Maps

Hanover County, Virginia

Land Use Map

Legend

- Rural/Agricultural
- Town of Ashland
- Business Flexible
- Parks and Conserved Lands
- Destination Commerce
- Employment Center
- Multi-Family Residential
- Highway Commercial
- Industrial
- Limited Industrial
- Suburban Neighborhood Residential
- Suburban High Residential
- Suburban Center
- Neighborhood Commercial
- Natural Conservation
- Rural Crossroads
- Rural Village
- Suburban Transitional Residential

REZ2025-00023

Marchetti Properties, et al.

Rezone A-1 to M-1

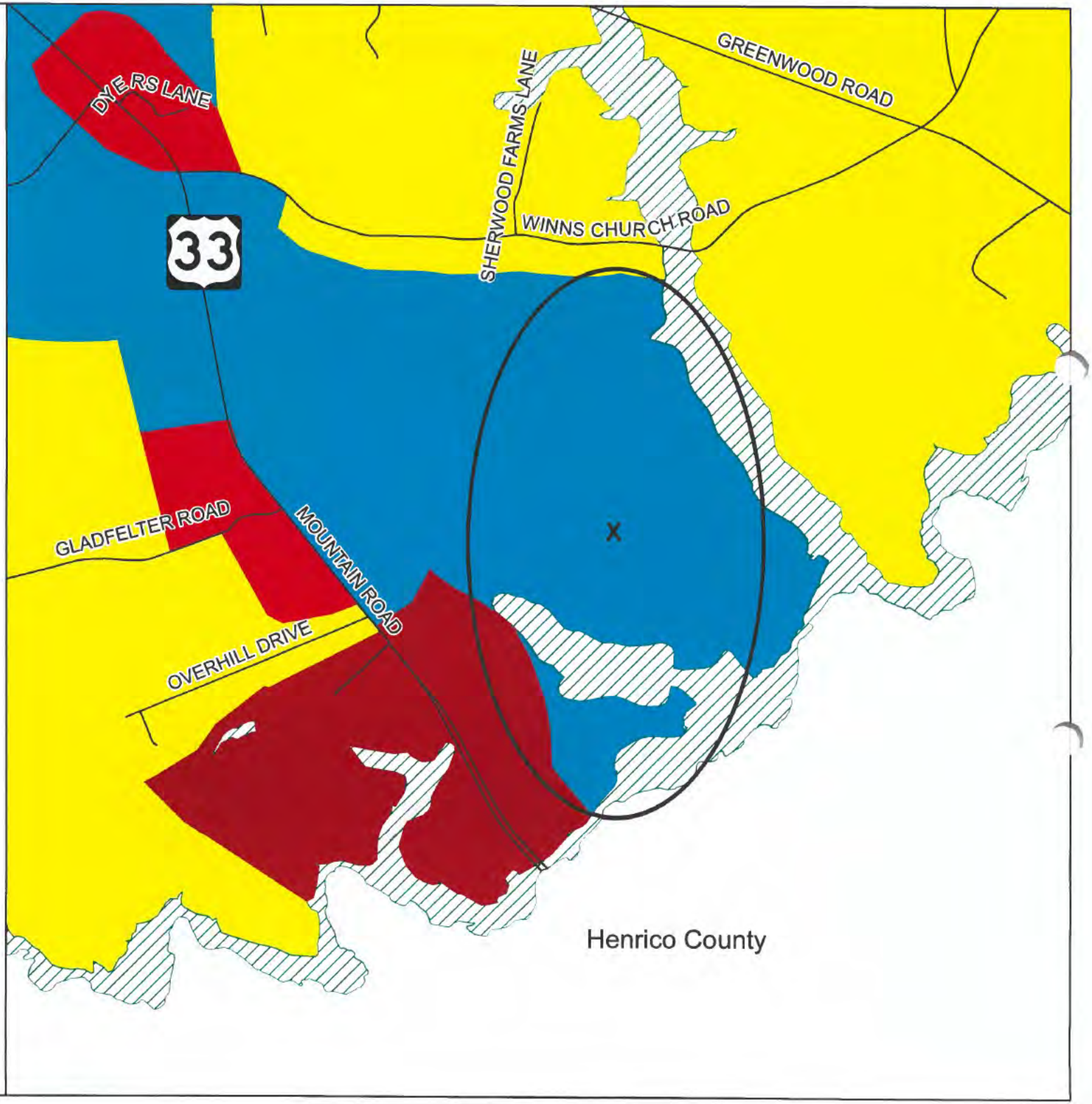
Employment Center, Highway Commercial & Natural Conservation Land Use

GPIN's: 7757-98-4106, et al.
South Anna Magisterial District

N
W E
S

1 inch = 1,500 feet

September 26, 2025

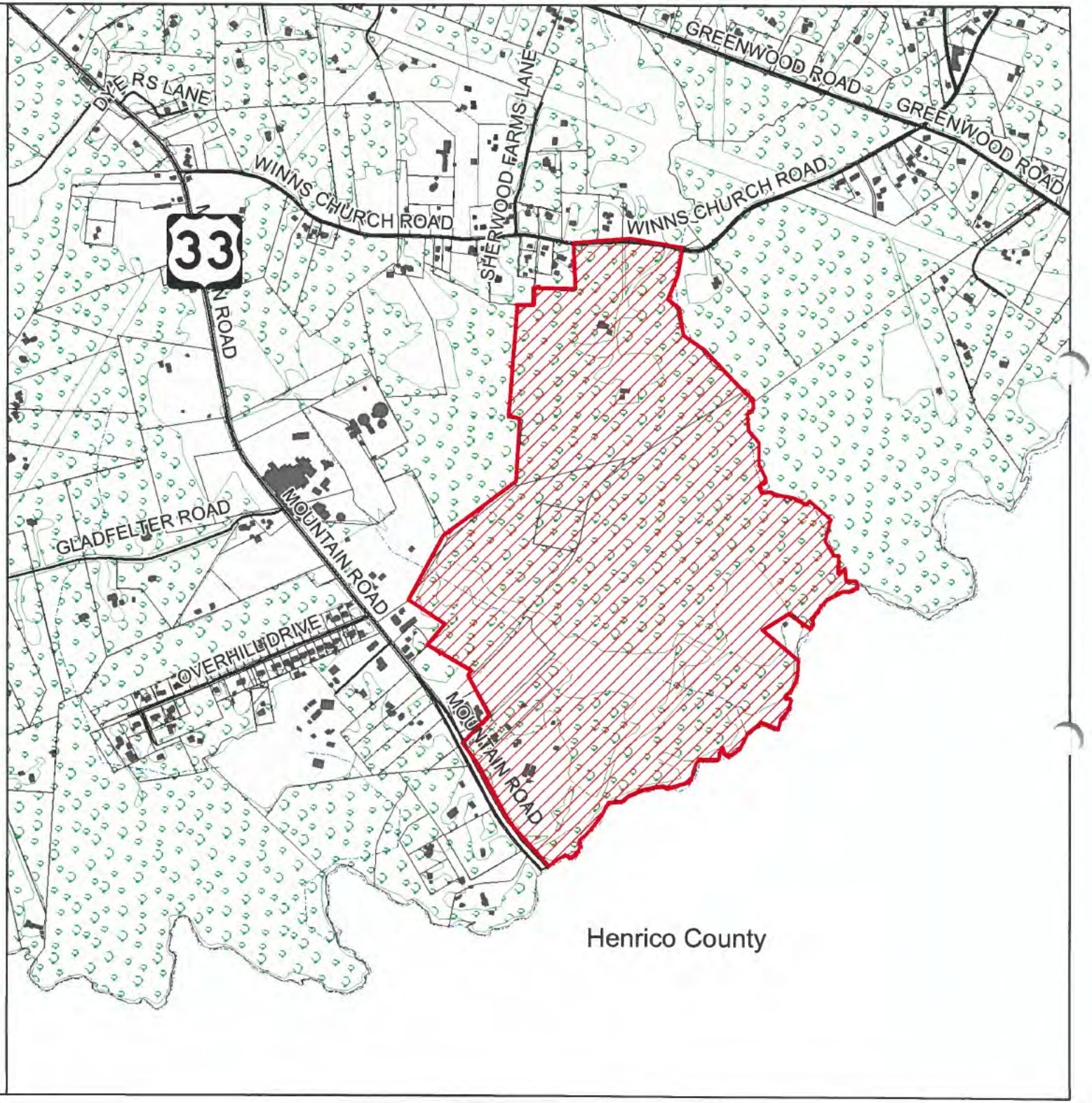


Hanover County, Virginia

General Parcel Map

Legend

- Roads
- Water
- Structures
- Parcels
- Trees



REZ2025-00023

Marchetti Properties, et al.

Rezone A-1 to M-1

GPIN's: 7757-98-4106, et al.
South Anna Magisterial District

N
W E
S

1 inch = 1,500 feet

September 26, 2025

Hanover County, Virginia

Zoning Map

Legend

Roads	R-1
Water	R-2
Parcels	R-3
CUP	R-4
A-1	R-5
PUD	R-6
RRC	RM
RR-1	MX
RO-1	B-1
PSC	B-2
POB	B-3
PMH	B-4
HE	O-S
AR-1	B-O
AR-2	M-1
AR-6	M-2
RC	M-3
RS	

REZ2025-00023

Marchetti Properties, et al.

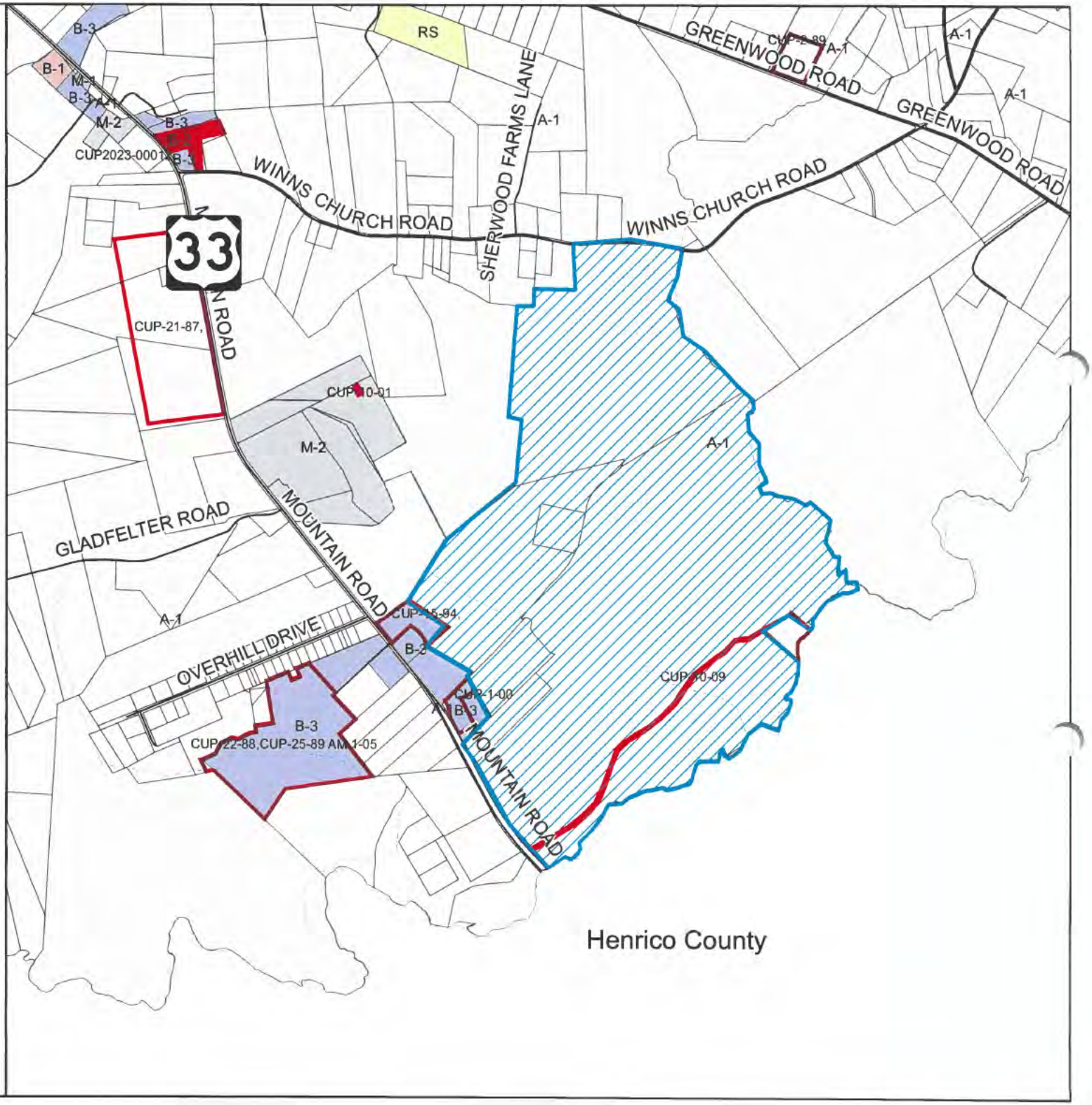
Rezone A-1 to M-1

GPIN's: 7757-98-4106, et al.
South Anna Magisterial District

N
W E
S

1 inch = 1,500 feet

September 26, 2025



REZ2025-00023



Application

Hanover County Planning Department Application

Request for REZONING

Case #: REZ2025-00023

Please type or print in **black** ink.

APPLICANT INFORMATION

Owner: Charles Marchetti, et al. - See Attached
Contact Name:
Address:

Telephone No.
Fax No.
Email Address

Applicant/Contract Purchaser: VALCO Hanover County Four LLC, VALCO Hanover County Six LLC & VALCO Hanover County Seven, LLC
Contact Name: Erin Fosdick
Address: 3200 Cherry Creek Dr. South, Suite 500
Denver, CO 80206

Telephone No. [redacted]
Fax No.
Email Address [redacted]

PARCEL INFORMATION

For multiple parcels, please complete Page 4 ☑

GPIN(s) (Tax ID #'s) See page 4

Deed Book _____ Page _____
Magisterial District South Anna
Location Description (Street Address, if applicable)
Between Mountain Road & Winns Church Road

Total Area (acres/square feet) 427.183 ac.
Current Zoning A-1
Requested Zoning M-1
Requested Use Master Planned Technology Campus

SIGNATURE OF OWNER ☐ POWER OF ATTORNEY ☑ CONTRACT PURCHASER ☐ *(attach contract)*

As owner or authorized agent of this property, I hereby certify that this application is complete and accurate to the best of my knowledge, and I authorize County representatives entry onto the property for purposes of reviewing this request.

Signature _____ Date 9/29/25
Print Name Jeffrey P. Geiger
Signature _____ Date _____
Print Name _____

QUESTIONS/ LETTERS/ REPORTS SHOULD BE FORWARDED TO THE FOLLOWING**:

Name Erin Fosdick
Address: 3200 Cherry Creek Dr. South, Suite 500
Denver, CO 80209

Telephone No. [redacted]
Fax No.
Email Address [redacted]

**It is the responsibility of the contact person to provide copies of all correspondence to other interested parties to the application.

RECEIVED
SEP 29 2025
HANOVER COUNTY
PLANNING DEPARTMENT

FOR APPLICATIONS WITH MULTIPLE PARCELS, PLEASE LIST:

GPIN	Property Owner(s)	Deed Book and Page Number	Area (acres/square feet)	Current Zoning	Requested Zoning
7757-98-4106 MARCHETTI PROPERTIES	Print Charles M. Marchetti, Jr. Sign Charles M. Marchetti, Jr.	2906/1667	49.72	A-1	M-1
7767-08-0569 MARCHETTI PROPERTIES	Print Charles M. Marchetti, Jr. Sign Charles M. Marchetti, Jr.	2903/1667	5.206	A-1	M-1
7767-17-2423 MARCHETTI PROPERTIES	Print Charles M. Marchetti, Jr. Sign Charles M. Marchetti, Jr.	2972/2804	256.515	A-1	M-1
7757-97-5013 TYSON FARMS, INC	Print Sign SEE ATTACHED	3155/1689	10.836	A-1	M-1
7768-00-5491 TRIBBLE, G M JR BRENDA R R/S	Print Sign	1571/34	99.767	A-1	M-1
7757-96-5577 STAPLES MILL SQUARE HOLDING II	Print Charles M. Marchetti, Jr. Sign Charles M. Marchetti, Jr.	2911/329	4.138	A-1	M-1
7757-96-1157 MARCHETTI PROPERTIES II INC	Print Charles M. Marchetti, Jr. Sign Charles M. Marchetti, Jr.	2884/870	1.001	A-1	M-1
	Print Sign				
	Print Sign				
	Print Sign				
	Print Sign				
	Print Sign				
	Print Sign				
	Print Sign				
	Print Sign				
	Print Sign				

FOR APPLICATIONS WITH MULTIPLE PARCELS, PLEASE LIST:					
GPIN	**Property Owner(s)**	**Deed Book and Page Number**	**Area (acres/square feet)**	**Current Zoning**	**Requested Zoning**
7757-98-4106 MARCHETTI PROPERTIES	Print | Sign |	2906/1667	49.72	A-1	M-1
7767-08-0569 MARCHETTI PROPERTIES	Print Sign SEE ATTACHED	2903/1667	5.206	A-1	M-1
7767-17-2423 MARCHETTI PROPERTIES	Print | Sign	2972/2804	256.515	A-1	M-1
7757-97-5013 TYSON FARMS, INC	Print Jeffrey P Meyer Sign JM	3155/1689	10.836	A-1	M-1
7768-00-5491 TRIBBLE, G M JR BRENDA R R/S	Print Jeffrey P Meyer Sign JM	1571/34	99.767	A-1	M-1
7757-96-5577 STAPLES MILL SQUARE HOLDING llc	Print Sign |	2911/329	4.138	A-1	M-1
7757-96-1157 MARCHETTI PROPERTIES II INC	Print SEE ATTACHED Sign |	2884/870	1.001	A-1	M-1
	Print Sign				
	Print Sign				
	Print Sign				
	Print Sign				
	Print Sign				
	Print Sign				
	Print Sign				
	Print Sign				
	Print Sign				
	Print Sign				

Mountain Road Technology Park

OWNER INFORMATION – PAGE 3

Owner: Charles Marchetti
Address: 2503 C Waco Street,
Henrico, VA 23294
Telephone Number:
Email Address:

c/o Mark H Mille, Esq.
P.O. Box 1555,
Richmond, VA 23218-1555
[redacted]

Owner: Tyson Farms, Inc. c/o Gordon McGrath
Address: P.O. Box 2020 Tax Dept.,
Springdale, AR 72765
Telephone Number: [redacted]

Owner: G. M. Tribble, Jr.
Address: 12517 Winns Church Road,
Glen Allen, VA 23059
Telephone Number: [redacted]

Owner: Brenda R. Tribble
Address: 12517 Winns Church Road,
Glen Allen, VA 23059
Telephone Number: [redacted]

ATTACHMENTS - For ALL REQUESTS you must submit the following:

☑ a. **Acknowledgement of Application Fee Payment Procedure** (Page 6)

☑ b. **Adjacent property owners, Board of Supervisors, and Planning Commissioner notification form** (Page 7) – please list all adjacent property owners including those across roadways, watercourses, and/or railroads as well as the members of the Board of Supervisors and Planning Commission for the magisterial district in which the property is located. Adjacent property owners, Board members, and Planning Commissioners must be notified prior to submittal of this application. The form must include owners' names, address, and GPINs for all adjacent property owners. (This information is available from the County website or may be obtained from the Planning Department.) A sample letter has been provided (Page 9), and may be used to notify the adjacent property owners.

☑ c. **A plat of the subject property,** which accurately reflects the current property boundaries, includes metes and bounds, is drawn to scale, and shows existing structures. If the full-size plat is larger than 8 ½" x 11", the plat must be folded no larger than 9" x 12", and a reduction of the plat must be submitted which is 8 ½" x 11" in size. (Typically available from the County Clerk's Office in the Circuit Court building.)

☑ d. **Responses to questions on Pages 10 and 11**

☑ e. **Historic Impact Information** (Page 12) (This information is available on the County website or may be obtained from the Planning Department.)

☑ f. **Traffic Impact Analysis Certification Form** (Page 13) In compliance with VDOT's new Traffic Impact Analysis Regulations (24 VAC 30-155 *et seq.*, commonly known as "Chapter 527"), rezonings that meet certain thresholds require Traffic Impact Analyses (TIA).
The process for submitting a TIA is as follows:

1) Submit the number of copies of the TIA required by VDOT to the Hanover County Planning Department with your comprehensive plan amendment/rezoning/conditional use permit submittal.
2) The Hanover County Planning Department will stamp "received" on all copies of the TIA, and will keep a copy for its files.
3) The applicant will deliver the remaining copies of the TIA to VDOT and pay the necessary TIA review fee directly to VDOT.

☑ g. **Community Meeting Guide** (Check the box if you have read and understand Pages 14 & 15. **Please note that applicants that schedule community meetings without coordinating with the staff may be required to reschedule the meeting, which may cause the application process to be delayed.**)

N/A h. **USPS Cluster Box Units (CBUs),** please show the general location of USPS' Central Box Units (CBUs) along with elevations, access, parking and lighting, if provided. Please contact the local postmaster to obtain specific guidelines.

☑ i. **For applications requiring plans,** please submit ten (10) full-size plans, with sheets no larger than 24" x 36", folded to 9" x 12" in size, and **one – 8 ½" x 11" reduction.**
Specific district requirements:
RS* - Conceptual plans that meet the requirements of Section 26-67 of the Zoning Ordinance.
RC - Existing Feature and Site Analysis plans that meet the requirements of Section 26-54(a).
RM* - Conceptual plans that meet the requirements of Section 26-84.
MX - Master Plan that meets the requirements of Section 26-93.
BP - Master Plan that meets the requirements of Section 26-157.

*RS and RM conceptual plans may also serve as the subdivision preliminary plat. In addition to the Zoning Ordinance requirements noted above, the preliminary plat requirements in Section 25-25 of the Subdivision Ordinance must also be addressed.

☐ **Check here** if the conceptual plan will serve as the preliminary plat.

NOTE: When **conceptual plans and/or elevations** are requested by the Director of Planning which are larger in size than 8½" x 11" or are in color, please submit ten (10) full-size or colored plans, with sheets no larger than 24" x 36", folded to 9" x 12" in size, and **one - 8 ½" x 11" reduction.**

ACKNOWLEDGEMENT OF APPLICATION FEE PAYMENT PROCEDURE

Application fees are not accepted at the time of submittal. I hereby acknowledge that this application is not complete until the payment for all applicable application fees has been received by the Hanover County Planning Department. The Hanover County Planning Department shall notify me by mail, email and/or fax, (if selected below) of the applicable fee(s) at such time that they determine that the application is complete and acceptable. I acknowledge that I am responsible for ensuring that such fees are received by the Hanover County Planning Department by the Tuesday the week following the application deadline. I further acknowledge that any application fee submitted after this date shall result in the application being considered filed for the next application deadline.

Should the applicable fees not be submitted within forty-five (45) days of the date of the notification letter, it shall be my responsibility to arrange for the retrieval of all application materials. The application and any supplementary materials for incomplete applications that are not retrieved within forty-five (45) days of the date of the notification letter shall be destroyed by the Hanover County Planning Department.

Should my application be accepted, my fee payment will be due by _____. (To be filled in by a Planning Staff member.)

Signature of applicant/authorized agent _____ Date 9/26/2025

Print Name Erin Fosdick

Signature of applicant/authorized agent _____ Date _____

Print Name _____

Address to which notification letter is to be sent:

3200 Cherry Creek Drive South, Suite 700

Denver, CO 80209

If you would like your letter emailed and/or faxed, please make selections, and provide the information below:

☑ Email [redacted] ☐ Fax _____

FEES

Following application acceptance, make checks payable to Treasurer, Hanover County:

A-1, OHP	$500
AR-6 (>2 lots), RC, RS, RM, MX	$1500 + $75/acre* for 1st 200 acres; $30/acre* for acreage>200 acres
B, OS, M, BP	$1100
Amendment of Proffer or Planned Unit Development	$1500

*Fractions of acreage are rounded up to the nearest whole number.

Please note: Applicants which request tax-exempt status may have their application fee waived upon presentation of official documentation of such status.

FOR STAFF USE ONLY:

Base Fee _____	
Acreage Fee _____	Accepted by: _____
TOTAL FEE _____	HTE #: _____

NOTIFICATION OF ADJOINING PROPERTY OWNERS, BOARD OF SUPERVISORS, AND PLANNING COMMISSIONERS

Applicant's Statement:

I hereby certify that I have notified all adjacent property owners to the property, which is the subject of this request, as well as the members of the Board of Supervisors and Planning Commission for the magisterial district in which the property is located. Adjacent property includes all property across roadways, watercourses, railroads, and/or municipal boundaries. I further certify that the names and addresses below are those of the adjacent property owners as listed in the tax records of the Commissioner of Revenue of Hanover County.

Applicant's Signature: _____

COMMONWEALTH OF VIRGINIA)

) to-wit:

COUNTY OF HANOVER)

The foregoing instrument was acknowledged before me this 25th day of September, 2025, by ERIN FOSDICK (Name of Applicant).

My commission expires: 6/30/26

Leslie L. Darlington

I was commissioned as Leslie D. Randolph

Notary Public

LESLIE D. RANDOLPH NOTARY PUBLIC COMMONWEALTH OF VIRGINIA REGISTRATION NO. 240346 MY COMM. EXPIRES 6/30/2026

Board of Supervisors Representative: Susan Dibble

Planning Commission Representative: Larry Leadbetter

List of Adjacent Property Owners: ☑ **Check here if list is attached.**

GPIN	Name	Address
See Attached		

ADJACENT PARCEL OWNERSHIP INFORMATION

ID	GPIN	OWNER	OWNER'S ADDRESS	ZONING
1	7757-94-3433	BEVERLY D HARRIS LIVING TRUST	13015 MOUNTAIN ROAD GLEN ALLEN, VA 23059	A-1
2	7757-85-3039	BEVERLY D HARRIS LIVING TRUST	13015 MOUNTAIN ROAD GLEN ALLEN, VA 23059	A-1
3	7757-95-1094	MARILYN MARTIN WALLS	13031 MOUNTAIN ROAD GLEN ALLEN, VA 23059	A-1
4	7757-85-9388	STUART E LEWIS & WILLIAM L EDWARDS, JR	P.O. BOX 2987 GLEN ALLEN, VA 23058	A-1
5	7757-85-8959	ROBERT W GLAUBIT	3012 SUMMERHAVEN COURT GLEN ALLEN, VA 23060-0000	A-1
6	7757-96-1510	OVERHILL PROPERTIES, INC.	5925 SCHOOL AVENUE HENRICO, VA 23228	B-3
7	7757-86-9670	BFG VA LLC	P.O. BOX 320099 ALEXANDRIA, VA 22320	B-3
8	7757-86-7936	WEST 33 LLC	15040 SCOTCHTOWN ROAD MONTPELIER, VA 23192	B-3
9	7757-87-4513	LEONARD G. MURPHY LIVING TRUST; CYNTHIA A. MURPHY LIVING TRUST	10279 GLADFELTER ROAD 3144 GLEN ALLEN, VA 23059	B-3
10	7757-88-1430	STEPHEN W TRAMMELL & ANTOINETTE W TRAMMELL	13081 WINNS CHURCH ROAD GLEN ALLEN, VA 23059	A-1
11	7758-71-6329	ANTOINETTE W TRAMMELL & STEPHEN W TRAMMELL	13081 WINNS CHURCH ROAD GLEN ALLEN, VA 23059	A-1
12	7758-91-4491	BRIAN G & DIANA L TRAMMELL	13031 WINNS CHURCH ROAD GLEN ALLEN, VA 23059-0000	A-1
13	7758-01-0456	LORENZON G AMBROGI & SUSAN A PARKER	12573 WINNS CHURCH ROAD GLEN ALLEN, VA 23059	A-1
14	7768-02-2085	DOUGLAS E WHITE	12572 WINNS CHURCH ROAD GLEN ALLEN, VA 23059	A-1
15	7768-02-6064	DOUGLAS A TRAMMELL	12550 WINNS CHURCH ROAD GLEN ALLEN, VA 23059	A-1
16	7768-03-9004	MANUAL G LOUPASSI LIMITED PARTNERSHIP (C/O ROBIN INN)	2601 PARK AVENUE RICHMOND, VA 23220	A-1
17	7768-10-9843	GARY N PALMER	11513 PRIMROSE LANE ROCKVILLE, VA 23146	A-1
18	7767-39-7416	WILLSON FAMILY, LLC	3031 LYNNHAVEN DRIVE VIRGINIA BEACH, VA 23451	A-1
19	7767-27-5397	HANOVER COUNTY	P.O. BOX 470 HANOVER, VA 23069	A-1
20	763-777-8518	ROBERT L MAUGHAN & FRANCES M KENNEDY	11524 BIRCHILL LANE GLEN ALLEN, VA 23056-5127	A-1
21	762-776-4610	THE TOWNES AT HUNTON PARK TOWNHOUSE ASSOCIATION, INC.	4435 WATERFRONT DRIVE, SUITE 406 GLEN ALLEN, VA 23060	MIXED
22	761-775-6361	STAR CITY LAND AND DEVELOPMENT COMPANY, LLC	148 BRISTOL EAST ROAD BRISTOL, VA 24202-5500	MIXED

tract

September 26, 2025

RE: Hanover County Development Applications for Mountain Road Technology Park, GPINs: 7757-98-4106 (Marchetti Properties), 7767-08-0569 (Marchetti Properties), 7767-17-2423 (Marchetti Properties), 7757-96-1157 (Marchetti Properties II Inc), 7757-96-5577 (Staples Mill Square Holding LLC), 7757-97-5013 (Tyson Farms Inc), 7768-00-5491 (Tribble)

Dear Neighbors and Surrounding Property Owners,

Tract is excited to present information on an application that is being submitted to Hanover County this month for the Mountain Road Technology Park. Tract is a digital infrastructure and data center developer that focuses on developing master plan technology campuses. This letter is being provided to you as a property owner that is adjacent to the proposed technology park. A community meeting will be held to present information on the project and answer questions; that meeting will be scheduled in the coming weeks, and additional information will be provided to you with meeting details.

Background

The Hanover County Board of Supervisors adopted the Route 33 Gateway Small Area Plan (Gateway Plan) in August of 2025. In conjunction with the Envision Hanover Comprehensive Plan, the Gateway Plan provides guidance on land uses and design for the area along Route 33/Mountain Road, between the Chickahominy River and Winns Church Rd. The Gateway Plan envisions data centers, light industrial, clean manufacturing, and other supporting uses, for this area. Tract is excited to apply for a master planned data center campus in the Gateway area, which will move the County's vision for this area forward!

Project Information

To further the goals of the Comprehensive Plan and Gateway Plan, Tract has applied for a rezoning, conditional use permit, and special exception for seven parcels of land in the area to create a master planned data center campus. These properties are part of an Economic Development Zone and are currently designated 'Employment Center' within the Envision Hanover Comprehensive Plan; they are also within the Suburban Service Area.

This project includes development and building areas to permit data center buildings as well as other supporting uses, consistent with the guidance provided in the Gateway Plan. The data center campus will include a primary entrance and secondary access off Route 33/Mountain Road; no construction or permanent access is being proposed off Winns Church Road (only a gated emergency access has been identified), which is consistent with the adopted Gateway Plan.

The project will preserve substantial natural buffers along Route 33/Mountain Road and along Winns Church, consistent with the Gateway Plan. Consistent with the recommendations from the Gateway Plan, the concept plan also proposes trails along the Chickahominy River, on the southern edge of the property, and along Grassy Swamp Creek, which is on the eastern edge of the property.

We look forward to sharing additional details at our upcoming community meeting and hope to see you there.

Sincerely,

Erin Fosdick

Erin Fosdick, AICP

CC: Susan P. Dibble, South Anna District
Michael Herzberg IV, Chairman, Cold Harbor District
Sean M. Davis, Vice Chairman, Henry District
Faye O. Prichard, Ashland District
Jeff S. Stoneman, Beaverdam District
Danielle Grieshaber Floyd, Chickahominy District
Ryan M. Hudson, Mechanicsville District
Larry Leadbetter, Planning Commission, South Anna District
Jo Ann Hunter, Planning Director
Andrew Pompeii, Assistant Planning Director

PLEASE RESPOND FOR ALL REZONING APPLICATIONS:

1. What is the General Land Use Plan Map designation for the subject property? The majority of the area is desingated Emp Employment Center. There is a small portion designated as Highway Commercial and as Suburban Neighborhood Residential.
2. What, if any, is the Major Thoroughfare Plan designation for the public road on which the subject property has frontage? Route 33/Mountain Road is a Major Arterial and Winns Church Road is a Major Collector.
3. Describe in detail the proposed use of the property. The applicant is proposing a rezoning consistent with the recommenda of the recently completed Route 33 Small Area Plan. The proposed use of the property would be a master planned industrial campus to accomodate data centers and supporting uses. The campus is being planned to respect the rural character of the corridor by minimizing visual and environmental impacts. The campus will be served by a public entrance along Mountain Rd. & well planned private network to serve buildings within the campus. A public trail is included on the south & east sides of the site.
4. List any sensitive environmental or unique features on the property. Are there any 150kV or greater transmission lines, transmission lines for natural gas, other public utilities, or other entity? There are transmission lines to the north and east of the site. There is a pump station on the southern portion of the site. The site is encumbered by wetlands, which will be carefully considered during site planning. There is an existing pond on the property.
5. Is the subject property located in a Dam Break Inundation Zone? ☐ Yes ☉ No (Please contact the Department of Planning or Public Works for assistance in addressing this question.) If yes, please contact the Department of Public Works for further information.

RESPOND FOR RS AND RM REZONING APPLICATIONS: (Attach additional pages, if needed)

1. Have you provided a conceptual plan of the proposed development, including general lot configurations and road locations? _____
2. How does your proposal preserve or protect the existing trees on the property? If the property is treeless, does your proposal contain provisions to provide trees on the property? _____
3. Are recreational amenities being proposed for the project? If so, specify in detail the amenities planned. _____
4. What provisions will be made to ensure safe and adequate access to the subject property? (Note: A second means of access should be provided for any project in which there will be fifty-one (51) or more lots.) _____

RESPOND FOR AR-6 and RC REZONING APPLICATIONS: (Attach additional pages, if needed)

1. For **AR-6** rezoning requests: Have you provided a conceptual plan of the proposed development, including general lot configurations and road locations? Are the proposed lot sizes compatible with existing parcel sizes in the area? ☐

2. How is the proposed subdivision compatible with the rural setting and sensitive to natural and cultural features? ☐

3. What provisions will be made to ensure safe and adequate access to the subject property? (Note: A second means of access should be provided for any project in which there will be fifty-one (51) or more lots.)

RESPOND FOR B-1, B-2, B-3, BO, OS, M-1, M-2, M-3 REZONING APPLICATIONS: (Attach additional pages, if needed)

1. Has a conceptual plan of the proposed development been provided, showing proposed building locations, parking lots, entrances, and other features? Yes, please see attached concept plan.
2. What provisions will be made to ensure safe and adequate access to the subject property? Access to the property has been planned consistent with the recently adopted Route 33 Gateway Small Area plan. Coordination with VDOT and the County for primary and secondary access from Route 33/Mountain Road will ensure appropriate roadway improvements are
3. How will the traffic impact of this development be addressed?: Data centers have relatively low trip generation rates. The applicant is working closely with VDOT and the County to ensure traffic impacts, especially during construction, are addressed.
4. Describe why the proposed use is desirable and appropriate for the area. What measures will be taken to assure that the proposed use will not have a negative impact on the surrounding vicinity? see attached pages
5. What type of signage is proposed for the site? Signage will be developed at a later date and submitted with site plan applications.
6. Have architectural/building elevations been submitted with this application? Example architectural forms have been included with the proffers. In addition, detailed design guidelines that are consistent with the guidance provided by the Small Area Plan have been included in the proffers and as guidelines with the concept plan.

HISTORIC SITE IMPACT ANALYSIS

Please identify any **known or suspected historic resources on both the subject property and adjacent properties**, to include both structural and non-structural resources, such as trenches, cemeteries, and archeological sites. Please include the GPIN (Tax Parcel Number) associated with the resource. Please attach additional sheets, if necessary. Should you need assistance completing this form, please contact the Planning Staff.

1. Historic Resource/File No. _____ GPIN _____
2. Historic Resource/File No. _____ GPIN _____
3. Historic Resource/File No. _____ GPIN _____

If you have identified known or suspected historic resources on the subject property or adjacent property, please provide the following information on each site:

a) Is the historic site listed as a National or State Registered Landmark? _____

b) Is the historic site open to the public? _____

c) Describe the impact the proposed request will have on the identified historic resources with regard to noise, traffic, dust, vibration, visual impact, and air pollution. _____

d) Describe voluntary measures that will be undertaken to help mitigate the impact that the proposed use may have on the identified historic resources. _____

If there are no known or suspected historic resources on the subject property or immediately adjacent, including structural and non-structural resources, trenches, cemeteries, and archeological sites, please sign and date.

Signature: _____ Date: 9/26/25

COMPLIANCE WITH VDOT & COUNTY TRAFFIC IMPACT ANALYSIS REQUIREMENTS

The following must be completed for all applications: The selection below is based on a projected daily trip generation of 1,488 vehicles per day and a site peak hour trip generation of 186 vehicles per hour, based on the stipulations of 24 VAC 30-155. The N.A. edition (latest edition) of the ITE Trip Generation Manual was used in determining the trip generation (Code Number N.A. and Page Number N.A.).

Choose one of the two options below:

☐ I certify that this proposal **DOES NOT EXCEED** 380 vehicle trips per day that would require submittal of a Traffic Impact Analysis.

☑ I certify that this proposal **DOES EXCEED** 380 vehicle trips per day that would require a Traffic Impact Analysis be submitted.

Choose one of the two options below:

☑ I certify that this proposal DOES NOT MEET any of the VDOT thresholds identified in the Traffic Impact Analysis Regulations Administrative Guidelines (24 VAC 30-155) that would require a Traffic Impact Analysis to be submitted in conjunction with this application.

☐ I certify that this proposal MEETS at least one of the VDOT thresholds identified in the Traffic Impact Analysis Regulations Administrative Guidelines (24 VAC 30-155) that would require a Traffic Impact Analysis to be submitted in conjunction with this application. A Traffic Impact Analysis, prepared in accordance with the Traffic Impact Analysis Regulations Administrative Guidelines (24 VAC 30-155), has been prepared and will be submitted to VDOT the same day.

David Capparuccini

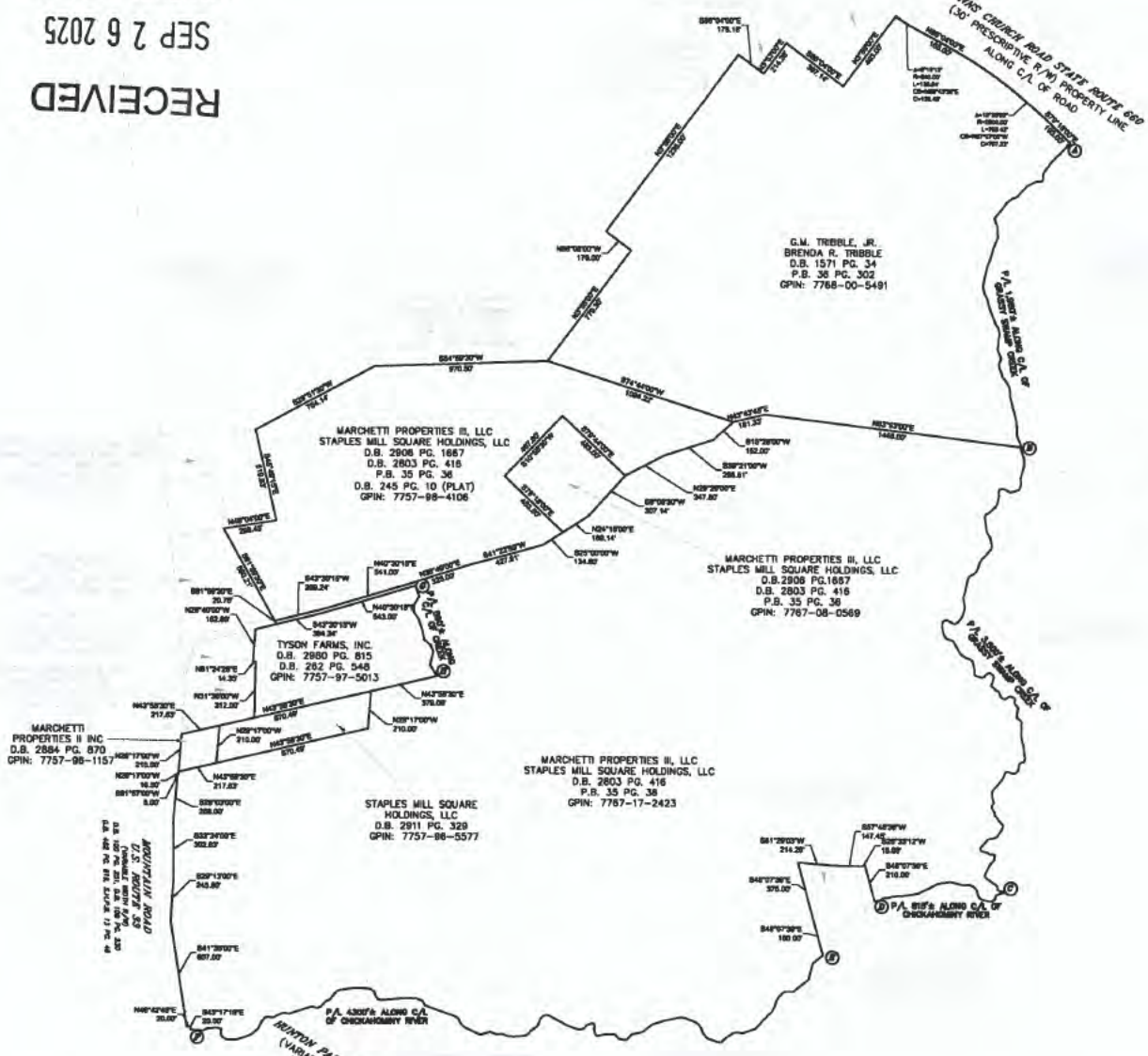
Digitally signed by David Capparuccini
DN: C=US, E=david.capparuccini@kimley-horn.com, O=Kimley-Horn, CN=David Capparuccini
Date: 2025.09.23 13:05:08-04'00'

(Signature of Applicant/Applicant's Representative)

9/23/25
(Date)

David Capparuccini
(Applicant/Applicant's Representative – Print Name)

RECEIVED
SEP 2 6 2025
HANOVER COUNTY
PLANNING DEPARTMENT





VICINITY MAP
SCALE 1" = 2000'

NOTE: BOUNDARY INFORMATION IS BASED ON ALTA SURVEYS PREPARED BY JENNINGSTEPHENSON P.C.

Kimley»Horn
© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
2525 G STREET, SUITE 107
VIRGINIA BEACH, VA 23452
PHONE: 757.213.3882
WWW.KIMLEY-HORN.COM

No.	REVISIONS	DATE	BY

KHA PROJECT 113752002
DATE 9/24/2025
SCALE AS SHOWN
DESIGNED BY KPC
DRAWN BY AF
CHECKED BY RMP

REZONING - PEL EXHIBIT

MOUNTAIN ROAD TECHNOLOGY PARK
HANOVER COUNTY VA

SHEET NUMBER 01

Hanover County Planning Department Application

Request for a Conditional Use Permit

Case #: CUP2025-00016

Please type or print in **black** ink.

APPLICANT INFORMATION

Owner/Applicant: Charles Marchetti, et al. - See Attached
Contact Name: Erin Fosdick
Address: 3200 Cherry Creek Dr. South, Suite 500
Denver, CO 80209

Telephone No. [redacted]
Fax No.
Email Address [redacted]

PARCEL INFORMATION — **For multiple parcels, please also complete Page 4** ☑

GPIN(s)(Tax ID #'s) See page 4

Total Area (acres/square feet) 427.183 ac.
Magisterial District South Anna
Location Description (Street Address, if applicable) ☐
Between Mountain Road & Winns Church Road

Total CUP Area (acres/square feet) 427.183 ac.
Current Zoning A-1
In accordance with Article 3, Division ☐ Section
§ 13.26-163 of the Ordinance the following use is requested:
Electrical Substation

SIGNATURE OF OWNER ☐ **POWER OF ATTORNEY** ☑ **CONTRACT PURCHASER** ☐ ***(attach contract)***

As owner or authorized agent of this property, I hereby certify that this application is complete and accurate to the best of my knowledge, and I authorize County representatives' entry onto the property for purposes of reviewing this request.

Signature _____ Date 9/25/25
Print Name Jeffrey P. Geiger
Signature _____ Date _____
Print Name _____

QUESTIONS/ LETTERS/ REPORTS SHOULD BE FORWARDED TO THE FOLLOWING:**

Name Erin Fosdick
Address: 3200 Cherry Creek Dr. South, Suite 500
Denver, CO 80209

Telephone No. [redacted]
Fax No.
Email Address [redacted]

**It is the responsibility of the contact person to provide copies of all correspondence to other interested parties to the application.

RECEIVED
SEP 29 2025
HANOVER COUNTY
PLANNING DEPARTMENT

FOR APPLICATIONS WITH MULTIPLE PARCELS, PLEASE LIST:					
GPIN	**Property Owner(s)**	**Deed Book and Page Number**	**Area (acres/square feet)**	**Current Zoning**	**Requested Zoning**
7757-98-4106 MARCHETTI PROPERTIES	Print Charles M. Marchetti, Jr. Sign Charles M. Marchetti	2906/1667	49.72	A-1	M-1
7767-08-0569 MARCHETTI PROPERTIES	Print Charles M. Marchetti, Jr. Sign Charles M. Marchetti	2903/1667	5.206	A-1	M-1
7767-17-2423 MARCHETTI PROPERTIES	Print Charles M. Marchetti, Jr. Sign Charles M. Marchetti	2972/2804	256.515	A-1	M-1
7757-97-5013 TYSON FARMS, INC	Print Sign	3155/1689	10.836	A-1	M-1
7768-00-5491 TRIBBLE, G M JR BRENDA R R/S	Print SEE ATTACHED Sign	1571/34	99.767	A-1	M-1
7757-96-5577 STAPLES MILL SQUARE HOLDING II	Print Charles M. Marchetti, Jr. Sign Charles M. Marchetti	2911/329	4.138	A-1	M-1
7757-96-1157 MARCHETTI PROPERTIES II INC	Print Charles M. Marchetti, Jr. Sign Charles M. Marchetti	2884/870	1.001	A-1	M-1
	Print Sign				
	Print Sign				
	Print Sign				
	Print Sign				
	Print Sign				
	Print Sign				
	Print Sign				
	Print Sign				
	Print Sign				
	Print Sign				

FOR APPLICATIONS WITH MULTIPLE PARCELS, PLEASE LIST:					
GPIN	Property Owner(s)	Deed Book and Page Number	Area (acres/square feet)	Current Zoning	Requested Zoning
7757-98-4106 MARCHETTI PROPERTIES	Print Sign	2906/1667	49.72	A-1	M-1
7767-08-0569 MARCHETTI PROPERTIES	Print SEE ATTACHED Sign	2903/1667	5.206	A-1	M-1
7767-17-2423 MARCHETTI PROPERTIES	Print Sign	2972/2804	256.515	A-1	M-1
7757-97-5013 TYSON FARMS, INC	Print Jeffrey P. Geyer Sign	3155/1689	10.836	A-1	M-1
7768-00-5491 TRIBBLE, G M JR BRENDA R R/S	Print Jeffrey P. Geyer Sign	1571/34	99.767	A-1	M-1
7757-96-5577 STAPLES MILL SQUARE HOLDING llc	Print Sign	2911/329	4.138	A-1	M-1
7757-96-1157 MARCHETTI PROPERTIES II INC	Print SEE ATTACHED Sign	2884/870	1.001	A-1	M-1
	Print Sign				
	Print Sign				
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	Print Sign				
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	Print Sign				
	Print Sign				
	Print Sign				
	Print Sign				

Mountain Road Technology Park

OWNER INFORMATION – PAGE 3

Owner: Charles Marchetti
Address: 2503 C Waco Street,
Henrico, VA 23294
Telephone Number:
[redacted]

c/o Mark H Mille, Esq.
P.O. Box 1555,
Richmond, VA 23218-1555
[redacted]

Owner: Tyson Farms, Inc. c/o Gordon McGrath
Address: P.O. Box 2020 Tax Dept.,
Springdale, AR 72765
Telephone Number: [redacted]

Owner: G. M. Tribble, Jr.
Address: 12517 Winns Church Road,
Glen Allen, VA 23059
Telephone Number: [redacted]

Owner: Brenda R. Tribble
Address: 12517 Winns Church Road,
Glen Allen, VA 23059
Telephone Number: [redacted]

REQUIREMENTS/ ATTACHMENTS FOR ALL REQUESTS you must submit the following:

- ☑ a. **Signature of Property Owner or Contract Purchaser** (Page 3) – If the contract purchaser signs the application, please provide a copy of the signed contract, with all sensitive information redacted.
- ☑ b. **Acknowledgement of Application Fee Payment Procedure** (Page 6)
- ☑ c. **Adjacent property owners, Board of Supervisors, and Planning Commissioner notification form** (Page 7) – please list all property owners including those across roadways, watercourses, and/or railroads as well as the members of the Board of Supervisors and Planning Commission for the magisterial district in which the property is located. Adjacent property owners, Board members, and Planning Commissioners must be notified prior to submittal of this application. The form must include owners' names, address, and GPINs for all adjacent property owners. (This information is available from the County website or can be obtained from the Planning Department.) The form on Page 9 may be used to notify these property owners.
- ☑ d. **A plat of the subject property,** which accurately reflects the current property boundaries. If the full-size plat is larger than 8 ½" x 11", the plat must be folded no larger than 9"x12", and a reduction of the plat must be submitted which is 8 ½" x 11" in size. (Typically available from the County Clerk's Office in the Circuit Court building.)
- ☑ e. **Responses to questions on Page 10**
- ☑ f. **Historic Impact Information** (Page 11) (This information is available on the County website or may be obtained from the Planning Department.)
- ☑ g. **Traffic Impact Analysis Certification Form** (Page 12) In compliance with VDOT's new Traffic Impact Analysis Regulations (24 VAC 30-155 *et seq.*, commonly known as "Chapter 527"), Conditional Use Permits that meet certain thresholds require Traffic Impact Analyses (TIAs). The process for submitting TIAs is as follows: (1) you must submit the number of copies of the TIA required by VDOT to the Hanover County Planning Department with your comprehensive plan amendment/rezoning/conditional use permit submittal; (2) the Hanover County Planning Department will stamp "received" on all copies of the TIA, and will keep a copy for its files; and (3) you must deliver the remaining copies of the TIA to VDOT and pay the necessary TIA review fee directly to VDOT.
- ☑ h. **Sketch Plan Checklist (Page 13) and ten (10) copies of the sketch plan and architectural elevations**, folded no larger than 9" x 12", and **1 - 8 ½" x 11" reduction**. Individual sheets should be no larger than 24" x 36". For Filling and/or Grading CUP Applications, a plan should be submitted that meets the Public Works Department's requirements for an Erosion and Sedimentation Control (E&S) Plan. However, please note that submittal of this plan will **not** be considered as a submittal of an E&S plan application. For a checklist of items to be included on this plan, please contact Public Works at (804) 365-6181.
- ☒ i. For CUP applications for telecommunication facilities, a **Telecommunications application** must be completed and include all of the required attachments.
- ☑ j. **Community Meeting Guide** (Check the box if you have read and understand Pages 14 & 15. **Please note that applicants that schedule community meetings without coordinating with the staff may be required to reschedule the meeting, which may cause the application process to be delayed.**)

ACKNOWLEDGEMENT OF APPLICATION FEE PAYMENT PROCEDURE

Application fees are not accepted at the time of submittal. I hereby acknowledge that this application is not complete until the payment for all applicable application fees has been received by the Hanover County Planning Department. The Hanover County Planning Department shall notify me by mail, at the address listed below, (as well as by email and/or fax, if selected below) of the applicable fee(s) at such time that they determine that the application is complete and acceptable. I acknowledge that I am responsible for ensuring that such fees are received by the Hanover County Planning Department by the Tuesday the week following the application deadline. I further acknowledge that any application fee submitted after this date shall result in the application being considered filed for the next application deadline.

