County of Spotsylvania Department of Planning



Board of Supervisors Staff Report November 9, 2017

Special Use #SUP16-0013 Chancellor Voting District

I. Recommendations		
Staff:	Approval with conditions.	
CTTC:	The Spotsylvania Cable TV and Telecommunication Commission will provide a recommendation on September 14 th 2017.	
PC:	The Spotsylvania County Planning Commission recommended approval of the project with conditions adding a condition to require the tower to fall away from onsite power lines on September 20 th , 2017, with a vote of 5-1.	
II. Overview		
Applicant:	Milestone Communications	
Owner:	Virginia Electric and Power Company	
Request:	Special Use approval for a 150' tall monopole style Wireless Telecommunications Tower with a 6' tall lightning rod within a secured 74' x 35' equipment area in a Rural (RU) zoning district.	
Tax Map Parcel(s):	21-A-93A	
Location:	The tower and equipment area are proposed on a 13.62 acre parcel of land located at 11100 Gordon Rd. The property currently contains the Chancellor Substation, a secured electric power substation owned by operated by Dominion Power. The property is located approximately 1700 feet west and behind the Salem Fields Community Church. The property on which the tower and equipment area are proposed is zoned Rural (RU) and is outside of the Primary Development Boundary.	

Character of Area:	The tower is proposed in a generally suburban area which includes a church located adjacent to the northeast and a shopping center further east. A 110 bed assisted living facility was recently approved east of the subject property between the church and the subject site, approximately 510 feet NE of the proposed tower. The nearest home is located approximately 650 feet to the south within a neighborhood called Ni River Village which contains approximately 74 single family home lots ranging from 1-5 acres in size. The nearest major intersection is located approximately 2,000 feet to the NE, where Gordon Rd. intersects with Salem Fields Blvd. The subject parcel and all surrounding parcels are zoned Rural (RU).
Community Meeting:	A community meeting was held on December 1 st , 2016, at the Salem Fields Community Church. Prior to the community meeting, balloons were flown on November 17 th and 18 th , 2016. County staff was present at the community meeting. The meeting was lightly attended with approximately 2 attendees. The concerns expressed included: whether the Chancellor Convenience Center site could be used in lieu of this proposal, RF radiation concerns, sound, and visibility.
Comprehensive Plan:	The subject property is located outside of the Primary Development Boundary and has an Institutional Future Land Use designation. The Institutional Future Land Use designation is typically mapped over existing infrastructure and public services, including hospitals and churches. Land designated as Institutional is generally perceived as compatible abutting residential Future Land Use designations, although often additional screening and buffering concerns may arise. The proposed special use conforms to the Comprehensive Plan as detailed further within this report.
Historic Resources:	One prehistoric archaeological site (DHR# 44SP0174), the Spotsylvania Court House Battlefield District (DHR# 088-5182), and the Earl Weimar Farm (DHR# 088-5203) are located within approximately 1,500 feet of the proposed site. The subject tower will pose no threat to any of these.
Zoning Overlay:	The project is within the Reservoir Protection Overlay District which is intended to protect potential drinking water reservoir sites from water pollution. The proposed communication tower meets the District's codes and should not impact any resources within the District.
Transportation:	Access to the site will be provided through an existing private roadway leading to the intersection of Gordon Rd. and Salem Fields Blvd. There are no significant transportation impacts expected from

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the approval of the subject communication tower.

III. Project Summary

The subject application is for a special use permit for a 150' tall telecommunications tower with a 6' lighting rod on property currently improved with the Chancellor Substation. The tower is designed with break point technology so that in the event of a failure no portion of the tower will disconnect from the tower, resulting in a bending or buckling over of the tower near its midsection. The top half of the tower will then stay attached but hang from the remainder of the pole. In the event of a failure, although the tower should not touch the physical ground, during the process of the tower buckling over it is possible that the tower may intrude offsite into the airspace of the neighboring property owner. Accordingly staff requested written confirmation from that property owner acknowledging their approval of this. That letter was received and documents the approval and support of the Salem Fields Community Church.

The tower is setback 14' from the nearest property line located to the south. As discussed above it is possible that in the event of a catastrophic failure the tower could intrude into the airspace of the abutting property. The tower has been designed to swing through, but not fall on, any abutting property. Staff notes this requires a modification to code 23-7A.4.1.2, and believes the modification is acceptable due to the support of the neighboring property owner and the design of the proposed tower.

