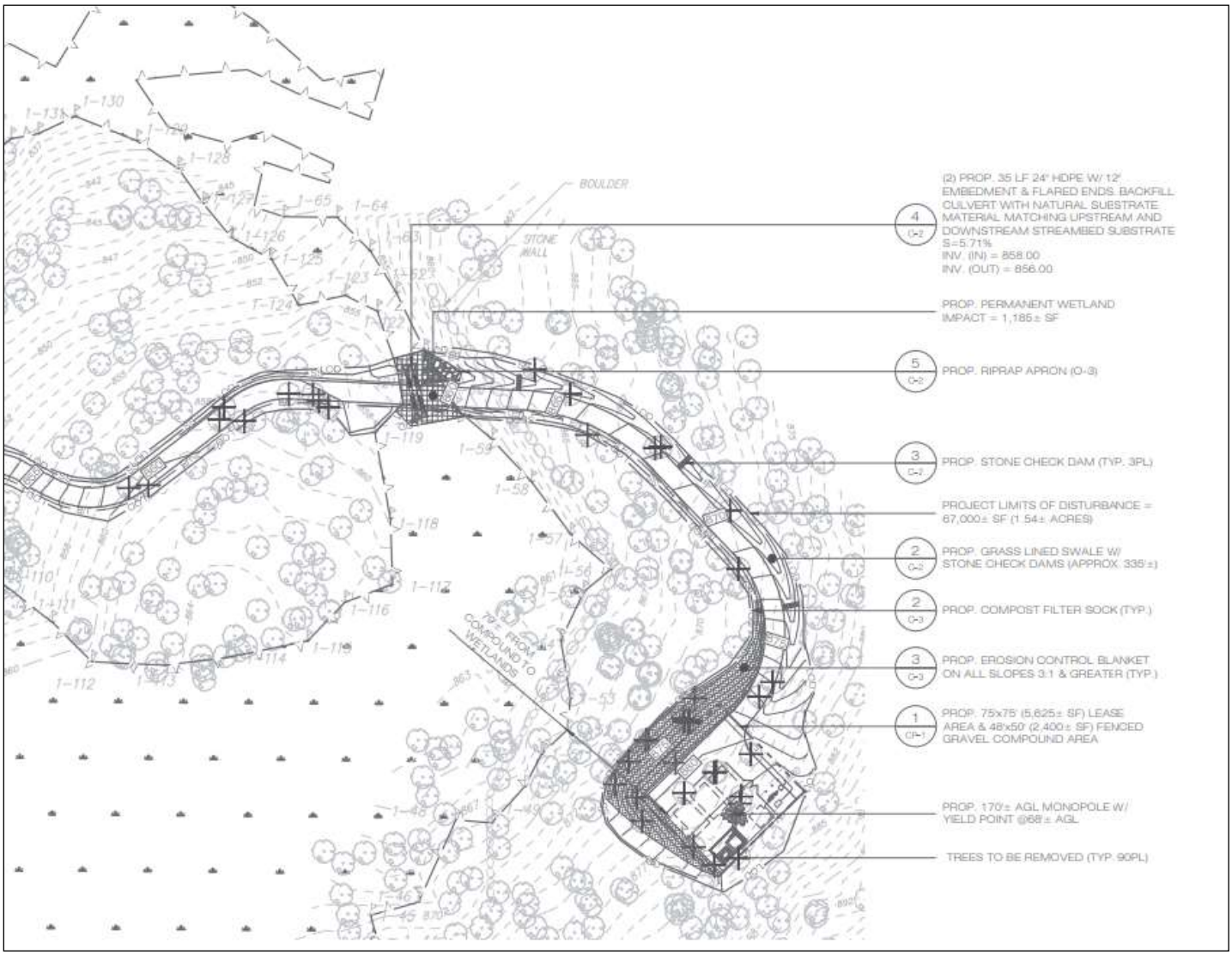
Figure 7A: Site Plan – northern section



(no scale)

(Applicants 1, Attachment 4)