Should the applicable fees not be submitted within forty-five (45) days of the date of the notification letter, it shall be my responsibility to arrange for the retrieval of all application materials. The application and any supplementary materials for incomplete applications that are not retrieved within forty-five (45) days of the date of the notification letter shall be destroyed by the Hanover County Planning Department.

Should my application be accepted, my fee payment will be due by _____. (To be filled in by a Planning Staff member.)

Signature of applicant/authorized agent _____ Date 9/26/2025

Print Name Erin Fosdick

Signature of applicant/authorized agent _____ Date _____

Print Name _____

Address to which notification letter is to be sent:

3200 Cherry Creek Drive South, Suite 700

Denver, CO 80209

If you would like your letter emailed and/or faxed, please make selections, and provide the information below:

☑ Email [redacted] ☐ Fax _____

FEES

After application is accepted for review, make checks payable to Treasurer, Hanover County:

Conditional Use Permit	$1500 + $75/acre*
Amendment (after final approval)	$1500

*Fractions of acreage are rounded up to the nearest whole number

Please note: Applicants who request tax-exempt status may have their application fee waived upon presentation of official documentation of such status.

FOR STAFF USE ONLY:

Fees: Base Fee _____

Acreage Fee _____

TOTAL _____

Accepted by: _____

HTE #: _____

NOTIFICATION OF ADJOINING PROPERTY OWNERS, BOARD OF SUPERVISORS, AND PLANNING COMMISSIONERS

Applicant's Statement:

I hereby certify that I have notified all adjacent property owners to the property, which is the subject of this request as well as the members of the Board of Supervisors and Planning Commission for the magisterial district in which the property is located. Adjacent property includes all property across roadways, watercourses, railroads, and/or municipal boundaries. I further certify that the names and addresses below are those of the adjacent property owners as listed in the tax records of the Commissioner of Revenue of Hanover County.

Applicant's Signature: Erin Fosdick

COMMONWEALTH OF VIRGINIA)

) to-wit:

COUNTY OF HANOVER)

LESLIE D. RANDOLPH COMMONWEALTH OF VIRGINIA REGISTRATION NO. 240346 MY COMM. EXPIRES 6/30/2026 NOTARY PUBLIC

The foregoing instrument was acknowledged before me this 25th day of September, 2025, by Erin Fosdick (Name of Applicant).

My commission expires: 6/30/2026 Leslie D. Randolph

I was commissioned as Leslie D. Randolph

Notary Public

Board of Supervisors Representative:	Susan Dibble
Planning Commission Representative:	Larry Leadbetter

List of Adjacent Property Owners:

GPIN	Name	Address
See attached		

ADJACENT PARCEL OWNERSHIP INFORMATION

ID	GPIN	OWNER	OWNER'S ADDRESS	ZONING
1	7757-94-3433	BEVERLY D HARRIS LIVING TRUST	13015 MOUNTAIN ROAD GLEN ALLEN, VA 23059	A-1
2	7757-85-3039	BEVERLY D HARRIS LIVING TRUST	13015 MOUNTAIN ROAD GLEN ALLEN, VA 23059	A-1
3	7757-95-1094	MARILYN MARTIN WALLS	13031 MOUNTAIN ROAD GLEN ALLEN, VA 23059	A-1
4	7757-85-9388	STUART E LEWIS & WILLIAM L EDWARDS, JR	P.O. BOX 2987 GLEN ALLEN, VA 23058	A-1
5	7757-85-8959	ROBERT W GLAUBIT	3012 SUMMERHAVEN COURT GLEN ALLEN, VA 23060-0000	A-1
6	7757-96-1510	OVERHILL PROPERTIES, INC.	5925 SCHOOL AVENUE HENRICO, VA 23228	B-3
7	7757-86-9670	BFG VA LLC	P.O. BOX 320099 ALEXANDRIA, VA 22320	B-3
8	7757-86-7936	WEST 33 LLC	15040 SCOTCHTOWN ROAD MONTPELIER, VA 23192	B-3
9	7757-87-4513	LEONARD G. MURPHY LIVING TRUST; CYNTHIA A. MURPHY LIVING TRUST	10279 GLADFELTER ROAD 3144 GLEN ALLEN, VA 23059	B-3
10	7757-88-1430	STEPHEN W TRAMMELL & ANTOINETTE W TRAMMELL	13081 WINNS CHURCH ROAD GLEN ALLEN, VA 23059	A-1
11	7758-71-6329	ANTOINETTE W TRAMMELL & STEPHEN W TRAMMELL	13081 WINNS CHURCH ROAD GLEN ALLEN, VA 23059	A-1
12	7758-91-4491	BRIAN G & DIANA L TRAMMELL	13031 WINNS CHURCH ROAD GLEN ALLEN, VA 23059-0000	A-1
13	7758-01-0456	LORENZON G AMBROGI & SUSAN A PARKER	12573 WINNS CHURCH ROAD GLEN ALLEN, VA 23059	A-1
14	7768-02-2085	DOUGLAS E WHITE	12572 WINNS CHURCH ROAD GLEN ALLEN, VA 23059	A-1
15	7768-02-6064	DOUGLAS A TRAMMELL	12550 WINNS CHURCH ROAD GLEN ALLEN, VA 23059	A-1
16	7768-03-9004	MANUAL G LOUPASSI LIMITED PARTNERSHIP (C/O ROBIN INN)	2601 PARK AVENUE RICHMOND, VA 23220	A-1
17	7768-10-9843	GARY N PALMER	11513 PRIMROSE LANE ROCKVILLE, VA 23146	A-1
18	7767-39-7416	WILLSON FAMILY, LLC	3031 LYNNHAVEN DRIVE VIRGINIA BEACH, VA 23451	A-1
19	7767-27-5397	HANOVER COUNTY	P.O. BOX 470 HANOVER, VA 23069	A-1
20	763-777-8518	ROBERT L MAUGHAN & FRANCES M KENNEDY	11524 BIRCHILL LANE GLEN ALLEN, VA 23056-5127	A-1
21	762-776-4610	THE TOWNES AT HUNTON PARK TOWNHOUSE ASSOCIATION, INC.	4435 WATERFRONT DRIVE, SUITE 406 GLEN ALLEN, VA 23060	MIXED
22	761-775-6361	STAR CITY LAND AND DEVELOPMENT COMPANY, LLC	148 BRISTOL EAST ROAD BRISTOL, VA 24202-5500	MIXED

September 26, 2025

RE: Hanover County Development Applications for Mountain Road Technology Park, GPINs: 7757-98-4106 (Marchetti Properties), 7767-08-0569 (Marchetti Properties), 7767-17-2423 (Marchetti Properties), 7757-96-1157 (Marchetti Properties II Inc), 7757-96-5577 (Staples Mill Square Holding LLC), 7757-97-5013 (Tyson Farms Inc), 7768-00-5491 (Tribble)

Dear Neighbors and Surrounding Property Owners,

Tract is excited to present information on an application that is being submitted to Hanover County this month for the Mountain Road Technology Park. Tract is a digital infrastructure and data center developer that focuses on developing master plan technology campuses. This letter is being provided to you as a property owner that is adjacent to the proposed technology park. A community meeting will be held to present information on the project and answer questions; that meeting will be scheduled in the coming weeks, and additional information will be provided to you with meeting details.

Background

The Hanover County Board of Supervisors adopted the Route 33 Gateway Small Area Plan (Gateway Plan) in August of 2025. In conjunction with the Envision Hanover Comprehensive Plan, the Gateway Plan provides guidance on land uses and design for the area along Route 33/Mountain Road, between the Chickahominy River and Winns Church Rd. The Gateway Plan envisions data centers, light industrial, clean manufacturing, and other supporting uses, for this area. Tract is excited to apply for a master planned data center campus in the Gateway area, which will move the County's vision for this area forward!

Project Information

To further the goals of the Comprehensive Plan and Gateway Plan, Tract has applied for a rezoning, conditional use permit, and special exception for seven parcels of land in the area to create a master planned data center campus. These properties are part of an Economic Development Zone and are currently designated 'Employment Center' within the Envision Hanover Comprehensive Plan; they are also within the Suburban Service Area.

This project includes development and building areas to permit data center buildings as well as other supporting uses, consistent with the guidance provided in the Gateway Plan. The data center campus will include a primary entrance and secondary access off Route 33/Mountain Road; no construction or permanent access is being proposed off Winns Church Road (only a gated emergency access has been identified), which is consistent with the adopted Gateway Plan.

The project will preserve substantial natural buffers along Route 33/Mountain Road and along Winns Church, consistent with the Gateway Plan. Consistent with the recommendations from the Gateway Plan, the concept plan also proposes trails along the Chickahominy River, on the southern edge of the property, and along Grassy Swamp Creek, which is on the eastern edge of the property.

We look forward to sharing additional details at our upcoming community meeting and hope to see you there.

Sincerely,

Erin Fosdick

Erin Fosdick, AICP

CC: Susan P. Dibble, South Anna District
Michael Herzberg IV, Chairman, Cold Harbor District
Sean M. Davis, Vice Chairman, Henry District
Faye O. Prichard, Ashland District
Jeff S. Stoneman, Beaverdam District
Danielle Grieshaber Floyd, Chickahominy District
Ryan M. Hudson, Mechanicsville District
Larry Leadbetter, Planning Commission, South Anna District
Jo Ann Hunter, Planning Director
Andrew Pompeii, Assistant Planning Director

EXPLANATION: (Attach additional sheets, if necessary)

1. What type of use is being requested? In addition to this CUP, a rezoning and special exception request are being submitted to facilitate the construction of a master planned technology campus that will include data center and other supporting uses. One of the essential supporting uses are substations. The concept plan being proposed as part of this application, contemplate substations in two building areas; these will provide the necessary power for the campus.

2. Briefly describe how you plan to develop the property for the proposed use and any associated uses. This property is proposed to be developed as the Mountain Road Technology Park. The campus is being developed in conformance with the recently adopted Route 33 Gateway Small Area Plan, which contemplates data centers and other supporting uses as ideal, compatible uses for this area. The concept plan submitted for the rezoning and this CUP contains three development areas and several associated building areas where data center buildings, administration buildings, substations, parking lots, mechanical equipment, generators, utilities, and other supporting uses can be located. Substations will specifically be allowed in building areas 2b and 3b, which are located on the eastern edge of the site; this configuration is most efficient based on the expected routing of power infrastructure. Detailed developments standards for development areas and building areas will guide overall site development to ensure conformance with the SAP and Envision Hanover Comprehensive Plan. Thoughtful site design including substantial natural buffers, significant building setbacks, and strategic siting for building areas, will ensure compatibility with surrounding areas. Access has been carefully considered and follows the SAP. The primary entrance to the campus is located off Route 33 at the southern end of the site. A secondary access is proposed along Route 33, further north on the site. An emergency & utility only access is shown from Winns Church Road.

3. Describe why the proposed use is desirable and appropriate for the area. What measures will be taken to assure that the proposed use will not have a negative impact on the surrounding vicinity? (For example, this may include traffic or environmental impacts.) The proposed use is consistent with the County's recently adopted Route 33 Gateway Small Area Plan (SAP). The planning process undertaken by the County for the SAP included significant community and stakeholder outreach, so the plan represents the vision and desires for residents and community members in this area. Compatible uses identified in the plan include data centers and other supporting uses; these uses were identified as being consistent with the comprehensive plan, but were also recognized as having more limited impacts on the surrounding residential and rural areas. The concept plan developed for the Mountain Road Technology Park incorporates substantial natural buffers along Route 33/ Mountain Road and Winns Church. Areas along the Chickahominy River and Grassy Swamp Creek have been preserved, whi provide additional buffering to the south and east. Development and buildings areas have been thoughtfully situated to reduce impacts to wetlands, the RPA, and other environmentally sensitive areas. In addition, access has been restricted to Route 33/ Mountain Road and kept off of Winns Church, which was an important request made by community members.

4. Are there any deed restrictions concerning the type of use proposed? If so, provide the date the said restrictions expire. (You may attach a copy of the restrictions.) NA

5. Is the subject property located in a Dam Break Inundation Zone? ☐ Yes ☑ No (Please contact the Department of Planning or Public Works for assistance in addressing this question.) If yes, please contact the Department of Public Works for further information.

HISTORIC SITE IMPACT ANALYSIS

Please identify any **known or suspected historic resources on both the subject property and adjacent properties**, to include both structural and non-structural resources, such as trenches, cemeteries, and archeological sites. Please include the GPIN (Tax Parcel Number) associated with the resource. Please attach additional sheets, if necessary. Should you need assistance completing this form, please contact the Planning Staff.

1. Historic Resource/File No. _____ GPIN _____
2. Historic Resource/File No. _____ GPIN _____
3. Historic Resource/File No. _____ GPIN _____

If you have identified known or suspected historic resources on the subject property or adjacent property, please provide the following information on each site:

a) Is the historic site listed as a National or State Registered Landmark? _____

b) Is the historic site open to the public? _____

c) Describe the impact the proposed request will have on the identified historic resources with regard to noise, traffic, dust, vibration, visual impact, and air pollution. _____

d) Describe voluntary measures that will be undertaken to help mitigate the impact that the proposed use may have on the identified historic resources. _____

If there are no known or suspected historic resources on the subject property or immediately adjacent, including structural and non-structural resources, trenches, cemeteries, and archeological sites, **please sign and date**.

Signature: _____ Date: 9/26/25

COMPLIANCE WITH VDOT & COUNTY TRAFFIC IMPACT ANALYSIS REQUIREMENTS

The following must be completed for all applications: The selection below is based on a projected daily trip generation of 1,488 vehicles per day and a site peak hour trip generation of 186 vehicles per hour, based on the stipulations of 24 VAC 30-155. The N.A. edition (latest edition) of the ITE Trip Generation Manual was used in determining the trip generation (Code Number N.A. and Page Number N.A.).

Choose one of the two options below:

☐ I certify that this proposal **DOES NOT EXCEED** 380 vehicle trips per day that would require submittal of a Traffic Impact Analysis.

☑ I certify that this proposal **DOES EXCEED** 380 vehicle trips per day that would require a Traffic Impact Analysis be submitted.

Choose one of the two options below:

☑ I certify that this proposal DOES NOT MEET any of the VDOT thresholds identified in the Traffic Impact Analysis Regulations Administrative Guidelines (24 VAC 30-155) that would require a Traffic Impact Analysis to be submitted in conjunction with this application.

☑ I certify that this proposal MEETS at least one of the VDOT thresholds identified in the Traffic Impact Analysis Regulations Administrative Guidelines (24 VAC 30-155) that would require a Traffic Impact Analysis to be submitted in conjunction with this application. A Traffic Impact Analysis, prepared in accordance with the Traffic Impact Analysis Regulations Administrative Guidelines (24 VAC 30-155), has been prepared and will be submitted to VDOT the same day.

David Capparuccini Digitally signed by David Capparuccini DN: C=US, E=david.capparuccini@kimley-horn.com, O=Kimley-Horn, CN=David Capparuccini Date: 2025.09.23 12:57:00-04'00'

(Signature of Applicant/Applicant's Representative)

9/23/25

(Date)

David Capparuccini

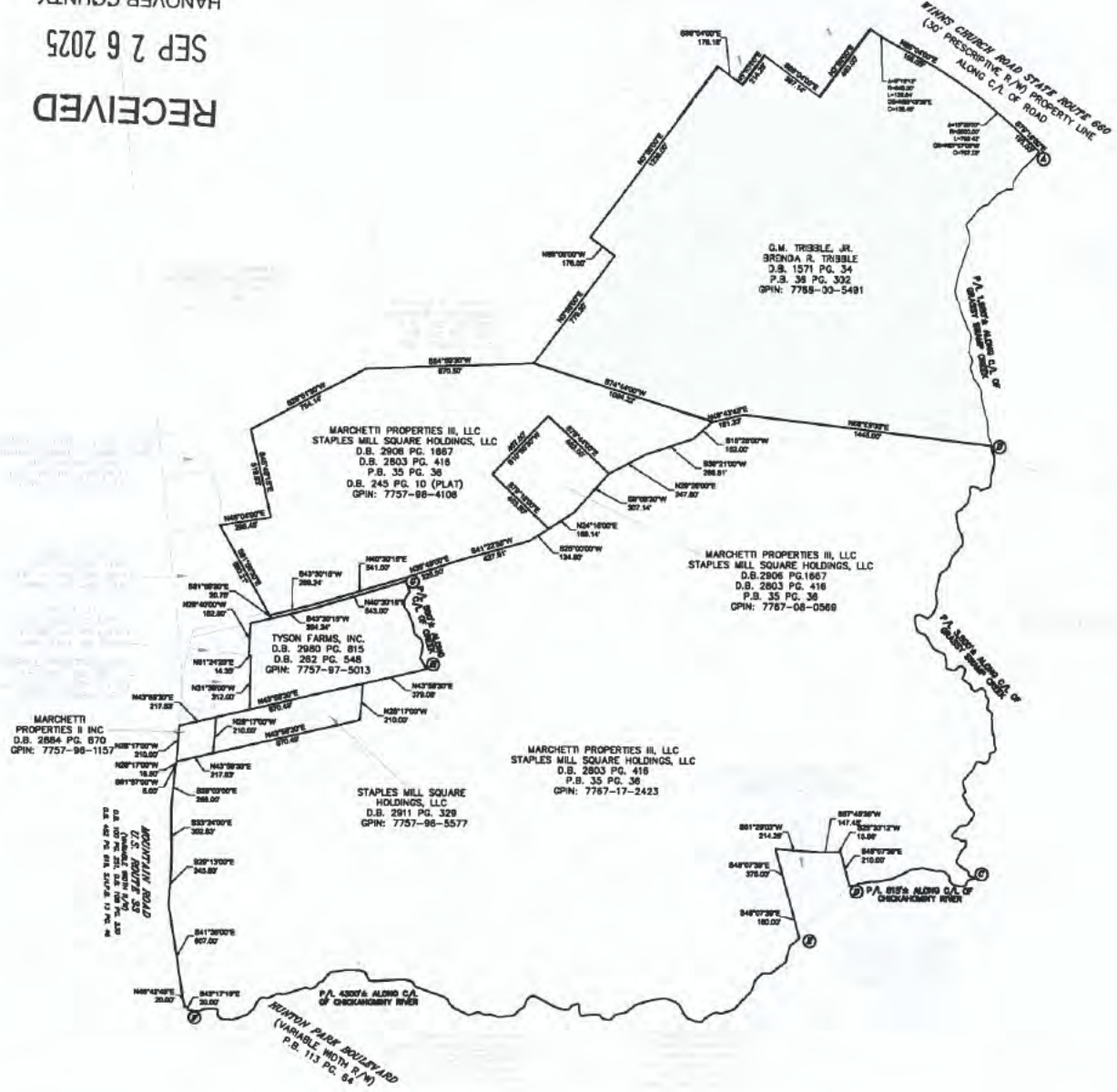
(Applicant/Applicant's Representative – Print Name)

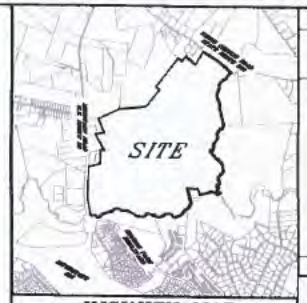
SKETCH PLAN CHECKLIST

Use this checklist to prepare the required sketch plan for submittal with this application. Place a mark next to each item to verify its inclusion on the sketch plan. Please make sure the information listed below is shown on the sketch plan. Failure to include all necessary information may result in the application not being accepted for processing.

Applicant:		Staff:
☑	1. The proposed title of the project, the name of the developer, and the name of the preparer of the plan.	☐
☑	2. The north point, scale, and date. The required scale of the sketch plan shall be as follows: a) For projects containing more than 200 acres, not more than 1" = 200' b) For projects containing 50 acres to 200 acres, not more than 1" = 100' c) For projects containing 10 acres to 50 acres, not more than 1" = 50' d) For projects containing 10 acres or less, not more than 1" = 30'	☐
☑	3. Existing zoning and zoning district boundaries. (Available on County zoning maps.)	☐
☑	4. The boundaries of the property involved; County and/or town boundaries; property lines; existing streets, buildings, and/or waterways; Chesapeake Bay Resource Protection Areas (see Department of Public Works); and major tree masses.	☐
☑	5. Topography of the project area, with contours of five (5) feet or less. (Maps are available in the Planning Department.)	☐
☑	6. Proposed changes in zoning, if any.	☐
☑	7. The general location and character of construction of proposed streets, alleys, driveways, curb cuts, entrances, and exits.	☐
☑	8. Location(s) of all proposed buildings and structures, accessory and main; major excavations; and the use category for each building.	☐
☑	9. General location, height, and material for all fences, walls, screen plantings, berms, and landscaping. The required perimeter buffer, if any, shall be shown.	☐
☑	10. Architectural elevation(s) for the proposed structures on site, which provide detail on the proposed building materials.	☐
☑	11. Location(s) of any known or suspected historic resources, including cemeteries, trenches, and archeological sites as reflected in available County records.	☐

RECEIVED
SEP 26 2025
HANOVER COUNTY
PLANNING DEPARTMENT





VICINITY MAP
SCALE 1" = 2000'

NOTE: BOUNDARY INFORMATION IS BASED ON ALTA SURVEYS PREPARED BY JENNINGSTEPHENSON P.C.

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
2525 ST. PAUL STREET, SUITE 147, RICHMOND, VA 23230
PHONE: 804 [illegible]
WWW.KIMLEY-HORN.COM

KHA PROJECT 113752092
9/24/2025
SCALE AS SHOWN
DESIGNED BY KPC
DRAWN BY AF
CHECKED BY RBP

REZONING - EXHIBIT

MOUNTAIN ROAD TECHNOLOGY PARK

HANOVER COUNTY VA

SHEET NUMBER 01

Hanover County Planning Department Application

Request for a Special Exception

Case #: SE2025-00023

Please type or print in **black** ink.

APPLICANT INFORMATION

Owner/Applicant: Charles Marchetti, et al. - See Attached
Contact Name: Erin Fosdick
Address: 3200 Cherry Creek Dr. South, Suite 500
Denver, CO 80209

Telephone No. [redacted]
Fax No.
Email Address [redacted]

PARCEL INFORMATION — **For multiple parcels, please also complete Page 4** ☑

GPIN(s)(Tax Parcel #'s) See page 4
Deed Book _____ Page _____
Magisterial District _____
Location Description (Street Address, if applicable) ☐
Between Mountain Road & Winns Church Road

Area (acres/square feet) 427.183 ac.
Current Zoning A-1
Requested Use/Exception Building Height, Fence Height

SIGNATURE OF OWNER ☐ **POWER OF ATTORNEY** ☑ **CONTRACT PURCHASER** ☐ *(attach contract)*

As owner or authorized agent of this property, I hereby certify that this application is complete and accurate to the best of my knowledge, and I authorize County representatives entry onto the property for purposes of reviewing this request.

Signature _____ Date 9/29/25
Print Name Jeffrey P. Geiger
Signature _____ Date _____
Print Name _____

QUESTIONS/ LETTERS/ REPORTS SHOULD BE FORWARDED TO THE FOLLOWING:**

Name Erin Fosdick
Address: 3200 Cherry Creek Dr. South, Suite 500
Denver, CO 80209

Telephone No. [redacted]
Fax No.
Email Address [redacted]

**It is the responsibility of the contact person to provide copies of all correspondence to other interested parties to the application.

RECEIVED
SEP 29 2025
HANOVER COUNTY

FOR APPLICATIONS WITH MULTIPLE PARCELS, PLEASE LIST:					
GPIN	**Property Owner(s)**	**Deed Book and Page Number**	**Area (acres/square feet)**	**Current Zoning**	**Requested Zoning**
7757-98-4106 MARCHETTI PROPERTIES	Print Charles M. Marchetti, Jr. Sign Charles M. Marchetti, Jr.	2906/1667	49.72	A-1	M-1
7767-08-0569 MARCHETTI PROPERTIES	Print Charles M. Marchetti, Jr. Sign Charles M. Marchetti, Jr.	2903/1667	5.206	A-1	M-1
7767-17-2423 MARCHETTI PROPERTIES	Print Charles M. Marchetti, Jr. Sign Charles M. Marchetti, Jr.	2972/2804	256.515	A-1	M-1
7757-97-5013 TYSON FARMS, INC	Print SEE ATTACHED Sign	3155/1689	10.836	A-1	M-1
7768-00-5491 TRIBBLE, G M JR BRENDA R R/S	Print SEE ATTACHED Sign	1571/34	99.767	A-1	M-1
7757-96-5577 STAPLES MILL SQUARE HOLDING II	Print Charles M. Marchetti, Jr. Sign Charles M. Marchetti, Jr.	2911/329	4.138	A-1	M-1
7757-96-1157 MARCHETTI PROPERTIES II INC	Print Charles M. Marchetti, Jr. Sign Charles M. Marchetti, Jr.	2884/870	1.001	A-1	M-1
	Print Sign				
	Print Sign				
	Print Sign				
	Print Sign				
	Print Sign				
	Print Sign				
	Print Sign				
	Print Sign				
	Print Sign				
	Print Sign				

FOR APPLICATIONS WITH MULTIPLE PARCELS, PLEASE LIST:					
GPIN	**Property Owner(s)**	**Deed Book and Page Number**	**Area (acres/square feet)**	**Current Zoning**	**Requested Zoning**
7757-98-4106 MARCHETTI PROPERTIES	Print Sign	2906/1667	49.72	A-1	M-1
7767-08-0569 MARCHETTI PROPERTIES	Print SEE ATTACHED Sign	2903/1667	5.206	A-1	M-1
7767-17-2423 MARCHETTI PROPERTIES	Print Sign	2972/2804	265.515	A-1	M-1
7757-97-5013 TYSON FARMS, INC	Print Jeffrey P. Geyer Sign	3155/1689	10.836	A-1	M-1
7768-00-5491 TRIBBLE, G M JR BRENDA R R/S	Print Jeffrey P. Geyer Sign	1571/34	99.767	A-1	M-1
7757-96-5577 STAPLES MILL SQUARE HOLDING llc	Print Sign	2911/329	4.138	A-1	M-1
7757-96-1157 MARCHETTI PROPERTIES II INC	Print SEE ATTACHED Sign	2884/870	1.001	A-1	M-1
	Print Sign				
	Print Sign				
	Print Sign				
	Print Sign				
	Print Sign				
	Print Sign				
	Print Sign				
	Print Sign				
	Print Sign				

Mountain Road Technology Park

OWNER INFORMATION – PAGE 3

Owner: Charles Marchetti
Address: 2503 C Waco Street,
Henrico, VA 23294
Telephone Number:
Email Address:

c/o Mark H Mille, Esq.
P.O. Box 1555,
Richmond, VA 23218-1555
[redacted]

Owner: Tyson Farms, Inc. c/o Gordon McGrath
Address: P.O. Box 2020 Tax Dept.,
Springdale, AR 72765
Telephone Number: [redacted]

Owner: G. M. Tribble, Jr.
Address: 12517 Winns Church Road,
Glen Allen, VA 23059
Telephone Number: [redacted]

Owner: Brenda R. Tribble
Address: 12517 Winns Church Road,
Glen Allen, VA 23059
Telephone Number: [redacted]

REQUIREMENTS/ ATTACHMENTS - For ALL REQUESTS you must submit the following:

☑ a. **Signature of Property Owner or Contract Purchaser** (Page 3) – If the contract purchaser signs the application, please provide a copy of the signed contract, with all sensitive information redacted.

☑ b. **Acknowledgement of Application Fee Payment Procedure** (Page 6)

☑ c. **Adjacent property owners and Board of Supervisors notification form** (Page 7) - please list all adjacent property owners including those across roadways, watercourses, and/or railroads as well as the member of the Board of Supervisors for the magisterial district in which the property is located. Adjacent property owners and Board members must be notified prior to submittal of this application. The form must include owners' names, address, and GPINs for all adjacent property owners. (This information is available from the County website or can be obtained from the Planning Department.) The form on Page 9 may be used to notify these property owners.

☑ d. **A plat of the subject property,** which accurately reflects the current property boundaries and the location of existing structures on the property. If the full-size plat is larger than 8 ½" x 11", the plat must be folded no larger than 9" x 12", and a reduction of the plat must be submitted which is 8 ½" x 11" in size. (Typically available from the County Clerk's Office in the Circuit Court building.)

☑ e. **Historic Impact Information** (Page 10) (This information is available on the County website or may be obtained from the Planning Department.)

☑ f. **Responses to questions** on Page 11

☑ g. **Community Meeting Guide** (Check the box if you have read and understand Pages 13 & 14. Please note that applicants that schedule community meetings without coordinating with the staff may be required to reschedule the meeting, which may cause the application process to be delayed.)

☑

h. A **sketch** of your proposal, showing the following:

1) The proposed title of the project, the name of the developer, and the name of the preparer of the plan.
2) The north point, scale, and date. The scale of the plan shall not exceed 1" = 200'.
3) The boundaries of the property involved; county or town boundaries; property lines; existing streets, buildings, and waterways; areas affected by Chesapeake Bay preservation requirements; and major tree masses.
4) The general location and character of construction of proposed parking lots, driveways, curb cuts, entrances, and exits.
5) The locations of all proposed buildings and structures.
6) The general locations, heights, and materials of all fences, walls, screen plantings, berms, and landscaping.

If the full-size sketch is larger than 8 ½" x 11", please provide **ten (10) copies of the sketch and elevations,** folded no larger than 9" x 12", and **one (1) a reduction of the sketch,** which is 8 ½" x 11". Sheets must be no larger than 24" x 36".

N/A i. For applications for manufactured/mobile home needed for **medical hardship** please provide a note from a medical doctor verifying that it is necessary for someone to live in close proximity to provide care.

j. For SE applications for telecommunication facilities, a **Telecommunications application** must be completed and include all of the required attachments.

ACKNOWLEDGEMENT OF APPLICATION FEE PAYMENT PROCEDURE

Application fees are not accepted at the time of submittal. I hereby acknowledge that this application is not complete until the payment for all application fees has been received by the Hanover County Planning Department. The Hanover County Planning Department shall notify me by mail, email or fax (as selected below), of the applicable fee(s) at such time that they determine that the application is complete and acceptable. I acknowledge that I am responsible for ensuring that such fees are received by the Hanover County Planning Department by the Tuesday the week following the application deadline. I further acknowledge that any application fee submitted after this date shall result in the application being considered filed for the next Application Deadline.

Should the applicable fees not be submitted within forty-five (45) days of the date of the notification letter, it shall be my responsibility to arrange for the retrieval of all application materials. The application and any supplementary materials for incomplete applications that are not retrieved within forty-five (45) days of the date of the notification letter shall be destroyed by the Hanover County Planning Department.

Should my application be accepted, my payment will be due by _____. (To be filled in by a Planning Staff member.)

Signature of applicant/authorized agent _____ Date 9/25/2025

Print Name Erin Fosdick

Signature of applicant/authorized agent _____ Date _____

Print Name _____

Address to which notification letter is to be sent:

3200 Cherry Creek Dr. South, Suite 500

Denver, CO 80209

If you would like your letter emailed and/or faxed, please make selections, and provide the information below:

☑ Email [redacted] ☐ Fax _____

FEES

After application is accepted for review, make checks payable to Treasurer, Hanover County:

Special Exception	$750
Extension	$20
Special Exceptions for manufactured homes needed in a medical hardship case	$200

Please note: Applicants which request tax-exempt status may have their application fee waived upon presentation of official documentation of such status.

FOR STAFF USE ONLY:

Fee: _____	Accepted by: _____ HTE #: _____

NOTIFICATION OF ADJOINING PROPERTY OWNERS AND BOARD OF SUPERVISORS

Applicant's Statement:

I hereby certify that I have notified all adjacent property owners to the property, which is the subject of this request, as well as the member of the Board of Supervisors for the magisterial district in which the property is located. Adjacent property includes all property across roadways, watercourses, railroads, and/or municipal boundaries. I further certify that the names and addresses below are those of the adjacent property owners as listed in the tax records of the Commissioner of Revenue of Hanover County.

Applicant's Signature: Erin Fosdick

COMMONWEALTH OF VIRGINIA)

) to-wit:

COUNTY OF HANOVER)

The foregoing instrument was acknowledged before me this 25th day of September, 2025 by Erin Fosdick (Name of Applicant).

LESLIE D. RANDOLPH NOTARY PUBLIC COMMONWEALTH OF VIRGINIA REGISTRATION NO. 240346 MY COMM. EXPIRES 6/30/2026

My commission expires: 6/30/2026

Leslie D. Randolph
I was commissioned as Leslie D. Randolph
Notary Public

Board of Supervisors Representative: Susan Dibble

List of Adjacent Property Owners: Larry Leadbetter

GPIN	Name	Address

ADJACENT PARCEL OWNERSHIP INFORMATION

ID	GPIN	OWNER	OWNER'S ADDRESS	ZONING
1	7757-94-3433	BEVERLY D HARRIS LIVING TRUST	13015 MOUNTAIN ROAD GLEN ALLEN, VA 23059	A-1
2	7757-85-3039	BEVERLY D HARRIS LIVING TRUST	13015 MOUNTAIN ROAD GLEN ALLEN, VA 23059	A-1
3	7757-95-1094	MARILYN MARTIN WALLS	13031 MOUNTAIN ROAD GLEN ALLEN, VA 23059	A-1
4	7757-85-9388	STUART E LEWIS & WILLIAM L EDWARDS, JR	P.O. BOX 2987 GLEN ALLEN, VA 23058	A-1
5	7757-85-8959	ROBERT W GLAUBIT	3012 SUMMERHAVEN COURT GLEN ALLEN, VA 23060-0000	A-1
6	7757-96-1510	OVERHILL PROPERTIES, INC.	5925 SCHOOL AVENUE HENRICO, VA 23228	B-3
7	7757-86-9670	BFG VA LLC	P.O. BOX 320099 ALEXANDRIA, VA 22320	B-3
8	7757-86-7936	WEST 33 LLC	15040 SCOTCHTOWN ROAD MONTPELIER, VA 23192	B-3
9	7757-87-4513	LEONARD G. MURPHY LIVING TRUST; CYNTHIA A. MURPHY LIVING TRUST	10279 GLADFELTER ROAD 3144 GLEN ALLEN, VA 23059	B-3
10	7757-88-1430	STEPHEN W TRAMMELL & ANTOINETTE W TRAMMELL	13081 WINNS CHURCH ROAD GLEN ALLEN, VA 23059	A-1
11	7758-71-6329	ANTOINETTE W TRAMMELL & STEPHEN W TRAMMELL	13081 WINNS CHURCH ROAD GLEN ALLEN, VA 23059	A-1
12	7758-91-4491	BRIAN G & DIANA L TRAMMELL	13031 WINNS CHURCH ROAD GLEN ALLEN, VA 23059-0000	A-1
13	7758-01-0456	LORENZON G AMBROGI & SUSAN A PARKER	12573 WINNS CHURCH ROAD GLEN ALLEN, VA 23059	A-1
14	7768-02-2085	DOUGLAS E WHITE	12572 WINNS CHURCH ROAD GLEN ALLEN, VA 23059	A-1
15	7768-02-6064	DOUGLAS A TRAMMELL	12550 WINNS CHURCH ROAD GLEN ALLEN, VA 23059	A-1
16	7768-03-9004	MANUAL G LOUPASSI LIMITED PARTNERSHIP (C/O ROBIN INN)	2601 PARK AVENUE RICHMOND, VA 23220	A-1
17	7768-10-9843	GARY N PALMER	11513 PRIMROSE LANE ROCKVILLE, VA 23146	A-1
18	7767-39-7416	WILLSON FAMILY, LLC	3031 LYNNHAVEN DRIVE VIRGINIA BEACH, VA 23451	A-1
19	7767-27-5397	HANOVER COUNTY	P.O. BOX 470 HANOVER, VA 23069	A-1
20	763-777-8518	ROBERT L MAUGHAN & FRANCES M KENNEDY	11524 BIRCHILL LANE GLEN ALLEN, VA 23056-5127	A-1
21	762-776-4610	THE TOWNES AT HUNTON PARK TOWNHOUSE ASSOCIATION, INC.	4435 WATERFRONT DRIVE, SUITE 406 GLEN ALLEN, VA 23060	MIXED
22	761-775-6361	STAR CITY LAND AND DEVELOPMENT COMPANY, LLC	148 BRISTOL EAST ROAD BRISTOL, VA 24202-5500	MIXED

NOTIFICATION OF ZONING APPLICATION SUBMITTAL

TO: Adjacent Property Owner

FROM: See attached letter

DATE: _____

The following application will be submitted for review to the Hanover County Planning Department:

- ☑ Rezoning
- ☑ Conditional Use Permit
- ☑ Special Exception

Applicant: _____
Property Location: _____
_____
GPIN(s): _____
_____
Requested Zoning District: _____
Requested Use/Exception: _____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____

The application will be available for viewing at the Hanover County Planning Department. The Planning Department shall notify all adjacent property owners of the time, day, and place of the public hearings to be held on this application. Should you have any questions or comments, please contact the Planning Department at (804) 365-6171.

September 26, 2025

RE: Hanover County Development Applications for Mountain Road Technology Park, GPINs: 7757-98-4106 (Marchetti Properties), 7767-08-0569 (Marchetti Properties), 7767-17-2423 (Marchetti Properties), 7757-96-1157 (Marchetti Properties II Inc), 7757-96-5577 (Staples Mill Square Holding LLC), 7757-97-5013 (Tyson Farms Inc), 7768-00-5491 (Tribble)

Dear Neighbors and Surrounding Property Owners,

Tract is excited to present information on an application that is being submitted to Hanover County this month for the Mountain Road Technology Park. Tract is a digital infrastructure and data center developer that focuses on developing master plan technology campuses. This letter is being provided to you as a property owner that is adjacent to the proposed technology park. A community meeting will be held to present information on the project and answer questions; that meeting will be scheduled in the coming weeks, and additional information will be provided to you with meeting details.

Background

The Hanover County Board of Supervisors adopted the Route 33 Gateway Small Area Plan (Gateway Plan) in August of 2025. In conjunction with the Envision Hanover Comprehensive Plan, the Gateway Plan provides guidance on land uses and design for the area along Route 33/Mountain Road, between the Chickahominy River and Winns Church Rd. The Gateway Plan envisions data centers, light industrial, clean manufacturing, and other supporting uses, for this area. Tract is excited to apply for a master planned data center campus in the Gateway area, which will move the County's vision for this area forward!

Project Information

To further the goals of the Comprehensive Plan and Gateway Plan, Tract has applied for a rezoning, conditional use permit, and special exception for seven parcels of land in the area to create a master planned data center campus. These properties are part of an Economic Development Zone and are currently designated 'Employment Center' within the Envision Hanover Comprehensive Plan; they are also within the Suburban Service Area.

This project includes development and building areas to permit data center buildings as well as other supporting uses, consistent with the guidance provided in the Gateway Plan. The data center campus will include a primary entrance and secondary access off Route 33/Mountain Road; no construction or permanent access is being proposed off Winns Church Road (only a gated emergency access has been identified), which is consistent with the adopted Gateway Plan.

The project will preserve substantial natural buffers along Route 33/Mountain Road and along Winns Church, consistent with the Gateway Plan. Consistent with the recommendations from the Gateway Plan, the concept plan also proposes trails along the Chickahominy River, on the southern edge of the property, and along Grassy Swamp Creek, which is on the eastern edge of the property.

We look forward to sharing additional details at our upcoming community meeting and hope to see you there.

Sincerely,

Erin Fosdick

Erin Fosdick, AICP

CC: Susan P. Dibble, South Anna District
Michael Herzberg IV, Chairman, Cold Harbor District
Sean M. Davis, Vice Chairman, Henry District
Faye O. Prichard, Ashland District
Jeff S. Stoneman, Beaverdam District
Danielle Grieshaber Floyd, Chickahominy District
Ryan M. Hudson, Mechanicsville District
Larry Leadbetter, Planning Commission, South Anna District
Jo Ann Hunter, Planning Director
Andrew Pompeii, Assistant Planning Director

HISTORIC SITE IMPACT ANALYSIS

Please identify any **known or suspected historic resources on both the subject property and adjacent properties**, to include both structural and non-structural resources, such as trenches, cemeteries, and archeological sites. Please include the GPIN (Tax Parcel Number) associated with the resource. Please attach additional sheets, if necessary. Should you need assistance completing this form, please contact the Planning Staff.

1. Historic Resource/File No. _____ GPIN _____
2. Historic Resource/File No. _____ GPIN _____
3. Historic Resource/File No. _____ GPIN _____
4. Historic Resource/File No. _____ GPIN _____
5. Historic Resource/File No. _____ GPIN _____

If you have identified known or suspected historic resources on the subject property or adjacent property, please provide the following information on each site:

a) Is the historic site listed as a National or State Registered Landmark? _____

b) Is the historic site open to the public? _____

c) Describe the impact the proposed request will have on the identified historic resources with regard to noise, traffic, dust, vibration, visual impact, and air pollution. _____

d) Describe voluntary measures that will be undertaken to help mitigate the impact that the proposed use may have on the identified historic resources. _____

If there are no known or suspected historic resources on the subject property or immediately adjacent, including structural and non-structural resources, trenches, cemeteries, and archeological sites, **please sign and date**.

Signature: _____ Date: 9/26/25

EXPLANATION: (Attach additional sheets, if necessary)

1. This Special Exception is being requested in order to: Allow for the maximum height of buildings up to 85 feet and the maximum height of security fencing of up to ten feet.

2. Briefly describe how you plan to develop the property for the proposed use and any associated uses. This property is proposed to be developed as the Mountain Road Technology Park. The campus is being developed in conformance with the recently adopted Route 33 Gateway Small Area Plan, which contemplates data centers and other supporting uses as ideal, compatible uses for this area. The concept plan submitted for the rezoning and this CUP contains three development areas and several associated building areas where data center buildings, administration buildings, substations, parking lots, mechanical equipment, generators, utilities, and other supporting uses can be located. Substations will specifically be allowed in building areas 2b and 3b, which are located on the eastern edge of the site; this configuration is most efficient based on the expected routing of power infrastructure. Detailed developments standards for development areas and building areas will guide overall site development to ensure conformance with the SAP and Envision Hanover Comprehensive Plan. Thoughtful site design including substantial natural buffers, significant building setbacks, and strategic siting for building areas, will ensure compatibility with surrounding areas. Access has been carefully considered and follows the SAP. The primary entrance to the campus is located off Route 33 at the southern end of the site. A secondary access is proposed along Route 33, further north on the site. An emergency & utility only access is shown from Winns Church Road.

3. Describe why the proposed use or exception is desirable and appropriate for the area. What measures will be taken to assure that the proposed use or exception will not have a negative impact on the surrounding vicinity? (For example, this may include traffic or environmental impacts.) Building height must be increased to allow for the proper installation of data distribution technologies. Fencing height must be increased to assure proper security measures to protect sensitive equipment and information. Substantial natural buffers will be implemented with the project to ensure that there are no negative visual impacts to surrounding properties.

4. Are there any deed restrictions concerning the type of use proposed? If so, provide the date the said restrictions expire. (You may attach a copy of the restrictions.) None

5. Is the subject property located in a Dam Break Inundation Zone? ☑ Yes ☐ No (Please contact the Department of Planning or Public Works for assistance in addressing this question.) If yes, please contact the Department of Public Works for further information.

COMPLIANCE WITH VDOT & COUNTY TRAFFIC IMPACT ANALYSIS REQUIREMENTS

The following must be completed for all applications: The selection below is based on a projected daily trip generation of 1,488 vehicles per day and a site peak hour trip generation of 186 vehicles per hour, based on the stipulations of 24 VAC 30-155. The N.A. edition (latest edition) of the ITE Trip Generation Manual was used in determining the trip generation (Code Number N.A. and Page Number N.A.).

Choose one of the two options below:

☐ I certify that this proposal **DOES NOT EXCEED** 380 vehicle trips per day that would require submittal of a Traffic Impact Analysis.

☑ I certify that this proposal **DOES EXCEED** 380 vehicle trips per day that would require a Traffic Impact Analysis be submitted.

Choose one of the two options below:

☑ I certify that this proposal DOES NOT MEET any of the VDOT thresholds identified in the Traffic Impact Analysis Regulations Administrative Guidelines (24 VAC 30-155) that would require a Traffic Impact Analysis to be submitted in conjunction with this application.

☐ I certify that this proposal MEETS at least one of the VDOT thresholds identified in the Traffic Impact Analysis Regulations Administrative Guidelines (24 VAC 30-155) that would require a Traffic Impact Analysis to be submitted in conjunction with this application. A Traffic Impact Analysis, prepared in accordance with the Traffic Impact Analysis Regulations Administrative Guidelines (24 VAC 30-155), has been prepared and will be submitted to VDOT the same day.

David Capparuccini Digitally signed by David Capparuccini DN: C=US, E=david.capparuccini@kimley-horn.com, O=Kimley-Horn, CN=David Capparuccini Date: 2025.09.23 12:43:55-04'00' 9/23/25

(Signature of Applicant/Applicant's Representative) (Date)

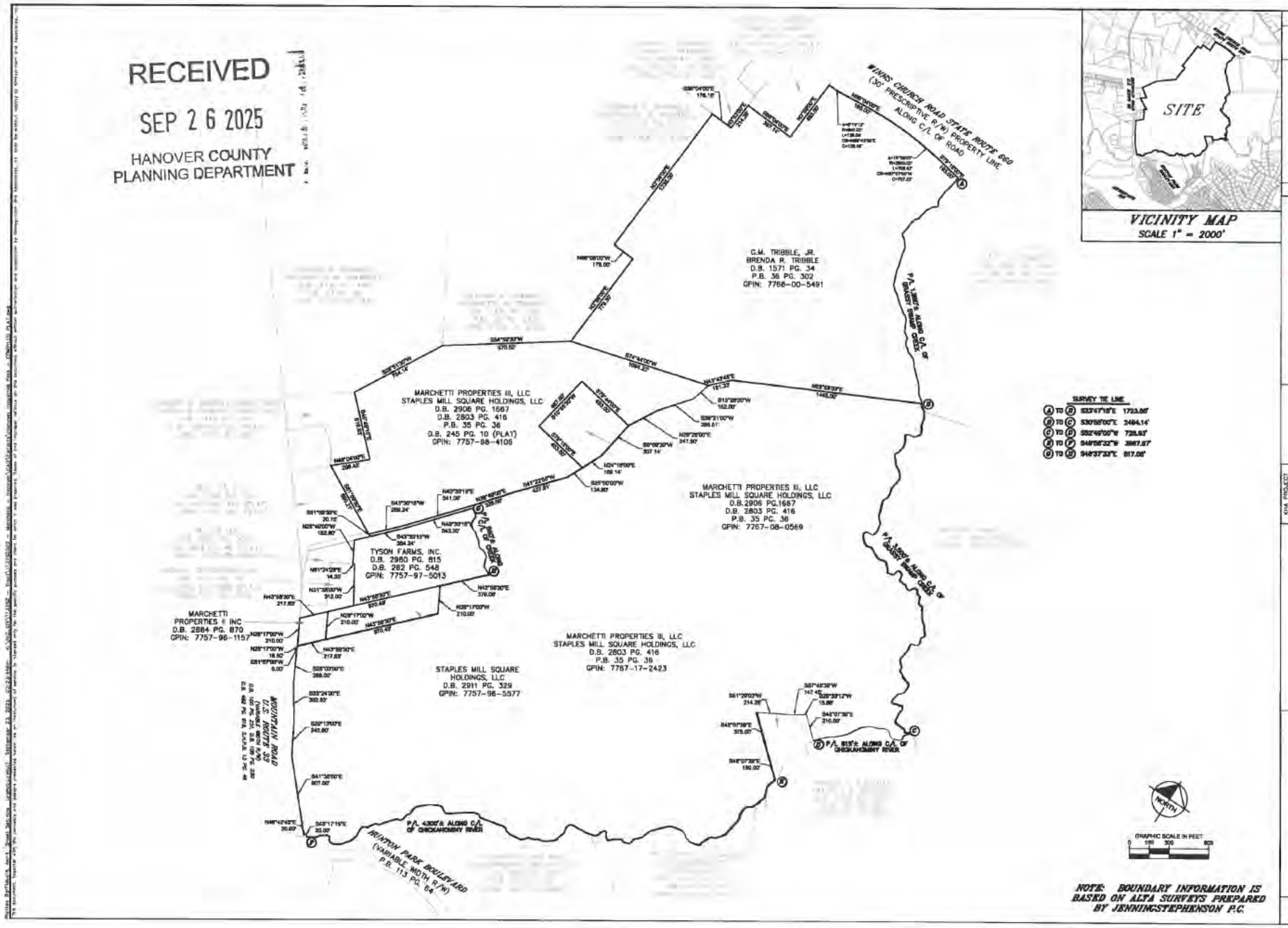
David Capparuccini

(Applicant/Applicant's Representative – Print Name)

RECEIVED

SEP 2 6 2025

HANOVER COUNTY
PLANNING DEPARTMENT



NOTE: BOUNDARY INFORMATION IS BASED ON ALTA SURVEYS PREPARED BY JENNINGSTEPHENSON P.C.

Kimley»Horn

REZONING - PARCEL EXHIBIT

MOUNTAIN ROAD TECHNOLOGY PARK

HANOVER COUNTY VA

KHA PROJECT 113002
DATE 9/24/2025
SCALE AS SHOWN
DESIGNED BY KFC
DRAWN BY AF
CHECKED BY RBP

SHEET NUMBER 01

Follow-Up Responses from the Applicant

Pompei, Andrew J.

From: Erin Fosdick <erin.fosdick@tract.com>
Sent: Thursday, May 14, 2026 10:27 AM
To: Budesky, John A.; Hunter, Jo Ann M.
Cc: Pompei, Andrew J.; Biernot, Gretchen W.; Dan Becht; Graham Williams
Subject: Fw: Factual Information on the Mountain Road Technology Park Project

CAUTION: This email originated from outside your organization. Exercise caution when opening attachments or clicking links, especially from unknown senders.
Good morning,

I wanted to let you know that my team emailed the Board of Supervisors the information below; individual emails went out to each Board member, but this is a copy of the email that I sent to Supervisor Dibble. I wanted you to have a copy in case you get questions from members of the Board. Please reach out if you have any questions. Enjoy your day!

