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| **DOCKET NO. 489** – The First Taxing District Water Department of Norwalk application for a Certificate of Environmental Compatibility and Public Need for the construction, maintenance, and operation of a telecommunications facility located at 173½ West Rocks Road, Norwalk, Connecticut. | } | Connecticut |
| | } | Siting |
| | } | Council |

October 30, 2020

**DRAFT Findings of Fact**

## Introduction

1. The First Taxing District Water Department of Norwalk (FTD or Applicant), in accordance with provisions of Connecticut General Statutes (C.G.S.) § 16-50g, et seq, applied to the Connecticut Siting Council (Council) on March 17, 2020 for a Certificate of Environmental Compatibility and Public Need (Certificate) for the construction, maintenance, and operation of a 130-foot monopole wireless telecommunications facility at 173½ West Rocks Road, Norwalk in Danbury, Connecticut. (Cellco 1, pp. 1-2)

2. FTD is a municipal water company with an administrative office located at 12 New Canaan Road, Norwalk, Connecticut. (Applicant 1, p. 2)

3. New Cingular Wireless PCS, LLC (AT&T), Cellco Partnership d/b/a Verizon Wireless (Cellco), T-Mobile Northeast, LLC (T-Mobile), and Sprint Spectrum (Sprint) (collectively, the "Wireless Carriers") are licensed by the Federal Communications Commission (FCC) to provide personal wireless communication service to Fairfield County, Connecticut. (Applicant 1, p. 2)

4. The party in this proceeding is the Applicant. The intervenor in this proceeding is AT&T. (Transcript 1, September 15, 2020, 2:00 p.m. [Tr. 1], p. 7)

5. FTD currently maintains an existing 115-foot tall 100,000 gallon water tank* in the northeast portion of the subject property. The water tank was originally constructed in 1953. The water tank was first approved for wireless telecommunications co-location in 1992 in Council Petition No. 284. The water tank currently supports the antennas of the Wireless Carriers as follows:
    a. AT&T at 111 feet above ground level (agl);
    b. T-Mobile at 108 feet agl;
    c. Sprint** at 106 agl; and
    d. Cellco at 82 feet agl.

    *The existing water tank is no longer used for water storage purposes.
    **Sprint and T-Mobile have recently merged, but the current plans are to continue to operate both networks for the foreseeable future (e.g. roughly the next year or two).

    (Applicant 1, pp. i and 6; Applicant 3, cover page and response 20; Council Administrative Notice Item No. 30; Tr. 1, pp. 82-83)

6. In 2016, FTD decided to discontinue use of the existing water tank due to the discovery of lead paint and polychlorinated biphenyls (PCBs) on the tank and in the soil beneath the tank. As part of its environmental remediation plan for the subject property, FTD will remove the existing water tank and the contaminated soils beneath the tank. (Applicant 1, p. 6; Tr. 1, p. 55)

7. FTD has received Norwalk Zoning Commission approval to install a new 116-foot tall 500,000 gallon water tank in the central portion of the subject property. (Applicant 1, p. i; Applicant 4, response 14, Sheet C-3)

8. In order to maintain existing wireless service in the area, FTD proposes to construct a new monopole tower on the subject property that would support the relocation of the Wireless Carriers from the water tank. (Applicant 1, p. 6)

9. The purpose of the proposed facility is to allow the Wireless Carriers to maintain the same level of service that is currently being provided along portions of the Merritt Parkway, Route 7, Main Street and West Rocks Road, as well as the commercial and residential areas surrounding the subject property. (Applicant 1, p. 7)

10. Pursuant to C.G.S. § 16-50*l* (b), the Applicant provided public notice of the filing of the application that was published in The Hour on March 12, 2020 and March 13, 2020. (Applicant 1, p. 3 and Tab 3; Applicant 3, response 3; Applicant 5)

11. Pursuant to C.G.S. § 16-50*l* (b), notice of the application was provided to all abutting property owners by certified mail. Notice was unclaimed by 4 abutters. The Applicant re-sent notice via regular mail to the four abutters on April 23, 2020. (Applicant 1, p. 3 and Tab 2; Applicant 3, response 1; Applicant 7, response 47)

12. On March 20, 2020, the Applicant provided notice to all federal, state and local officials and agencies listed in C.G.S. § 16-50*l* (b). (Applicant 1, p. 3 and Tab 2)

## Procedural Matters

13. 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. 53)

14. 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. 53)

15. On March 14, 2020, 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. 53, CGS §1-200, *et seq*. (2019))

16. 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;
    d) 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

e) 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. 53)

17. Upon receipt of the application, the Council sent a letter to the City of Norwalk (City) on March 18, 2020, as notification that the application was received and is being processed, in accordance with C.G.S. § 16-50gg. (Record)

18. During a regular Council meeting on June 4, 2020, 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)

19. Pursuant to C.G.S. § 16-50m, the Council published legal notice of the date and time of the public hearing in The Norwalk Hour on June 14, 2020. 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)

20. Field reviews are not an integral part of the public hearing process. (Council Administrative Notice Item Nos. 54 and 55)

21. Pursuant to Governor Lamont's EO 7B and C.G.S. § 16-50m, on June 10, 2020, the Council sent a letter to the City of Norwalk to provide notification of the scheduled remote public hearing via Zoom conferencing and to invite the municipality to participate. (Record)

22. On July 8, 2020, 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 Memoranda, dated June 30, 2020 and July 9, 2020)

23. Pursuant to C.G.S. § 16-50m, the Council gave due notice of a remote public hearing to be held on August 6, 2020, 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 June 10, 2020)

24. By notice dated August 6, 2020, the Council cancelled the public hearing scheduled for August 6, 2020 due to Governor Lamont's August 5, 2020 state of emergency proclamation in response to widespread power outages caused by Tropical Storm Isaias. (Council Hearing Cancellation Memo dated August 6, 2020; Council Rescheduled Hearing Notice dated August 6, 2020)

25. On March 25, 2020 and June 29, 2020, Governor Lamont issued EO 7M and EO 7DDD, respectively, allowing for an extension of all statutory and regulatory deadlines of administrative agencies for a period of no longer than 90 days as long as notice of such extension is provided before September 9, 2020. (Record; Council Administrative Notice Item No. 53)

26. Pursuant to Governor Lamont's EO 7B and C.G.S. § 16-50m, the Council published legal notice of the date and time of the rescheduled remote public hearing via Zoom conferencing in The Norwalk Hour on August 11, 2020. (Record)

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

(Council's Rescheduled Hearing Notice dated August 6, 2020)

28. On July 16, 2020, in lieu of an in-person field review of the proposed site, the Council requested the Applicant submit photographic documentation of site-specific features into the record intended to serve as a "virtual" field review of the site. On July 27, 2020, the Applicant submitted such information in response to the Council's second set of interrogatories. (Record; Applicant 7, response 50; Applicant 8)

29. In compliance with R.C.S.A. § 16-50j-21, the Applicant installed a four-foot by six-foot sign at the entrance to the subject property on July 10, 2020. The sign presented information regarding the project and the Council's public hearing*. (Applicant 6)

*The sign originally indicated the hearing date of August 6, 2020, and on August 11, 2020, the sign was corrected to reflect the rescheduled hearing date of September 15, 2020.

(Applicant 6; Tr. 1, p. 15; Hearing Notice dated June 10, 2020)

30. Pursuant to C.G.S. § 16-50m, the Council, after giving due notice thereof, held a rescheduled remote public hearing on September 15, 2020, 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 August 6, 2020; Tr. 1, p. 1; Transcript 2 – 6:30 p.m. [Tr. 2], p. 114)

31. 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 September 15, 2020;
    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 and members of the public who spoke during the public comment session provided their information for identification purposes during the 9remote public hearing.

(Hearing Notice dated August 6, 2020; Tr. 1; Tr. 2; Record)

## State Agency Comment

32. Pursuant to C.G.S. § 16-50j (g), on June 10, 2020, 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)

33. The Council received comments from CEQ on May 1, 2020 which are attached. (CEQ Comments received May 1, 2020)

34. The following agencies did not respond with comment on the application: DEEP, DPH, PURA, OPM, DECD, DOAg, DOT, CAA, DESPP, and SHPO. (Record)

35. 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

36. The Applicant commenced the 90-day pre-application municipal consultation process by submitting the technical report to local officials in Norwalk. The Applicant also met with City of Norwalk officials to discuss the proposal and the Council's application review process. (Applicant 1, p. 16)

37. At the request of the City of Norwalk, the Applicant held a Public Information Meeting (PIM) on January 2, 2020 at the beginning of a regular meeting of the Norwalk Zoning Commission. (Applicant 1, p. 16)

38. Notice of the PIM was published in The Hour on December 18, 2019 and was sent to abutting landowners on December 12, 2019 and December 17, 2019*.

    *After sending out the initial notice to abutting landowners, the start time of the PIM was changed from 7:00 p.m. to 6:30 p.m. at the request of the City. Thus, a supplemental notice to abutters was sent to indicate the change in start time.

    (Applicant 1, p. 16)

39. At the PIM, the Applicant discussed the need to replace the existing wireless telecommunications facility and the Council's application review process. One abutting landowner spoke at the PIM and expressed concerns related to visual impacts, construction-related impacts and radio frequency (RF) emissions from the proposed facility. (Applicant 1, p. 16)

40. The proposed monopole would be painted in accordance with recommendations by SHPO and in consultation with the First Taxing District Water Company. A very light green, almost blue-ish tone similar to the new water tank is being considered. (Applicant 3, response 10; Tr. 1, pp. 102-103)

41. The Applicant has designed its tower to accommodate emergency services antennas. As of September 15, 2020, neither the City of Norwalk nor any emergency response entity has expressed an interest in co-locating emergency services antennas on the tower. (Applicant 1, p. 9; Applicant 3, response 28; Tr. 1, p. 33)

**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. AT&T, Cellco, T-Mobile, and Sprint are licensed by the FCC to provide personal wireless communication service to Fairfield County, Connecticut. (Council Administrative Notice Item No. 4 – Telecommunications Act of 1996; Applicant 1, p. 2)

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 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. 23 – FCC Wireless Infrastructure Report and Order; Council Administrative Notice Item No. 12 – Presidential Executive Order 13616, Accelerating Broadband Infrastructure Development)

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. 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)

53. On June 10, 2020, the Council sent correspondence to telecommunications carriers requesting that carriers interested in locating on the proposed facility in the foreseeable future notify the Council by July 30, 2020. No comments were received. (Record)

## Existing and Proposed Wireless Services

54. The Wireless Carriers would provide service over the following frequency bands:

    a) AT&T – 700 MHz, 850 MHz, 1900 MHz and 2100 MHz;

    b) Cellco – 700 MHz, 850 MHz, 1900 MHz, and 2100 MHz;

    c) T-Mobile – 700 MHz, 1900 MHz and 2100 MHz; and

    d) Sprint – 850 MHz, 1900 MHz and 2100 MHz.

    (Applicant 1, Tab 13 – Calculated Radio Frequency Exposure Report; Applicant 3, responses 19and 25)

55. For the Wireless Carriers, all of their respective frequency bands would be used to transmit voice and data. (Applicant 3, response 19; Tr. 1, p. 36)

56. For the Wireless Carriers, the respective design signal strengths for in-vehicle and in-building coverage are noted below:

a) AT&T – For 700 MHz and 850 MHz, the in-building and in-vehicle design signal strengths are -83 dBm and -93 dBm. For PCS and AWS service, the respective thresholds are -86 dBm and -96 dBm;

b) Cellco – For in-building and in-vehicle, the design signal strengths are -82 RSRP and -95 RSRP, respectively;

c) T-Mobile – For in-building commercial, in-building residential, and in-vehicle, the design signal strengths are -91 dBm, -97 dBm, -114 dBm, respectively; and

d) Sprint – Utilizes similar design signal strengths as T-Mobile.

(Applicant 3, response 23; Tr. 1, p. 19, 36-37)

57. If the existing water tank facility is decommissioned but not replaced with the proposed facility (i.e. there is not an active facility at the site for the Wireless Carriers), the impacts on existing signal strength and/or coverage for the Wireless Carriers is noted below:

a) The existing signal strength in AT&T's target coverage area would range from as high as the "high quality" coverage threshold of -83 dBm to an unreliable signal strength of less than -93 dBm;

b) Cellco's existing signal strength in its target coverage area would be greater than or equal to -105 RSRP, and this is a level of service that is unreliable;

c) T-Mobile's target coverage area would be reduced to include unreliable in-vehicle coverage of approximately -114 dBm along with coverage gaps on Route 15. Additionally, in-building commercial coverage would be unreliable; and

d) Sprint would have coverage gaps open up along Route 15, Route 7 and Main Avenue under such scenario.

(Applicant 1, Tab 5; Applicant 3, response 24; Tr. 1, p. 20)

58. With respect to the Wireless Carriers' existing and proposed coverage along state roads, the following is indicated below:

a) AT&T currently has a small coverage gap on the Merritt Parkway in a valley located west of Route 7. The proposed facility would maintain the existing level of coverage and would also eliminate this gap completely;
b) Cellco is not experiencing existing coverage gaps along state roads within its target area. Cellco would maintain the same level of coverage as the existing coverage;
c) T-Mobile is not experiencing existing coverage gaps along state roads (e.g. Route 15), and the proposed facility would provide comparable coverage to that of the existing facility; and
d) Sprint is not experiencing existing coverage gaps along Route 7 and Route 15 in the vicinity of the site. Sprint would maintain the same level of coverage as is currently existing.

