

DOCKET NO. 509 - Homeland Towers, LLC and New Cingular } Connecticut
Wireless PCS, LLC d/b/a AT&T application for a Certificate of }
Environmental Compatibility and Public Need for the construction, } Siting
maintenance, and operation of a telecommunications facility }
located at 1837 Ponus Ridge Road, New Canaan, Connecticut. } Council

December 8, 2022

Opinion

On May 6, 2022, Homeland Towers, LLC (HT) and New Cingular Wireless PCS, LLC d/b/a AT&T (AT&T) (collectively, Applicants), applied to the Connecticut Siting Council (Council) for a Certificate of Environmental Compatibility and Public Need (Certificate) for the construction, maintenance, and operation of a wireless telecommunications facility at 1837 Ponus Ridge Road, New Canaan, Connecticut. The purpose of the proposed facility is to provide reliable wireless communications services for AT&T and Cellco Partnership d/b/a Verizon Wireless (Cellco) customers and address significant coverage deficiencies in AT&T and Cellco's networks in portions of northwestern New Canaan and northeastern Stamford.

The parties to this proceeding are Applicants; Mark Buschmann; Jamie Buschmann, Trustee; Mark Buschmann, Trustee (Buschmanns)¹; and the New Canaan Neighbors (NCN). The Connecticut Environmental Protection Act (CEPA) intervenors to this proceeding are NCN and Mark Buschmann. The Intervenor to this proceeding is Cellco. In this Opinion, the Council incorporates its record disposition of all substantive and procedural motions and objections that were raised by the parties, intervenors and CEPA intervenors during the course of the proceeding.

The United States Congress recognized a nationwide need for high quality wireless services through the adoption of the Federal Telecommunications Act of 1996 and directed the Federal Communications Commission (FCC) to establish a market structure for system development and develop technical standards for network operations. FCC preempts state or local regulation on matters that are exclusively within the jurisdiction and authority of FCC, including, but not limited to, network operations and radio frequency emissions. Preservation of state or local authority extends only to placement, construction and modifications of telecommunications facilities based on matters not directly regulated by FCC, such as environmental impacts. The Council's statutory charge is to balance the need for development of proposed wireless telecommunications facilities with the need to protect the environment.

Under Connecticut General Statutes (CGS) §16-50p(b), there is a presumption of public need for personal wireless services and the Council is limited to consideration of a specific need for any proposed facility to be used to provide such services to the public.

HT owns and/or operates numerous tower facilities in the state. HT would construct, maintain and own the proposed facility and would be the Certificate Holder. AT&T and Cellco are licensed by FCC to provide personal wireless communications service throughout the state and would lease space on the proposed tower for their telecommunications equipment.

¹ Pursuant to CGS §16-50n(c), the Council grouped the parties and CEPA Intervenor Mark Buschmann; Mark Buschmann, Trustee; and Jamie Buschmann, Trustee.

The total estimated cost of the proposed facility is \$867,000, inclusive of costs associated with AT&T and Cellco's equipment installations. Neither the project, nor any portion thereof, is proposed to be undertaken by state departments, institutions or agencies or to be funded in whole or in part by the state through any grant or contract. Applicants and Cellco are private entities.

AT&T and Cellco have significant coverage deficiencies in their wireless communications networks in portions of northwestern New Canaan and northeastern Stamford. Coverage objectives include the deployment of reliable in-vehicle service on roads and within buildings in the proposed service areas. Public roads in the area without adequate service include, but are not limited to, Ponus Ridge Road, Dan's Highway, and High Ridge Road (Route 137). Non-reliable service for both carriers was confirmed by coverage modeling.

Both carriers would operate at the 700 MHz, 850 MHz, 1900 MHz, 2100 or 2300 MHz, 3550 or 3700 MHz frequencies, all of which transmit voice and data services. All of AT&T's frequencies and Cellco's 850 MHz, 2100 MHz, and 3700 MHz frequencies are capable of supporting 5G services. In addition to coverage needs, Cellco's proposed installation on the tower would provide capacity relief to an existing site in Stamford.

In addition to wireless call capability, AT&T's deployment would feature emergency communication FirstNet services. These services are provided through a federal program to establish emergency communications to areas with deficient wireless service. FirstNet gives emergency responders on AT&T's 700 MHz network first priority to ensure emergency communications are not interrupted.

