

DOCKET NO. 495 – 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 5151 Park Avenue, }
Fairfield, Connecticut. } Council

April 22, 2021

Opinion

On October 16, 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 130-foot tall wireless telecommunications facility to be located on the Sacred Heart University (SHU) Main Campus at 5151 Park Avenue in Fairfield, Connecticut. The purpose of the proposed facility is to replace an existing Cellco facility located on the roof of a residential dormitory building on the SHU Main Campus that will be removed at the request of SHU.

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's existing facility is on the roof of Pierre Toussaint Hall, located in the center of the SHU Main Campus. The rooftop space is currently managed by Message Center Management (MCM) and also hosts AT&T and T-Mobile. In 2017, SHU notified MCM and the telecommunication carriers that it would not be extending the existing rooftop lease and that the carriers must vacate the roof. SHU subsequently granted an extension to January 2022 so that the telecommunication carriers would have enough time to search for and develop a suitable replacement facility.

Cellco established a search ring for a replacement facility in 2018. SHU initially directed Cellco to examine several locations on the SHU West Campus, located approximately 0.5 miles west of the Main Campus, adjacent to the Merritt Parkway. Cellco ultimately decided the West Campus was not suitable as it did not offer comparable coverage to that of the existing rooftop facility due to a much lower ground elevation. Additionally, the West Campus was adjacent to the Merritt Parkway, a National Scenic Byway and was opposed by a neighborhood group.

Cellco investigated numerous sites at the SHU Main Campus before selecting the proposed site. The other sites included three rooftop locations, five new tower locations and a lightpole type facility by an outdoor stadium. These sites were rejected due to land use restrictions, the presence of existing and/or proposed campus infrastructure, interference with campus operations, or in the case of the rooftops locations, insufficient height to provide adequate service or planned renovations to the buildings.

Cellco's proposed tower facility would provide Long Term Evolution (LTE) service in the 700 MHz, 850 MHz, 1900 MHz and 2100 MHz frequencies and would be capable of transmitting 5G services once Cellco is ready to deploy these services to the area.

The proposed facility would not only replicate the service provided by the rooftop facility, it would also improve Cellco's existing 700 MHz service by providing uninterrupted reliable coverage to 1.3 miles of the Merritt Parkway and 1.0 mile of CT State Route 59. Currently the existing rooftop facility only provides limited coverage to these highways. The proposed site would also provide additional capacity by increasing the number of wireless service frequencies from two to four, enhancing network capacity served by the site and by reducing capacity demands on adjacent Cellco sites, thereby increasing usage of the site and adjacent sites by area customers.

The proposed site is located on the northwestern portion of the SHU Main Campus, adjacent to a campus maintenance building in a previously disturbed, mostly open area currently used to store materials for an unrelated construction project. The site is zoned Residential (R-3).

Cellco would install a 130-foot monopole and an associated 50-foot by 50-foot fenced equipment compound at the site, accessed from an existing 180-foot long paved driveway extending from Jefferson Street. Cellco would construct a gravel parking area adjacent to the proposed compound.

Cellco would install 12 panel antennas and 9 remote radio heads on a low-profile platform antenna mount at a centerline height of 130 feet above ground level (agl). The total height of the facility with Cellco's antennas would be 133 feet agl.

Cellco would install equipment cabinets and a 30-kilowatt propane fueled emergency backup generator on a concrete pad located within the compound. A 1,000-gallon propane tank would be installed on a separate concrete pad within the compound. The emergency generator could provide five to seven days of run time before refueling is required.

Besides Cellco's installation, the tower will be designed to support three additional levels of antennas and municipal emergency services antennas. The tower and foundation would be designed to support a 20-foot extension if there is a need to increase the height of the tower to promote tower sharing in the future. T-Mobile has expressed interest to Cellco in locating at the 120-foot level of the proposed tower.

The tower setback radius remains within the boundaries of the subject property. Thus, no design yield point is necessary. Operation of the proposed facility would comply with DEEP Noise Control Standards.

As for environmental impact, the site is not located within a flood zone, an aquifer protection area, or on mapped prime farmland soils. A DEEP Natural Diversity Database (NDDDB) review indicates the site would not affect any NDDDB listed-species or the Federally-listed northern long-eared bat.

The site is not near any National Audubon Society designated Important Bird Area. The proposed tower would comply with the United States Fish and Wildlife Service guidelines for minimizing the potential for telecommunications towers to impact bird species.

One wetland, a manmade stormwater basin/pond associated with nearby campus buildings and parking areas, is located approximately 23 feet south of the proposed site. No construction impact to the basin would occur as it is located upgradient of the proposed site.

Based on a visual impact assessment within a two-mile radius of the site (Study Area-8,042 acres), the proposed tower would be visible year-round from approximately 26 acres (<1%) and seasonally visible (leaf-off conditions) from approximately 49 acres (<1%) of the Study Area.

Generally, year-round and seasonal views of portions of the facility would be limited to areas within an approximate 0.5-mile radius of the site, consisting of a mix of residential and on-campus areas. The most prominent year-round views would be from the Donna Drive and Weeping Willow Lane residential areas approximately 0.1 mile north of the site where the upper 10 to 70 feet of the tower would be visible. A second area of prominent views would occur along Jefferson Avenue and Park Avenue within a half-mile of the site where of the upper 10 to 40 feet of the tower would be visible year-round.

The Merritt Parkway, a National Scenic Byway listed on the National Register of Historic Places, is located approximately 1,200 feet north of the site. There would be minimal year-round views of the proposed tower from the parkway.

No public schools or child day care centers are located within 250 feet of the proposed tower. There are no Connecticut blue-blazed hiking trails located within one mile of the proposed site.

Although SHU requested that Cellco consider a monopine design at the site to mitigate views to the surrounding area, the Council finds that due to some of the prominent views within 0.5 mile of the site, a monopine would appear out of place due to its wide profile, drawing viewers to it rather than blending in with the surroundings. A two-tone color scheme would likewise not be beneficial in reducing views given the height above the tree line in some locations and that a sky blue color on the upper portion of the tower would stand out on cloudy days.

To improve screening of the facility, Cellco indicated that it would be willing to install shrubs along the north edge of the parking area to screen views of the compound from Jefferson Street, and would be willing to shift the compound slightly to avoid removing a large Norway spruce that provides screening from adjacent campus areas. Thus, the Council will order that these screening improvements be included within the Development and Management Plan for the project.

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 47.0% 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 130-foot galvanized steel monopole telecommunications facility at the proposed site located at 5151 Park Avenue, Fairfield, Connecticut.