(Applicant 1, p. 7 and Tab 5; Applicant 3, response 26)

59. AT&T's proposed facility would interact with the adjacent existing facilities identified in the following table.

| **Site Location** | **Distance from Proposed Tower** | **Height of AT&T's Antennas above ground level (AGL)** | **Structure Type** |
|---|---|---|---|
| 2 Sunny Lane, Westport | 2.7 miles | 100 feet | Monopole |
| Willard Road, Norwalk | 1.8 miles | 347 feet | Self-supporting Lattice |
| Shirley Street, Norwalk | 2.1 miles | 81 feet | Guyed Tower |
| 284 New Canaan Avenue, Norwalk | 2 miles | 126 and 136 feet | Stealth Pole (with internal antennas) |
| 24 Beldon Avenue, Norwalk | 1.8 miles | 121, 130 and 141 feet | Rooftop |
| 1 Will Russ Court, Norwalk | 1.4 miles | 105 feet | Power Mount |
| 101 Merritt 7, Norwalk | 0.7 mile | 128 feet | Rooftop |
| 33 Riverside Avenue, Westport | 2.9 miles | 59 and 69 feet | Rooftop |

(Applicant 3, response 18)

60. Cellco's proposed facility would interact with the adjacent existing facilities identified in the following table.

| Site Location | Distance from Proposed Tower | Height of Cellco's Antennas above ground level (AGL) | Structure Type |
|---|---|---|---|
| 301 Merritt 7, Norwalk | 0.6 mile | 106 feet | Building-mount |
| 50 Danbury Road, Wilton | 1.7 miles | 72 feet | Building-mount |
| 2 Sunny Lane, Westport | 2.7 miles | 128 feet | Monopole |
| 33 Riverside Avenue, Westport | 2.9 miles | 69 feet | Building-mount |
| 274 Riverside Avenue, Westport | 2.7 miles | 82 feet | Rooftop |
| 1 Filbert Street, Norwalk | 2.1 miles | 111 feet | Tank |
| 24 Beldon Avenue, Norwalk | 1.7 miles | 85 feet | Building-mount |
| 6 Shirley Avenue, Norwalk | 4.2 miles | 101 feet | Self-supporting Lattice |
| 4 Tower Drive, Darien | 4.1 miles | 108 feet | Tank |
| 677 South Avenue, New Canaan | 3.8 miles | 122 feet | Tank |
| 39 Locust Avenue, New Canaan | 3.8 miles | 45 feet | Building-mount |
| 208 Valley Road, New Canaan | 3.1 miles | 106 feet | Monopole |

(Applicant 3, response 18)

61. T-Mobile's proposed facility would interact with the adjacent existing facilities identified in the following table.

| Site Location | Distance from Proposed Tower | Height of T-Mobile's Antennas above ground level (AGL) | Structure Type |
|---|---|---|---|
| 383 Main Avenue, Norwalk | 0.45 mile | 105 feet | Rooftop |
| 101 Main Avenue, Norwalk | 0.61 mile | 114 feet | Rooftop |
| 2 Sunny Lane, Westport | 2.69 miles | 110 feet | Self-Support |
| 10 Willard Road, Norwalk | 1.8 miles | 262 feet | Self-Support |
| 2 Willruss Street, Norwalk | 1.34 miles | 114 feet | Power-mount on Lattice Tower |
| 40 Danbury Road, Wilton | 1.48 miles | 86 feet | Rooftop |
| 24 Belden Avenue, Norwalk | 1.8 miles | 110 feet | Rooftop |

(Applicant 3, response 18)

62. This table indicates the existing and proposed coverage areas from the Wireless Carriers at various frequencies.

| Wireless Carriers | Existing Coverage Areas from Existing Water Tank Facility | Proposed Coverage Areas |
|---|---|---|
| AT&T | 0.91 square miles at 700 MHz | 0.98 square miles at 700 MHz |
| Cellco | 0.986 square miles at 700 MHz | 1.709 square miles at 700 MHz |
| T-Mobile | 4.8 square miles at 2100 MHz | 6.0 square miles at 2100 MHz |

(Applicant 3, response 25)

63. The minimum antenna centerline heights for AT&T, Cellco, T-Mobile and Sprint to meet their wireless service objectives are 126 feet agl, 116 feet agl, 106 feet agl, and 96 feet agl, respectively. (Applicant 3, response 21; Applicant 4, response 14, Sheet C-3)

64. If the proposed tower were ten feet shorter than proposed, i.e. each of the Wireless Carriers had antenna centerline heights ten feet lower than proposed, the impacts on coverage for the Wireless Carriers are noted below:

    a) AT&T would lose some continuity along the Merritt Parkway;

    b) Cellco's and T-Mobile's antennas would be getting close to the existing tree line and can result in coverage degradation; and

    c) Sprint's antennas would be lowered farther into the existing tree cover area and would experience additional obstructions from the new water tank.

    (Tr. 1, pp. 20-21)

65. In terms of capacity, for AT&T and Cellco, the proposed facility would be sufficient to replace the service each carrier currently provides from the existing water tank facility and may provide some capacity benefits in the near term. However, beyond the near term time frame of about two to three years, it is difficult to predict additional capacity benefits of the proposed facility. (Applicant 3, response 27)

66. In terms of capacity, for T-Mobile, the proposed facility would maintain capacity levels currently provided by the existing water tank facility and provide some near term capacity benefits. T-Mobile does not have additional facilities planned for capacity in the near term but it constantly evaluating it capacity needs. (Applicant 3, response 27)

## Site Selection

67. The Applicant initiated its search for an alternative facility location in January 2018 and spent the next 16 months working with the Wireless Carriers and SHPO to identify a viable tower location. (Applicant 1, p. 8)

68. To accommodate the needs of the Wireless Carriers co-located on the existing water tank and to maintain a revenue stream to benefit the First Taxing District Water Department of Norwalk, the search for alternative tower locations focused exclusively on the subject property. (Applicant 1, Tab 6 – Site Search Summary)

69. Various locations on the subject property were considered while taking into account the following considerations:

    a) A tower location that would not conflict with the construction of the new 500,000-gallon water tank;
    b) A tower location that would not conflict with FTD's efforts to complete its environmental remediation in the northeast portion of the subject property;
    c) A tower location that would not interfere with the service provided by the Wireless Carriers;
    d) A tower location that would satisfy SHPO's concerns regarding the visual impacts that a new tower may have on the Merritt Parkway, a resource on the National Register of Historic Places.

    (Applicant 1, Tab 6 – Site Search Summary)

70. With consideration to the four factors affecting tower location on the subject property, the Applicant reviewed five alternative tower locations on the subject property:

a) **Alternative Location A** is located approximately 60 feet southwest of the existing FTD water tank. This alternative was rejected because SHPO determined that this location would be highly visible from and would have an adverse effect on the Merritt Parkway;

b) **Alternative Location B** is located in the same location as the abandoned water tank. This alternative was rejected because SHPO determined that this location would have an adverse effect on the Merritt Parkway. In addition, the Applicant notes that this location would conflict with its site environmental remediation plans;

c) **Alternative Location C** is located 66 feet southeast of the existing water tank. This alternative was rejected because SHPO determined that this location would have an adverse effect on the Merritt Parkway;

d) **Alternative Location D** is located 252 feet southwest of the existing water tank. This is the proposed location. It was deemed acceptable to SHPO and the Wireless Carriers.

e) **Alternative Location E** is located 110 feet south of the existing water tank. This alternative was rejected by the Applicant and the Wireless Carriers due to signal blocking that would be caused by the location of the proposed 500,000 gallon water tank to be constructed by FTD.

(Applicant 1, Tab 6 – Site Search Summary, p. 2; Applicant 3, response 6)

71. FTD also consulted with the Wireless Carriers about the possibility of installing the antennas on the new 500,000 water tank. This alternative was rejected due to concerns with the impact the antenna mounting structures and related equipment would have on the integrity of the water tank (e.g. risk of developing leaks in the tank). There are also concerns about the quality of the water stored within the tank as deterioration of the tank due to wireless equipment attachments could allow outside water to enter the drinking water inside the tank. There are also maintenance concerns such as having to remove the wireless carrier antennas and equipment in order to fully re-paint the water tank after approximately 15 or 20 years. (Applicant 1, Tab 6 – Site Search Summary, p. 2; Tr. 1, pp. 37-38)

72. FTD and the Wireless Carriers also considered co-locating antennas on the existing Eversource transmission line structures located adjacent to the Merritt Parkway. This alternative was rejected because the installation of antennas on existing 345-kV transmission line towers is not a preferred option for the Wireless Carriers or Eversource. (Applicant 1, Tab 6 – Site Search Summary, p. 2)

73. While it is theoretically possible to install a large number of small cell facilities in the area that could match or closely match the coverage footprint of the proposed facility for the four carriers, such approach is neither economically feasible nor consistent with good RF engineering practice given the significant number of small cell facilities required for the area to be served. (Applicant 3, response 22)

## Facility Description

74. The proposed site is located on an approximately 1.90-acre parcel at 173½ West Rocks Road in Norwalk. The parcel is owned by the First Taxing District Water Department. The proposed site location is depicted on Figure 1. (Applicant 1, Tab 1, Sheet T-1 and Zoning Location & Topographical Survey)

75. 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. (*Corcoran v. Connecticut Siting Council*, 284 Conn. 455 (2007); CGS §16-50p(g)(2019)).

76. The subject property is zoned A-Residence and is used for and will continue to be used for water company purposes. The deed for this parcel does not contain any language restricting the use of the subject property. (Applicant 1, p. 8; Applicant 3, response 4)

77. The tower site is located in the north-central portion of the property, at an elevation of approximately 221 feet above mean sea level (amsl). (Applicant 4, response 14, Sheets T-1 and C-1)

78. Land uses south and east of the subject property are residential. An Eversource transmission line corridor is located directly to the north and west of the subject property. The Merritt Parkway (Route 15) is located farther to the north and west on the opposite side of the Eversource transmission corridor. (Applicant 1, p. 14; Applicant 4, response 14, Sheets T-1 and C-1)

79. The proposed facility would consist of a 130-foot monopole within a 3,518 square foot compound. The tower would be approximately 50 inches wide at the base tapering to 24 inches wide at the top. The tower would be designed to support the four Wireless Carriers as well as municipal emergency services antennas. The tower and foundation would be designed to accommodate an increase in tower height of up to 20 feet. (Applicant 7, response 48; Applicant 3, response 13; Applicant 4, response 14, Sheets C-2 and C-3; Applicant 1, p. 9 and Tab 1 – Facilities and Equipment Specification)

80. AT&T would install six panel antennas and 12 remote radio units (RRUs) on T-arm mounts at a centerline height of 126 feet agl. The tops of AT&T's antennas would not extend above the top of the 130-foot agl tower. (Applicant 4, response 14, Sheet C-3)

81. Cellco would install nine panel antennas and six RRUs on T-arm mounts at a centerline height of 116 feet agl. (Applicant 4, response 14, Sheet C-3)

82. T-Mobile would install three panel antennas and six RRUs on T-arm mounts at a centerline height of 106 feet agl. (Applicant 4, response 14, Sheet C-3)

83. Sprint would install six panel antennas and six RRUs on T-arm mounts at a centerline height of 96 feet agl. (Applicant 4, response 14, Sheet C-3; Tr. 1, p. 19)

84. The use of flush-mounted antennas would result in a reduction of service and may require each of the Wireless Carriers to install antennas at second centerline height, thereby requiring a taller tower. (Applicant 3, response 29)

85. A 3,518 square foot irregular shaped equipment compound would be established at the base of the tower. The size of the compound would be able to accommodate the equipment of four wireless carriers plus one additional wireless carrier or emergency services. (Applicant 4, response 14, Sheet C-3; Applicant 1, p. 7)

86. The proposed equipment compound will be surrounded by a six-foot high chain-link fence with black vinyl coated mesh and black vinyl privacy slats. The proposed compound fence would have a gate that would be locked for security purposes. (Applicant 4, response 14, Sheet C-3; Applicant 3, response 15)

87. AT&T's equipment would be located within an approximately 8-foot long by 8-foot wide by 8-foot tall walk-in cabinet located on a 10-foot by 20-foot concrete pad within the fenced compound. The concrete pad would have an approximately 9-foot to 10-foot tall ice canopy on top. (Tr. 1, p. 23)

88. Cellco's radio and battery cabinets would be located on an approximately 10 foot by 20 foot concrete pad located within the fenced compound. The concrete pad would have an approximately 10-foot tall ice canopy on top. (Tr. 1, p. 22)

89. T-Mobile's and Sprint's ground equipment locations/configurations to be installed within the compound have not yet been finalized. Whether T-Mobile and Sprint would utilize two separate concrete pad locations or share one location would be determined in consultation with FTD. (Tr. 1, p. 24)

90. Development of the site would require importing approximately 160 cubic yards of broken stone to construct the compound area and access drive. Construction of the utility trench would require the excavation of approximately 185 cubic yards of material that would be re-used to backfill the trench. (Applicant 4, response 14, Sheet C-1)

