DOCKET NO. 489 – The First Taxing District Water Department of Norwalk application for a Certificate of Environmental Compatibility and Public Need for the construction, maintenance, and operation of a telecommunications facility located at 173½ West Rocks Road, Norwalk, Connecticut.	}	Connecticut Siting Council

November 19, 2020

Opinion

On March 17, 2020, The First Taxing District Water Department of Norwalk (FTD or Applicant) 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 Norwalk (City), Connecticut. The purpose of the proposed facility is to maintain the same level of wireless service along portions of the Merritt Parkway (Route 15), Route 7, Main Street, West Rocks Road, and other areas surrounding the subject property as FTD plans to remove an existing water tank that currently supports the co-location of four wireless carriers.

FTD is a municipal water company. The four carriers are New Cingular Wireless PCS, LLC (AT&T), Cellco Partnership d/b/a Verizon Wireless (Cellco), T-Mobile Northeast, LLC (T-Mobile), and Sprint Spectrum (Sprint) (collectively, the "Wireless Carriers") and are licensed by the FCC to provide personal wireless communications service to Fairfield County.

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.

The existing 115-foot tall water tank is located in the northeastern portion of the subject property and was constructed in 1953. It has supported telecommunications carrier co-locations since approximately 1992. The tank has not been actively used to store water since 2016 when lead paint and polychlorinated biphenyls (PCBs) were discovered on the tank and in the soil beneath the tank. FTD plans to remove this existing water tank and implement its environmental remediation plan. FTD has received approval from the City Zoning Commission to install a new 116-foot tall 500,000-gallon water tank in the central portion of the subject property. There are no plans to co-locate the Wireless Carriers onto the new water tank due to concerns that the Wireless Carriers' co-location attachments could adversely impact the integrity of the tank and the water quality inside, and the Wireless Carriers' co-locations would have to be temporarily removed in the future to accommodate a re-painting of the tank when it becomes necessary for maintenance purposes.

The Applicant began its site search for an alternative facility in early 2018 and spent 16 months working with the Wireless Carriers and the State Historic Preservation Office (SHPO) to identify a viable tower location. The search focused exclusively on the subject property to accommodate the needs of the Wireless Carriers and to maintain a revenue stream to benefit FTD. The search for a suitable location on the subject property took into account such factors as avoiding conflicts with the construction of the new water tank and the environmental remediation plans; having a tower location that would not interfere with service

provided by the Wireless Carriers; and having a location that would satisfy SHPO's concerns regarding visual impacts on the Merritt Parkway (Route 15) because it is listed on the National Register for Historic Places (NRHP). The Merritt Parkway is also a National Scenic Byway.

Five locations were evaluated on the subject property. Four were rejected for various reasons such as SHPO's determination of an adverse visual impact on the Merritt Parkway; conflicts with environmental remediation plans; and signal blocking associated with the new 500,000-gallon water tank. One site, located roughly 250 feet southwest of the existing water tank, was selected in consultation with SHPO and the Wireless Carriers. Thus, FTD plans to construct a new 130-foot monopole facility at this location to serve as a permanent alternative (or replacement) telecommunications facility in order to maintain continuity of service for the Wireless Carriers.

FTD proposes to construct a 130-foot monopole and a 3,518-square foot equipment compound in the north-central portion of a 1.90-acre parcel at 173 ½ West Rocks Road. The subject parcel is located in the City's A-Residence Zone and currently contains the water company. AT&T, Cellco, T-Mobile and Sprint would install their panel antennas and remote radio heads on T-arm mounts at centerline heights of 126 feet, 116 feet, 106 feet and 96 feet, respectively. The tops of AT&T's antennas would not extend above the top of the 130 feet tall tower.

AT&T's equipment would be located within an approximately 8-foot long by 8-foot wide by 8-foot tall walk-in cabinet located on a 10-foot by 20-foot concrete pad and Cellco's equipment cabinets would be located on an approximately 10-foot by 20-foot concrete pad all located within the fenced compound. The concrete pads for AT&T and Verizon would also have an ice canopy on top reaching a height of roughly 10 feet.

T-Mobile's and Sprint's ground equipment configurations have not yet been finalized. The Council will require that the final ground equipment layout be included in the Development and Management (D&M) Plan.

The Wireless Carriers' radio frequency propagation modeling demonstrated a need to replace the existing wireless service in the area that would otherwise be lost due to decommissioning of the existing water tank facility. The proposed facility would also be needed to maintain the Wireless Carriers' capacity afforded by the existing water tank facility, and it would also provide some near term capacity benefits. AT&T and Cellco would provide service via 700 MHz, 850 MHz, 1900 MHz, and 2100 MHz. T-Mobile would utilize 700 MHz, 1900 MHz and 2100 MHz, and Sprint would utilize 850 MHz, 1900 MHz and 2100 MHz. The Wireless Carriers would utilize each of their respective frequency bands for both voice and data.

AT&T, Cellco, T-Mobile and Sprint would need antenna centerline heights of 126 feet, 116 feet, 106 feet, and 96 feet, respectively, because lower heights (e.g. ten feet lower) would result in AT&T losing continuity along Route 15, and the remaining carriers would end up at or close to the existing tree lines which could result in coverage degradation and/or signal blocking from the new water tank.

The tower will be designed to support the four Wireless Carriers antennas, as well as municipal emergency services antennas, and would be designed to accommodate a 20-foot extension. The City has not expressed an interest in co-locating emergency services antennas on the top of the tower as of September 15, 2020.

