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PLANNING COMMISSION STAFF REPORT

Meeting Date: August 26, 2026

Project: ***RC24155981; Zoning Reclassification – Accokeek Center***

Description: A proposed zoning reclassification from A-1, Agricultural, A-2, Rural Residential, and B-3, Office Zoning Districts to the M-2, Heavy Industrial Zoning District on Tax Map Parcel Nos. 38-96, 38-74A, 38-45, 38-45H, 38-45I, 38-45L, 38-44A, and 38-73 (Property), to allow for development of up to 590,000 square feet of data center and accessory uses, consisting of approximately of 120.88 acres ("Property"). The Property is subject to concurrent requests for a Conditional Use Permit, and a Comprehensive Plan Compliance Review for the electric substation.

Election District: Falmouth

Applicant/Owner: Stephen W. DeFalco, Falmouth Tech, LLC

Agent: Charles W. Payne, Jr., Hirschler

Application Date: May 5, 2025 – AMENDED
(Complete Application: June 23, 2025)

Advertisement Dates: August 11, 2026 and August 18, 2026

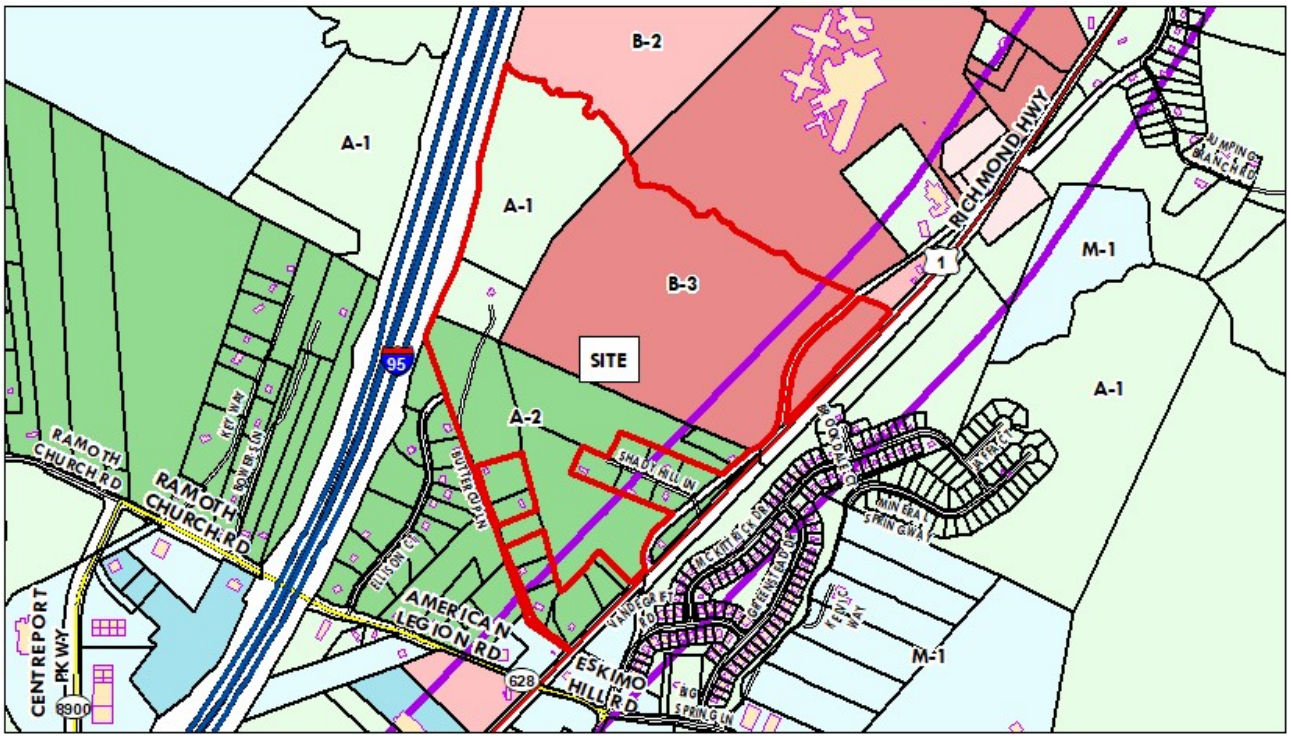
Time Limits: PC: December 4, 2026
Application Expiration: December 23, 2026

Staff Project Manager: Amy Taylor

SITE LOCATION, ZONING & CHARACTERISTICS

Location: West side of Richmond Highway, approximately 2,500 feet north of the intersection with Eskimo Hill Road.

Zoning: A-1, Agricultural (light green), A-2, Rural Residential (dark green), B-3, Office (dark pink)
Highway Corridor Overlay District (HC) (purple)



Location & Zoning Map

Abutting Properties

Location	**Zoning**	**Existing Use**	**Comprehensive Plan**
North	B-2, Urban Commercial and B-3, Office	Institutional – Rappahannock Regional Jail	Business and Industry
South	A-2, Rural Residential	Undeveloped / Residential – Single Family Homes	Central Stafford TDA / Mixed Use – Commercial / Residential
East	A-1, Agricultural and M-1, Light Industrial	Residential – Single Family Homes	Central Stafford TDA / Mixed Use – Commercial / Residential
West	A-1, Agricultural and A-2, Rural Residential	Interstate 95	Business and Industry

