

DRAFT

Petition No. 1134A New Cingular Wireless PCS, LLC

Off Rivergate Drive, Wilton, Connecticut Staff Report April 1, 2021

Introduction

On March 9, 2015, the Connecticut Siting Council (Council) issued a declaratory ruling pursuant to Connecticut General Statutes (CGS) §4-176 and §16-50k, approving a proposal from New Cingular Wireless PCS, LLC (AT&T) for the installation of a wireless telecommunications facility at an existing electric transmission line structure (Structure #935), owned by The Connecticut Light and Power Company (Eversource) and located within existing Eversource electric transmission line right-of-way (ROW) off Rivergate Drive in Wilton (Declaratory Ruling). AT&T proposed to install a 103-foot antenna mast within the existing 93-foot tall lattice structure. Antennas were to be installed at a centerline height of 100 feet above ground level (agl) and would have extended to a height of 104 feet agl. Associated equipment would have been installed within the footprint of the lattice transmission line structure, and a backup diesel generator would have been installed adjacent to the lattice structure.

The Council did not impose a construction deadline in its March 9, 2015 declaratory ruling. AT&T did not complete installation of the approved wireless telecommunications facility.

On February 5, 2021, the Council received a petition from AT&T to amend its Declaratory Ruling pursuant to CGS §4-176 and §16-50k, for proposed modifications to its approved installation of a wireless telecommunications facility at Structure #935 (Petition).¹

On or about February 4, 2021, AT&T provided notice of the proposed amendment to the Town of Wilton (Town), state officials and agencies, and abutting property owners. The Town of Weston was also provided notice on February 4, 2021 as it is within 2,500 feet of the proposed project.

On February 18, 2021, the Council sent correspondence to the Town stating that the Council has received the Petition and invited the municipality to contact the Council with any questions or comments by March 13, 2021. No comments from the Town were received.

The Council received comments from Pauline Prevett, an abutting property owner at 39 West Meadow Road.² Mrs. Prevett's concerns include:

1. The filing should be considered an application rather than a modification to the Declaratory Ruling.
2. Visual impact from the proposed facility since 2015 as Eversource cleared the ROW adjacent to 39 West Meadow Road.
3. Radio frequency emissions may have increased due to technology changes since 2015.
4. Impact from noise and air emissions from the proposed generator.
5. The need for the facility and lack of exploration of alternative locations for the facility.

¹ On February 11, 2021, AT&T submitted supplemental correspondence clarifying the February 5, 2021 Petition is a request to amend the Declaratory Ruling in Petition No. 1134.

² The Council received a letter from Mrs. Prevett on March 29, 2021. It references a letter to the Council from February 24, 2021; however, the Council has not received that letter.

Similar comments were received from the previous owner of 39 West Meadow Road in 2015.

On March 4, 2021, AT&T submitted a letter in response to Mrs. Prevett's concerns. AT&T stated:

1. The Council's March 9, 2015 Declaratory Ruling approved the facility without a deadline for completion of construction.
2. AT&T submitted a visibility analysis demonstrating the facility would not substantially increase visibility of the existing structure.
3. AT&T submitted a radio frequency power density report demonstrating emissions from the facility would be below Federal Communications Commission (FCC) established limits for general public exposure.
4. Generator testing would be infrequent and occur only during daytime hours. Noise and emissions from the generator would be in compliance with state regulations.
5. Although not required, AT&T demonstrated the proposed facility is needed to provide coverage and increased emergency communications capabilities.

The Council submitted interrogatories to AT&T on March 17, 2021. AT&T responded to the Council's interrogatories on March 24, 2021.

Jurisdiction

Pursuant to CGS §16-50x, in addition to exclusive jurisdiction over telecommunications facilities throughout the state, the Council also has exclusive jurisdiction over electric transmission line facilities with a design capacity of 69-kilovolts (kV) or higher. The existing transmission structure currently supports an electric transmission line with a design capacity of 115-kV.

In February 2012, Congress adopted the Middle Class Tax Relief and Job Creation Act (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 (FirstNet) Authority to oversee the construction and operation of a nationwide public safety wireless broadband network. 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.

In October 2014, the FCC issued an order under the Spectrum Act for streamlined siting of certain wireless facilities referred to as "eligible facilities requests" (EFR). An EFR is defined as: 1) collocation of new transmission equipment; 2) removal of transmission equipment; or 3) replacement of transmission equipment. The FCC order requires a state or local government to approve an EFR.