The tower is setback approximately 660' from the nearest residential structure, which is located south of the proposed tower. However, staff notes that a recently approved Special Use for an Assisted Living Facility was completed March 2017 but is not yet under construction. When the facility is constructed it will be approximately 500 feet NE from the proposed tower.

The proposed tower will be located within a 74' x 35' equipment area that will be secured by an 8' high fence, which is topped with an additional foot of barbed wire. The equipment area is accessed through an existing private road.

The area where the compound and tower are proposed is currently vegetated and 18 trees will be removed to accommodate the proposed installation. Apart from these being proposed for removal all other trees onsite will be preserved. The applicant has proposed to plant 21 replacement trees around the equipment area, and additionally supplement existing plantings on the NW of the existing substation with an additional 33 trees. Due to the location of the proposed installation, a modification is necessary to code 23-7A.4.1.6.a, which requires a 15 foot perimeter landscaping buffer. Staff has no objection to this request due to the existing landscaping, site conditions, and the supplemental plantings being proposed.

The proposed tower is a freestanding monopole structure designed to accommodate five service providers, the first of which being T-Mobile. The applicant notes that the proposed site satisfies T-Mobile's coverage goals to improve service within the vicinity of the proposed location and expects that the facility will serve future demand from other carriers. As noted within the

alternative analysis, alternatives were considered but deemed not feasible due security or coverage objective concerns. Sites within this analysis included co-locating onto the existing tower within the substation, co-locating on the tower at 7502 Old Plank Rd., and installing a new tower at the Salem Station Elementary School.

Based on the input of the neighboring Ni River Village Home Owners Association, a tree pole, or Monopine design was evaluated, but determined to be unsafe by county consultant Atlantic Technology Consultants, Inc., and Dominion Power engineering staff. The relocation of the tower on the subject property was discussed but ultimately not proposed by the applicant due to engineering costs, significant expenditures being necessary to restart the federal permitting procedures, and that building on the most reasonable alternative location onsite would entail significant clearing of existing forested lands northwest of the substation. The applicant has also provided information which shows existing storm water management facilities, Resource Protection Areas, and significant elevation changes NW of the existing substation.

IV. Special Use Standards of Review

Sec. 23-4.5.7 of County Code outlines eight standards that shall be met by an application for consideration of approval. The following table details those standards with staff comments.

STANDARDS OF REVIEW FOR SPECIAL USE APPROVAL			
STANDARD	STAFF COMMENT		
1. Proposed use is in accord with the comprehensive plan and other official plans adopted by the county.	The use is in conformance with the Comprehensive Plan as detailed within this report.		
2. Proposed use or development of the land will be in harmony with the scale, bulk, coverage, density, and character of the area.	The proposed tower is beside an existing electrical substation. An existing church is located to the Northeast. A proposed Assisted Living Facility will be constructed approximately 500 east of the subject site. The residential neighborhood of Ni River Village is located approximately 500 to the south. An existing microwave communication tower is within the substation, but provides no colocation capability due to security concerns within the substation. The tower is generally compatible with these land uses.		
3. Proposed use will not hinder or discourage the appropriate development and use of adjacent land and buildings or impair the value thereof.	The tower is proposed to be located on a site currently improved with an electrical substation. Most of the properties within the immediate area are already improved with varying uses. The tower will be visible from some residential properties within the Ni River Village which carries at least a perception of property value impairment.		

4. Proposed use will not adversely affect the health or safety of persons residing or working in the neighborhood.	The Federal Communication Commission provides safety standards and limits for Radio Frequency Electromagnetic Exposure and this site will be designed to meet them. The use will not adversely affect the health or safety of persons residing or working in the area.
5. Proposed use will not be detrimental to the public welfare or injurious to property or improvements within the neighborhood.	The use will not adversely affect the general public welfare; rather, it should benefit them through the provision of better telecommunication and internet connectivity. No injury to property or improvements should result from the proposal.
6. Proposed use is appropriately located with respect to transportation facilities, water supply, wastewater treatment, fire and police protection, waste disposal, and similar facilities.	The use will have no impact on County facilities and should benefit wireless telecommunication services that may be used for emergency communications.
7. Proposed use will not cause undue traffic congestion or create a traffic hazard.	The proposed use is expected to have no impacts on the traffic and transportation infrastructure.
8. Proposed use will have no unduly adverse impact on environmental or natural resources.	County and State requirements for erosion and sediment control along with stormwater management must be adhered to for the construction of the facility. The NEPA review conducted supports that the proposal should not affect any protected species.