Erin Fosdick, AICP
Director of Entitlements
erin.fosdick@tract.com
720-552-9172
www.tract.com

From: Erin Fosdick <erin.fosdick@tract.com>
Sent: Thursday, May 14, 2026 8:04 AM
To: Dibble, Susan P. <spdibble@hanovercounty.gov>
Cc: Dan Becht <Dan.Becht@tract.com>
Subject: Factual Information on the Mountain Road Technology Park Project

Good morning, Supervisor Dibble,

As you know, Tract's second Hanover County project in the South Anna District, will be presented to the Board of Supervisors on May 27th. We are extremely proud of all the work we've put into the proposal to ensure consistency with the Envision Hanover Comprehensive Plan and Route 33 Gateway Small Area Plan. We think this represents an incredible opportunity for the County and for the region. Unfortunately, there is a lot of misinformation being communicated in the community, so we wanted to share some factual project information in advance of the Board meeting later this month - see below.

I am also including a couple of links to recent reports and articles that you may be interested in:

Data Centers Are Becoming Industrial's Growth Engine

The Impact of Data Centers on Virginia's State and Local Economies (available for download)
PWC Report: Economic Contributions of Data Centers in the United States (2026 report available for download)
Data center revenue helps Louisa County cut personal property tax rate

Please feel free to reach out with questions in advance of the meeting. We look forward to presenting more detailed information later this month.

Information on Tract's Mountain Road Technology Park project in Hanover County, VA

The Mountain Road Technology Park project will begin to implement Hanover County's long-term vision for the Route 33 Corridor. With an initial power deliver date of late 2029, this project will advance the County's economic development goals in the nearer term; a project requesting power today, would be placed in Batch 15 or later, as compared with Batch 0 where this project is. Projects in these later batches would not likely achieve energization until the mid- to late 2040s, limiting the County's ability to continue attracting investment in areas targeted for this type of development. This project will provide needed tax revenue to support Hanover County schools, public safety, infrastructure projects, and more. It will provide good jobs for a variety of trades throughout construction and will provide hundreds of quality permanent jobs when it's complete. Thoughtful planning and a commitment to established County goals will ensure integration into the community in a manner that benefits Hanover County.

Tract has worked extensively with the County and regional stakeholders to deliver a project proposal that addresses concerns and is consistent with the county's vision. An organized, highly vocal opposition has formed around this project, and much of the information they are sharing is misleading or simply false. The following is a response to some of the claims. Additional detail is provided below, but generally strengths of the project include:

- Alignment with Hanover County's adopted plans
- Strong proffers that will hold future development to significant environmental and design standards, including air and water quality, noise standards, and high-quality architecture
- Existing public infrastructure availability and significant private investment to improve reliability and resiliency of County water and wastewater systems
- Fair and reliable cost structures for power to ensure Tract will pay for investments in power infrastructure and ongoing operations
- Significant, reliable tax revenues over the long term to support Hanover County schools, public safety, capital improvements, and general fund
- Quality jobs and construction employment, including hundreds of spinoff jobs to support existing businesses in the County
- Strengthening Hanover County's regional competitiveness and diversifying it's economic base

Additional Background on Claims and Project Information

Claim: This project is not consistent with the County's vision and data centers are not an appropriate use for Employment Centers

Fact: This project is fully consistent with Hanover County plans, making it the right project in the right location.

- The Envision Hanover Comprehensive Plan was prepared through a multi-year, highly public process, that included extensive public engagement.

- Data Centers are specifically identified as an appropriate use for Employment Centers.
- The project is located within the County's Suburban Service Area (SSA), which is the area the County has identified for future growth. By directing growth to the SSA, which comprises less than one quarter of the area within the County, the majority of Hanover county can remain rural.
- The Route 33 Gateway Small Area Plan, adopted by the Board of Supervisors on August 27, 2025, also included a robust public process. The public agreed that the plan should prioritize uses in the industrial zone that generate lower traffic, can be buffered and screened, and that can be integrated into the area by limiting intensity at the edges and limiting visual impacts.
- The Route 33 Gateway SAP specifically recommends data centers as an appropriate use for the Industrial Zone where this project is located.

Claim: This project will use 90% of the water in this area of the County and will leave residents vulnerable.

Fact: There is adequate water capacity to serve this project without impacting existing users, and this project will actually result in increased resiliency for South Anna residents.

- The former Tyson's plant used 800,000 gallons of water/day. This project has an average daily demand of 600,000 gallons/day.
- This project will only use public water; no groundwater or well water will be used.
- Although our peak water use could approach 90% of the existing *available* capacity on rare high-demand days, Tract is contributing land and $15 million for a new County water tank and booster station, which will increase system capacity, lower our share of usage compared to today, improve resiliency and accommodate future economic development projects.
- This investment means that tax payers will not have to fund this in the future and that the project can be completed much sooner than originally contemplated.
- Tract has proffered to using air-cooled or recirculating evaporative cooling, which use less water than single-pass cooling systems.

Claim: This project will result in significant impacts to air and water quality and will negatively impact public health

Fact: There are extensive regulatory requirements to protect air and water quality, including local, state, and federal regulations.

- Regulatory requirements govern construction and ongoing operations for water, wastewater, stormwater, and air quality; this includes generator testing.
- All wastewater will be discharged to the public system; there will be no direct discharge from data center buildings to area waterways, including the Chickahominy River.
- Stormwater and runoff will comply with water quality/quantity and stormwater regulations.
- Construction and contractor management practices will be established and monitored to protect water quality during construction.
- Tract will work through appropriate local, state, and federal regulatory agencies to remove a dam that is in poor condition. Holzgrefe Pond will be dewatered, so the stream can be restored. This area will remain undeveloped and will undergo significant ecological restoration, supporting water quality, native vegetation, and habitat.

- Tract has proffered Tier 4 generators.
- There are several counties in VA with established data center markets that are among the state's healthiest counties.

Claim: This project will result in noise and light levels that will destroy residents' quality of life

Fact: This project will meet or exceed the County's requirements for acceptable sound and light levels.

- The campus incorporates extensive natural buffers and requires supplemental plantings, which will reduce visual and noise impacts.
- Modern data centers produce less noise than many other industrial uses.
- Tract has proffered to dBA and dBC levels, although the County only requires adherence to dBA levels.
- A noise study will be required for every building after construction is complete, when the building is ready for service. If the building doesn't meet proffered standards, mitigation measures will need to be put into place before the building can operate.
- Tract has proffered that the County can request a noise study annually in the event there are complaints after the campus is in operation.
- Generators are required to be placed in sound attenuation enclosures.
- Tract has proffered minimal lighting levels at the inside edge of the natural buffer, which will ensure minimal light trespass at the property line.
- Uplighting is prohibited, and there are height restrictions for all exterior lighting.
- Both roof-mounted and ground mounted mechanical equipment is required to be screened, which will minimize visual and noise impacts.

Claim: Electric bills for residents will increase to fund the necessary power upgrades, and power demands for power will reduce grid reliability.

Fact: Tract is working closely with Dominion Energy to plan this site. New substations will be constructed to serve the development site, and Tract will be responsible for the cost of the infrastructure to serve this project.

- The recently approved GS-5 rate class will shield residential and small customers from large load users, like data centers.
- Tract will be subject to the GS-5 rate.
- Once operational, this project will be subject to required monthly minimum payments even if usage is lower than the contract amount. This guarantees that Dominion Energy recovers their infrastructure costs and these costs aren't passed along to residential and other small customers.
- Tract must provide collateral for each substation to ensure costs are not passed on to residential or other small customers.

Claim: The impacts on Mountain Road during construction have not been considered.

Fact: Tract has proffered transportation improvements, access restrictions, and detailed requirements for construction management plans, which will be reviewed and approved by the County prior to starting construction.

- A traffic impact analysis has been approved by VDOT and the County's 3rd party reviewer; this TIA included a detailed analysis of both permanent and construction traffic.
- Tract will pay for improvements to Mountain Road including turn lanes, receiving lanes, and a median U-turn. These improvements will be required prior to construction commencing.
- Construction and permanent access will not be permitted on Winns Church Road.
- Commercial construction vehicles will not be permitted to access Mountain Road during peak hours
- A construction management plan will be required at the time of grading permit. This plan will cover:
    - Construction days/hours
    - Required traffic control, including traffic control through the Sheriff's Office at Tract's expense
    - Methods for reducing dirt, dust, and rocks
    - Identification of a public liaison for the project

Claim: The tax revenues for this project are not predictable and won't support County services.

Fact: Data centers provide significant revenue for the jurisdictions they are located in.

- Tract has modeled tax revenue from construction (real property) and equipment (business personal property).
- Hanover County's Finance Department, Commissioner of Revenue's Office, and Assessor's Office have reviewed the assumptions used to project tax revenue and have agreed the assumptions are sound.
- The project will begin to generate additional revenue once it is reassessed 30 days after rezoning; additional, robust revenue generation will be realized as the project builds out.
- Jurisdictions throughout the state and country are seeing significant revenue generation from projects like this. Two examples for the fiscal year that ended June 30, 2023:
    - Data center tax revenue in Loudoun County accounted for $733 million representing 31% of total county tax revenue
    - Data center tax revenue in Prince William County generated $110 million, representing 7 percent of total local tax revenue.

Claim: This project will only create temporary construction jobs.

Fact: This project will generate 300-350 jobs and will support an additional 1,100 construction jobs.

- Construction jobs are not temporary jobs. While employees working on specific projects may move around a region to support a variety of projects, many have long-term, successful careers in the construction sector.
- Data centers support permanent, high quality technical jobs, as well as a variety of trades.
- Data shows that each direct data center job supports six (6) jobs elsewhere in the economy. There have been announcements of significant investments in Hanover County for companies that support the data center industry, line Rosedin and DPR.

Claim: Tract has not delivered on the Hanover Technology Park (HTP) project, so they cannot be trusted to do another project in Hanover County.

Fact: Tract has worked successfully across the U.S. and has numerous active project sites, including the Hanover Technology Park in Hanover County.

- Large master planned data center campuses, like HTP, are extremely complex development projects, with multiple steps required prior to construction commencing.
- Tract has been working diligently with the County and other agencies on necessary plans and permits and plans to break ground on permanent improvements later this year.
- Commercial interest in HTP is strong.



Erin Fosdick, AICP

Director of Entitlements


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May 5, 2026

Gretchen W. Biernot
Current Planning Manager
Hanover County Planning Department
P.O. Box 470
Hanover Virginia 23069

RE: Mountain Road Technology Park Application Updates for the Hanover County Board of Supervisors for REZ2025-00023, CUP2025-00016, and SE2025-00023

Dear Gretchen,

In preparation for the May 27, 2026, Hanover County Board of Supervisors meeting, we are submitting updated materials to support REZ2025-00023, CUP2025-00016, and SE2025-00023. This resubmittal package includes a revised plan set and revised proffers, which are part of the formal rezoning, conditional use, and special exception applications. We understand that the materials provided to the Planning Commission for the April 16, 2026, meeting will also be provided to the Board of Supervisors. We are also including an attachment that describes the changes that have been made to the plans and proffers since the Planning Commission meeting, and have also included a summary of the changes since the project was initially submitted to the County, as a reference for the Board of Supervisors.

We look forward to discussing this information at the Board of Supervisors meeting on May 27, 2026. In the meantime, please don't hesitate to reach out with any additional questions or if you need clarification on anything.

Sincerely,

Erin Fosdick

Erin Fosdick, AICP
Director of Entitlements
erin.fosdick@tract.com

cc: Jo Ann Hunter, Senior Director of Planning & Community Development
Andrew Pompei, Deputy Director of Planning

Attachments (provided electronically via email):

1. Plan and Proffer Revisions since the April 16, 2026 Planning Commission meeting
2. Plan and Proffer Revisions since the initial application submittal
3. Mountain Road Technology Park Concept Plan and Conditional Use Permit Plan Set
4. Voluntary Proffer Statement Mountain Road Technology Park Project

Plan and Proffer Revisions since the April 16, 2026, Planning Commission Meeting

The following proffer revisions were made after the April 16, 2026, Planning Commission meeting to address Planning Commission and staff comments:

- Proffer #2: updated to include sheets C3.1 – C3.3 of the concept plan; previously on sheet C3.0, to overall concept plan was included
- Proffer #3: increased the buffer along the western property boundary adjacent to "Future Industrial" from 50' to 75'
- Proffer #5: increased the perimeter setbacks for buildings along the western boundary adjacent to "Future Industrial" from 50' to 75' for consistency with the increased natural buffer in Proffer #3
- Proffer #9: updated reference to lighting fixtures for consistency with current code
- Proffer #13: added an additional section for additional noise studies, to allow the Planning Director to require additional noise studies, at the owner's expense, to demonstrate ongoing compliance with proffered sound levels
- Proffer #15: added clarifying language that coordination with the Sherriff's Office for traffic control would be at the applicant's expense
- Proffer #16: added clarification that single pass cooling will not be used and adjusted proffer language for the cash proffer payment for public water infrastructure
- Minor clean-up and reorganization for readability

Summary of Plan and Proffer Revisions Since Initial Application Submittal

The Mountain Road Technology Park application was originally submitted to the Hanover County Planning Department in September of 2025. Since that time, the project team has made significant changes to the plan and proffers to address comments and concerns raised by County staff, the Planning Commission, and the community at large; these changes included:

- Narrowed permitted principal uses
- Clarified that substations only are permitted in Building Areas 2B and 3B
- Added and clarified definitions, including ecological restoration area
- Increased width for natural perimeter buffers along Winns Church Road, Grassy Swamp Creek, and the Future Industrial area on the western property boundary
- Added more specific timing requirements for inventorying vegetation and supplemental planting standards
- Added language for mandatory supplemental planting around substations and specific building areas for additional screening
- Added detail on proffered walking paths and the trailhead. Also, proffered a cash contribution for a Trail Maintenance fund.
- Reduced building heights from 85' to 62', to ensure consistency with guidance from the Route 33 Gateway Small Area Plan; clarified that building height is measured to the top of parapet wall
- Updated design standards to better reflect guidance from the Route 33 Gateway Small Area Plan (façade articulation, color palettes, security sheds, viewsheds, orientation, etc.)
- Added a requirement that transmission infrastructure will be weathering steel or similar earth tone to better blend into the surrounding landscape (weathering steel is the name of the color treatment)
- Added additional requirements for screening of mechanical equipment and substations
- Added additional requirements for signage, including more details to better reflect signage guidance from the Route 33 Gateway Small Area Plan
- Clarified locations for perimeter and security fencing
- Added additional requirements for lighting to reduce visual impacts, restrict height, and to better reflect guidance from the Route 33 Gateway Small Area
- Added additional requirements to the transportation proffer specifying permanent improvements to Route 33/Mountain Road (e.g. turn lanes and median improvements)
- Clarified bond language and timing to address construction road damage
- Revised noise proffer to add limits on dBC, in addition to permitted dBA levels.
- Added a proffer that authorizes the Planning Director to request additional, follow-up noise studies
- Added a requirement that generators be in sound attenuation enclosures and strengthened physical sound attenuation requirements for mechanical equipment near perimeter property boundaries
- Restricted timing for generator testing to 8:00 am – 4:00 pm, Monday – Friday
- Added a requirement for Tier 4 generators

- Strengthened the construction management proffer by limiting commercial construction vehicles during peak hours, adding requirements for the implementation of traffic control measures, and requiring coordination with the Sheriff's Office at the applicant's expense
- Updated the Construction proffer to specify that at least one public liaison must be identified by the applicant/owner in the construction management plan to serve as a point of contact during active construction
- Added specific language that the use of well water is not permitted
- Clarified that the project must use air cooling or recirculating evaporative cooling systems and stated that single-pass (once-through cooling) systems will not be incorporated into this development (to promote water efficiency)
- Added a cash proffer payment totaling $15 million for the design and construction of a booster pump station and water storage tank
- Added a land dedication proffer for the future installation of two water storage tanks and associated infrastructure
- Added a proffer requiring the construction of a gateway entrance feature to incorporate the guidance from the Route 33 Gateway Small Area

April 2, 2026 (update to February 27, 2026 letter)

Gretchen W. Biernot
Current Planning Manager
Hanover County Planning Department
P.O. Box 470
Hanover Virginia 23069

RE: Mountain Road Technology Park Application Resubmittal for Planning Commission for REZ2025-00023 and CUP2025-00016

Dear Gretchen,

As a follow up to the February 19, 2026, Hanover County Planning Commission meeting, we are resubmitting materials to support REZ2025-00023 and CUP2025-00016. This resubmittal package includes a revised concept plan and revised proffers, which are part of the formal rezoning and conditional use application; we have provided a clean version of the proffers, as well as redline versions. In addition, we have included responses outlining how we have addressed the specific items included in the Planning Commission's motion and suggested by Planning Staff; we have also included supplemental information and reports supporting the application materials.

We look forward to discussing this information at the next Planning Commission meeting on April 16, 2026. In the meantime, please don't hesitate to reach out with any additional questions or if you need clarification on anything.

Sincerely,

Erin Fosdick

Erin Fosdick, AICP
Director of Entitlements
erin.fosdick@tract.com

cc: Jo Ann Hunter, Senior Director of Planning & Community Development
Andrew Pompei, Deputy Director of Planning

Attachments (provided electronically via email):

1. Additional Information for the Planning Commission

2. Concept Plan
3. Revised Proffers
4. Tax Generation Analysis
5. Supplemental TIA Information
6. Technical Memorandum on Hydraulic Modeling
7. Environmental Noise Assessment
8. Exhibit showing distances from Building Areas to property lines

Additional Information Requested by the Planning Commission

At the February 19, 2026, Hanover Planning Commission meeting, the Commission voted to defer the project and requested the following changes and information:

1. Updating the proffers to better reflect guidance from the Route 33 Gateway Small Area Plan (viewsheds, position of mechanical equipment, generator run times, clarification for perimeter boundaries)
2. Clarifying peak water demand
3. Incorporating staff recommended conditions from the CUP
4. Adding additional standards for Building Area 3A, which will house the substation along Winns Church Rd. (increasing buffer distances, screening, compatibility of transmission infrastructure)
5. Identify a more permanent solution for construction traffic leaving the site
6. Clarifying Tier 4 Generators will be used
7. Clarify rates for Dominion
8. Identifying options for recirculating water to reduce average daily use
9. Ensuring language around decommissioning is appropriately detailed

Proffer and Plan Updates

Several changes were made to the proffers to address items 1, 3, 4, 5, 6, 8, and 9. These are detailed in the attached updated version of the proffers (dated April 3, 2026) and shown in the updated concept plan. Generally, the changes include the following:

- Minor formatting and reorganization of the proffers, as recommended by Planning Staff to improve readability
- Modifications to Building Area 3B:
    - Increasing the Natural Perimeter Buffer along Winns Church Road from 200' to 300' feet and shifting Building Area 3B to the south
    - Adding a double row of evergreen trees behind the expanded Natural Perimeter Buffer and north of Building Area 3B to provide additional screening from Winns Church Road

- Adding additional notes in the Design Standards for permitted uses for the substation in Building Area 3B, requiring additional substation screening
- Clarifying that substations only are permitted in Building Areas 2B and 3B
- Originally Tract Incorporated Planning Staff's recommended conditions for the CUP into the proffers; however, Planning Staff recommended that the conditions specific to the substation should not be incorporated into the proffers, so these changes were retracted in the subsequent draft submitted to the County. Tract is still fine with the conditions tied to CUP approval. Generally, these include:
  - Ensuring location and design for substations is in compliance with the plan and approved by the Planning Director
  - An additional setback distance specific for substations
  - Additional screening requirements for substations
  - Requirement that any supporting buildings meet overall design standards
  - County inspection of substations
- Adding a proffer to establish a Trail Maintenance Contribution Fund which will provide $30,000/Building Area to the County to support ongoing maintenance of the walking trail and trailhead originally included in the proffers (Proffer #4f), which was requested by staff.
- Requiring that transmission infrastructure will be weathering steel or similar earth tone to better blend into the surrounding landscape (weathering steel is the name of the color treatment)
- Updating the proffers to clarify that requirements for screening and reducing visibility apply to perimeter project boundary lines, in addition to public rights-of-way
- Identifying additional transportation improvements to address concerns around construction traffic including:
  - Construction of a Median U-Turn along Route 33/Mountain Road to improve LOS during construction (this is a permanent improvement included in the Transportation Proffer)
  - Prohibiting commercial construction trucks from exiting the site during AM peak hours (8 – 9 AM) entering and exiting the property during peak PM hours (4 – 6 PM) and implementing traffic control measure to ensure construction traffic complies with approved exiting movements
  - Working with the Sherrif's Office to control traffic on Mountain Road during construction
- Updating the Construction proffer to specify that at least one public liaison must be identified by the applicant/owner in the construction management plan to serve as a point of contact during active construction, as requested by Planning Staff.
- Reducing hours and days that generators can be tested
- Adding a land dedication proffer for the future installation of a Water Storage Tank
- Prohibiting the use of well water to avoid any confusion or concern by the community
- Requiring that single-pass or once-through cooling systems will not be incorporated into this development to promote water efficiency

- Clarifying that only Tier IV generators will be used by removing the phrase requested and adding a requirement that generators shall be in an enclosure

Peak Water Demand

The proposed development will be served by the public water system. Due to its location between the Hanover County and Henrico County service areas, water service may be provided from either system. Following discussions and coordination with the Department of Public Utilities (DPU), it is Tract's understanding that DPU's preference is for water to be provided from the Hanover County service area. Water supplied from Hanover County would be delivered via the Lockwood Booster Station with the option of the County sending water from the Doswell system during periods of low system usage such as the winter.

The projected average daily water usage is 600,000 gallons/day (gpd). Recent capacity made available through the closure of a nearby facility, and the relinquishment of its 800,000 gallons/day allocation provides sufficient capacity to meet the needs of this project, while also allowing for additional supply to accommodate future development in the area.

Tract has evaluated Maximum Daily Demand (MDD or peak demand), which is projected at 2,000,000 gallons/day. This MDD is based on a 20-year worst case temperature and humidity condition; this level of demand is expected to occur infrequently.

Detailed hydraulic modeling was completed by Dewberry to evaluate the ability of the existing water system and, if necessary, identify the best available options to support both the project and add resiliency to the overall water system. Based on the results of this evaluation, the existing Hanover County water system has sufficient capacity to supply water to the Route 33 data center development during both MDD and fire flow conditions.

The results of this modeling also identified two recommendations to support the MDD conditions and increase system resiliency. These include on-site water storage or other means to reduce the maximum day cooling demand or the construction of a new water storage tank that could support this project and other areas along Route 33. This was also generally discussed during a recent presentation to the Board of Supervisors when the overall Water Supply Resiliency Study was presented. The technical memo and the presentation acknowledge that a future preliminary engineering report will be needed to evaluate the final location, design, and impact on water supply agreements, among other things.

Per DPUs request, detailed service plans and agreements would follow a rezoning approval. These service plans would identify specific infrastructure sizes and requirements. Additional conversations on planning for a future water storage tank to serve the Route 33 corridor can be included in these conversations. A proffer has been added that confirms Tract will contribute land for this infrastructure if requested by DPU.

The technical memorandum prepared by Dewberry has been provided for the Commission's information.

Construction Traffic

The project team has evaluated the proffers around transportation and construction traffic. We understand that the Commission is concerned about traffic volumes and safety, especially during construction. To address these concerns and identify solutions, the project team prepared a Supplement to the previously approved TIA; this supplemental analysis evaluated more permanent solutions for construction traffic and included revised trip distributions, as requested by the Commission. This analysis was reviewed by VDOT; their comments have been provided for the County's considerations. Based on the analysis and subsequent discussions with VDOT, the project team made several updates to the proffers. The transportation proffer has been updated to include the construction of a Median U-Turn along Route 33/Mountain Road, north of the primary project entrance; this improvement will be designed and constructed to accommodate construction workers leaving the site. The construction proffers have also been updated to include a restriction on commercial construction vehicles exiting the site during peak AM hours and entering and exiting the site during peak PM hours, to help alleviate impacts to traffic on Mountain Road/Route 33. Additional language has also been included to ensure that the construction management plan will identify traffic control measures designed to ensure construction traffic complies with the exiting movements identified in the plan.

Any future upgrades to Mountain Road/Route 33 in this area, including upgrades to support construction peaks, will need to be approved by VDOT and the County. A Construction Management Plan will need to be approved by the County prior to site construction commencing.

Power Costs

Several questions were raised at the Planning Commission meeting regarding power costs. Tract is working closely with Dominion Energy to coordinate all aspects of power delivery for this project, including the execution of binding agreements with Dominion Energy that include Tract's financial obligations for the power infrastructure needed to serve the site.

Questions were raised about additional offsite improvements that could be needed because of this project.

Electric rates in Virginia are established under the oversight of the Virginia State Corporation Commission (SCC) and are based on cost-of-service principles. This framework requires that costs be allocated to the customer classes (i.e. residential, commercial, industrial) responsible for incurring them.

A review by the Joint Legislative Audit and Review Commission (JLARC) found Dominion's current rates appropriately allocate costs to the customer responsible for incurring them, including data

center customers. That finding confirms that the cost-of-service principles Dominion has long implemented and approved by the SCC are functioning as intended.

This year, Dominion refined this approach further by creating a new class specific to data centers. This class is the GS-5 large-load rate class. This class is an enhancement of that same methodology, designed to ensure that the large-load class of customers (i.e. data centers) are paying their specific cost of service as the customers within this class increase their power needs. This refinement to the customer class model ensures that data centers pay their own way for the benefit of the other classes of industrial customers, commercial customers, and residential customers.

Under GS-5, Dominion has also added additional obligations for data center customers. Data centers must:

- Assume construction-related financial obligations before any infrastructure is built via the execution of a Construction Letter of Authorization for each substation
    - Make cash deposits for long-lead equipment (substation transformers and breakers) pre-construction
    - Pay Dominion Energy a cancellation payment equal to the costs Dominion incurred for the project if the customer fails to take service
- Execute a 14-year Electric Service Agreement (ESA) pre-energization
    - Commit to minimum payments, even if actual usage declines
    - Provide substantial financial security, hundreds of millions of dollars per substation

Tract's cost of service (to include distribution, transmission, and generation) will be recovered through the GS-5's unique rate structure. The 14-year term ESA agreement requires minimum payments regardless of customer utilization, and high-dollar surety obligations provide a financial backstop funded by data centers. If a data center underutilizes its contracted capacity, the data center must still make the minimum payments required by the ESA. If a customer cancels or defaults before the end of the term, Dominion can draw on the posted surety to ensure Dominion is paid the money owed under the ESA. These protections are specifically designed to ensure data centers pay their costs, not the other customer-classes, like residential or small commercial customers. Taken together, these safeguards ensure that the costs required to serve this project are paid by the data center receiving the service, as well as the rest of the large-load customers in the GS-5 rate class.

With respect to increases in electric bills, they are driven by a range of broader factors, including:

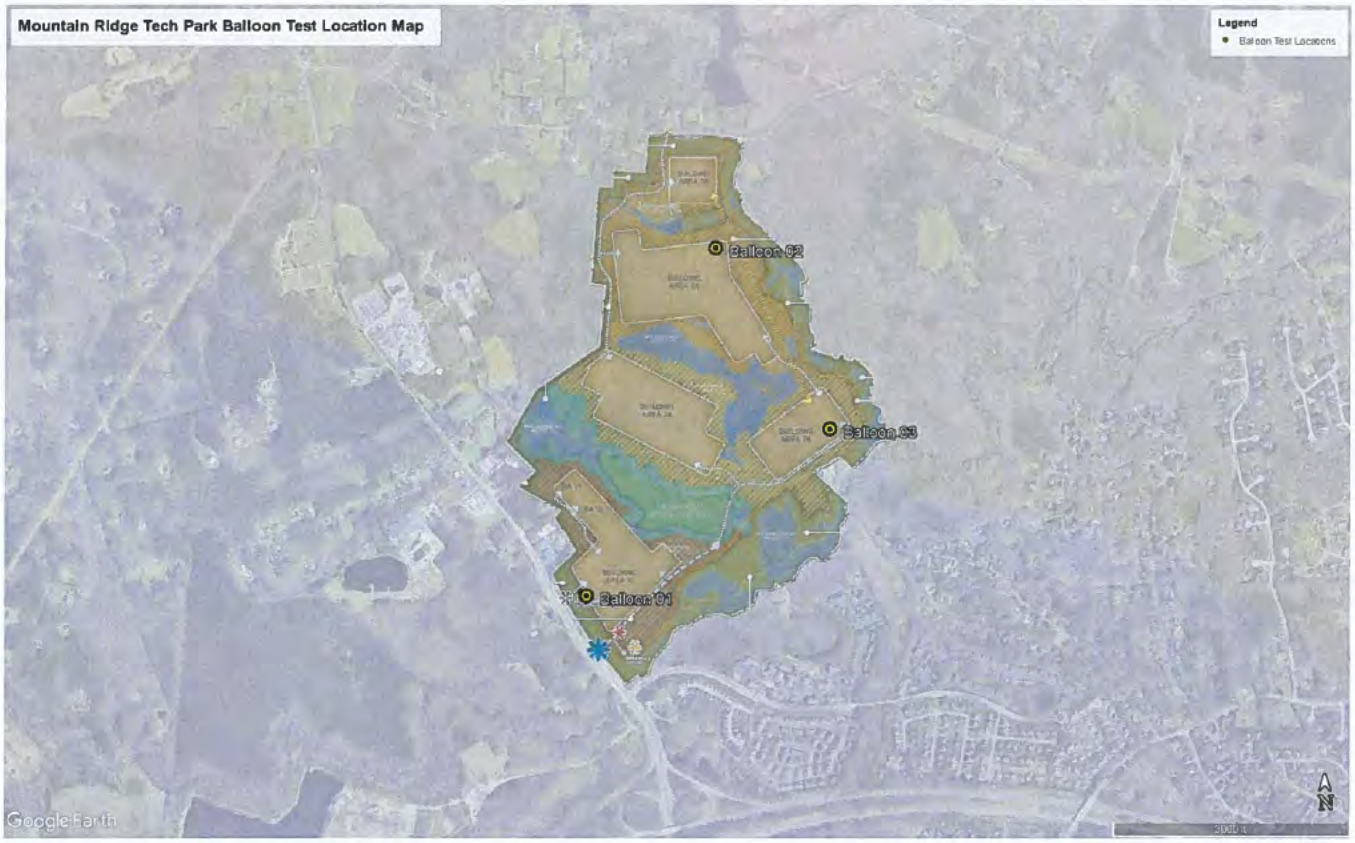
- Inflation
- Replacing aging distribution and transmission infrastructure
- Rising fuel costs
- The impacts of severe weather
- Grid modernization (upgrading the grid to make it more reliable)

- State clean energy requirements (Dominion's offshore wind farm is approach a $10 billion cost)

The cost associated with these broader factors is present in the rates Dominion charges, and will charge in the future, regardless of whether a data center is built. But each data center must bear the cost of rising electricity costs from these same broader factors, just like each of the other customer classes. This rising electricity cost is on top of the costs data centers must pay under the new GS-5 class created for them.

Balloon Testing

The Commission requested notification for the balloon test and requested that additional locations be added along Grassy Swamp Creek. Tract worked with Planning Staff to adjust locations and to advertise the test on the County's website. The balloon test took place on March 9, 2026 at the three locations on the property shown in the graphic below. Each balloon was flown at 62' above the proposed FFE to the top of the balloon. Balloons were red/orange and were 5.5 feet in diameter. All balloon heights were verified with laser rangefinders. Hanover County Planning Staff and members of the project team were in attendance.



Tax Generation Analysis

Data centers generally create several different streams of tax revenue, bringing significant economic benefit to the communities in which they are located. Tract contracted with an independent company, Ernst & Young (EY) to conduct a future tax generation analysis for this project. The data center future tax generation analysis is attached to this document. This analysis is based on data provided by Tract and a model developed by EY. The land use applications under consideration are for a rezoning, CUP, and special exception. If approved, the applicant will be required to complete additional site plan review. Although additional development details will be reviewed and approved as part of the site plan review process, several high-level assumptions were developed to conduct this analysis. This is a typical process for conducting fiscal impact analysis for rezoning applications.

To develop reasonable assumptions on a development program, the following assumptions were used, which are all based on the total power to the site:

- 900 MW
- 6 buildings (150 MW/building)
- 2.6M sq ft of building areas (across 3 building areas and 6 buildings)
- 254 developable acres (total acreage that is not natural areas and will contribute to the development)

EY documented additional assumptions within the report for real property, personal property, and sales tax; these are all included in the notes and assumptions sections of the attached report.

This analysis modeled a 20-year time horizon; however, it is important to note that business personal property tax begins to be generated when power is delivered, new buildings are completed, and personal property is placed within the buildings. So, the revenue is reported for a 15-year timeframe, beginning in 2030, which coincides with expected energization in Q4 of 2029. If the energization date is later, then the same 15-year timeframe and benefits would adjust forward for the corresponding 15-year period.

Please note that the property is reassessed 30 days after the zoning is approved, and the real estate taxes go up significantly. These higher taxes are then due and paid going forward regardless of when construction activity starts.

As additional background, Tract also wanted to share some general information on the broader economic and revenue impacts of data centers across the region.

RVA757 Connects recently launched their Digital Infrastructure & Data Center Information Hub (https://www.globalinternethub.org/resource-center). This resource center offers information into the digital infrastructure ecosystem and includes a section dedicated to Generating Economic Benefits (https://www.globalinternethub.org/resource-center/economic-benefits). In addition to providing general information, there is summary data about local tax revenue for several mature data center markets in the state. Here are some examples:

- Data center tax revenue in Loudoun County accounted for $733 million for the fiscal year that ended June 30, 2023, which represented 31 percent of the total county tax revenue.
- In Prince William, data center tax revenue generated $110 million during the same time period, representing 7 percent of total local tax revenue.

Additional information on revenue generation and examples of how counties are using this revenue is available in the Information Hub.

Additional Information on Dam Removal & Ecological Restoration

Since the Planning Commission meeting, a question on Holtzgraph Pond and the associated dam on the property were raised. This pond is on private property and is not publicly accessible. As part of the due diligence for this project, an evaluation of the dam was undertaken. The results of this evaluation showed that the dam is in poor condition. Tract has evaluated several options for removing the dam hazard and undertaking ecological restoration on the site. This is a separate process and effort that would commence upon approved zoning, as this is a big undertaking that would need to be undertaken as part of a larger development project. This area is included in the conceptual plan as an ecological restoration and is NOT included within any development or building areas. Additional information on the steps being undertaken as part of this separate effort is provided below.

Dam removal would occur upon receiving the required permits from the USACE, VDEQ, and Hanover County; permitting work to obtain these authorizations would commence upon approved zoning. Concept restoration plans for the pond area are already under development to support the initial conversations with the regulatory agencies to determine appropriate permitting pathways.

Dam removal must be sequenced with the ecological restoration project in a manner that prevents the discharge of sediment off site. The removal and handling plan(s) for sediment and debris behind the dam will be addressed through the permitting processes with the federal, state, and local regulatory agencies. There is no expected impact to any municipal water supply. The Chickahominy River is expected to benefit by having a historic tributary system restored. An ecological restoration project means that the pond dam will be removed in a controlled manner that will involve dewatering the pond area over time and then the material removal of the dam. The dewatering will result in exposed banks and sediment being exposed. These bared areas will need to be stabilized as the area is exposed, and the historic stream channel will be exposed and re-

established through the pond footprint and connected with the Chickahominy River in a controlled manner.

The ecological restoration also includes a revegetation plan to establish a vegetated riparian zone around the re-established stream channel. This is the meaning of the ecological restoration project being intentionally designed and assisted. We aren't simply removing the dam and allowing nature to do the work, we will be stabilizing material as it is exposed, re-establishing the stream channel through the pond footprint, and planting vegetation in the newly established riparian area. In accordance with industry standards for ecological restoration projects, a reference site is used to model the project after. This means that for the design of the "original" state will be based on identifying a site that is similarly situated to the proposed project area within the Chickahominy River watershed. All of these designs and planning occurs during the permitting process with federal, state, and county regulatory authorities.

Biernot, Gretchen W.

From: Erin Fosdick <erin.fosdick@tract.com>
Sent: Friday, February 27, 2026 1:41 PM
To: Leadbetter, Larry A; frmcghee@hanovercounty.gov
Cc: Biernot, Gretchen W.; Hunter, Jo Ann M.; Pompei, Andrew J.; Grant Polley; Heizer, Brett
Subject: Fw: [EXTERNAL]Mountain Road Technology Park

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As requested, please see below for the additional information that was provided to Commissioner Heizer on his follow up questions. Thanks!

Erin Fosdick, AICP
Director of Entitlements
erin.fosdick@tract.com
720-552-9172
www.tract.com

From: Erin Fosdick <erin.fosdick@tract.com>
Sent: Friday, February 27, 2026 10:06 AM
To: Heizer, Brett <BHeizer@hanovercounty.gov>
Cc: Grant Polley <Grant.Polley@tract.com>
Subject: Re: [EXTERNAL]Mountain Road Technology Park

Hello Commissioner Heizer,

Thanks for your patience as I gathered the information you requested. We will provide additional detail on much of this in our resubmittal to the County in advance of the March Planning Commission meeting, but in the meantime, please see my responses (in blue) below. Feel free to reach out with additional questions. Enjoy your weekend!

Erin Fosdick, AICP
Director of Entitlements
erin.fosdick@tract.com
720-552-9172

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From: Heizer, Brett <BHeizer@hanovercounty.gov>
Sent: Monday, February 23, 2026 10:50 AM
To: Erin Fosdick <erin.fosdick@tract.com>
Subject: [EXTERNAL]Mountain Road Technology Park

> You don't often get email from bheizer@hanovercounty.gov. Learn why this is important

Good afternoon Ms. Fosdick-

I have a few questions following Thursday's presentations. I may have additional but wanted to get these out in front of your team to allow as much time as possible to review.

A citizen expressed that they were given conflicting information about where the water will come from for the project. Can you please clarify?

As discussed in the hearing, the proposed development will be served by the County's public water system. Due to its location between the Hanover County and Henrico County service areas, water service may be provided from either system. Following discussions and coordination with the Department of Public Utilities (DPU), it is Tract's understanding that DPU's preference is for water to be provided from the Hanover County service area. Water supplied from Hanover County would be delivered via the Lockwood Booster Station with the option of the County sending water from the Doswell system during periods of low system usage such as the winter. I believe this may be where the confusion is coming from.

A comment was made during the presentation that conversations have been had with the county regarding water storage to help offset during peak demand but nothing was definitive. What specifically is being proposed?

Tract has evaluated peak demand, which is projected at 2,000,000 gallons/day. This peak demand is based on a 20-year worst case temperature and humidity condition. Which is to say that this level of demand is expected to occur infrequently. Detailed hydraulic modeling is currently underway to identify what the best available options are to support the both the project and add resiliency to the overall water system. The preliminary results of this modeling have identified a variety of options to accommodate the peak flow conditions. These include options for on-site water storage, upgraded municipal storage, a looped water main, and pump upgrades that would be phased in with the development. Per DPUs request, detailed service plans and agreements would follow a rezoning approval. These service plans would identify specific infrastructure sizes.

Regarding the slide titled "Project Benefits" that was provided at the Elmont Elementary Open House and available on the project website:

- Please clarify and confirm that based on the top half of the Property & Sales Tax Revenue, Tract is projecting $62mil in annual tax revenue for Hanover County at full build out based on property and personal property.

  Yes, this is correct. The projected tax revenue is $901M over the modeling period; this includes both property tax and personal property tax. This analysis modeled a 20-year time horizon from when the land use applications were originally submitted in 2025; however, it is important to note that property tax begins to be generated when power is delivered, new buildings are completed, and personal property is placed within the buildings. So, the revenue is reported for a 15-year timeframe, beginning in 2030, which coincides with expected energization in Q4 of 2029. Buildout doesn't occur in year 1, so this estimated annual revenue includes the "ramp up" for construction.

  For the community open house, we took the overall revenue generated ($901M) in each of the county's budget categories and divided it by 15 years to get the average annual projected county revenue (based on the County's 2026 budget allocation - $360M for schools, $261M for general fund, $144M for CIP, $72.1M for Other, and $63.1M for Public Utilities).

- Please clarify and confirm that based on the bottom half of the Property & Sales Tax Revenue, Tract is projecting $42mil in annual tax revenue in 2036-2038 and 2040-2043. What is the Use Tax? Will the Sales Tax be paid to the Commonwealth of Virginia? Why the dip in 2039 and rebound in 2040?

  The bottom half of this slide showed projections for sales & use tax. The dip in revenue can be attributed to how the modeling and assumption for building construction and personal property spend are occurring. Personal property spend is based off real property spend. In years 1 – 4 we assume consistent real property spend based off of power deliver and anticipated construction; in year 5, this is halved as the project is expected to build out, so sales tax generation is lower. While the value of tax dollars generated is driven primarily by the total MW, we have estimated some building construction and square footage numbers to best refine the model. Total sales tax rate for this location are 6%. Of this 6%, 4.3% goes to the State of Virginia, 0.7% to the Central Virginia Region, and 1% goes to Hanover County. The projected breakout is $1,482M for the State, $241M in regional sales tax, and $345M in County sales tax; this is over the modeled period 2025 – 2044, with revenues starting in 2030 with anticipated power delivery.

- Assuming full build out by the year 2036, please confirm that the $62mil in annual Property & Sales Tax revenue is separate & independent of the $42mil in annual tax revenue from Sales & Use Tax. If not, please explain the overlap.

  Yes, property tax and sales tax revenues are separate.

We will be submitting the report that EY produced for us with the Planning Commission materials, but I'm happy to walk through this if there are additional questions.

Page 19 of the TIA indicates that... ."the westbound approach at the intersection of US-33 and Project Driveway #1 during the PM peak hour, which is projected to operate with delays equivalent to LOS F."

Summarizing what I understood at the public hearing, it was stated that VDOT will not support any improvements to this newly created intersection. Can you confer with your contact at VDOT and confirm what would it take for VDOT to support upgrades at this intersection beyond a traffic study indicating that LOS will drop to F due to the peak construction traffic?

Based on the conversations we've had with VDOT and in consultation with our traffic consulting team, this intersection would not meet traffic signal warrants and would therefore not be supported by VDOT. The westbound approach at this intersection is describing traffic that is leaving our site during the peak construction hour, so the poor level of service you've identified is confined to within the site itself. We did update the proffers to limit commercial construction traffic entering and exiting the site during the AM and PM peaks to help alleviate this. Any upgrades to this intersection area to support construction peaks are approved by VDOT at the time a Construction Management Plan is submitted

I'm sure it has been covered but please confirm "(equivalent or better)" will be struck from Proffer #15.

Yes, we have removed "equivalent" from the proffer. We left "or better".

Can the TIA be recalculated completely focused on Construction Peak? Page 10 of the TIA indicates 40% of the workforce would arrive before 6am to a jobsite that has proffered (Proffer #13) to limit exterior construction hours between 7am-7pm. I understand that a considerable amount of construction would take place after the buildings are under roof, but I have serious doubts that the percentage of project manhours that are dedicated to completing their work after the building is under roof is so substantial that it drowns out the manhours that would be **required** to not start their shift until 7am.
The allocation of workforce arriving on average before 6am seems to be a stretch and I think the percentage of workers arriving and exiting within a more compressed window is more likely and should be fairly represented.
My request would be to study 70% arriving between 6am-7am, 15% between 5am-6am, and 15% between 7am-8am with 70% departing between 3pm-4pm, 15% between 2pm-3pm, and 15% between 4pm-5pm.

The existing, approved TIA does have calculations and considerations focused entirely on the construction peak. That being said, we would be happy to further analyze the alternative distribution scenario you've outlined above. Our original trip distribution assumptions for arrival and departure times are based on our construction team's experience with workers across the state typically arriving well in advance of their shift to avoid the peak traffic hours across the metro area. We are certainly willing to further discuss the model and our trip distributions more thoroughly with you, our traffic consultant, and construction professionals to fully address your concerns.

Thanks for your time and please let me know if you have any questions or need clarification on any of the requests.

Brett Heizer
804-519-8191
Hanover County Planning Commission
Mechanicsville District

Biernot, Gretchen W.

From: Erin Fosdick <info@mountainroadtechpark.com>
Sent: Monday, February 16, 2026 4:21 PM
Subject: Mountain Road Technology Park Balloon Test

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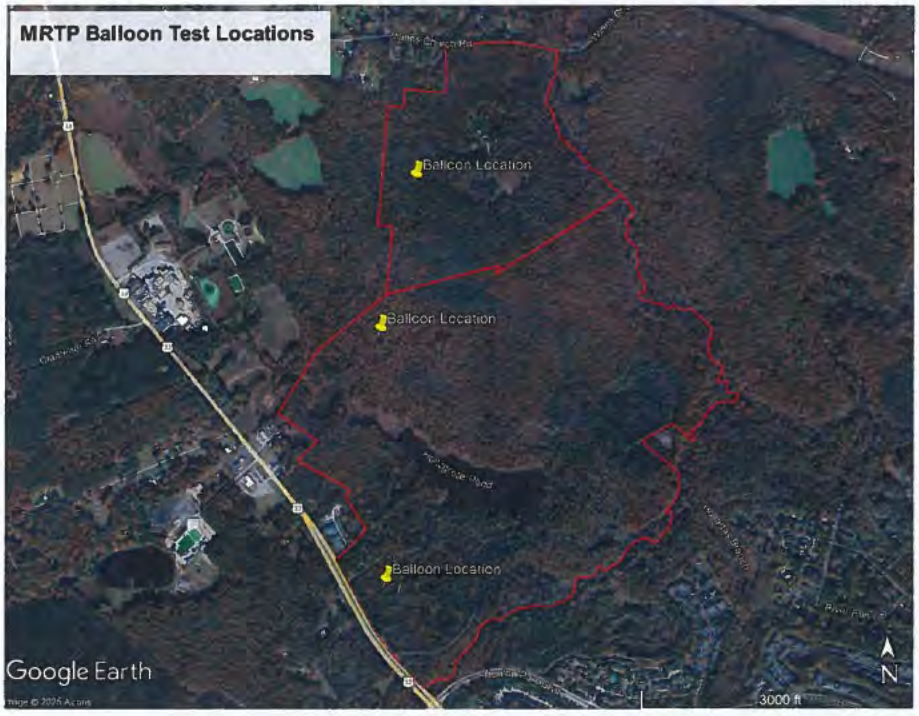
Hello -

You are receiving this message because you attended a community meeting or open house for the Mountain Road Technology Park project. As we discussed at the recent community open house, there will be a balloon test for the project in advance of the Board of Supervisors holding a hearing later this Spring, where a special exception to building height will be considered.

The balloon test is currently scheduled for the morning of Friday, February 20, 2026; in case of inclement weather, a backup date of Monday, February 23, 2026 has also been scheduled.

There will be three balloons on the site at the locations identified on the image below. The balloons are scheduled to go up around 8 am, depending on weather conditions, and will be floating for approximately two hours. The intent of the balloon test is to allow community members to observe potential visual impacts from areas adjacent to the project area.

--
Mountain Road Technology Park Project Team
info@mountainroadtechpark.com



Estimated Tax Generation (Prepared by the Applicant)

Pompei, Andrew J.

From: Hunter, Jo Ann M.
Sent: Thursday, April 16, 2026 3:00 PM
To: Pompei, Andrew J.
Subject: FW: Tract Data Center Project

From: Harris, T. Scott <tsharris@hanovercounty.gov>
Sent: Thursday, April 16, 2026 2:28 PM
To: Hunter, Jo Ann M. <JMHunter@hanovercounty.gov>
Subject: Tract Data Center Project

Good afternoon Jo Ann,

We have reviewed the business property tax revenue portion estimate for the Mountain Road Data Center project report and have determined that their analysis uses our computer equipment depreciation schedule as well as the current data center tax rate to determine estimated tax revenues. Their calculations generally match ours apart from minor rounding differences. However, the methodology used to determine their initial personal property spend (BTP original purchase price) is based on an industry standard of assuming equipment purchases per megawatt usage required to run each of their six facilities. While this assumption or assertion appears to be reasonable, we cannot attest to the accuracy of thse assumptions since no asset list has been provided to support the original cost of the equipment.

In summary, their bottom-line revenue projection for BTP is not that different from our calculations. The major influencer on revenue is going to be the timing of when the six buildings come online and their equipment replacement schedule. The project estimates a 5-year equipment life cycle and replacement schedule. If the life cycles (replacement schedule) stretch to 7 or 8 years it will have a significant impact on revenue. Overall, we are comfortable with the calculations used for the revenue projections and analysis component of the report, but before we start estimating actual year to year revenue projections we will need more information on the schedule of investments and replacements.
Please let me know if you have questions.
Scott

T. Scott Harris, MCR
Hanover County Commissioner of the Revenue

tsharris@hanovercounty.gov
(804) 365-6132

Tract Management Company, LP

Data centers future tax generation analysis

Hanover County, Virginia

Updated Version - April 3, 2026

The better the question. The better the answer.
The better the world works.

EY
Building a better working world

EY expressly authorizes Client (and each employee, representative, or other agent thereof) to disclose to any and all persons, without limitation of any kind, the tax treatment discussed herein and all materials of any kind (including tax analyses) that are provided to the Client relating to such tax treatment. This Report, however, is solely for the benefit of the Client and is not to be relied upon by anyone else without the written consent of EY. We assume no responsibility for tax consequences, or any other consequences, to any other parties or to other persons. Instead, any other such parties or persons should consult and rely upon the advice of their own counsel, accountant, tax advisor or other advisors.

Assumptions: Projected site and data center CAPEX

Based on discussions with Tract, we assumed the following for our analysis:

Location	Address	Projected Capital Expenditures (over 20-years)		Job Creation	
		Real Property	Personal Property (including refresh)	Est. construction jobs (peak)	Est. new permanent jobs
Hanover County, VA	13074 Mountain Rd	$9 billion	$56.25 billion	1,100	320

Construction & Equipment	
$ / MW	$10 million
Power Usage Effectiveness (PUE)	1.2
kW / cabinet	10
Cabinet server price	$250,000
Number of buildings	6
Total building area (sq. ft.)	2,600,000

Real Property CAPEX Breakout			
Categories	% of real prop.	labor	materials
Land & Building Shell	20%	10%	10%
Electrical Systems	35%	17.5%	17.5%
HVAC / Mechanical / Cooling systems	25%	12.5%	12.5%
Building Fit-out	20%	10%	10%
Totals	100%	50%	50%

Property tax assumptions and limitations

Location	Address	Projected Capital Expenditures		Job Creation		Lot Size (Developable acres)
		Real Property	Personal Property (including refresh)	Est. construction jobs (peak)	Est. new permanent jobs	
Hanover County, VA	13074 Mountain Rd	$9 billion	$56.25 billion	1,100	320	254

Parcel IDs		Current Zoning	2025 Base Assessment Value (land use value)	Assessment Ratio	Est. Market Value / sq.ft.	Est. 2024 Effective Tax Rate	Building Area (sq. ft.)
7757-98-4106, 7767-08-0569, 7767-17-2423,	7757-96-5577, 7757-96-1157, 7768-00-5491, 7757-97-5013	A1 - Agriculture	$1,060,134	100%	$1,300	0.81%	2,600,000

Real Property notes and assumptions:

1) The estimated Market Values (MV) used in the calculations assume no reduction via appeal or litigation.
2) This analysis is based on construction costs and percentage of completion information provided by the Client. EY researched current market data and Hanover County assessment information.
3) In Virginia, Assessors must estimate the market value of each property as of every January 1. Industrial property assessments have been increasing from 2024 to 2025. After construction is complete, this analysis assumes 2% year over year growth in value of improvements, however it could increase more depending on market conditions.
4) The process of calculating, imposing, and collecting Virginia taxes for a year is paid within the same calendar year. The real property assessment ratio in Virginia is 100%.
5) Additional rezoning may be required as the Subject parcels are currently classified as A-1 and assumes only the developable lot is developed for data center. There will remain residual undeveloped land that is not part of the analysis.
6) Land value assumes that developable land is reclassified to commercial/industrial upon completion. The assessor tracks two values; land use and market land value. The total 2025 land use value is $700K and the market value is $3.43M. All parcels have land use values. The taxable assessment and tax are based on these lower values. Improved land assessed values range from $59K to $90K per acre. This analysis assumes an average of $68K per acre for the buildable lot size as of 2025, with a 20% increase in 2030 to account for market factors and reassessment based on substantial improvements over the 5 years.
7) After 2030, the land value is assumed to appreciate by 2% per year. There will be additional value placed on the non-buildable land that was not considered in this projection.
8) All values and tax rates that are included in this projection are estimates (unless noted otherwise) and are based on total tax due without any discounts or abatements.
9) It is assumed that the site will be subject to Hanover County's real property tax rate of $0.81 per $100 of assessed value. Reclassification may trigger rollback taxes, which have not been considered.
10) This analysis estimates an annual tax and assumes that all subject parcels' prior year(s) property taxes are paid in full, no back taxes, penalties, or interest have accrued as a result of failure to make a payment in full or partial, and/or late payment.
11) There are limited comparable properties to review in this area. Most are in Henrico County, VA, and the new data center buildings in the Henrico County area are valued at $738 to $1,929 per square foot. This analysis assumes $1,300 per square foot.