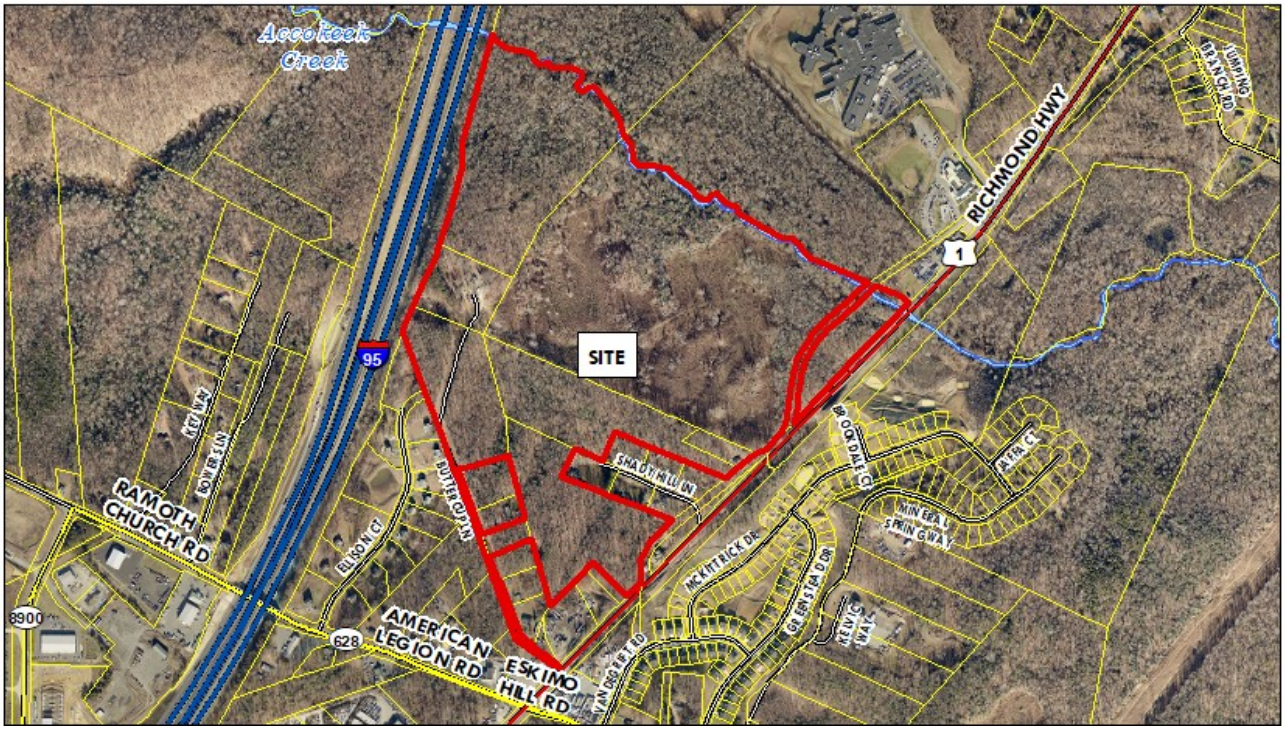
Zoning History

Most of the subject parcels have been zoned A-1, Agricultural (TM 38-73 and 38-74A), and A-2, Rural Residential (TM 38-45H, 38-45I, 38-45L, and 38-44A) since at least 1978, and no proffers exist for these parcels. However, TM 38-96 was rezoned in February 1990 from A-1, Agricultural to B-1, Convenience Commercial and M-1, Light Industrial with proffers, pursuant to Ordinance O90-21 (Attachment 13).

The Property was rezoned again on March 18, 2008, from B-1, Convenience Commercial and M-1, Light Industrial to B-3, Office as part of a larger comprehensive rezoning for multiple properties within the Courthouse Redevelopment Area. No proffers were established as part of the 2008 rezoning, pursuant to Ordinance O08-01 (Attachment 14).

Existing Conditions

The subject property is located along the west side of Richmond Highway, approximately 2,500 feet north of the intersection with Eskimo Hill Road. The majority of the site is currently vacant and undeveloped, with exception of two (2) single-family dwellings and various outbuildings located on TM 38-73 and 38-44A. The southern half of the Property is densely forested consisting almost entirely of old growth deciduous trees and a few coniferous trees. The northern half of the site was timbered between 2019 and 2021, and the area has substantial regrowth of young tree saplings. Site topography consists of rolling terrain throughout much of the property and slopes significantly to the north, with an elevation range of more than 100 feet from the highest and lowest points throughout the site. The Property borders Accokeek Creek and a Critical Resource Protection Area (CRPA), as well as 100 and 500-year floodplains that encumber a large area within the northern portion of the site.



Existing Conditions - Aerial View

Cultural Resources

The Property contains an archeological resource in the northwest portion of the site: 44ST1347, which is registered with the Virginia State Historic Preservation Office. A Phase IA Archeological Survey of the site was conducted and found to contain pre-contact lithic debitage and historic period artifacts. The site is not proposed to be developed, as identified on the GDP.

Google Street View –Southwest view from Richmond Highway

Google Street View –Northwest view from Richmond Highway

APPLICATION DETAILS

Generalized Development Plan (GDP) (Attachment 6)

The applicant is proposing development of a data center campus with up to 590,000 square feet of floor area, and supporting accessory uses such as an electric substation. The following is a summary of notable features shown on the GDP. Refer to Attachment 6 for full details.

Buildings and Uses:

- Two (2) data center buildings with a total combined gross floor area (GFA) of 590,000 square feet. (staff notes that total data center development is limited by proposed proffer 6.a Maximum Data Center Square Footage)
- 2-stories, with a height not to exceed the district maximum of 65 feet.
- Buildings are generally located within the western portion of the Property adjacent to Interstate 95 and oriented such that the generator yards will generally face east and west, away from abutting residential uses and A-1 zoned properties.
- Data centers require a minimum primary building setback of 750 feet from property lines abutting or across public right-of-way from residential uses or undeveloped properties zoned for residential use, and a minimum setback of 100 feet from property lines abutting commercial zoned properties. The Zoning Ordinance further requires a minimum setback of 300 feet for accessory structures and uses such as parking and loading areas, drive aisles, substations, etc.

  Setback distances for primary buildings exceed minimum requirements along the site's frontage along Richmond Highway, across from residential development, and along the northern property line where adjacent to commercial uses. Accessory structure and use setback distances also meet or exceed minimum requirements for the majority of the site, including the proposed substation.

  Access to the site is limited due to the configuration of the subject parcels and the presence of a large CRPA. The proposed layout has been designed to avoid unnecessary environmental impacts but limits the applicant's ability to meet minimum setback distances in some locations.

  Where required setbacks distances are not proposed, the applicant has requested a modification to minimum setback requirements, to reduce primary and accessory structure and use setbacks as follows, and as permitted by Sec. 28-39(q)(3) of the Zoning Ordinance:

  As permitted by Sec. 28-39(q)(3) of the Zoning Ordinance, the applicant has requested a modification to the required setbacks, to reduce setbacks as follows:

  - Primary Structure Setback
    - Reduced to 399 feet from residential property line abutting Tax Map Parcel 38E-1-5 (subject to recordation of a "No Build" covenant for the abutting parcel).
    - Reduced to 550 feet from residential property lines and A-1 zoned properties abutting Tax Map Parcels 38E-1-6, 38E-1-7, 38E-45N, 38E-45J, 38-45E, 38-74, and 38-50.
  - Accessory Structure and Use Setback
    - Reduced to 275 feet from residential property line abutting Tax Map Parcel 38E-1-5 (subject to recordation of a "No Build" covenant for the abutting parcel).

- Reduced to approximately 47 feet from abutting residential and A-2 zoned properties, for roadways and drive aisles, as generally depicted on the GDP (staff notes that the abutting parcel to the south is subject to a pending Zoning Reclassification to M-1, Light Industrial).

The requested modifications are detailed further in the applicant's letter of Request for Modification of Code Requirements (Attachment 7) and on page 3 of the GDP, and such reductions are being proffered by the applicant.

The Line-of-Sight exhibits included within the GDP depict the proposed data center buildings in relation to abutting residences to the south, east and west. As shown, there would be a distance of approximately 660 feet between the proposed data center buildings and the nearest residential structure (not property line) to the south.

Access and Circulation:

- Two (2) access points are proposed along Richmond Highway. The northern entrance is the primary entrance for the site and will be full access with no restrictions. The southern entrance is a gated emergency entrance which will be generally utilized for emergency purposes, large deliveries, and during site construction. This entrance is proposed as limited access and will restrict left turn movements exiting the site.
- The primary entrance will provide access to the data center campus and the substation site. Access to the data center buildings will be gated, including a guard house.
- Multiple transportation improvements are proposed along Richmond Highway which will provide a southbound right-turn lane, and a northbound left-turn lane at the primary entrance to the site. A raised concrete median is also proposed along much of the site's frontage, which will further prevent left turns from the emergency entrance to the south.
- A 10-foot wide shared-use path is also proposed along the site's frontage on Richmond Highway, as recommended by the Bicycle and Pedestrian Plan. As the proposed data center will be a secure facility, no external bike or pedestrian connections are proposed.
- Staff notes that construction of the shared-use path and all transportation improvements as depicted on the GDP are being proffered by the applicant.

Buffering, Screening, Landscaping and Open Space:

- Data centers require a vegetated buffer of at least 200 feet along all property lines abutting or across public right-of-way from residential uses or undeveloped properties zoned for residential use. Where adjacent to abutting commercial/retail uses, a 50-foot landscaped/vegetated buffer is required, in accordance with the Stafford County Design and Construction Standards Manual for Landscaping, Screening, and Buffering (DCSL).

