

**VERIZON WIRELESS "SOUTHLAND" - RIVER'S EDGE III LLC PROPERTY  
TIER III PERSONAL WIRELESS SERVICE FACILITY  
(DOMINION POWER ANTENNA PLATFORM CO-LOCATION)**

**Project Description:**

Cellco Partnership, trading as Verizon Wireless, respectfully requests approval of a Special Use Permit and a Special Exception for modifications of Section 5.1.40.b(3)(c) in order to allow the installation of a Tier III Personal Wireless Service Facility (PWSF) on a parcel of land identified as Tax Map 078B0-00-00-10100 ("the Property"). The proposed antenna installation will be placed in a three-sectored array on a platform attached to the top of a monopole extension that will be run within the interior of the existing high tension power transmission, lattice support structure. The top of the antennas will extend to a maximum height of 135 feet (20' above the top of the existing structure). Each face of the proposed antenna platform will measure 14'-6" and support four (4) panel antennas for a total of twelve (12). Ground equipment will consist of a 144 square foot steel, grated platform that will support base station cabinets containing radio transmitters and backup batteries, and an H-frame utility stand for other power and communications components, along with a natural gas powered, emergency back-up generator on its own 32 square foot concrete pad. All of the ground equipment will be contained within a 450 square foot lease area located near the center of the River's Edge office condominium complex.

For safety and maintenance purposes, all of the required structural work including antenna installation and subsequent maintenance on the power tower must be performed by specially trained contractors and overseen by Dominion Power employees scheduled during power line outages. Additionally, changes in Dominion Power's safety requirements that occurred in 2012 dictate that no new antennas can be direct mounted to the structure or placed below the top static line on the company's power tower. Therefore, Verizon Wireless' antennas will be attached above the 115' top level of the existing lattice structure and on the proposed extension with the platform designed to support the workers installing and performing facility maintenance. A 4-foot lightning rod will also be placed at the top of the platform, but only 1 to 2 feet of it will be exposed above the top heights of the antennas.

**Network Objectives:**

Verizon Wireless is licensed by the Federal Communications Commission (FCC) to provide various types of state-of-the-art wireless communications services within Albemarle County. These licenses are comprised of Cellular (CDMA / 800 MHz), PCS (Personal Communication Service / 1900 MHz), the Long Term Evolution 4G Network (LTE / 700 MHz) and Advanced Wireless Service (AWS / 2100 MHz) technologies, all of which are combined for a wide range of services that are used for mobile voice, data, video and text messaging among others.

Whenever possible, it is Verizon Wireless' goal to provide seamless in-building, in-car and on-street coverage and the full range of voice and data services to existing and potential future customers. In doing so, Verizon Wireless has planned this particular site for the purpose of filling in coverage gaps that are present in the surrounding commercial areas and residential neighborhoods surrounding the intersections of Stony Point Road and Riverbend Drive with Long Street and Richmond Road (U.S. Route 250). Additionally, this proposed facility will also help to increase network capacity by offloading the demands on the company's voice and data services that are currently being provided by the two nearest, existing sites: "Melbourne" (co-location on a radio tower approximately 1-1/4-mile to the northwest between Rio Road, Melbourne Road and the John Warner Parkway) and "Pantops" (co-location with antennas concealed in two cupolas on the low rooftop of the Pantops BP convenience center approximately 3/4-mile to the southeast).

### **Character of the Area:**

The subject property is zoned Commercial (C1) and all of the adjoining parcels to the south share the same zoning designation. The property located directly to the north and is currently being developed with a mixture of densities and uses under the Neighborhood Model District designation. While the properties to the east and west are zoned Highway Commercial and Commercial Office, respectively. This site is located within Dominion Power's high tension electrical power line easement that runs from north/south from this particular point and crosses the Rivanna River before entering the Property and then passes over US Route 250 to the south. The proposed mounting design will be very similar to an existing installation located due south on a transmission tower located behind the Clean Machine car wash at the corner of Riverbend Drive and Richmond Road.

Access to the facility will be provided through the River's Edge office complex parking lot that starts on the western side of Stony Point Road and splits off to the left, leading to the existing office building situated on Tax Map 78 / Parcel 58G2. The existing rust-brown colored power tower is situated on a slight knoll with a base elevation of approximately 358.6 feet above mean sea level (ASML). The proposed base station equipment will be placed directly under the tower between the foundation piers in a grassed which is surrounded on all sides by portions of the parking lot travel ways.

Installation of the proposed facility will not substantially impact the character of the surrounding area because the existing 115-foot tall power pole will only be extended by 20 additional feet, or approximately 17 percent, to a top height of 135 feet (not including the lightning rod). Furthermore, the this tower is located within a power line easement that stretches through the area and contains many other structures that are similar in size and height, and the nearest structure to the south is already fitted with a facility that has a similarly designed extension pole and platform for personal wireless service antennas. Neither the short access extension into the site or other construction activities that will be necessary to install the PWSF ground equipment will require the clearing of any vegetation. Verizon Wireless is also proposing the addition of a new screening fence that will be placed around the compound in order to help screen the base station equipment from views within the office complex and also from the public right-of-way for Stony Point Road (State Route 20 North).