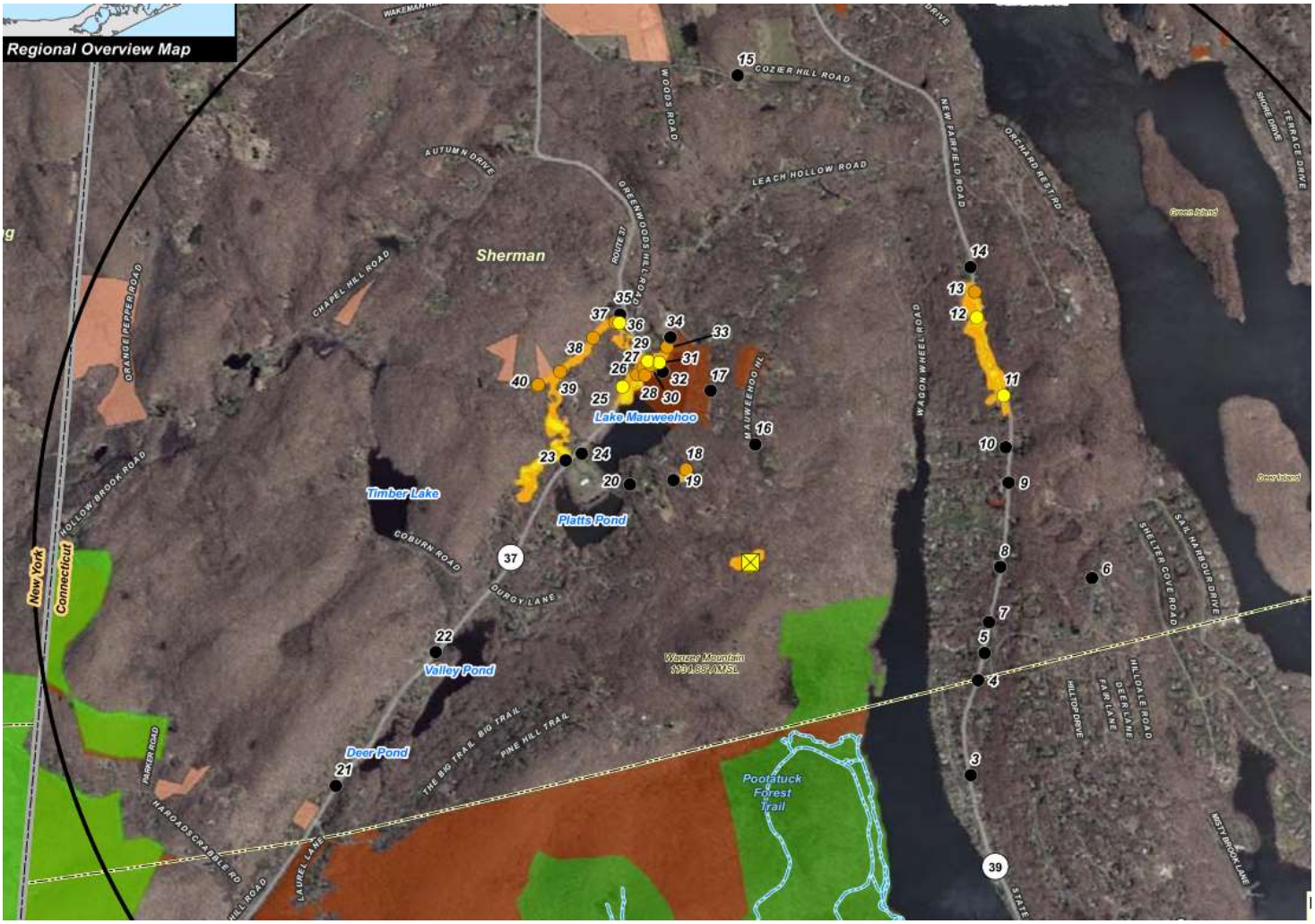
Figure 7B: Site Plan – southern section



(no scale)

(Applicants 1, Attachment 4)

Figure 8: Visibility Map and Photolog



(partial map)

Legend

- Proposed Site
- Study Area (2-Mile Radius)
- Predicted Year-Round Visibility (5 Acres)
- Areas of Potential Seasonal Visibility (28 Acres)

Photo Locations (January 31, 2021)

- Not Visible
- Seasonal
- Year-Round
- Municipal Boundary
- State Boundary
- Trail
- Scenic Highway
- DEEP Boat Launches
- Municipal and Private Open Space Property
- State Forest/Park

Protected Open Space Property

- Federal
- Land Trust
- Municipal
- Private
- State

(Applicants Attachment 8)

Photolog - photo numbers correspond with numbers on map. (photos with visibility only)

Photo	Location	Orientation	Distance to Site	Visibility	Height Visible above Trees*
11	Route 39	Southwest	± 0.84 Mile	Year Round	20'-40'
12	Route 39	Southwest	± 0.93 Mile	Year Round	40'-60'
13	Route 39	Southwest	± 0.98 Mile	Seasonal	1'-20'
18	Coote Hill Road	Southeast	± 0.32 Mile	Seasonal	1'-20'
25	Route 37	Southeast	± 0.61 Mile	Year Round	20'-40'
26	Route 37	Southeast	± 0.62 Mile	Seasonal	20'-40'
27	Route 37	Southeast	± 0.63 Mile	Seasonal	1'-20'
28	Lake Mauweehoo Club	Southeast	± 0.61 Mile	Seasonal	At Treeline
29	Route 37 at Leach Hollow Road	Southeast	± 0.64 Mile	Year Round	40'-60'
30	Leach Hollow Road	Southeast	± 0.62 Mile	Seasonal	1'-20'
31	Leach Hollow Road	Southeast	± 0.62 Mile	Year Round	20'-40'
33	Leach Hollow Road	Southeast	± 0.65 Mile	Seasonal	At Treeline
36	Coburn Road East	Southeast	± 0.77 Mile	Year Round	20'-40'
37	Coburn Road East	Southeast	± 0.78 Mile	Seasonal	1'-20'
38	Coburn Road East	Southeast	± 0.77 Mile	Seasonal	1'-20'
39	Coburn Road East	Southeast	± 0.76 Mile	Seasonal	1'-20'
40	Coburn Road East	Southeast	± 0.78 Mile	Seasonal	20'-40'

* A range of potential visibility is provided to characterize the estimated height in the vicinity of the photograph. Please note that the height estimate only pertains to the tower structure and does not include the proposed 20' whip antenna.