  Full width vegetated buffers are proposed along most of the site's perimeter where adjacent to both residential and commercial uses. Tree preservation areas are also proposed which meet or exceed buffer requirements in most locations. Such tree preservation areas are being proffered by the applicant, as depicted on the GDP.

  However, clearing existing trees within the identified tree preservations areas is not prohibited, including the installation of necessary perpendicular utility crossings for private and public utilities, retaining walls, and related easements across, under, and above the tree preservation areas.

Where tree preservation is not practical, the applicant is also proffering to replant at a rate of 2,113 plant units per acre, with a specific mix of deciduous and evergreen trees, and shrubs or grasses.

Where full width buffers are not proposed, the applicant has requested a modification to minimum buffer requirements, to reduce vegetated buffers as follows, and as permitted by Sec. 28-39(q)(3) of the Zoning Ordinance:

- Emergency Access Road
  - Reduced to a variable width of approximately 40 feet from abutting residential and A-2 zoned properties, for roadways and drive aisles, as generally depicted on the GDP.
- Interstate 95
  - Reduced to 60 feet along Interstate 95, across from A-1 zoned properties to the west.

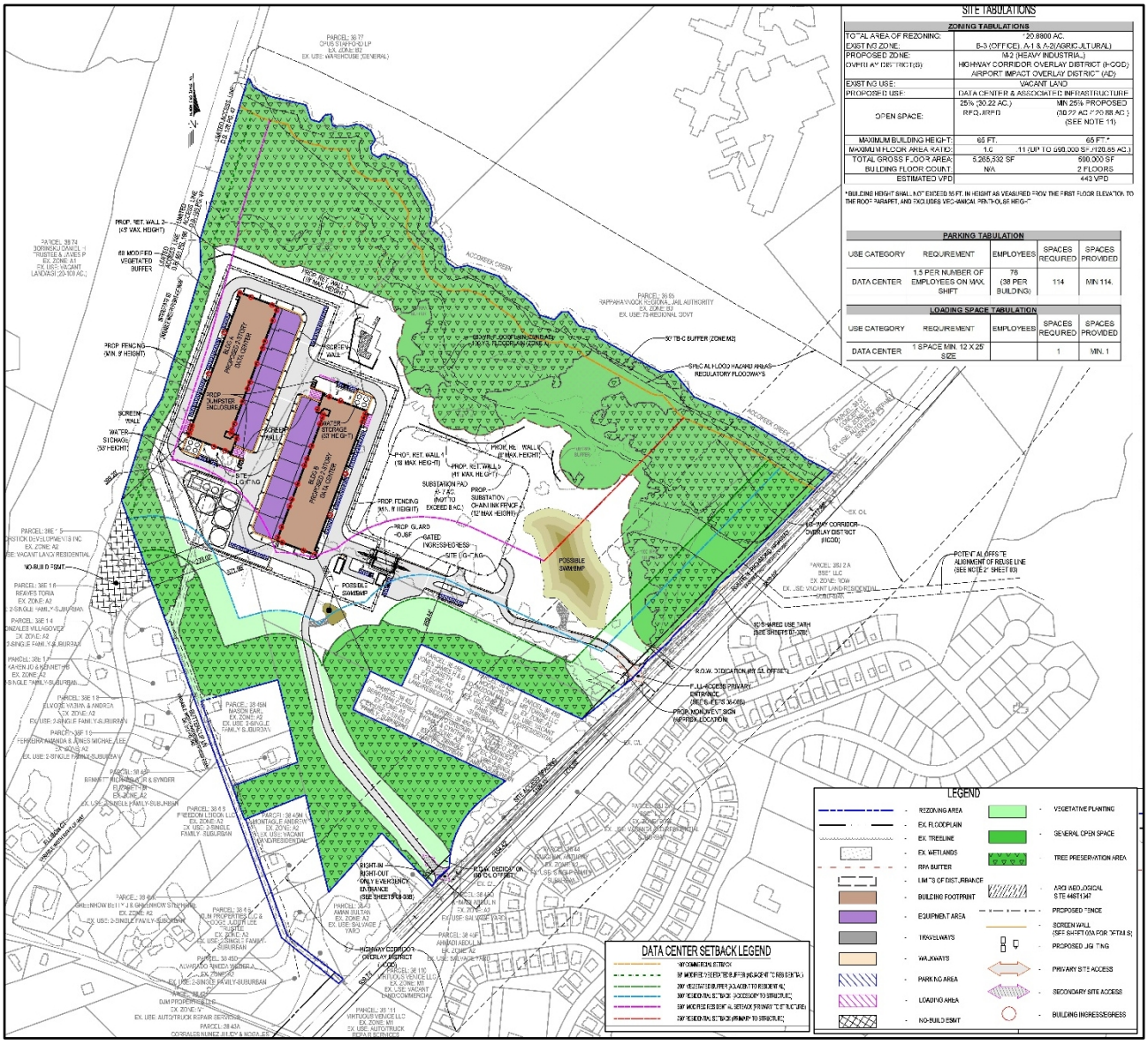
The requested modification of required buffers associated with development of a data center is noted on Sheet 3 of the GDP. Such modifications are detailed further in the applicant's letter of Request for Modification of Code Requirements (Attachment 7), and all buffers and planting areas are shown on Sheet 4 of the GDP.

The Visual Impact Assessment (Attachment 9) provides visual renderings of the vegetative screening provided by the proposed buffers and tree preservation areas as seen from abutting residences to the south, east and west.