AT&T's proposed installation at the 106-foot level of the tower would provide a 700 MHz coverage footprint of 1.47 square miles at -83 dBm and 3.72 square miles at -93 dBm. Within the -93 dBm footprint, AT&T's installation would provide over one mile of new in-vehicle coverage to Route 137. Cellco's proposed installation at the 95-foot level of the tower would provide a 700 MHz coverage footprint of 4.2 square miles at -85 dB Reference Signal Received Power (RSRP) and 8.7 square miles at -95 dB RSRP, including reliable in-vehicle service to 2.9 miles of Route 137 at -95 dB RSRP. AT&T and Cellco's coverage footprints are within a Town of New Canaan (Town)-designated Cellular Communication Priority area.

Based on a lack of reliable wireless service for both AT&T and Cellco in northwestern New Canaan and northeastern Stamford, the Council finds a specific need for the facility to be used to provide wireless services to the public. Although the proposed site provides necessary reliable coverage to portions of the greater area of need, it cannot meet all of the coverage needs of the carriers due to hilly terrain and the expansiveness of the underserved area. Additional facilities would be required in the future to provide reliable wireless services to areas south, east and west of the proposed site.²

Between 2011 and 2013, AT&T met with the Town to discuss coverage needs, including but not limited to, the need for a facility in the northwest section of Town. In 2014, the Town commissioned a Wireless Market Study, which determined that AT&T and Cellco have non-reliable coverage in the northwest portion of Town, west of Route 124 (Oenoke Ridge).

In 2016, the Town selected HT in a Request for Proposals to develop telecommunications sites in Town to address carrier network needs that were identified in the 2014 Wireless Market Study.

² The Town's West School, approximately 2.4 miles south of the proposed site, was identified in the 2014 Wireless Market Study as a potential location for a wireless facility.

Beginning in 2018, HT searched for a suitable tower site in the northwest New Canaan/northeast Stamford area, investigating 24 potential sites, of which only the proposed site was available and met the coverage needs of AT&T and Cellco. During the proceedings, the Buschmanns suggested installation of a facility at three other locations east of the site - 982 Oenoke Ridge Road; 40 Dan's Highway, and 40 River Wind Road - to meet coverage needs. Subsequent coverage modeling performed by AT&T from these locations indicated wireless service needs would not be met and therefore, none of the suggested locations are feasible alternatives.

For any site to be considered a feasible and prudent alternative to a proposed facility site, it must be available to host the proposed facility. Although many sites were examined and many landowners were not interested in a lease agreement for a wireless facility, the Council has no authority to compel a parcel owner to sell or lease property, or portions thereof, for the purpose of siting a facility nor shall the Council be limited in any way by the Applicants having already acquired land or an interest therein for the purpose of siting a facility.

Pursuant to CGS §16-50x, the Council has exclusive jurisdiction over telecommunications facilities throughout the state. It shall consider any location preferences provided by the host municipality under CGS §16-50gg as the Council shall deem appropriate.

HT presented the Town with a preliminary design for the site in October 2021, which was later modified in response to Town comments regarding the access drive and stormwater drainage control. In December 2021, the Town's emergency response entities and public works department submitted letters to Applicants indicating support for the tower and expressing their intent to install communication antennas on the proposed facility.

Pursuant to CGS §16-50p(b), the Council shall examine whether the proposed facility may be shared with any public or private entity that provides service to the public, provided such shared use is technically, legally, environmentally and economically feasible and meets public safety concerns, and may impose reasonable conditions as it deems necessary to promote the immediate and shared use of telecommunications facilities and avoid the unnecessary proliferation of such facilities in the state. The proposed facility is designed to accommodate four wireless carriers and municipal antennas.

The proposed site consists of a 110-foot stealth "tree" monopole (monopine) located in the northeastern portion of the 5.1-acre residentially-zoned parcel. The host parcel is developed with a residence located in the southeastern portion of the parcel, accessed from a driveway extending from Ponus Ridge Road. The remaining areas on the parcel consist of a forested, sloping hillside with a wetland/stream system in the northwestern section of the host parcel.

The tower would be located near the top of a hill at an elevation of 394 feet above mean sea level. A 3,000 square-foot equipment compound would be established at the base of the tower, with space to accommodate the equipment of four carriers and municipal emergency services.

Initially, the proposed compound and tower were located approximately 45 feet and 110 feet, respectively, to the eastern property boundary (359 Dan's Highway). At the request of the Council, and with consent from the landlord, HT shifted and reoriented the compound and tower to increase the distance to the property line (Revised Configuration). In the Revised Configuration, the compound and tower would be approximately 108 feet and 153 feet, respectively, from this property line.