Property tax assumptions and limitations *(continued)*

Real Property notes and assumptions (continued):

12) Virginia will assess improvements as construction is in progress and, as such, supplemental assessments may be issued during construction. This has not been considered in this analysis. There are existing improvements on two of the parcels.
13) This analysis assumes two datacenters will be constructed and assessed starting in 2030, with another one building added each year from 2031 to 2034. The development assumptions provided by the Client model six buildings with a total square footage of 2,600,000.
14) Laws, Regulations, practices and customs can change. This guidance is current as of September 24, 2025. EY is not responsible for any subsequent changes to these projections.
15) Facts and figures within the estimates are not to be taken as predictions or promises of performance and does not consider any future changes in legislation or property taxes.
16) Any US Tax Advice contained in this Property Tax Projection was not intended to be written or to be used, and cannot be used, by the recipient for the purpose of avoiding penalties that may be imposed under the Internal Revenue Code or applicable state regulations.
17) Further analysis can be completed to refine these estimated taxes once additional project details are known and provided by the Client.

Business Personal Property (BPP) notes and assumptions:

1) This analysis assumes there will be a refresh of personal property every 5 years after the initial spend of personal property once each building has been placed in service.
2) The personal property assessment year is the first tax year for reporting data center assets in 2030.
3) The model doesn't account for reductions in assessed value based on appeal.
4) Current costs relied upon in the model are based on a BPP ratio assumption provided by Client. All values and tax rates that are included in this projection are estimates. Estimated taxes were derived without an actual asset listing; estimates could change based on a review of the actual assets. Once actual BPP asset classes and costs are known, the estimate should be further refined.
5) The model assumes that all BPP will be computer equipment and does not account for Furniture and Fixtures.
6) Hanover County's published Data Center Depreciation Table is a 6-year life. Assets are assumed to be disposed of in their 7th year of life.
7) The personal property assessment ratio in Virginia is 100%.
8) The tax rate used is the 2024 Hanover County rate for the prospective location provided by Client. Estimated taxes are based on total tax due without any discounts or abatements. Hanover County has a preferential business personal property tax rate for data center equipment (computer equipment and peripherals only) of $0.45 per $100 of assessed value.
9) The Hanover County standard business personal property would be at a 6-year depreciation schedule and a tax rate of 3.57%.
10) The SUT percentages applied to the personal property's tax base were referenced from the State of Virginia's official' website and take into account the State's Data Center SUT exemption program until the initial program sunsets in June 2035. Following that, eligibility for the Data Center SUT exemption requires creating at least 1,000 new jobs.

Estimated 20-yr property tax projections*

Values below are expressed in millions of USD

Year	2026 - 2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	Totals
New Buildings completed		2	1	1	1	1											6
Total Real Property Spend		2,000	2,000	2,000	2,000	1,000											9,000
Taxable Market Value (Real Property)		675	1,380	2,307	3,253	3,892	3,970	4,050	4,131	4,213	4,297	4,383	4,471	4,560	4,652	4,745	
Initial Personal Property Spend		4,166	4,166	4,166	4,166	2,083											18,750
First Personal Property Replacement Cycle							4,167	4,166	4,166	4,166	2,083						18,750
Second Personal Property Replacement Cycle												4,166	4,166	4,166	4,166	2,083	18,750
Real Property Tax (0.81%)		5.5	11.2	18.7	26.3	31.5	32.2	32.8	33.5	34.1	34.8	35.5	36.2	36.9	37.7	38.4	445
Business Personal Property Tax (0.45%)		12.4	22.7	29.3	33.8	28.5	29.7	32.3	34.0	36.2	30.2	31.5	33.5	34.6	36.5	30.3	456
Total Estimated Property Tax Liability		**17.9**	**33.9**	**48.0**	**60.1**	**60.0**	**61.9**	**65.1**	**67.5**	**70.3**	**65.1**	**67.0**	**69.7**	**71.5**	**74.1**	**68.7**	**901**

Note: Business personal property tax projections only account for servers and do not include furniture & fixtures or other machinery & equipment. Hanover County's depreciation schedule for Data Center Business Personal Property is as follows: year 1 - 66%, year 2 - 55%, year 3 - 35%, year 4 - 24%, year 5 - 5%, year 6 - 1%.

* Facts and figures within the estimates are not to be taken as predictions or promises of performance and doesn't contemplate any future changes in legislation or property taxes.

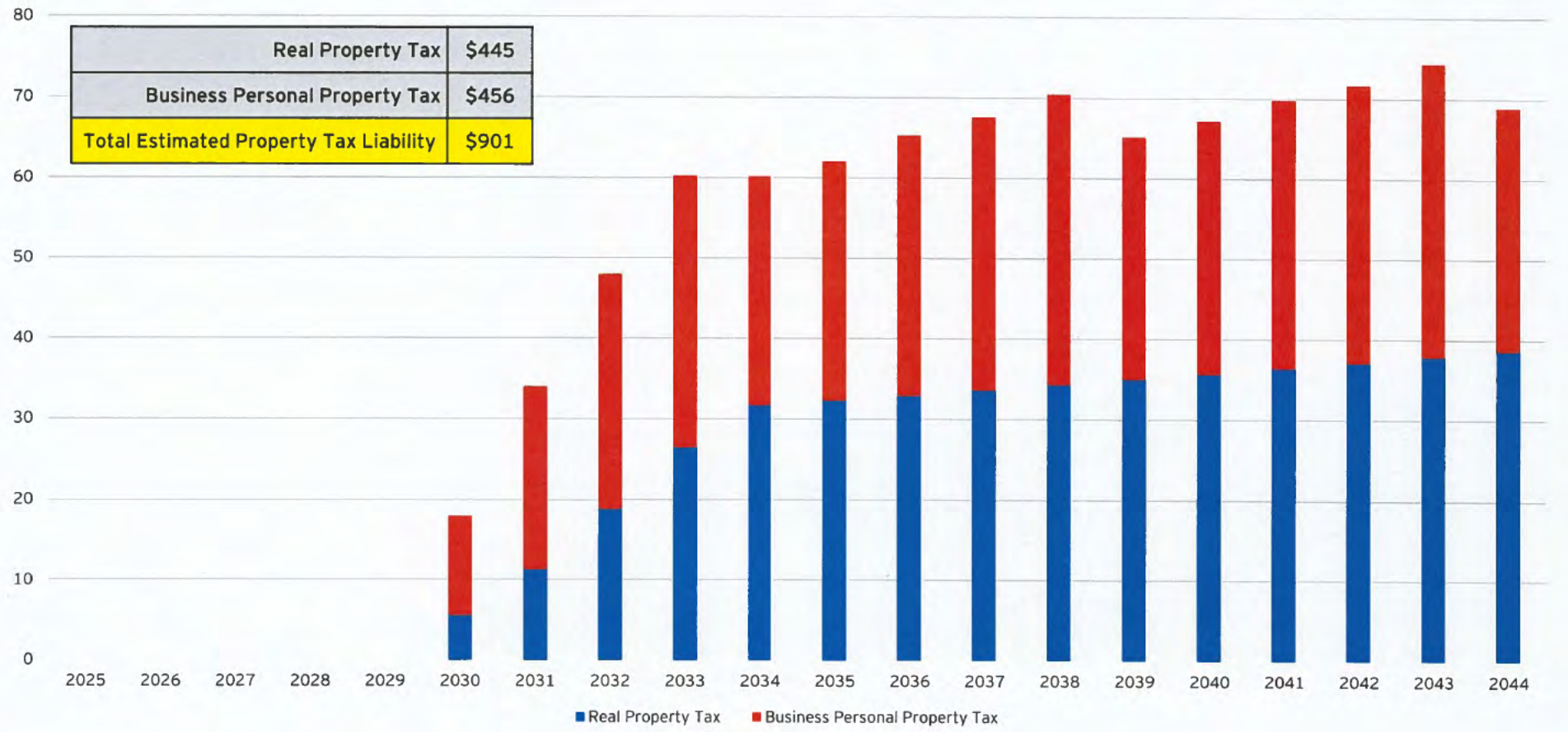
(see page 4 & 5 for property tax assumptions & limitations)

Property Tax

Estimated 20-yr property tax projections*

Values below are expressed in millions of USD

Real Property Tax	$445
Business Personal Property Tax	$456
Total Estimated Property Tax Liability	$901



Estimated sales & use tax projections

Values below are expressed in millions of USD

*VA Data Center Sales Tax Exemption program ends

Sales Tax Implications	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035*	2036	2037	2038	2039	2040	2041	2042	2043	2044	Totals
Total Real Property Spend						2,000	2,000	2,000	2,000	1,000											9,000
Total Personal Property Spend						4,167	4,167	4,167	4,167	2,083	4,167	4,167	4,167	4,167	2,083	4,167	4,167	4,167	4,167	2,083	56,250
Taxable Real Property Spend (25% of some *build materials*) [4,6]						200	200	200	200	100											900
Taxable Personal Property Spend (1% of spend until 2035) [4,5]						41.7	41.7	41.7	41.7	20.8	41.7	4,167	4,167	4,167	2,083	4,167	4,167	4,167	4,167	2,083	33,563
Applicable Sales Tax Paid On Building Materials [4,6]						12.0	12.0	12.0	12.0	6.0											54.0
Sales Tax Paid On Personal Property [4,5]						2.5	2.5	2.5	2.5	1.3	2.5	250	250	250	125	250	250	250	250	125	2,014
State Sales Tax (4.3%)						10.4	10.4	10.4	10.4	5.2	1.8	179	179	179	90	179	179	179	179	90	1,482
Regional Sales Tax (0.7%)						1.7	1.7	1.7	1.7	0.8	0.3	29.2	29.2	29.2	14.6	29.2	29.2	29.2	29.2	14.6	242
County Sales Tax (1.0%)						2.4	2.4	2.4	2.4	1.2	0.4	41.7	41.7	41.7	20.8	41.7	41.7	41.7	41.7	20.8	345
Total Sales Tax Liability						**14.5**	**14.5**	**14.5**	**14.5**	**7.2**	**2.5**	**250**	**250**	**250**	**125**	**250**	**250**	**250**	**250**	**125**	**2,068**

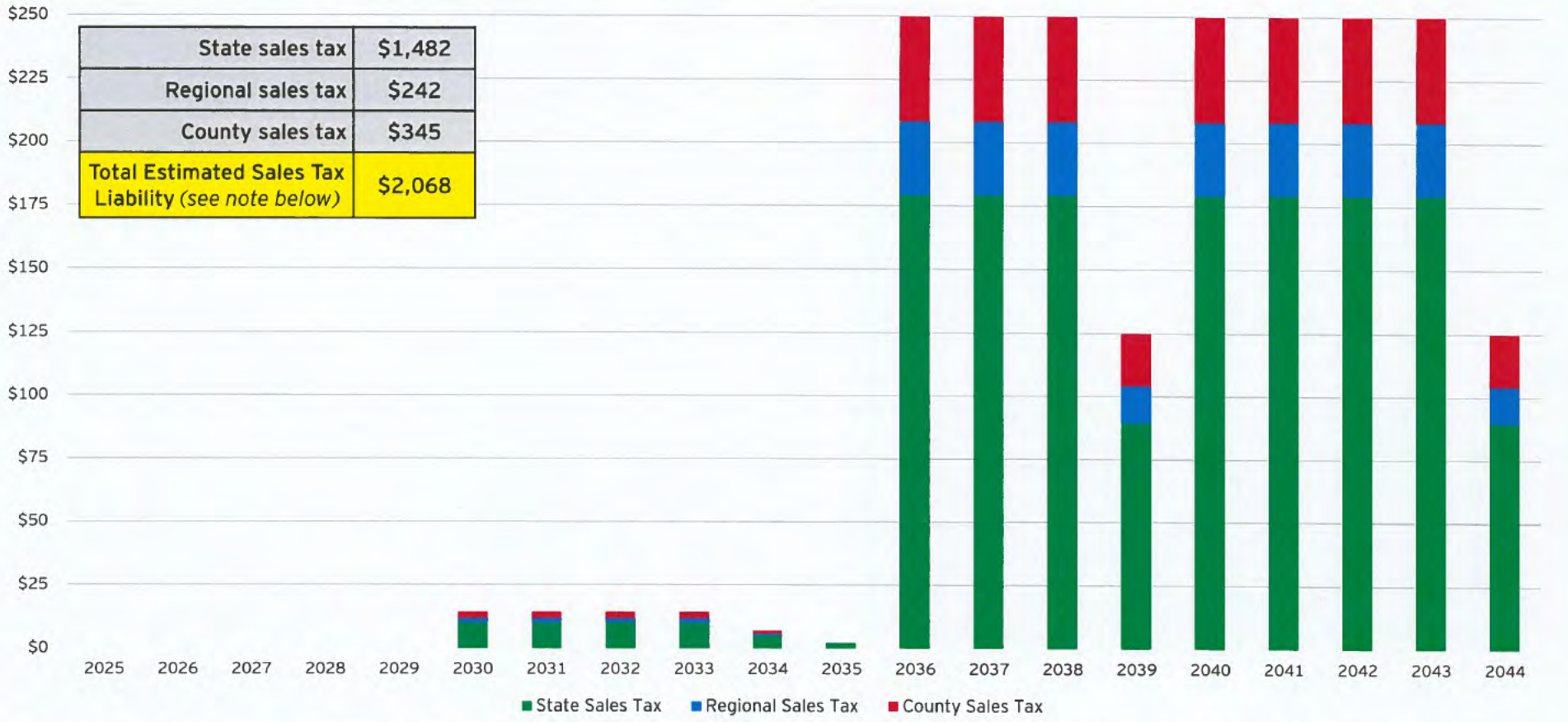
Notes and assumptions:

1) This analysis is based on construction costs and percentage of completion information modeled by the Client and are subject to change based on final project details.
2) All values and tax rates that are included in this projection are estimates (unless noted otherwise).
3) Total sales tax rate for this location = 6%; 4.3% goes to the state Virginia, 0.7% to the Central Virginia Region, and 1% goes to Hanover County.
4) Virginia has a Data Center Sales and Use Tax Exemption program that exempts from sales tax 1) personal property used for data centers and 2) electrical and HVAC real property necessary for the operations of a data center. The exemption sunsets in June 2035 as per *Va. Code § 58.1-609.3* and will be replaced by another program after June 2035. The CAPEX and job requirements under the new program are significantly higher (see next page for details), so it is assumed that the project's CAPEX post-existing program sunset will not apply.
5) To account for potential gaps in the exemptions and in lieu of more detailed project facts, these estimates assume a conservative 1% of applicable project costs may be taxable for sales and use tax purposes until June 2035, whereafter it is assumed that all personal property will be 100% taxable. This analysis assumes all personal property purchased in 2035 will occur before the sunset date.
6) Virginia's Tax Code regarding new construction projects does not charge sales and use taxes on all construction labor and some categories of building materials that become permanently affixed to real property as per *Va. Admin. Code 10-210-410*. Therefore, this conservative estimate assumes that only 25% of the project's building shell & fit-out building materials costs (i.e., 10% of the total real property CAPEX) will generate sales tax that would be captured in Hanover County from contractors purchasing materials to build the facility. Sales tax is not generated from any construction labor or building materials necessary to construct the data centers electrical systems and HVAC/Mechanical/Cooling systems.

Estimated sales & use tax projections*

Values below are expressed in millions of USD

State sales tax	$1,482
Regional sales tax	$242
County sales tax	$345
Total Estimated Sales Tax Liability *(see note below)*	$2,068



* Facts and figures within the estimates are not to be taken as predictions or promises of performance and doesn't contemplate any future changes in legislation or sales and use taxes.
(see page 10 for sales and use tax assumptions & limitations)

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2208-4081364
ED None

Biernot, Gretchen W.

From: Stevens, Felix L.
Sent: Monday, March 9, 2026 2:25 PM
To: Biernot, Gretchen W.
Cc: Harris, T. Scott; Kaplan, Carol A.
Subject: RE: Mountain Road Tech Park
Attachments: Data Center Projection_Tract 20260305-CoR Review.pdf

Proposed response.

Good afternoon, Ms. Biernot,

Hoping all is well.

We've reviewed the figures and assumptions provided in the brochure.

Based on these limited details, we were able to review the Personal Property Records.

Please note that tax assessments are based on assets on hand on Tax Day of the given year (January 1).

There is no automatic disposal of assets. **Assets will be assessed as long as they are on site; even if not being used.**

Business Personal Property (BPP) notes and assumptions:

1) This analysis assumes there will be a refresh of personal property every 5 ye

5) The model assumes that ... computer equipment and does not ac

6) Hanover County's published Data Center Depreciation Table is a 6-year life. A

7) ... property assessment ratio in Virgini...

... the 301 perce... ... ...y's tax base wo...

the initial program sunsets in June 2035. Following that, eligibility for the Da

Happy to respond to any questions or comments.

All the best. Felix

Felix Stevens
Business Services Tax Administrator
Hanover County
www.hanovercounty.gov
Ph. 804-365-6823
Fax 804-365-6111

From: Biernot, Gretchen W. <gwbiernot@hanovercounty.gov>
Sent: Thursday, March 5, 2026 1:20 PM
To: Stevens, Felix L. <FLStevens@hanovercounty.gov>
Subject: Mountain Road Tech Park

Hi Felix,
Please find attached a document prepared by the applicant for the Mountain Road Technology Park (data center park) that provides estimated tax projections, should the project be approved. Would you please review the document to check to see if it is accurate? I appreciate your assistance on this. Please do not hesitate to contact me should you have any questions.
Thank you!

Gretchen W. Biernot, AICP
Current Planning Manager
Hanover County Planning Department
Direct Line:(804) 365-6369
Main Line: (804) 365-6171

Hanover County VA

Tract Business Property Projection Review SUMMARY

Year	Calendar Year	Original Cost	Assessed Value	Tax	Cumulative Total
1	2026	$ -	$ -	$ -	
2	2027	$ -	$ -	$ -	
3	2028	$ -	$ -	$ -	
4	2029	$ -	$ -	$ -	
5	2030	$ 4,166,000,000.00	$ 2,749,560,000.00	$ 12,373,020.00	$ 12,373,020.00
6	2031	$ 8,332,000,000.00	$ 5,040,860,000.00	$ 22,683,870.00	$ 35,056,890.00
7	2032	$ 12,498,000,000.00	$ 6,498,960,000.00	$ 29,245,320.00	$ 64,302,210.00
8	2033	$ 16,664,000,000.00	$ 7,498,800,000.00	$ 33,744,600.00	$ 98,046,810.00
9	2034	$ 18,747,000,000.00	$ 6,332,320,000.00	$ 28,495,440.00	$ 126,542,250.00
10	2035	$ 18,748,000,000.00	$ 6,562,110,000.00	$ 29,529,495.00	$ 156,071,745.00
11	2036	$ 18,748,000,000.00	$ 6,978,600,000.00	$ 31,403,700.00	$ 187,475,445.00
12	2037	$ 18,748,000,000.00	$ 7,207,530,000.00	$ 32,433,885.00	$ 219,909,330.00
13	2038	$ 18,748,000,000.00	$ 7,603,190,000.00	$ 34,214,355.00	$ 254,123,685.00
14	2039	$ 18,748,000,000.00	$ 6,332,370,000.00	$ 28,495,665.00	$ 282,619,350.00
15	2040	$ 18,747,000,000.00	$ 6,561,450,000.00	$ 29,526,525.00	$ 312,145,875.00
16	2041	$ 18,747,000,000.00	$ 6,978,050,000.00	$ 31,401,225.00	$ 343,547,100.00
17	2042	$ 18,747,000,000.00	$ 7,207,180,000.00	$ 32,432,310.00	$ 375,979,410.00
18	2043	$ 18,747,000,000.00	$ 7,602,950,000.00	$ 34,213,275.00	$ 410,192,685.00
19	2044	$ 18,747,000,000.00	$ 6,332,320,000.00	$ 28,495,440.00	$ 438,688,125.00

Tract Business Property Projection Review DETAIL

Year 1 2026

Real Estate

Acq. Year	Land	Improvements	Total Assessed Value	Tax Rate	Tax
Year 1	$ -	$ -	$ -	0.0081	$ -
Totals	**$** -		**$** -		**$** -

Computer Equipment

Acq. Year	Original Cost	Deprec.	Assessed Value	Tax Rate	Tax
Year 1			$ -	0.0045	$ -
Year 2				0.0045	
Year 3				0.0045	
Year 4				0.0045	
Year 5				0.0045	
Year 6				0.0045	
Year 7				0.0045	
Year 8				0.0045	
Year 9				0.0045	
Year 10				0.0045	
Year 11				0.0045	
Year 12				0.0045	
Year 13				0.0045	
Year 14				0.0045	
Year 15				0.0045	
Year 16				0.0045	
Year 17				0.0045	
Year 18				0.0045	
Year 19				0.0045	
Year 20				0.0045	
Year 21				0.0045	
Year 22				0.0045	
Year 23				0.0045	
Year 24				0.0045	
Year 25				0.0045	
Totals	**$** -		**$** -		**$** -

Year 2 2027

Real Estate

Acq. Year	Land	Improvements	Total Assessed Value	Tax Rate	Tax
Year 2	$ -	$ -	$ -	0.0081	$ -
Totals	**$** -		**$** -		**$** -

Computer Equipment $ -

Acq. Year	Original Cost	Deprec.	Assessed Value	Tax Rate	Tax
Year 1	$ -			0.0045	$ -
Year 2				0.0045	
Year 3				0.0045	
Year 4				0.0045	
Year 5				0.0045	
Year 6				0.0045	
Year 7				0.0045	
Year 8				0.0045	
Year 9				0.0045	
Year 10				0.0045	
Year 11				0.0045	
Year 12				0.0045	
Year 13				0.0045	
Year 14				0.0045	
Year 15				0.0045	
Year 16				0.0045	
Year 17				0.0045	
Year 18				0.0045	
Year 19				0.0045	
Year 20				0.0045	
Year 21				0.0045	
Year 22				0.0045	
Year 23				0.0045	
Year 24				0.0045	
Year 25				0.0045	
Totals	**$** -		**$** -		**$** -

Year 3 2028

Real Estate

Acq. Year	Land	Improvements	Total Assessed Value	Tax Rate	Tax
Year 3	$ -	$ -	$ -	0.0081	$ -
Totals	**$ -**		**$ -**		**$ -**

Computer Equipment $ -

Acq. Year	Original Cost	Deprec.	Assessed Value	Tax Rate	Tax
Year 1	$ -			0.0045	$ -
Year 2				0.0045	
Year 3				0.0045	
Year 4				0.0045	
Year 5				0.0045	
Year 6				0.0045	
Year 7				0.0045	
Year 8				0.0045	
Year 9				0.0045	
Year 10				0.0045	
Year 11				0.0045	
Year 12				0.0045	
Year 13				0.0045	
Year 14				0.0045	
Year 15				0.0045	
Year 16				0.0045	
Year 17				0.0045	
Year 18				0.0045	
Year 19				0.0045	
Year 20				0.0045	
Year 21				0.0045	
Year 22				0.0045	
Year 23				0.0045	
Year 24				0.0045	
Year 25				0.0045	
Totals	**$ -**		**$ -**		**$ -**

Year 4 2029

Real Estate

Acq. Year	Land	Improvements	Total Assessed Value	Tax Rate	Tax
Year 4			$ -	0.0081	$ -
Totals	**$ -**		**$ -**		**$ -**

Computer Equipment $ -

Acq. Year	Original Cost	Deprec.	Assessed Value	Tax Rate	Tax
Year 1			$ -	0.0045	$ -
Year 2				0.0045	
Year 3				0.0045	
Year 4				0.0045	
Year 5				0.0045	
Year 6				0.0045	
Year 7				0.0045	
Year 8				0.0045	
Year 9				0.0045	
Year 10				0.0045	
Year 11				0.0045	
Year 12				0.0045	
Year 13				0.0045	
Year 14				0.0045	
Year 15				0.0045	
Year 16				0.0045	
Year 17				0.0045	
Year 18				0.0045	
Year 19				0.0045	
Year 20				0.0045	
Year 21				0.0045	
Year 22				0.0045	
Year 23				0.0045	
Year 24				0.0045	
Year 25				0.0045	
Totals	**$ -**		**$ -**		**$ -**

Year 5 2030 1

Real Estate

Acq. Year	Land	Improvements	Total Assessed Value	Tax Rate	Tax
Year 5	$ -	$ -	$ -	0.0081	$ -
Totals	**$ -**		**$ -**		**$ -**

Computer Equipment $ -

Acq. Year	Original Cost	Deprec.	Assessed Value	Tax Rate	Tax
Year 1	$ 4,166,000,000.00	0.66	$ 2,749,560,000.00	0.0045	$ 12,373,020.00
Year 2	$ -		$ -	0.0045	$ -
Year 3			$ -	0.0045	$ -
Year 4			$ -	0.0045	$ -
Year 5			$ -	0.0045	$ -
Year 6			$ -	0.0045	$ -
Year 7			$ -	0.0045	$ -
Year 8			$ -	0.0045	$ -
Year 9			$ -	0.0045	$ -
Year 10			$ -	0.0045	$ -
Year 11			$ -	0.0045	$ -
Year 12			$ -	0.0045	$ -
Year 13			$ -	0.0045	$ -
Year 14			$ -	0.0045	$ -
Year 15			$ -	0.0045	$ -
Year 16			$ -	0.0045	$ -
Year 17			$ -	0.0045	$ -
Year 18			$ -	0.0045	$ -
Year 19			$ -	0.0045	$ -
Year 20			$ -	0.0045	$ -
Year 21			$ -	0.0045	$ -
Year 22			$ -	0.0045	$ -
Year 23			$ -	0.0045	$ -
Year 24			$ -	0.0045	$ -
Year 25			$ -	0.0045	$ -
			$ -		$ -
Totals	***$ 4,166,000,000.00***		***$ 2,749,560,000.00***		***$ 12,373,020.00***

Year 6 2031 2

Real Estate

Acq. Year	Land	Improvements	Total Assessed Value	Tax Rate	Tax
Year 6	$ -	$ -	$ -	0.0081	$ -
Totals	**$** -		**$** -		**$** -

Computer Equipment $ -

Acq. Year	Original Cost	Deprec.	Assessed Value	Tax Rate	Tax
Year 1	$ 4,166,000,000.00	0.55	$ 2,291,300,000.00	0.0045	$ 10,310,850.00
Year 2	$ 4,166,000,000.00	0.66	$ 2,749,560,000.00	0.0045	$ 12,373,020.00
Year 3	$ -		$ -	0.0045	$ -
Year 4			$ -	0.0045	$ -
Year 5			$ -	0.0045	$ -
Year 6			$ -	0.0045	$ -
Year 7			$ -	0.0045	$ -
Year 8			$ -	0.0045	$ -
Year 9			$ -	0.0045	$ -
Year 10			$ -	0.0045	$ -
Year 11			$ -	0.0045	$ -
Year 12			$ -	0.0045	$ -
Year 13			$ -	0.0045	$ -
Year 14			$ -	0.0045	$ -
Year 15			$ -	0.0045	$ -
Year 16			$ -	0.0045	$ -
Year 17			$ -	0.0045	$ -
Year 18			$ -	0.0045	$ -
Year 19			$ -	0.0045	$ -
Year 20			$ -	0.0045	$ -
Year 21			$ -	0.0045	$ -
Year 22			$ -	0.0045	$ -
Year 23			$ -	0.0045	$ -
Year 24			$ -	0.0045	$ -
Year 25			$ -	0.0045	$ -
			$ -		$ -
Totals	***$ 8,332,000,000.00***		***$ 5,040,860,000.00***		***$ 22,683,870.00***

Year 7 2032 3

Real Estate

Acq. Year	Land	Improvements	Total Assessed Value	Tax Rate	Tax
Year 7	$ -	$ -	$ -	0.0081	$ -
Totals	**$** -		**$** -		**$** -

Computer Equipment $ -

Acq. Year	Original Cost	Deprec.	Assessed Value	Tax Rate	Tax
Year 1	$ 4,166,000,000.00	0.35	$ 1,458,100,000.00	0.0045	$ 6,561,450.00
Year 2	$ 4,166,000,000.00	0.55	$ 2,291,300,000.00	0.0045	$ 10,310,850.00
Year 3	$ 4,166,000,000.00	0.66	$ 2,749,560,000.00	0.0045	$ 12,373,020.00
Year 4			$ -	0.0045	$ -
Year 5			$ -	0.0045	$ -
Year 6			$ -	0.0045	$ -
Year 7			$ -	0.0045	$ -
Year 8			$ -	0.0045	$ -
Year 9			$ -	0.0045	$ -
Year 10			$ -	0.0045	$ -
Year 11			$ -	0.0045	$ -
Year 12			$ -	0.0045	$ -
Year 13			$ -	0.0045	$ -
Year 14			$ -	0.0045	$ -
Year 15			$ -	0.0045	$ -
Year 16			$ -	0.0045	$ -
Year 17			$ -	0.0045	$ -
Year 18			$ -	0.0045	$ -
Year 19			$ -	0.0045	$ -
Year 20			$ -	0.0045	$ -
Year 21			$ -	0.0045	$ -
Year 22			$ -	0.0045	$ -
Year 23			$ -	0.0045	$ -
Year 24			$ -	0.0045	$ -
Year 25			$ -	0.0045	$ -
			$ -		$ -
Totals	***$ 12,498,000,000.00***		***$ 6,498,960,000.00***		***$ 29,245,320.00***

Year 8 2033 4

Real Estate

Acq. Year	Land	Improvements	Total Assessed Value	Tax Rate	Tax
Year 8	$ -	$ -	$ -	0.0081	$ -
Totals	**$** -		**$** -		**$** -

Computer Equipment $ -

Acq. Year	Original Cost	Deprec.	Assessed Value	Tax Rate	Tax
Year 1	$ 4,166,000,000.00	0.24	$ 999,840,000.00	0.0045	$ 4,499,280.00
Year 2	$ 4,166,000,000.00	0.35	$ 1,458,100,000.00	0.0045	$ 6,561,450.00
Year 3	$ 4,166,000,000.00	0.55	$ 2,291,300,000.00	0.0045	$ 10,310,850.00
Year 4	$ 4,166,000,000.00	0.66	$ 2,749,560,000.00	0.0045	$ 12,373,020.00
Year 5			$ -	0.0045	$ -
Year 6			$ -	0.0045	$ -
Year 7			$ -	0.0045	$ -
Year 8			$ -	0.0045	$ -
Year 9			$ -	0.0045	$ -
Year 10			$ -	0.0045	$ -
Year 11			$ -	0.0045	$ -
Year 12			$ -	0.0045	$ -
Year 13			$ -	0.0045	$ -
Year 14			$ -	0.0045	$ -
Year 15			$ -	0.0045	$ -
Year 16			$ -	0.0045	$ -
Year 17			$ -	0.0045	$ -
Year 18			$ -	0.0045	$ -
Year 19			$ -	0.0045	$ -
Year 20			$ -	0.0045	$ -
Year 21			$ -	0.0045	$ -
Year 22			$ -	0.0045	$ -
Year 23			$ -	0.0045	$ -
Year 24			$ -	0.0045	$ -
Year 25			$ -	0.0045	$ -
			$ -		$ -
Totals	***$ 16,664,000,000.00***		***$ 7,498,800,000.00***		***$ 33,744,600.00***

Year 9 2034 5

Real Estate

Acq. Year	Land	Improvements	Total Assessed Value	Tax Rate	Tax
Year 9			$ -	0.0081	$ -
Totals	***$ -***		***$ -***		***$ -***

Computer Equipment $ -

Acq. Year	Original Cost	Deprec.	Assessed Value	Tax Rate	Tax
Year 1	$ 4,166,000,000.00	0.05	$ 208,300,000.00	0.0045	$ 937,350.00
Year 2	$ 4,166,000,000.00	0.24	$ 999,840,000.00	0.0045	$ 4,499,280.00
Year 3	$ 4,166,000,000.00	0.35	$ 1,458,100,000.00	0.0045	$ 6,561,450.00
Year 4	$ 4,166,000,000.00	0.55	$ 2,291,300,000.00	0.0045	$ 10,310,850.00
Year 5	$ 2,083,000,000.00	0.66	$ 1,374,780,000.00	0.0045	$ 6,186,510.00
Year 6			$ -	0.0045	$ -
Year 7			$ -	0.0045	$ -
Year 8			$ -	0.0045	$ -
Year 9			$ -	0.0045	$ -
Year 10			$ -	0.0045	$ -
Year 11			$ -	0.0045	$ -
Year 12			$ -	0.0045	$ -
Year 13			$ -	0.0045	$ -
Year 14			$ -	0.0045	$ -
Year 15			$ -	0.0045	$ -
Year 16			$ -	0.0045	$ -
Year 17			$ -	0.0045	$ -
Year 18			$ -	0.0045	$ -
Year 19			$ -	0.0045	$ -
Year 20			$ -	0.0045	$ -
Year 21			$ -	0.0045	$ -
Year 22			$ -	0.0045	$ -
Year 23			$ -	0.0045	$ -
Year 24			$ -	0.0045	$ -
Year 25			$ -	0.0045	$ -
			$ -		$ -
Totals	***$ 18,747,000,000.00***		***$ 6,332,320,000.00***		***$ 28,495,440.00***

Year 10 2035 6

Real Estate

Acq. Year	Land	Improvements	Total Assessed Value	Tax Rate	Tax
Year 10			$ -	0.0081	$ -
Totals	***$ -***		***$ -***		***$ -***

Computer Equipment $ -

Acq. Year	Original Cost	Deprec.	Assessed Value	Tax Rate	Tax
Year 1	$ -		$ -	0.0045	$ -
Year 2	$ 4,166,000,000.00	0.05	$ 208,300,000.00	0.0045	$ 937,350.00
Year 3	$ 4,166,000,000.00	0.24	$ 999,840,000.00	0.0045	$ 4,499,280.00
Year 4	$ 4,166,000,000.00	0.35	$ 1,458,100,000.00	0.0045	$ 6,561,450.00
Year 5	$ 2,083,000,000.00	0.55	$ 1,145,650,000.00	0.0045	$ 5,155,425.00
Year 6	$ 4,167,000,000.00	0.66	$ 2,750,220,000.00	0.0045	$ 12,375,990.00
Year 7			$ -	0.0045	$ -
Year 8			$ -	0.0045	$ -
Year 9			$ -	0.0045	$ -
Year 10			$ -	0.0045	$ -
Year 11			$ -	0.0045	$ -
Year 12			$ -	0.0045	$ -
Year 13			$ -	0.0045	$ -
Year 14			$ -	0.0045	$ -
Year 15			$ -	0.0045	$ -
Year 16			$ -	0.0045	$ -
Year 17			$ -	0.0045	$ -
Year 18			$ -	0.0045	$ -
Year 19			$ -	0.0045	$ -
Year 20			$ -	0.0045	$ -
Year 21			$ -	0.0045	$ -
Year 22			$ -	0.0045	$ -
Year 23			$ -	0.0045	$ -
Year 24			$ -	0.0045	$ -
Year 25			$ -	0.0045	$ -
			$ -		$ -
Totals	***$ 18,748,000,000.00***		***$ 6,562,110,000.00***		***$ 29,529,495.00***

Year 11 2036 7

Real Estate

Acq. Year	Land	Improvements	Total Assessed Value	Tax Rate	Tax
Year 11	$ -		$ -	0.0081	$ -
Totals	***$ -***		***$ -***		***$ -***

Computer Equipment $ -

Acq. Year	Original Cost	Deprec.	Assessed Value	Tax Rate	Tax
Year 1			$ -	0.0045	$ -
Year 2			$ -	0.0045	$ -
Year 3	$ 4,166,000,000.00	0.05	$ 208,300,000.00	0.0045	$ 937,350.00
Year 4	$ 4,166,000,000.00	0.24	$ 999,840,000.00	0.0045	$ 4,499,280.00
Year 5	$ 2,083,000,000.00	0.35	$ 729,050,000.00	0.0045	$ 3,280,725.00
Year 6	$ 4,167,000,000.00	0.55	$ 2,291,850,000.00	0.0045	$ 10,313,325.00
Year 7	$ 4,166,000,000.00	0.66	$ 2,749,560,000.00	0.0045	$ 12,373,020.00
Year 8			$ -	0.0045	$ -
Year 9			$ -	0.0045	$ -
Year 10			$ -	0.0045	$ -
Year 11			$ -	0.0045	$ -
Year 12			$ -	0.0045	$ -
Year 13			$ -	0.0045	$ -
Year 14			$ -	0.0045	$ -
Year 15			$ -	0.0045	$ -
Year 16			$ -	0.0045	$ -
Year 17			$ -	0.0045	$ -
Year 18			$ -	0.0045	$ -
Year 19			$ -	0.0045	$ -
Year 20			$ -	0.0045	$ -
Year 21			$ -	0.0045	$ -
Year 22			$ -	0.0045	$ -
Year 23			$ -	0.0045	$ -
Year 24			$ -	0.0045	$ -
Year 25			$ -	0.0045	$ -
			$ -		$ -
Totals	***$ 18,748,000,000.00***		***$ 6,978,600,000.00***		***$ 31,403,700.00***

Year 12 2037 8

Real Estate

Acq. Year	Land	Improvements	Total Assessed Value	Tax Rate	Tax
Year 12	$ -	$ -	$ -	0.0081	$ -
Totals	***$ -***		***$ -***		***$ -***

Computer Equipment $ -

Acq. Year	Original Cost	Deprec.	Assessed Value	Tax Rate	Tax
Year 1			$ -	0.0045	$ -
Year 2			$ -	0.0045	$ -
Year 3			$ -	0.0045	$ -
Year 4	$ 4,166,000,000.00	0.05	$ 208,300,000.00	0.0045	$ 937,350.00
Year 5	$ 2,083,000,000.00	0.24	$ 499,920,000.00	0.0045	$ 2,249,640.00
Year 6	$ 4,167,000,000.00	0.35	$ 1,458,450,000.00	0.0045	$ 6,563,025.00
Year 7	$ 4,166,000,000.00	0.55	$ 2,291,300,000.00	0.0045	$ 10,310,850.00
Year 8	$ 4,166,000,000.00	0.66	$ 2,749,560,000.00	0.0045	$ 12,373,020.00
Year 9			$ -	0.0045	$ -
Year 10			$ -	0.0045	$ -
Year 11			$ -	0.0045	$ -
Year 12			$ -	0.0045	$ -
Year 13			$ -	0.0045	$ -
Year 14			$ -	0.0045	$ -
Year 15			$ -	0.0045	$ -
Year 16			$ -	0.0045	$ -
Year 17			$ -	0.0045	$ -
Year 18			$ -	0.0045	$ -
Year 19			$ -	0.0045	$ -
Year 20			$ -	0.0045	$ -
Year 21			$ -	0.0045	$ -
Year 22			$ -	0.0045	$ -
Year 23			$ -	0.0045	$ -
Year 24			$ -	0.0045	$ -
Year 25			$ -	0.0045	$ -
			$ -		$ -
Totals	***$ 18,748,000,000.00***		***$ 7,207,530,000.00***		***$ 32,433,885.00***

Year 13 2038 9

Real Estate					
Acq. Year	Land	Improvements	Total Assessed Value	Tax Rate	Tax
Year 13	$ -	$ -	$ -	0.0081	$ -
Totals	***$ -***		***$ -***		***$ -***

Computer Equipment $ -

Acq. Year	Original Cost	Deprec.	Assessed Value	Tax Rate	Tax
Year 1			$ -	0.0045	$ -
Year 2			$ -	0.0045	$ -
Year 3			$ -	0.0045	$ -
Year 4			$ -	0.0045	$ -
Year 5	$ 2,083,000,000.00	0.05	$ 104,150,000.00	0.0045	$ 468,675.00
Year 6	$ 4,167,000,000.00	0.24	$ 1,000,080,000.00	0.0045	$ 4,500,360.00
Year 7	$ 4,166,000,000.00	0.35	$ 1,458,100,000.00	0.0045	$ 6,561,450.00
Year 8	$ 4,166,000,000.00	0.55	$ 2,291,300,000.00	0.0045	$ 10,310,850.00
Year 9	$ 4,166,000,000.00	0.66	$ 2,749,560,000.00	0.0045	$ 12,373,020.00
Year 10			$ -	0.0045	$ -
Year 11			$ -	0.0045	$ -
Year 12			$ -	0.0045	$ -
Year 13			$ -	0.0045	$ -
Year 14			$ -	0.0045	$ -
Year 15			$ -	0.0045	$ -
Year 16			$ -	0.0045	$ -
Year 17			$ -	0.0045	$ -
Year 18			$ -	0.0045	$ -
Year 19			$ -	0.0045	$ -
Year 20			$ -	0.0045	$ -
Year 21			$ -	0.0045	$ -
Year 22			$ -	0.0045	$ -
Year 23			$ -	0.0045	$ -
Year 24			$ -	0.0045	$ -
Year 25			$ -	0.0045	$ -
			$ -		$ -
Totals	***$ 18,748,000,000.00***		***$ 7,603,190,000.00***		***$ 34,214,355.00***

Year 14 2039 10

Real Estate

Acq. Year	Land	Improvements	Total Assessed Value	Tax Rate	Tax
Year 14	$ -	$ -	$ -	0.0081	$ -
Totals	**$ -**		**$ -**		**$ -**

Computer Equipment $ -

Acq. Year	Original Cost	Deprec.	Assessed Value	Tax Rate	Tax
Year 1			$ -	0.0045	$ -
Year 2			$ -	0.0045	$ -
Year 3			$ -	0.0045	$ -
Year 4			$ -	0.0045	$ -
Year 5			$ -	0.0045	$ -
Year 6	$ 4,167,000,000.00	0.05	$ 208,350,000.00	0.0045	$ 937,575.00
Year 7	$ 4,166,000,000.00	0.24	$ 999,840,000.00	0.0045	$ 4,499,280.00
Year 8	$ 4,166,000,000.00	0.35	$ 1,458,100,000.00	0.0045	$ 6,561,450.00
Year 9	$ 4,166,000,000.00	0.55	$ 2,291,300,000.00	0.0045	$ 10,310,850.00
Year 10	$ 2,083,000,000.00	0.66	$ 1,374,780,000.00	0.0045	$ 6,186,510.00
Year 11			$ -	0.0045	$ -
Year 12			$ -	0.0045	$ -
Year 13			$ -	0.0045	$ -
Year 14			$ -	0.0045	$ -
Year 15			$ -	0.0045	$ -
Year 16			$ -	0.0045	$ -
Year 17			$ -	0.0045	$ -
Year 18			$ -	0.0045	$ -
Year 19			$ -	0.0045	$ -
Year 20			$ -	0.0045	$ -
Year 21			$ -	0.0045	$ -
Year 22			$ -	0.0045	$ -
Year 23			$ -	0.0045	$ -
Year 24			$ -	0.0045	$ -
Year 25			$ -	0.0045	$ -
			$ -		$ -
Totals	***$ 18,748,000,000.00***		***$ 6,332,370,000.00***		***$ 28,495,665.00***

Year 15 2040 11

Real Estate

Acq. Year	Land	Improvements	Total Assessed Value	Tax Rate	Tax
Year 15			$ -	0.0081	$ -
Totals	***$ -***		***$ -***		***$ -***

Computer Equipment $ -

Acq. Year	Original Cost	Deprec.	Assessed Value	Tax Rate	Tax
Year 1	$ -		$ -	0.0045	$ -
Year 2	$ -		$ -	0.0045	$ -
Year 3	$ -		$ -	0.0045	$ -
Year 4	$ -		$ -	0.0045	$ -
Year 5	$ -		$ -	0.0045	$ -
Year 6	$ -		$ -	0.0045	$ -
Year 7	$ 4,166,000,000.00	0.05	$ 208,300,000.00	0.0045	$ 937,350.00
Year 8	$ 4,166,000,000.00	0.24	$ 999,840,000.00	0.0045	$ 4,499,280.00
Year 9	$ 4,166,000,000.00	0.35	$ 1,458,100,000.00	0.0045	$ 6,561,450.00
Year 10	$ 2,083,000,000.00	0.55	$ 1,145,650,000.00	0.0045	$ 5,155,425.00
Year 11	$ 4,166,000,000.00	0.66	$ 2,749,560,000.00	0.0045	$ 12,373,020.00
Year 12			$ -	0.0045	$ -
Year 13			$ -	0.0045	$ -
Year 14			$ -	0.0045	$ -
Year 15			$ -	0.0045	$ -
Year 16			$ -	0.0045	$ -
Year 17			$ -	0.0045	$ -
Year 18			$ -	0.0045	$ -
Year 19			$ -	0.0045	$ -
Year 20			$ -	0.0045	$ -
Year 21			$ -	0.0045	$ -
Year 22			$ -	0.0045	$ -
Year 23			$ -	0.0045	$ -
Year 24			$ -	0.0045	$ -
Year 25			$ -	0.0045	$ -
			$ -		$ -
Totals	***$ 18,747,000,000.00***		***$ 6,561,450,000.00***		***$ 29,526,525.00***

Year 16 2041 12

Real Estate

Acq. Year	Land	Improvements	Total Assessed Value	Tax Rate	Tax
Year 16			$ -	0.0081	$ -
Totals	***$ -***		***$ -***		***$ -***

Computer Equipment $ -

Acq. Year	Original Cost	Deprec.	Assessed Value	Tax Rate	Tax
Year 1	$ -		$ -	0.0045	$ -
Year 2	$ -		$ -	0.0045	$ -
Year 3	$ -		$ -	0.0045	$ -
Year 4	$ -		$ -	0.0045	$ -
Year 5	$ -		$ -	0.0045	$ -
Year 6	$ -		$ -	0.0045	$ -
Year 7	$ -		$ -	0.0045	$ -
Year 8	$ 4,166,000,000.00	0.05	$ 208,300,000.00	0.0045	$ 937,350.00
Year 9	$ 4,166,000,000.00	0.24	$ 999,840,000.00	0.0045	$ 4,499,280.00
Year 10	$ 2,083,000,000.00	0.35	$ 729,050,000.00	0.0045	$ 3,280,725.00
Year 11	$ 4,166,000,000.00	0.55	$ 2,291,300,000.00	0.0045	$ 10,310,850.00
Year 12	$ 4,166,000,000.00	0.66	$ 2,749,560,000.00	0.0045	$ 12,373,020.00
Year 13			$ -	0.0045	$ -
Year 14			$ -	0.0045	$ -
Year 15			$ -	0.0045	$ -
Year 16			$ -	0.0045	$ -
Year 17			$ -	0.0045	$ -
Year 18			$ -	0.0045	$ -
Year 19			$ -	0.0045	$ -
Year 20			$ -	0.0045	$ -
Year 21			$ -	0.0045	$ -
Year 22			$ -	0.0045	$ -
Year 23			$ -	0.0045	$ -
Year 24			$ -	0.0045	$ -
Year 25			$ -	0.0045	$ -
			$ -		$ -
Totals	***$ 18,747,000,000.00***		***$ 6,978,050,000.00***		***$ 31,401,225.00***

Year 17 2042 13

Real Estate

Acq. Year	Land	Improvements	Total Assessed Value	Tax Rate	Tax
Year 17			$ -	0.0081	$ -
Totals	***$ -***		***$ -***		***$ -***

Computer Equipment $ -

Acq. Year	Original Cost	Deprec.	Assessed Value	Tax Rate	Tax
Year 1	$ -		$ -	0.0045	$ -
Year 2	$ -		$ -	0.0045	$ -
Year 3	$ -		$ -	0.0045	$ -
Year 4	$ -		$ -	0.0045	$ -
Year 5	$ -		$ -	0.0045	$ -
Year 6	$ -		$ -	0.0045	$ -
Year 7	$ -		$ -	0.0045	$ -
Year 8	$ -		$ -	0.0045	$ -
Year 9	$ 4,166,000,000.00	0.05	$ 208,300,000.00	0.0045	$ 937,350.00
Year 10	$ 2,083,000,000.00	0.24	$ 499,920,000.00	0.0045	$ 2,249,640.00
Year 11	$ 4,166,000,000.00	0.35	$ 1,458,100,000.00	0.0045	$ 6,561,450.00
Year 12	$ 4,166,000,000.00	0.55	$ 2,291,300,000.00	0.0045	$ 10,310,850.00
Year 13	$ 4,166,000,000.00	0.66	$ 2,749,560,000.00	0.0045	$ 12,373,020.00
Year 14			$ -	0.0045	$ -
Year 15			$ -	0.0045	$ -
Year 16			$ -	0.0045	$ -
Year 17			$ -	0.0045	$ -
Year 18			$ -	0.0045	$ -
Year 19			$ -	0.0045	$ -
Year 20			$ -	0.0045	$ -
Year 21			$ -	0.0045	$ -
Year 22			$ -	0.0045	$ -
Year 23			$ -	0.0045	$ -
Year 24			$ -	0.0045	$ -
Year 25			$ -	0.0045	$ -
			$ -		$ -
Totals	***$ 18,747,000,000.00***		***$ 7,207,180,000.00***		***$ 32,432,310.00***

Year 18 2043 14

Real Estate

Acq. Year	Land	Improvements	Total Assessed Value	Tax Rate	Tax
Year 18			$ -	0.0081	$ -
Totals	***$ -***		***$ -***		***$ -***

Computer Equipment $ -

Acq. Year	Original Cost	Deprec.	Assessed Value	Tax Rate	Tax
Year 1	$ -		$ -	0.0045	$ -
Year 2	$ -		$ -	0.0045	$ -
Year 3	$ -		$ -	0.0045	$ -
Year 4	$ -		$ -	0.0045	$ -
Year 5	$ -		$ -	0.0045	$ -
Year 6	$ -		$ -	0.0045	$ -
Year 7	$ -		$ -	0.0045	$ -
Year 8			$ -	0.0045	$ -
Year 9			$ -	0.0045	$ -
Year 10	$ 2,083,000,000.00	0.05	$ 104,150,000.00	0.0045	$ 468,675.00
Year 11	$ 4,166,000,000.00	0.24	$ 999,840,000.00	0.0045	$ 4,499,280.00
Year 12	$ 4,166,000,000.00	0.35	$ 1,458,100,000.00	0.0045	$ 6,561,450.00
Year 13	$ 4,166,000,000.00	0.55	$ 2,291,300,000.00	0.0045	$ 10,310,850.00
Year 14	$ 4,166,000,000.00	0.66	$ 2,749,560,000.00	0.0045	$ 12,373,020.00
Year 15			$ -	0.0045	$ -
Year 16			$ -	0.0045	$ -
Year 17			$ -	0.0045	$ -
Year 18			$ -	0.0045	$ -
Year 19			$ -	0.0045	$ -
Year 20			$ -	0.0045	$ -
Year 21			$ -	0.0045	$ -
Year 22			$ -	0.0045	$ -
Year 23			$ -	0.0045	$ -
Year 24			$ -	0.0045	$ -
Year 25			$ -	0.0045	$ -
			$ -		$ -
Totals	***$ 18,747,000,000.00***		***$ 7,602,950,000.00***		***$ 34,213,275.00***

Year 19 2044 15

Real Estate

Acq. Year	Land	Improvements	Total Assessed Value	Tax Rate	Tax
Year 19			$ -	0.0081	$ -
Totals	**$ -**		**$ -**		**$ -**

Computer Equipment $ -

Acq. Year	Original Cost	Deprec.	Assessed Value	Tax Rate	Tax
Year 1	$ -		$ -	0.0045	$ -
Year 2	$ -		$ -	0.0045	$ -
Year 3	$ -		$ -	0.0045	$ -
Year 4	$ -		$ -	0.0045	$ -
Year 5			$ -	0.0045	$ -
Year 6			$ -	0.0045	$ -
Year 7			$ -	0.0045	$ -
Year 8			$ -	0.0045	$ -
Year 9			$ -	0.0045	$ -
Year 10			$ -	0.0045	$ -
Year 11	$ 4,166,000,000.00	0.05	$ 208,300,000.00	0.0045	$ 937,350.00
Year 12	$ 4,166,000,000.00	0.24	$ 999,840,000.00	0.0045	$ 4,499,280.00
Year 13	$ 4,166,000,000.00	0.35	$ 1,458,100,000.00	0.0045	$ 6,561,450.00
Year 14	$ 4,166,000,000.00	0.55	$ 2,291,300,000.00	0.0045	$ 10,310,850.00
Year 15	$ 2,083,000,000.00	0.66	$ 1,374,780,000.00	0.0045	$ 6,186,510.00
Year 16			$ -	0.0045	$ -
Year 17			$ -	0.0045	$ -
Year 18			$ -	0.0045	$ -
Year 19			$ -	0.0045	$ -
Year 20			$ -	0.0045	$ -
Year 21			$ -	0.0045	$ -
Year 22			$ -	0.0045	$ -
Year 23			$ -	0.0045	$ -
Year 24			$ -	0.0045	$ -
Year 25			$ -	0.0045	$ -
			$ -		$ -
Totals	***$ 18,747,000,000.00***		***$ 6,332,320,000.00***		***$ 28,495,440.00***

Noise Assessment

Intended for

Tract Capital Management, LP

Date

April 2, 2026

Mountain Road Tech Park

Environmental Noise Assessment

RAMBOLL Bright ideas. Sustainable change.