91. Access to the proposed site compound from West Rocks Road would be provided over a portion of an access driveway serving the new FTD water tank and then would continue over a new approximately 350-foot long gravel driveway extension to reach the proposed tower compound. (Applicant 1, Tab 1 – General Cell Site Description; Applicant 4, response 14, Sheet C-2)

92. Utilities would be installed underground from an existing pole on West Rocks Road and would run generally parallel to and directly north of the access drive route to reach the compound area. (Applicant 4, response 14, Sheet C-2)

93. The nearest property boundary from the proposed tower is approximately 49 feet to the northwest (Eversource ROW). (Applicant 4, response 14, Sheet C-1)

94. There are approximately 157 residences within 1,000 feet of the proposed tower location. The nearest residence is located at 9 Skyview Lane, approximately 180 feet to the south of the tower site. (Applicant 3, response 5; Applicant 1, p. 10; Applicant 4, response 14, Sheet C-1)

95. Site preparation and engineering would commence following Council approval of a Development and Management Plan (D&M Plan) and are expected to be completed within two to four weeks. Equipment installation is expected to take an additional four weeks after the tower is installed. After the equipment installation, cell site integration and system testing is expected to require about two additional weeks. (Applicant 1, p. 18)

96. The proposed monopole is expected to be constructed and operational prior to removal of the existing water tank. Thus, the Wireless Carriers do not anticipate the need to deploy temporary wireless telecommunications facilities (e.g. cells-on-wheels) at the site to maintain continuity of service. (Tr. 1, pp. 32-33)

97. The estimated cost of the proposed facility is:

| | |
|---|---|
| Tower | $60,000 |
| Misc. including site prep, access and grading | $250,000 |
| Radio equipment | $600,000* |
| **Total Estimated Costs** | **$910,000**** |

*Radio equipment costs would be the responsibility of the individual wireless carriers.
**Costs to dismantle the Wireless Carriers' existing equipment from the existing water tank are not included in this total.

(Applicant 1, p. 18; Tr. 1, pp. 29-30, 40)

## Public Safety

98. 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)

99. The proposed facility would be in compliance with the requirements of the 911 Act and would provide Enhanced 911 services. (Applicant 1, p. 5; Applicant 3, response 38)

100. 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)

101. The proposed facility would support text-to-911 service. No additional equipment would be required. (Applicant 3, response 37)

102. 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)

103. The proposed Wireless Carriers' installations would comply with the Warning, Alert and Response Network Act of 2006. (Applicant 3, response 39)

104. Pursuant to CGS §16-50p(a)(3)(G), the tower would be constructed in accordance with the governing standard in the State of Connecticut for tower design in accordance with the currently adopted International Building Code. (Applicant 3, responses 11 and 12)

105. The proposed tower would not require notice to the Federal Aviation Administration and would not require any obstruction marking or lighting. (Applicant 1, p. 17 and Tab 16 – TOWAIR Determination Results)

106. Wireless Carriers' equipment would maintain separate intrusion alarms which would be monitored remotely. (Applicant 3, response 15)

107. The tower setback radius extends beyond the property boundary approximately 49 feet to the northwest. A tower design yield point would be employed at 81 feet agl (or 49 feet from the top of the tower) to ensure that, in the event of a tower failure, the tower fall zone would be contained within the subject parcel. (Tr. 1, pp. 24-25, 41; Applicant 4, response 14, Sheet C-2)

108. A yield point at 81 feet agl means that the lower section of the tower (i.e. less than 81 feet agl) would be overdesigned relative to the upper section of the tower (i.e. greater than 81 feet agl). (Tr. 1, pp. 24-25, 41)

109. A structural failure in the lower section of the tower (or base) would be extremely unlikely due to the significant load factors (i.e. safety factors) applied to the design and due to the yield point preventing further collapse of the structure. (Tr. 1, p. 25)

110. The cumulative worst-case maximum power density from the radio frequency emissions from the operation of all approved antennas is 26.6% 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 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.*

*A 10-dB off-beam pattern loss was applied to account for the lower gain below the antennas.

(Applicant 1, Tab 13 – Calculated Radio Frequency Exposure Report, p. 3; Council Administrative Notice Item No. 2 – FCC OET Bulletin No. 65)

**Emergency Backup Power**

111. 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. 49)

112. 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. 31 – Council Docket No. 432)

113. 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. 31 – Council Docket No. 432)

114. For backup power, AT&T would install a 20-kW propane-fueled generator for its own use. AT&T would utilize its own 500-gallon propane tank to provide approximately 3.5 to 4 days of run time before it requires refueling assuming full load. (Applicant 3, responses 30 and 34; Applicant 4, response 30)

115. AT&T would also have a battery backup in order to avoid a "re-boot" condition during the generator start-up delay period. The battery backup system alone could provide about four to eight hours of backup power. (Applicant 3, response 35)

116. Cellco would install a 30-kW propane-fueled backup generator for its own use. Cellco would utilize its own 500-gallon propane tank to provide approximately 3 to 4 days of run time before it requires refueling assuming full load. (Applicant 3, responses 30 and 34; Applicant 4, response 30)

117. Cellco would also have a battery backup in order to avoid a "re-boot" condition during the generator start-up delay period. The battery backup system alone could provide about four to eight hours of backup power. (Applicant 3, response 35)

118. T-Mobile would not install a backup generator and would utilize battery backup only. T-Mobile's battery backup system would prevent a "re-boot" condition during a power interruption and would supply nearly 8 hours of backup power during an outage. (Applicant 3, response 35; Tr. 1, p. 27)

119. Sprint would not install a backup generator and would utilize battery backup only. Sprint's battery backup system would prevent a "re-boot" condition during a power interruption and would supply nearly 8 hours of backup power during an outage. (Tr. 1, pp. 27-28; Applicant 3, response 35)

120. Sprint and T-Mobile would have to bring in portable generators to the site if additional run time was needed beyond the capability of their battery backup systems. (Tr. 1, p. 94)

121. AT&T's and Cellco's backup generators would be tested periodically for maintenance. Such testing would occur for about 30 minutes per week during weekdays. (Applicant 3, response 36)

122. AT&T and Cellco believe that control of their cell site equipment, including backup power supplies, are critical to the reliability of their wireless networks. Neither AT&T nor Cellco is willing to risk a "single point of failure" associated with a shared generator. Thus, both carriers would have individual generators and fuel tanks under their own respective control. (Applicant 3, response 30; Tr. 1, pp. 105-107)

123. Each backup generator would include the appropriate containment measures to protect against fluid leakage of the generator units. (Applicant 3, response 33)

124. 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 DEEP Noise Control Regulations. (R.C.S.A. §22a-69-1.8)

125. Pursuant to R.C.S.A. §22a-174-3b, the generators would be managed to comply with DEEP's "permit by rule" criteria. Therefore, the generators would be exempt from general air permit requirements. (Applicant 1, Tab 1 – Environmental Assessment Statement, p. 8; R.C.S.A. §22a-174-3b)

## Environmental Considerations

126. The entire proposed equipment compound would be located on approximately 3,518 square feet of Prime Farmland Soils. The total acreage of Prime Farmland Soils on the subject property is 0.5 acre. There are no Statewide Important Farmland Soils on the subject property. (Applicant 3, response 17; Applicant 1, Tab 12 – Farmland Soils Map)

127. The subject property is adjacent to the Merritt Parkway, which is listed on the National Register of Historic Places (NRHP). (Applicant 1, Tab 11 – SHPO Letter dated January 17, 2020)

128. A Phase 1B reconnaissance survey was conducted at the proposed site. Of the 22 planned shovel tests that were performed, none yielded cultural material from either historic or prehistoric periods. SHPO notes that no additional archaeological investigations at the site are recommended. (Applicant 1, Tab 11 – SHPO Letter dated January 17, 2020)

129. The proposed project would not have an adverse effect on sites listed on or eligible for listing on the NRHP. (Applicant 1, Tab 11 – SHPO Letter dated January 17, 2020)

130. 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.)

131. 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)

132. 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)

133. The nearest wetland to the proposed site is located approximately 905 feet to the west across the Merritt Parkway and is associated with a large open water feature. This feature consists of a man-made pond with limited bordering wetlands. The proposed project would not be expected to adversely impact wetland or watercourse resources. (Applicant 1, Tab 9 – Wetland Inspection Field Form, p. 1)

134. No vernal pool habitat was observed at the site. (Applicant 1, Tab 9 – Wetland Inspection Field Form, p. 2)

135. The proposed project would comply with the *2002 Connecticut Guidelines for Soil Erosion and Sedimentation Control*. (Tr. 1, p. 26)

136. The proposed project would comply with the *2004 Connecticut Stormwater Quality Manual*. (Tr. 1, pp. 26-27)

137. The site is located in the Federal Emergency Management Agency (FEMA) unshaded Zone X, an area outside of the 100-year and 500-year flood zones. (Applicant 1, p. 15 and Tab 14 – FEMA Flood Hazard Map)

138. The existing lead and PCB contamination associated with the existing water tank (and to be remediated) do not extend into the area of the proposed tower compound. (Tr. 1, p. 100; Applicant 1, p. 6; Tr. 1, p. 55)

139. The proposed facility would be located within the DEEP-designated Kellogg-Deering Aquifer Protection Area (APA). The Applicant would implement an Aquifer Protection Plan (APP). The APP would include, but not be limited to, the following: protective measures/precautions; monitoring and notification plans in accordance with DEEP recommendations; proper installation and monitoring of erosion and sedimentation controls; a petroleum/hazardous materials storage and spill prevention plan; herbicide/pesticide best management practices; proper treatment of stormwater runoff; and notification and reporting to FTD and the Council. (Applicant 7, response 49; Council Administrative Notice Item No. 69 – DEEP APA Map for Norwalk)

140. The proposed facility is not located within 0.25-mile of the buffered area of the DEEP Natural Diversity Database. (Applicant 1, Tab 8 – USFWS & NDDB Compliance Determination, p. 2)

141. One federally-listed Threatened-Species, the northern long-eared bat, is known to occur in the vicinity of the proposed site. However, minimal tree clearing would be performed. The proposed facility is not located within 150 feet of a known NLEB maternity roost tree or within 0.25 mile of a known NLEB hibernaculum. By letter dated November 8, 2020, the Applicant consulted with the U.S. Fish & Wildlife Service (USFWS). USFWS did not respond within 30 days, and thus, the Applicant's action is in compliance with the Endangered Species Act Section 7(a)(2) with respect to NLEB. (Applicant 1, Tab 8 – USFWS & NDDB Compliance Determination and USFWS NLEB Letter)

142. Approximately 11 trees with a diameter of six inches or greater would be removed to construct the proposed facility. (Applicant 1, Tab 1 – Environmental Assessment Statement, p. 8)

143. The proposed facility is not located near an Important Bird Area (IBA), as designated by the National Audubon Society. The nearest IBA to the proposed tower site is The Nature Conservancy's Devil's Den Preserve in Weston and Redding, approximately 7.5 miles to the northeast of the proposed tower site. (Applicant 1, p. 12 and Tab 10 – Aviation Resources Evaluation, p. 9)

144. The proposed facility would comply with the United States Fish and Wildlife Service guidelines for minimizing the potential for telecommunications towers to impact bird species. (Applicant 1, p. 12 and Tab 10 – Aviation Resources Evaluation, p. 9)

145. Cellco does not anticipate the need for blasting at the proposed site. If rock were encountered, the Applicant would utilize traditional methods of using a hoe ram to remove boulder in lieu of blasting. (Tr. 1, p. 26)

146. The proposed facility would comply with DEEP Noise Control Regulations at the property boundaries. While the proposed backup generators are exempt from DEEP Noise Control Regulations, the proposed facility would still comply with such regulations if the generators were conservatively modeled as non-exempt. Noise attenuating sound blankets are not expected to be required. (Tr. 1, pp. 28-29)

147. 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))

**Visibility**

148. The Applicant's consultant, All Points Technology, Inc. (APT) 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. (Applicant 1, Tab 7 – Visual Assessment, p. 2)

149. On January 22, 2020, APT performed a balloon float at the location of the proposed facility. APT flew a brightly-colored approximately 4-foot diameter balloon tethered to a string height of approximately 130 feet agl*. The weather conditions were favorable for the balloon float activity with calm winds and partly cloudy skies.

*The bottom of the balloon represented the tower height of 130 feet agl, and the top of the balloon conservatively reached a height of about 134 feet agl.

(Applicant 1, Tab 7 – Visual Assessment, pp. 3-4)

150. Information obtained during the field reconnaissance was incorporated into APT's 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. Once the additional data was integrated into the model, APT re-calculated the visibility of the proposed facility from within a two-mile study area to produce the final viewshed map. (Applicant 1, Tab 7 – Visual Assessment, p. 6)

151. Based on APT's viewshed map, the proposed tower would be visible year-round from approximately 19 acres within a two-mile radius of the site (refer to Figure 17). This would be about 0.24 percent of the study area.* The tower would be seasonally visible (leaf-off conditions) from an approximately 41 acres within a two-mile radius of the site or about 0.51 percent of the study area.