AT&T proposes to install six panel antennas at a tower centerline height of 106 feet above ground level (agl). Cellco would install nine antennas at a tower centerline height of 95 feet agl. The proposed site plans depict one 12-foot whip antenna and two dish antennas at the top of the tower and one 12-foot whip antenna at the approximate 60-foot level of the tower for Town communications. AT&T and Cellco would install equipment cabinets on concrete pads within the compound.

In the event an outage of commercial power occurs at the proposed site, both AT&T and Cellco would rely on propane-fueled generators and associated 500-gallon propane tanks. HT designed the compound with space for four propane fuel tanks, arranged in a row. It is anticipated the generators would provide 5 to 7 days of run time before refilling is required.

The compound would be accessed by a short portion of the existing driveway. From the existing driveway, a new 12-foot wide, 460-foot long access drive would ascend the hillside to the compound. Due to slopes reaching 19 percent, the 250-foot long lower portion of the access drive would be paved. The upper portion would have a gravel surface as grades are more moderate. Utilities servicing the compound would be installed underground alongside of or within the access drive depending on geologic conditions.

In the Revised Configuration, the nearest property boundary from the proposed tower and compound is approximately 134 feet and 95 feet, respectively, to the north (59 Squires Lane). Thus, the tower setback radius for the proposed tower does not extend beyond the boundary of the host parcel and no tower yield point is necessary. There are approximately 11 residential structures within 1,000 feet of the proposed tower site. The nearest residence is located approximately 291 feet to the north at 59 Squires Lane.

The site would be built on a hillside with exposed ledge that would be removed by mechanical methods. Blasting is not anticipated. If blasting is required, it would be conducted in accordance with state and municipal regulations. Site development would require approximately 3,550 cubic yards of cut and approximately 1,500 cubic yards of fill.

Although HT would utilize as much of the excavated material for fill as possible, geologic mapping indicates some of the rock in the construction area is composed of minerals that could cause acid rock drainage, which can cause water potability issues when exposed to the air. HT, as part of the Development and Management (D&M) Plan, would investigate whether on-site geologic conditions could cause acid rock drainage, and if so, would implement a management plan to mitigate its potential effects on surface and subsurface water quality.

Post-construction stormwater along the access drive would be directed into a rip-rap lined drainage swale with velocity reducing check dams installed at certain intervals. Stormwater would be discharged into four stilling basins located on the down gradient side of the hill. The riprap stilling basins are designed to slow down water velocity before discharge overland towards Ponus Ridge Road. The stormwater management system was designed for a 10-year storm. The Council will order HT to design the stormwater management system to a 25-year storm event, in accordance with Town criteria, and submit a stormwater/drainage report that accounts for on-site geological conditions, as well as consideration of any improvements that can be made to promote on-site infiltration, such as a rain garden.

The western boundary of the host parcel contains a forested seep wetland with an intermittent watercourse that originates off-site near the cul-de-sac at the end of Squires Lane, northeast of the site. The intermittent watercourse is directed under Ponus Ridge Road and discharges onto Aquarion Water Company (Aquarion)-owned property that surrounds Laurel Reservoir, a public water supply.

The limit of disturbance for construction of the site would be approximately 105 feet from the edge of the wetland at its closest point. Once site construction is completed and disturbed areas revegetated, the access road to the site would be approximately 137 feet to the wetland at its closest point. These distances comport with the *2004 Stormwater Quality Manual* and the Western Connecticut Council of Governments guidance. To ensure the wetland is not impacted during construction, HT would retain a wetland scientist to conduct monitoring during construction.

Development of the site would disturb an approximate 0.85-acre area and would not require a DEEP-issued Stormwater Permit. HT would develop a detailed construction erosion and sedimentation (E&S) control plan that is consistent with the *2002 Connecticut Guidelines for Soil Erosion and Sedimentation Control (2002 E&S Guidelines)*. Soils at the site are mapped as highly erodible; therefore, in addition to E&S controls, HT would develop a construction phasing plan to minimize exposed surfaces and restore disturbed areas as soon as practicable. In addition, HT would retain a civil engineer independent of the construction contractor to monitor E&S controls. Consistent with Department of Health (DPH) recommendations, Applicants, with consent from the host parcel owner, would make accommodations for Aquarion personnel to access the site for a pre-construction and post-construction site visit.

