DOCKET NO. 473 - 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 515 Morehouse Road, Easton, Connecticut.	}	Connecticut
	}	Siting
	}	Council
		September 14, 2017

Opinion

On April 21, 2017, Homeland Towers, LLC (HT) and 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 wireless telecommunications facility located at 515 Morehouse Road in Easton, Connecticut. HT would construct, maintain, and own the proposed facility and would be the Certificate Holder. The purpose of the proposed facility is to increase Cellco's network capacity and provide reliable wireless service to existing gaps primarily in the central and southern sections of Easton.

The United States Congress recognized a nationwide need for high quality wireless services in part 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. Connecticut State law directs the Council to balance the need for development of proposed wireless telecommunications facilities with the need to protect the environment, including public health and safety.

Cellco is currently located on five existing telecommunications facilities within a four-mile radius of the proposed site and these existing facilities cannot provide adequate service to the area. For example, unreliable service exists at Cellco's 700 MHz LTE service frequency in an approximate 2.75 square mile area around the site. Additionally, there is no 2100 MHz LTE service available in the area. The site would provide capacity relief at several surrounding Cellco sectors, two of which are at their service capacity limits.

HT, as a tower developer, approached the Town in early 2012 regarding its search for a tower site in the Morehouse Road area as there were no existing towers or sufficiently tall structures in the area that could support telecommunications equipment to effectively service the central Easton area. At the direction of the Town, HT explored numerous parcels that could be suitable for a tower facility. The Town and HT ultimately selected the proposed site, located on a large Town-owned parcel near the Town center, for a tower facility. Cellco first identified a need in this area in 2014 and worked with HT to determine the necessary tower height to meet Cellco's wireless service objectives.

HT proposes to construct a 150-foot tower and an associated equipment compound at the south end of a 104.4-acre parcel owned by the Town. The parcel, zoned residential, includes a school and associated athletic fields, and an animal control shelter, woodland, open fields, and a public works yard. An existing dirt road extends from Morehouse Road near an athletic field in the central portion of the parcel and extends to the public works yard located in the southern portion of the parcel.

The proposed tower site is located in a wooded area adjacent to an open field southwest of the public works yard. The tower setback radius remains within the boundaries of the subject property. The facility would consist of the 150-foot tower, designed to support four levels of antennas, and a 70-foot by 70-foot equipment compound. Cellco would install antennas at a centerline height of 145 feet above ground level and install radio equipment on a steel platform within the compound. The Town would install an equipment shelter within the compound and whip antennas at the 150-foot, 95-foot and 75-foot levels of the tower for emergency and public works communications.

To access the tower site HT would construct a new 12-foot wide, 315-foot long gravel access road extending southwest from the existing dirt road on the property through a field and wooded area. Utilities would be installed underground to the compound over a length of 890 feet from a utility pole on Morehouse Road using a utility specific easement that extends generally westward through open and shrubby areas of the parcel.

In the event an outage of commercial power occurs, Cellco would rely on a battery system that can provide about two to eight hours of backup power. Cellco would also install a 20-kW diesel generator in order to recharge the batteries during prolonged outages. The generator could also be used to provide emergency power directly to the facility.

The emergency generator features a double-walled fuel tank and leak detection alarms, and also has a secondary containment for engine oil and coolant within the generator enclosure. Due to the site's location within the Hemlocks Reservoir System, operated by the Aquarion Water Company, the Department of Public Health (DPH) recommended certain best management practices during site construction and facility operation. To address the DPH's concerns, the Council will order that HT and Cellco comply with the recommended best management practices.

The tower site is located within a mesic oak/hickory forest that contains habitat for the eastern box turtle, a State-listed Species of Special Concern. Although there are no records of box turtles on the Department of Energy and Environmental Protection's (DEEP) Natural Diversity Database for this area, HT would adhere to established DEEP box turtle protection protocols during construction.

The tower site is located within a 199 acre forest block classified as edge forest that surrounds a core forest area. Approximately 0.3 acres of the edge forest would be removed to develop the site but the core forest area would not be affected. The Council inquired as to the feasibility of relocating the tower site to the north, out of the edge forest and into the adjacent field but the Town did not want to encumber the field area in the event it would be needed for future development.

The proposed facility is not located near an Important Bird Area, as designated by the national Audubon Society. However, the design of the proposed facility would comply with United States Fish and Wildlife Service (USFWS) guidelines for minimizing the potential impact of telecommunications towers to bird species. Site clearing, however, could impact breeding birds and in order to reduce impacts, the Council will order HT to adhere to the USFWS recommended clearing restriction, or in the alternative, perform an avian survey to determine if breeding birds would be disturbed prior to the commencement of construction.

The tower will be visible year-round from approximately 106 acres within a two-mile radius of the site, mostly from open fields and the Staples Elementary School area north of the site. Several residential properties along the east side of Morehouse Road, across from the fields, would have also year-round views of portions of the tower. Seasonal, leaf-off views of the upper portion of the tower would occur from Morehouse Road northeast and east of the facility. The tower would not be visible from Route 58, a State designated scenic road 1.25 miles west of the site. No landscaping is proposed around the compound area as it is located in a wooded area and screened from view.

HT, upon consultation with the Town prior to the filing of the application to the Council, proposed a tree tower design for the site. The party, Pamela Westmoreland, prefers a tree tower over a standard monopole design.

Upon review, the Council finds that a tree tower design would be out of character with the surrounding area. The tree tower would extend up to 70 feet above the adjacent tree canopy and there is little intervening vegetation to the north, allowing for views of most of the tower from the open fields, Staples Elementary School, and Morehouse Road north of the site. When viewed from this area, the tree tower would appear bulky as it would have to have simulated branches arranged in a conical shape that extend far enough from the monopole to conceal the antennas and associated mounting equipment. Views from Morehouse Road to the east are sufficiently screened by intervening, wooded vegetation so that the only views of the tower would be during leaf-off conditions. Dense vegetation and local topography would effectively screen views of the facility from areas southeast of the site.

During the hearing on June 20, 2017, the Council suggested that the Town re-examine the feasibility of a tree tower at the site. The Town Planning and Zoning Commission subsequently reconsidered the tower design and submitted correspondence to the Council on July 18, 2017 indicating a preference for a monopole at the proposed site. Upon receipt of the Town's correspondence, the Council issued a memorandum to parties and intervenors requesting that parties consider whether or not to reopen the evidentiary record to provide for additional cross examination specific to these potential telecommunications facility design changes. Parties were requested to notify the Council on or before July 27, 2017. No response to the Council's memorandum was received from any of the parties. Based on the Town's review of the facility design and the Council's review of the visibility impacts of the facility, the Council will order HT to construct a monopole tower facility at the proposed site.

The proposed project would be constructed in compliance with the *2002 Connecticut Guidelines for Soil Erosion and Sedimentation Control.* No wetlands or vernal pools are in close proximity to the development area. The proposed facility will have no effect on historic properties.

According to a methodology prescribed by the FCC Office of Engineering and Technology Bulletin No. 65E, Edition 97-01 (August 1997), the radio frequency power density levels of the Town's and Cellco's antennas would be 39.5 percent 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 a monopole telecommunications facility at the proposed site, including effects on the natural environment; ecological integrity and balance; public health and safety; scenic, historic, and recreational values; forests and parks; air and water purity; and fish 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 to Homeland Towers, LLC for the construction, maintenance, and operation of a 150-foot monopole telecommunications facility at the proposed site located at 515 Morehouse Road in Easton, Connecticut.