### **Request to Modify Section 5.1.40.b(2)(c) of the Zoning Ordinance:**

Verizon Wireless is required to request approval of a Special Exception in order to allow a modification of the requirements set forth in Zoning Ordinance Section 5.1.40.b(3)(c), which states the following: *"Projection. No antenna shall project from the facility, structure or building beyond the minimum required by the mounting equipment, and in no case shall the closest point of the back of the antenna be more than twelve (12) inches from the facility, structure, or building, and in no case shall the farthest point of the back of the antenna be more than eighteen (18) inches from the facility, structure, or building."*

Verizon Wireless is requesting Board of Supervisors approval for modifications of the standard flush-mounting restrictions because all twelve of the antennas in this array will be mounted on a triangular platform that will extend above the top of the existing power tower. This design is required by Dominion Power in order to meet the company's standards for safely working above power lines. The proposed platform will measure 14-1/2 feet in length across each face, allowing for approximately 3 feet of separation between the antenna mounting spaces in each sector. The proposed antennas are identified as Andrew Model# HBXX-6517DS-VTM [74.9"(H) x 12"(W) x 6.5"(D) = 898.8 square inches] and Amphenol Model# HTXC6318R000 [102"(H) x 12"(W) x 7.1"(D) = 1,224 square inches] will be mounted in a configuration that requires two of each per sector. In order to closely match the color of the existing power tower, the mounting devices, extension and all of the panel antennas will be painted Sherwin

Williams Number SW 6048 (Terra Brun) to closely match the rust-colored tone of the existing power structure.

Although collocations are allowed by right as Tier I facilities (often with Special Exceptions to account for specific design variations), the County Attorney has determined that a Special Use Permit is required in this particular case because this type of extension requires a pole with its own foundation to be installed within the center of the existing lattice tower. Therefore, staff informed Verizon that this is different from a standard extension that would be mounted at the top of a structure to increase the overall height.

In addition to meeting Dominion Power's safety standards, this proposed full-sectored platform array is a design that will allow for the maximized use of an existing structure in order to provide expanded and improved levels of wireless coverage. This is very important from a siting standpoint, because use of the existing facility eliminates the need for Verizon to install any new facilities with free-standing mounting structures within the surrounding area that is mostly developed, under development and/or cleared of large wooded areas. It should also be noted that there is another Dominion Power structure, with a similar PWSF antenna platform installed above it, located directly to the south and in the same power line easement, so the character of this largely commercial area will not be change by approval of the proposed facility.

At its hearing on September 21, 2015, the Architectural Review Board determined that the proposed installation of this facility will not impose any additional negative impacts upon the Entrance Corridor. This finding should also hold true when considering the possible impacts upon neighboring properties because the proposed extension pole will be contained completely within the outer structure of the existing power tower, so as not to increase its current footprint. The proposed equipment cabinets will also be placed within the legs of the power tower and screened by a wooden fence, similar to the designs that are used to screen dumpster pads and other types of ground based equipment in parking lots and utility yards serving nearby businesses. Screening provided by the fence will be fortified with a combination newly proposed deciduous and evergreen trees and shrubs that are required in order to secure a Certificate of Appropriateness as a condition of Architectural Review Board's approval.

#### **Conclusion:**

The Albemarle County Personal Wireless Service Facilities Policy identifies power towers in high tension power line easements as "Opportunity Sites". Although the wireless policy discourages full-sectored antennas arrays and platforms such as the one being proposed with this request, it must be recognized that the wireless policy's stance on the use of power towers was provided more than 15 years ago, at a time when most service providers held only a single license to provide voice coverage. In its current form the policy fails to anticipate several of the key changes that have taken place as access to Personal Wireless Services has evolved from being an option to a necessity for telecommunications. Some of those changes are being provided below:

- Dominion Power's occupational safety changes to only allow antennas on the work platforms and above all electrical and static lines.
- Federal government's auctioning and reallocation of additional licensed spectrum for use within the Personal Wireless Services industry.
- The merging of several locally based carriers with the larger regional and national companies that now hold multiple licenses to provide varied services, including voice , texting and data.
- The numbers of homes and businesses using wireless services surpassing those with landlines.

At the same time, similar full-sectored, platform mounted co-location designs that have been implemented in areas throughout the County on existing power structures since the adoption of the wireless policy. Therefore, Verizon Wireless is confident that the proposed Personal Wireless Service Facility has been designed to meet and/or exceed those same criteria that have been applied to the approvals of co-located Tier III PWSFs with modifications of the antenna mounting and standoff standards that are normally applied under Tier I.

Approval of this Special Use Permit and its related Special Exception request will contribute to the expansion and improvement of Verizon Wireless' voice and data services in an area of the county that will benefit from expanded coverage and increased network capacity. **It should also be noted that approval of a Special Exception allowing the requested design modifications will not impose any detriment upon adjacent properties. This has been demonstrated in the site photos, photosimulations and other points that have been addressed throughout this application and the approvals of similar facilities throughout the county. The Architectural Review Board's approval also provides confirmation that the proposed facility will not increase the power tower's perceived visual impacts upon the Entrance Corridor that provides the nearest and most unobstructed, off-site view from which the tower can be seen.**

Sincerely,

A handwritten signature in black ink, appearing to read "Stephen Waller", with a stylized flourish at the end.

Stephen Waller, AICP  
Planner / Site Development Consultant  
For Verizon Wireless