V. Comprehensive Plan Analysis

This proposal is consistent with the Comprehensive Plan. Specifically, it meets General Policy A.2: "[to] encourage the provision of ... telecommunication infrastructure".

The State Historic Preservation Officer has opined that the proposed tower will have neither adverse direct affect nor any adverse visual effect on either battlefield, pursuant to Historic Resources Policy 2: "... [to] support projects that consider and mitigate the impact of development projects on historic and cultural resources..."

Pursuant to Natural Resources Policy 1, "[to] balance the protection of environmental resources and natural wildlife habitats with development", a National Environmental Policy Act Report (NEPA Report), conducted by Archer, Inc (Archer) was provided during the course of this review. This study reviewed the project for potential environmental or cultural concerns which may trigger further assessment requirements by the FCC. Archer found no expected impacts on threatened or endangered species, wilderness areas, wildlife preserves, etc.

DCR did recommend the voluntary implementation of USFWS interim guidelines for Communication Tower Siting, Construction, Operation, and Decommissioning, which was submitted to County staff. The development of the site will require a Minor Site Plan permit, during which E&S measures are strictly enforced pursuant to the State and local law, notably the Chesapeake Bay Preservation Act. No impacts or changes are proposed to streams or riparian buffers.

VI. Findings

- 1. The proposal enhances T-Mobile wireless telecommunications signal strength and provides room for four additional co-locating providers pursuant to the County's requirements to accommodate as many co-locators as possible.
- 2. The tower will be visible from Gordon Rd. and residences within Ni River Village. Although experts disagree about a telecommunication towers effect on property values, the perception of value impairment is a frequent concern to neighboring residential land owners.
- 3. The tower will accompany an existing 199' high communication tower and multiple high tension electrical transmission lines presently in use at the Chancellor Substation.
- 4. The Ni River Landing HOA requested stealthed monopine tower. This could not be accommodated at the present location for safety reasons.
- 5. The applicant contends that relocation of the tower NW of substation is unfeasible due to existing storm water management facilities, RPAs, easements, and topographic challenges.
- 6. The tower will not be required to be lit per FCC regulations.
- 7. The Virginia Department of Historic Resources opined that the tower will have no adverse direct or visual effect on historic properties in the Area of Potential Effects.
- 8. The request satisfies the Special Use Standards of Review as detailed within this report.
- 9. The proposal is consistent with the Comprehensive Plan as detailed within this report.

VII. Conclusions and Staff Recommendation

Staff concludes that the applicant's Special Use request for a wireless telecommunications tower at this location is appropriate. Staff recommends approval with conditions as noted below.

X. Recommended Conditions

- 1. The telecommunications tower and compound shall be developed in conformance with the Generalized Development Plan titled "Special Use Permit, TAX MAP 21-A-93A, DVP CHANCELLOR SUBSTATION, 11100 GORDON ROAD, FREDERICKSBURG, VA 22407" dated November 21, 2016 and last revised August 15, 2017.
- 2. New evergreen trees planted south of the existing substation shall be installed at a minimum height of 4 feet.
- 3. The final site design and operation of the facility must be in compliance with all other standards outlined in Sec. 23-7A.4.1 of the Code, except for Sec. 23-7A.4.1.0 as modified as a condition of this permit, 23-7A.4.1.6, and 23-7A.4.1.2.

- 4. If the operation of this site causes any interference to surrounding broadcast television receivers, amateur radio operations, or County radio system operations, the applicant shall investigate the complaint within thirty (30) days of notice and work with the Spotsylvania County Cable TV and Telecommunications Commission to determine remediation to correct the problem, if it is found to be the fault of the one of the tower vendors.
- 5. The tower's breakpoint shall be designed to have the tower bend in a southwesterly direction away from existing powerlines in the event of failure.