



COUNTY OF ALBEMARLE PLANNING
STAFF REPORT SUMMARY

Proposal: SP202200021 Dominion Hollymead Substation Expansion	Staff: Rebecca Ragsdale, Planning Manager
Planning Commission Public Hearing: October 25, 2022	Board of Supervisors Hearing: To be announced
Owner: Virginia Electric & Power Company	Applicant: Dominion Energy
Acreage: 6.72 acres	Special Use Permit/Zoning Map Amendment for: Energy and communications transmission facilities under Section 10.2.2(6) of the Zoning Ordinance, on two parcels of land totaling approximately 7.92 acres.
TMPs: 03200-00-00-03700	Zoning/by-right use: R-1 Residential - 1 unit/acre; R-15 Residential - 15 units/acre
Location: 3317 Worth Crossing	
Magisterial District: Rio	Conditions: Yes EC: No
School Districts: Baker Butler Elementary – Lakeside Middle – Albemarle High School	
Proposal: Request to expand an existing substation to add addition equipment and associated stormwater-management facilities.	Requested # of Dwelling Units: n/a
DA: X RA:	Comp. Plan Designation: Urban Density Residential – residential (6.01 – 34 units/ acre); supporting uses such as religious institutions, schools, commercial, office and service uses.
Character of Property: Parcel 41A is an existing electric substation with some vegetated screening.	Use of Surrounding Properties: Nearby properties include residential to the north and southwest, residential recreation amenity to the south, and commercial to northwest.
Positive Aspects: 1. The proposed upgrade meets the utility’s need for improving electricity transmission without creating significant new impacts on the Development Area.	Concerns: 1. The applicant has not yet provided a sound study. However, a sound study will be required prior to commencement of the use to ensure ordinance standards are met.
RECOMMENDATIONS: Staff recommends approval of SP202200021 Dominion Hollymead Substation Expansion.	

STAFF CONTACT:
PLANNING COMMISSION:
BOARD OF SUPERVISORS:

Rebecca Ragsdale, Planning Manager
October 25, 2022
To be scheduled

PETITION

PROJECT: SP202200021 Dominion Hollymead Substation Expansion (Sign#55)
MAGISTERIAL DISTRICT: Rivanna
TAX MAP/PARCEL: 03200-00-00-03700, 6.72 acres
LOCATION: 3317 Worth Crossing
PROPOSAL: Request for an approx. 0.77 acre expansion of the existing Dominion Energy Virginia electric substation to allow for new equipment, fencing, and stormwater management. Currently, the substation covers 1.59 acre and following the proposed expansion would occupy 2.36 acres of the site. The expansion would be located southeast of the existing facility, which will remain, and accessed by the existing entrance from Worth Crossing.
PETITION: Section 18-13.2.2(6) and 18-18.2.2(6) Electrical power substations, transmission lines and related towers; gas or oil transmission lines, pumping stations and appurtenances; unmanned telephone exchange centers; micro-wave and radio-wave transmission and relay towers, substations and appurtenances (reference 18-5.1.12).
ZONING: R-1 Residential - 1 unit/acre; R-15 Residential - 15 units/acre
ENTRANCE CORRIDOR: No
OVERLAY DISTRICT: None
COMPREHENSIVE PLAN: Urban Density Residential – residential (6.01 – 34 units/ acre); supporting uses such as religious institutions, schools, commercial, office and service uses.

CHARACTER OF SURROUNDING AREA

The substation is located on a 6.72 acre parcel that is partially wooded. It is accessed by an existing entrance from Worth Crossing. Most of the surrounding area is residential, including Forest Lakes, and associated clubhouse, trail and pond to the south. Across Worth Crossing are commercial uses. (Attachment 1)

PLANNING AND ZONING HISTORY

SDP198400060- A site plan was approved to allow initial construction of the substation was approved.
SDP199600139- A site plan was approved to allow a minor expansion of the facility which was deemed not to require a special use permit.

DETAILS OF THE PROPOSAL

Project details are provided in the narrative, community meeting presentation, and shown on the concept plan (Attachments 2,3,4).The substation currently occupies approximately 1.2 acres. The applicant estimates that the total area of disturbance for the proposed expansion (including area for substation equipment, stormwater facilities, and new screening vegetation) would be 5.2 acres. The expansion will be located to the east/southeast of the facility getting closer to the Forest Lakes pond/trail amenity area.

COMMUNITY MEETING

A community meeting for this proposal was held on October 13, 2022 at the Places 29 North Community Advisory Committee regular meeting held at the Forest Lakes North Clubhouse. Approximately ten or more attended, including immediate neighboring properties. Staff gave a brief overview of the review status and special use permit process. The applicant gave a presentation with details on the proposal. (Attachment 4) Those in attendance had the following questions and concerns:

- Screening, including views to the trail/pond amenity area

- Health of trees that will provide screening
- Enforcement of rules and regulations Dominion must follow
- Amount of electromagnetic fields (EMF) that would be generated from the new facility
- Concerns about what defoliant is used to clear vegetation in powerline right of way
- Noticeable runoff from the site after rains, not located in the storm drain channel

ANALYSIS OF THE SPECIAL USE PERMIT REQUEST

This special use permit, and all special use permits, are evaluated for compliance with the provisions of Chapter 18, Section 33.40b of the Code of Albemarle. Each provision of that section is addressed below. The provisions of the ordinance are in bold font and underlined.