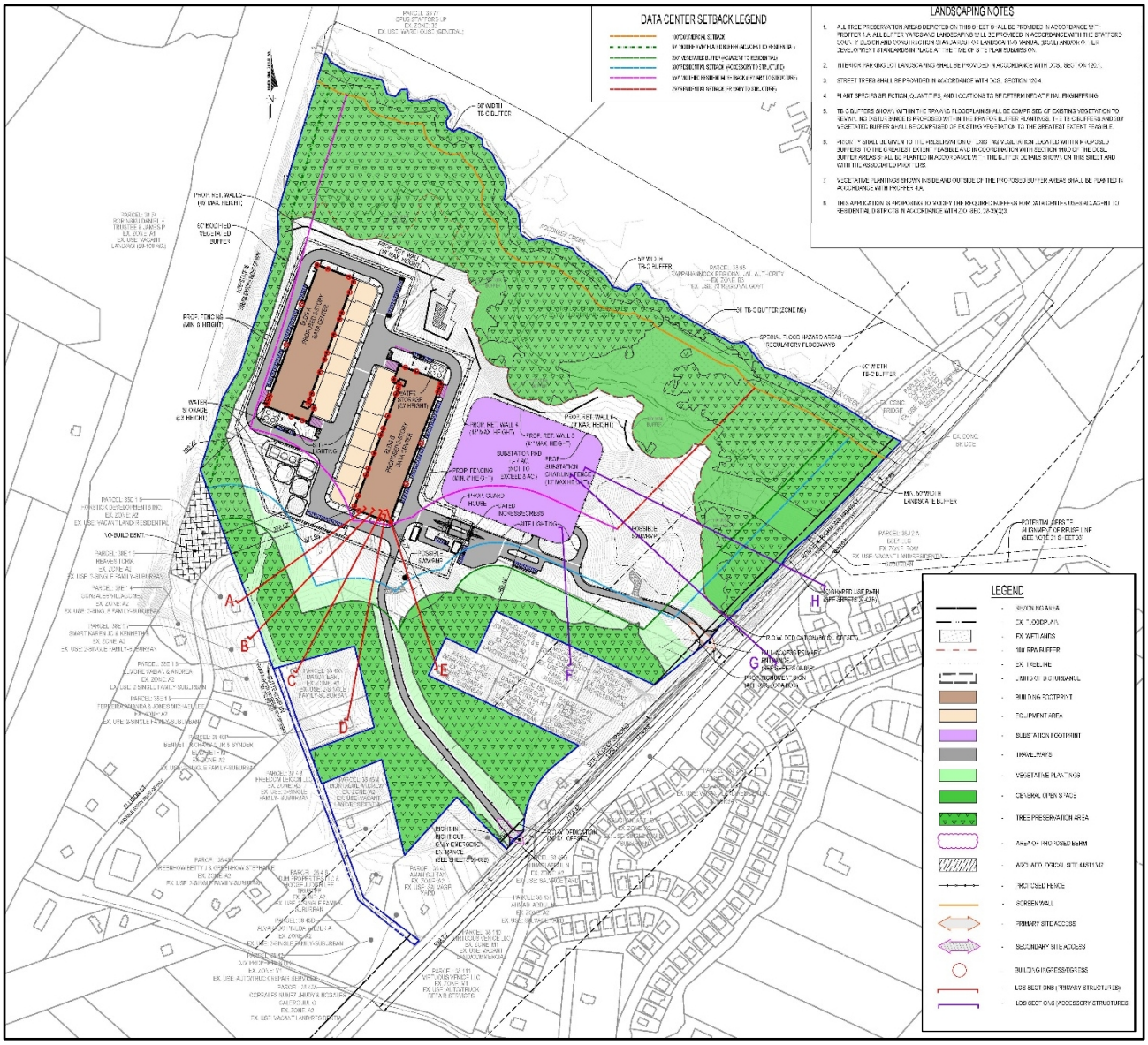
- The M-2 District requires a minimum of 25% open space, and a proposed proffer commits to providing a minimum of 40% open space for the overall Property.
- Staff notes that screening of mechanical equipment and substations is required per Sec. 28-39(q)(5)a., which must be demonstrated at the time of zoning reclassification and site plan.

Utilities:

- The site is located entirely inside the Urban Services Area (USA) and water and sewer service is located along the site's frontage along Richmond Highway.
- An electric substation is proposed within the center of the site and will be located approximately 369 feet from the southern property line and closest residential uses.
- The site is within proximity of an existing electric transmission corridor, which is approximately ½ of a mile to the east. The GDP does not depict the potential alignment of overhead power lines, as such alignment is not within the applicant's control. Staff also notes that Dominion Energy has not yet filed for or obtained a Certificate of Public Convenience and Necessity (CPCN) for this transmission line or the substation location.
- Dominion Energy is currently evaluating the availability and extension of existing utility infrastructure to the Property. As such, the applicant is unable to provide at this time the necessary documentation regarding availability or timing of the anticipated power load necessary to support a data center campus in this location.



Generalized Development Plan (GDP)



Generalized Development Plan (GDP) – Landscape Plan

Proposed Proffers (Attachment 5)
The proposed proffers would:

Use and Development

- Require the Property to be developed in general conformance with the generalized development plan;
- Limit development to only a data center, public utility/facility (with applicable CUP), and related accessory uses;
- Limit data center building development to no more than 590,000 square feet;
- Require a minimum of 40% open space on the Property;

Screening, Buffering and Landscaping

- Permit reduced vegetated buffers as depicted on the GDP;

- Establish tree preservation areas as depicted on the GDP, with specific replanting requirements, should the areas be disturbed;
- Permit perpendicular utility crossings for public and private utilities within tree preservation areas, to be replanted in an alternate location on the site;
- Require vegetated buffers to be replanted at a rate of 2,113 plant units per acre with a minimum of 30% large evergreen, 30% understory evergreen, 15% large deciduous, and 10% understory deciduous trees, and a maximum of 15% shrubs and/or grasses, as necessary;

Setbacks and Site Design

- Establish architectural design standards for data center buildings, including the use of specific building materials and colors (refer to Architectural Design section below);
- Limit building height to a maximum of 65 feet;
- Permit reduced setbacks for primary structures and accessory structures/uses as depicted on the GDP

Utilities

- Prohibit the use of groundwater for data center operations;
- Construct planned utility infrastructure along the frontage of the Property, consistent with County Master Utility Plan;
- Require utilization of reuse water as sole primary water source for all cooling water demands;
- Establish requirements for the provision of water and sewer facilities for adjacent properties in certain situations;
- Prohibit the use of public or private potable water for industrial cooling;
- Provide written verification from the electric utility provider regarding the timeline and commencement date to provide power to the site;

Noise, Fire and Rescue

- Require physical sound attenuation measures such as retaining walls, landscaped buffers, and mechanical screening and enclosures, as depicted on the GDP;
- Require an AED within each data center building;
- Require all generators on the Property to be greater than or equivalent to Tier 4 generators standards;

Transportation

- Restrict site entrances, with location and design as depicted on the GDP;
- Limit maximum vehicular trip generation to no more than 443 daily trips;
- Require the following transportation improvements:
    - Construct a 10-foot wide shared-use path along Richmond Highway (US-1) frontage;
    - Construct a northbound left-turn lane, including a raised concrete median along Richmond Highway at the site's primary entrance;
    - Construct a southbound right-turn lane along Richmond Highway at the site's primary entrance;

    All such improvements will be provided as depicted on the GDP and as permitted by VDOT;

- Dedication additional right-of-way along Richmond Highway, up to 80-feet from centerline;

Construction

- Repair roadway damage associated with construction of the project;
- Require approval of an Emergency Action Plan prior to issuance of a certificate of occupancy for the first building;

Monetary Contributions

- Require multiple one-time monetary contributions towards various projects identified within the County's Capital Improvement Plan as follows:
    - $50,000 towards transportation related projects within the immediate area;
    - $1,500,000 towards renovation of the County Courthouse;
    - $1,250,000 towards technology infrastructure needs;
    - $1,650,000 towards completion of the Belmont/Ferry Farm Bike Trail;
    - $1,500,000 towards construction of a new fire and rescue station; and
    - $500,000 towards continued operations of the Central Rappahannock Regional Library.

STAFF ANALYSIS – NOISE, LIGHTING AND OTHER FACTORS

Noise Impacts

Data centers include the potential for creating noise impacts from various equipment associated with such uses. Such facilities require consistent climate control which is handled with cooling systems that operate more frequently, especially during warmer months. As such, data center operations can generate consistent low-frequency noise sound that can be audible from adjacent properties. In addition, backup generators are also a standard and necessary component to ensure consistent power to the building. Generator use is not intended as the primary source of power and will only operate during power outages and for periodic testing. While generator use during power outages is exempt from maximum allowable noise levels associated with data centers, as permitted under Sec 28-39(q)(8)(c) of the zoning ordinance, staff notes that the operation of the full bank of generators during such events could have a temporary negative impact on the adjacent residential uses.

Section 28-39(q)(8) of the Zoning Ordinance regulates noise associated with data centers, and limits such uses to a maximum decibel level of 55 dB(A). Sections 28-39(5) and (8) also require all mechanical equipment areas to be screened from view of abutting parcels and public right-of-way, include sound mitigation measures, and require post development noise to be evaluated annually for a period of 10 years.