Mountain Road Tech Park

Environmental Noise Assessment

Project name	**Mountain Road Tech Park**
Project no.	**1940118718**
Recipient	**Dan Becht, Tract**
Version	**1.0**
Date	**2026-04-02**
Prepared by	**Matt Shriffer, Senior Lead Consultant** **Rob St. Claire, Senior Lead Consultant**
Checked by	**Rob St. Claire, Senior Lead Consultant**
Approved by	**Brent Ferren, PE, INCE - Principal**
Description	Environmental Noise Assessment for the referenced project site outlining findings related to environmental noise emissions. This work was undertaken in accordance with the contract between Ramboll Americas Engineering Solutions, Inc. and Tract Capital Management, LP. under Master Services Agreement dated November 17, 2023, and the associated proposal titled STATEMENT OF WORK FOR ENVIRONMENTAL ACOUSTICAL ASSESSMENT FOR MOUNTAIN ROAD TECHNOLOGY PARK PROJECT, HANOVER COUNTY, VIRGINIA, dated January 14, 2026, and approved January 26, 2026. This report has been prepared by Ramboll Americas Engineering Solutions, Inc. with reasonable skill and care and taking account of the services and the terms agreed between Ramboll and the client. This report is confidential to the client and Ramboll accepts no responsibility whatsoever to third parties to whom this report, or any part thereof, is made known, unless agreed in writing by Ramboll beforehand. Any such party relies upon the report at its own risk. Ramboll disclaims any responsibility to the client and others in respect of any matters outside the agreed scope of the services. The report is valid only if taken in its entirety.

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Contents

Summary		4
1.	Introduction	5
2.	Regulatory Framework	7
2.1	Commonwealth of Virginia	7
2.2	Hanover County	7
2.3	Henrico County	7
2.4	Census Designated Place of Glen Allen	7
2.5	Regulatory Applicability Summary	8
3.	Conceptual Design Information	9
3.1	Conceptual Facility Layout	9
3.2	Equipment Design Information and Assumptions	10
3.3	Operational Scenarios	10
4.	Potential Project Sound Emissions	10
4.1	Methodology	10
4.2	Acoustical Analysis Results	12
4.2.1	Normal Operations (Full Cooling)	12
4.2.2	Generator Maintenance and Testing	12
5.	Conclusions	16
Appendix A		17
Basics of Sound		17

Summary

Tract Capital Management, LP ("Tract") has retained Ramboll Americas Engineering Solutions ("Ramboll") to conduct an environmental noise assessment for a proposed data center campus ("Mountain Road Tech Park") located in Hanover County, Virginia. The site is approximately 400 acres in size.

This report presents the environmental noise assessment conducted by Ramboll and the resulting findings related to potential sound emissions from the data center. The noise assessment criteria for the site included considerations of the following:

- Identification of applicable local, state, and federal noise regulations
- Compliance with local, state, and federal noise regulations based on predictive acoustical modeling

The conceptual site plan layout includes three primary building areas and two secondary building areas. The primary sources of sound emissions from data center buildings are expected to be building cooling equipment and, occasionally, emergency generators. The equipment and associated sound emission levels considered in this assessment were based on available project information provided by Tract and Ramboll's experience with typical data center facility equipment.

The noise emissions associated with the proposed data center operation were assessed through predictive acoustical modeling. Under normal operation, the site is expected to achieve compliance with the regulatory sound level limits specified in the Hanover County code of ordinances.

Facility sound emissions were also assessed for the operating scenario of planned daytime testing and maintenance of generators. Planned generator testing and maintenance activities are expected to be limited to daytime hours only. The predicted facility sound levels for this scenario are expected to comply with the the regulatory sound level limits specified in the Hanover County code of ordinances.

1. Introduction

Tract is developing an approximately 400-acre property in Hanover County, Virginia to accommodate a data center campus. The site is located within the census-designated place (CDP) of Glen Allen, Virginia. While the site is in Hanover County, the site's southeast border abuts Henrico County. The campus concept includes three primary building areas and two secondary building areas. Nearby noise-sensitive neighbors potentially affected by noise emissions from the proposed data center facility, shown in **Figure 1-1**, include residences on residential and agricultural land, located as close as approximately 50 feet from the site boundary.

This environmental noise assessment was performed to identify and assess potential sound emissions associated with the proposed facility. The assessment was conducted in general accordance with applicable provisions specified in relevant industry standards including ANSI S1.13, ANSI S12.9 and ISO 9613.

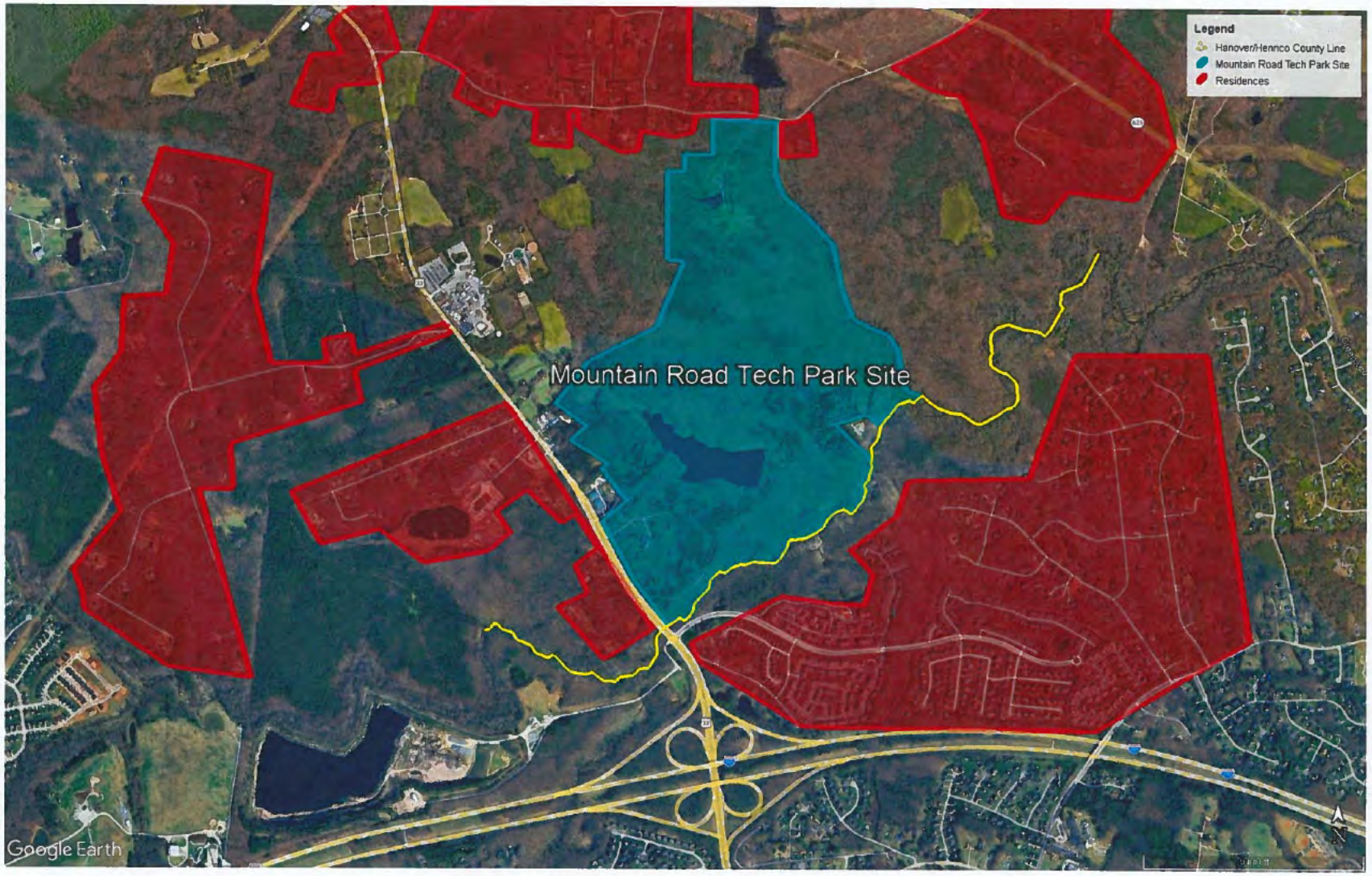


Figure 1-1. Project site, surrounding vicinity, and nearby areas of noise-sensitive receivers.

2. Regulatory Framework

An overview of the regulations applicable to the site related to sound emissions is presented below. The following jurisdictions have been considered based on the site location.

- Commonwealth of Virginia
- Hanover County
- Henrico County (reviewed for informational purposes only)
- Census Designated Place of Glen Allen

2.1 Commonwealth of Virginia

The Commonwealth of Virginia has no quantifiable regulations pertaining to noise or vibration.

2.2 Hanover County

Hanover County, Virginia has established quantitative limits for noise based on the land use designation of the property receiving the noise, shown in **Table 2-1**.

Table 2-1: Hanover County, Virginia Code of Ordinances Chapter 16 - Noise

Hanover County, Virginia Code of Ordinances Chapter 16 - Noise		
Land Use Designation Where Noise is Measured	**Maximum L_{AV} (dBA)**	
	Daytime	**Nighttime**
Agricultural and Residential: Zones A-C, A-1, AR-1, AR-2, AR-6, R-C, R-1, R-2, R-3, R-4, R-5, R-6	57	52
Commercial: Zones B-1, B-2, B-3, O-S	67	62
Industrial: Zones M-1, M-2, M-3	77	77
Maximum Permissible Sound Pressure Levels: Sound level limits apply at the receiving property boundary and are determined by the zoning district classification of the property on which the noise is measured (receiving property). **Daytime:** 7:00 a.m. to 10:00 p.m. **Nighttime:** 10:00 p.m. to 7:00 a.m. **L_{AV}:** Average A-weighted sound pressure level measured over any continuous four-hour period **Generator Testing/Maintenance**: No exemption to the Hanover County Code of Ordinances limits for generator maintenance and testing is noted. As a result, the same limits as normal operations apply. **Emergency Operation:** "The emission of sound in the performance of emergency work" is exempt from the above limits		

Source: Hanover County, Virginia Code of Ordinances Chapter 16 - Noise

2.3 Henrico County

Henrico County, Virginia has no quantifiable regulations pertaining to noise or vibration. The site is not within Henrico County, but regulations were investigated for informational purposes given the proximity of the site.

2.4 Census Designated Place of Glen Allen

As a Census Designated Place, Glen Allen does not have incorporated legal status and therefore has no regulations pertaining to noise or vibration.

2.5 Regulatory Applicability Summary

Based on the Hanover County neighboring and nearby land use designations shown in **Figure 2-1**, the applicable sound level limits prescribed by the Hanover County Code of Ordinances (**Table 2-1**) include the following. It is recommended these also be considered for the nearby properties in Henrico County.

- Maximum allowable sound pressure levels of 57/52 dBA (daytime/nighttime) at all neighboring A-1 properties.
- Maximum allowable sound pressure levels of 67/62 dBA (daytime/nighttime) at all adjacent B-3 properties.

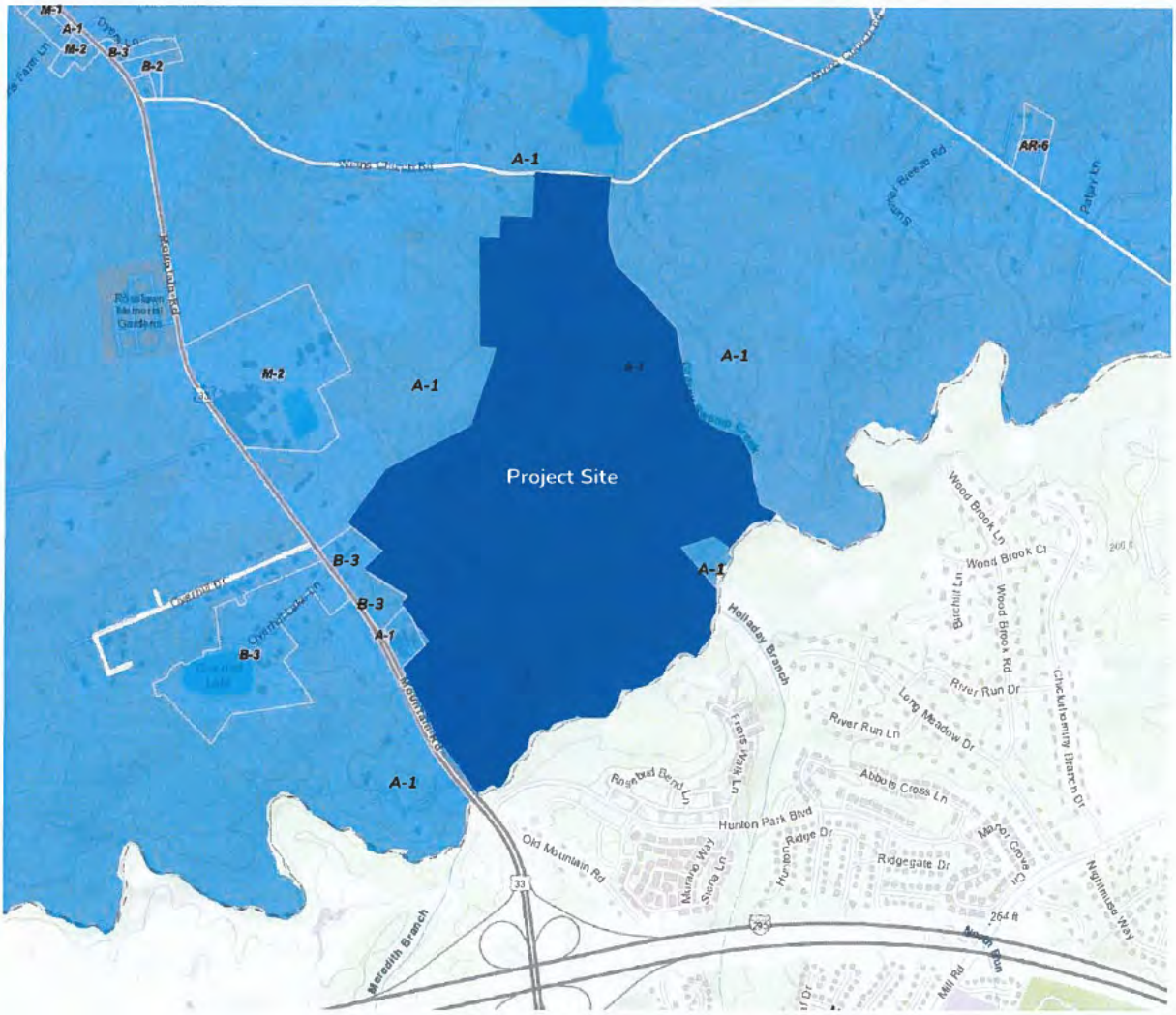


Figure 2-1. Site and surrounding area zoning map, per Hanover County

3. Conceptual Design Information

3.1 Conceptual Facility Layout

Based on the latest project layout update dated March 26, 2026 provided by Tract, the layout is expected to include three primary building areas and two secondary building areas. The conceptual site plan is shown in **Figure 3-1**.

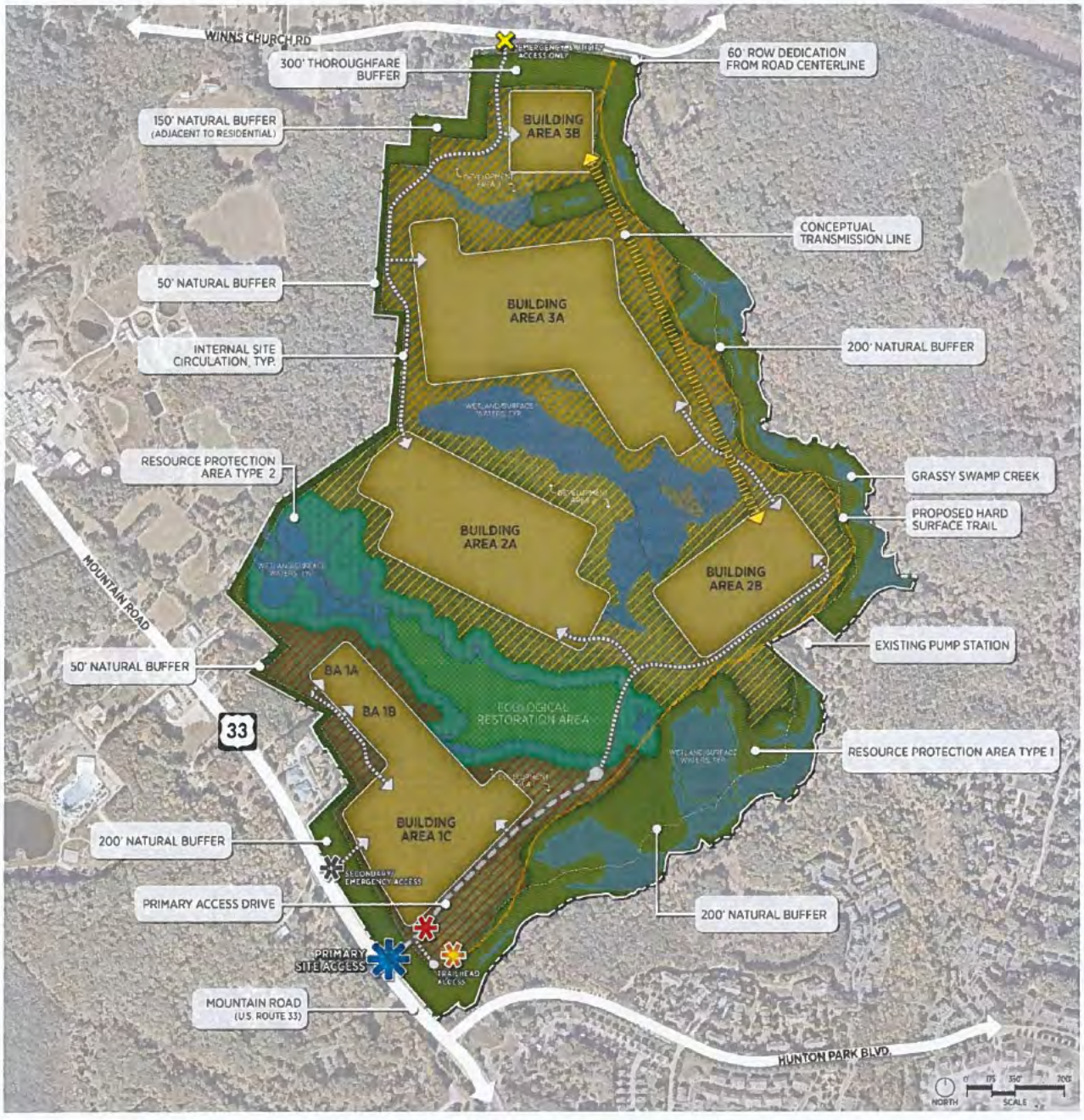


Figure 3-1. Mountain Road Tech Park conceptual layout

3.2 Equipment Design Information and Assumptions

Ramboll understands that the primary noise sources at the site are likely to include rooftop chillers and transformers. It is understood the data center will operate 24 hours per day, 7 days per week. Additionally, the data center will include emergency generators to provide back up power during an unplanned power outage.

Chillers: The chillers were modeled on the rooftops of the data center buildings. Chiller data for a lower-noise model was provided by Tract. It is understood there will be one chiller per 1 MW of building power.

Emergency Generators: It is assumed that maintenance and testing operations of the emergency generators would be conducted on a regular basis. The emergency generators will be placed at grade in generator yards for each data center building. The generators are rated at 3.5 MW. Based on information provided by Tract, the total number of generators is based on the total power of each building, specifically one generator per 3.5 MW of building power. According to additional information provided by Tract, each generator will be installed within an acoustically-rated enclosure.

Transformers: Transformers will be located within electrical substations. Transformer sound levels are based on data available to Ramboll for similarly sized transformers. As a note, while transformers often contribute to the total sound environment, they typically are not a significant factor in sound levels at off-site receptors.

3.3 Operational Scenarios

Ramboll modeled two operating scenarios, Normal Operations (Full Cooling) and Generator Maintenance and Testing Operations.

Normal Operations (Full Cooling): The normal operations scenario assumes all data center buildings are running normally on utility power with chillers running at typical capacity.

Generator Maintenance and Testing: Typically, emergency generators for a data center are tested on a regular basis. Three generators per primary building area have been assumed in this scenario, for a total of nine generators running on the entire campus. For this analysis, Ramboll assumed that load banks would be located within the acoustically-rated generator enclosures, consistent with typical data center operations.

4. Potential Project Sound Emissions

To evaluate the potential for the proposed site to meet the sound level requirements and guidelines detailed in the previous sections, Ramboll developed an acoustical model for the facility. The results of the acoustical model are summarized below.

4.1 Methodology

The noise emissions assessment for the proposed data center site was completed using a sound prediction software package, Cadna/A, published by Datakustik GmbH, which is configured to implement the ISO 9613-2 environmental sound propagation algorithms. It allows the creation of complex acoustical models and predicts sound pressure levels due to sound emissions from (a) specific source(s). The modelling considers the following factors such as source sound level and directivity, distance attenuation, source-receptor geometry, barrier effects of buildings and topography, and ground and atmospheric attenuation

The receptors selected for analysis in the acoustical model are shown in **Figure 4-1.**



Figure 4-1. Modeling receptor locations

4.2 Acoustical Analysis Results

4.2.1 Normal Operations (Full Cooling)

The analysis presented in **Table 4-1** provides a comparison of the predicted facility sound emissions for normal operations and the applicable regulatory sound level limits. **Figure 4-2** shows the sound level contours for the site during normal operations. Sound emissions from the building chillers would be the predominant source of noise during normal data center operations. These facility sound levels are expected to comply with the Hanover County noise regulation.

Table 4-1: Acoustical Modeling Results for Normal Operation – Overall SPL (dBA)

Acoustical Modeling Results for Normal Operation – Overall SPL (dBA)				
Receptor Location	County	Applicable Regulatory Noise Limit		Projected Sound Level During Normal Operations
		Daytime	Nighttime	
R01	Hanover	57	52	41
R02	Hanover	57	52	44
R03	Hanover	57	52	43
R04	Hanover	57	52	40
R05	Hanover	57	52	40
R06	Hanover	57	52	43
R07	Hanover	57	52	43
R08	Hanover	57	52	37
R09	Henrico	N/A	N/A	39
R10	Henrico	N/A	N/A	40
R11	Henrico	N/A	N/A	42

4.2.2 Generator Maintenance and Testing

The analysis presented in **Table 4-2** provides a comparison of the the predicted facility sound emissions for generator maintenance and testing and the applicable regulatory sound level limits. In addition to normal chiller operation, three generators per primary building area were operating in this scenario, for a total of nine generators running on the entire campus. It is understood that generator maintenance and testing will occur during daytime hours only. **Figure 4-3** shows the sound level contours for the site during generator maintenance & testing. During generator maintenance and testing operations, the resulting sound levels are expected to comply with the Hanover County daytime noise regulation limit.

Table 4-2: Acoustical Modeling Results for Generator Maintenance & Testing – Overall SPL (dBA)

Acoustical Modeling Results for Generator Maintenance & Testing – Overall SPL (dBA)			
Receptor Location	County	Applicable Regulatory Sound Level Limit (Daytime)	Projected Sound Level During Generator Maintenance & Testing
R01	Hanover	57	51
R02	Hanover	57	57
R03	Hanover	57	48
R04	Hanover	57	44
R05	Hanover	57	44
R06	Hanover	57	48
R07	Hanover	57	43
R08	Hanover	57	42
R09	Henrico	N/A	45
R10	Henrico	N/A	44
R11	Henrico	N/A	48

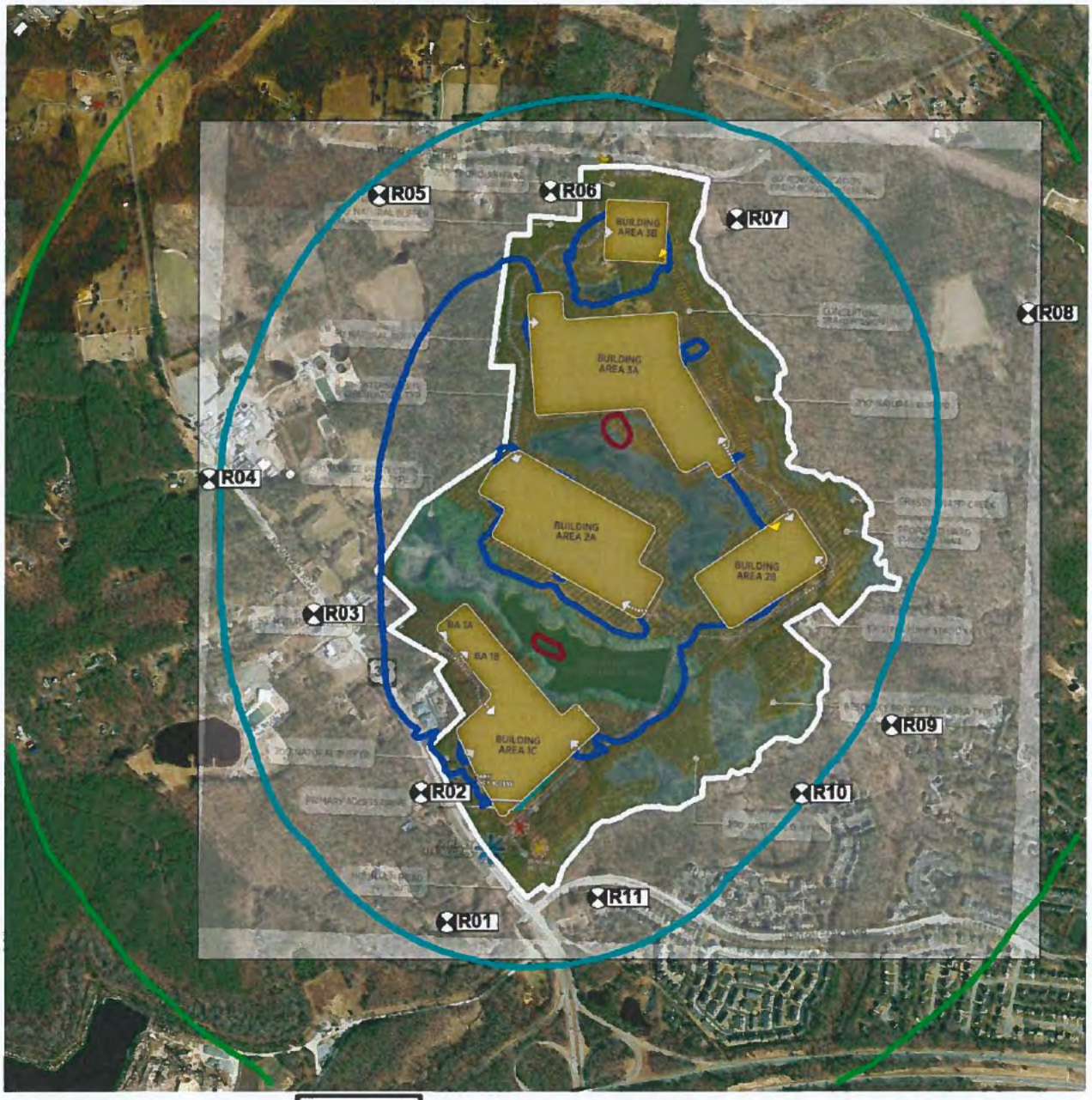


Figure 4-2. Predicted sound levels (dBA) during Normal operation

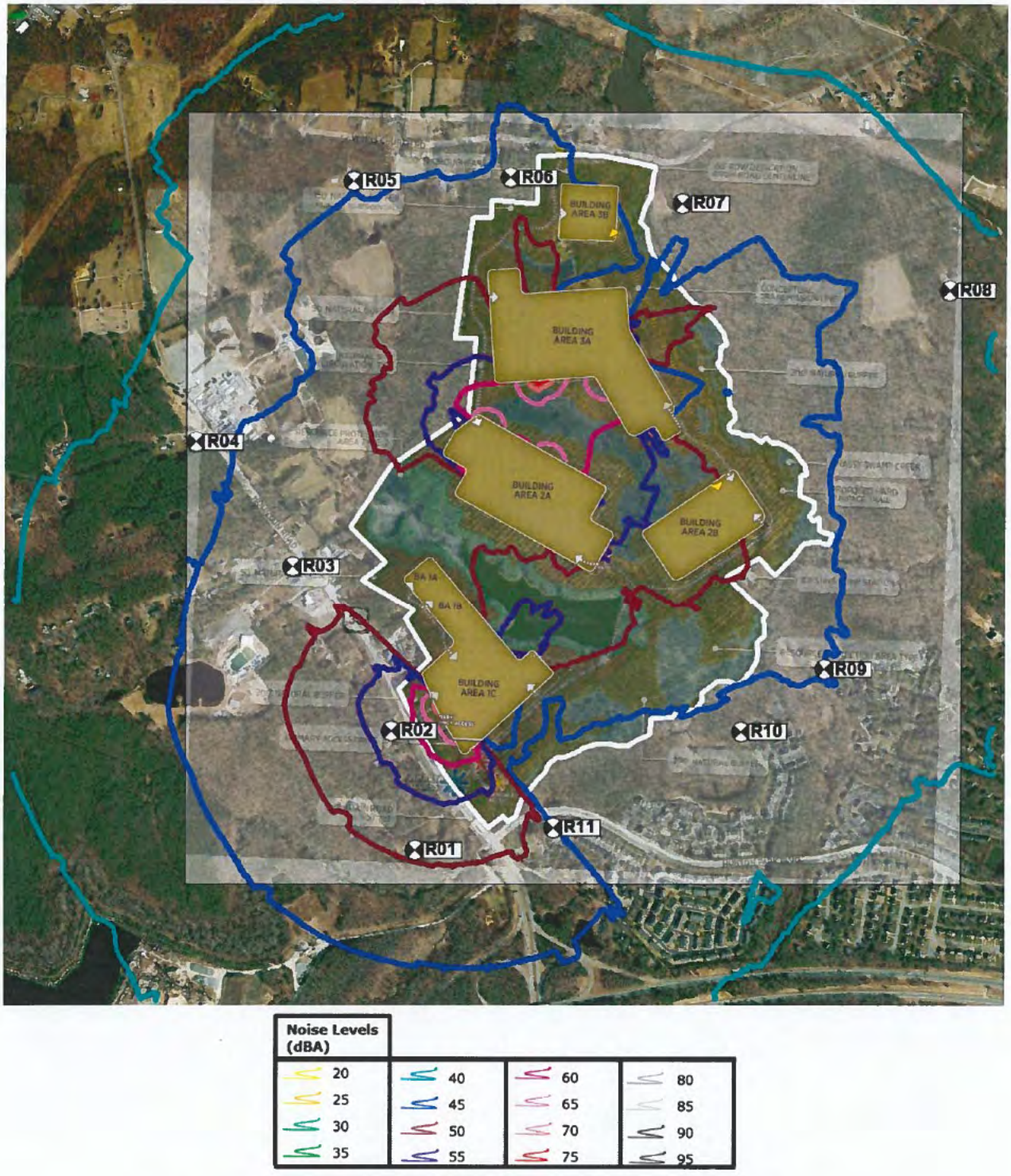


Figure 4-3. Predicted sound levels (dBA) during Generator Maintenance & Testing

5. Conclusions

An environmental noise assessment was completed for the proposed Mountain Road Tech Park data center site. The conceptual layout and equipment information was provided by Tract. The results of the assessment indicate the facility sound levels are expected to comply with the applicable Hanover County sound level limits during normal operations and during occasional generator maintenance and testing operations.

Appendix A

Basics of Sound

Sound is the transmission of energy in the form of fluctuating pressure waves from a vibrating source through an elastic medium, such as air, that is detectable by the human ear. The pressure fluctuates above and below atmospheric pressure. The amplitude of the pressure fluctuation is typically described in terms of decibels (dB), while the rate of fluctuation per unit time (frequency) is described in hertz (Hz). The decibel is a logarithmic ratio of a given sound pressure to a reference sound pressure. A logarithmic ratio is used for decibels since human hearing is roughly logarithmic, rather than linear. The reference sound pressure is roughly equal to the threshold of human hearing. Sound pressure levels below the human threshold of hearing are less than 0 dB, while levels above the human threshold of hearing are greater than 0 dB. Differences in sound level are also described in decibels. A 3-dB difference is considered "just noticeable", a 5-dB difference is considered "clearly noticeable", while a 10-dB difference is perceived as a doubling (or halving) in loudness. **Table A-1** provides a list of common noise sources, their sound level, and their subjective loudness.

The range of frequencies a healthy human ear can hear is approximately 20 Hz to 20,000 Hz. The human ear is not equally sensitive to all frequencies across the audible frequency spectrum. The human ear is most sensitive to mid frequencies (the frequency range associated with speech) and is less sensitive at low frequencies and very high frequencies. To account for this, frequency weighting networks have been developed to approximate the human ear's frequency response at different sound pressure levels. The A-weighting network is used to approximate the frequency response of the human ear at normal sound levels. Measurements using the A-weighting network are described in terms of A-weighted decibels, often abbreviated colloquially as dBA or dB(A).

Table A-1. Sound Pressure Level of Common Noise Sources (Hansen, 2003) (Raichel, 2006)

Sound Pressure Level of Common Noise Sources		
Sound Pressure Level (dBA)	**Subjective Evaluation**	**Descriptions of Example Sound Sources**
140	Deafening	Jet aircraft at 75 feet (ft)
130	Threshold of pain	Jet aircraft during takeoff at a distance of 300 ft
120	Threshold of feeling	-
110	Extremely Loud	Jet flyover at 1000 ft
100	Very Loud	Auto horn at 10 ft
90		Jackhammer at 50 ft
80	Loud	Diesel truck (40 miles per hour (mph)) at 50 ft, noisy urban street
70	Moderately Loud	Busy highway at 100 ft
60	Moderate	-
50	Quiet	Small town
40		
30	Very quiet	-
20		Rustling leaves
10	Just audible	-
0	Threshold of hearing	-

Traffic Study

(Appendix Available Upon Request)

TRAFFIC IMPACT ANALYSIS

MOUNTAIN ROAD TECHNOLOGY PARK

HANOVER COUNTY, VIRGINIA

NOVEMBER 2025 (VERSION 2)

Prepared By:

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TABLE OF CONTENTS

1 Introduction 5
1.1 Purpose 5
1.2 Methodology 5
1.3 Project Area 6
1.4 Development Information 6
2 Traffic Operational Analysis 8
2.1 Methodology 8
2.2 Key Assumptions 9
3 Data Collection 9
3.1 Existing Roadway Characteristics 9
3.2 Existing Traffic Volumes 9
4 Construction Peak – Traffic Operational Analysis 10
4.1 Peak Hour Determination 10
4.2 Existing Conditions Analysis Results 12
4.3 Projected No-Build Conditions 12
4.4 Build Conditions 14
4.5 I-295 Interchange Highway Capacity Analysis 23
5 Full Buildout - Traffic Operational Analysis 24
5.1 Peak Hour Determination 24
5.2 Existing Conditions Analysis Results 26
5.3 Projected No-Build Conditions 26
5.4 Build Conditions 28
5.5 I-295 Interchange Highway Capacity Analysis 35
6 Access Management 36
7 Conclusion and Recommendations 39

TABLE OF FIGURES

Figure 1: Study Area 7
Figure 2: 2025 Existing Turning Movement Volumes (Construction Peak) 11
Figure 3: 2034 No-Build Turning Movement Volumes (Construction Peak) 13
Figure 4: Construction Peak – Trip Distribution 16
Figure 5: Construction Peak – Trip Assignment 17
Figure 6: 2034 Build Turning Movement Volumes (Construction Peak) 18
Figure 7: 2025 Existing Turning Movement Volumes 25
Figure 8: 2034 No-Build Turning Movement Volumes 27
Figure 9: Trip Distribution 29
Figure 10: Trip Assignment 30
Figure 11: 2034 Build Turning Movement Volumes 31
Figure 12: Access Management 37
Figure 13: Access Management: Inset A 38

TABLE OF TABLES

Table 1: Intersection Level of Service (LOS) Analysis Criteria 8
Table 2: Existing Roadway Characteristics 9
Table 3: Anticipated Hourly Construction Traffic Distribution 10
Table 4: Anticipated Hourly Construction Traffic Volumes 14
Table 5: Control Delay and LOS Summary (Construction Peak) 20
Table 6: 95th Percentile Queue Lengths (Construction Peak) 22
Table 7: Proposed Development Trip Generation 28
Table 8: Control Delay and LOS Summary 33
Table 9: 95th Percentile Queue Lengths 34
Table 10: Turn Lane Warrant Analysis 36

APPENDICES

Appendix A: Conceptual Site Plan
Appendix B: Pre-Scope of Work Form
Appendix C: Traffic Count Data and Signal Timing Data
Appendix D: *Synchro 11™* Output Sheets
Appendix E: HCS7 Output Sheets
Appendix F: Trip Generation Calculations
Appendix G: Turn Lane Warrants

Executive Summary

The Traffic Impact Analysis (TIA) documented in this report evaluates the traffic impacts of a data center generally located in the northeast quadrant of the intersection of Mountain Road (US-33) and Hunton Park Boulevard in Hanover County, Virginia.

The project proposes to rezone the 434-acre property to permit a 900-megawatt (MW) data center. Access to the proposed site will be provided via one full-access driveway along US-33 at an existing median break and two (2) emergency/utility access driveways; one (right-in/right-out driveway) along US-33 and one (full-access driveway) along Winns Church Road. The emergency/utility access along US-33 will serve as a temporary driveway during construction operations.

Traffic operations were analyzed at the intersections identified below during the AM and PM peak hours using *Synchro 11™* software for the Existing 2025, No-Build 2034, and Build 2034 conditions. However, at the request of VDOT staff, traffic operations were also analyzed during the construction AM (6:00 – 7:00 AM) and construction PM (3:00 – 4:00 PM) peak hours and include Existing 2025 (Construction Peak), No-Build 2034 (Construction Peak), and Build 2034 (Construction Peak) conditions. The following intersections were identified as the study area intersections:

1. US-33 (Mountain Road) & Hunton Park Boulevard
2. US-33 (Mountain Road) & Gladfelter Road
3. US-33 (Mountain Road) & Winns Church Road
4. Winns Church Road & Greenwood Road

The results of the operational analyses indicate that under the No-Build conditions (both construction peak and commuter peak hours), all signalized intersections and all unsignalized approaches are projected to operate with an overall delay equivalent to LOS D or better, with the exception of the intersection of US-33 and Winns Church Road, which operates at LOS E during the commuter AM and PM peak hours.

The results of the Build 2034 (Construction Peak) traffic operational analysis indicate that all signalized intersections and all unsignalized approaches are projected to operate with delays equivalent to LOS D or better, with the exception of the westbound approach at the intersection of US-33 and Project Driveway #1 during the PM peak hour, which is projected to operate with delays equivalent to LOS F. Note that these results are typical where a low volume, stop-controlled, road intersects a high-volume, free-flow road. On occasions where vehicles are unable to exit the site, or excessive queues are observed on-site, it is expected that the contractor will deploy flaggers to maintain the safety and operations of the intersection.

The results of the Build 2034 traffic operational analysis indicate that all signalized intersections and all unsignalized approaches are projected to operate with an overall delay equivalent to LOS D or better, with the exception of the westbound approach at the intersection of US-33 and Winns Church Road, which operates at LOS E during the commuter AM and PM peak hour. Note that the approach was projected to operate with delays equivalent to LOS E under No-Build conditions, prior to the completion of the project.

Additionally, Highway Capacity Software (HCS7) was used to evaluate the merge and diverge operations of the US-33 and Interstate 295 (I-295) interchange ramps that are anticipated to be used by the proposed development traffic. The results of the highway capacity analysis indicate that under all analysis scenarios, the I-295 on/off-ramps are projected to operate with densities equivalent to LOS C or better under all analysis conditions.

Turn lane warrant analyses were conducted for the 2034 Build (Construction Peak) and 2034 Build conditions at the proposed Project Driveway #1 and Project Driveway #2 using the turn lane warrant standards outlined in Appendix F of the VDOT Road Design Manual.

A northbound right-turn lane with 200 feet of taper and 200 feet of storage is warranted at Project Driveway #1. Note that the project is committed to providing a dedicated right-turn lane with 200 feet of taper and 100 feet of storage, consistent with the adjacent left and right-turn lanes along Mountain Road. The proposed taper at Project Driveway #1 does not meet turn lane design standards due to the proximity of the Chickahominy River bridge crossing that is located approximately 400 feet south of the existing median break. An Access Management Exception (AME) form will be submitted for the proposed turn lane length at Project Driveway #1. Additionally, A northbound right-turn lane with 200 feet of taper and 200 feet of storage is warranted and proposed at Project Driveway #2.

1 Introduction

1.1 Purpose

Kimley-Horn has performed a Traffic Impact Analysis (TIA) to evaluate the traffic impacts of a proposed data center generally located in the northeast quadrant of the intersection of US-33 (Mountain Road) and Hunton Park Boulevard in Hanover County, Virginia. The purpose of this study is to determine and evaluate the potential future impact of the proposed development on the external roadway network. A conceptual site plan is included in **Appendix A**.

1.2 Methodology

In preparation of the TIA, Kimley-Horn coordinated with Hanover County and VDOT staff to receive concurrence on the scope of the study, the limits of the study area, and the proposed methodology. The approved pre-scope of work form is contained in **Appendix B**. As determined through the coordination, the study area intersections included the following:

1. US-33 (Mountain Road) & Hunton Park Boulevard
2. US-33 (Mountain Road) & Gladfelter Road
3. US-33 (Mountain Road) & Winns Church Road
4. Winns Church Road & Greenwood Road

Traffic operations were analyzed at the intersections identified during the AM and PM peak hours using *Synchro 11™* software for the Existing 2025, No-Build 2034, and Build 2034 conditions. However, at the request of VDOT staff, traffic operations were also analyzed during the construction AM (6:00 – 7:00 AM) and construction PM (3:00 – 4:00 PM) peak hours and include Existing 2025 (Construction Peak), No-Build 2034 (Construction Peak), and Build 2034 (Construction Peak) conditions.

Existing conditions represent the roadway network geometry and traffic volumes at the time of the study. No-Build conditions represent the future roadway network prior to the completion of the proposed development with the addition of background traffic growth. Build conditions represent the future roadway network with the addition of background traffic growth, proposed roadway improvements, and traffic generated by the project (construction or operations).

Highway Capacity Software (HCS7), Freeway Facilities, module was used to evaluate the US-33 and I-295 interchange mainline merge and diverge operations for the on/off ramps identified to be used by the proposed development traffic. The following I-295 on/off ramps were analyzed:

- I-295 eastbound to US-33 northbound
- US-33 southbound to I-295 eastbound
- I-295 westbound to US-33 northbound
- US-33 southbound to I-295 westbound

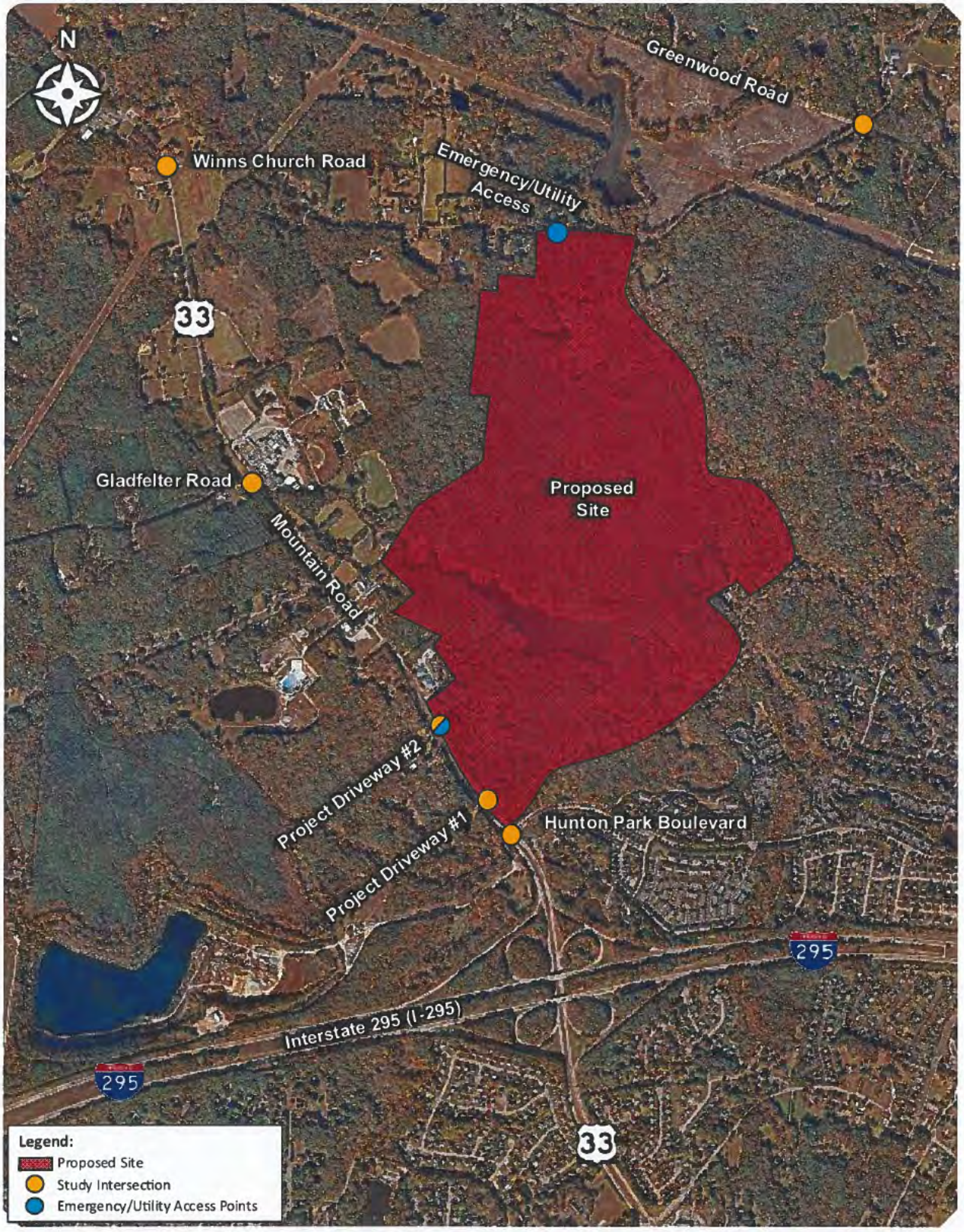
1.3 Project Area

The project area is generally located in the northeast quadrant of the intersection US-33 (Mountain Road) and Hunton Park Boulevard in Hanover County, Virginia. The project area for the proposed development is shown in **Figure 1**.

1.4 Development Information

The site proposed for development is currently vacant. The proposed development consists of data center buildings and support structures, with access to be provided via one full-access driveway along US-33 at an existing median break and two (2) emergency/utility access driveways; one (right-in/right-out driveway) along US-33 and one (full-access driveway) along Winns Church Road. The emergency/utility access along US-33 will serve as a temporary driveway during construction operations.

FIGURE 1: STUDY AREA



2 Traffic Operational Analysis

2.1 Methodology

The traffic operational analysis performed for this study using *Synchro 11™* was conducted in accordance with VDOT's Traffic Operations Safety Analysis Manual (TOSAM), version 2.0 for deterministic intersection capacity analyses. Existing signal timings were provided by VDOT and were input into *Synchro 11™*. The interchange on/off-ramp operational analysis performed for this study using Highway Capacity Software (HCS7), Freeway Facilities, module was in accordance with VDOT's TOSAM for deterministic basic freeway, merging and diverging, and weaving segment analyses.

The evaluation of traffic operations within the study area was comprised of an intersection capacity level of service (LOS) analysis during the AM and PM peak hours, a 95th percentile queueing analysis to evaluate the adequacy of existing turn lanes and the potential need for turn lane improvements, and an analysis of the US-33 and I-295 interchange mainline merge and diverge operations to evaluate the density of the interchange ramps.

Capacity analyses were conducted using methodologies contained in the Highway Capacity Manual (HCM) reported from *Synchro 11™*. Queue analyses were conducted using the 95th percentile queues from *Synchro 11™*. Interchange merge, diverge, and weaving operational analysis was conducted using methodologies contained in the Highway Capacity Manual (HCM) reported from HCS7.

As part of the traffic operational analysis, the projected No-Build conditions served as the baseline for evaluating intersection delays and identifying mitigation measures under the Build conditions.

