

DOCKET NO. 472 - 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 Bridgeport Tax Assessor's }
Map 85, Block 2805, Lot 29, 541 Broadbridge Road, Bridgeport, } Council
Connecticut.

August 31, 2017

Opinion

On March 24, 2017, 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 City of Bridgeport, Connecticut. The purpose of the proposed facility is to provide enhanced wireless voice and data services in northerly portions of Bridgeport, as well as portions of Trumbull and Stratford; improve coverage along portions of Route 8, Huntington Turnpike and Broadbridge Road and the surrounding commercial and residential areas; and provide capacity relief to Cellco's existing North Bridgeport 2 and Trumbull II cell sites that are currently operating at or near their 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.

There are no existing towers or sufficiently tall structures available within Cellco's search area. Thus, Cellco investigated available sites for a new tower. Of ten sites reviewed by Cellco, seven were rejected because the property owners were not interested. One site was rejected because of topography issues, and another site was rejected because of wetland issues. One site was selected – the proposed site at 541 Broadbridge Road in Bridgeport.

Cellco proposes to construct a 100-foot above ground level (agl) flagpole (without a flag) and associated equipment compound at 541 Broadbridge Road in the northeastern portion of this 1.26-acre property owned by Beardsley Plaza Limited Partnership. The subject property is zoned Office Retail (OR) and is occupied by the Beardsley Park Shopping Plaza, with its related parking and loading areas. Cellco will install six panel antennas inside the tower: three at 92 feet agl and three at 82 feet agl. All antennas will be internally-mounted behind RF transparent sheathing. The total height of the facility will be 100 feet agl. Cellco will install its equipment on a concrete pad within a 19-foot by 8-foot equipment compound.

Cellco's radio frequency propagation modeling demonstrated a need to provide wireless service to several existing service gaps in the area and has presented a need to offload capacity from adjacent sites that are currently operating at or near their capacity limits. At the proposed site, Cellco will deploy 700 MHz and 2100 MHz frequency band services at this time. The use of 850 MHz and 1900 MHz frequency bands will be evaluated in the future. Cellco will need minimum antenna heights of 92 feet and 82 feet at the proposed site to meet wireless service objectives.

The tower will be designed to support one or two additional antenna arrays for 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 will extend beyond the boundaries of the subject property. Thus, the Council will order that the tower be designed with a yield point to ensure that the tower setback radius remains within the boundaries of the subject property.

Cellco will utilize the existing access from Broadbridge Road to the side of the plaza building. However, Cellco will need to expand the existing access slightly to the east with more asphalt and will remove the curbing in that area to facilitate access. A sloped retaining wall with a safety fence on top will be located to the east of the proposed compound and will maintain an approximately five-foot horizontal clearance around the fenced compound. Electric and telecom utilities will be installed underground to the site from an existing utility pole on the same side of Broadbridge Road as the subject property.

In the event an outage of commercial power occurs, Cellco will rely on a natural gas-fueled generator for backup power. Natural gas is pipeline supplied; thus, barring a maintenance shutdown, mechanical breakdown, or natural service interruption, the hours of run time will only be limited by applicable Connecticut Department of Energy and Environmental Protection (DEEP) Air Emissions Regulations.

The proposed natural gas line (to supply the backup generator) will rise up the wall of the shopping center building, travel through the inside of the building along the roof line and will exit the building on the north side to connect to a new gas meter. The Council's preference is to have the natural gas line run underground (i.e. "trenched") from Broadbridge Road similar to the electric and telecom utilities. However, the final natural gas line route will be subject to discussions with the natural gas utility company. The Council recommends that Cellco, in consultation with the natural gas utility, consider trenching the gas line underground towards Broadbridge Road in order to avoid the necessity of running a gas line through the building or on top of the roof of the building. Cellco will include the final natural gas line route in the Development & Management Plan.

Cellco will also have a battery backup system to provide uninterrupted power and avoid a "reboot" condition. The battery backup system alone could provide about four to eight hours of backup power, subject to the site loading.

The proposed equipment compound will be surrounded by an eight-foot high chain-link fence with privacy slats and one foot of barbed wire on top. The compound will be fenced on three sides, with the western side against the shopping center building.

The Housatonic Trail runs in a north/south direction approximately 0.5 miles to the west of the proposed tower site. The proposed facility is not expected to be visible from the Housatonic Trail. The Merritt Parkway (Route 15), a State-designated scenic road, is located approximately one mile to the north of the proposed facility. The proposed facility is not expected to be visible from Route 15. There are no known locally-designated scenic roads within the two-mile viewshed study area.

The tower will be visible year-round from approximately 60 acres within the two-mile visibility study area. The tower will be seasonally visible from approximately 489 acres within a two-mile radius of the site. The majority of the year-round views of the facility will occur from areas within the immediate vicinity of the site or roughly within a 0.25-mile radius or less. About five or six (off-site) parcels will be expected to have partial year-round views of the proposed facility. Due to the relatively dense development, topography and vegetative cover throughout the study area, seasonal views of the proposed facility will generally be limited to locations within a roughly 0.75-mile radius.

The Council is concerned about the tower's close proximity to abutting residences, particularly 1088 Huntington Turnpike (approximately 85 feet northwest) and 29 Holland Road (approximately 75 feet to the east). The abutting property to the east, 29 Holland Road, will have year-round visibility of the top of the tower and seasonal visibility of the tower itself through the existing deciduous trees. The abutting property to the north, 1088 Huntington Turnpike, will have less of a wintertime (i.e. seasonal) view of the facility than properties to the east because the shopping center building will shield the ground equipment, compound and a fair amount of the tower. However, the flagpole design will be the least visually intrusive tower design because of its slim profile and no external or horizontal appurtenances.

No negative impacts to State-listed species are expected to result from the proposed project. No federally-listed threatened or endangered species were identified in the project area.

The proposed facility is not located near an Important Bird Area (IBA), as designated by the National Audubon Society. The nearest IBA is approximately 3.25 miles southeast of proposed site. In addition, the proposed facility will comply with the 2013 U.S. Fish and Wildlife Service guidelines for minimizing the potential for telecommunications towers to impact bird species.

No wetlands are located on the subject property. An intermittent watercourse flows under the central portion of the subject property and daylight off site along the northern property boundary and across Broadbridge Road, south of the subject property. The proposed flagpole facility will be located approximately 190 feet east of the intermittent watercourse. The underground utility route will be located approximately 120 feet northeast of the intermittent watercourse, across (or south) of Broadbridge Road. Since the proposed facility and associated development activities will be located within existing developed and disturbed areas that are a significant distance from the intermittent watercourse, the proposed development will not likely result in an adverse impact to this resource, subject to erosion and sedimentation controls being installed and maintained during construction in accordance with the *2002 Connecticut Guidelines for Soil Erosion and Sedimentation Control*.

There are no historic properties on or eligible for the National Register of Historic Places within one-half mile of the proposed facility.

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 12.9% 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 100-foot flagpole telecommunications facility at the proposed site located at 541 Broadbridge Road, Bridgeport, Connecticut.