No substantial detriment. The proposed special use will not be a substantial detriment to adjacent lots.

The facility and proposed expansion are screened by existing vegetation along the northern and southern property lines. The expanded area will be screened consistent with ordinance requirements and a fence will screen the ground equipment from the southern property line with the pond/trail amenity. There will be taller tower structures that will not be screened from the southern property line but there are existing electric towers that are visible so this is not a new visual impact.

Currently, the existing substation does not cause any noise impacts to neighboring properties. The applicant has not yet provided any sound information on the proposed equipment. With the expansion, a sound study will be required to ensure the new equipment meets zoning ordinance decibel level limits of 55 dba nighttime and 65 dba daytime hours at the property lines.

Character of the nearby area is unchanged. Whether the character of the adjacent parcels and the nearby area will be changed by the proposed special use.

The substation is an existing component of the landscape and will not change the character of the area.

Harmony. Whether the proposed special use will be in harmony with the purpose and intent of this chapter,

Section 1.4(D) of the Zoning Ordinance states that one of the purposes of the Ordinance is to:

“Facilitate providing adequate police and fire protection, disaster evacuation, civil defense, transportation, water, sewerage, flood protection, schools, parks, forests, playgrounds, recreational facilities, airports and other public requirements;”

Harmony. ...with the uses permitted by right in the district

Public utilities are in harmony with and supportive of residential uses in the district.

Harmony. ...with the regulations provided in section 5 as applicable,

5.1.12 PUBLIC UTILITY STRUCTURES/USES

a. The proposed use at the location selected will not endanger the health and safety of workers and/or residents in the community and will not impair or prove detrimental to neighboring properties or the development of same;

Existing access will be utilized for the substation expansion. There is no endangerment to workers or neighboring properties.

b. Public utility buildings and structures in any residential zone shall, wherever practical, have the exterior appearance of residential buildings and shall have landscaping, screen planting and/or fencing, whenever these are deemed necessary by the commission;

There are no buildings proposed, only additional equipment at the substation.

In addition, trespass fencing and other safety measures may be required as deemed necessary to reasonably protect the public welfare;

The site currently has safety fencing and safety fencing will continue around the expansion area as well.

In cases of earth-disturbing activity, immediate erosion control and reseedling shall be required to the satisfaction of the zoning administrator;

The facility will be required to meet state stormwater management requirements and erosion and sediment control measures. During construction, the site will be inspected frequently to make sure measure remain in place.

c. Such structures as towers, transmission lines, transformers, etc., which are abandoned, damaged or otherwise in a state of disrepair, which in the opinion of the zoning administrator pose a hazard to the public safety, shall be repaired/removed to the satisfaction of the zoning administrator within a reasonable time prescribed by the zoning administrator;

No existing equipment is proposed for removal at this time.

d. In approval of a public utility use, the commission shall be mindful of the desirability of use by more than one utility company of such features as utility easements and river crossings, particularly in areas of historic, visual or scenic value, and it shall, insofar as practical, condition such approvals so as to minimize the proliferation of such easements or crossings, as described by the comprehensive plan.

The proposal will not affect any critical resources.

Harmony. ...and with the public health, safety and general welfare.

Upgrading equipment within the substation does not introduce new safety issues.

Consistency with the Comprehensive Plan. The use will be consistent with the Comprehensive Plan.

Objective 10: Support provision of private electric, telephone, natural gas, wireless, and fiber optic service when its provision is in keeping with other aspects of the Comprehensive Plan.

Strategy 10d: Locate utilities to minimize impacts on the visual and natural environment.

Staff believes that the proposal does not conflict with the above-noted objective and strategy in the Comprehensive Plan. Ground equipment visual impacts will be mitigated with screening and tower structure visual impacts already exist. The expansion is mostly within a portion of the parcel that is not wooded and measures will be in place to protect the natural environment through the site plan process.

SUMMARY

Staff has identified the following positive aspects to this proposal:

1. The proposed upgrade meets the utility's need for improving electricity transmission without creating significant new impacts on the Development Area.

Staff has identified the following concern:

1. The applicant has not yet provided a sound study. However, a sound study will be required prior to commencement of the use to ensure ordinance standards are met.

RECOMMENDED ACTION

Based on the findings contained in this staff report, staff recommends approval of SP202200021 Dominion Hollymead Substation Expansion Project with the following conditions:

1. Development of the use must be in general accord (as determined by the Director of Community Development, or the Director's designee) with the Concept Plan entitled "Preliminary Site and Grading Plan Hollymead Substation Expansion," provided in Attachment 3. To be in general accord with the plan, development must reflect:
 - a. Location of the substation and related infrastructure
 - b. Limits of disturbance and wooded areas to remainMinor modifications to the plan that do not conflict with that essential element may be made to ensure compliance with the Zoning Ordinance.
2. Prior to operation of the new substation equipment, a sound study must be conducted to demonstrate compliance with decibel level limits of the zoning ordinance.

ATTACHMENTS

Attach 1 – [SP2022-21 Hollymead Substation Expansion Project - Location Map](#)

Attach 2 – [SP2022-21 Hollymead Substation Expansion Project - Application Narrative](#)

Attach 3 – [SP2022-21 Hollymead Substation Expansion Project - Concept Plan](#)

Attach 4 – [SP2022-21 Hollymead Substation Expansion Project -October 13, 2022 Community Meeting Applicant's Presentation](#)