Intersection capacity defines the volume of traffic that can be accommodated by a roadway at a specified LOS. Capacity is affected by various geometric factors including roadway type (e.g., divided or undivided), number of lanes, lane widths, and grades. LOS, which is a measure of the degree of congestion, ranges from LOS A (free flowing) to LOS F (a congested, forced flow condition). Delay, measured in seconds per vehicle, and the associated LOS thresholds for signalized and unsignalized intersections based on HCM methodologies are presented in **Table 1**. Density, measured in passenger cars per lane per mile, and the associated LOS thresholds for basic, merge, diverge, and weaving segments are shown in **Appendix E.**

Table 1: Intersection Level of Service (LOS) Analysis Criteria

Level of Service (LOS)	Average Control Delay per Vehicle (sec/veh)		Description of Traffic Conditions
	Signalized	Unsignalized	
A	≤ 10	≤ 10	No delays at intersections with continuous traffic flow. Uncongested operations; high frequency of long gaps available for all left and right-turning traffic; no observable queues.
B	> 10 and ≤ 20	> 10 and ≤ 15	
C	> 20 and ≤ 35	> 15 and ≤ 25	Moderate delays at intersections with satisfactory traffic flow. Light congestion; infrequent backups on critical approaches.
D	> 35 and ≤ 55	> 25 and ≤ 35	Increased probability of delays along every approach. Significant congestion on critical approaches, but intersection functional. No long-standing lines formed.
E	> 55 and ≤ 80	> 35 and ≤ 50	Heavy traffic flow conditions. Heavy delays probable. No available gaps for cross-street traffic or main street turning traffic. Limit of stable flow.
F	> 80	> 50	Unstable traffic flow. Heavy congestion. Traffic moves in forced flow conditions. Average delays greater than one minute highly probable. Total breakdown.

2.2 Key Assumptions

The following assumptions were made as part of the traffic operational analysis for all scenarios:

- For the No-Build and Build conditions, all signalized intersections used the higher of the calculated peak hour factor or 0.92 in accordance with TOSAM. All existing peak hour factors were calculated per TOSAM.
- A posted speed limit of 25 MPH was asserted for roads without a posted speed limit.

3 Data Collection

3.1 Existing Roadway Characteristics

Roadway characteristics including geometry and posted speed limits for roadway facilities adjacent to the proposed development are summarized in **Table 2**.

Table 2: Existing Roadway Characteristics

Road	Lanes	Posted Speed (mph)	Functional Classification [1]
US-33 (North of Overhill Lake Lane)	2 Lanes Undivided	55	Minor Arterial
US-33 (South of Overhill Lake Lane)	4 Lanes Divided	55	Minor Arterial
Hunton Park Boulevard	2 Lanes Divided	35	Unclassified
Gladfelter Road	2 Lanes Undivided	25	Unclassified
Winns Church Road	2 Lanes Undivided	45	Minor Collector
Greenwood Road	2 Lanes Undivided	45	Major Collector

[1] Based on the VDOT Functional Classification Map

3.2 Existing Traffic Volumes

Turning movement counts (TMCs) for the study intersections were collected on May 15, 2025, when school was in session, during the AM peak period (6:00 AM to 10:00 AM) and PM peak period (3:00 PM to 7:00 PM) at the following intersections:

1. US-33 (Mountain Road) & Hunton Park Boulevard
2. US-33 (Mountain Road) & Gladfelter Road
3. US-33 (Mountain Road) & Winns Church Road
4. Winns Church Road & Greenwood Road

Kimely-Horn coordinated with Henrico County staff to use the traffic data collected for the ongoing *I-295 at Woodman Road Interchange Access Report* for the US-33 and I-295 interchange ramps and mainline traffic volumes. The provided 48-hour ramp and mainline counts were collected on September 13, 2023, and January 24, 2024, at the US-33 and I-295 interchange. Signal timings and traffic count data are included in **Appendix C.**

4 Construction Peak – Traffic Operational Analysis

The purpose of the temporary construction traffic operational analysis was to evaluate the impacts of the traffic generated by peak construction operations prior to the completion of the project.

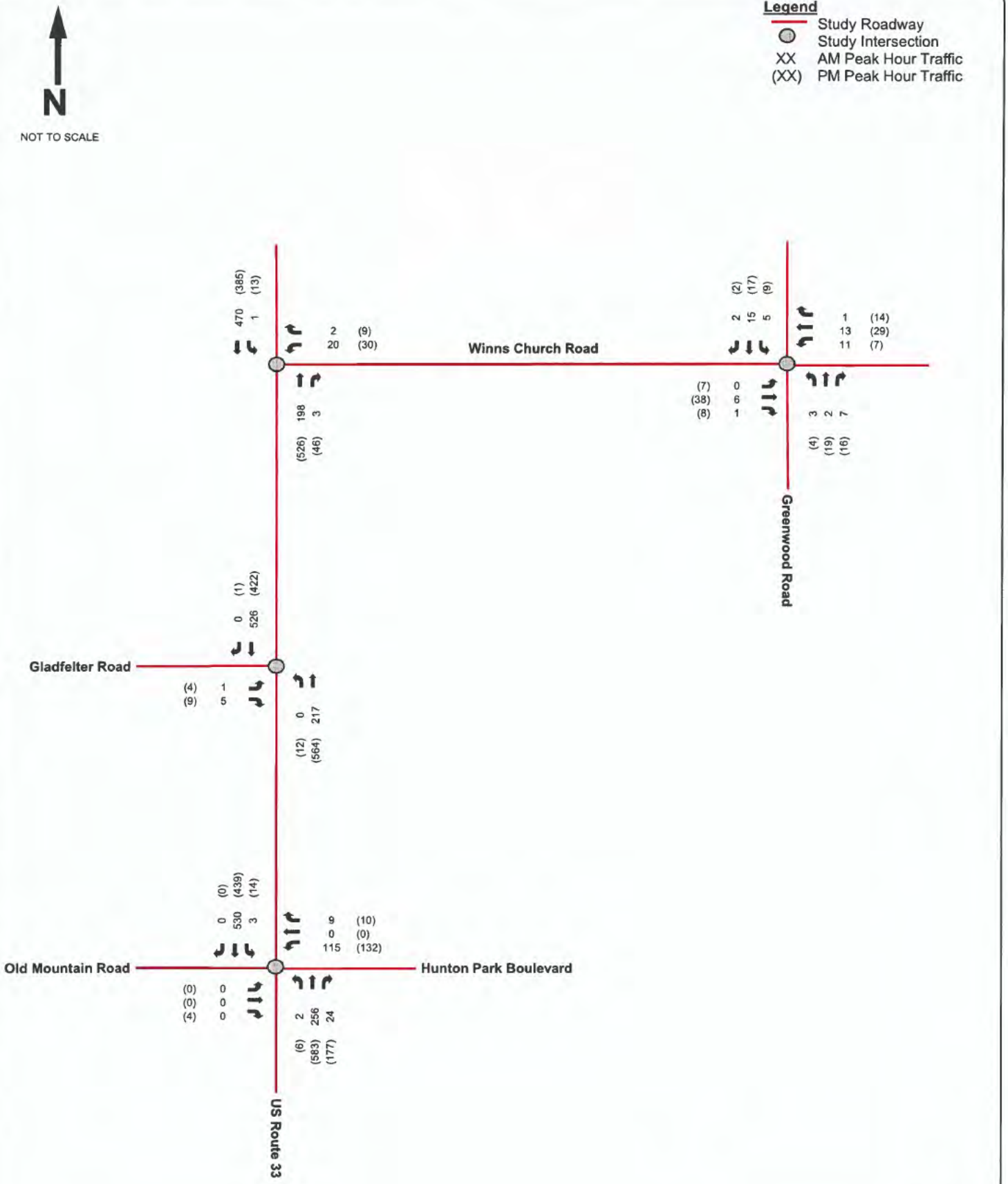
4.1 Peak Hour Determination

The construction peak hours were determined based on data provided by the applicant. Construction will consist of one shift that is staggered to occur outside of the typical AM and PM commuter peak hours, with construction employees arriving on-site between 4:00–7:00 AM and departing between 2:00–5:00 PM.

The hourly distribution of construction employees arriving/departing the site was provided by the applicant and used to determine the morning and evening construction traffic peak hours. The anticipated hourly arrival and departure distributions are provided in **Table 3**. The AM construction peak hour was assumed to be from 6:00–7:00 AM and the PM construction peak hour was assumed to be from 3:00–4:00 PM. Existing (Construction Peak) AM and PM peak hour traffic turning volumes are summarized in **Figure 2**.

Table 3: Anticipated Hourly Construction Traffic Distribution

Start Time	Percent Arriving/Departing
AM Peak Period	
4:00 AM	10%
5:00 AM	30%
6:00 AM	50%
7:00 AM	10%
PM Peak Period	
2:00 PM	10%
3:00 PM	50%
4:00 PM	30%
5:00 PM	10%



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Figure 2
2025 Existing (Construction Peak) Conditions
Mountain Road Technology Park
Hanover, Virginia

4.2 Existing Conditions Analysis Results

Existing Conditions Intersection Capacity Analysis

During the construction peak hours, all signalized intersections and all unsignalized approaches operate with overall delays equivalent to LOS C or better, during the AM and PM peak hour.

Control delay and LOS results are summarized in **Table 5** following the analysis sections. The intersection capacity analysis results are included in **Appendix D**.

Existing Conditions 95th Percentile Queuing Analysis

The existing 95th percentile vehicle queue lengths during the construction peak hour were calculated by movement for each study intersection using Synchro 11™. All queue lengths are expected to be accommodated within existing storage lanes during the AM and PM peak hour.

The queue results are summarized in **Table 6** following the analysis sections. The queueing analysis results are included in **Appendix D**.

4.3 Projected No-Build Conditions

The projected No-Build conditions represent the future roadway network and background traffic growth in the study area. Projected No-Build conditions were analyzed in the year 2034. No future developments that have been approved but not yet built were identified or included in the analyses conducted in this traffic impact analysis.

Traffic Growth Rate

A linear growth rate of 1.0% was applied and agreed upon by VDOT staff during the pre-scope of work meeting. The pre-scope of work form is provided in **Appendix B**. The growth rate was applied to the collected turning movement counts to establish volumes for future year (2034) conditions. No-Build (Construction Peak) AM and PM peak hour traffic volumes are summarized in **Figure 3**.

No-Build Conditions Intersection Capacity Analysis

During the construction peak hours, all signalized intersections and all unsignalized approaches are projected to operate with overall delays equivalent to LOS C or better, during the AM and PM peak hour.

Control delay and LOS results are summarized in **Table 5** following the analysis sections. The intersection capacity analysis results are included in **Appendix D**.

No-Build Conditions 95th Percentile Queueing Analysis

The no-build 95th percentile vehicle queue lengths during the construction peak hour were calculated by movement for each study intersection using Synchro 11™. All queue lengths are expected to be accommodated within existing storage lanes during the AM and PM peak hour.

The queue results are summarized in **Table 6** following the analysis sections. The queueing analysis results are included in **Appendix D**.

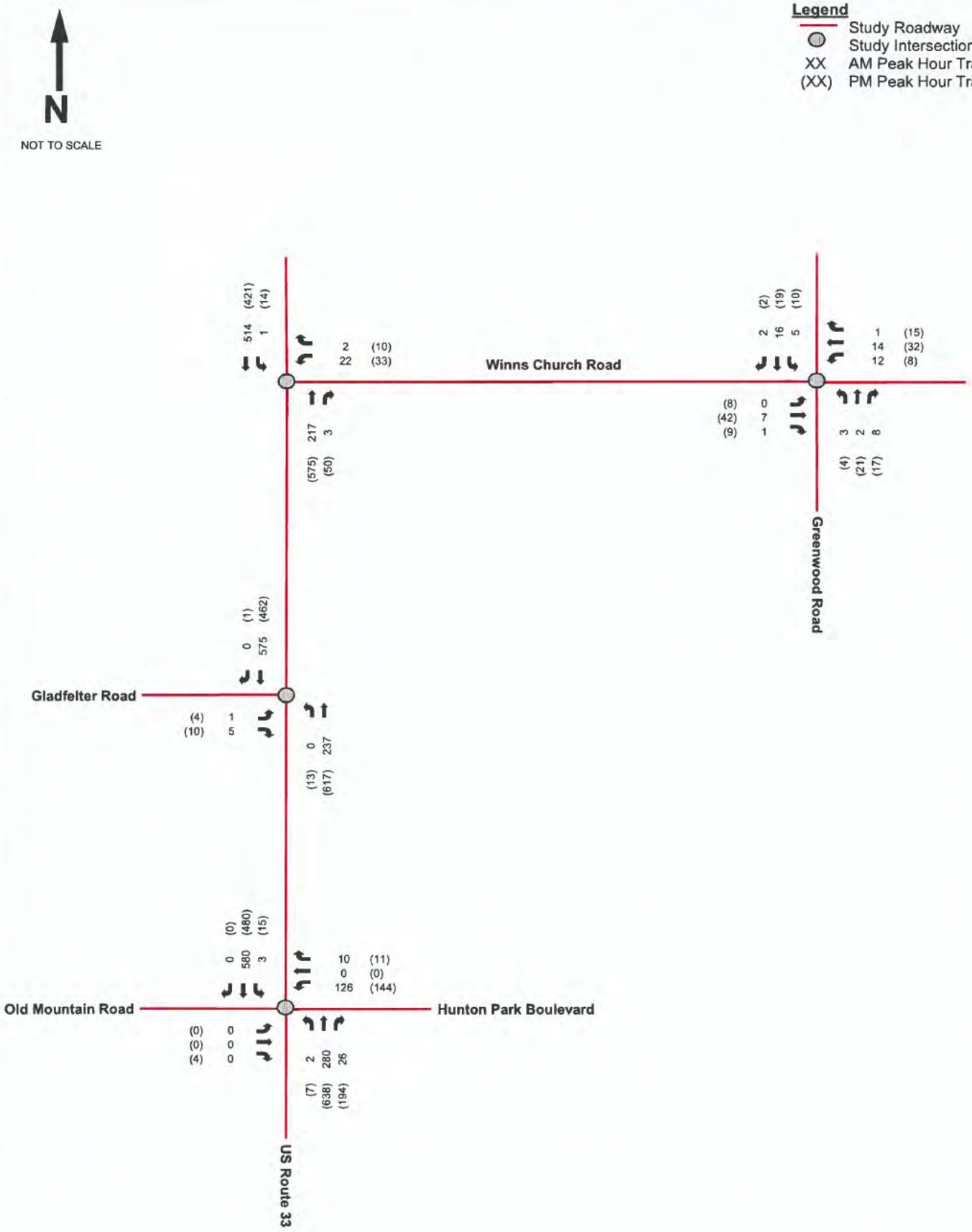


Figure 3
2034 No-Build (Construction Peak) Conditions
Mountain Road Technology Park
Hanover, Virginia

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4.4 Build Conditions

For the temporary construction traffic operational analysis, the Build 2034 conditions represent the future roadway network with the addition of background traffic growth, proposed roadway improvements, and traffic generated by the peak construction operations prior to the completion of the project.

During the construction period, access to the proposed development will be provided by one full-access and one partial-access (right-in/right-out only) driveway along US-33/Mountain Road. Construction employees will be directed to enter the site via the northern driveway (Project Driveway #2) and exit via the southern driveway (Project Driveway #1) to provide efficient traffic flow on-site. Roadway improvements included in Build 2034 (Construction Peak) conditions include a northbound right-turn lane with 200 feet of storage and 200 feet of taper at Project Driveway #2.

Site Trip Generation

Based on information provided by the applicant, the anticipated peak construction work force consists of 600-800 employees on-site daily. Construction employees would arrive between 4:00–7:00 AM and depart between 2:00–5:00 PM. The following assumptions were made regarding the peak construction traffic:

- 1,600 weekday daily trips
- 800 morning trips; employee arrival distributed between 4:00–7:00 AM; directional distribution was assumed to be 90% entering, 10% exiting
- 800 evening trips; employee departures distributed between 2:00–5:00 PM; directional distribution was assumed to be 10% entering, 90% exiting

The hourly distribution of construction employees arriving/departing the site was provided by the applicant and used to distribute the morning and evening trips to capture the employees' non-uniform arrival/departure. The anticipated hourly arrival and departure volumes are provided in **Table 4**.

Table 4: Anticipated Hourly Construction Traffic Volumes

Start Time	Percent Arriving/Departing	In	Out	Total
AM Peak Period				
4:00 AM	10%	72	8	80
5:00 AM	30%	216	24	240
6:00 AM	50%	360	40	400
7:00 AM	10%	72	8	80
PM Peak Period				
2:00 PM	10%	8	72	80
3:00 PM	50%	40	360	400
4:00 PM	30%	24	216	240
5:00 PM	10%	8	72	80

Site Trip Distribution and Assignment

The distribution of traffic at study area intersections, including proposed access locations, was established based on information provided by the applicant, which assumed that a majority of the traffic attributable to the proposed development would originate from the US-33 and I-295 interchange. Note that the trip distribution assumptions were included in the approved Pre-scope of Work Form. The inbound and outbound distribution of traffic are shown in **Figure 4**. Trip assignment based on the trip distribution is shown in **Figure 5**.

The assignment of traffic generated by the project was calculated by applying the distribution percentage for a specific turning movement to the total number of inbound or outbound trips generated to establish the turning movement volume at that location. The build condition traffic volumes were then calculated by adding the site generated trips to the projected No-Build traffic volumes. The resulting Build 2034 (Construction Peak) volumes for the AM and PM peak hours are shown in **Figure 6**.

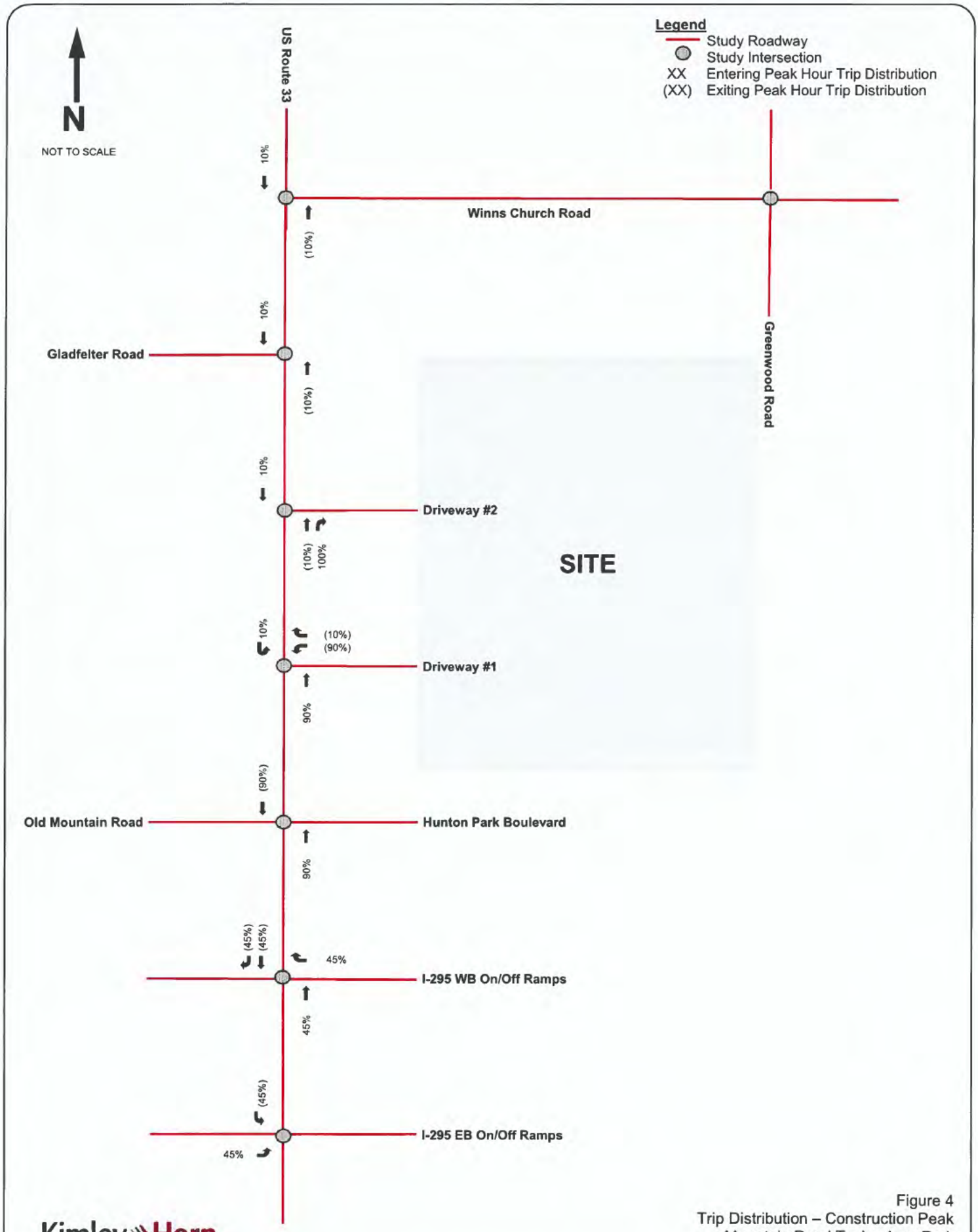
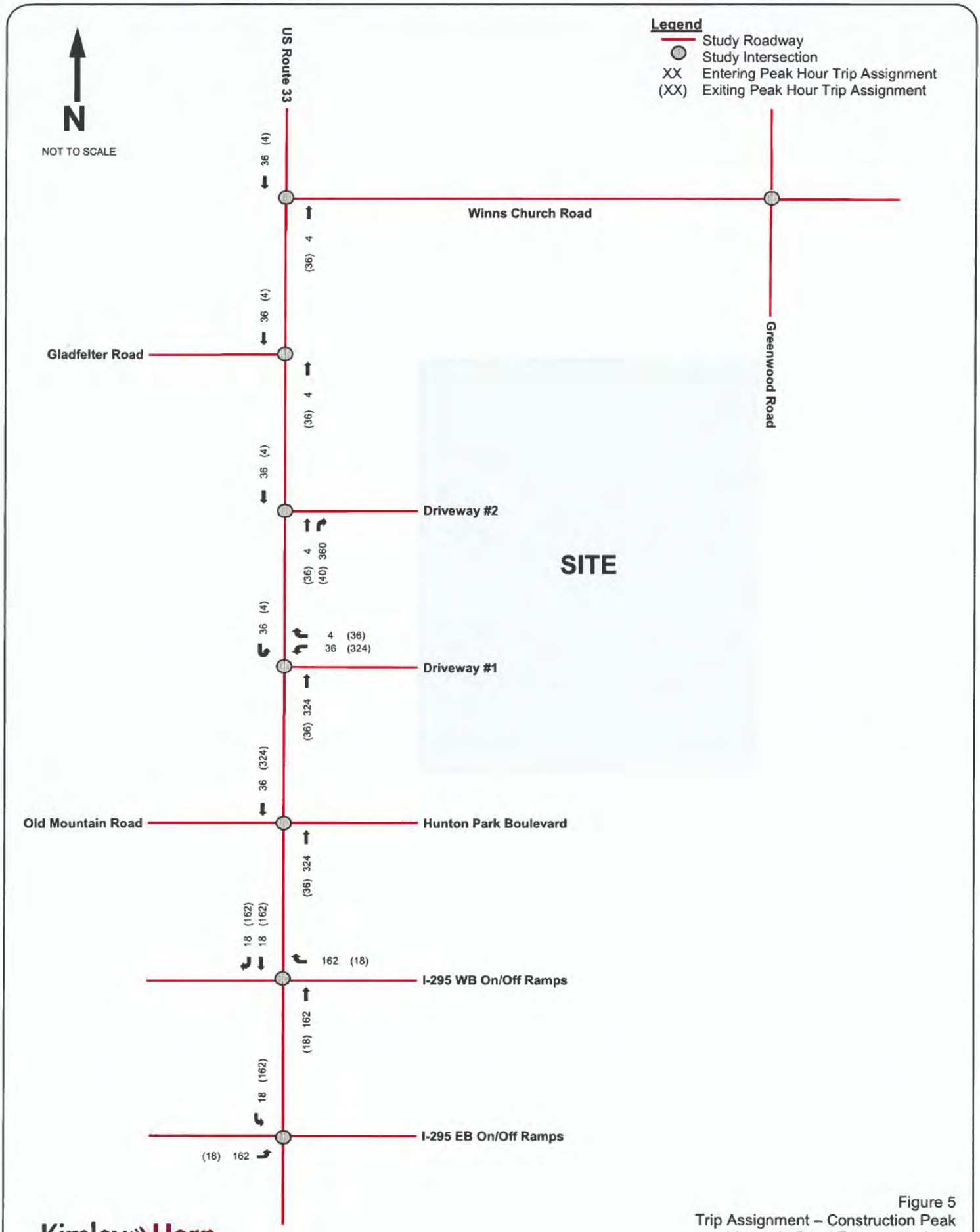


Figure 4
Trip Distribution – Construction Peak
Mountain Road Technology Park
Hanover, VA

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Figure 5
Trip Assignment – Construction Peak
Mountain Road Technology Park
Hanover, VA

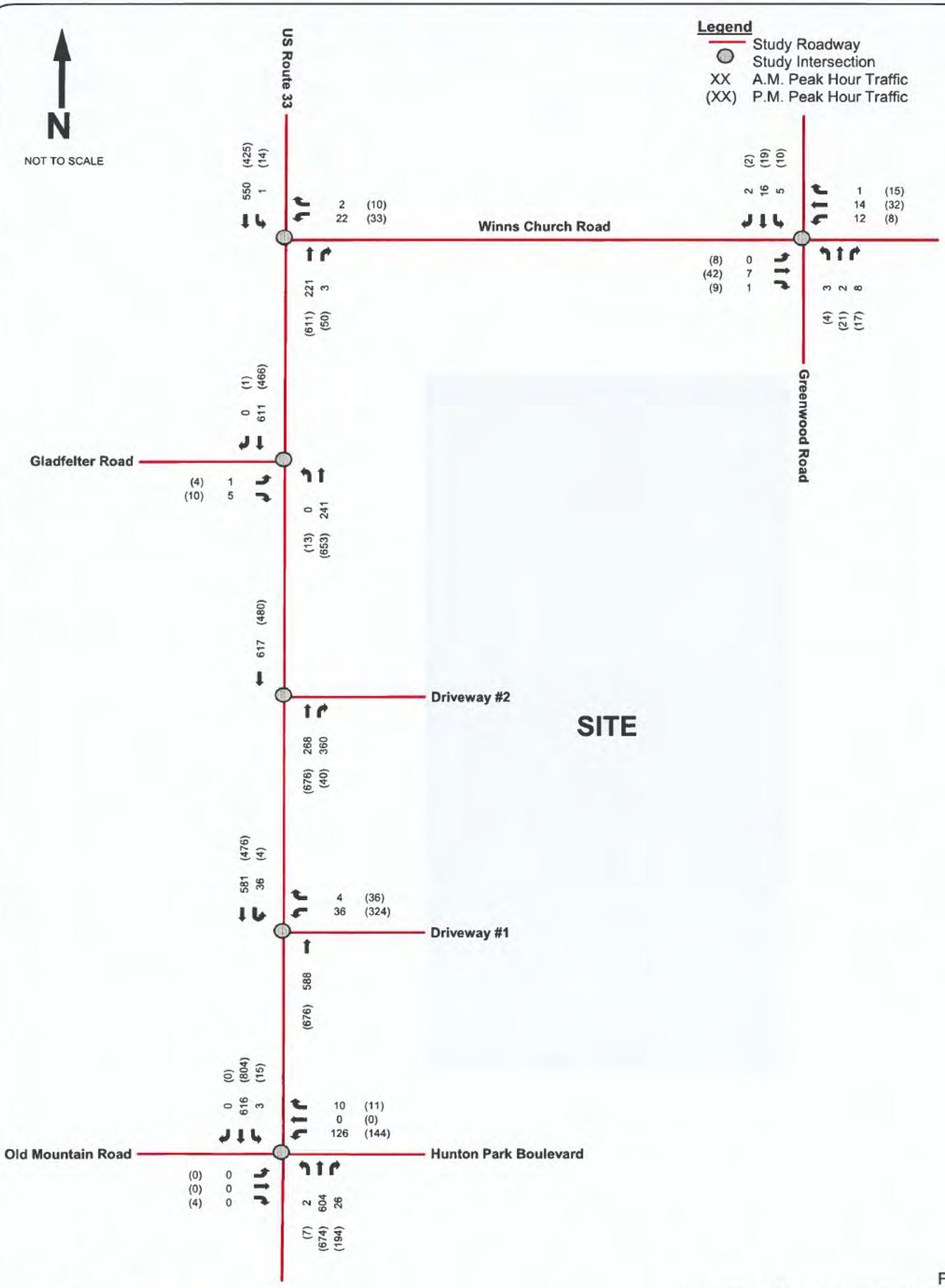


Figure 6
2034 Build (Construction Peak) Conditions
Mountain Road Technology Park
Hanover, Virginia

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Build Conditions Intersection Capacity Analysis

During the construction peak hours, all signalized intersections and all unsignalized approaches are projected to operate with overall delays equivalent to LOS D or better, with the exception of the westbound approach at the intersection of US-33 and Project Driveway #1 during the PM peak hour, which is projected to operate with delays equivalent to LOS F.

Note that these results are typical where a low volume, stop-controlled, road intersects a high-volume, free-flow road. On occasions where vehicles are unable to exit the site, or excessive queues are observed on-site, it is expected that the contractor will deploy flaggers to maintain the safety and operations of the intersection.

Control delay and LOS results are summarized in **Table 5** following the analysis sections. The intersection capacity analysis results are included in **Appendix D**.

Build Conditions 95th Percentile Queue Analysis

The build 95th percentile vehicle queue lengths during the construction peak hour were calculated by movement for each study intersection using Synchro 11™. All queue lengths are expected to be accommodated within existing storage lanes during the AM and PM peak hour.

The queue results are summarized in **Table 6** following the analysis sections. The queueing analysis results are included in **Appendix D**.

Table 5: Control Delay and LOS Summary (Construction Peak)

Intersection Number and Description		Approach	Lane Group	2025 Existing Conditions				No-Build Conditions				Build Conditions			
				AM		PM		AM		PM		AM		PM	
				Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
1	US-33/Mountain Road & Hunton Park Boulevard	Eastbound	Left	s	s	s	s	s	s	s	s	s	s	s	s
			Through	0.0	A	32.9	C	0.0	A	34.3	C	0.0	A	35.7	D
			Right	s	s	s	s	s	s	s	s	s	s	s	s
			Approach	0.0	A	32.9	C	0.0	A	34.3	C	0.0	A	35.7	D
		Westbound	Left	22.5	C	29.2	C	23.2	C	28.2	C	23.7	C	29.5	C
			Through	22.5	C	29.2	C	23.4	C	28.2	C	23.7	C	29.5	C
			Right	20.9	C	26.7	C	21.5	C	26.1	C	21.8	C	27.3	C
			Approach	22.4	C	29.0	C	23.2	C	28.1	C	23.6	C	29.3	C
		Northbound	Left	11.2	B	13.3	B	10.3	B	14.2	B	10.2	B	14.0	B
			Through	13.1	B	17.2	B	12.0	B	18.8	B	13.6	B	18.5	B
			Right	11.7	B	14.5	B	10.9	B	15.4	B	10.8	B	15.0	B
			Approach	13.0	B	16.5	B	11.9	B	18.0	B	13.5	B	17.7	B
		Southbound	Left	11.1	B	13.4	B	10.3	B	14.3	B	10.2	B	13.9	B
			Through	15.2	B	16.1	B	13.5	B	17.4	B	13.6	B	20.2	C
			Right	s	s	s	s	s	s	s	s	s	s	s	s
			Approach	15.2	B	16.0	B	13.5	B	17.3	B	13.6	B	20.1	C
		Intersection		**15.5**	**B**	**17.7**	**B**	**14.3**	**B**	**18.9**	**B**	**14.5**	**B**	**19.8**	**B**
2	US-33/Mountain Road & Gladfelter Road	Eastbound	Left	s	s	s	s	s	s	s	s	s	s	s	s
			Right	14.6	B	15.2	C	13.2	B	15.7	C	13.6	B	16.2	C
			Approach	14.6	B	15.2	C	13.2	B	15.7	C	13.6	B	16.2	C
		Northbound	Left	0.0	A	8.5	A	0.0	A	8.5	A	0.0	A	8.6	A
			Through	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A
			Approach	0.0	A	0.2	A	0.0	A	0.2	A	0.0	A	0.2	A
		Southbound	Through	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A
			Right	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A
			Approach	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A
		Intersection		–	–	–	–	–	–	–	–	–	–	–	–
3	US-33/Mountain Road & Winns Church Road	Westbound	Left	s	s	s	s	s	s	s	s	s	s	s	s
			Right	18.2	C	20.9	C	15.3	C	23.6	C	15.3	C	23.6	C
			Approach	18.2	C	20.9	C	15.3	C	23.6	C	15.3	C	23.6	C
		Northbound	Through	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A
			Right	s	s	s	s	s	s	s	s	s	s	s	s
			Approach	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A
		Southbound	Left	7.8	A	9.0	A	7.7	A	9.1	A	7.7	A	9.1	A
			Through	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A
			Approach	0.0	A	0.3	A	0.0	A	0.3	A	0.0	A	0.3	A
		Intersection		–	–	–	–	–	–	–	–	–	–	–	–
4	Winns Church Road & Greenwood Road	Eastbound	Left	0.0	A	7.3	A	0.0	A	7.3	A	0.0	A	7.3	A
			Through	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A
			Right	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A
			Approach	0.0	A	1.0	A	0.0	A	1.0	A	0.0	A	1.0	A
		Westbound	Left	7.2	A	7.3	A	7.2	A	7.3	A	7.2	A	7.3	A
			Through	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A
			Right	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A
			Approach	3.2	A	1.0	A	3.2	A	1.1	A	3.2	A	1.1	A
		Northbound	Left	s	s	s	s	s	s	s	s	s	s	s	s
			Through	8.7	A	9.5	A	8.7	A	9.5	A	8.7	A	9.5	A
			Right	s	s	s	s	s	s	s	s	s	s	s	s
			Approach	8.7	A	9.5	A	8.7	A	9.5	A	8.7	A	9.5	A
		Southbound	Left	s	s	s	s	s	s	s	s	s	s	s	s
			Through	9.2	A	9.8	A	9.2	A	9.9	A	9.2	A	9.9	A
			Right	s	s	s	s	s	s	s	s	s	s	s	s
			Approach	9.2	A	9.8	A	9.2	A	9.9	A	9.2	A	9.9	A
		Intersection		–	–	–	–	–	–	–	–	–	–	–	–

Intersection Number and Description		Approach	Lane Group	2025 Existing Conditions				No-Build Conditions				Build Conditions			
				AM		PM		AM		PM		AM		PM	
				Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
5	US-33/Mountain Road & Project Driveway #1	Westbound	Left	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	s	s	s	s
			Right	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	16.4	C	104.0	F
			Approach	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	16.4	C	104.0	F
		Northbound	Through	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	A	0.0	A
			Right	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	A	0.0	A
			Approach	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	A	0.0	A
		Southbound	Left	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	11.9	B	12.8	B
			Through	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	A	0.0	A
			Approach	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.7	A	0.1	A
		Intersection		**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	–	–	–	–
6	US-33/Mountain Road & Project Driveway #2	Northbound	Through	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	A	0.0	A
			Right	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	A	0.0	A
			Approach	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	A	0.0	A
		Southbound	Through	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	A	0.0	A
			Approach	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	A	0.0	A
		Intersection		**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	–	–	–	–

Note: – Synchro does not report delay for free-flow movements: no delay reported
S Shared lane
N/A Movement does not exist for scenario

Table 6: 95th Percentile Queue Lengths (Construction Peak)

Intersection Number and Description		Approach	Lane Group	Effective Storage	2025 Existing Conditions		No-Build Conditions		Build Conditions	
					AM	PM	AM	PM	AM	PM
1	US-33/Mountain Road & Hunton Park Boulevard	Eastbound	Left	s	s	s	s	s	s	s
			Through	Continuous	0	0	0	0	0	0
			Right	s	s	s	s	s	s	s
		Westbound	Left	215	56	81	60	89	63	94
			Through	Continuous	56	81	61	90	63	95
			Right	530	0	0	0	0	0	0
		Northbound	Left	175	3	7	3	9	3	9
			Through	Continuous	68	202	74	226	163	239
			Right	Continuous	0	44	0	45	0	45
		Southbound	Left	350	3	13	3	14	3	14
			Through	Continuous	140	148	154	164	165	294
			Right	s	s	s	s	s	s	s
2	US-33/Mountain Road & Gladfelter Road	Eastbound	Left	s	s	s	s	s	s	s
			Right	Continuous	3	3	0	3	0	3
		Northbound	Left	s	0	0	0	0	0	0
			Through	Continuous	0	0	0	0	0	0
		Southbound	Through	Continuous	0	0	0	0	0	0
			Right	s	0	0	0	0	0	0
3	US-33/Mountain Road & Winns Church Road	Westbound	Left	s	s	s	s	s	s	s
			Right	Continuous	8	15	5	18	5	20
		Northbound	Through	Continuous	0	0	0	0	0	0
			Right	s	s	s	s	s	s	s
		Southbound	Left	s	s	s	s	s	s	s
			Through	Continuous	0	0	0	3	0	3
4	Winns Church Road & Greenwood Road	Eastbound	Left	s	s	s	s	s	s	s
			Through	Continuous	0	0	0	0	0	0
			Right	s	s	s	s	s	s	s
		Westbound	Left	s	s	s	s	s	s	s
			Through	Continuous	0	0	0	0	0	0
			Right	s	s	s	s	s	s	s
		Northbound	Left	s	s	s	s	s	s	s
			Through	Continuous	0	5	0	5	0	5
			Right	s	s	s	s	s	s	s
		Southbound	Left	s	s	s	s	s	s	s
			Through	Continuous	3	3	3	3	3	3
			Right	s	s	s	s	s	s	s
5	US-33/Mountain Road & Project Driveway #1	Westbound	Left	s	N/A	N/A	N/A	N/A	s	s
			Right	Continuous	N/A	N/A	N/A	N/A	10	350
		Northbound	Through	Continuous	N/A	N/A	N/A	N/A	0	0
			Right	s	N/A	N/A	N/A	N/A	s	s
		Southbound	Left	245	N/A	N/A	N/A	N/A	5	0
			Through	Continuous	N/A	N/A	N/A	N/A	0	0
6	US-33/Mountain Road & Project Driveway #2	Northbound	Through	Continuous	N/A	N/A	N/A	N/A	0	0
			Right	300 [1]	N/A	N/A	N/A	N/A	0	0
		Southbound	Through	245	N/A	N/A	N/A	N/A	0	0

Note: Effective storage length is equal to the storage length plus half of the existing taper length, per VDOT Traffic Operations and Safety Analysis Manual (TOSAM) version 2.0
S Shared lane
N/A Movement does not exist for scenario

4.5 I-295 Interchange Highway Capacity Analysis

The HCS7 Freeway Facilities module was used to evaluate the merge and diverge operations of the US-33 and Interstate 295 (I-295) interchange ramps that are anticipated to be used by the proposed development construction traffic. The following I-295 on/off ramps were analyzed during the AM and PM peak hour for the Existing 2025 (Construction Peak), No-Build 2034 (Construction Peak), and Build 2034 (Construction Peak) conditions:

- I-295 eastbound to US-33 northbound
- US-33 southbound to I-295 eastbound
- I-295 westbound to US-33 northbound
- US-33 southbound to I-295 westbound

The results of the construction peak highway capacity analysis indicate that under all analysis conditions, the I-295 on/off-ramps are projected to operate with densities equivalent to LOS C or better.

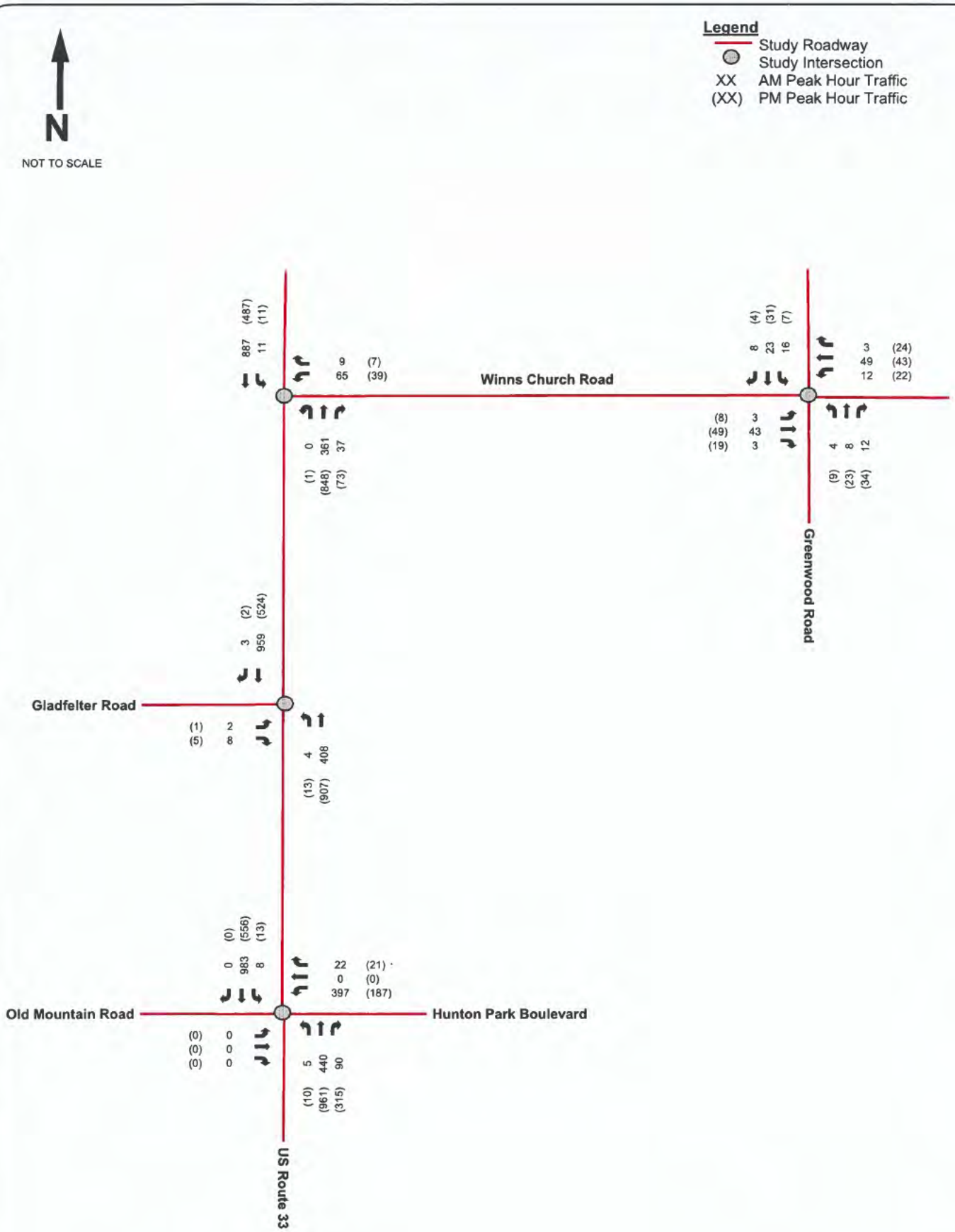
Figures showing the speed, density, volume, and LOS results and complete reports generated by the HCS7 Freeway Facilities module for each scenario are included in **Appendix E**.

5 Full Buildout - Traffic Operational Analysis

The traffic operational analysis conducted in the following sections was conducted to evaluate the impact of the traffic that is anticipated to be generated for the development after construction is completed, and the development is operational (Full Buildout).

5.1 Peak Hour Determination

The previously discussed collected TMCs were used to determine a network-wide commuter peak hour for the AM and PM peak periods based on the peak hours calculated for each study intersection. The hours that captured the highest percentage of overall traffic in the network peak hours. The AM peak hour was determined to be from 7:15–8:15 AM and the PM peak hour was determined to be from 4:15–5:15 PM. Existing AM and PM peak hour traffic turning volumes are summarized in **Figure 7**.



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Figure 7
2025 Existing Conditions
Mountain Road Technology Park
Hanover, VA

5.2 Existing Conditions Analysis Results

Existing Conditions Intersection Capacity Analysis

During the commuter peak hours, all signalized intersections and all unsignalized approaches operate with overall delays equivalent to LOS D or better, with the exception of the westbound approach at the intersection of US-33 and Winns Church Road, which operates at LOS E during the AM peak hour.

Control delay and LOS results are summarized in **Table 8** following the analysis sections. The intersection capacity analysis results are included in **Appendix D**.

Existing Conditions 95th Percentile Queuing Analysis

The existing 95th percentile vehicle queue lengths during the commuter peak hour were calculated by movement for each study intersection using Synchro 11™. All queue lengths are expected to be accommodated within existing storage lanes during the AM and PM peak hours.

The queue results are summarized in **Table 9** following the analysis sections. The queueing analysis results are included in **Appendix D**.

5.3 Projected No-Build Conditions

The projected No-Build conditions represent the future roadway network and background traffic growth in the study area. Projected No-Build conditions were analyzed in the year 2034. No future developments that have been approved but not yet built were identified or included in the analyses conducted in this traffic impact analysis.

Traffic Growth Rate

As previously discussed, a linear growth rate of 1.0% was applied and agreed upon by VDOT staff during the pre-scope of work meeting. The pre-scope of work form is provided in **Appendix B**. The growth rate was applied to the collected turning movement counts to establish volumes for future year (2034) conditions. No-Build AM and PM peak hour traffic volumes are summarized in **Figure 8**.

No-Build Conditions Intersection Capacity Analysis

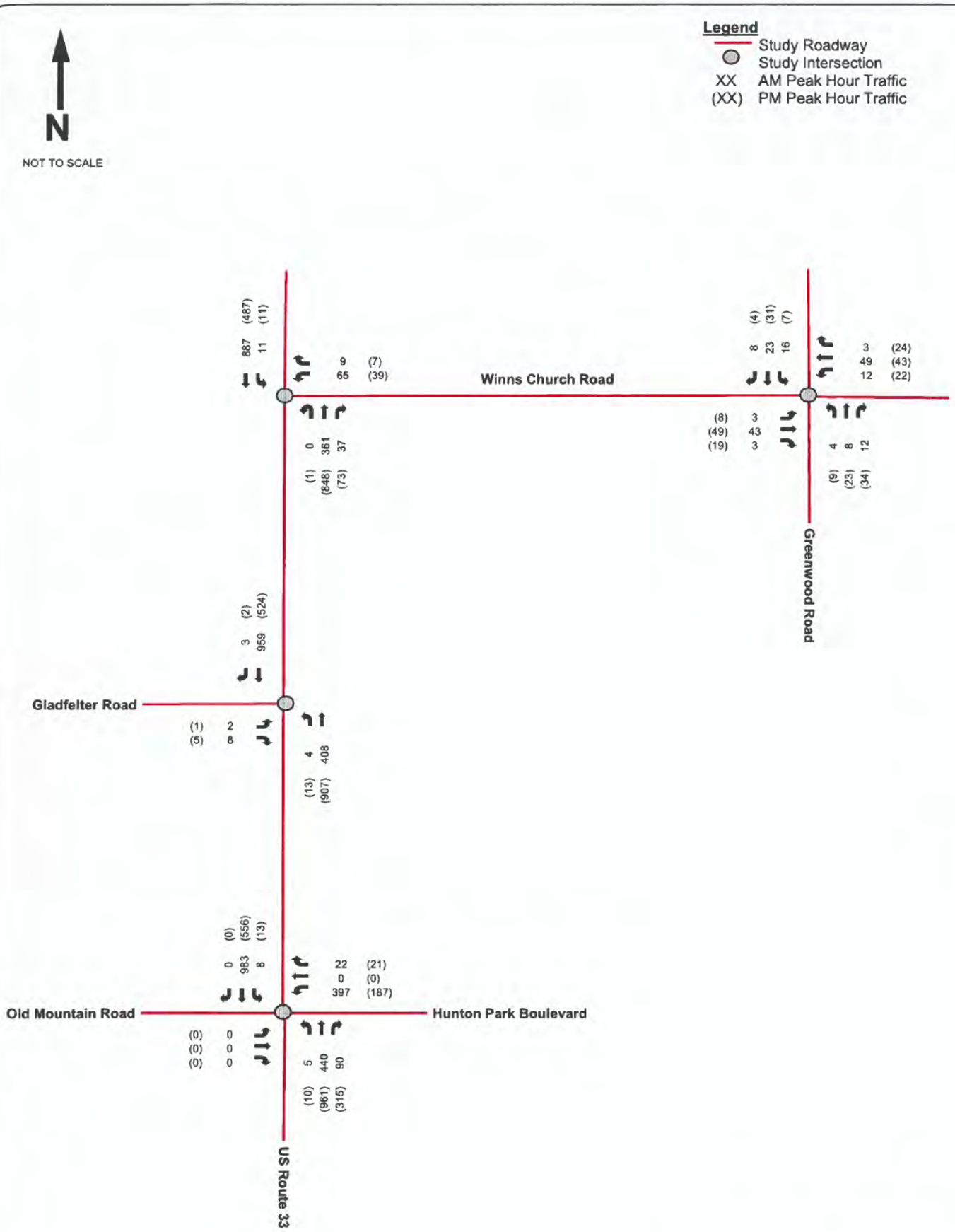
During the commuter peak hours, all signalized intersections and all unsignalized approaches are projected to operate with overall delays equivalent to LOS D or better, with the exception of the westbound approach at the intersection of US-33 and Winns Church Road, which operates at LOS E during the AM and PM peak hour.

Control delay and LOS results are summarized in **Table 8** following the analysis sections. The intersection capacity analysis results are included in **Appendix D**.

No-Build Conditions 95th Percentile Queueing Analysis

The no-build 95th percentile vehicle queue lengths during the commuter peak hour were calculated by movement for each study intersection using Synchro 11™. All queue lengths are expected to be accommodated within existing storage lanes during the AM and PM peak hours.

The queue results are summarized in **Table 9** following the analysis sections. The queueing analysis results are included in **Appendix D**.



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Figure 8
2034 No-Build Conditions
Mountain Road Technology Park
Hanover, VA

5.4 Build Conditions

For the traffic operational analysis, the Build 2034 conditions represent the future roadway network with the addition of background traffic growth, proposed roadway improvements, and traffic generated by the proposed project when construction is complete and the development is operational. Access to the proposed site will be provided via one full-access driveway along US-33 at an existing median break and two (2) emergency/utility access driveways; one (right-in/right-out driveway) along US-33 and one (full-access driveway) along Winns Church Road. Roadway improvements included in the Build 2034 conditions include a northbound right-turn lane with 200 feet of storage and 100 feet of taper at Project Driveway #1, consistent with the adjacent left and right-turn lanes along Mountain Road.

Site Trip Generation

Traffic projections were estimated for the proposed development based on the VDOT-approved *AWS Data Center Trip Generation Assessment* conducted by Bowman, March 2023. The total trips represent the number of vehicles entering and exiting the proposed development to and from the adjacent street network. **Table 7** summarizes the project's trip generation potential during the AM and PM peak hours. Detailed trip generation calculations are included in **Appendix F**.

Table 7: Proposed Development Trip Generation

Land Use	Scale	Weekday Daily Trips	Weekday AM Peak Hour			Weekday PM Peak Hour		
			In	Out	Total	In	Out	Total
Data Center	900 Megawatts	1,488	102	84	186	18	42	60

Site Trip Distribution and Assignment

The distribution of traffic at study area intersections, including proposed access locations, was established based on data provided by the applicant, which assumed that a majority of the traffic attributable to the proposed development would originate from the US-33 and I-295 interchange. Note that the trip distribution assumptions were included in the approved Pre-scope of Work Form. The inbound and outbound distribution of traffic are shown in **Figure 9**. Trip assignment based on the trip distribution is shown in **Figure 10**.

