

DOCKET NO. 519 - Cellco Partnership d/b/a Verizon Wireless } Connecticut
application for a Certificate of Environmental Compatibility and }
Public Need for the construction, maintenance, and operation of a } Siting
telecommunications facility located at 11 Chamberlain Road, East }
Windsor, Connecticut. } Council

July 26, 2024

DRAFT

Opinion

On October 26, 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 120-foot monopole wireless telecommunications facility at 11 Chamberlain Road, East Windsor, Connecticut. The purpose of the proposed facility is to replace Cellco's existing facility (Broadbrook) located on an abandoned water tank in the southern portion of the host parcel, provide reliable wireless communications services for Cellco customers and address coverage and capacity deficiencies in eastern and central portions of East Windsor (Town).

The party to this 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 \$625,000, 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. Cellco is a private entity.

Cellco would have a significant coverage deficiency in its wireless communications network in portions of central East Windsor following the removal of its existing Broadbrook facility, including but not limited to, the areas around Chamberlain Road, Rye Street, and Broad Brook Road (Route 191). Cellco provides wireless service to portions of East Windsor from five existing facilities. The proposed facility would replace its existing Broadbrook facility and provide additional coverage and capacity in central and eastern

East Windsor. The proposed tower site is located in the northeast portion of the host parcel, 650 feet northeast of the existing Broadbrook facility.

Cellco maintains existing equipment at the 116 foot level of the Broadbrook facility and has determined a need to upgrade its equipment. T-Mobile also maintains existing equipment on the abandoned water tank on the property at the 104-foot level. Cellco determined the existing water tank would not be structurally capable of supporting Cellco's upgraded equipment and T-Mobile's existing equipment.

Cellco would deploy 700 MHz, 850 MHz, 1900 MHz and 2100 MHz wireless service at the site, all of which would be capable of transmitting voice and data. All frequencies are capable of supporting 5G 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 115-foot level of the tower would provide reliable in-building and in-vehicle 700 MHz service to a 1.8 and 5.5 square mile area, respectively. Other frequencies (850 MHz, 1900 MHz, 2100 MHz) used in Cellco's network provide smaller coverage footprints and are used to provide additional capacity to the system, reducing the customer load on the 700 MHz system, thereby increasing the data speeds available to users that only have 700 MHz coverage. In addition to providing reliable service to the surrounding area, the site would provide limited capacity relief to Cellco's existing East Windsor and South Windsor North sites located approximately 3.4 miles to the southwest and 1.8 miles to the south, respectively, allowing customers closer to those facilities to have better network performance.

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.

The proposed facility would replace the coverage from Cellco's existing Broadbrook facility and provide additional coverage and capacity in central and eastern East Windsor. Based on a lack of reliable wireless service for Cellco in central and eastern East Windsor and adjacent areas, following the removal of its existing facility, the Council finds a specific need for the facility.

Cellco conducted a condition assessment of the existing water tank in 2021 that concluded the entire structure was deteriorated. Cellco began its search for a site on the host parcel, since its need for a new facility was to replace an existing facility. Cellco entered into a lease agreement with the host parcel owner and ended the search for alternative locations. The host parcel is used as a manufacturing facility and contains several buildings, the existing water tank, and parking areas.

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. 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 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. The Town did not provide the Council with any location preferences pursuant to CGS §16-50gg.

Cellco presented the Town with a technical report for the site in June 2023. The Town did not request Cellco hold a public information meeting and did not provide any comments to Cellco. On March 5, 2024, the Town Police Chief submitted comments to the Council regarding reservation of space for collocation of emergency services equipment at 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 facility would be designed to accommodate four wireless carriers, including Cellco, and municipal antennas.

The proposed facility consists of a 120-foot monopole within a 2,500-square foot compound located in the northeastern portion of the host parcel. T-Mobile and the Town have expressed interest in collocation at the site. The Council will order that public or private entities be permitted to share space on the proposed tower for fair consideration, or shall provide any requesting entity with specific legal, technical, environmental, or economic reasons precluding such tower sharing.

Cellco proposes to install 9 antennas and 9 remote radio heads on an antenna platform at a centerline height of 115 feet above ground level. Cellco would install two equipment cabinets and a 50-kilowatt diesel-fueled emergency backup generator on a 10-foot by 20-foot concrete pad. The compound can support radio equipment of four other tenants.

To deter unauthorized access to the compound and tower, the compound would be enclosed by an eight-foot chain link fence, accessed through a locked, 8-foot-wide double swing gate.