Access to the site would be provided via a portion of an access driveway off of West Rocks Road to serve the new FTD water tank, and then the Applicant's new access drive would continue for another 350 feet to reach to the tower compound. Utilities would be installed underground generally following the access route to West Rocks Road and then would connect to an existing utility pole on West Rocks Road.

In the event an outage of commercial power occurs, AT&T and Cellco would each rely on their own propane-fueled backup generators. Each generator would have its own 500-gallon propane tank that would provide roughly three to four days of run time before it requires refueling. T-Mobile and Sprint would not have backup generators. A shared generator is not proposed because neither Cellco nor AT&T is willing to risk a "single point of failure" associated with one shared generator.

The Wireless Carriers would each be equipped with a battery backup system to provide uninterrupted power and avoid a "reboot" condition. The battery backup systems alone would provide about four to eight hours of backup power for AT&T and Cellco and would provide nearly 8 hours of backup power for Sprint and T-Mobile.

Commercial Mobile Radio Service (CMRS) providers are licensed by and are under the jurisdiction and authority of the Federal Communications Commission (FCC). At present, no standards for backup power for CMRS providers have been promulgated by the FCC. Every year since 2006, Verizon, AT&T, T-Mobile, and Sprint have certified their compliance with the CTIA Business Continuity/Disaster Recovery Program and the Communications Security, Reliability and Interoperability Council standards and best practices to ensure network reliability during power outages.

On January 22, 2020, the Applicants' consultant, All Points Technology, Inc. (APT), performed a balloon float to simulate the height of the proposed facility. Using a combination of a predictive computer model, in-field analysis simulation, and a review of various data sources, APT produced a viewshed map with a two-mile radius centered at the proposed facility location.

According to the viewshed map, of the 8,042-acre study area, the proposed tower would be visible year-round and seasonally (i.e. during leaf-off conditions) from approximately 19 acres and 41 acres, respectively. The Council notes that this would represent small percentages of the study area or approximately 0.24 and 0.51 percent, respectively.

The proposed monopole would be painted in accordance with recommendations by SHPO and in consultation with the FTD. A very light green, almost blue-ish tone similar to the new water tank is being considered.

The proposed facility would be not be highly visible beyond 0.5-mile of the site, where the most prominent views would occur. This area includes portions of Skyview Lane to the south, West Rocks Road to the east/northeast and Main Avenue to the west. Year-round visibility of the facility would extend intermittently to areas generally west of the site, including Main Avenue/Merritt Parkway interchange, along Comstock Hill Avenue as it crosses Merritt Parkway and along Spring Hill Road.

Seasonal partially obstructed views of the facility would extend north of the Merritt Parkway to portions of Creeping Hemlock Drive, west of the site in the Midrocks Drive area and intermittently along West Rocks Road south of the site.

With respect to the Merritt Parkway, the closest view of the proposed tower occurs at a point where Route 15 is about 1/3 of a mile away from the tower. At this point, generally, the facility would only be visible if a traveler on the southbound side of Route 15 were to look backwards (i.e. over their shoulder) towards the tower site.

Pursuant to CGS §16-50p(a)(3)(F), for a telecommunications facility proposed to be installed on land near a building containing a school, the facility will not be less than 250 feet from the building containing a school unless the location is acceptable to the chief elected official of the municipality or the Council finds that the facility will not have a substantial adverse effect on the aesthetics or scenic quality of the neighborhood in which such school is located. The nearest school is the All Saints Catholic School located

approximately 0.39 mile south of the proposed facility. No views of the facility are anticipated from either location.

With respect to the proposed compound, the Council notes that it would have a six-foot tall chain link fence with black vinyl coated mesh and matching black vinyl privacy slats. Approximately 12 white pines approximately six to eight feet tall would be installed for vegetative screening and would help screen the compound from the residential areas located south/southeast. There would also be additional landscape screening associated with FTD's new water tank, and such landscaping would provide additional layers of tower compound screening for areas to the south/southeast. In the D&M Plan, the Council will require that the Applicant provide its final landscaping plan associated with the proposed tower facility.

Approximately 11 trees with a diameter of six inches or greater would be removed to construct the facility. The proposed project area is not located within 0.25-mile of the buffered area of Department of Energy and Environmental Protection (DEEP) Natural Diversity Database. One federally-listed Threatened Species, the northern long-eared bat, is known to occur in the vicinity of the proposed site. However, the proposed facility is not located within 150 feet of a known NLEB maternity roost tree or within 0.25 -mile of a known hibernaculum. The Applicant also consulted with the U.S. Fish & Wildlife Service (USFWS) in compliance with the Endangered Species Act.

The proposed equipment compound would impact approximately 3,518 square feet of Prime Farmland Soils. This would be approximately 16.2 percent of the Prime Farmland Soils on the subject property.

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 USFWS guidelines for minimizing the potential for telecommunications towers to impact bird species.

The proposed project would comply with the 2002 Connecticut Guidelines for Soil Erosion and Sedimentation Control and the 2004 Connecticut Stormwater Quality Manual.

Development of the proposed project would not adversely impact wetlands or watercourses.

The proposed facility would be located within a DEEP-designated Aquifer Protection Area. The Applicant would implement an Aquifer Protection Plan (APP). The Council will require that the final details of the APP be included in the D&M Plan.

The proposed facility would not have an adverse effect on sites listed on or eligible for listing on the NRHP.

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

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 26.6% of the FCC's General Public/Uncontrolled Maximum Permissible Exposure, as measured at the base of the tower taking into account a 10-dB off-beam pattern loss. 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 FTD for the construction, maintenance, and operation of a 130-foot monopole telecommunications facility at the proposed site located at 173 ½ West Rocks Road, Norwalk, Connecticut.