In accordance with Section 28-39(q)(9)(b) of the Zoning Ordinance, a pre-development sound study was provided as part of the zoning reclassification application (Attachment 10). As required, the study evaluated pre-development ambient noise conditions at the site, as well as model-predicted noise conditions, based on the layout depicted on the GDP. Due to the site's location between Interstate 95 and Richmond Highway (US-1), the study indicated that existing ambient noise conditions range between 53-60 dB(A) during the day, and 52-61 dB(A) at night. In general, the existing sound environment is dominated by traffic noise from Interstate 95 and Richmond Highway.

Currently, maximum permissible sound levels associated with operation of any data center facility are limited to 55 dB(A) and 52 dB(A) where a prominent discrete tone is present, as measured at the boundary of the site. The study is based on facility operations at full cooling load and generator maintenance for a single generator at each building, as modeled at 13 receptor locations around and beyond the boundary of the site. As shown, the results of the study suggest that noise levels will not exceed 48 dB(A) at the closest property line, 44 dB(A) at the closest residential structures, or 37 dB(A) at the farthest residential structures.

To further mitigate potential sound impacts, proposed proffers commit to providing specific sound attenuation measures such as retaining walls, landscaped buffers, and mechanical screening enclosures as depicted on the GDP.
***Staff notes the analysis at this stage relies on assumptions known at this time, and the actual noise impacts and appropriate mitigation measures for the project are not fully known.**

Lighting Impacts

No significant impacts are noted or anticipated and proposed site lighting would be installed in compliance with Section 28-87 and 28-39(q)(6) of the Zoning Ordinance, for Outdoor lighting standards and Special Regulations - Special provisions applicable to data centers. The maximum allowable height permitted for both pole and building mounted fixtures is 30 feet, and limits maximum lighting levels to no more than 15 footcandles.

Economic Development

A fiscal impact analysis was provided with the application (Attachment 12), which projects a peak combined annual tax revenue (real estate and personal property) of approximately $15,500,000 in 2029, which would decrease and stabilize at approximately $13,500,000 in 2035. The project is also expected to generate additional employment opportunities, with 64 new jobs at full build-out.

STAFF ANALYSIS – PUBLIC FACILITIES AND SERVICES

Transportation

The Property abuts Richmond Highway (US-1) to the east, Interstate 95 to the west, and Buttercup Lane to the south. The following is a summary of the adjacent street characteristics, including facility type, posted speed limit, and VDOT Annual Average Daily Traffic Volume Estimates for 2024.

Street	**Facility Type**	**Posted Speed Limit (MPH)**	**Traffic Volumes**
Richmond Highway (US-1)	4-lane undivided	50	17,000
Interstate 95	6-lane divided	65	70,000
Buttercup Lane	Private / Gravel	N/A	No Data

A Transportation Impact Analysis (TIA) was not required with this application, as estimated trip generation is below the threshold of 1,000 vehicle trips per day (VPD) to warrant a TIA. However, a TIA was conducted voluntarily and evaluated the overall impacts to the transportation network

(Attachment 11). The TIA was based on a total of 590,000 square feet for data center uses, which would generate approximately 443 VPD.

The study found that the project would not have a substantial impact or degrade the Level of Service (LOS) of the surrounding transportation network. The need for turn-lanes at the primary site entrance was also evaluated, and the study found that both right and left-turn lanes are warranted.

The required turn lanes are depicted on the GDP, and include a northbound left-turn lane, and a southbound right-turn, including a raised concrete median which is necessary to accommodate the required lane shift/transition. The turn lane improvements have been proffered by the applicant, including a proffer to limit total development to a maximum of 590,000 square feet of data center buildings, and a maximum of 443 VPD.

VDOT concurred with the findings in the TIA and found the proposed turn-lane improvements to be generally acceptable.

Utilities

The Property is located with the Urban Services Area and will be required to be served by the water and sewer system. Existing water and sewer lines are readily located along Richmond Highway. An 8-inch sanitary sewer line is located on the east side of Richmond Highway, along the northern portion of the site's frontage, and a 12-inch water line is located on the west side, along the full length of the site's frontage. The developer would be responsible for any necessary utility connections and upgrades to serve the proposed development and would need to ensure that the existing water and sewer systems have adequate capacity.

To limit impacts to potable water resources, the Applicant is proposing to connect to the future Reuse Water System to meeting the facility's cooling needs. Proposed proffers commit to the use of reuse water as the sole water source for all industrial cooling needs, and also prohibit the use of any potable water, public or private. In the event the Reuse Water System is unavailable or does not have adequate capacity to serve the facility, the Applicant has also proffered the use of alternative industrial cooling methods such as air-based cooling. Under no circumstances will the facility utilize potable water for industrial cooling purposes.

Schools

The rezoning would reduce the potential impact on the County School System as the proposed reclassification would reduce potential future residential units and school children under the existing A-1 zoning district.

Parks & Recreation

There would be a potential reduction in impacts on the County Park system as the proposed reclassification would reduce potential future residential units under the existing A-1 zoning district.

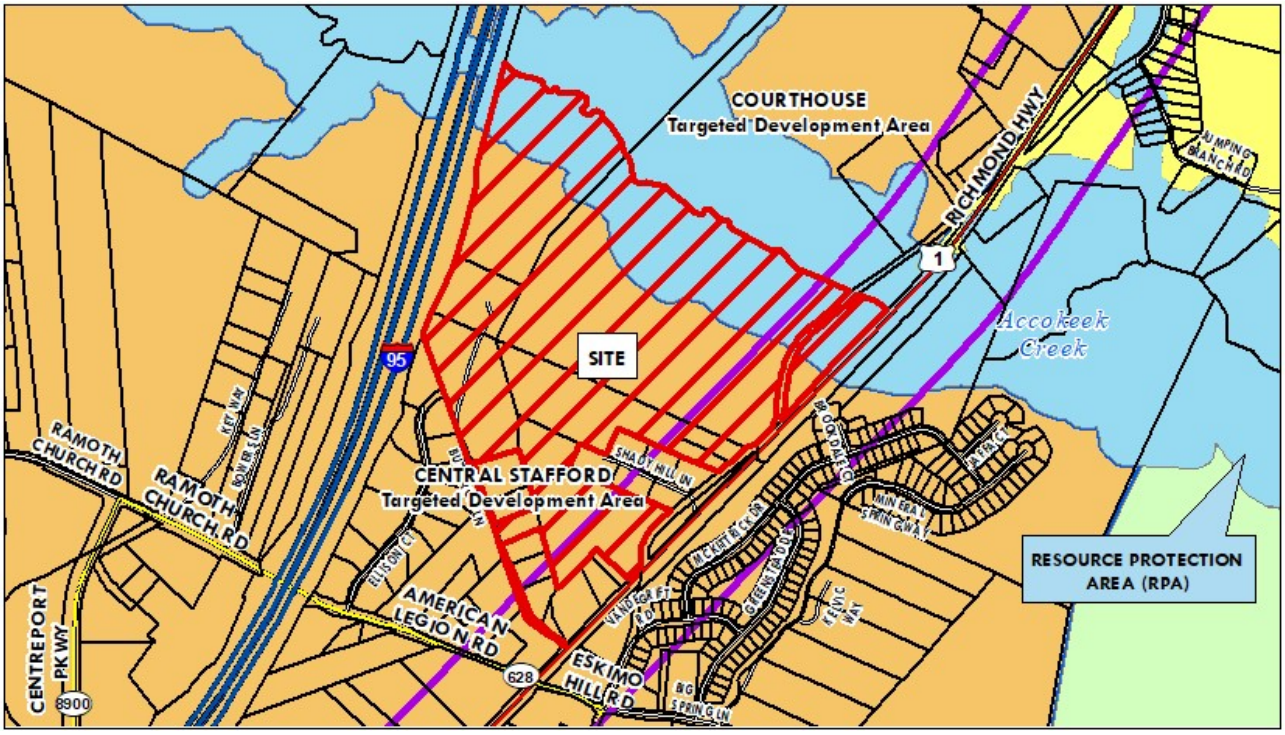
Fire and Rescue

The Property is within the first response area of the Stafford Volunteer Fire Station (No. 2), which is located approximately 2 miles from the Property on Jason Mooney Drive. The County's Fire and Rescue level of service should not be adversely impacted by the proposed reclassification from A-1 to B-2 and M-2 zoning. The applicant addressed all comments provided by Fire and Rescue during the application review.