*The study area is comprised of 8,042 acres.

(Applicant 1, Tab 7 – Visual Assessment, Viewshed Map)

152. The proposed facility would not be highly visible beyond approximately 0.5-mile of the site, where the most prominent views would occur. This area would include portions of Skyview Lane to the south, West Rocks Road to the east/northeast and Main Avenue to the west. Year-round visibility of the facility would extend intermittently to areas generally west of the site, including the Main Avenue/Merritt Parkway interchange, along Comstock Hill Avenue as it crosses the Merritt Parkway, and along Spring Hill Road. (Applicant 1, Tab 7 – Visual Assessment, p. 6)

153. Seasonally (i.e. under "leaf-off conditions) partially obstructed views of the facility in the immediate area of the site would extend north of the Merritt Parkway to portions of Creeping Hemlock Drive, west of the site in the Midrocks Drive neighborhood, and intermittently along West Rocks Road south of the site. (Applicant 1, Tab 7 – Visual Assessment, p. 7)

154. Pursuant to CGS §16-50p(a)(3)(F), for a telecommunications facility 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 a 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. (CGS §16-50p(a)(3)(F))

155. The nearest building containing a school is the All Saints Catholic School located approximately 0.39 mile south of the proposed facility. The nearest building containing a commercial child day care facility is the All Saints Daycare located approximately 0.39 mile south of the proposed facility. (Applicant 1, Tab 7 – Visual Assessment, p. 7)

156. During the study area reconnaissance, APT obtained photo-documentation of representative locations where the balloon was visible, and the visibility of the proposed tower from such specific locations within a two-mile radius of the site is presented in the table below:

| **Specific Location** | **Photo location on Map*** | **Approx. Portion of Facility Visible** | **Approx. Distance & Direction to Tower** |
|---|---|---|---|
| Butternut Lane | 1 | Not visible | 0.31 mile southwest |
| West Rocks Road | 2 | Year round – top of tower approx. even with top of tree line | 0.19 mile southwest |
| West Rocks Road | 3 | Year round – approx. top 30 feet above tree line | 0.11 mile southwest |
| Midrocks Drive | 4 | Seasonal – approx. top 15 feet discernable through trees | 0.23 mile west |
| Midrocks Drive at Caddy Road | 5 | Seasonal – approx. top 28 feet | 0.16 mile west |

| | | | |
|---|---|---|---|
| Skyview Lane | 6 | Year round – approx. 18 feet above tree line | 0.06 mile northwest |
| Skyview Lane | 7 | Year round – approx. top 18 feet above tree line and additional 18 feet discernable through trees | 0.08 mile northeast |
| Linden Street | 8 | Year round – approx. top 56 feet above tree line | 0.13 mile northeast |
| Linden Heights at Linden Street | 9 | Not visible | 0.18 mile northeast |
| Linden Heights | 10 | Seasonal – approx. top 28 feet above tree line | 0.17 mile northeast |
| Winnipauk Drive | 11 | Year round – approx. top 38 feet above tree line | 0.20 mile north |
| Tod Road | 12 | Not visible | 0.32 mile north |
| West Rocks Road | 13 | Seasonal – approx. top 44 feet | 0.34 mile northwest |
| Route 7 | 14 | Year-round – approx. top 28 feet | 0.85 mile northeast |
| Main Avenue | 15 | Not visible | 0.60 mile northeast |
| Main Avenue | 16 | Year round – approx. top 10 feet | 0.52 mile northeast |
| Main Avenue | 17 | Year-round – approx. top 10 feet | 0.41 mile northeast |
| Glover Avenue | 18 | Year round – approx. top 28 feet | 0.44 mile east |
| Merritt Parkway | 19 | Year round – approx. top 18 feet. This represents the closest location where the tower would be visible from the Merritt Parkway.* | 0.33 mile east |
| Creeping Hemlock Drive | 20 | Year round – approx. top 10 feet | 0.26 mile east |
| Valley View Drive | 21 | Seasonal – approx. top 38 feet | 0.31 mile southeast |
| Cobblers Lane at Lakewood Drive | 22 | Not visible | 0.25 mile southeast |
| Creeping Hemlock Drive | 23 | Seasonal – approx. top 30 feet | 0.10 mile southeast |
| Danbury Road | 24 | Not visible | 1.41 mile south |
| Main Avenue | 25 | Not visible | 0.56 mile southeast |
| North Seir Hill Road | 26 | Year round – approx. top 65 feet | 0.92 mile southeast |
| Silvermine Arts Center – Silvermine Road, New Canaan | 27 | Not visible | 1.72 miles southeast |

| | | | |
|---|---|---|---|
| Comstock Hill Avenue Overpass – Merritt Parkway | 28 | Year round – approx. top 50 feet | 1.41 miles northeast |
| Riverview Drive | 29 | Not visible | 0.87 miles northeast |
| Spring Hill Avenue | 30 | Year round – approx. top 45 feet | 1.56 miles northeast |
| Main Avenue | 31 | Not visible | 1.06 miles northeast |
| Esquire Road at West Rocks Road | 32 | Not visible | 0.80 mile northwest |
| Norwalk Senior Center – Allen Road | 33 | Not visible | 0.98 mile northwest |
| Ellen Street | 34 | Not visible | 1.06 miles southwest |
| Merritt Parkway | 35 | Not visible | 1.62 miles southwest |

*At this location, which is the closest view of the tower that would be seen, generally, the facility would only be visible if a traveler on the southbound side of Route 15 were to look backwards (e.g. over their shoulder) towards the tower site.

(Applicant 1, Tab 7 – Visual Assessment & Photo-simulations; Tr. 1, pp. 44-45)

157. There are no Connecticut blue-blaze or other designated hiking trails located within the two-mile study area. (Applicant 1, Tab 7 – Visual Assessment & Photo-simulations, Viewshed Analysis Map)

158. There are no state or locally-designated scenic roads located within the two-mile study area. (Applicant 1, Tab 7 – Visual Assessment & Photo-simulations, Viewshed Analysis Map)

159. Throughout the project design and SHPO consultation process, alternative tower design options as well as alternative tower locations on the subject property were considered by the Applicant. Such alternatives regarding stealth design considered are as follows:

a) Keep existing water tank and wireless facilities intact;
b) Employ a unipole with internally-mounted antennas; and
c) Utilize a "monopine" tree tower.

(Applicant 3, response 40)

160. All three alternative tower designs were rejected due to substantial limitations and/or increased visual effects. The proposed monopole tower configuration was selected by the Applicant as a result of SHPO consultation restricting antennas from projecting no more than three feet radially from the tower and painting the tower

(Applicant 3, response 40)

161. Of the five alternative tower locations on the subject property identified as Locations A through E, the overall visibility of a tower at each location is described as follows:

a) **Location A** – This location could potentially lessen the views from a few residences on Skyview Lane to the southwest as the tower would be screened to some extent by the new water tank. The views from additional abutting properties and nearby residences would remain similar to the existing water tank visibility;

b) **Location B** – Similar to Location A, this location could potentially soften the views from a few residences on Skyview Lane to the southwest due to the screening from the new water tank. The views from additional abutting properties and nearby residences would also remain similar to the existing water tank visibility. However, this option requires at least one, if not multiple, temporary structures to be built while the existing water tank is demolished. The additional space needed to accommodate the temporary tower(s) and associated equipment would result in additional tree clearing and the removal of existing vegetative screening thus increasing the views from additional off-sit locations;

c) **Location C** – This location would have similar visibility to Locations A and B with respect to residences along Skyview Lane. The proximity to West Rocks Road and Caddy Road would likely increase visibility to those nearby residences to the east;

d) **Location D** (proposed location) – This location would have visibility along Skyview Lane and to some residences farther to the south/southwest on Linden Street, Linden Heights and Winnipauk Drive. The new water tank would limit visibility from nearby residences along West Rocks Road and Caddy Road to the highest point of the tower. This location was selected based on consultation with SHPO and SHPO's determination of no adverse effect on historic resources; and

e) **Location E** – This location would have the most visibility to the largest number of abutting and nearby residences. This location south of the existing water tank and east of the new water tank would create a large contiguous clearing, eliminating nearly all existing screening in the northeast portion of the subject property.

(Applicant 3, response 46)

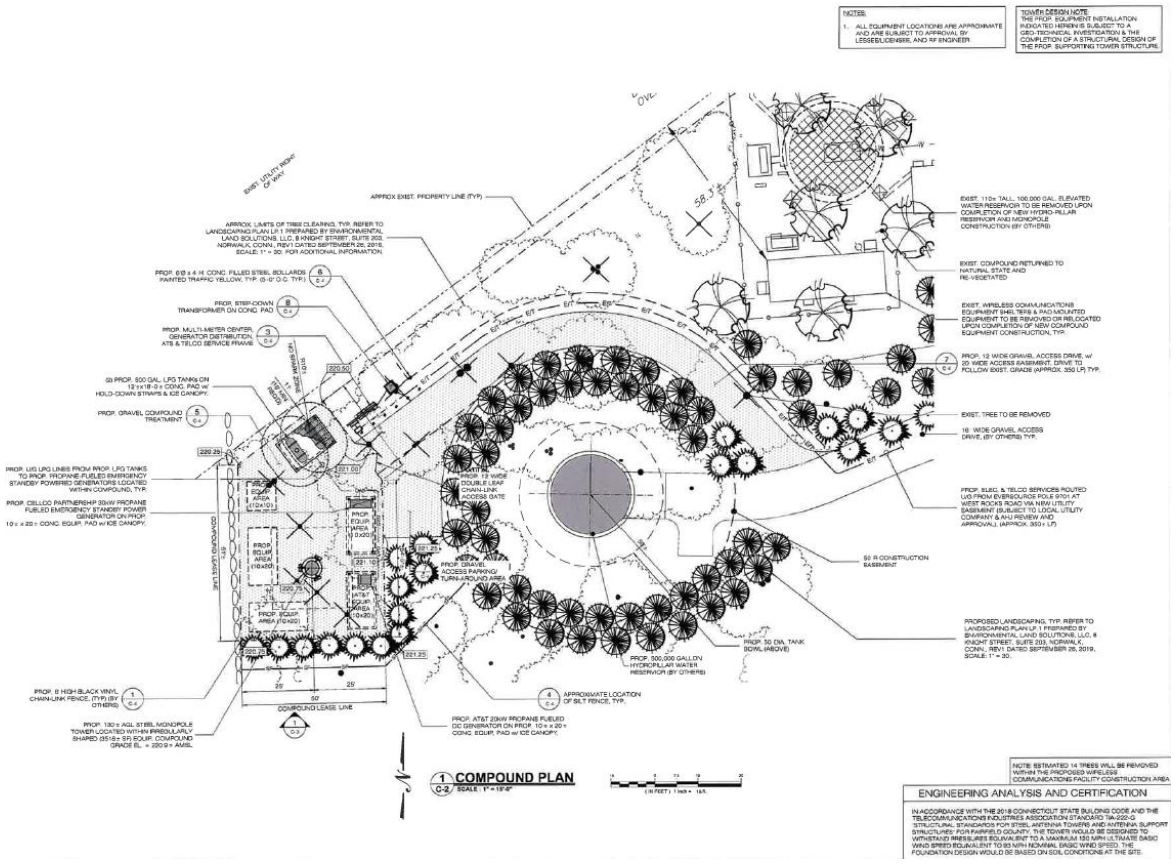
162. A total of 12 white pines approximately six to eight feet tall would be installed along the southern side and a portion of the eastern side of the proposed fenced compound. See Figure 3. Such landscaping would provide screening of the compound as viewed from locations to the south and southeast. (Applicant 4, response 14 – Drawing LP.1; Tr. 1, p. 33)

163. Additional landscape screening associated with FTD's new water tank construction project would provide additional layers of tower compound screening for residences to the south/southeast. See Figure 3. (Tr. 1, pp. 33-34)