The proposed site is upgradient of Laurel Reservoir. The nearest point of the proposed access drive and proposed compound to the reservoir is approximately 190 feet and 410 feet, respectively. Although the tower site is located close to and within a public water supply watershed for Laurel Reservoir, the Council finds that the watershed encompasses a large area of northwest New Canaan that is mostly residentially developed with reservoir feeder streams flowing through these developed areas. Ponus Ridge Road and several nearby residences are closer to the reservoir than the proposed tower and access drive. The Town reviewed the preliminary plan for the site during the Town consultation process and suggested access drive improvements. As a result of these consultations, the access drive was re-located out of the Town's 100-foot wetland buffer and drainage was improved by eliminating a curb cut, removing a trench drain, and using a cross slope to direct water to a swale.

On June 1, 2022, the Council received comments from DPH related to water quality and Laurel Reservoir.³ The Council is cognizant of these concerns and finds that construction of the site can be accomplished without adverse impact to water quality and Laurel Reservoir if recommended procedures are followed. These procedures include, but are not limited to, a geotechnical investigation of the site, a stormwater management system designed to a 25-year storm event that accounts for geological conditions, establishment of E&S controls consistent with the *2002 E&S Guidelines*, a construction phasing plan that maintains a minimum 100-foot buffer from the limit of disturbance to the on-site wetland, provisions for acid rock mitigation, use of clean fill, replanting of steep slopes with native vegetation to the extent possible, servicing of construction machinery outside of the Laurel Reservoir public water supply watershed, implementing a petroleum materials storage and spill prevention plan and on-site monitoring by a civil engineer and a wetland scientist. The Council will order HT to incorporate all of these protective measures into the D&M Plan.

Approximately 0.85 acre of forest would be cleared to develop the site. It is part of a small forest patch that extends onto adjacent parcels but does not contain core forest (greater than 300 feet from a forest edge). HT would implement an invasive species mitigation plan to reduce the likelihood of invasive species from colonizing disturbed areas of the site.

³ DPH did not identify the proposed facility site and/or host parcel as Class I or Class II watershed land that is owned by a water company.

The DEEP Natural Diversity Database (NDDB) identified three state-listed species that were recorded in the site area: little brown bat, red bat, and eastern box turtle. HT would implement a NDDB species protection plan in accordance with DEEP's recommendations that would include contractor education, site inspections, isolation barriers, and a tree clearing restriction to reduce potential impact to the listed species during site construction. HT would conduct tree clearing from November 1 to March 31, which would also be protective of the federally-listed threatened and state-listed endangered northern long-eared bat, and neotropical birds that could use the site for nesting. Therefore, the Council will order HT to clear trees from November 1 to March 31. To reduce the possibility for wildlife entanglement, the Council will also order HT to use 100 percent natural fiber erosion control blankets.

The site is approximately three miles south of the Ward Pound Ridge Reservation in New York, an Important Bird Area (IBA), as designated by the National Audubon Society. The proposed facility would not affect the IBA and would comply with the U.S. Fish and Wildlife Service guidelines for minimizing the potential for telecommunications towers to impact bird species.

The host parcel is not within a flood zone. It does not contain prime farmland soil. Operation of the facility would comply with DEEP Noise Control Standards.

No resources listed on the State or National Register of Historic Places were identified within 0.5-mile of the site, and thus, no impact to historic resources is expected. The State Historic Preservation Office determined the proposed facility would have no effect on historic or archeological resources.

Applicants prepared a visual impact assessment of the site utilizing a two-mile radius study area (Study Area-8,042 acres) and computer modeling that was supplemented with in-field studies. These analyses were used by Applicants to generate photo-simulations of the proposed tower.

Based on the visual impact assessment, the proposed tower would be visible year-round from approximately 198 acres (2.5% of the Study Area), of which 195 acres occur from Laurel Reservoir and its shoreline. The tower would also be seasonally visible (leaf-off conditions from November to early May) from approximately 80 acres (1.0%) of the Study Area, including 13 residentially developed properties within a half-mile of the site.

Three residentially developed parcels in close proximity to the tower would have year-round views of the tower, not including the host parcel. The abutting property to the southeast at 359 Dan's Highway would have year-round views of most of the tower and parts of the compound fence that are not obscured by landscaping. The abutting property to the north at 59 Squires Lane would have year-round views of the upper portion of the tower. The non-abutting property to the east at 331 Dan's Highway would have year-round views of the uppermost portion of the tower.

The tower would be seasonally visible from various roads within 0.75 mile of the site including, but not limited to, Laurel Road in Stamford, and Dan's Highway, Ponus Ridge Road, and Lake Wind Road in New Canaan. Some short sections of these roads would have year-round visibility of the upper portion of the tower.