Existing Facility

Structure #935 is within an existing electric transmission line corridor owned by Eversource located on the east side of Rivergate Drive near the intersection with West Meadow Road. Surrounding land use consists primarily of residentially developed properties and wooded, undeveloped land. The nearest property boundary to Structure #935 is located at 39 West Meadow Road, approximately 40 feet to the south with the residential structure approximately 127 feet to the south of the structure on the same property.

Proposed Telecommunications Facility Co-location

The proposed facility is necessary for AT&T to provide reliable wireless service in this area of Wilton. Additionally, the facility would support AT&T's FirstNet program which provides first responders with priority access to AT&T's network to ensure critical communication capabilities in the event of an

emergency. The proposed facility would operate in 700/850/1900/2100 MHz LTE frequencies and would be capable of providing 5G services in the future.

AT&T proposes to install an antenna mast within the center of Structure #935 that would reach a height of approximately 107 feet agl. AT&T would install 6 antennas on triple T-arm mounts at a centerline height of 103 feet agl on the antenna mast. The tops of the antennas would extend to a height of approximately 107 feet agl.

An approximately 18-foot by 25-foot gravel equipment compound would be installed south of the lattice structure. The equipment compound would be surrounded on the southern and western sides by an 8-foot tall chain-link fence with sound attenuation materials installed on the interior side of the fence. The eastern side of the equipment compound would be bounded by steel and concrete bollards extending 3 feet 6 inches agl. The north side of the compound would be bordered by the base of the lattice transmission line structure. Electric and telephone utilities would extend south underground from an existing utility pole #8168 along Rivergate Drive to the proposed equipment compound.

The proposed equipment includes a walk-in equipment cabinet on an 8-foot 6-inch square concrete pad. A 17-foot long by 9-foot tall ice bridge would be installed to protect the cables with 9 remote radio heads and 36 diplexers attached to the vertical posts of the ice bridge. A 15-kilowatt diesel backup generator with a built-in fuel tank would be installed on a 4-foot by 5-foot concrete pad within the equipment compound. The backup generator could run at full load for approximately 53 hours based on its fuel tank capacity.

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, 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.

AT&T would extend the existing gravel access road north of the existing transmission structure to access the site. There is an existing wooden fence gate at the entrance to the access road.

Environmental

The proposed site is not within a Connecticut Department of Energy and Environmental Protection Natural Diversity Database buffered area.

Development of the proposed facility would require the clearing of approximately 1,135 square feet of brush around the base of the existing transmission line structure.

The nearest wetland is approximately 90 feet west of the proposed facility, within the Eversource electric transmission line right-of-way across Rivergate Drive. Erosion and sedimentation controls would be installed consistent with the *2002 Connecticut Guidelines for Soil Erosion and Sediment Control*. Due to the distance of the wetland area, the intervening paved public road and the use of erosion and sedimentation controls, no impact to this wetland area is expected.

The proposed antenna mast would be primarily visible from Rivergate Drive and from West Meadow Road. Additional limited views may extend to surrounding residential neighborhoods; however, the existing transmission line structures are also visible from these locations. An existing T-Mobile antenna mast is

located on Eversource Structure No. 937 for which the Council issued a declaratory ruling in 1999 in Petition 419. AT&T's proposed increase in structure height is not expected to have a significant adverse visual impact on the surrounding area.

There are no schools or child day care facilities within 250 feet of the existing structure. The nearest school and child day care center are located over one mile from the site.

Public Safety

The proposed facility would not require registration with the Federal Aviation Administration.

The Project would be constructed in accordance with the 2017 National Electric Code, 2018 Connecticut State Building Code and the American National Standards Institute "Structural Standards for Steel Antenna Towers and Antenna Support Structures" Revision G.

A Professional Engineer duly licensed in the State of Connecticut has certified that the existing lattice transmission structure and proposed antenna mast would be structurally adequate to support the proposed loading with reinforcements to the existing lattice transmission structure.

The proposed backup generator is exempt from DEEP Noise Control Regulations §22a-69-1.8(f). Notwithstanding, given the residential nature of the surrounding area, AT&T performed an Environmental Sound Assessment and proposes to install sound attenuation blankets in order to mitigate the combined worst-case noise of the cooling (i.e. HVAC) system for the equipment shelter and the backup generator and achieve a level that would comply with DEEP Noise Control Regulations if the generator were not exempt.

The cooling system consists of a primary and secondary system. The primary system consists of ventilation fans. The secondary system includes a door-mounted cooler to provide additional support when needed. The secondary cooling system is only expected to operate during the daytime under high summertime ambient temperatures. Generator testing would be infrequent and occur during the daytime. Additionally, during generator testing there will typically be no load, so the unit will operate at little more than idle during the test. The noise modeling considers the worst-case scenario of the generator being tested and the primary and secondary cooling systems all operating simultaneously. The need for secondary cooling plus the testing the backup generator is a scenario that could only happen during the few hottest days of the summer.

