DOCKET NO. 491 – 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 110 Yantic Lane, Norwich, Connecticut.	}	Connecticut
	}	Siting
	}	Council

February 25, 2021

Opinion

On July 7, 2020, 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 tall wireless telecommunications facility to be located in the City of Norwich, Connecticut. The purpose of the proposed facility is to increase network capacity and provide reliable wireless service to service deficient areas in westerly portions of western Norwich and portions of Bozrah and Franklin, particularly along portions of Route 2 and the Interstate 395 (I-395) interchange.

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.

Cellco is currently located on seven existing telecommunications facilities within a four-mile radius of the proposed site and these existing Cellco facilities cannot provide adequate coverage to the target service area. Cellco customers experience unreliable 700 MHz long-term evolution (LTE), 1900 MHz personal communications service (PCS) and 2100 MHz advanced wireless service (AWS) within the area surrounding the proposed site most notably along Route 2 and the Route 2 and I-395 interchange. Cellco has no existing 850 MHz frequency deployed in the area. The proposed facility would also provide capacity relief to Cellco's existing Franklin Facility (Beta Sector) which is currently operating at capacity limits in the 700 MHz frequency range and is over utilized in the 2100 MHz frequency range.

Cellco established a search ring for its proposed facility in March 2017 and determined there were no existing structures available within the search area to locate on. Cellco investigated a total of five tower sites; three of which were deemed unsuitable for Cellco's required coverage objectives; one of which collocation was rejected by the owner (Norwich Public Utilities water tank) and one that was selected – the proposed site at 110 Yantic Lane.

Cellco proposes to construct a 110-foot monopole and associated equipment compound at 110 Yantic Lane in the central portion of the 115.0-acre parcel owned by Robert W. Larsen. The subject property is zoned Residential (R-80) and is currently used for residential and public utility purposes. Cellco will install six panel antennas and six remote radio heads on a low-profile platform antenna mount at a centerline height of 110 feet above ground level (agl).

Cellco will install one equipment cabinet with an integrated battery backup system and a 25-kilowatt propane fueled emergency backup generator on an 18-foot by 10-foot concrete pad with ice canopy located within a 50-foot by 50-foot fenced equipment compound. Cellco will also install a 1,000-gallon propane tank on an 18-foot by 5-foot concrete pad. Cellco's emergency backup battery system would prevent a reboot condition and alone could provide about four to eight hours of backup power while its 25-kilowatt generator and 1000-gallon propane tank will provide approximately seven days of run time before it requires refueling.

At the proposed site, Cellco would deploy its 700 MHz and 850 MHz LTE, 1900MHz PCS and 2100 MHz AWS services at an antenna height of 110 feet at the proposed site to meet its wireless service objectives.

The tower will be designed to support the antennas of three additional carriers as well as municipal emergency services antennas and a 20-foot extension. No other wireless carriers or municipalities have expressed an interest in co-locating on the tower at this time. The tower setback radius remains within the boundaries of the subject property. Thus, no design yield point is necessary.

Cellco initially planned to use an access driveway that extends from Yantic Lane approximately 2,300-feet in a southeast direction before turning northeast to the proposed site. Subsequently, Cellco acquired an easement to utilize an existing dirt and gravel access driveway from Philanne Drive which extends approximately 900-feet in a northeast direction to the proposed site. Improvements to the existing access driveways are expected to be minimal. The Council will require Cellco to utilize the access driveway extending from Philanne Drive for construction purposes.

Cellco intends to tap an existing underground electric utility now serving the NPU water supply tower and located adjacent to the existing access driveway from Philanne Drive to the proposed site. Fiber communications would be installed underground from an existing pole on Philanne Drive and would run generally parallel to and directly northwest of the access driveway to the equipment compound.

Five wetlands are located along the shoulder of the existing access road from Yantic Lane and two wetlands possibly separated by a pre-existing buried culvert are located on either side of the existing access driveway from Philanne Drive. The nearest wetland to the proposed site is a man-made drainage ditch located approximately 460 feet south-southwest from the proposed site. Cellco would install erosion and sedimentation control measures in compliance with the *2002 Connecticut Guidelines for Soil Erosion and Sedimentation Control*. Cellco would also implement a wetland protection plan and employ Best Management Practices (BMPs) during construction to prevent impact to the wetlands. No vernal pool habitat was observed within the wetlands.

The proposed facility is not located within a DEEP Natural Diversity Database buffer area and no known hibernacula or maternity roost trees for the northern long-eared bat, a federally listed threatened species and state-listed endangered species are located within 0.25 miles of the proposed site. The nearest Important Bird Area to the proposed site is The Lyme Forest Block in Colchester, located approximately 5.8 miles to the west. In addition, the proposed facility will comply with the U.S. Fish and Wildlife Service guidelines for minimizing the potential for telecommunications towers to impact bird species.

The site is located outside of the 100-year and 500-year flood zones and there are no prime farmland soils on the site.

No historic properties would be affected by the proposed facility. The host property is located within The Last Green Valley Heritage Area (TLGVHA); however, the proposed site is not proximate to any TLGVHA identified historic, cultural or natural resource.

There are no Connecticut blue-blazed hiking trails located within one mile of the proposed site. In addition, there are no state or locally-designated scenic roads located within two miles of the proposed site.

No public schools or child day care centers are located within 250 feet of the proposed tower and no views of the tower are expected from these locations.

The tower will be visible year-round from approximately 44 acres within the two-mile radius visibility study area. The tower will be seasonally visible in leaf-off conditions from approximately 22 acres within such study area. This represents in total less than one percent of an 8,042 acre study area. Furthermore, the tower is located adjacent to an existing water tank that is much taller (190 feet) and wider.

No landscaping is proposed because the compound area is located within a wooded area. Moreover, the chain-link fence incorporates slats which will obscure views of the ground level equipment and act as an anti-climb feature.

According to a methodology prescribed by the FCC Office of Engineering and Technology Bulletin No. 65E, Edition 97-01 (August 1997), the combined radio frequency power density levels of the antennas proposed to be installed on the tower have been calculated to amount to 56.63% of the FCC's General Public/Uncontrolled Maximum Permissible Exposure, 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 well below federal standards established for the frequencies used by wireless companies. If federal 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 carriers 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. Regarding potential harm to wildlife from radio emission; this, like the matter of potential hazard to human health, is a matter of federal jurisdiction. The Council's role is to ensure that the tower meets federal permissible exposure limits.

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 site, 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 galvanized steel monopole telecommunications facility at the proposed site located at 110 Yantic Lane, Norwich, Connecticut.