DOCKET NO. 520 – Homeland Towers, LLC and Cellco }
Partnership d/b/a Verizon Wireless application for a Certificate of Environmental Compatibility and Public Need for the construction, } maintenance, and operation of a telecommunications facility located at 124 Ague Spring Road, Haddam, Connecticut.

Siting

Council

June 20, 2024

Opinion

On November 29, 2023, Homeland Towers, LLC (HT) and Cellco Partnership d/b/a Verizon Wireless (Cellco), collectively the 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 150-foot wireless telecommunications facility at 124 Ague Spring Road, Haddam, Connecticut. The purpose of the proposed facility is to provide reliable wireless communications services to portions of central and eastern Haddam (Town).

The party to this proceeding is the Applicants. There are no Connecticut Environmental Protection Act (CEPA) Intervenors to this proceeding. In this Opinion, the Council incorporates its record disposition of all substantive and procedural motions that were raised by Applicants 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. The FCC preempts state or local regulation on matters that are exclusively within the jurisdiction and authority of the 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 the 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. Cellco is licensed by the FCC to provide personal wireless communications service throughout the state and would lease space on the proposed tower for their telecommunications equipment.

The total estimated cost of the proposed facility is \$830,000, inclusive of costs associated with 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. HT and Cellco are private entities.

Cellco has a significant coverage deficiency in its wireless communications network in portions of central and eastern Haddam, including but not limited to, areas around Route 154, Walkley Hill Road, Meeting House Road, Old Ponset Road, and Haddam Meadows State Park. Currently, Cellco provides wireless service to portions Haddam and adjacent towns from seven existing facilities within four miles of the

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proposed site; however, none of these existing facilities provides reliable service to the proposed service area.

Cellco would deploy 700 MHz, 850 MHz, 1900 MHz, 2100 MHz wireless services at the site, all of which transmit data services. Cellco's radio frequency engineers use an in-house coverage modeling program to determine network performance and service needs.

Cellco's proposed installation at the 146-foot level of the tower would provide reliable 700 MHz service to a four-mile section of Route 154 and adjacent areas, including but not limited to the Town Hall, two fire stations, senior center, library, residences and Haddam Meadows State Park and the western section of Haddam Neck, located on the east side of the Connecticut River.

Small cells or distributed antenna systems would not be a practicable or feasible means of addressing the existing coverage deficiency within the proposed service area. Small cells limit the number of frequencies that can be deployed, limit structure sharing with other carriers, and lack space for emergency backup power. To provide wireless service to the proposed service area would require a significant number of small cell deployments either on existing utility poles or on new utility poles along roadways or on private parcels throughout the proposed service area and would not be economically viable as a replacement for a single tower site. Therefore, the Council finds small cells are not a feasible alternative to the proposed facility.

Based on a lack of reliable wireless service for Cellco in portions of Haddam, the Council finds a specific need for the facility. 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 Cellco due to hilly terrain and the expansiveness of the underserved area, especially at the higher frequencies within Cellco's network. Additional facilities may be required in the future to provide reliable wireless services to areas that remain underserved.

HT initiated a site search in the Haddam area in 2016 and signed a lease with the property owner in 2018. HT also signed two leases with the Town for use of Town-owned property on the west side of the Connecticut River; however, neither site would meet Cellco's coverage objectives. Although Cellco issued a search ring for this area in 2018, no sites were examined. Cellco and HT conducted a collaborative review of leased sites and a search for new sites in 2022/2023 and determined only the proposed site would meet coverage needs.

A total of 12 other potential sites were examined and included existing transmission structures, a church steeple and an existing lattice lookout tower on the host parcel as well as several raw land sites. The existing 73.5-foot lattice lookout tower on the host parcel once supported equipment operated by Nextel Communications, Inc. which was removed after Nextel's merger with Sprint. It is too short to meet Cellco's coverage objectives, it is not within the Applicants' leased site and the property owner intends to continue to use the lookout tower for views and photography.

A 180-foot tower was proposed by Sprint Nextel Corporation and CL&P on a parcel off Cove Road in Haddam Neck in 2007 in Council Docket 348 which was subsequently withdrawn in 2008. This parcel is too low in elevation and too far south to meet Cellco's coverage objectives. Other raw land sites were not pursued due to lack of property owner interest or deficient coverage to the proposed service area.

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, 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

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lease property, or portions thereof, for the purpose of siting a facility nor shall the Council be limited in any way by the applicant having already acquired land or an interest therein for the purpose of 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. On March 21, 2024, the Town submitted comments to the Council in support of the proposed facility.

The Applicants presented the Town with a technical report for the site in July 2023 and participated in a public information meeting at the Town Hall on October 12, 2023.

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, including Cellco, and municipal antennas. No other wireless carriers expressed an interest in co-locating on the tower at this time.

The host parcel, located on the east side of the Connecticut River, is 13.1-acres and zoned residential. It is developed with a single-family residence in the southern portion, and the lookout tower within a field in the northern portion, accessed by a dirt road extending from Ague Spring Road.

The proposed facility consists of a 150-foot monopole within a 40-foot by 70-foot equipment compound located in the northern portion of property, and in line with, the existing lookout tower.

Cellco would install 8 panel antennas and 7 remote radio heads on an antenna platform at a centerline height of 146 feet above ground level. Cellco would install radio cabinet, battery cabinet and a 50-kilowatt dieselfueled emergency backup generator on a 10-foot by 20-foot concrete pad, covered with a steel canopy. The compound can support radio equipment of three other carriers. To deter unauthorized access to the compound, the compound would be enclosed by an eight-foot chain link fence, accessed through a locked, 12-foot-wide gate.