**Figure 1 – Aerial Map**

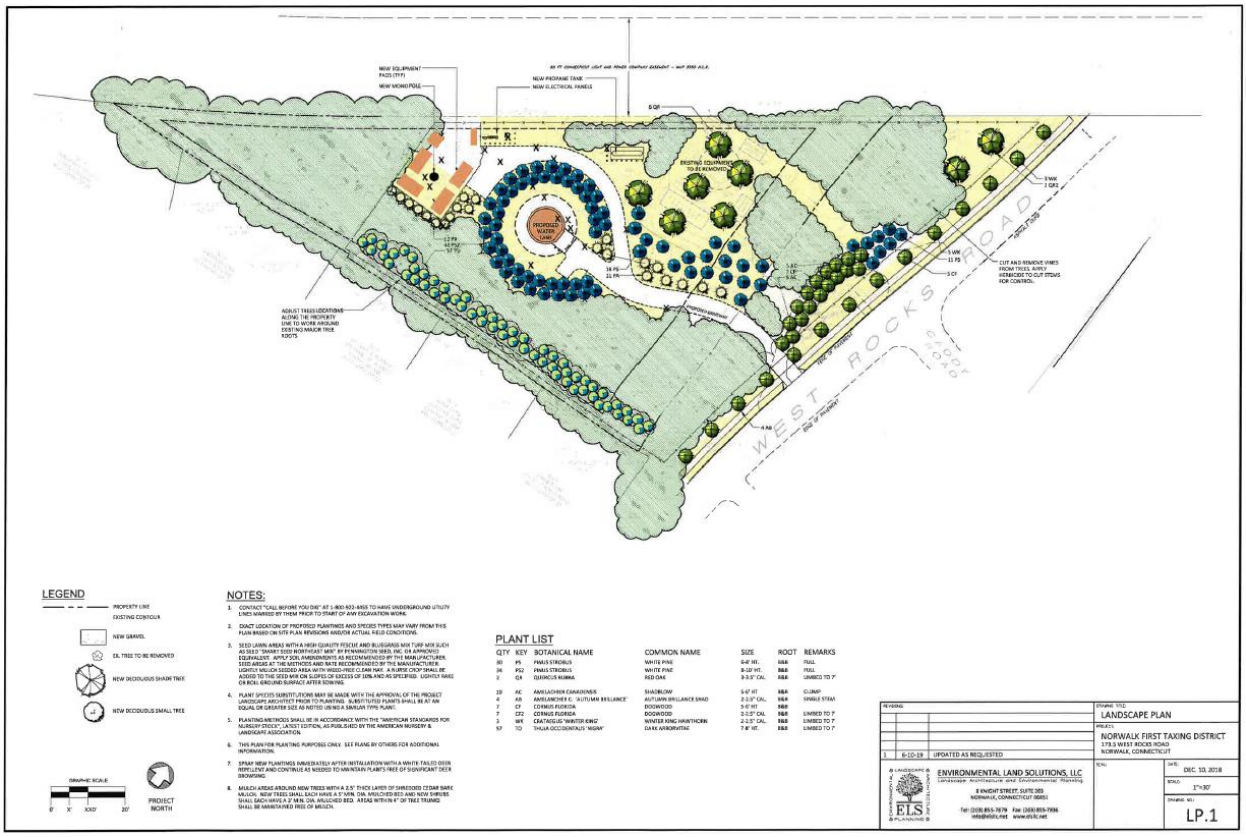

(Applicant 3, response 6)

## Figure 2 – Site/Compound Plan



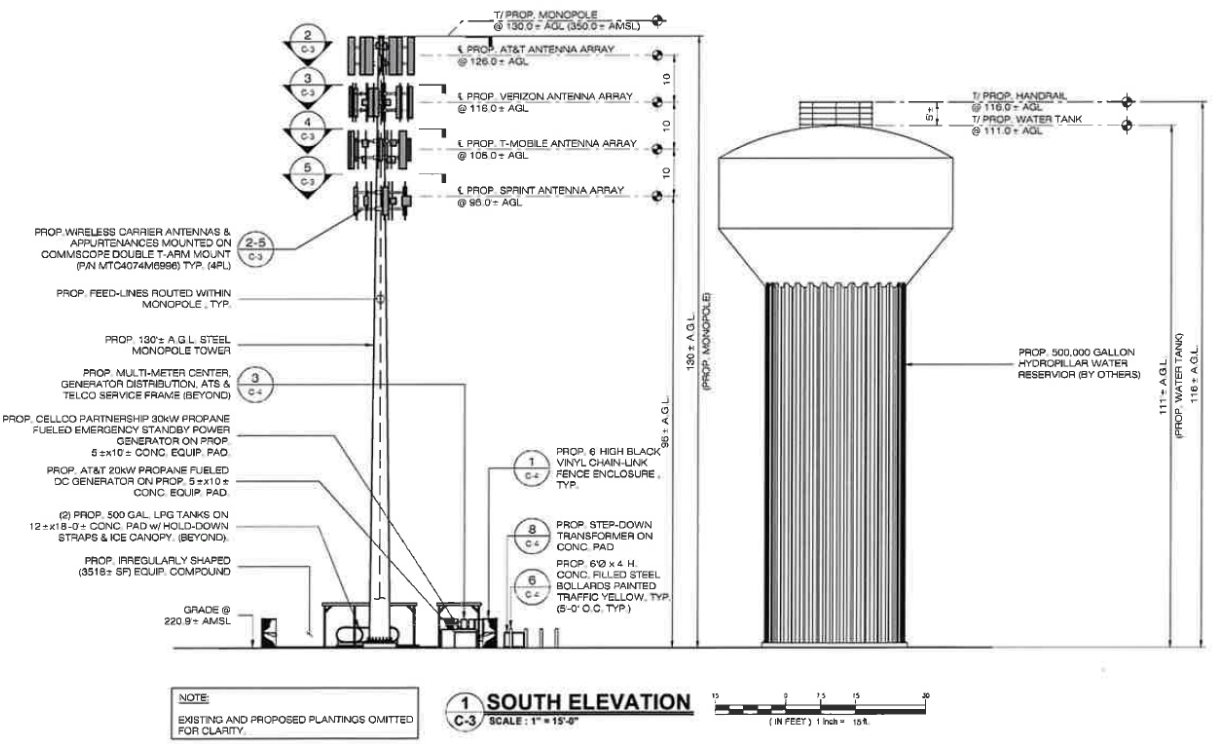

(Applicant 4, response 14 – Sheet C-2)

## Figure 3 – Landscaping Plan



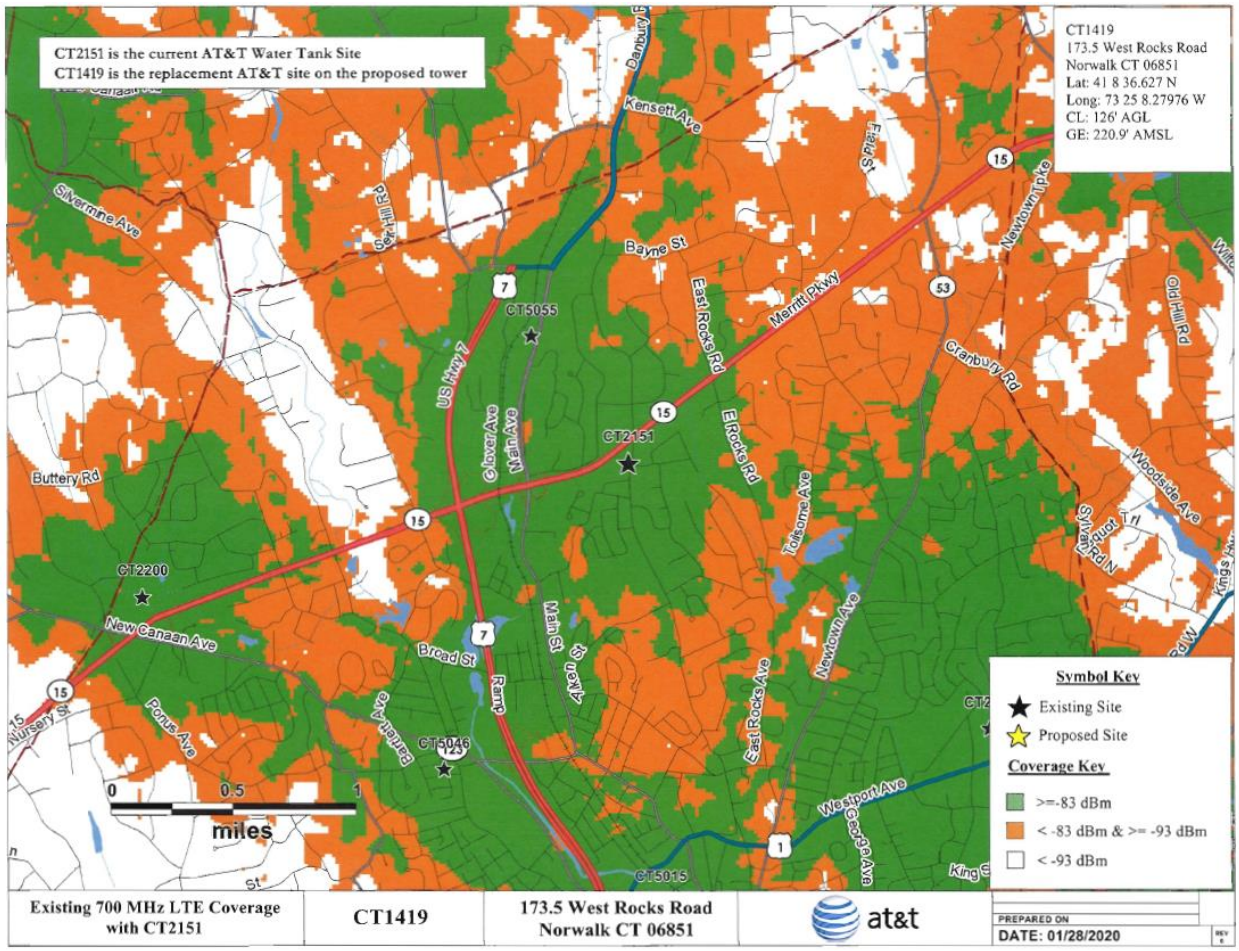

(Applicant 4, response 14 – Drawing LP.1)

**Figure 4 – Tower Profile Drawing**



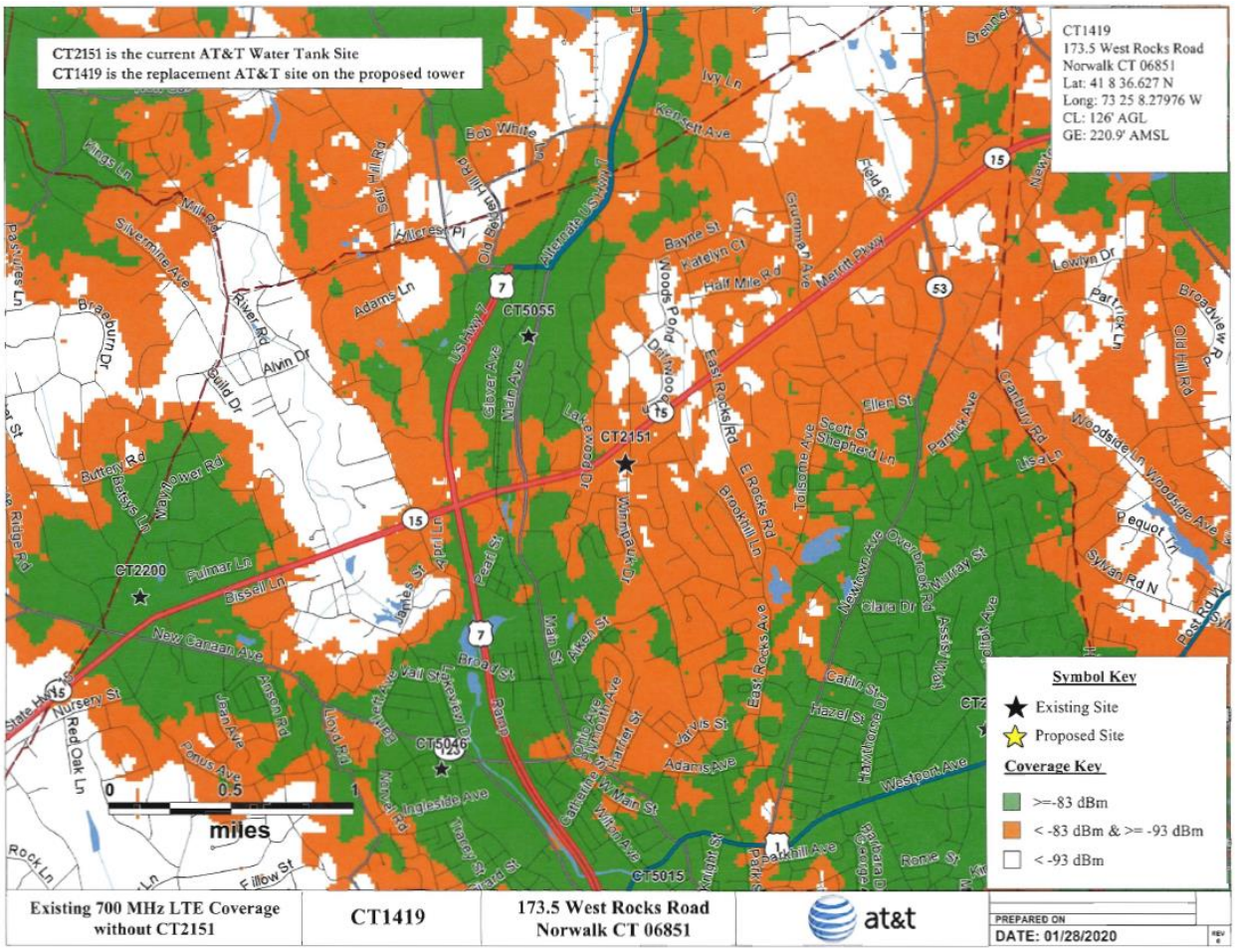

(Applicant 4, response 14 – Sheet C-2)