STAFF ANALYSIS – COMPREHENSIVE PLAN EVALUATION

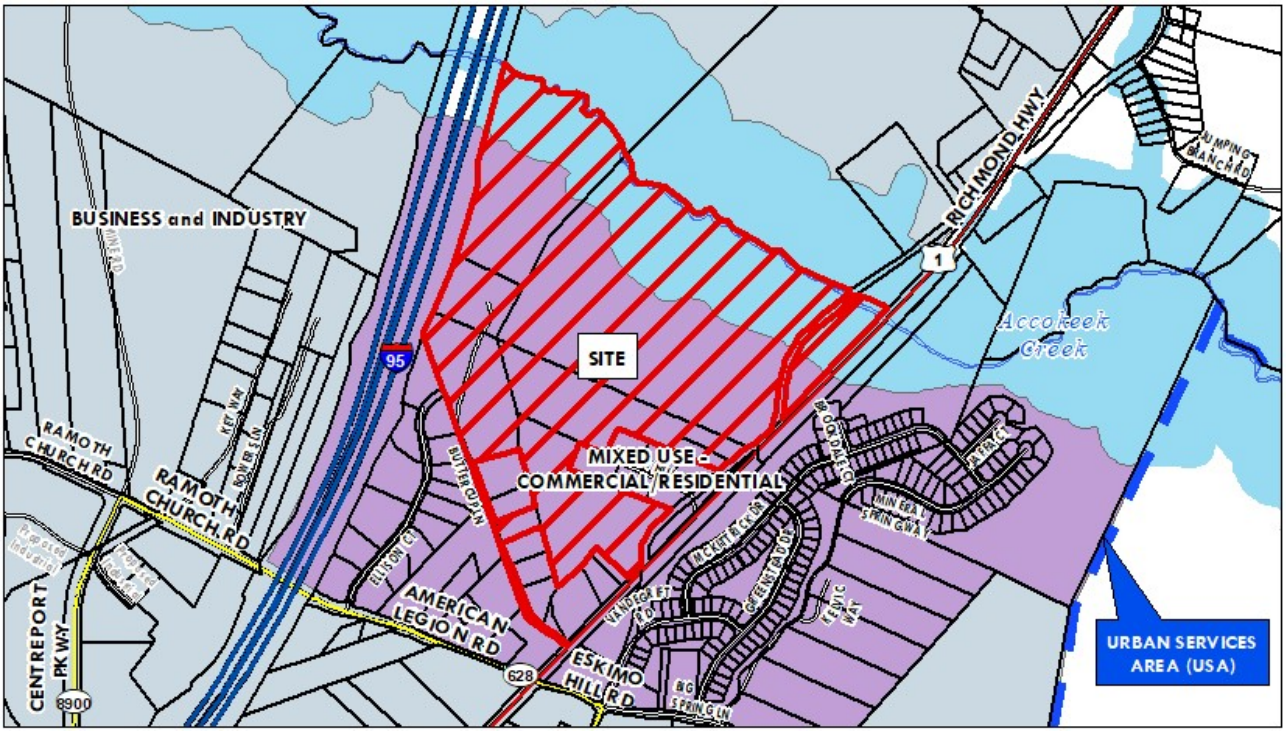
General Land Use Recommendations

The Future Land Use Plan within the Comprehensive Plan identifies the Property within the Central Stafford Targeted Development Area (TDA). Targeted Development Areas (TDAs) are areas of the County where a significant amount of development or redevelopment is expected to occur. More specifically, TDAs emphasize where development will be targeted, and may include a mix of development such as residential, mixed-use, commercial, and industrial. Designated TDA areas are where concentrated urban or higher density suburban development is most appropriate.



Future Land Use Map – Courthouse TDA

The more detailed Land Use Concept for the Central Stafford TDA designates this Property for Mixed Use – Commercial/Residential. The Comprehensive Plan establishes a goal of accommodating 50% of projected population growth within TDAs, and further recommends a total of 1,750 residential dwelling units and approximately 12.1 million square feet of commercial development in the Central Stafford TDA. The Mixed Use – Commercial/Residential land use designation recommends a mix of these uses within these areas.



Central Stafford TDA – Future Land Use Concept

Staff finds that the overall proposal is consistent with multiple Comprehensive Plan Objectives, including:

Objective 1.2. – to ensure that land use policies are consistent with attracting and retaining high-quality employment options for Stafford residents.

Objective 2.3. – which encourages consideration of infill development within the USA and TDAs for vacant, bypassed, and underutilized land where infrastructure is already in place.

Objective 5.5 – which recommends minimizing visual impacts and environmental hazards associated with electrical generation transmission and distribution facilities.

Environmental Resources

Site topography consists of rolling terrain throughout much of the property and slopes significantly to the north, with an elevation range of more than 100 feet from the highest and lowest points throughout the site. The Property borders Accokeek Creek and a Critical Resource Protection Area (CRPA), as well as 100 and 500-year floodplains encumber a large area within the northern portion of the site. The entire site drains to the to the north, towards Accokeek Creek.

The southern half of the Property is densely forested consisting almost entirely of old growth deciduous trees and very few coniferous trees. The northern half of the site was timbered between 2019 and 2021, and the area has substantial regrowth of young tree saplings. A large tree preservation area is proposed in the northern portion of the site, within the identified CRPA. Additional tree preservation areas are also proposed in the western and southern portions of the site, adjacent to Interstate 95 and between residential uses along Shady Hill Lane and Buttercup Lane. However, staff

notes that proposed tree preservation areas could be impacted by necessary utility connections, including electric transmission lines.

Cultural/Historical Resources

The Property contains an archeological resource in the northwest portion of the site: 44ST1347, which is registered with the Virginia State Historic Preservation Office. A Phase IA Archeological Survey of the site was conducted and found to contain pre-contact lithic debitage and historic period artifacts. The Phase IA study recommended avoidance of the site or a Phase II archeological evaluation of the site.

The development plan generally avoids development of the archeological resource site and within the CRPA. Cultural Resources staff have reviewed this application and have not expressed any concerns.

Data Center Recommendations

Section 3.11 of the Comprehensive Plan includes specific recommendations for data centers. The following summarizes the recommendations in sections and identifies the project's level of compatibility with the recommendations.