The sound attenuation blankets would be installed on the southern, northern and western faces of the proposed compound fence. The sound attenuation blankets would be attached to the inside faces of the fence. The proposed facility would be a Class B emitter under DEEP Noise Control Standards, and abutting residences would be Class A receptors. This results in a daytime noise limit of 55 dBA and a nighttime noise limit of 45 dBA. The existing ambient noise measurements and predicted worst-case noise levels for cooling fans, the supplemental cooler and the emergency backup generator are depicted below.

Table 4: Predicted Worst-Case Sound Levels Expected at Receptors

| Receptor Location | Distance (Ft) (from Cabinet) | Ambient Level Day/Night (L_{eq}) | Sound Level Standard (dBA) | Cooler+ Generator Level |
|--------------------------|---|---|---------------------------------------|------------------------------------|
| P/L, South | 17 | 49/43 | 55 | 55 dBA |
| P/L, Northeast | 55 | 49/43 | 55 | 54 dBA |
| P/L, Northwest | 65 | 49/43 | 55 | 45 dBA |
| Residence, South | 80 | 49/43 | 55 | 42 dBA |
| Residence, Northeast | 165 | 49/43 | 55 | 44 dBA |
| Residence, Northwest | 130 | 49/43 | 55 | 39 dBA |

Note: It is customary to conduct all calculations using precise values, but to round the result to whole dBA. All results are rounded to units (dBA).

The calculated power density would be 11.4 percent of the applicable limit using a -10 dB off-beam adjustment.

Construction Schedule

Construction of the facility would occur Monday through Friday between the hours of 8:00 a.m. and 5:00 p.m. Construction is anticipated to begin in October 2021 and take approximately two months.

Conclusion

If approved, staff recommends the following conditions:

1. Approval of any project changes be delegated to Council staff;
2. Prior to equipment installation, the lattice transmission structure shall be reinforced consistent with the Structural Analysis Report prepared by Centek Engineering, Inc. stamped and signed by Timothy Lynn and dated January 13, 2021; and
3. Within 45 days following completion of proposed modifications, AT&T shall provide documentation that its installation complied with the recommendations of the Structural Analysis.