**Figure 5 – Existing 700 MHz AT&T Coverage with Existing Water Tank Facility**



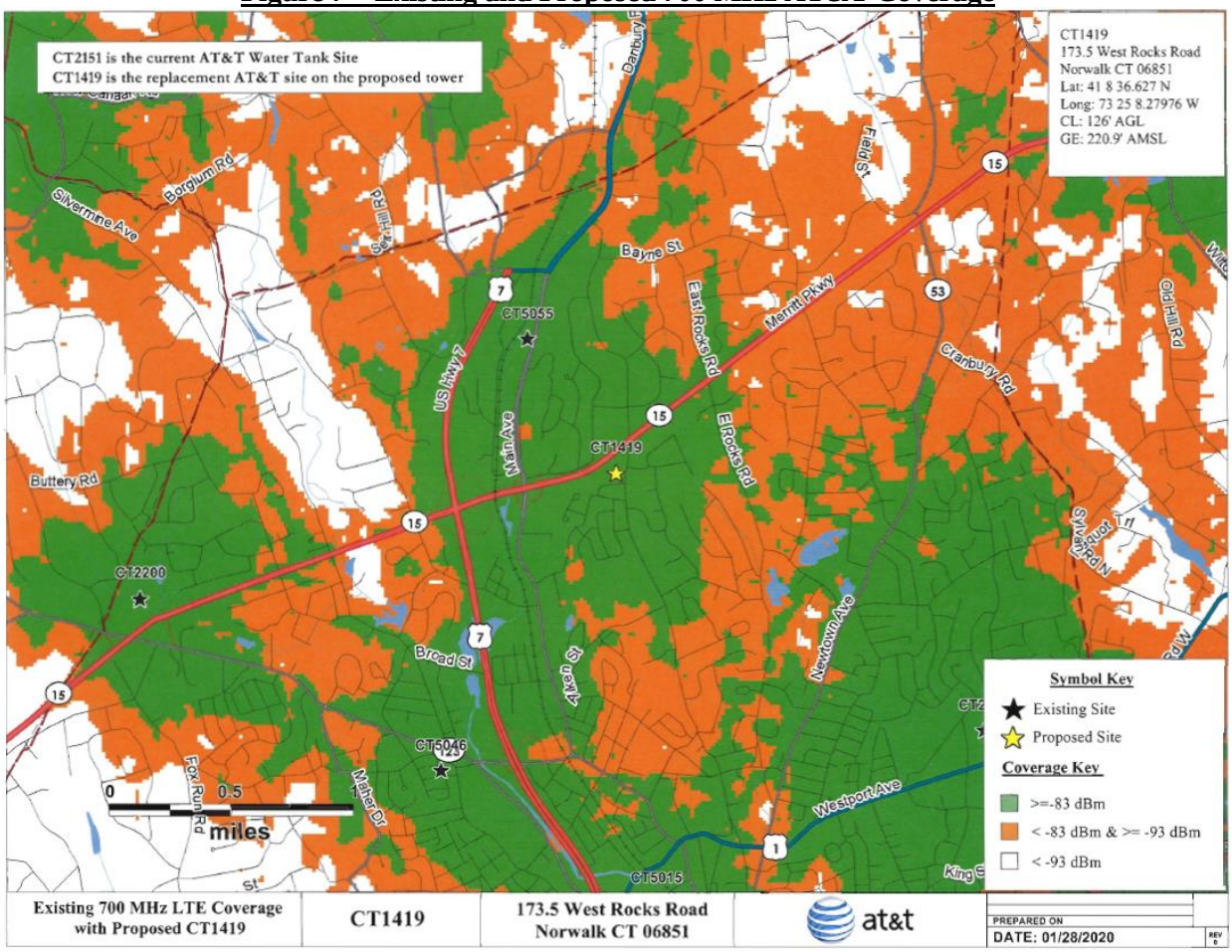

(Applicant 1, Tab 5)

**Figure 6 – Existing 700 MHz AT&T Coverage without Existing Water Tank Facility**



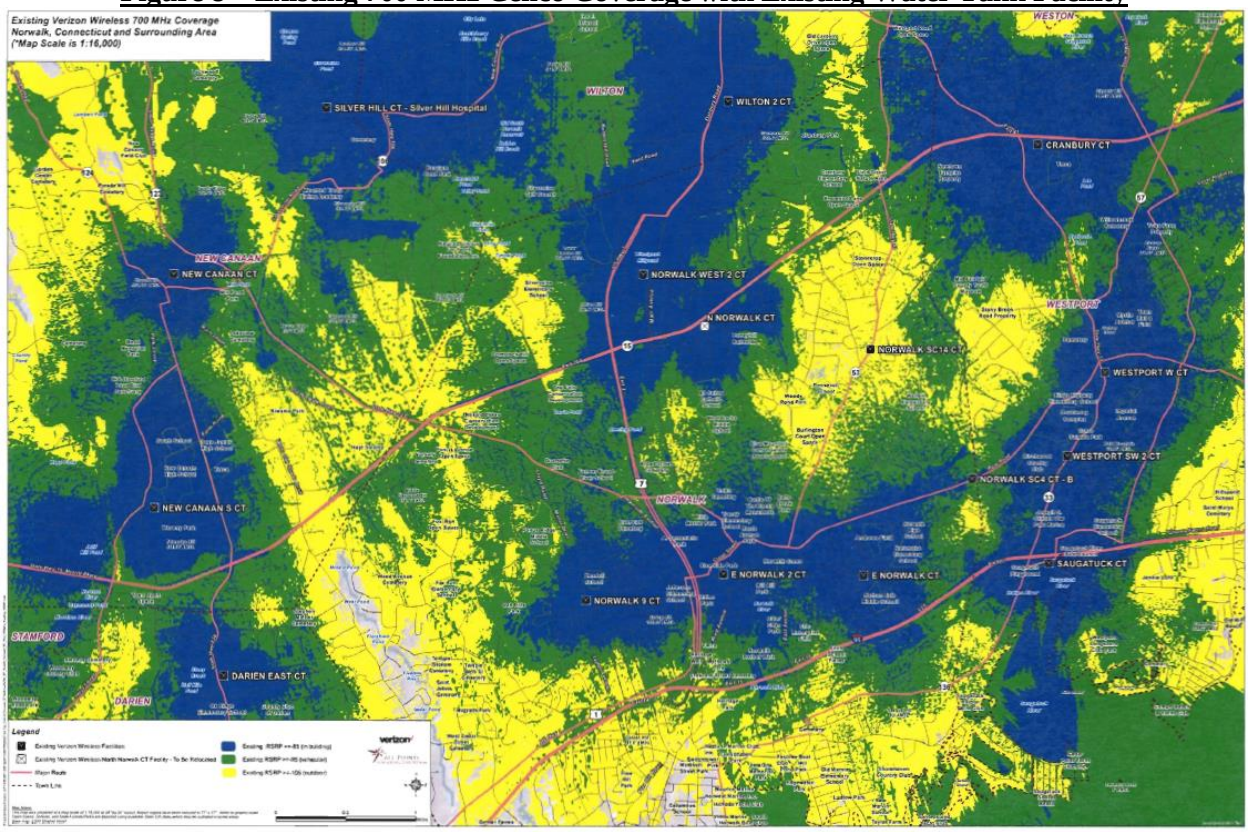

(Applicant 1, Tab 5)

**Figure 7 – Existing and Proposed 700 MHz AT&T Coverage**



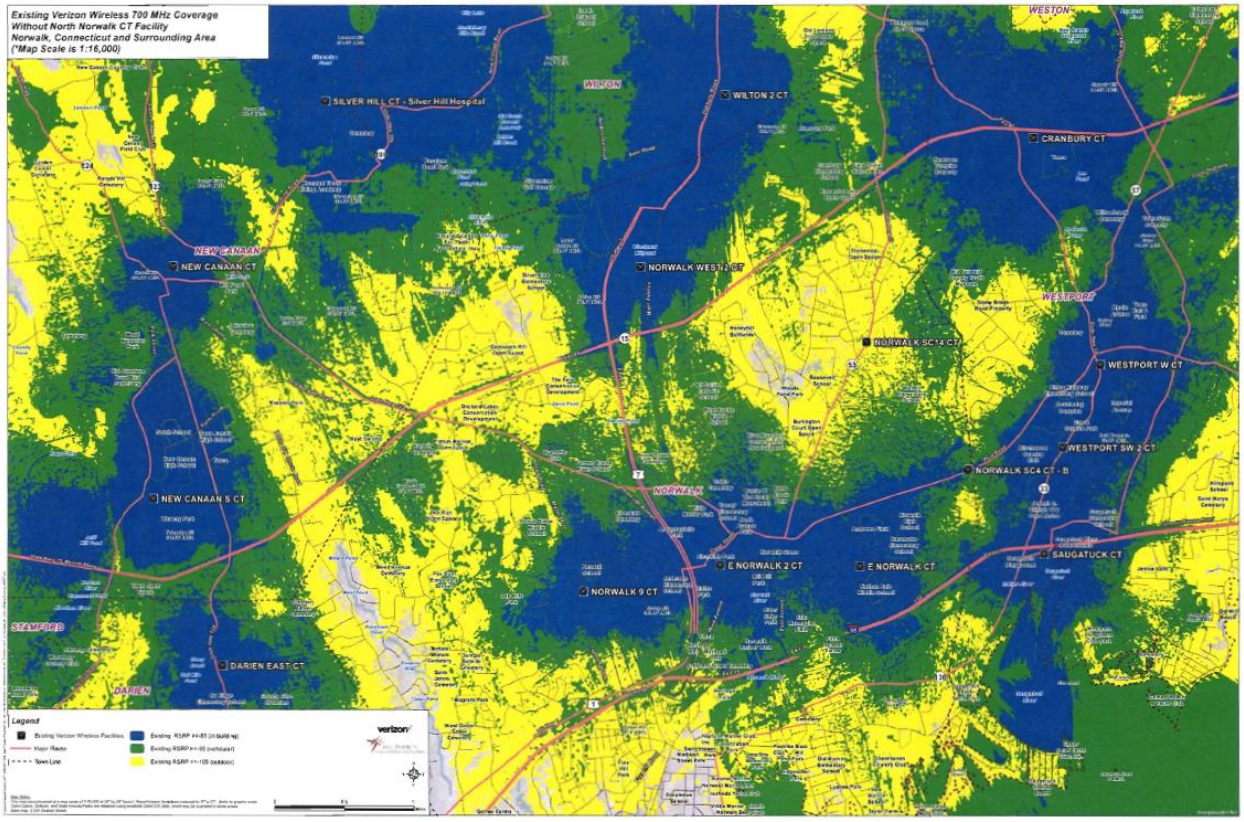

(Applicant 1, Tab 5)

**Figure 8 – Existing 700 MHz Cellco Coverage with Existing Water Tank Facility**



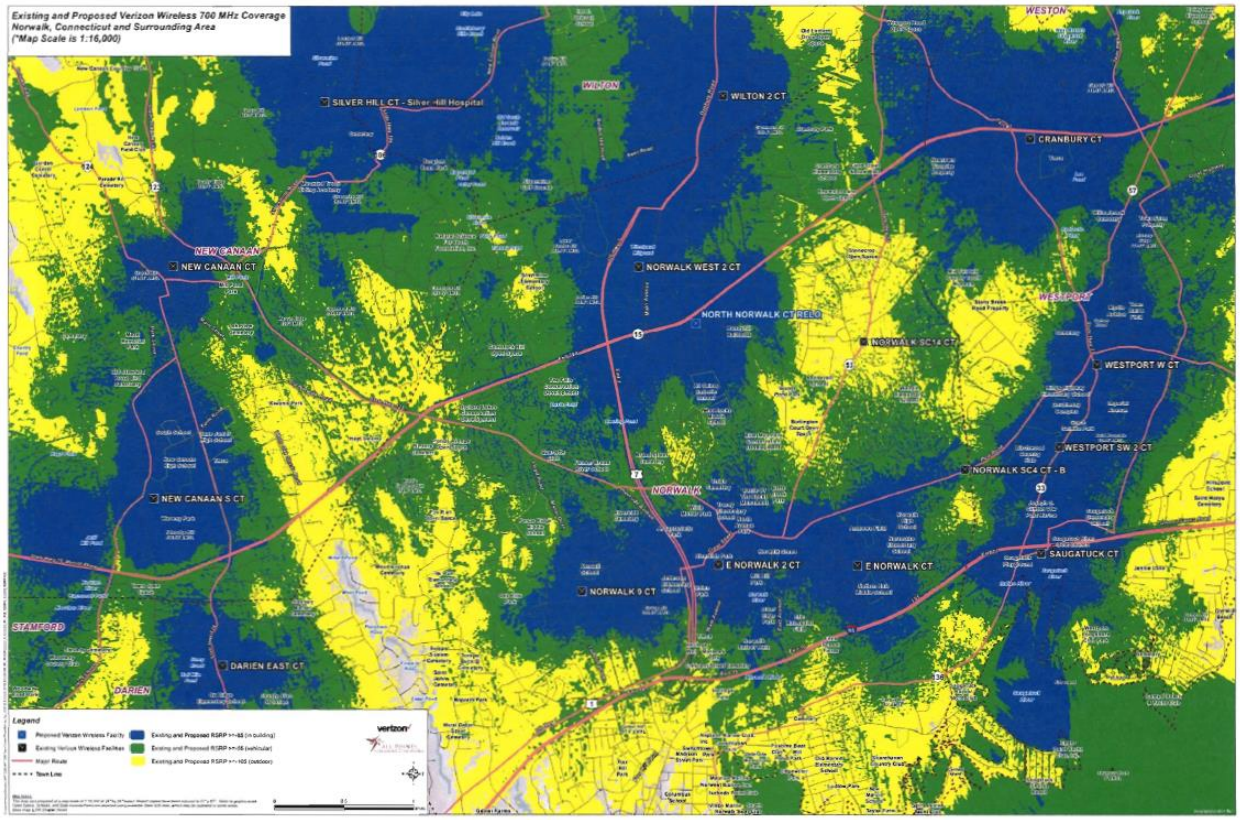

(Applicant 1, Tab 5)

