

<p><b>DOCKET NO. 469</b> – 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 Killingly Tax Assessor’s Map 143, Lot 6, 520 Bailey Hill Road, Killingly, Connecticut.</p>	<p>} Connecticut          } Siting          } Council</p>
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December 22, 2016

### Opinion

On July 26, 2016, 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 to be located in the Town of Killingly, Connecticut. The purpose of the proposed facility is to provide improved wireless coverage to existing service gaps in Killingly and capacity relief to Cellco’s existing Killingly cell site (beta sector) that is currently operating at or near capacity limits.

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 currently maintains six existing macro-cell telecommunications facilities within a five-mile radius of the proposed site. However, there are no other existing towers or sufficiently tall structures available within Cellco’s search area. Thus, Cellco investigated available vacant land sites for a new tower. Of two sites reviewed by Cellco, one was rejected because the property owner was not interested in leasing space for a tower, and one was selected – the proposed site at 520 Bailey Hill Road.

Cellco proposes to construct a 150-foot monopole and associated equipment compound at 520 Bailey Hill Road in the northwestern portion of a 648-acre property owned by Tri Lakes LLC. The subject property is zoned Rural Development and currently undeveloped except for an existing access driveway to reach a lake. Cellco will install nine panel antennas and nine remote radio heads at a centerline height of 150 feet above ground level (agl). Cellco prefers the use of a low-profile platform for antenna mounting because of maintenance purposes. Cellco will install its equipment on a 12-foot by 26-foot “open air” equipment platform (with a canopy on top) within the approximately 50-foot by 50-foot fenced compound.

Cellco’s radio frequency propagation modeling demonstrated a need to provide wireless service to existing service gaps in the area and has presented a need to offload capacity from an adjacent site. At the proposed site, Cellco would initially deploy 700 MHz and reserve 1900MHz and 2100 MHz for the near term. Cellco would consider providing 850 MHz service in the more distant future after 1900 MHz and 2100 MHz. Cellco would need a minimum antenna height of 150 feet at the proposed site to meet wireless service objectives.

The tower will be designed to support the antennas of three additional carriers (and municipal emergency services antennas) and a 20-foot extension if additional tower height is needed in this location for additional carriers. However, 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 will utilize the existing approximately 17-foot wide by 582-foot long access drive from Bailey Hill Road and then continue with a new 12-foot wide gravel access driveway for approximately 92 feet to reach the facility compound. Utilities would originate at existing pole #3403 and then cross Bailey Hill Road overhead to reach a proposed utility pole south of the access drive. The utilities would then be installed underground generally following the existing and proposed access drive to reach the tower site. The Council recommends that Cellco, in consultation with the local electric distribution company, investigate the possibility of trenching across Bailey Hill Road to reduce the visual “clutter” associated with an overhead crossing of Bailey Hill Road. The final details of the utility connections will be included in the Development and Management Plan (D&M Plan).

In the event an outage of commercial power occurs, Cellco will primarily rely on a battery-backup system. During an interruption in commercial power service, a diesel generator will be used to provide power to Cellco’s radio equipment and keep the battery backup system at full charge. The generator will have an estimated 60 to 65 hours of run time before requiring refueling under normal load conditions. The final details of the backup generator, its fuel tank and run time will be included in the D&M Plan. The backup generator would operate for testing purposes once every two weeks for a period of approximately 30 minutes. Cellco proposes to perform its periodic testing of the generator during daytime hours.

Cellco offers two options for the compound fence: 2-inch chain link mesh size with an anti-climbing mesh added or a chain link fence with a mesh size of less than two inches as an anti-climb measure. Cellco will include the details of one of these fence design configurations in the D&M Plan.

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

The tower will be visible year-round from approximately 23.5 acres within the two-mile radius or approximately 8,042-acre visibility study area. Approximately one or two residential properties will have such year-round views of the proposed tower. The tower will be seasonally visible from approximately 238 acres within such study area. This includes approximately two or three residential properties. However, the Council notes that the majority of the year-round visibility areas would occur on portions of the subject parcel, along portions of the driveway, and extending out from the cell site down to Bailey Hill Road. Residential neighbors in the immediate vicinity of the subject property have substantial amounts of mature trees and other vegetation that will serve to obstruct the site and the proposed facility. Seasonal views of the proposed facility will be through intervening tree trunks and branches.

No landscaping around the fenced compound is proposed because of the existing wooded vegetation surrounding the site. In the unlikely event of a fire, the Council is concerned that sufficient vegetative clearing around the site is performed to reduce the risk of a fire spreading, particularly under very dry, drought conditions. The Council will require Cellco to determine a suitable amount of clearing, consistent with any applicable codes and standards, and provide the final clearing plans in the D&M Plan.

The northern long-eared bat (NLEB), a federally-listed Threatened species and State-listed Endangered species, may occur in Killingly. The nearest NLEB habitat resource to the proposed project is located approximately 48 miles away. The proposed project would not require the removal of any trees six inches or greater in diameter. There are no known NLEB maternity roost trees in Connecticut. Thus, the proposed facility is not likely to adversely impact the NLEB.

The small whorled pogonia is a federally-listed Threatened Species and a State-designated Endangered Species. No suitable habitat supportive of the small whorled pogonia occurs in the vicinity of the proposed facility. Thus, the proposed project is not expected to result in an adverse impact to the small whorled pogonia.

While the Connecticut Department of Energy and Environmental Protection does not anticipate adverse impacts to any State-listed species as a result of the project, the Council notes that the site has potential to support the eastern hognose snake (EHS), a State-designated Species of Special Concern. Accordingly, Cellco proposes protective measures including but not limited to installing a restrictive barrier around the main compound construction zone and also providing contractor awareness training.

The proposed facility is not located near an Important Bird Area, as designated by the National Audubon Society. 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 nearest on-site wetland/watercourse to the proposed tower site is associated with a large pond located 425 feet to the southeast. The nearest off-site wetland is Wetland 1, located approximately 500 feet southwest of the proposed facility. No likely adverse impacts to wetlands or watercourses are expected to result from the proposed project due to the distances.

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 combined radio frequency power density levels of the antennas proposed to be installed on the tower have been calculated by Council staff to amount to 19.8% 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 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 for the construction, maintenance, and operation of a 150-foot galvanized steel monopole telecommunications facility at the proposed site located at 520 Bailey Hill Road, Killingly, Connecticut.