

<p>DOCKET NO. 513 - 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 Parcel No. 258-10C-001, Mason Hill Road, Litchfield, Connecticut.</p>	<p>} Connecticut } Siting } Council</p>
	<p>June 22, 2023</p>

Opinion

On March 1, 2023, Cellco Partnership d/b/a Verizon Wireless (Cellco), 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 110-foot wireless telecommunications facility Parcel No. 258-10C-001, Mason Hill Road, Litchfield, Connecticut. The purpose of the proposed facility is to provide reliable wireless communications services for Cellco customers in portions of southeast Litchfield and northern Thomaston.

The party to the proceeding is Cellco. There are no Connecticut Environmental Protection Act (CEPA) Intervenor to this proceeding. In this Opinion, the Council incorporates its record disposition of all substantive and procedural motions that were raised by Cellco 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.

Cellco 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.

The total estimated cost of the proposed facility is \$590,000, inclusive of costs associated with Cellco’s equipment installation. 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. Cellco is a private entity.

Cellco has significant coverage deficiencies in its wireless communications network in the southeastern portion of Litchfield and the northern portion of Thomaston which includes, but is not limited to, State Route 254 (Northfield Road), Mason Hill Road, Hopkins Road, Main Street, and Knife Shop Road. Coverage objectives include the deployment of reliable in-vehicle service on roads and within buildings in the proposed service area.

Cellco provides wireless service to portions of Litchfield and Thomaston from five facilities within a four-mile radius of the proposed site. None of these existing facilities provides reliable service to the proposed service area.

Cellco would deploy 700 MHz, 850 MHz, 1900 MHz, 2100 MHz and 3700 MHz wireless service at the site, all of which transmit voice and data services. The 3700 MHz band is designed to provide 5G services.

The site would provide reliable in-vehicle service to 3.6 miles of Route 254 and in-building coverage footprint of 2.5 square miles. Although the proposed site provides needed coverage to the surrounding area, it cannot cover all of Cellco's needs. For example, several areas east of Route 254 a quarter to a half-mile south/southwest of the site would not have reliable service due to hilly terrain. The site would also provide capacity relief to a Cellco site in Bethlehem, approximately 4 miles to the west.

Based on a lack of reliable wireless service for Cellco in the southeastern portion of Litchfield and the northern portion of Thomaston, the Council finds a specific need for a new tower to provide necessary wireless services for Cellco to an underserved area.

Beginning in 2021 Cellco searched for a suitable tower site in the Litchfield and Thomaston area, investigating 11 potential sites, of which only the proposed site was available and met the coverage needs of Cellco. In addition, Cellco examined the use of Eversource transmission line structures located within a right-of-way (ROW) on the host parcel but determined the structures are too short for colocation as well as other site constraints such as unencumbered access for site maintenance.

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 are typically installed to provide added network capacity. Although the exact number of small cells necessary to provide equivalent coverage to the target area is unknown, they would be numerous with each small cell costing approximately \$70k to \$75k. Therefore, the Council finds small cells are not a feasible alternative to the proposed facility.

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 Cellco 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.

Cellco commenced the municipal consultation process on October 27, 2022 and held a public information meeting (PIM) on December 2, 2022 at the Town Hall. Concerns raised at the PIM included the facility's radio frequency emissions, property values, visibility, site alternatives and safety issues. The Town did not provide the Council with any location preferences pursuant to CGS §16-50gg.

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 monopole located on an 8.1-acre undeveloped parcel, zoned rural-residential. An Eversource electric transmission line ROW traverses the central portion of the host parcel in a north-south orientation. The ROW contains three 115-kV transmission lines in a 185-foot wide managed portion of the 250-foot wide ROW. The Litchfield-Thomaston boundary comprises the southern property boundary line. Land use in the surrounding area consists of rural residential and vacant land.

The tower would be located in the southeastern portion of the host parcel at an elevation of approximately 794 feet above mean sea level. A 2,355 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 response services. The south, east and west sides of the compound would be supported by a three to five-foot high modular block retaining wall.

Cellco initially proposed a tower location within the unmanaged, wooded portion of the Eversource ROW, 10 feet from its eastern boundary. After determining Eversource would not allow a tower within the ROW, Cellco shifted the facility location 55 feet northeast of the originally proposed location and outside of the ROW. This new location is referred to as the Alternate Location. Cellco removed the originally proposed location identified in the application from Council consideration.

Cellco proposes to install nine panel antennas and six remote radio heads on an antenna platform at a tower centerline height of 105 feet above ground level. Within the compound, Cellco would install equipment cabinets, covered with a steel canopy, on a concrete pad. The equipment compound would be enclosed by an eight-foot high chain link fence, accessed by a swing gate.

In the event an outage of commercial power occurs at the proposed site, Cellco would rely on a 50-kilowatt propane-fueled generator and an associated 500-gallon propane tank that would provide approximately seven days of run time before refueling is necessary. Cellco would also provide an eight-hour battery backup power source for use in the event the generator does not start.