- Location and Siting
    - Location within the Urban Services Area *(**Consistent** – site is located within the Urban Services Area)*
    - Location within 0.5 mile of an existing electric transmission corridor *(**Consistent** - site is approximately 0.5 mile from existing transmission corridor to the east)*
- Site Design
    - Increased setbacks adjacent to existing residential uses *(**Partially Consistent** – required setbacks associated with development of data centers significantly exceeds those required for other uses in the M-2 zoning district; primary building setback exceeds 750 feet along Richmond Highway; minor reductions for primary structure and accessory structure/use setbacks are proposed in some locations where adjacent to residential uses)*
    - Direct noise generating features away from sensitive uses *(**Consistent** - generator yards are generally oriented away from residential uses; generator yards will utilize screening walls; generators will utilize acoustical enclosures; buildings will sit at a lower elevation than adjacent residential uses due to site topography)*
    - Reduce building heights near residential uses *(**Partially Consistent** – reduced building heights not proposed; buildings will sit at a lower elevation due to site topography)*
- Sound/Noise
    - Minimize operational noise near sensitive uses (***Consistent*** *– all mechanical equipment areas will be screened with the use of screening walls, and parapet walls associated with the building design; emergency generators will utilize acoustical enclosures; pre-development noise propagation study completed, as required by the Zoning Ordinance*)

- Back-up Generators
    - Minimize noise and air pollution *(**Consistent** – limitations for generator testing times is required by the Zoning Ordinance; generators will utilize acoustical enclosures and exhaust stack shrouds)*
    - Use of Tier IV generators and on-site air quality monitoring devices *(**Consistent** – use of Tier 4 generators proposed, as proffered)*
- Visual Impacts
    - Location on sites with established/preserved vegetive and forested buffers with depth and density to effectively screen the facility *(**Consistent** – existing mature trees and on-site vegetation will be retained for much of the site; reduced vegetated buffers are proposed in some locations, but line of sight exhibits and the visual impact assessment suggest that proposed buffers and retained vegetation will provide adequate visual screening year-round)*
    - Viewshed analysis should be submitted for development adjacent to non-industrial and non-commercial properties *(**Consistent** - viewshed exhibits provided for all buffers adjacent to existing residential uses as required by the Zoning Ordinance; line of sight exhibits and the visual impact assessment suggest that proposed buffer widths and retained vegetation will provide adequate visual screening year-round)*
- Building Design
    - Building façade visible from adjacent properties should be consistent in terms of design, materials, details, and treatment, and should incorporate various recommended design elements *(**Consistent** – proposed building design incorporates multiple design elements that promote visual interest, variation in primary and accent martials and colors, as proffered)*
- Security
    - Security fencing recommended to be 8 feet in height, and consistent with quality design such as "Ameristar Palisade" *(**Consistent** – site will be secured with an 8-foot tall security fence, as required by the Zoning Ordinance, and consistent with "Ameristar Palisade", as proffered)*
- Land Conservation
    - Avoid sites with active agriculture, high levels of biodiversity, threatened and endangered species habitat, and large tracts of mature forests *(**Not Consistent** – site is located on property with large area of mature forest)*
    - Preservation of existing mature trees to maximum extent practical *(**Partially Consistent** – existing mature trees and on-site vegetation will be retained for much of the site; proposed tree preservation areas could be impacted by utilities including electric transmission lines)*
    - Avoid locations near or within viewshed of residential developments, cultural/historic resources, and/or public drinking water sources *(**Partially Consistent** – site location is adjacent to existing residential development, but line of sight exhibits and the visual impact assessment suggest that proposed buffers and retained vegetation will provide adequate visual screening year-round)*
    - Evaluate impacts to nearby wells and assist with connection to public water network should unforeseen impacts to neighboring wells arise *(**Consistent** – proffers include*

evaluation of nearby impacted wells and drainfields on adjacent residential properties and connection to public water/sewer)

- Facility Cooling
    - Encourage use of innovative, low-impact alternatives to public water-based cooling systems; Use of re-use for water-based cooling methods; Evaluate water demands and adequate capacity of public water/sewer systems; Utilize on-site water storage; Develop a water management plan for use of potable water, and; And address improvements to public sewer system as needed to serve the facility *(**Consistent** – industrial cooling approach identifies use of low-impact alternatives to potable water-based cooling including air cooled methods and use of reuse water (purple pipe) based on available capacity, as proffered)*
- Electricity Demand
    - Ensure electrical grid can support power demands without impacting the surrounding community; Provide documentation from electric service provider that confirms capacity and timing of electrical service required to serve the development; Encourage energy efficient buildings or campus design, and; Encourage underground placement of new private power transmission lines *(**Partially Consistent** – required "load letter" from the electric service provider has not been provided by the applicant; necessary power demand of 122 MW has been provided by the applicant, as identified on an Engineering Study Letter of Authorization, but timing of service connection is unknown; electric service provider has recently changed their queueing process for high energy use facilities (HEUF) to submit projects to the State Corporation Commission (SCC) in batches, which may affect applicants' ability to provide the necessary information at this stage)*
    - Encourage energy efficient building and campus design such as LEED Certification *(**Partially consistent** - proffers include limited solar options, without confirmation of where or how many solar panels would be provided.)*
- Public Safety
    - Develop an emergency management action plan; Provide NFPA 14 standpipe system for any multi-story buildings; Provide NFPA13 sprinkler system for any data center building, and; Implement other public safety needs identified *(**Partially Consistent** – emergency management action plan will be developed, as required by the Zoning Ordinance; other public safety recommendations have not been addressed)*
- Construction Mitigation
    - Mitigate roadway damage resulting from construction of the project; Repair roadway damage attributable to the project within a reasonable timeframe, and Repair roadway damaged deemed unsafe immediately *(**Consistent** – roadway damage attributed to the development of the project will be repaired promptly, and repair of damage deemed unsafe will be initiated within 48 hours, as proffered)*

Bicycle and Pedestrian Facilities

The Bicycle and Pedestrian Facilities Plan element of the Comprehensive Plan recommends a shared use path along Richmond Highway in this area. Proposed proffers commit to construction of a 10-foot wide shared-use path along the west side of Richmond Highway.

Airport Land Use Compatibility

The Future Land Use chapter of the Comprehensive Plan recognizes land use compatibility in the operational areas around Stafford Regional Airport. The Plan establishes an overlay and recommends what uses are compatible, not compatible, or need additional review. The site is within the Airport Impact Overlay, specifically the H-1, Horizontal Zone (Inside Flight Zone), and the H-2, Horizontal Zone (Outside Flight Zone). Data Centers are not specifically defined in the compatibility table but may be most similar to Light industrial / manufacturing, and storage warehouse uses. Such uses are identified as needing *Additional Review* within the H-1 Zone and would need to comply with additional development standards.

The Airport Authority has been notified of the proposed development and has not expressed any concerns.

Architectural Design

Building elevations were provided as part of the GDP and represent the conceptual design of the proposed buildings. The elevations depict variation in architectural treatment such as the use of subtle and contrasting colors, changes in building height, projections along the façade, and the use of multiple building materials and accent features. While the building elevations have not been proffered by the applicant, proposed proffers require the use of multiple building design elements, variation of materials and colors, and limitations on percentage of a single material.

Staff notes that the proposed building design elements and proffers for data center buildings are consistent with the Comprehensive Plan recommendations for data centers.

