

DOCKET NO. 486 - Tarpon Towers II, LLC application for a } Connecticut
Certificate of Environmental Compatibility and Public Need for }
the construction, maintenance, and operation of a } Siting
telecommunications facility located at 796 Woodin Street, }
Hamden, Connecticut. } Council

December 5, 2019

Opinion

On July 15, 2019, Tarpon Towers II, LLC (Tarpon) 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 wireless telecommunications facility located at the 796 Woodin Street in Hamden, Connecticut. Cellco Partnership d/b/a Verizon Wireless (Cellco) was an intervenor to the proceeding. The purpose of the proposed facility is to resolve Cellco's existing wireless network interference issues and to enhance Cellco's coverage in the Hamden – New Haven area.

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 at the 170-foot level of an existing 250-foot lattice tower on West Rock Ridge with an address of 1055 Wintergreen Lane in Hamden, and refers to this site as their *Hamden* facility. This existing tower, owned by SBA Communications Corporation, is located at a ground elevation of 445 feet above mean sea level (amsl), much higher than surrounding terrain to the east and northeast that has a ground elevation of 50-70 feet amsl.

Due to the high overall ground elevation of Cellco's existing *Hamden* facility antennas, wireless coverage from the *Hamden* facility has an unimpeded line of sight across the low-lying terrain to the east and northeast. Due to the lack of attenuation, the coverage serving this geographic area is dominant and carries more wireless traffic than desired, causing the *Hamden* facility to operate beyond its designed capacity. To resolve the interference issue, Cellco would locate at a lower elevation at the proposed site (113 feet amsl) and decommission the *Hamden* facility.

Cellco has already made adjustments at the *Hamden* facility to reduce network interference, such as modifying antenna tilt, and using different antennas, but these adjustments have not resolved the issue and there are no other feasible alternatives to improve network performance. Simply decommissioning its existing *Hamden* facility without a replacement facility would create large coverage gaps to the surrounding area.

Cellco would deploy 700 MHz, 850 MHz, 1900 MHz and 2100 MHz licensed frequencies at the proposed site. All of the frequencies are Long Term Evolution (LTE) voice and data service compatible. Once the proposed site is operational, Cellco would decommission its existing *Hamden* facility, most likely in

phases so as to ensure there is adequate service to portions of Woodbridge, as service from the proposed site would be effectively blocked by West Rock Ridge and would not reach areas of Woodbridge that are currently served by the *Hamden* facility.

Coverage enhancements as a result of the relocation of its *Hamden* facility to the proposed site include reliable coverage within the Route 15 tunnel through West Rock Ridge and coverage improvements to several small areas of Route 15 and to local roads near the proposed site.

The proposed site is located in the southern portion of an approximate 6.7-acre parcel, zoned residential. Land use immediately surrounding the subject parcel is residential to the east and north, the Wilbur Cross Parkway (Route 15) to the west and the West Rock Nature Center site to the south. The nearest property boundary is approximately 124 feet to the southwest.

The proposed facility would consist of a 120-foot monopole, designed to support four levels of platform-mounted antennas. A 70-foot by 40-foot fenced equipment compound within a 75-foot by 75-foot lease area would be established at the base of the tower, enclosed by an eight-foot tall chain link fence.

Cellco would install 9 panel antennas and 6 remote radio units on an antenna platform at a centerline height of 120 feet agl. Although T-Mobile did not intervene in the proceeding, Tarpon indicated T-Mobile has an executed lease to locate at the 100-foot level of the proposed tower. T-Mobile would file a tower share request after a Development and Management Plan is approved by the Council.

Cellco would install radio equipment, an emergency generator and a 500 gallon propane fuel tank within the compound. Access to the proposed site would be from a new 700-foot long, 12-foot wide gravel access drive extending south from Woodin Street, generally. Utilities would be installed underground along the access drive to the compound from a utility pole on Woodin Street along the north property boundary.

Cellco's emergency power system consists of a battery cabinet and a 30-kW propane fueled generator. The emergency power system can run for approximately 4.75 days under normal cell tower loading conditions before refueling of the associated tank is necessary.

Development of the site would not directly impact any wetlands. The compound site is located between two wetland areas that are part of one large wetland complex. The compound construction area is approximately four feet from a narrow wetland seep area at its closest point. In order to enlarge the overall buffer to adjacent wetlands, Tarpon shifted the compound footprint 22 feet to the northwest and reduced the size of the compound from 70 feet by 70 feet to 70 feet by 40 feet. Relocation of the compound site further north towards an existing pasture and away from wetlands would impede potential future use of that area of the property by the landowner. The proposed project would be constructed in compliance with the 2002 *Connecticut Guidelines for Soil Erosion and Sedimentation Control*.

Approximately 38 trees with a diameter of six inches or greater at breast height would be removed to construct the site. Development of the proposed site would not impact any species listed on the Department of Energy and Environmental Protection's Natural Diversity Database. No prime agricultural soils would be disturbed by the project.

The Wilbur Cross Parkway Heroes Tunnel, built in 1949 through West Rock Ridge and eligible for listing on the National Register of Historic Places, is approximately 0.4 mile southwest of the proposed site. The State Historic Preservation Office reviewed the project and determined the proposed tower would have no adverse effect on the tunnel.

Generally, year-round views of portions of the tower would be limited to areas within an approximate 0.5-mile radius of the subject property. Within this area, year-round visibility of the upper portion of the tower would be possible from some residential areas along Wintergreen Avenue and Wilmont Road. A wooded buffer would limit views of the proposed tower from the residential properties immediately northeast of the proposed site along Woodin Street. Leaf-off views are expected from these properties although it is possible an isolated year-round view of the upper portion of the tower may occur from a few areas. There would be no adverse visual impact to West Rock Ridge State Park, located 0.25 miles northwest of the site, or from the abutting West Rock Nature Center property to the south where some seasonal views of the tower are possible.

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 Celco's antennas would be 24.7 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 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 to Tarpon Towers II, LLC for the construction, maintenance, and operation of a 120-foot monopole telecommunications facility at 796 Woodin Street, Hamden, Connecticut.