Access to the Alternate Location would be from a new, approximately 70 foot long, 15-foot wide, access drive extending downhill from Mason Hill Road to the compound. The upper portion of the access drive would be paved to account for a steep, 25-30 percent grade. The remaining, flatter portion would be composed of gravel. Utilities to the compound would be installed underground along the access road to a new utility pole along the south side of Mason Hill Road. A gravel vehicle turnaround area extends onto the Eversource ROW by 30 feet. Cellco would need to obtain an agreement from Eversource to use the existing ROW for the turnaround area. The Council will require that the final turnaround area design be included in the Development and Management (D&M) Plan.

Cellco initially intended to access the originally proposed location from the west using existing gravel access roads within the ROW. Relocation of the proposed facility to the Alternate Location and out of the ROW would result in more disruption to wooded areas and wetlands, and therefore, the Council finds the proposed access drive extending south from Mason Hill Road preferable.

The nearest property boundary from the Alternate Location is approximately 40 feet to the north (Mason Hill Road right-of-way). The paved portion of Mason Hill Road is approximately 75 feet to the north. The nearest residence from the Alternate Location is approximately 350 feet to the north at 250 Mason Hill Road. There are approximately 36 residences within 1,000 feet of the proposed tower.

The proposed Alternate Location is approximately 37 feet from the west edge of the Eversource ROW and 141 feet from the nearest transmission line. Cellco would be willing to design the tower with a yield point to allow the tower to collapse upon itself rather than fall over lengthwise onto the ROW or on Mason Hill Road. The Council will order the tower to be designed with a yield point to ensure it does not encroach upon the Eversource ROW.

Blasting is not anticipated to construct the facility. If blasting is required, it would be conducted in accordance with state and municipal regulations. Development of the facility compound would require approximately 218 cubic yards of fill and 25 cubic yards of cut.

Development of the site would disturb an approximate 0.15-acre area and would not require a DEEP-issued Stormwater Permit. Cellco 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*.

The Alternate Location limit of construction disturbance is approximately 25 feet west of a forested wetland. Post-construction, the site retaining wall would be 33 feet from the wetland. Cellco would develop a wetland protection plan for construction that includes but is not limited to an independent environmental compliance monitor to ensure E&S control measures are installed and maintained. Additionally, upon completion of construction, Cellco would implement a wetland buffer enhancement plan that includes the planting of native forest understory shrubs and the application of a wetland seed mix between the facility and the wetland. The Council will require a wetland protection plan be included with the D&M Plan.

Post-construction drainage along the access drive would either sheet flow across the driveway and drain overland or would be directed by a riprap swale that discharges to a riprap level spreader on the north side of the compound, away from the wetland.

Nine trees with a diameter of six inches or greater would be removed to develop the site.

The proposed facility is not located within a DEEP Natural Diversity Database buffer area.

The site is within the range of the northern long-eared bat (NLEB), a federally and state-listed endangered species. Although 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, Cellco would be willing to adhere to a US Fish and Wildlife Service (USFWS) recommended tree clearing restriction from April 1-October 31. Due to its endangered status, the Council will order Cellco to implement the USFWS NLEB conservation measures.

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

Two resources listed on the State or National Register of Historic Places were identified approximately 0.5-mile of from the site (Northfield Knife Co. Site and Catlin Howard House), but the tower would not be visible from these resources, and thus, no impact to historic resources is expected.

A forested portion of the site is on mapped prime farmland soil near Mason Hill Road, but no agricultural activities occur on the parcel.

Cellco prepared a visual impact assessment of the site utilizing computer modeling within a two-mile radius of the Alternate Location (Study Area-8,042 acres). Based on Cellco's visual impact assessment, the proposed tower would be visible year-round from approximately 17 acres (<1%) of the Study Area, mostly from agricultural areas or the Eversource ROW. Within a half-mile of the Alternate Location, approximately 31 residences would have seasonal views of the facility and 10 residences would have year-round views of the upper 10 - 30 feet of the tower, mostly from the Atwood Heights and Atwood Street area to the east/southeast.

The upper portion of the tower would be visible from the northwest portion of Northfield Pond within Humaston Brook State Park. No other visibility is anticipated from the park or surrounding Mattatuck State Forest due to dense tree cover and hilly terrain.

The tower was designed as a monopole to reduce its visibility from the surrounding area. A unipole with flush-mounted antennas would require additional height to accommodate multiple levels of antennas, and thus, this alternative design would have an increased visual profile relative to the proposed monopole design.

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 or Connecticut blue-blazed trails located within two miles of the Alternate Location. No comments were received from the Town, Office of Policy and Management or DEEP regarding any impacts to scenic quality or resources.

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

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.

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 10.5% 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. Prior to commencement of construction, the Council will require a final 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 patterns 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 at the Alternate 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 110-foot monopole telecommunications facility at the Alternate Location at Parcel No. 258-10C-001, Mason Hill Road, Litchfield, Connecticut.