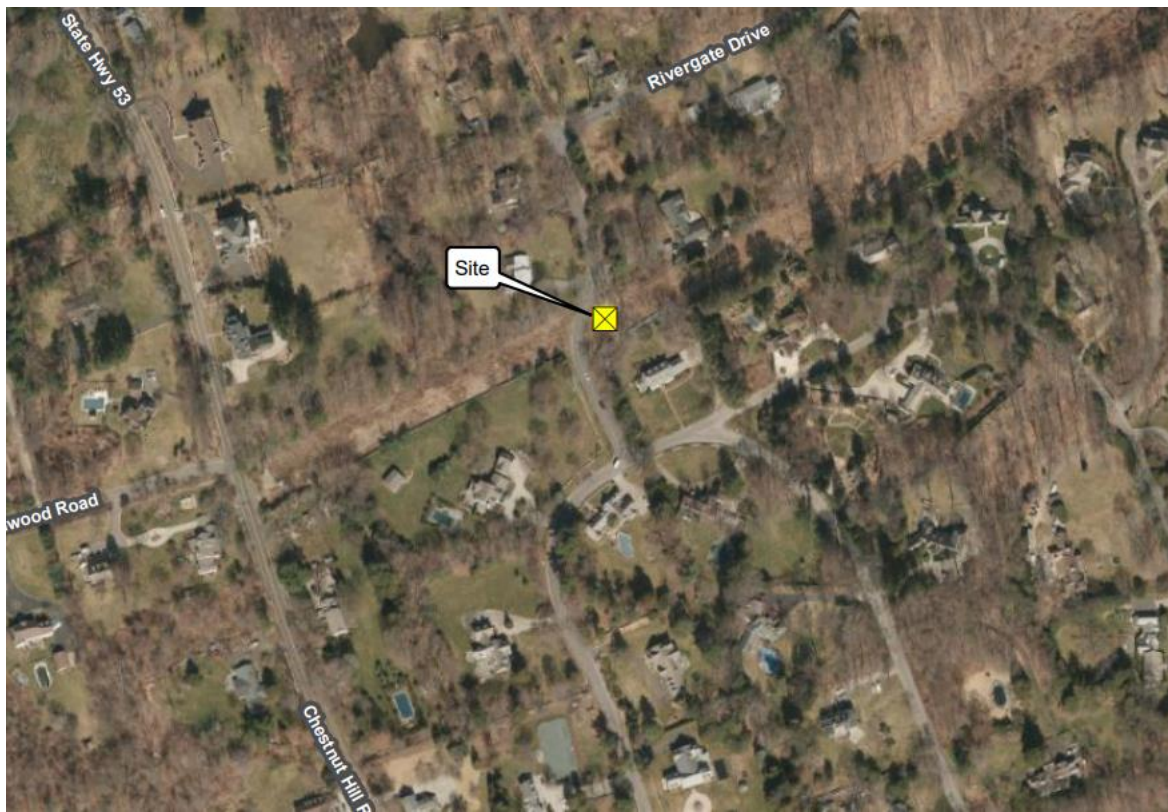


Figure 1. Proposed Site Location



Figure 2. Proposed modified facility simulation

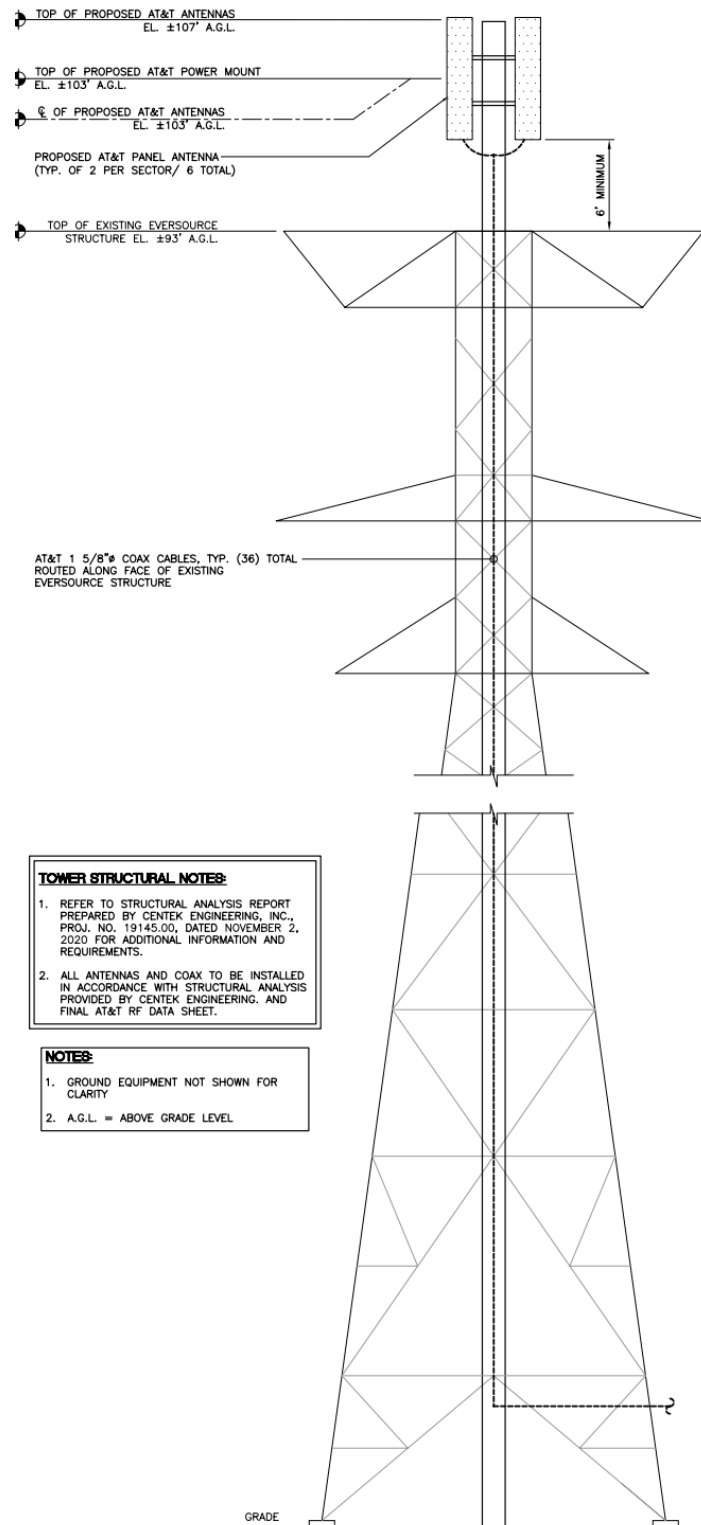


Figure 3. Facility Elevation Site Plan