**Figure 9 – Existing 700 MHz Cellco Coverage without Existing Water Tank Facility**



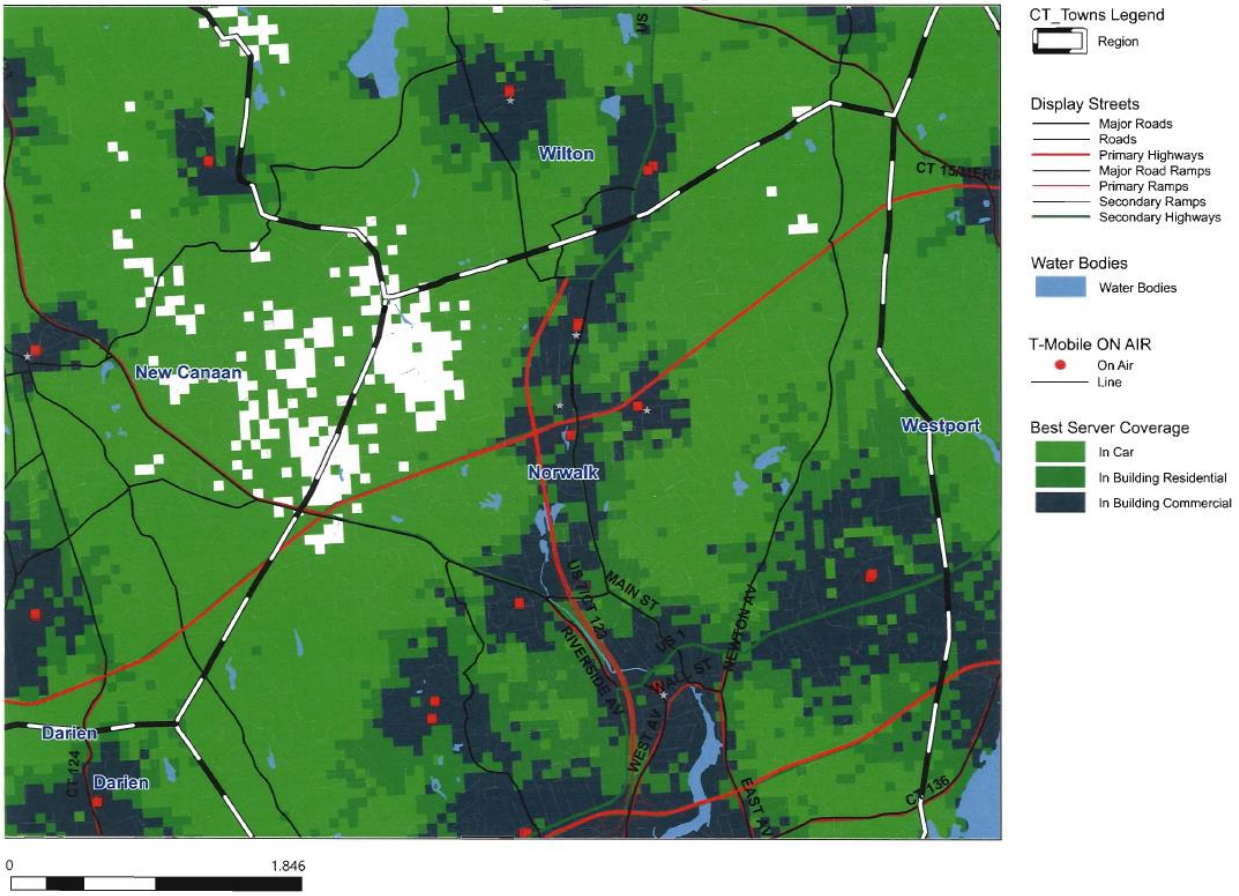

(Applicant 1, Tab 5)

**Figure 10 – Existing and Proposed 700 MHz Cellco Coverage**



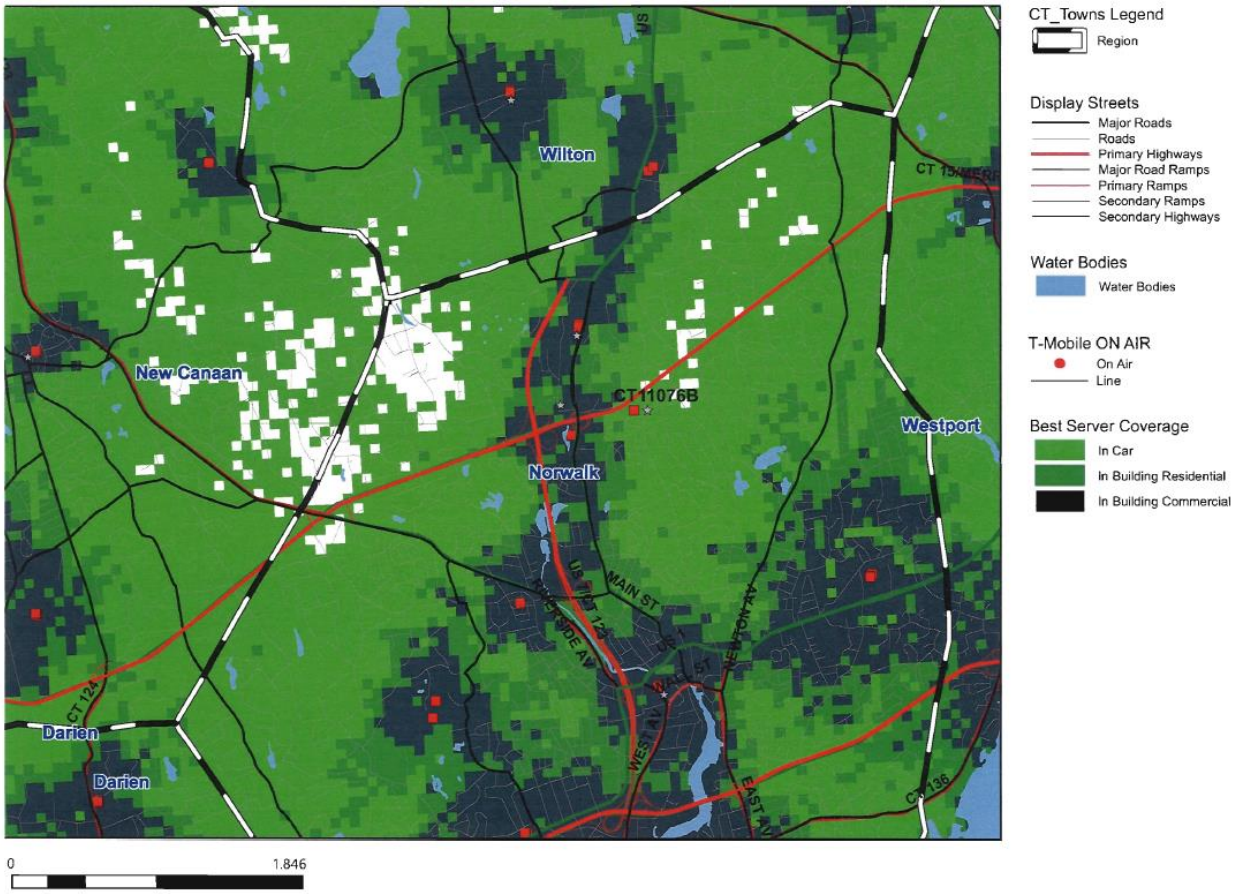

(Applicant 1, Tab 5)

**Figure 11 – Existing T-Mobile Coverage with Existing Water Tank Facility**



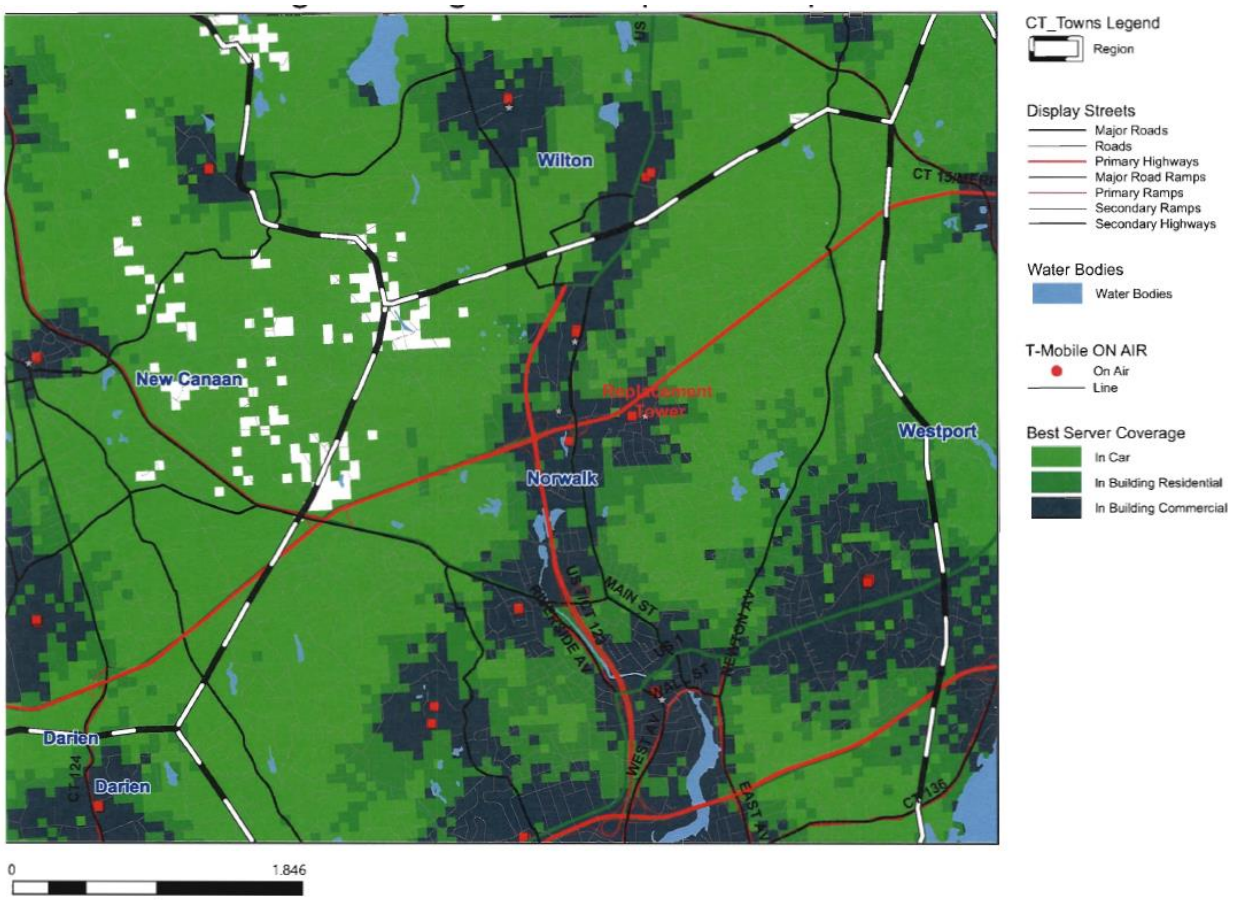

(Applicant 1, Tab 5)

**Figure 12 – Existing T-Mobile Coverage without Existing Water Tank Facility**



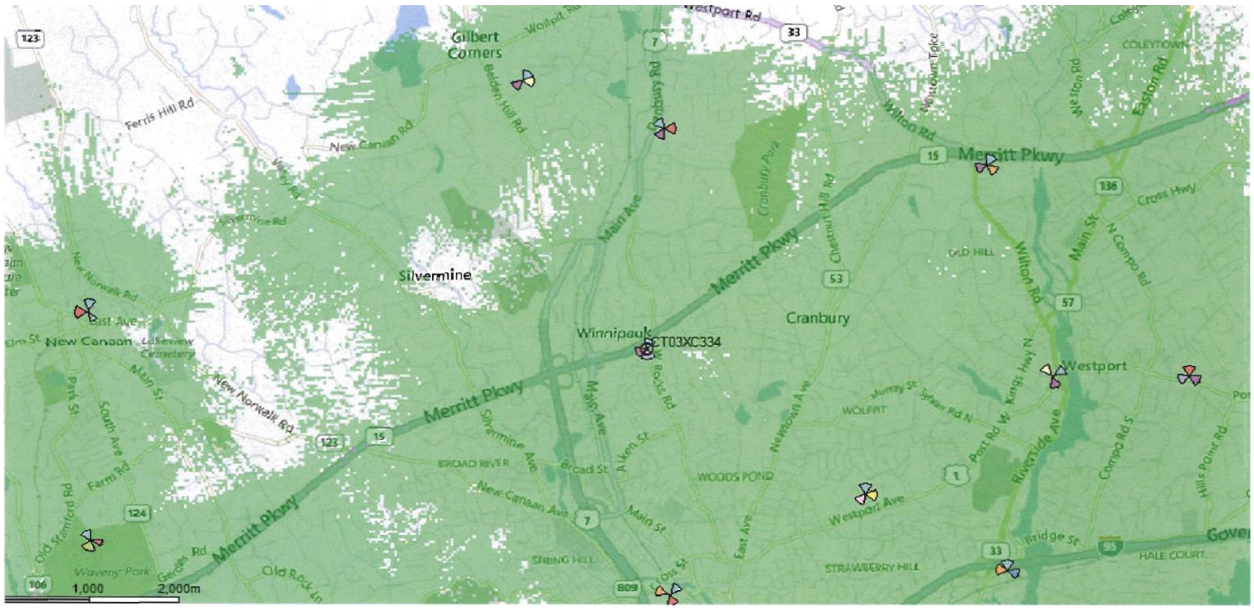

(Applicant 1, Tab 5)