The assignment of traffic generated by the project was calculated by applying the distribution percentage for a specific turning movement to the total number of inbound or outbound trips generated to establish the turning movement volume at that location. The build condition traffic volumes were then calculated by adding the site generated trips to the projected no-build traffic volumes. The resulting 2034 Build volumes for the AM and PM peak hours are shown in **Figure 11.**

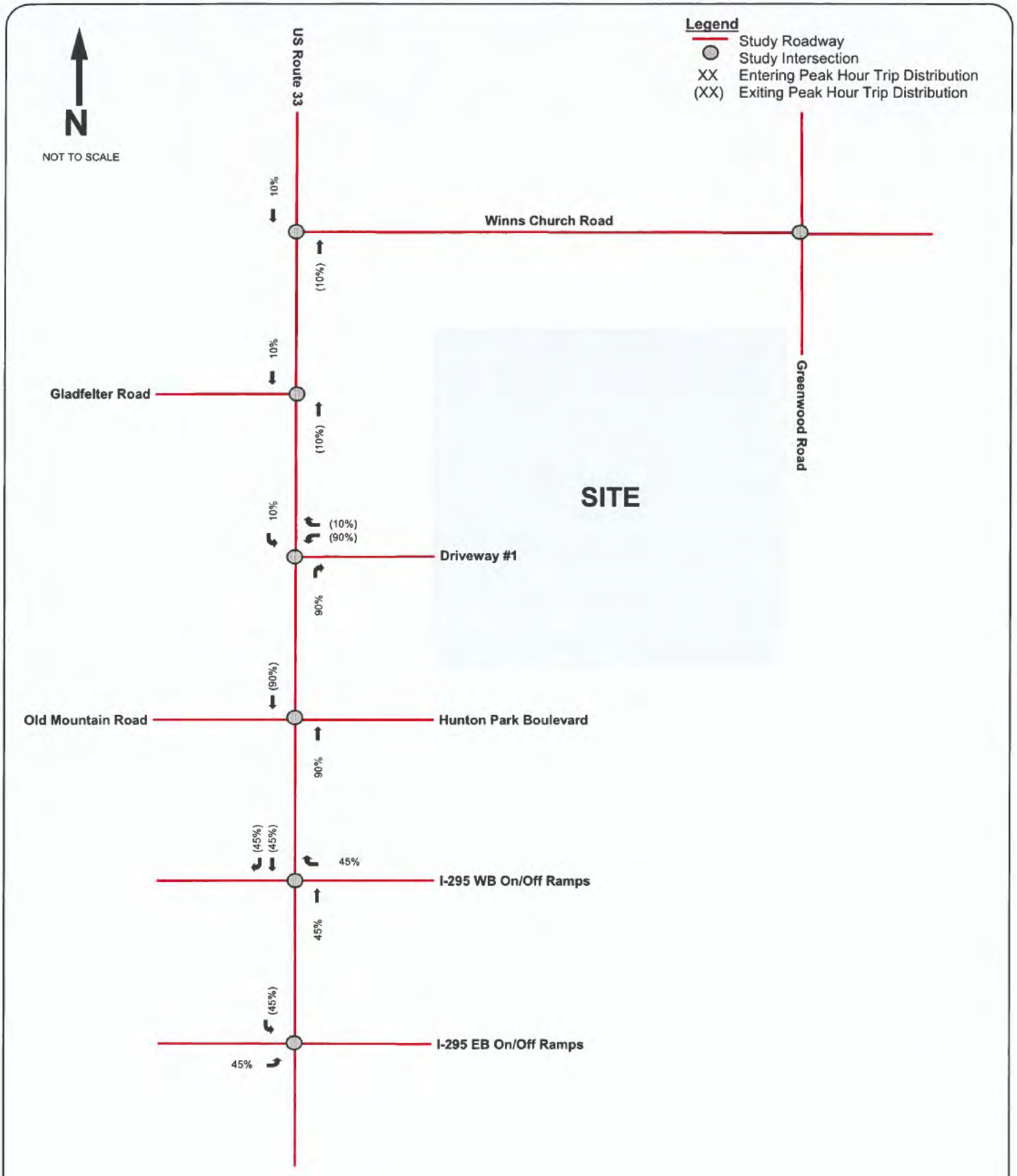
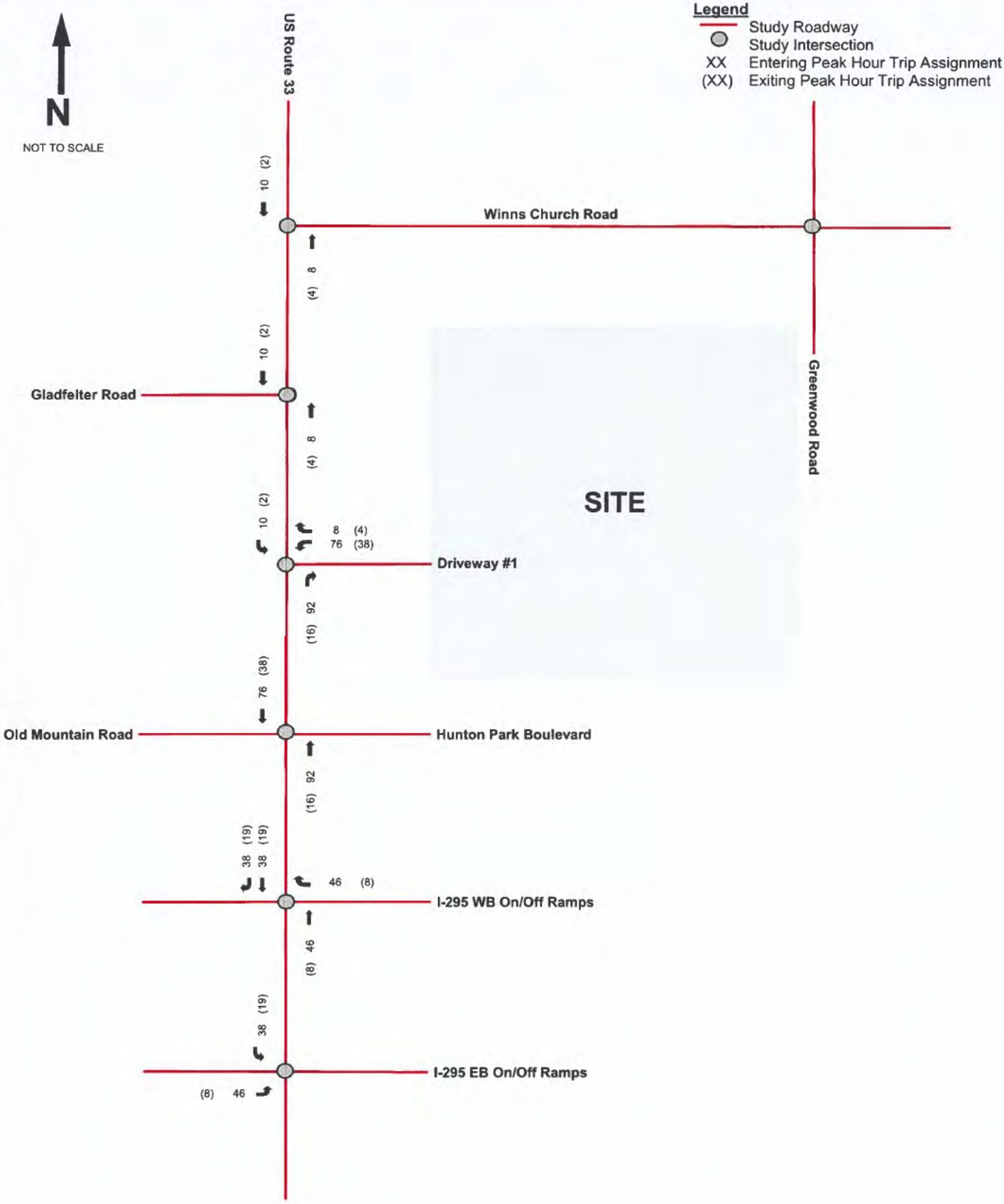


Figure 9
Trip Distribution
Mountain Road Technology Park
Hanover, VA

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Figure 10
Trip Assignment
Mountain Road Technology Park
Hanover, VA

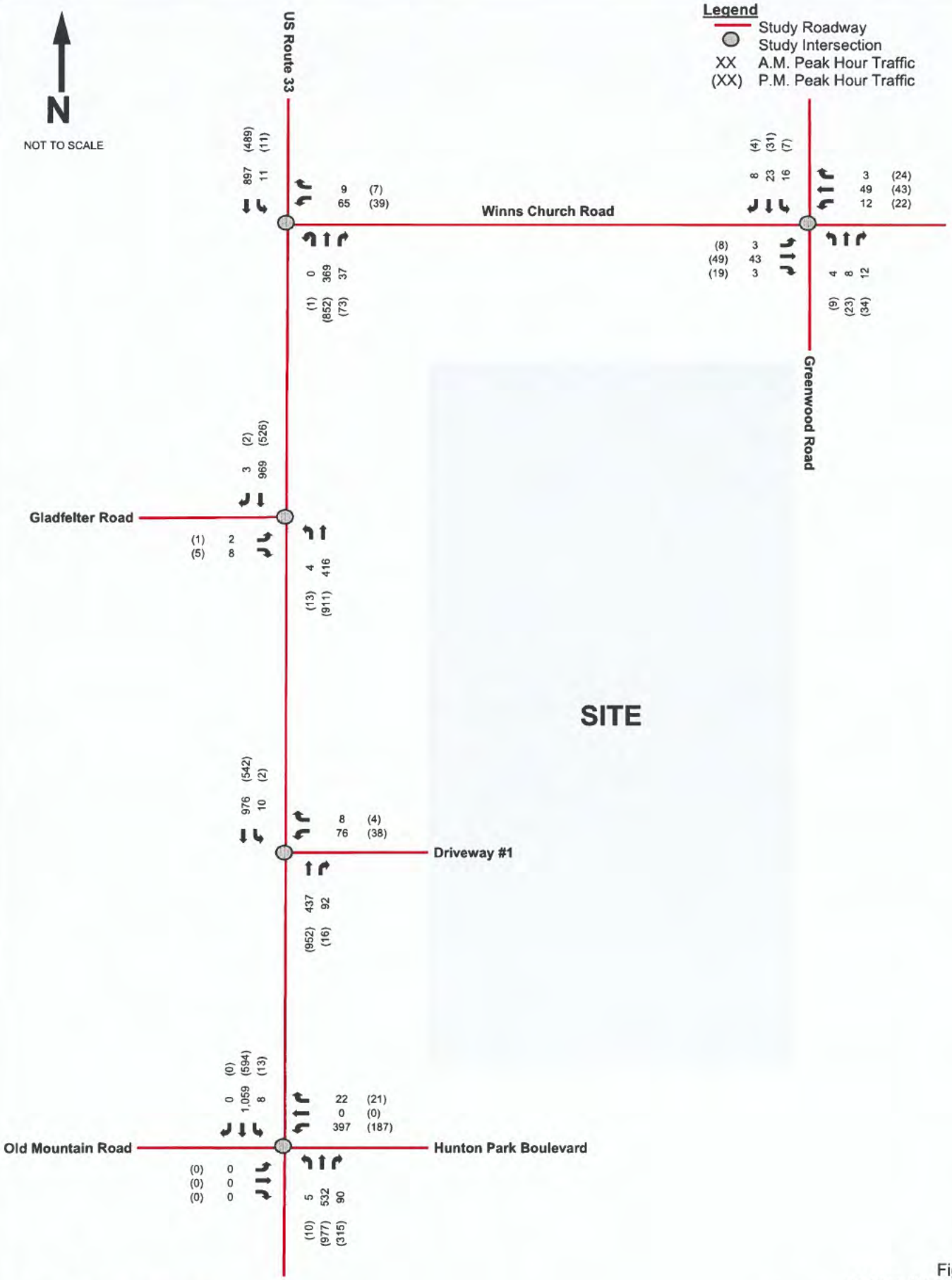


Figure 11
2034 Build Condtions
Mountain Road Technology Park
Hanover, Virginia

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Build Conditions Intersection Capacity Analysis

During the commuter peak hours, all signalized intersections and all unsignalized approaches are projected to operate with delays equivalent to LOS D or better, with the exception of the westbound approach at the intersection of US-33 and Winns Church Road, which operates at LOS E during the AM and PM peak hour.

Note that the approach was projected to operate with delays equivalent to LOS E under No-Build conditions, prior to the completion of the project. The project is not expected to increase traffic on the minor street at this intersection.

Control delay and LOS results are summarized in **Table 8** following the analysis sections. The intersection capacity analysis results are included in **Appendix D**.

Build Conditions 95th Percentile Queueing Analysis

The build 95th percentile vehicle queue lengths during the commuter peak hour were calculated by movement for each study intersection using Synchro 11™. All queue lengths are expected to be accommodated within existing storage lanes during the AM and PM peak hours.

The queue results are summarized in **Table 9** following the analysis sections. The queueing analysis results are included in **Appendix D**.

Table 8: Control Delay and LOS Summary

Intersection Number and Description		Approach	Lane Group	2025 Existing Conditions				No-Build Conditions				Build Conditions			
				AM		PM		AM		PM		AM		PM	
				Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
1	US-33/Mountain Road & Hunton Park Boulevard	Eastbound	Left	s	s	s	s	s	s	s	s	s	s	s	s
			Through	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A
			Right	s	s	s	s	s	s	s	s	s	s	s	s
			Approach	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A
		Westbound	Left	28.3	C	29.5	C	34.9	C	31.3	C	43.1	D	32.1	C
			Through	28.3	C	29.5	C	35.0	C	31.3	C	43.3	D	32.2	C
			Right	23.2	C	26.8	C	26.8	C	28.2	C	30.9	C	28.9	C
			Approach	28.0	C	29.2	C	34.5	C	31.0	C	42.5	D	31.8	C
		Northbound	Left	12.7	B	9.8	A	12.1	B	9.5	A	11.3	B	9.3	A
			Through	14.7	B	14.7	B	14.0	B	14.6	B	13.3	B	14.4	B
			Right	13.0	B	11.8	B	12.3	B	11.7	B	11.3	B	11.5	B
			Approach	14.4	B	13.9	B	13.7	B	13.9	B	13.0	B	13.7	B
		Southbound	Left	12.3	B	10.1	B	11.5	B	9.9	A	10.4	B	9.8	A
			Through	19.2	B	12.2	B	18.4	B	12.0	B	17.2	B	12.0	B
			Right	s	s	s	s	s	s	s	s	s	s	s	s
			Approach	19.2	B	12.2	B	18.3	B	12.0	B	17.2	B	11.9	B
		Intersection		**19.8**	**B**	**15.0**	**B**	**20.5**	**C**	**15.1**	**B**	**20.9**	**C**	**14.9**	**B**
2	US-33/Mountain Road & Gladfelter Road	Eastbound	Left	s	s	s	s	s	s	s	s	s	s	s	s
			Right	19.4	C	14.3	B	21.4	C	15.4	C	21.7	C	15.5	C
			Approach	19.4	C	14.3	B	21.4	C	15.4	C	21.7	C	15.5	C
		Northbound	Left	9.4	A	8.4	A	10.3	B	8.5	A	10.3	B	8.5	A
			Through	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A
			Approach	0.1	A	0.1	A	0.1	A	0.1	A	0.1	A	0.1	A
		Southbound	Through	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A
			Right	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A
			Approach	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A
		Intersection		–	–	–	–	–	–	–	–	–	–	–	–
3	US-33/Mountain Road & Winns Church Road	Westbound	Left	s	s	s	s	s	s	s	s	s	s	s	s
			Right	35.2	E	31.3	D	45.5	E	39.2	E	48.3	E	39.6	E
			Approach	35.2	E	31.3	D	45.5	E	39.2	E	48.3	E	39.6	E
		Northbound	Through	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A
			Right	s	s	s	s	s	s	s	s	s	s	s	s
			Approach	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A
		Southbound	Left	8.3	A	10.0	A	8.4	A	10.3	B	8.4	A	10.4	B
			Through	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A
			Approach	0.1	A	0.2	A	0.1	A	0.2	A	0.1	A	0.2	A
		Intersection		–	–	–	–	–	–	–	–	–	–	–	–
4	Winns Church Road & Greenwood Road	Eastbound	Left	7.3	A	7.3	A	8.0	A	7.3	A	8.0	A	7.3	A
			Through	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A
			Right	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A
			Approach	0.5	A	0.7	A	0.5	A	0.8	A	0.5	A	0.8	A
		Westbound	Left	7.3	A	7.4	A	7.3	A	7.4	A	7.3	A	7.4	A
			Through	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A
			Right	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A
			Approach	1.4	A	1.8	A	1.4	A	1.8	A	1.4	A	1.8	A
		Northbound	Left	s	s	s	s	s	s	s	s	s	s	s	s
			Through	9.2	A	9.7	A	9.3	A	9.9	A	9.3	A	9.9	A
			Right	s	s	s	s	s	s	s	s	s	s	s	s
			Approach	9.2	A	9.7	A	9.3	A	9.9	A	9.3	A	9.9	A
		Southbound	Left	s	s	s	s	s	s	s	s	s	s	s	s
			Through	9.7	A	10.4	B	9.8	A	10.7	B	9.8	A	10.7	B
			Right	s	s	s	s	s	s	s	s	s	s	s	s
			Approach	9.7	A	10.4	B	9.8	A	10.7	B	9.8	A	10.7	B
		Intersection		–	–	–	–	–	–	–	–	–	–	–	–

Intersection Number and Description		Approach	Lane Group	2025 Existing Conditions				No-Build Conditions				Build Conditions			
				AM		PM		AM		PM		AM		PM	
				Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
5	US-33/Mountain Road & Project Driveway #1	Westbound	Left	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	s	s	s	s
			Right	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	17.5	C	21.9	C
			Approach	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	17.5	C	21.9	C
		Northbound	Through	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	A	0.0	A
			Right	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	A	0.0	A
			Approach	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	A	0.0	A
		Southbound	Left	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8.7	A	10.5	B
			Through	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	A	0.0	A
			Approach	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.1	A	0.0	A
		Intersection		**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	–	–	–	–

Note: – Synchro does not report delay for free-flow movements; no delay reported
S Shared lane
N/A Movement does not exist for scenario

Table 9: 95th Percentile Queue Lengths

Intersection Number and Description		Approach	Lane Group	Effective Storage	2025 Existing Conditions		No-Build Conditions		Build Conditions	
					AM	PM	AM	PM	AM	PM
1	US-33/Mountain Road & Hunton Park Boulevard	Eastbound	Left	s	s	s	s	s	s	s
			Through	Continuous	0	0	0	0	0	0
			Right	s	s	s	s	s	s	s
		Westbound	Left	215	192	107	215	112	215	112
			Through	Continuous	192	107	216	114	216	114
			Right	530	0	0	0	0	0	0
		Northbound	Left	175	6	7	6	8	6	8
			Through	Continuous	128	263	144	292	176	300
			Right	Continuous	4	73	7	87	7	88
		Southbound	Left	350	8	8	9	9	9	9
			Through	Continuous	319	138	369	151	410	163
			Right	s	s	s	s	s	s	s
2	US-33/Mountain Road & Gladfelter Road	Eastbound	Left	s	s	s	s	s	s	s
			Right	Continuous	3	0	3	3	3	3
		Northbound	Left	s	0	0	0	0	0	0
			Through	Continuous	0	0	0	0	0	0
		Southbound	Through	Continuous	0	0	0	0	0	0
			Right	s	0	0	0	0	0	0
3	US-33/Mountain Road & Winns Church Road	Westbound	Left	s	s	s	s	s	s	s
			Right	Continuous	43	23	58	33	60	33
		Northbound	Through	Continuous	0	0	0	0	0	0
			Right	s	s	s	s	s	s	s
		Southbound	Left	s	s	s	s	s	s	s
			Through	Continuous	0	0	0	1	0	1
4	Winns Church Road & Greenwood Road	Eastbound	Left	s	s	s	s	s	s	s
			Through	Continuous	0	0	0	0	0	0
			Right	s	s	s	s	s	s	s
		Westbound	Left	s	s	s	s	s	s	s
			Through	Continuous	0	0	0	0	0	0
			Right	s	s	s	s	s	s	s
		Northbound	Left	s	s	s	s	s	s	s
			Through	Continuous	3	8	3	8	3	8
			Right	s	s	s	s	s	s	s
		Southbound	Left	s	s	s	s	s	s	s
			Through	Continuous	5	5	5	5	5	5
			Right	s	s	s	s	s	s	s
5	US-33/Mountain Road & Project Driveway #1	Westbound	Left	s	N/A	N/A	N/A	N/A	s	s
			Right	Continuous	N/A	N/A	N/A	N/A	23	15
		Northbound	Through	Continuous	N/A	N/A	N/A	N/A	0	0
			Right	250 [1]	N/A	N/A	N/A	N/A	0	0
		Southbound	Left	245	N/A	N/A	N/A	N/A	0	0
			Through	Continuous	N/A	N/A	N/A	N/A	0	0

Note: Effective storage length is equal to the storage length plus half of the existing taper length, per VDOT Traffic Operations and Safety Analysis Manual (TOSAM) version 2.0
S Shared lane
N/A Movement does not exist for scenario

5.5 I-295 Interchange Highway Capacity Analysis

The HCS7 Freeway Facilities module was used to evaluate the merge and diverge operations of the US-33 and Interstate 295 (I-295) interchange ramps that are anticipated to be used by the proposed development traffic. The following I-295 on/off ramps were analyzed during the AM and PM peak hour for the Existing 2025, No-Build 2034, and Build 2034 conditions:

- I-295 eastbound to US-33 northbound
- US-33 southbound to I-295 eastbound
- I-295 westbound to US-33 northbound
- US-33 southbound to I-295 westbound

The results of the highway capacity analysis indicate that under all analysis conditions, the I-295 on/off-ramps are projected to operate with densities equivalent to LOS C or better.

Figures showing the speed, density, volume, and LOS results and complete reports generated by the HCS7 Freeway Facilities module for each scenario are included in **Appendix E**.

6 Access Management

An evaluation of access management and turn lane warrants was prepared based on the projected traffic volumes and the spacing standards outlined in Table 2-2 and Figure 4-11 in Appendix F of the VDOT Road Design Manual.

Access to the proposed site will be provided via one full-access driveway along US-33 at an existing median break and two (2) emergency/utility access driveways; one (right-in/right-out driveway) along US-33 and one (full-access driveway) along Winns Church Road. The emergency/utility access along US-33 will serve as a temporary driveway during construction operations. Proposed project driveways are expected to meet spacing and corner clearance criteria outlined within the VDOT Road Design Manual. The required and proposed access spacing is shown in **Figure 12** and **Figure 13**.

Turn lane warrant analyses were conducted for the 2034 Build (Construction Peak) and 2034 Build conditions at the proposed Project Driveway #1 and Project Driveway #2 using the turn lane warrant standards outlined in Appendix F of the VDOT Road Design Manual. The right-turn and left-turn lane warrant analysis results for the project driveways are summarized in **Table 10.**

Table 10: Turn Lane Warrant Analysis

Project Driveway	Right-Turn Lane Warranted?		Left-Turn Lane Warranted?	
	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
2034 Build (Construction Peak) Conditions				
DW 1	Not evaluated, no traffic assigned	Not evaluated, no traffic assigned	N/A [2]	N/A [2]
DW 2	Yes – 200 feet of storage and 200 feet of taper [1]	Yes – 200 feet of taper	N/A [3]	N/A [3]
2034 Build Conditions				
DW 1	Yes – 200 feet of storage and 200 feet of taper [1]	Yes – 200 feet of taper	N/A [2]	N/A [2]
DW 2	Not evaluated, emergency/utility access	Not evaluated, emergency/utility access	N/A [3]	N/A [3]

Notes: (1) Per Figure 3-1 of the VDOT Road Design Manual, a turn lane on a roadway with a speed limit ≥ 50 mph must have a minimum of 200' storage and 200' taper.
(2) A left-turn lane is currently provided under existing conditions; therefore, a left-turn lane warrant analysis was not conducted; any improvements to the left-turn lane will be determined by queueing analysis
(3) Left-turn lane does not exist; therefore, a left-turn lane warrant analysis was not conducted

Note that the project is committed to providing a dedicated right-turn lane with 200 feet of taper and 100 feet of storage, consistent with the adjacent left and right-turn lanes along Mountain Road. The proposed taper at Project Driveway #1 does not meet turn lane design standards due to the proximity of the Chickahominy River bridge crossing that is located approximately 400 feet south of the existing median break. An Access Management Exception (AME) form will be submitted for the proposed turn lane length at Project Driveway #1. The turn lane warrant analysis using Appendix F of the VDOT Road Design Manual is included in **Appendix G**.

FIGURE 12: ACCESS MANAGEMENT

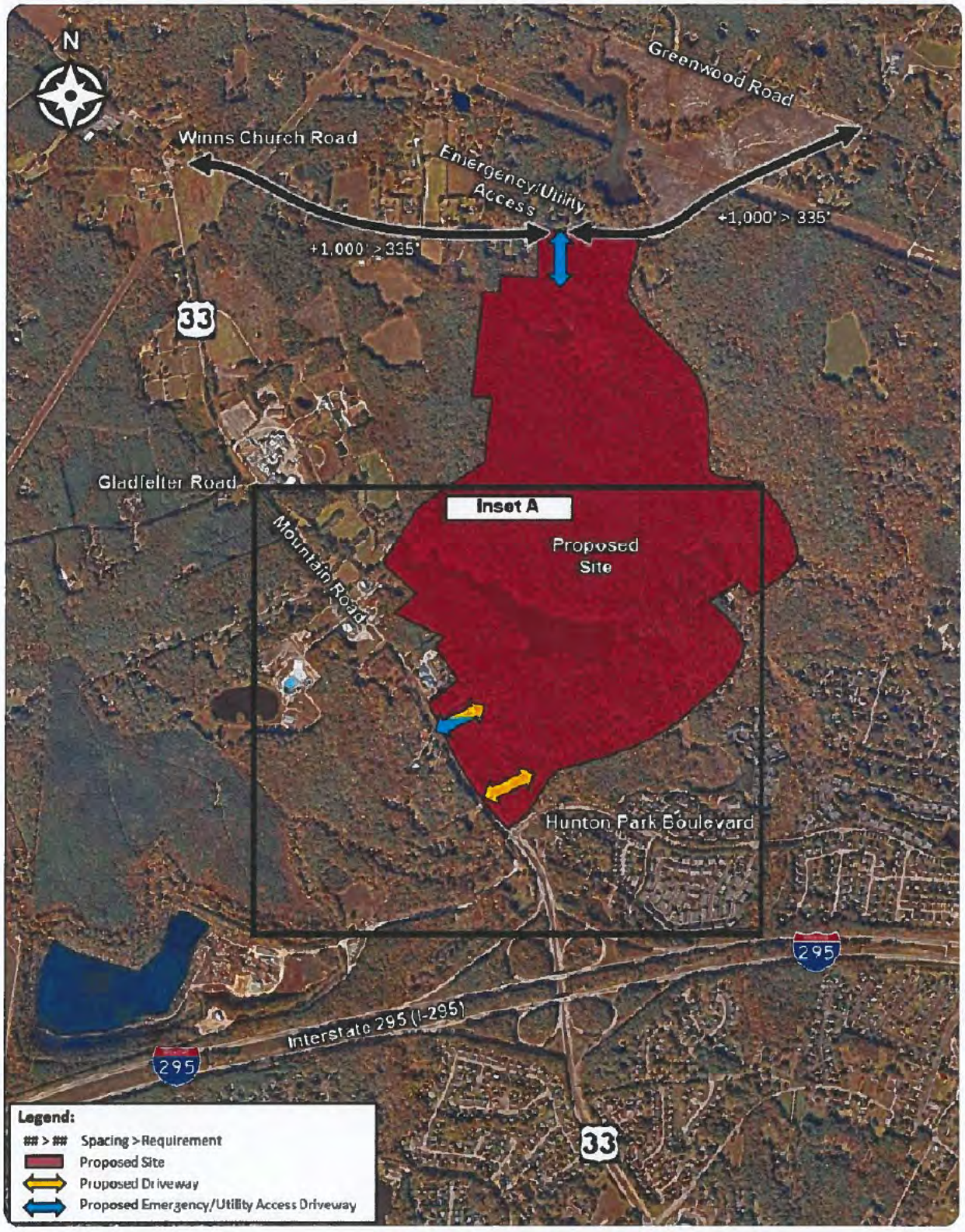


FIGURE 13: ACCESS MANAGEMENT: INSET A



7 Conclusion and Recommendations

The Traffic Impact Analysis (TIA) documented in this report evaluates the traffic impacts of a data center generally located in the northeast quadrant of the intersection of Mountain Road (US-33) and Hunton Park Boulevard in Hanover County, Virginia.

The project proposes to rezone the 434-acre property to permit a 900-megawatt (MW) data center. Access to the proposed site will be provided via one full-access driveway along US-33 at an existing median break and two (2) emergency/utility access driveways; one (right-in/right-out driveway) along US-33 and one (full-access driveway) along Winns Church Road. The emergency/utility access along US-33 will serve as a temporary driveway during construction operations.

Traffic operations were analyzed at the intersections identified below during the AM and PM peak hours using *Synchro 11™* software for the Existing 2025, No-Build 2034, and Build 2034 conditions. However, at the request of VDOT staff, traffic operations were also analyzed during the construction AM (6:00 – 7:00 AM) and construction PM (3:00 – 4:00 PM) peak hours and include Existing 2025 (Construction Peak), No-Build 2034 (Construction Peak), and Build 2034 (Construction Peak) conditions. The following intersections were identified as the study area intersections:

1. US-33 (Mountain Road) & Hunton Park Boulevard
2. US-33 (Mountain Road) & Gladfelter Road
3. US-33 (Mountain Road) & Winns Church Road
4. Winns Church Road & Greenwood Road

The results of the operational analyses indicate that under the No-Build conditions (both construction peak and commuter peak hours), all signalized intersections and all unsignalized approaches are projected to operate with an overall delay equivalent to LOS D or better, with the exception of the intersection of US-33 and Winns Church Road, which operates at LOS E during the commuter AM and PM peak hours.

The results of the Build 2034 (Construction Peak) traffic operational analysis indicate that all signalized intersections and all unsignalized approaches are projected to operate with delays equivalent to LOS D or better, with the exception of the westbound approach at the intersection of US-33 and Project Driveway #1 during the PM peak hour, which is projected to operate with delays equivalent to LOS F. Note that these results are typical where a low volume, stop-controlled, road intersects a high-volume, free-flow road. On occasions where vehicles are unable to exit the site, or excessive queues are observed on-site, it is expected that the contractor will deploy flaggers to maintain the safety and operations of the intersection.

The results of the Build 2034 traffic operational analysis indicate that all signalized intersections and all unsignalized approaches are projected to operate with an overall delay equivalent to LOS D or better, with the exception of the westbound approach at the intersection of US-33 and Winns Church Road, which operates at LOS E during the commuter AM and PM peak hour. Note that the approach was projected to operate with delays equivalent to LOS E under No-Build conditions, prior to the completion of the project.

Additionally, Highway Capacity Software (HCS7) was used to evaluate the merge and diverge operations of the US-33 and Interstate 295 (I-295) interchange ramps that are anticipated to be used by the proposed development traffic. The results of the highway capacity analysis indicate that under all analysis scenarios, the I-295 on/off-ramps are projected to operate with densities equivalent to LOS C or better under all analysis conditions.

Turn lane warrant analyses were conducted for the 2034 Build (Construction Peak) and 2034 Build conditions at the proposed Project Driveway #1 and Project Driveway #2 using the turn lane warrant standards outlined in Appendix F of the VDOT Road Design Manual.

A northbound right-turn lane with 200 feet of taper and 200 feet of storage is warranted at Project Driveway #1. Note that the project is committed to providing a dedicated right-turn lane with 200 feet of taper and 100 feet of storage, consistent with the adjacent left and right-turn lanes along Mountain Road. The proposed taper at Project Driveway #1 does not meet turn lane design standards due to the proximity of the Chickahominy River bridge crossing that is located approximately 400 feet south of the existing median break. An Access Management Exception (AME) form will be submitted for the proposed turn lane length at Project Driveway #1. Additionally, A northbound right-turn lane with 200 feet of taper and 200 feet of storage is warranted and proposed at Project Driveway #2.

Biernot, Gretchen W.

From: Hunter, Jo Ann M.
Sent: Wednesday, March 25, 2026 2:53 PM
To: Leadbetter, Larry A
Cc: Pompei, Andrew J.; Biernot, Gretchen W.
Subject: Tract TIA

Larry –

I took a look at the dates in the TIA for RT. 33 project.

The Turning Movement Counts for study intersections were done on 5/15/25

The Counts for the 295 ramps were done during two 48-hour periods.

- September 13 and 14, 2023
- January 23 and 24, 2024

VDOT has accepted those numbers and has approved the TIA as being in accordance with their standards.

Tysons closed in May of 2023. All of the traffic counts has occurred after the closing of Tysons.

Jo Ann M. Hunter, AICP

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Supplemental Traffic Analysis

Kimley»Horn

MEMORANDUM

To:	Hanover Planning Commission
From:	David Capparuccini, PE, PTOE Kyle Lowther, E.I.T. Kimley-Horn and Associates, Inc.
Date:	March 20, 2026
Subject:	Mountain Road Technology Park – Supplemental Traffic Analysis

Introduction

Kimley-Horn and Associates, Inc. under contract with Tract completed the *Mountain Road Technology Park Traffic Impact Analysis (TIA)* in November 2025. The purpose of the TIA was to identify the potential future impacts of a proposed 900-megawatt (MW) data center and evaluate potential solutions to address those impacts. The TIA was approved by VDOT in December 2025. The proposed data center campus is generally located in the northeast quadrant of the intersection of US-33 (Mountain Road) and Hunton Park Boulevard in Hanover County, Virginia. Access to the proposed site would be provided via one full-access driveway along US-33 at an existing median break and a secondary access along US-33 to be used during construction (right-in/right-out), and a third access off of Winns Church Road to be used as an emergency/utility full access. A conceptual site plan is included in **Appendix A**.

The TIA included assumptions for the trips generated from the proposed data center campus during construction activities and post construction, when the development is fully operational. The TIA evaluated the potential traffic impacts and identified alternative solutions to address those impacts. Improvements at the study intersections were identified to address the operational and safety issues at the intersections under the opening year (2034) during construction activities and post construction, when the development is operational.

Based on the future (2034) construction peak traffic operational analysis results in the TIA, the unsignalized intersection of US-33 and Project Driveway #1 was projected to operate with delays equivalent to LOS F during the PM peak hour. The TIA recommended that on occasions where vehicles are unable to exit the site, or excessive queues are observed on-site, it is expected that the contractor will deploy flaggers to maintain the safety and operations of the intersection.

During the Hanover Planning Commission hearing for the rezoning application, the Hanover Planning Commission requested that additional analysis be conducted to evaluate more permanent solutions for the intersection of US-33 and Project Driveway #1 due to the six-year estimated duration of construction and to re-evaluate the construction employee arrival/departure assumptions to provide a more conservative analysis.

This supplemental analysis includes an operational analysis that accounts for the redistribution of construction employees arriving/departing the site under peak construction conditions for the opening year (2034).

Trip Generation Assumptions

The purpose of this memorandum is to re-evaluate the potential traffic impacts of the proposed development during construction activities and identify more permanent solutions to address those impacts. In the previously approved TIA, the anticipated site-generated traffic for the proposed development was determined based on data provided by the applicant. Based on this data, the anticipated peak construction work force consists of 600-800 employees on-site daily. Construction employees were assumed to arrive between 4:00–7:00 AM and depart between 2:00–5:00 PM. The following assumptions were made regarding the peak construction traffic:

- 1,600 weekday daily trips
- 800 morning trips; employee arrival distributed between 4:00–7:00 AM; directional distribution was assumed to be 90% entering, 10% exiting
- 800 evening trips; employee departures distributed between 2:00–5:00 PM; directional distribution was assumed to be 10% entering, 90% exiting

The hourly distribution of construction employees arriving/departing the site was provided by the applicant and used to distribute the morning and evening trips to capture the employees' non-uniform arrival/departure. The anticipated hourly arrival and departure volumes are provided in **Table 1**.

Table 1: Previously Approved TIA Anticipated Hourly Construction Traffic Volumes

Start Time	Percent Arriving/Departing	Trip Generation		
		In	Out	Total
AM Peak Period				
4:00 AM	10%	72	8	80
5:00 AM	30%	216	24	240
6:00 AM	50%	360	40	400
7:00 AM	10%	72	8	80
PM Peak Period				
2:00 PM	10%	8	72	80
3:00 PM	50%	40	360	400
4:00 PM	30%	24	216	240
5:00 PM	10%	8	72	80

During the Hanover Planning Commission hearing for the rezoning application, the Hanover Planning Commission requested that additional analysis be conducted to evaluate more permanent solutions for the intersection of US-33 and Project Driveway #1 due to the six-year estimated duration of construction and to re-evaluate the construction employee arrival/departure assumptions to provide a more conservative analysis. The Hanover Planning Commission requested changes be made to the trip distribution percentages shown in the table below. **Table 2** depicts the revised anticipated hourly arrival and departure distribution of construction traffic volumes. Updated trip distributions, assignment, and peak hour Build volumes figures are provided in **Appendix B**.

Table 2: Revised Anticipated Hourly Construction Traffic Volumes

Start Time	Percent Arriving/Departing	Trip Generation		
		In	Out	Total
AM Peak Period				
5:00 AM	15%	108	12	120
6:00 AM	70%	504	56	560
7:00 AM	15%	108	12	120
PM Peak Period				
3:00 PM	15%	12	108	120
4:00 PM	70%	56	504	560
5:00 PM	15%	12	108	120

Traffic Analysis Methodology

The traffic operational analysis performed for this study using Synchro 11™ was conducted in accordance with VDOT's Traffic Operations Safety Analysis Manual (TOSAM), version 2.0 for deterministic intersection capacity analyses. Existing signal timings were provided by VDOT and were input into Synchro 11™.

The evaluation of traffic operations within the study area was comprised of an intersection capacity level of service (LOS) analysis during the AM and PM peak hours and a 95th percentile queueing analysis to evaluate the adequacy of existing turn lanes and the potential need for turn lane improvements. Capacity analyses were conducted using methodologies contained in the Highway Capacity Manual (HCM) reported from Synchro 11™. Queue analyses were conducted using the 95th percentile queues from Synchro 11™.

As part of the traffic operational analysis, the projected No-Build conditions served as the baseline for evaluating intersection delays and identifying mitigation measures under the Build conditions.

Intersection capacity defines the volume of traffic that can be accommodated by a roadway at a specified LOS. Capacity is affected by various geometric factors including roadway type (e.g., divided or undivided), number of lanes, lane widths, and grades. LOS, which is a measure of the degree of congestion, ranges from LOS A (free flowing) to LOS F (a congested, forced flow condition). Delay, measured in seconds per vehicle, and the associated LOS thresholds for signalized and unsignalized intersections based on HCM methodologies are presented in **Table 3**.

Table 3: Intersection Level of Service (LOS) Analysis Criteria

Level of Service (LOS)	Average Control Delay per Vehicle (sec/veh)		Description of Traffic Conditions
	Signalized	Unsignalized	
A	≤ 10	≤ 10	No delays at intersections with continuous traffic flow. Uncongested operations; high frequency of long gaps available for all left and right-turning traffic; no observable queues.
B	> 10 and ≤ 20	> 10 and ≤ 15	
C	> 20 and ≤ 35	> 15 and ≤ 25	Moderate delays at intersections with satisfactory traffic flow. Light congestion; infrequent backups on critical approaches.
D	> 35 and ≤ 55	> 25 and ≤ 35	Increased probability of delays along every approach. Significant congestion on critical approaches, but intersection functional. No long-standing lines formed.
E	> 55 and ≤ 80	> 35 and ≤ 50	Heavy traffic flow conditions. Heavy delays probable. No available gaps for cross-street traffic or main street turning traffic. Limit of stable flow.
F	> 80	> 50	Unstable traffic flow. Heavy congestion. Traffic moves in forced flow conditions. Average delays greater than one minute highly probable. Total breakdown.

In addition to using *Synchro 11™* to evaluate the study area intersection performance, microsimulation (*SimTraffic™*) delay and maximum queue lengths were reported for the Median U-Turn alternative as it was deemed more accurate for analyzing the U-turn movements. Note that the SimTraffic models were not calibrated based on existing conditions, all calibration settings were left as the default values.

Intersection analysis included an evaluation of the opening year (2034) Build conditions during peak construction activities. Build conditions represent the future roadway network with the addition of background traffic growth, proposed roadway improvements, and traffic generated by the peak construction operations prior to the completion of the project. Modeling assumptions for the Build conditions during peak construction activities are consistent with the previously approved TIA. The revised future traffic volumes were distributed along the study intersections in accordance with the revised trip generation assumptions made for this memorandum.

Concept Development

The following roadway improvements were identified as potential mitigation strategies to mitigate the traffic impacts anticipated to occur during the peak construction activities. and were included in the operational analysis.

Alternative # 1 - TIA Recommended Improvements

The TIA Recommended Improvements alternative assumes no new improvements would take place, with the exception of warranted turn lane improvements as recommended by the TIA. This concept would permit construction employees to turn left out of the site onto US-33. This configuration was evaluated in the previously approved TIA. Based on the results from the TIA, the westbound approach at the intersection of US-33 and Project Driveway #1 was projected to operate with delays equivalent to LOS F during the PM peak hour under. Note that these results are typical where a low volume, stop-controlled road intersects a high-volume, free-flow road.

Alternative # 2 - Flagger Implementation

The flagger implementation alternative assumes no additional improvements beyond those recommended in the approved TIA. However, in this alternative, it was assumed that flaggers would be deployed by the contractor when vehicles are unable to exit the site, or excessive queues are observed on-site. For the purposes of the operational analysis, this concept was analyzed as a conventional signalized intersection to mimic flaggers.

Alternative # 3 - Median U-Turn (MUT)

The MUT alternative assumes that the westbound approach at the intersection of Project Driveway #1 and US-33 would restrict left-turn movements from the project driveway for passenger vehicles. Passenger vehicles heading to I-295 would be directed to make a right-turn out of the site and perform a U-turn maneuver at the nearest median break on US-33. The developer is committed to implementing the use of traffic control devices to enforce the left-turn restriction during peak periods. Note that commercial vehicles would be permitted to make a left-turn out of the site; however, commercial vehicle traffic will be staggered to arrive/depart the site outside the morning and evening peak periods, 8 AM to 9 AM and 4 PM to 6 PM.

Traffic Operational Analysis Results

The traffic operational analysis for each alternative considered was conducted for the following intersections:

- US-33 (Mountain Road) & Hunton Park Boulevard
- US-33 (Mountain Road) & Project Driveway #1
- US-33 (Mountain Road) & Project Driveway #2
- US-33 (Mountain Road & Proposed Median Break (MUT alternative only)

Note that only the TIA study area intersections that are anticipated to be impacted by the reconfiguration of the intersection of US-33 and Project Driveway #1 were included in this supplemental analysis.

Alternative #1 – TIA Recommended Improvements Analysis Results

Under the TIA Recommended Improvements alternative, during the construction peak hours, all signalized intersections and all unsignalized approaches operate with overall delays equivalent to LOS C or better, with the exception of the westbound approach at the intersection of US-33 and Project Driveway #1, which is projected to operate with delays equivalent to LOS F during the PM peak hour. Control delay and LOS results are summarized in **Table 4** following the analysis sections. The intersection capacity analysis results are included in **Appendix C**.

The Build 95th percentile vehicle queue lengths during the construction peak hours were calculated by movement for each study intersection using Synchro 11™. All queue lengths are expected to be accommodated within storage lanes during the AM and PM peak hours. The queue results are summarized in **Table 5** following the analysis sections. The queueing analysis results are included in **Appendix C**.

Alternative #2 – Flagger Implementation Analysis Results

Under the flagger implementation, during the construction peak hours, all signalized intersections and all unsignalized approaches operate with overall delays equivalent to LOS C or better. Control delay and LOS results are summarized in **Table 4** following the analysis sections. The intersection capacity analysis results are included in **Appendix C**.

The Build 95th percentile vehicle queue lengths during the construction peak hours were calculated by movement for each study intersection using Synchro 11™. All queue lengths are expected to be accommodated within storage lanes during the AM and PM peak hours. The queue results are summarized in **Table 5** following the analysis sections. The queueing analysis results are included in **Appendix C**.

Alternative #3 – Median U-Turn (MUT) Analysis Results

Under the median U-Turn alternative, during the construction peak hours, all signalized intersections and all unsignalized approaches operate with overall delays equivalent to LOS C or better, with the exception of the westbound approach at the intersection of US-33 and Project Driveway #1 which is projected to operate with a delay equivalent to LOS E during the PM peak hour. Note that the delay and queues for this approach would be internal to the site and are not anticipated to impact the operations of the US-33 mainline. Control delay and LOS results are summarized in **Table 4** following the analysis sections. The intersection capacity analysis results are included in **Appendix B**.

The total delay for the median U-Turn alternative, during the construction peak hours, was calculated by movement for each study intersection using *SimTraffic™*. Under these conditions, all intersections are projected to operate with a delay less than 40 seconds per vehicle. The SimTraffic performance analysis results are included in **Appendix C**.

The Build 95th percentile vehicle queue lengths during the construction peak hours were calculated by movement for each study intersection using Synchro 11™. All queue lengths are expected to be accommodated within storage lanes during the AM and PM peak hours. The queue results are summarized in **Table 5** following the analysis sections. The queueing analysis results are included in **Appendix C**.

The maximum vehicle queue lengths for the median U-Turn alternative, during the construction peak hours, were calculated for each study intersection using *SimTraffic™*. Based on the queue analysis results, all turn lane queues are projected to be accommodated within storage lanes. SimTraffic queueing analysis results are included in **Appendix C**.

A conceptual sketch of the median U-turn alternative is shown in **Appendix D**. Passenger cars exiting the site will be directed to use the median U-turn alternative, and commercial vehicles will use the primary project driveway (#1).

Table 4: Control Delay and LOS Summary

Intersection Number and Description	Approach	Lane Group	2034 Build Conditions: TIA Recommended Improvements AM Delay	AM LOS	TIA Recommended Improvements PM Delay	PM LOS	Flagger Implementation AM Delay	AM LOS	Flagger Implementation PM Delay	PM LOS	Median U-Turn AM Delay	AM LOS	Median U-Turn PM Delay	PM LOS
1 US-33/Staples Mill Road & Hunton Park Boulevard	Eastbound	Left	s	s	s	s	s	s	s	s	s	s	s	s
		Through	0.0	A	38.6	D	0.0	A	38.6	D	0.0	A	38.6	D
		Right	s	s	s	s	s	s	s	s	s	s	s	s
		Approach	0.0	A	38.6	D	0.0	A	38.6	D	0.0	A	38.6	D
	Westbound	Left	25.2	C	32.5	C	25.2	C	32.5	C	25.2	C	32.5	C
		Through	25.2	C	32.6	C	25.2	C	32.6	C	25.2	C	32.6	C
		Right	23.2	C	30.1	C	23.2	C	30.1	C	23.2	C	30.1	C
		Approach	25.0	C	32.4	C	25.0	C	32.4	C	25.0	C	32.4	C
	Northbound	Left	9.8	A	13.4	B	9.8	A	13.4	B	9.8	A	13.4	B
		Through	14.0	B	17.1	B	14.0	B	17.1	B	14.0	B	17.1	B
		Right	10.3	B	14.1	B	10.3	B	14.1	B	10.3	B	14.1	B
		Approach	13.9	B	16.4	B	13.9	B	16.4	B	13.9	B	16.4	B
	Southbound	Left	9.8	A	12.9	B	9.8	A	12.9	B	9.8	A	12.9	B
		Through	13.1	B	20.0	C	13.1	B	20.0	C	13.0	B	19.8	B
		Right	s	s	s	s	s	s	s	s	s	s	s	s
		Approach	13.0	B	19.9	B	13.0	B	19.9	B	13.0	B	19.6	B
	Intersection		**14.5**	**B**	**19.4**	**B**	**14.5**	**B**	**19.4**	**B**	**14.5**	**B**	**19.2**	**B**
8 US-33/Staples Mill Road & Project Driveway #1	Westbound	Left	20.0	C	285.6	F	17.6	B	13.8	B	s	s	s	s
		Right	s	s	s	s	s	s	s	s	11.6	B	38.6	E
		Approach	20.0	C	285.6	F	17.6	B	13.8	B	11.6	B	38.6	E
	Northbound	U-Turn	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A
		Through	0.0	A	0.0	A	2.8	A	12.5	B	0.0	A	0.0	A
		Approach	0.0	A	0.0	A	2.8	A	12.5	A	0.0	A	0.0	A
	Southbound	U-Turn	14.0	B	13.0	B	2.4	A	9.6	A	14.9	B	47.1	E
		Through	0.0	A	0.0	A	2.6	A	11.2	B	0.0	A	0.0	A
		Approach	1.1	A	0.2	A	2.6	A	11.2	B	1.1	A	0.3	A
	Intersection		–	–	–	–	**3.3**	**A**	**12.5**	**B**	–	–	–	–
6 US-33/Staples Mill Road & Project Driveway #2	Northbound	Through	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A
		Right	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A
		Approach	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A
	Southbound	Through	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A
		Approach	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A
	Intersection		**0.0**	**A**	**0.0**	**A**	**0.0**	**A**	**0.0**	**A**	**0.0**	**A**	**0.0**	**A**
7 US-33/Staples Mill Road & Median U-Turn	Northbound	U-Turn	N.A.		N.A.		N.A.		N.A.		0.0	A	0.0	A
		Through									0.0	A	0.0	A
		Approach									0.0	A	0.0	A
	Southbound	Through									0.0	A	0.0	A
		Approach									0.0	A	0.0	A
	Intersection										**0.0**	**A**	**0.0**	**A**

Notes: N/A Movement does not exist for scenario
S Shared lane

Table 5: 95th Percentile Queue Lengths

Intersection Number and Description	Type of Control	Lane Group	Effective Storage	2034 Build Conditions: TIA Recommended Improvements AM	TIA Recommended Improvements PM	Flagger Implementation AM	Flagger Implementation PM	Median U-Turn AM	Median U-Turn PM
1 US-33/Staples Mill Road & Hunton Park Boulevard	Eastbound	Left	s	s	s	s	s	s	s
		Through	Continuous	0	0	0	0	0	0
		Right	s	s	s	s	s	s	s
	Westbound	Left	215	68	103	68	103	68	103
		Through	Continuous	69	103	69	103	69	103
		Right	530	0	0	0	0	0	0
	Northbound	Left	175	4	9	4	9	4	9
		Through	Continuous	212	249	212	249	212	249
		Right	Continuous	0	45	0	45	0	45
	Southbound	Left	350	3	14	3	14	3	13
		Through	Continuous	172	367	172	367	167	331
		Right	s	s	s	s	s	s	s
5 US-33/Staples Mill Road & Project Driveway #1	Westbound	Left	s	18	770	35	272	s	s
		Right	Continuous	s	s	s	s	8	260
	Northbound	U-Turn	230	0	0	0	0	0	0
		Through	250	0	0	66	184	0	0
	Southbound	U-turn	245	10	0	15	10	10	5
		Through	Continuous	0	0	52	123	0	0
6 US-33/Staples Mill Road & Project Driveway #2	Northbound	Through	Continuous	0	0	0	0	0	0
		Right	300	0	0	0	0	0	0
	Southbound	Through	Continuous	0	0	0	0	0	0
7 US-33/Staples Mill Road & Median U-Turn	Northbound	U-Turn	400	N.A.	N.A.	N.A.	N.A.	0	0
		Through	Continuous					0	0
	Southbound	Through	Continuous					0	0

Notes: Effective storage length is equal to the storage length plus half of the taper length, per VDOT Traffic Operations and Safety Analysis Manual (TOSAM) version 2.0
N/A Movement does not exist for scenario
S Shared lane

Conclusions and Recommendations

Based on the future (2034) construction peak traffic operational analysis results in the previously approved TIA, the unsignalized intersection of US-33 and Project Driveway #1 was projected to operate with delays equivalent to LOS F during the PM peak hour. The TIA stated that flaggers would be deployed on occasions where vehicles are unable to exit the site, or where excessive queues are observed on-site.