In the event an outage of commercial power, Cellco would rely on its 50-kilowatt diesel-fueled generator that could provide approximately 50 hours of run time before refueling is necessary. Cellco would also have an 8-hour battery backup power source for use in the event the generator does not start.

The compound would be accessed by using a portion of the existing lookout tower driveway and a new 360-foot long gravel drive. The new access drive would require grading of the hillside to maintain a moderate grade of nine percent. Utilities to the compound would be installed underground along the access road from existing service along Ague Spring Road.

The nearest property boundary from the proposed compound and tower is approximately 22 feet and 62 feet, respectively, to the north at 64 Ague Spring Road. Given the close proximity of the site to the abutting property, the Council will order HT to explore the feasibility of reasonably shifting the facility site to the south to establish a 50-foot buffer from the compound fence to the abutting property. The Council will also order HT to design the tower with a yield point to ensure the tower setback radius remains within the boundaries of the host parcel.

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There are approximately 4 residential structures within 1,000 feet of the proposed tower. The nearest residence is approximately 475 feet to the south at 121 Ague Spring Road.

A geotechnical survey would be performed prior to construction to evaluate existing subsurface conditions as part of the Development and Management (D&M) Plan. Construction would require 230 cubic yards of excavation and 150 cubic yards of stone for the access drive and compound. The construction limit of disturbance extends to the north property line and given the amount of open field area on the host property south of the site, the Council finds this limit of disturbance unreasonable and will order HT to maintain a minimum 10-15 foot buffer to the northern property line.

Development of the site would not impact any wetlands, trees or prime farmland soils.

The site is not located within a Department of Energy and Environmental Protection (DEEP) Natural Diversity Database buffer area. The northern long-eared bat (NLEB), a federally-listed and State Endangered Species, is known to occur in the vicinity of the proposed site. However, the proposed site is not located within 150 feet of a known NLEB maternity roost tree or within 0.25-mile of a known hibernaculum. The U.S. Fish and Wildlife Service (USFWS) determined that the proposed facility would not have an impact on the NLEB.

The proposed facility is not proximate to a National Audubon Society designated Important Bird Area. The facility would comply with the USFWS guidelines for minimizing the potential for telecommunications towers to impact bird species.

The site is not within a flood zone or an aquifer protection area. Operation of the facility would comply with DEEP Noise Control Standards.

The proposed facility would be visible from portions of the Haddam Center Historic District, listed on the National Register of Historic Places, and the Higganum Land Historic District, listed on the State Register of Historic Places, approximately 1.0 mile and 1.75 miles from the site, respectively. The State Historic Preservation Office (SHPO) stated the proposed tower would have an adverse effect on both districts and recommended mitigation measures to lessen the impact. HT is consulting with SHPO regarding mitigation measures which may include painting the upper portion of the tower sky blue and developing a mitigation agreement with the Haddam Historical Society.

Based on HT's visual impact assessment within a two-mile radius of the site (Study Area-8,042 acres), the proposed tower would be visible year-round (above the trees) from approximately 432 acres of the Study Area, mostly over the open fields of Haddam Meadows State Park and the Connecticut River, both west of the site. In addition, isolated year-round views of the tower would occur from various portions of the Study Area.

Within a half-mile of the site on the east side of the Connecticut River, the tower may be visible year-round to several residential properties along Ague Spring Road to the southwest and seasonally visible to five residential properties west of the site proximate to Injun Hollow Road. The tower would be seasonally visible from School House Hill Road southeast of the site and Quarry Hill Road west of the site.

To screen some views of the facility from Ague Spring Road, the compound fence would feature privacy slats and landscaping would be installed on the south and east sides of the compound.

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Visibility of the tower would occur from the Connecticut River Gateway Conservation Zone, established to conserve aesthetic and ecological riverway resources in eight towns along the lower Connecticut River. The Town established zoning regulations consistent with the goals of the conservation zone, which is overseen by the Connecticut River Gateway Commission (CRGC).

The proposed tower would be visible seasonally and year-round from portions of Route 154, a State-designated scenic road approximately 1 mile from the site at its closest point. The tower would be seasonally visible from a CRGC-designated scenic section of Rock Landing Road, 0.4 mile northwest of the site.

The tower would be visible year-round from a hiking trail in George D. Seymour State Park northeast of the site and from portions of Haddam Meadows State Park west of the site.

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.

No comments were received from the Town, Office of Policy and Management or DEEP regarding any impacts to scenic quality or resources.

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

The Council finds that the proposed facility would not substantially affect the scenic quality of its location or surrounding neighborhood. To minimize aesthetic effects, the Council will order HT to continue consultation with SHPO regarding visual mitigation measures and submit the results of any SHPO recommendations.

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 Cellco's proposed antennas to be installed on the tower have been calculated to amount to 0.43 percent of the FCC's General Public/Uncontrolled Maximum Permissible Exposure (MPE) using a far-field methodology for the proposed facility that accounts for a 6-foot tall person at ground level and the actual antenna patterns. This is conservatively based on the antennas emitting maximum power. This percentage is below federal standards established for the frequencies used by wireless companies.

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.

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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 at the proposed location, 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 150-foot monopole telecommunications facility at 124 Ague Spring Road, Haddam, Connecticut.