**Figure 13 – Existing and Proposed T-Mobile Coverage**



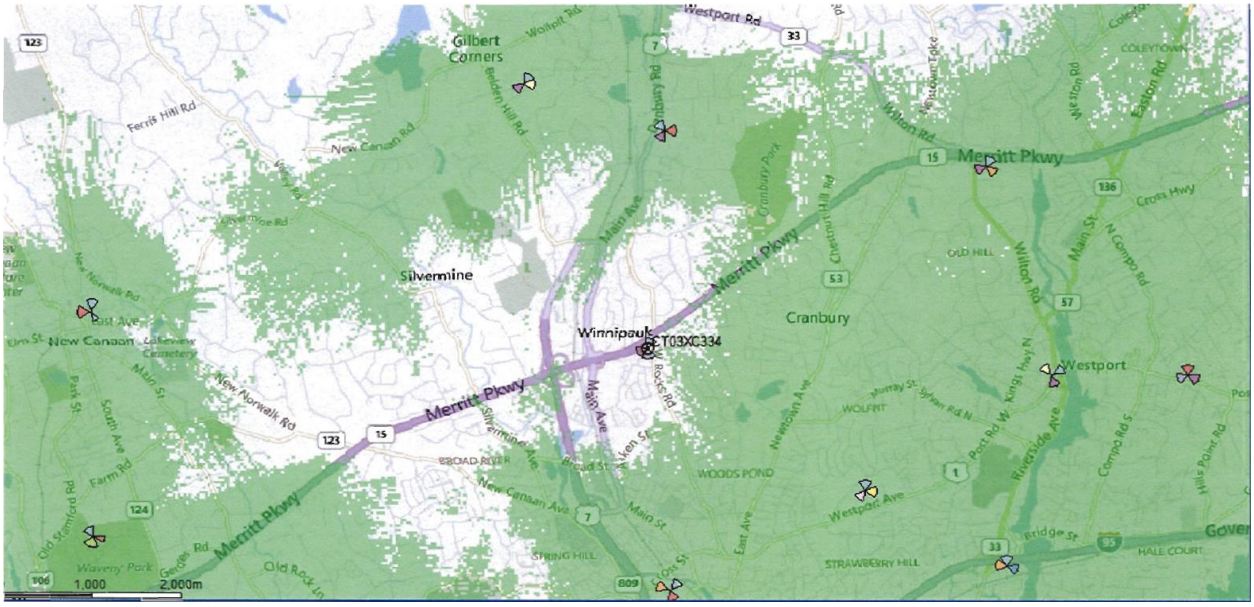

(Applicant 1, Tab 5)

**Figure 14 – Existing Sprint 1900 MHz Coverage with Existing Water Tank Facility**



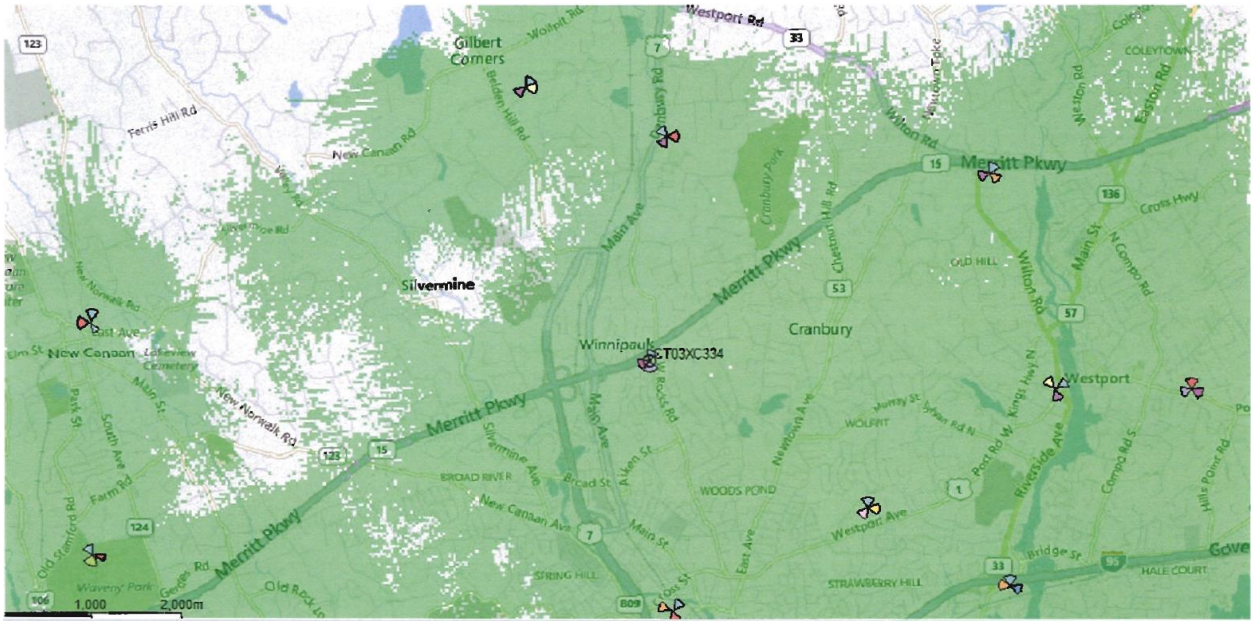

(Applicant 1, Tab 5)

**Figure 15 – Existing Sprint 1900 MHz Coverage without Existing Water Tank Facility**



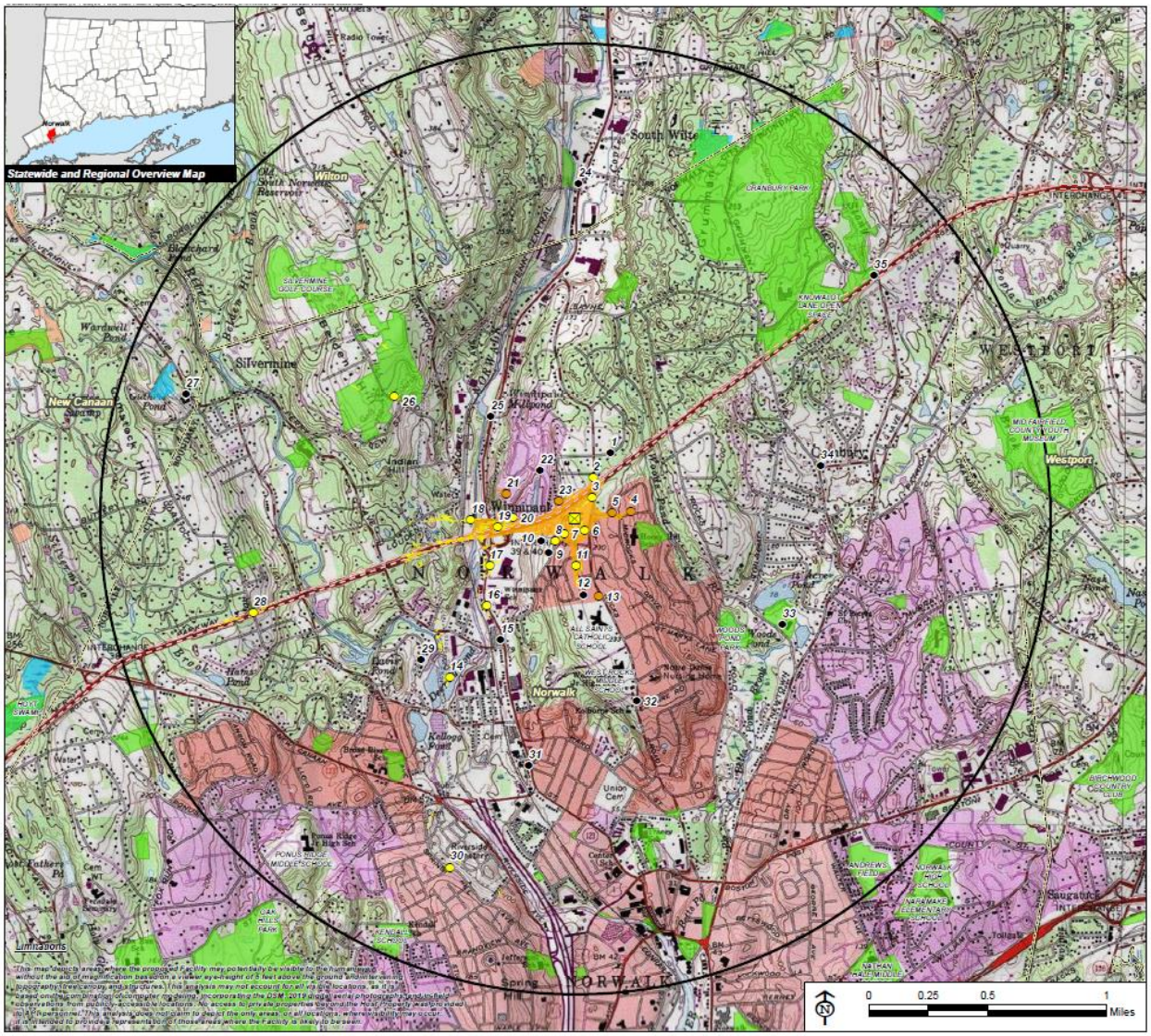

(Applicant 1, Tab 5)

**Figure 16 – Existing and Proposed Sprint 1900 MHz Coverage**




(Applicant 1, Tab 5)

**Figure 17 – Visibility Analysis**




**Legend**

- Proposed Site
- Study Area (2-Mile Radius)

**Photo Locations (January 22, 2020)**

- Year-Round
- Seasonal
- Not Visible
- Predicted Year-Round Visibility (19 Acres)
- Areas of Potential Seasonal Visibility (41 Acres)
- Scenic Highway
- Municipal Boundary
- Trail
- DEEP Boat Launches
- Municipal and Private Open Space Property
- State Forest/Park

**Protected Open Space Property**

- Federal
- Land Trust
- Municipal
- Private
- State

*Location No. 10 has seasonal visibility and was intended to be orange.

(Applicant 1, Tab 7 – Visual Assessment & Photo-simulations, Viewshed Analysis Map; Tr. 1, p. 34)

# ATTACHMENT

CEQ Comments to Council, dated May 1, 2020

*STATE OF CONNECTICUT*

# COUNCIL ON ENVIRONMENTAL QUALITY



May 1, 2020

Melanie Bachman, Executive Director
Connecticut Siting Council
Ten Franklin Square
New Britain, CT 06051

RE: DOCKET NO. 489 – The First Taxing District Water Department of Norwalk application for a Certificate of Environmental Compatibility and Public Need for the construction, maintenance, and operation of a telecommunications facility located at 173 ½ West Rocks Road, Norwalk, Connecticut.

Dear Ms. Bachman:

The Council on Environmental Quality ("the Council") has reviewed the application submitted in Docket 489 for a Certificate of Environmental Compatibility and Public Need. The Council offers the following comments for consideration by the Applicant and Siting Council.

**1. Northern Long-Eared Bat**

The Applicant states that the potential exists for the presence of northern long-eared bat (NLEB) and that the applicant "would consider the following additional recommended measures for NLEB conservation, as encouraged in the April 29, 2016 FCC Public Notice'. The Council commends the applicant for consideration of NLEB conservation measures.

**2. Visibility**

The zoning requirements call for the proposed facility to be "effectively screened" from adjacent properties; however, the only landscape screening proposed and depicted on Attachment 1, Sheet C-1 would be around the proposed 500,000 gallon water tank and along West Rocks Road in the vicinity of the former access drive. The Council suggests that the Applicant assess the need for screening of the equipment compound from observers to the south and southeast of the equipment buildings.

Furthermore, the Visual Assessment and Photo-Simulations included in Attachment 7 may understate the projected visibility. The location of Photo 10 is depicted as "not visible" on the viewshed analysis map; however, Photo 10 clearly shows that the red balloon, which is a proxy for the proposed tower height, is visible.

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In addition, it appears that a few locations (2, 7, 8 and 11) identified as "year round" in the photo-simulations may not be included in the yellow shading for Predicted Year-Round Visibility (19 Acres). The Council recommends that the Applicant confirm the locations and total area of the projected year round and seasonal visibility.

Thank you for your consideration of these comments. Please do not hesitate to contact the Council if you have any questions.

Sincerely,

Peter Hearn

Executive Director

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