The tower was designed as a stealth "tree" monopole (monopine) to reduce its visibility from the surrounding area. A flagpole type tower would not be feasible due to the limited amount of tower-mounted equipment that can be installed at each level of the tower, necessitating a much taller tower. The Town requested that ground equipment within the compound be installed within a residential-style wood frame building. The Council finds that views of the compound and its equipment can be mitigated by landscaping and a wood shadowbox fence. The Council will require HT to provide a final landscaping plan that

includes, but is not limited to, evergreen plantings tall enough to screen the walk-in equipment cabinets, in the D&M Plan.

Pursuant to CGS §16-50p(b), the Council shall examine whether the proposed facility would be located in an area of the state which the Council, in consultation with DEEP and any affected municipalities, finds to be a relatively undisturbed area that possesses scenic quality of local, regional or state-wide significance and the latest facility design options intended to minimize aesthetic and environmental impacts.

There are no state or locally designated scenic roads located within two miles of the proposed site. There are no state or locally designated scenic areas near the tower. No comments were received from the Town, the City of Stamford, Office of Policy and Management or DEEP regarding any impacts to scenic quality or resources. The Town has listed directional “scenic vistas” in its Conservation and Development Plan that include vistas of Laurel Reservoir from Ponus Ridge Road, but these vistas are oriented towards the reservoir and not in the direction of the tower. There are no blue blazed hiking trails maintained by the Connecticut Forest and Parks Association within two miles of the site.

The Council finds that the proposed facility would not be located in an area of the state that possesses scenic quality of local, regional or state-wide significance and would not substantially affect the scenic quality of its location or surrounding neighborhood. The Council also finds that the stealth “tree” monopole (monopine) design of the facility minimizes aesthetic impacts.

Although the tower would be visible year-round from Laurel Reservoir, its shoreline, and bordering forest, these areas, part of Centennial Watershed State Forest, are Class I watershed lands owned by Aquarion and are not accessible to the public. Future access to the reservoir and surrounding lands would require approval from DPH. In its June 1, 2022 correspondence to the Council, DPH did not comment on future public use of Laurel Reservoir or the surrounding Class I and Class II watershed lands.

No public schools or commercial child day care facilities are located within 250 feet of the proposed site.

According to a methodology prescribed by the FCC Office of Engineering and Technology Bulletin No. 65E, Edition 97-01 (August 1997), the cumulative worst-case maximum power density from the radio frequency emissions from the operation of AT&T and Cellco’s proposed antennas to be installed on the tower have been calculated to amount to 54.2 percent of the FCC’s General Public/Uncontrolled Maximum Permissible Exposure (MPE), as measured at the base of the tower. This is conservatively based on all antennas of a given sector pointing down to the ground and emitting maximum power. This percentage is below federal standards established for the frequencies used by wireless companies. As part of the D&M Plan, the Council will require a rigorous cumulative far-field radio frequency analysis for the facility that accounts for all entities on the tower, a 6-foot tall person at ground level and the actual antenna pattern for the proposed facility with a cumulative percent MPE at or below 100 percent, consistent with FCC methodology.

If federal power density standards change, the Council will require that the tower be brought into compliance with such standards. The Council will require that the power densities be recalculated in the event other entities add antennas to the tower. The Telecommunications Act of 1996 prohibits any state or local agency from regulating telecommunications towers on the basis of the environmental effects of radio frequency emissions to the extent that such towers and equipment comply with FCC’s regulations concerning such emissions. Potential harm to wildlife from radio frequency emissions, like the potential harm to human health from radio frequency emissions, is a matter of exclusive federal jurisdiction. The Council’s role is to ensure that the tower meets federal permissible exposure limits.

The Council finds that the proposal would not cause unreasonable pollution, impairment or destruction of the public trust in the air, water or other natural resources of the state. The Council has considered all reasonable alternatives and finds that the proposal represents the best alternative consistent with the reasonable requirements of the public health, safety and welfare.

Based on the record in this proceeding, the Council finds that the effects associated with the construction, operation, and maintenance of the telecommunications facility in the Revised Configuration, including effects on the natural environment, ecological balance, public health and safety, scenic, historic, and recreational values, agriculture, forests and parks, air and water purity, and fish, aquaculture and wildlife are not disproportionate either alone or cumulatively with other effects when compared to need, are not in conflict with policies of the state concerning such effects, and are not sufficient reason to deny this application. Therefore, the Council will issue a Certificate for the construction, maintenance, and operation of a 110-foot stealth “tree” monopole (monopine) telecommunications facility in the Revised Configuration located at 1837 Ponus Ridge Road, New Canaan, Connecticut.