In the event an outage of commercial power, Cellco would rely on its 50-kilowatt diesel-fueled generator and associated 250-gallon propane tank that would provide approximately 2 to 4 days of run time before refueling is necessary. Cellco would also install an 8-hour battery backup power source for use in the event the generator does not start.

The site would be accessed using a new 260-foot-long gravel drive extending north from the Chamberlain Road.

Utilities servicing the facility would be installed underground along the gravel drive to an existing utility pole on Chamberlain Road.

The nearest property boundary from the proposed tower is approximately 150 feet to the east along Chamberlain Road. The tower setback radius for the proposed tower would remain within the boundaries of the host parcel.

There are no residences within 1,000 feet of the site. The nearest residential property line from the tower is approximately 1,075 feet to the west at 75 Rye Street.

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 1,212 cubic yards of excavation. Excess material would be disposed of off-site. Cellco does not anticipate the need for blasting

to construct the facility. The proposed facility would be constructed in compliance with the applicable *Connecticut Guidelines for Soil Erosion and Sedimentation Control*.

Two wetland areas were identified near the site; one wetland area that contains a vernal pool is approximately 232 feet northwest of the site (Wetland 1) on the host parcel, and the second is located approximately 35 feet from the access road across Chamberlain Road, off the host parcel. The proposed site is within the Critical Terrestrial Habitat (CTH) (100-foot to 750-foot) area from the vernal pool. Development of the site would result in a loss of approximately 0.4 acres of the CTH, or approximately less than 1 percent. Cellco would incorporate a Wetland, Vernal Pool and Aquifer Protection plan that would include contractor training, establishment of a restrictive barrier and amphibian sweeps by a trained professional. To mitigate potential effects to the wetlands and vernal pool, the Council will order a Wetland and Vernal Pool and Aquifer Protection Plan be submitted as part of the D&M Plan.

Development of the site would require the removal of 18 trees with a diameter of eight inches or greater at breast height, including dead trees.

Although the northern long-eared bat (NLEB), a federal and state-listed endangered species, is known to occur throughout Connecticut, 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 eastern pearlshell mussel, a State-listed Special Concern Species, may occur near the site. Although the site does not support eastern pearlshell habitat, Cellco would implement species protection measures during construction to avoid water quality impacts that could affect any off-site habitat.

The proposed facility is located approximately 5.37 miles to the northwest of Station 43 Marsh/ Sanctuary, a National Audubon Society designated Important Bird Area (IBA). The proposed facility would not affect the IBA. The facility would comply with the USFWS guidelines for minimizing the potential for telecommunications towers to impact bird species.

The proposed facility would have no effect on sites listed on or eligible for listing on the National Register of Historic Places.

The site is not within a flood zone. The site is located within the DEEP designated Hunt Wellfield Aquifer Protection area. The Council will order a protection plan be submitted as part of the D&M Plan to ensure water quality is not adversely impacted.

Prime farmland soils are located within the host parcel. The proposed access drive would disturb a total of 0.16 acres of the 3.3 acres of prime farmland soils on the host parcel. No prime farmland soils are located within the proposed facility compound.

Operation of the facility would comply with DEEP Noise Control Standards.

Based on Cellco'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 78 acres of the Study Area, mostly over open fields, at distances of approximately 0.5-mile to the southwest and approximately 0.86 mile to the southeast.

The tower would be seasonally visible (leaf-off conditions) from approximately 276 acres of the Study Area with most of this seasonal visibility occurring from locations on the host parcel and on the Chamberlain

Road parcels. Other areas with seasonal visibility include, but are not limited to, Apothecaries Hall Road to the north, Rye Street to the southwest, and Norton Road to the southeast.

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.

The Town Plan of Conservation and Development encourages the development of a Town-wide utility infrastructure plan that includes, but is not limited to, telecommunications facilities. There are no blue-blazed hiking trails or state designated scenic roads located within two miles of the proposed site. 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 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 proposed tower would not constitute an obstruction or hazard to air navigation and would not require Federal Aviation Administration (FAA) marking or lighting. The Connecticut Airport Authority requested Cellco complete and submit Form FAA 7460-1 to FAA. Cellco would submit form FAA 7460-1 to FAA for the proposed facility. The Council will order Cellco to submit the final FAA determination as part of the D&M Plan.

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 9.4 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.

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 120-foot monopole telecommunications facility at 11 Chamberlain Road, East Windsor, Connecticut.