ZONING ORDINANCE EVALUATION CRITERIA

County Code Sec. 28-206 lists 12 criteria to be considered at each public hearing for reclassification. A summary of each criteria is as follows:

1. Compliance of the request with the stated requirements of the district or districts involved – *The request is in compliance with the stated requirements of the M-2 Zoning Districts, meeting open space, setbacks, building height, and other design requirements. However, staff notes that the request is not fully consistent with the special regulations established for data center uses, due to reduced setbacks, and vegetated buffers.*

2. The existing use and character of the property and the surrounding property – *Most of the Property is currently undeveloped and densely wooded, with exception to two (2) single-family dwellings located at the existing terminus of Buttercup Lane and along Richmond Highway. Wetlands and a large Critical Resource Protection Area (CRPA) are located in the northern portion of the Property, and Accokeek Creek borders the site to the north. The Property abuts several existing residential uses to the south along Ellison Court, Buttercup Lane, and Shady Hill Lane, including some undeveloped Rural Residential zoned properties. Additional residential uses are located to the east, along and across Richmond Highway, including a large residential subdivision currently under development with approximately 175 homes. The Rappahannock Regional Jail, a warehouse distribution facility, and an existing motor vehicle sales use are located to the north, and undeveloped Agricultural and Rural Residential land to*

west, across Interstate 95. Development within the surrounding area includes a variety of residential, industrial, commercial, and institutional uses, including active development of two (2) data center campuses.

3. The suitability of the property for various uses – *The size and location of the Property along the Richmond Highway corridor make it suitable for a variety of uses. Environmental constraints prevent development within the northern portion of the site, and varied, steep topography may make small-scale developments on the property cost prohibitive and/or impractical.*

4. The trend of growth and development in the surrounding area – *The development trend along this portion of the Richmond Highway includes a mix of residential, industrial, commercial, and institutional uses, with most development immediately abutting the site being residential in nature. Commercial and institutional uses exist to the north, and several small light industrial and commercial uses are located just south of the site, at the intersection of Richmond Highway and Ramoth Church Road/Eskimo Hill Road. However, staff acknowledges that there is an emerging development trend with data center campuses located further south (STC campus is approximately ½ mile to the south) along Richmond Highway, which includes one approved data center project, and several additional projects to the south and west with pending Zoning Reclassification applications.*

5. The current and future requirements of the County for land – *The Comprehensive Plan identifies Richmond Highway as a planned 6-lane upgrade, which will require a total right-of-way width of 160 feet. The applicant is proffering to dedicate additional right-of-way along Richmond Highway to accommodate this planned improvement.*

6. The transportation requirements of the project and the County, and the impact of the proposed land-use on the County's transportation network – *The TIA determined that the project would have no significant impact to the transportation network and would not degrade levels of service in accordance with Comprehensive Plan policies. The applicant is proffering to dedicate additional right-of-way along Richmond Highway to accommodate planned widening in this area, as well as construction of required turn lanes to serve the project.*

7. Requirements for schools, parks, recreational lands and facilities, and other public services, potentially generated by the proposed classification – *There are no impacts to schools or parks anticipated with this development, and would reduce the potential demand on schools, parks, and other facilities as the potential for residential development would be negated. The proposed data center includes no impacts to potable water supplies for industrial cooling purposes and would require connection to the planned Reuse Water System. The Applicant is also proffering monetary contributions towards public safety, and other various public facility needs as identified in the Capital Improvement Plan.*

8. The conservation of property values in the surrounding area – *Staff does not anticipate any impacts to abutting residential property values, although potential impacts to property values are unknown at this time. The required pre-development sound study has been provided as required and suggests that noise levels associated with data center operations will be less than existing ambient noise levels. Additional studies would be required at site plan that would clarify any necessary mitigation. Staff also notes that line of sight exhibits and the visual impact*

assessment suggest that proposed setbacks, vegetated buffers, and preservation of existing mature trees will provide adequate visual screening year-round.

9. The preservation of natural resources and the impact of the proposed uses on the natural environment – *The site is wooded, and the development plan identifies that the Critical Resource Protection Areas (CRPA) along Accokeek Creek will be preserved. Additional tree preservation areas outside the CRPA are also proposed along the site's perimeter where adjacent to the closest residential uses. Existing mature trees and on-site vegetation will be retained for much of the site; however, proposed tree preservation areas could be impacted by utilities including electric transmission lines.*

10. The most appropriate use of land – *The Land Use Plan recommends this area for mixed use development, including commercial and residential uses in the Central Stafford Targeted Development Area (TDA). The proposed data center is not consistent with this recommendation and would be most appropriate in an area designated for Business and Industry. However, the data center use may be appropriate based on the reduced impacts to public services and facilities, the site's location adjacent to major transportation corridors, and proximity to other data center campuses and industrial development.*

11. The timing of the development of utilities and public facilities, and the overall public costs of the development – *Road infrastructure is present adjacent to the Property, and the existing transportation network is able to support the proposed development in conjunction with additional proffered improvements. As noted, water and sewer lines currently exist along Richmond Highway, and the applicant will be required to install any utility connections or upgrades at their expense. The applicant will be responsible for connection to the planned Reuse Water System, although timing of completion of the System is unknown.*

12. The consistency, or lack thereof, of the proposed rezoning with the Stafford County Comprehensive Plan as in effect at that time – *The proposed data center is not consistent with the current land use recommendations within the Central Stafford TDA. However, the use does conform to most of the guidelines specific to data centers as they relate to site location and design, screening and buffering associated with noise and visual impacts, and land conservation. Staff further notes the proposed use would also minimize transportation impacts, including impacts to public services and facilities associated with by-right development .*

SUMMARY OF POSITIVE AND NEGATIVE FEATURES

Positive

1. The proposal is consistent with most of the Comprehensive Plan recommendations specific to data center development.
2. Proffers limit development to only a data center use.
3. Data centers are an appropriate/acceptable use within the Airport Overlay District.
4. Buffers and building setbacks will limit visual impacts to adjacent residential uses.
5. The commitment to preserving a minimum of 40% of the site as open space will help reduce environmental impacts of the development.

6. The proposal is in conformance with Transportation Plan policies, limits maximum permitted trip generation and provides multiple transportation improvements along Richmond Highway.
7. The proffered shared-use path along Richmond Highway will help address needs identified in the Bicycle and Pedestrian Facilities component of the Comprehensive Plan.
8. The proposed architecture is consistent with the Comprehensive Plan guidelines for data center development.
9. The proposal minimizes impacts to public services and facilities otherwise associated with by-right development.
10. The proposal promotes Economic Development goals of bringing high paying jobs to the County and promotes Fiscal Responsibility goals by reducing potential impacts to public services and facilities and increasing tax-based revenue.

Negative

1. The proposed use is not consistent with the land use recommendations in the Comprehensive Plan.
2. Proposed tree preservation areas could be impacted by utility connections, including electric transmission lines.
3. Uncertain how low-frequency noises may impact abutting residential uses due to limited information regarding proposed mitigation measures.
4. Missing adequate details on the height and type of electric substation to evaluate the possible impacts and mitigation measures to adjacent properties.

RECOMMENDATION

Staff finds multiple positive aspects to the proposal and believes that the proposed data center is consistent with many of the recommendations of the Comprehensive Plan. Staff recommends approval of the application (RC24155981).

While the proposed use is not consistent with the future land use recommendations, staff believes that the positive aspects outweigh the negatives, and that the applicant has made a good faith effort to mitigate the potential impacts to surrounding properties to the maximum extent practical.

In contrast, under current zoning designations, the site could be developed with single family homes, as well as office and low-intensity commercial retail as by-right uses. Development of such uses would create significant impacts to the transportation network, including other public facilities and services without the requirement for mitigation measures.