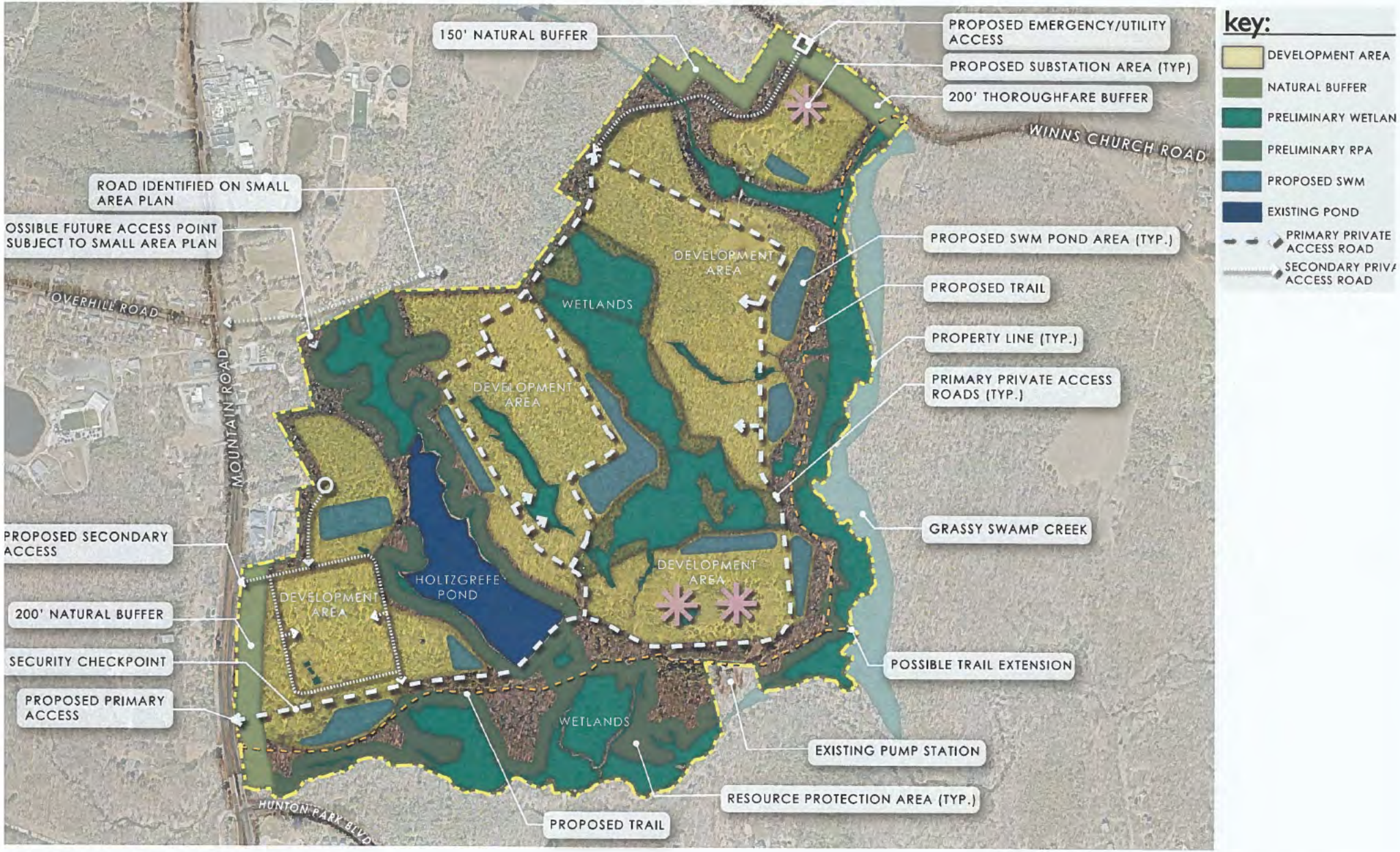
An additional analysis was requested by the Hanover Planning Commission during a hearing for the rezoning application. The request was to evaluate permanent solutions for the intersection of US-33 and Project Driveway #1 due to the six-year estimated duration of construction. It was also requested to re-evaluate the construction employee arrival/departure assumptions for a more conservative analysis.

Based on the results of the operational analysis, the median U-Turn alternative operated the best in terms of congestion, with all signalized intersections and all unsignalized intersection approaches projected to operate with an overall delay equivalent to LOS C, with the exception of the westbound approach at the intersection of US-33 and Project Driveway #1 which is projected to operate with a delay equivalent to LOS E during the PM peak hour. Note that the delay and queues for this approach would be internal to the site and are not anticipated to impact the operations of the US-33 mainline.

Additional analysis was conducted in *SimTraffic™* to evaluate the operations of the median U-Turn alternative. The results showed that all movements are projected to operate with a delay less than 40 seconds per vehicle and all maximum queues are projected to be accommodated within storage lanes.

Based on these findings, it is recommended that a more permanent "median U-Turn" be utilized at the proposed median break along US-33, north of the project driveway #1. The median U-Turn alternative would provide a more permanent solution to the traffic impacts that are anticipated to occur during the estimated six-year construction period. A conceptual sketch of the median U-turn alternative is shown in **Appendix D**. During site plan development, a construction management plan will be provided to the County/VDOT for review that may consist of shift stagger to the maximum extent practicable, limiting commercial vehicle traffic during peak periods, and maintenance of traffic plans.

Appendix A: Conceptual Site Plan



ANOVER INDUSTRIAL PARK

nover County, VA

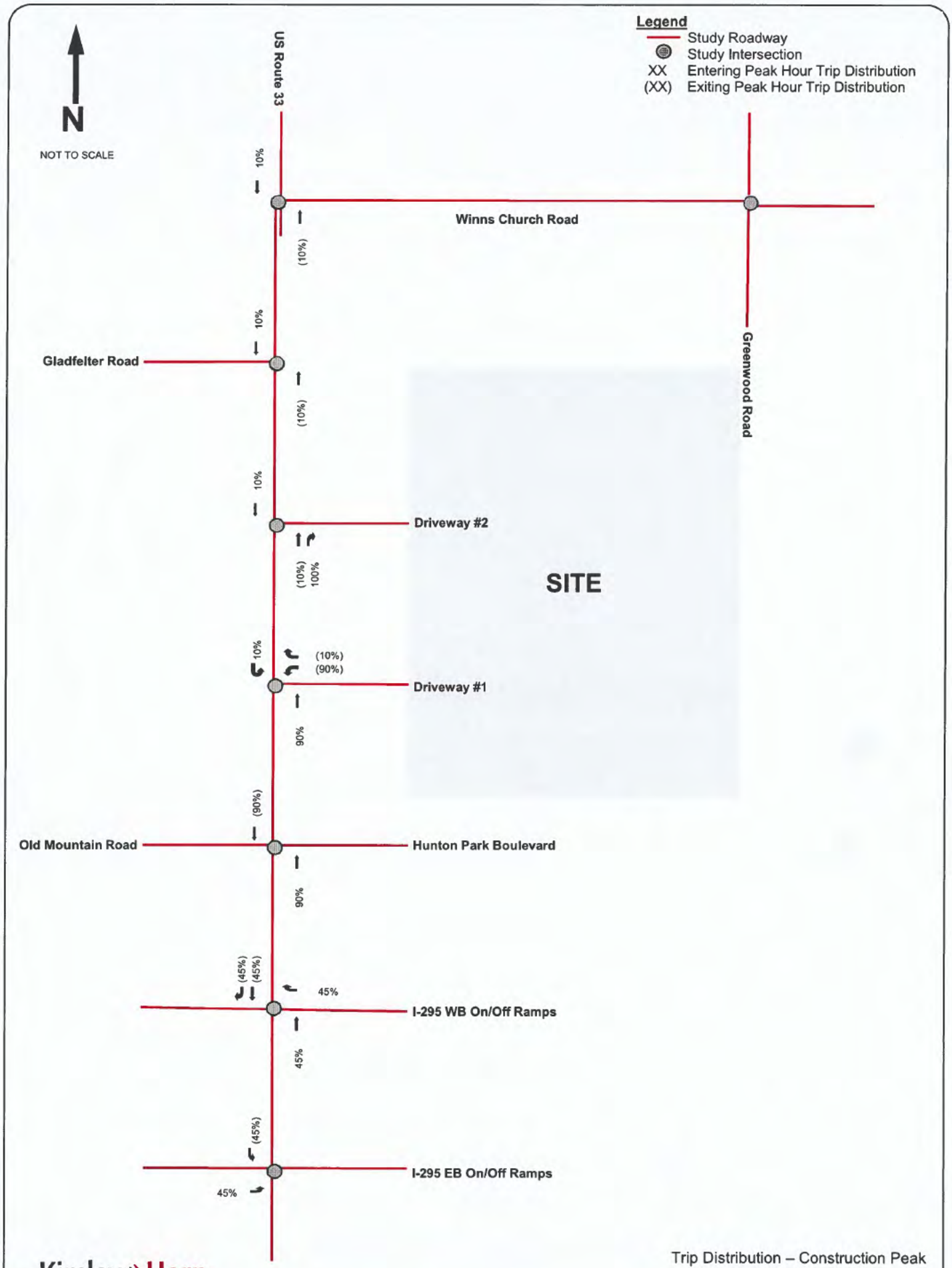
0' 75' 150' 300' 600'

08.20.2025

SCALE: 1"= 3

Kimley»Horn

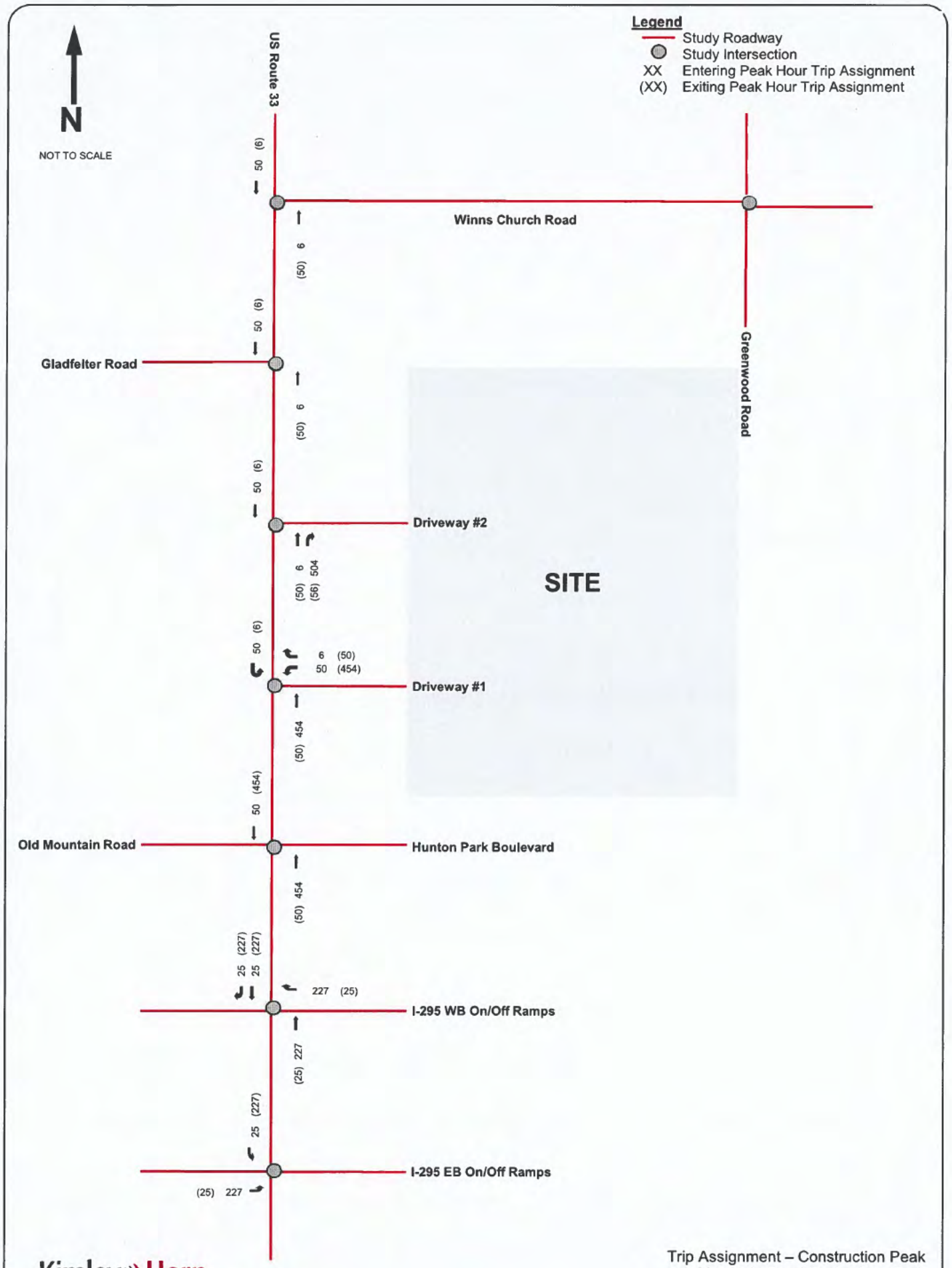
Appendix B: Volume Development Figures



Kimley»Horn

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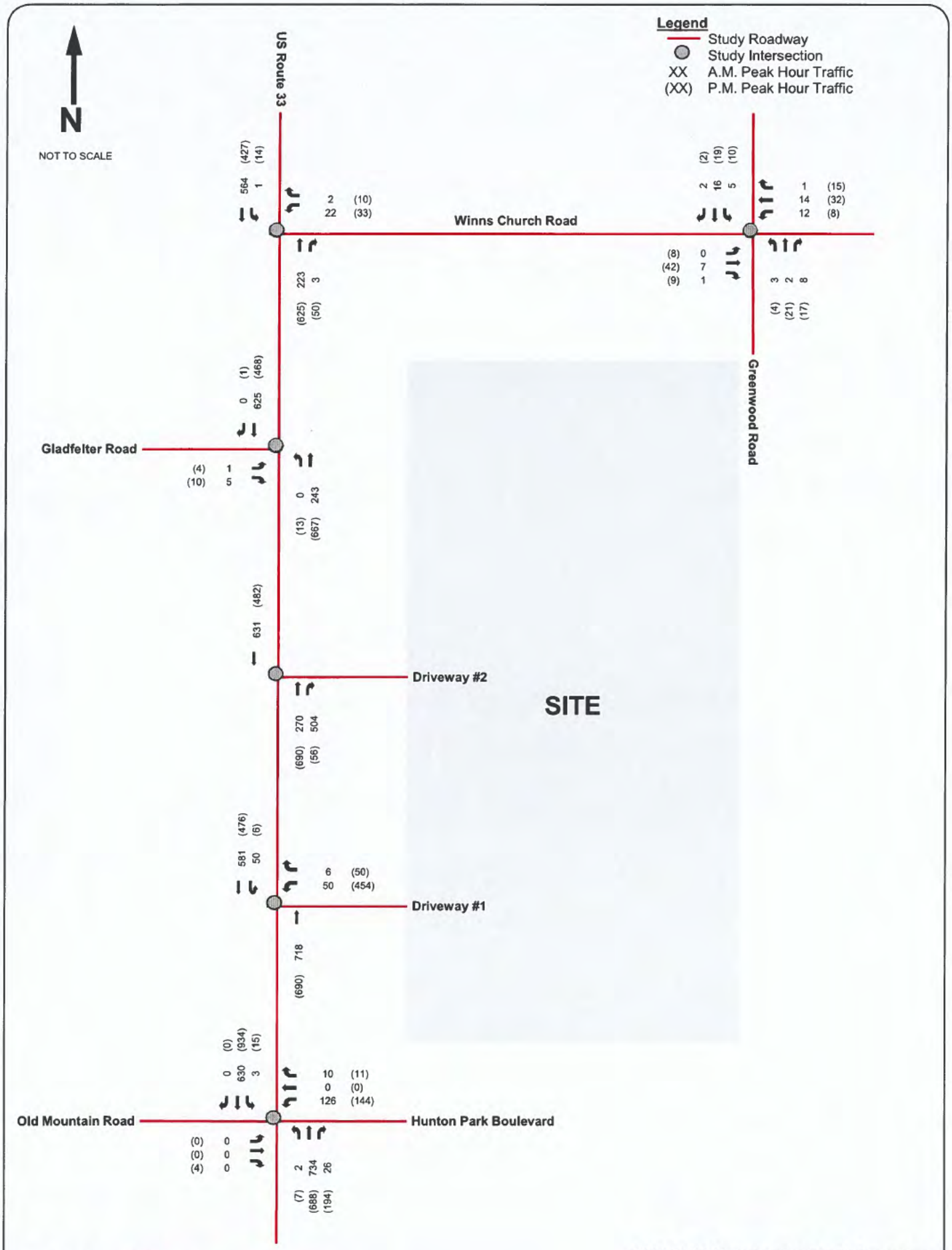
Trip Distribution – Construction Peak
Mountain Road Technology Park
Hanover, VA



Kimley»Horn

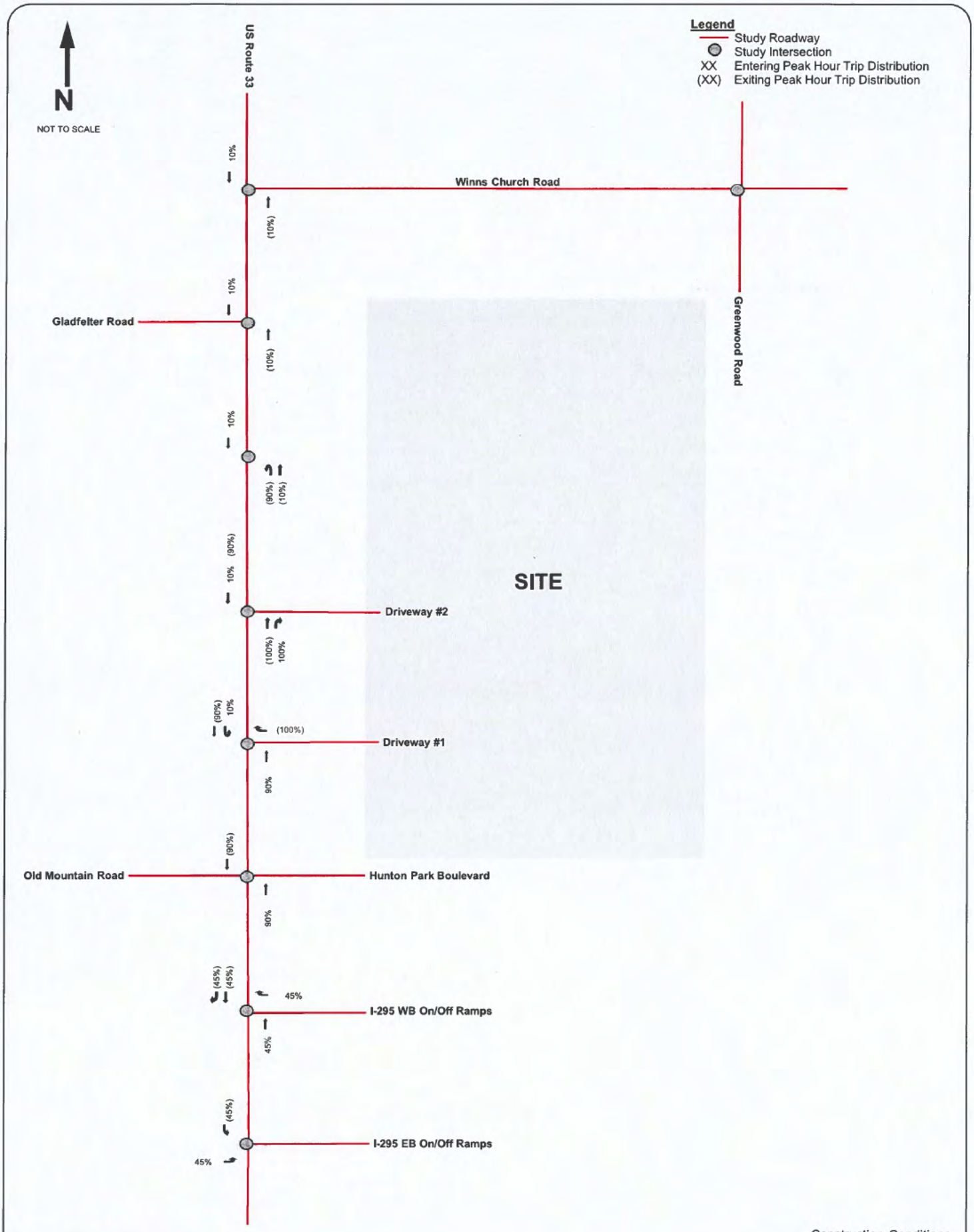
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Trip Assignment – Construction Peak
Mountain Road Technology Park
Hanover, VA



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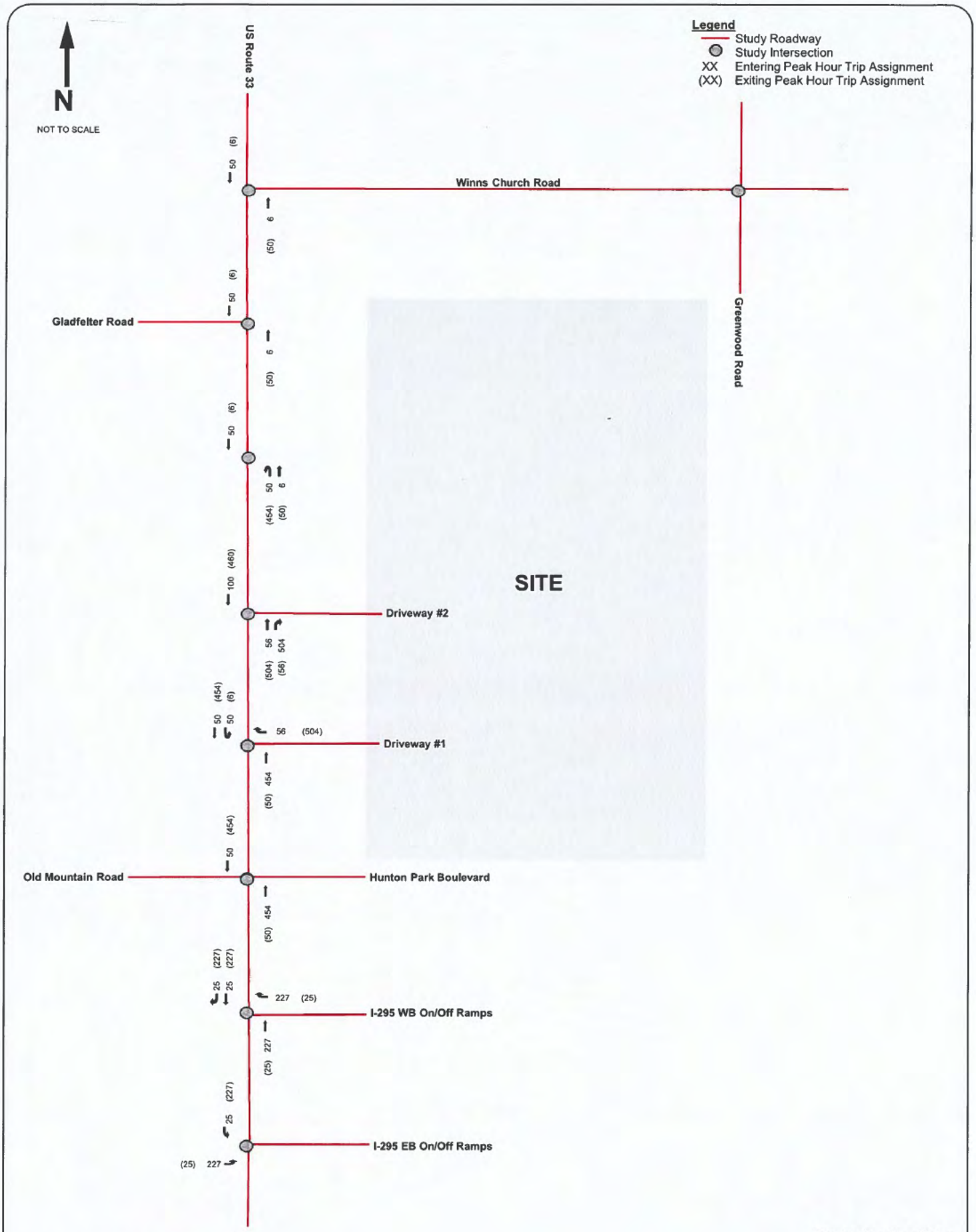
2034 Build (Construction Peak) Conditions
Mountain Road Technology Park
Hanover, Virginia



Kimley»Horn

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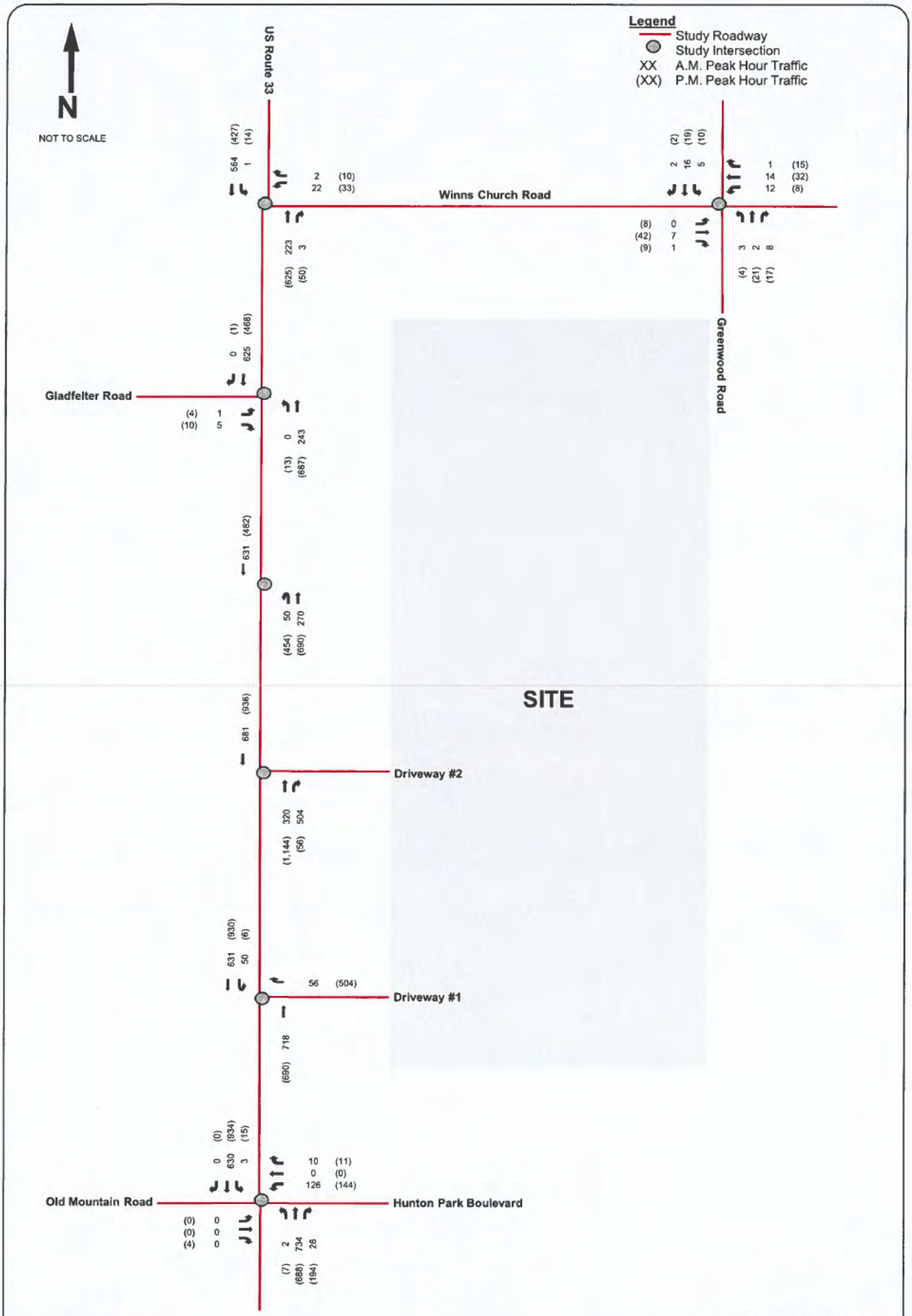
Construction Conditions
Trip Distribution (MUT)
Mountain Road Technology Park
Hanover, Virginia



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Construction Conditions
Trip Assignment (MUT)
Mountain Road Technology Park
Hanover, Virginia



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Construction Conditions
2034 Build Peak Hour Volumes (MUT)
Mountain Road Technology Park
Hanover, Virginia

Kimley»Horn

MEMORANDUM

To:	County of Hanover Department of Planning and Zoning
From:	David Capparuccini, PE, PTOE Kyle Lowther, E.I.T. Kimley-Horn and Associates, Inc.
Date:	March 20, 2026
Subject:	REZ2025-00023 - Marchetti Properties, LLC – Mountain Road Technology Park – TIA Reconsideration (Hanover Planning Commission Request) Comment Responses

We have received comments provided by the Virginia Department of Transportation (VDOT) for the subject project. We offer the following responses:

1) **Comment:** A temporary signal was evaluated as a potential solution. The revised study shows that the anticipated construction volumes would not meet the signal warrants 1 and 2, which are the warrants normally used to conduct signal warrant analyses. There is an existing signal to the south at Hunton Park Blvd, approximately 690 feet South of the proposed entrance location. Route 33, Mountain Road is functionally classified as a minor arterial roadway with a posted speed limit of 55 MPH. Per Table 2-2 in RDM Appendix F, the spacing required between two signals is 1320 feet therefore, a temporary signal at the proposed driveway entrance location would require an AM-E. Therefore, with the provided information, VDOT TE do not believe a signal is warranted currently.

   Response: Noted.

2) **Comment:** Engineering (TE) can support a median U-turn concept to facilitate traffic coming out of the main driveway with the following conditions:

   a) The location of the U-turn shown in the supplemental analysis is approximately 1200' north of the proposed driveway, at the existing median opening at the Extra Space Storage driveway. There are 450 vehicles expected to make the U-turn movement in the PM peak hour. There is concern that vehicles currently using the Extra Space Storage driveway would not be able to turn left onto Route 33. Therefore, we would support a new median opening closer to the proposed driveway location. Please note that when this is updated in the Synchro model, the OD volumes should be updated so that the U-turn traffic is coming from the WBR out of the site driveway.

      Response: The median U-Turn alternative was updated to propose a new median opening on US-33 south of the existing median opening at the Extra Space Storage driveway. The Synchro models and analysis results were updated to address this comment.

b) The proposed crossover needs to comply with "the spacing standards, the sight distance requirements, and all other engineering standards," per Appendix F.

Response: The updated median U-Turn alternative meets the spacing standards outlined for median U-Turn intersection configurations provided in the VDOT Road Design Manual Appendix F (AASHTO Green Book recommends a range of 400 to 600 feet).

c) The concept shown in the supplemental analysis shows a drop lane for the U-turn. We do not support the drop lane and want a full separate turn lane in the median.

Response: Please see updated concept for the median U-Turn alternative.

d) Our preference would be for the start of the U-turn travel lane to be as close to the driveway as possible. The intent is that vehicles going from the driveway to make the U-turn would not necessarily need to get up to speed on Route 33, Mountain Road before merging over to get in the U-turn lane.

Response: Please see updated concept for the median U-Turn alternative.

e) The driveway is proposed to be a full access driveway during off-peak hours and not allow a left turn egress during the AM and PM peak periods. They will need to confirm how this will be enforced to ensure construction traffic will not make left turning movements out of the site during peak periods.

Response: The applicant is committed to implementing the use of traffic control devices to restrict vehicles making a left-turn movement out of the site during peak periods.

We trust that these responses adequately address the comments provided. Please contact us if you have any questions.

COMMONWEALTH of VIRGINIA

DEPARTMENT OF TRANSPORTATION
RICHMOND DISTRICT
2430 Pine Forest Drive
COLONIAL HEIGHTS, VA 23834
www.VDOT.Virginia.gov

Stephen C. Brich, P.E.
COMMISSIONER

March 12, 2026

County of Hanover
Department of Planning and Zoning
P.O. Box 470
Hanover, VA 23069
Attn.: Gretchen Biernot

Re: REZ2025-00023 - Marchetti Properties, LLC – Mountain Road Technology Park – TIA Reconsideration (Hanover Planning Commission Request)

Ms. Biernot,

Hanover Planning Commission requested that Kimley-Horn evaluate options to provide some more permanent solutions regarding construction traffic for the Mountain Road Technology Park, located on Route 33, Mountain Road just north of the I-295 interchange. As part of the evaluation, construction traffic was more concentrated during the AM and PM peaks than it was in the original TIA.

The Virginia Department of Transportation, Richmond District Traffic Engineering (TE) and the Ashland Residency Transportation and Land Use Section has reviewed the Supplemental Traffic Impact Analysis (TIA) in association with the above referenced request for rezoning as submitted by Marchetti Properties, LLC regarding Mountain Road Technology Park prepared by Kimley-Horn dated February 27, 2026, and provide the following comments:

1. A temporary signal was evaluated as a potential solution. The revised study shows that the anticipated construction volumes would not meet the signal warrants 1 and 2, which are the warrants normally used to conduct signal warrant analyses. There is an existing signal to the south at Hunton Park Blvd, approximately 690 feet South of the proposed entrance location. Route 33, Mountain Road is functionally classified as a minor arterial roadway with a posted speed limit of 55 MPH. Per Table 2-2 in RDM Appendix F, the spacing required between two signals is 1320 feet therefore, a temporary signal at the proposed driveway entrance location would require an AM-E. Therefore, with the provided information, VDOT TE do not believe a signal is warranted currently.

2. Traffic Engineering (TE) can support a median U-turn concept to facilitate traffic coming out of the main driveway with the following conditions:

a. The location of the U-turn shown in the supplemental analysis is approximately 1200' north of the proposed driveway, at the existing median opening at the Extra Space Storage driveway. There are 450 vehicles expected to make the U-turn movement in the PM peak hour. There is concern that vehicles currently using the Extra Space Storage driveway would not be able to turn left onto Route 33. Therefore, we would support a new median opening closer to the proposed driveway location. Please note that when this is updated in the Synchro model, the OD volumes should be updated so that the U-turn traffic is coming from the WBR out of the site driveway.

b. The proposed crossover needs to comply with "the spacing standards, the sight distance requirements, and all other engineering standards," per Appendix F.

c. The concept shown in the supplemental analysis shows a drop lane for the U-turn. We do not support the drop lane and want a full separate turn lane in the median.

d. Our preference would be for the start of the U-turn travel lane to be as close to the driveway as possible. The intent is that vehicles going from the driveway to make the U-turn would not necessarily need to get up to speed on Route 33, Mountain Road before merging over to get in the U-turn lane.

e. The driveway is proposed to be a full access driveway during off-peak hours and not allow a left turn egress during the AM and PM peak periods. They will need to confirm how this will be enforced to ensure construction traffic will not make left turning movements out of the site during peak periods.

Please provide a detailed response to comments indicating where and how each comment was addressed with your resubmittal. If further information is desired, please contact Jason Brook at 804-585-3590.

Sincerely,

Jason T. Brook for Rachel Lawton
Ashland Residency Plan Reviewer

On behalf of:
Aaron French, PE
Acting Area Land Use Engineer
VDOT Ashland Residency

Utility Usage

Pompei, Andrew J.

From: Erin Fosdick <erin.fosdick@tract.com>
Sent: Thursday, February 5, 2026 4:12 PM
To: Pompei, Andrew J.
Cc: Brandon Smith; Aric Crable; Trey Thomasson
Subject: Fw: [EXTERNAL]Tract Projects - Batch Numbers / Target Energization Dates

Follow Up Flag: Follow up
Flag Status: Flagged

CAUTION: This email originated from outside your organization. Exercise caution when opening attachments or clicking links, especially from unknown senders.
Andrew,

Please see the information below to demonstrate Tract's position in Dominion's queue. Let me know if this is adequate. Thanks!

tract
Accelerating Responsible Infrastructure

Erin Fosdick, AICP
Director of Entitlements
erin.fosdick@tract.com
720-552-9172
www.tract.com

From: Brandon Smith <brandon.smith@tract.com>
Sent: Thursday, February 5, 2026 12:34 PM
To: Erin Fosdick <erin.fosdick@tract.com>; Trey Thomasson <Trey.Thomasson@tract.com>; Aric Crable <aric.crable@tract.com>
Subject: FW: [EXTERNAL]Tract Projects - Batch Numbers / Target Energization Dates

Erin,

Dominion said we can use the communication below as verification of our queue position.

Regards,

tract

Brandon Smith
Vice President – Utility Development
brandon.smith@tract.com
434.409.1915
www.tract.com

From: andrew.b.molinares@dominionenergy.com <andrew.b.molinares@dominionenergy.com>
Sent: Thursday, February 5, 2026 2:02 PM
To: Brandon Smith <brandon.smith@tract.com>
Cc: dominic.j.minor@dominionenergy.com; jacob.r.wiseman@dominionenergy.com
Subject: [EXTERNAL]Tract Projects - Batch Numbers / Target Energization Dates

Good afternoon,

Below are the current batch positions/ target energization dates for project sites in Hanover.

Marchetti
Flamingo DP – Q4 2029
Pelican DP – Batch 13

Hanover Technology Park
Slayden Creek DP – Q2 2029
Falling Creek DP – Batch 1

Thank you,

Andrew B. Molinares
Key Account Manager
Customer Service & Strategic Partnerships

Dominion Energy Virginia
3072 Centreville Rd. Herndon, VA 20171
C: 571-485-0887
To Report An Outage Call: 866-591-0157



Actions Speak Louder

CONFIDENTIALITY NOTICE: This electronic message contains information which may be legally confidential and or privileged and does not in any case represent a firm ENERGY COMMODITY bid or offer relating thereto which binds the sender without an additional express written confirmation to that effect. The information is intended solely for the individual or entity named above and access by anyone else is unauthorized. If you are not the intended recipient, any disclosure, copying, distribution, or use of the contents of this information is prohibited and may be unlawful. If you have received this electronic transmission in error, please reply immediately to the sender that you have received the message in error, and delete it. Thank you.

Hydraulic Modeling

Dewberry

TECHNICAL MEMORANDUM

PREPARED FOR: Kimley-Horn Associates, Inc.

PREPARED BY: Dewberry Engineers Inc.

DATE: March 24, 2026

SUBJECT: Route 33 Data Center Development Hydraulic Modeling

1. Introduction

Kimley-Horn Associates, Inc. (Kimley-Horn) is working on the planning and design of a new data center development near the old Tyson Plant at Route 33. Kimley-Horn contracted with Dewberry Engineers Inc. (Dewberry) to utilize the current Hanover Suburban Water System (HSWS) hydraulic model to evaluate the existing water distribution system for purposes of serving the proposed development and identify any necessary improvements. The hydraulic modeling was based on phasing and water needs provided by Kimley-Horn, as summarized below:

Data Center Phasing:

- 300 MW online beginning of 2030 (Area 1)
- Additional 300MW online beginning of 2031 (Area 2)
- Final 300MW online beginning of 2032 (Area 3)

Full Build-Out Demands:

- 0.6 million gallon per day (MGD) average day demand (ADD)
- 2.0 MGD maximum day demand (MDD)
- Fire Flow Goal - 2,000 GPM for 2 hours
- Minimum Pressure – 40 psi during MDD

This information was utilized to develop the modeling scenarios summarized in Section 3.

2. Proposed Development Water Service Overview

The proposed data center development will be served by the Elmont and Lower Elmont Pressure Zones (PZ) within the HSWS. These pressure zones receive water supply from the Elmont Water Storage Tank and Pump Station (Elmont WST), located on Cedar Lane Road and an interconnect with Henrico County at Route 33. The Elmont WST pumps water from the Ashland PZ to create the Elmont PZ and the Lower Elmont PZ is bounded by the Route 33 Pressure Reducing Valve (PRV) and the Henrico County connection, which also has a PRV.

Based on the proposed maximum ground elevation of approximately 250 ft within the data center development, the Lower Elmont PZ would provide service to the development. The first phase (Area 1) would be nearest Route 33 and would be served from the existing 12-inch water main along Route 33. As the data center develops through full buildout, it is anticipated that a new water transmission main would be constructed connecting the existing 12-inch water main along Route 33 to the existing 16-inch water main along Winns Church Road. The sizing of this waterline is evaluated in the scenarios below

Refer to Figure 1 for an overview of the proposed data center development and how it would connect into the existing system.

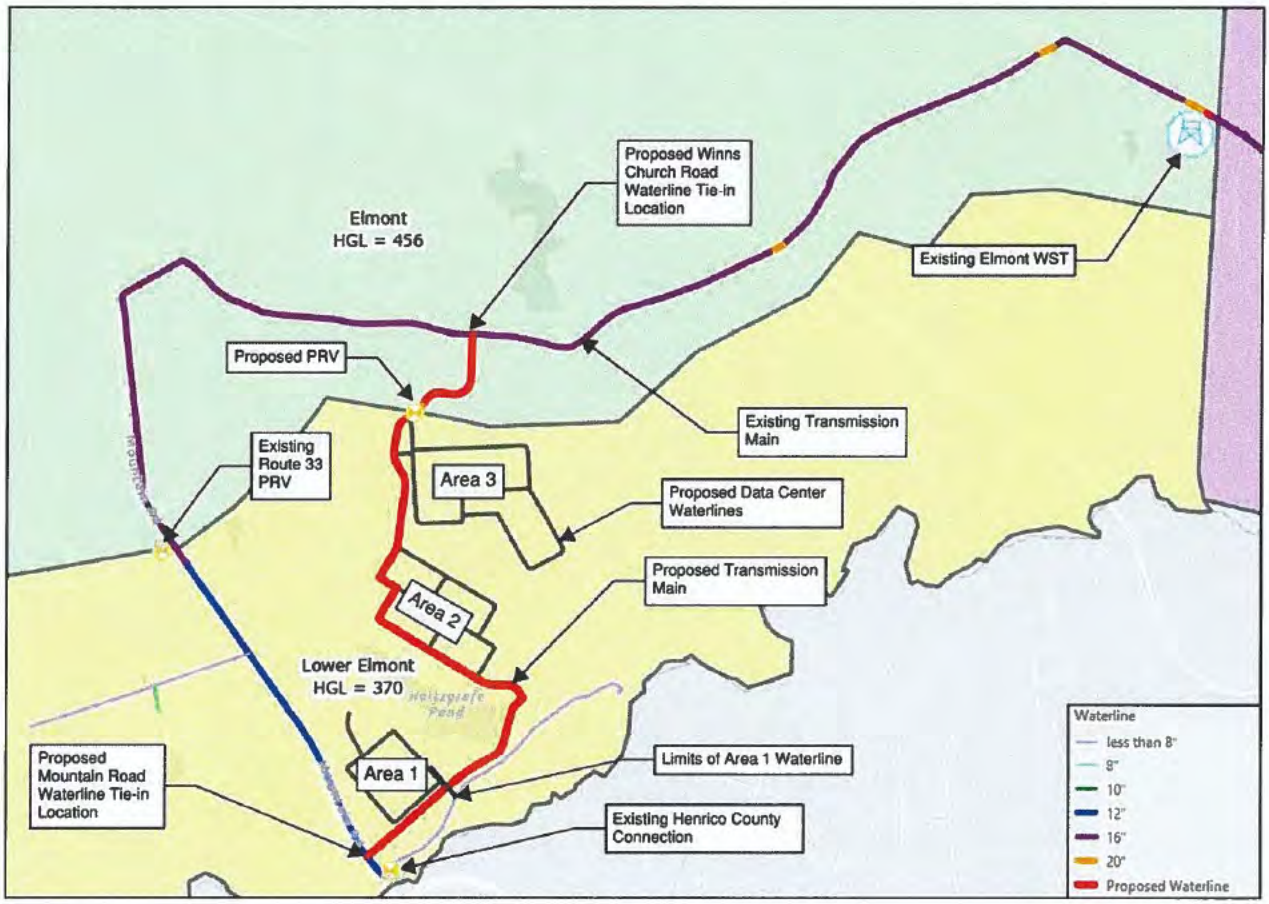


Figure 1 Elmont & Lower Elmont Pressure Zone Map

3. Hydraulic Evaluation

The Hanover County hydraulic model was developed in Innovyze InfoWater and converted to Autodesk InfoWater Pro. The model was last updated in 2025, which included reallocation of demands, updates to model elements to reflect the existing water system, and calibration of Hazen-Williams C values based on hydrant testing.

3.1 Modeling Scenarios

To evaluate the ability of the existing HSWS to serve the Route 33 data center development, MDD extended period simulations (EPS) and fire flow EPS scenarios were developed. Each scenario was run using the existing infrastructure, and improvements were identified when necessary.

Table 1 Model Scenarios Summary

MODEL SCENARIOS SUMMARY				
NAME	DEMAND CONDITION	DEVELOPMENT	DATA CENTER DEMAND	WATER SYSTEM STATUS
S1a	MDD	Area 1	0.67 MGD	Existing
S1b	MDD + Fire Flow	Area 1	0.67 MGD	Existing
S2a	MDD	Full Build Out	2 MGD	Existing
S2b	MDD + Fire Flow	Full Build Out	2 MGD	Existing
S3a	MDD	Full Build Out	2 MGD	Improved
S3b	MDD + Fire Flow	Full Build Out	2 MGD	Improved

Each MDD scenario was conducted as a 24 hour extended period simulation (EPS), with the appropriate AWWA diurnal curves applied to all existing demands. The proposed demand for the data center was assumed to be constant over the day. The fire flow scenarios were simulated during an MDD scenario with a 2-hour fire event starting at hour 11 of the 24-hour simulation. The fire event is located near the intersection of Mountain Road and Winns Church Road and requires 2,000 gpm of fire flow availability over the 2-hour duration. The data center development will have a storage tank on-site, so a fire event at the data center site was not modeled.

3.2 Level of Service Criteria

Level of service (LOS) criteria were developed for purposes of evaluating improvements necessary for each model scenario. The LOS criteria were based on the VDH Waterworks Regulations, the American Water Works Association Manual of Water Supply Practices M68 Water Quality in Distribution Systems (AWWA M68), Hanover County standards, and industry standards/best practices. The LOS criteria are used for the evaluation of each modeling scenario and the sizing of proposed infrastructure. Refer to Table 2 for a summary of the LOS criteria.

Table 2 Level of Service Criteria

LEVEL OF SERVICE CRITERIA		
LEVEL OF SERVICE	CRITERIA	SOURCE
Minimum System Pressure (MDD)	40 psi	Industry Standard
Minimum System Pressure (Fire Flow)	20 psi	VDH Requirement
Maximum Head Loss Gradient for New Water Mains	2 ft/1,000 ft	AWWA M68
Fire Flow Requirement (Commercial)	2,000 gpm for 2 hours	Hanover County Standards

3.3 S1 Area 1 – Existing System

Scenarios S1a and S1b evaluate the ability of Hanover County's existing water system to serve Area 1 of the data center development during MDD and fire flow conditions, respectively. In these scenarios, only the Area 1 section of the proposed data center waterline is assumed to be constructed.

Based on the results of this analysis, the existing water system has capacity to supply the water required by Area 1 of the development during MDD conditions. During this MDD scenario, water to the data center is provided entirely by the Elmont WST. Pressures throughout the day remain above 40 psi across the Elmont and Lower Elmont Pressure Zones.

During the fire flow scenario, the County must rely on the Route 33 Henrico Connection to supplement the flow from the Elmont WST and prevent under-pressurization of the Lower Elmont PZ. With both supply sources providing flow to the Elmont and Lower Elmont Pressure Zones, the water system can provide the required 2,000 gpm of fire flow over 2 hours.

3.4 S2 Buildout – Existing System

Scenarios S2a and S2b evaluate the ability of Hanover County's existing water system to serve the buildout of the data center development during MDD and fire flow conditions, respectively. In these scenarios, the completed waterline loop is assumed to be constructed with a PRV located at the northern end of the development to lower the Elmont HGL to the Lower Elmont PZ HGL.

Based on the results of this analysis, the existing water system has capacity to supply the water required by the buildout phase of the development during MDD plus a 2,000 gpm, 2-hour fire event. During this scenario, the flow being supplemented from the Route 33 Henrico Connection (approximately 0.4 MGD) is less than the contractual limit of 0.775 MGD. It should be noted that this scenario utilizes most (approximately 90%) of water supply capacity of the existing Elmont PZ, with approximately 0.25 - 0.3 MGD of maximum day capacity remaining. To support additional high-water users in the Small Area Plan[1], additional water capacity improvements would be required.

3.5 S3 Buildout – Improved System

To provide additional water capacity within the Elmont PZ, a new tank and booster pump station (Route 33 WST) was modeled at the Route 33 connection to Henrico County. Scenarios S3a and S3b evaluate the ability of Hanover County's water system with improvements to serve the buildout of the data center development during MDD and fire flow conditions, respectively. In these scenarios, Henrico County would supply water into the Route 33 WST, which would repump water into the merged Elmont/Lower Elmont Pressure Zone. The merged PZ could operate with a combined supply from Route 33 WST and the Elmont WST or the Route 33 WST could supply the PZ demand and fill the Elmont WST, which would repump into the Ashland PZ and supplement the County's water supply from other sources.

For the scenario in which the Route 33 WST provides water supply for the all of the merged Elmont PZ demand, the Route 33 WST should have an initial firm pumping capacity of 6 MGD with a storage tank volume of 1.0 MG. This would provide adequate hydraulic capacity to serve a maximum day demand of 3 MGD (1 MGD excess capacity) plus a 2-hour, 2,000 GPM fire event in the PZ. A 20-inch waterline is sufficient to meet all LOS criteria for the 6 MGD pumping station; however, it is recommended that the water main through the data center is 24-inch to provide enough capacity for future buildout of the Route 33 WST. In addition, a segment of 24-inch transmission main is required between the Route 33 WST and the data center water main tie-in location running parallel to the existing 12" water main to provide additional capacity. In this scenario, the 0.775 water supply capacity from Henrico County would be exceeded, and a renegotiated agreement between Hanover and Henrico Counties would be required. Due to the water supply source location at the southern end of the Elmont/Lower Elmont PZ, the PRV at the northern end of the data center site is not needed and the existing Route 33 PRV will be bypassed. Refer to Figure 2 for the location of the Route 33 WST and associated improvements.

1. *Route 33 Gateway Small Area Plan, Draft Plan (BOS Public Hearing), Last Revised August 4, 2025*

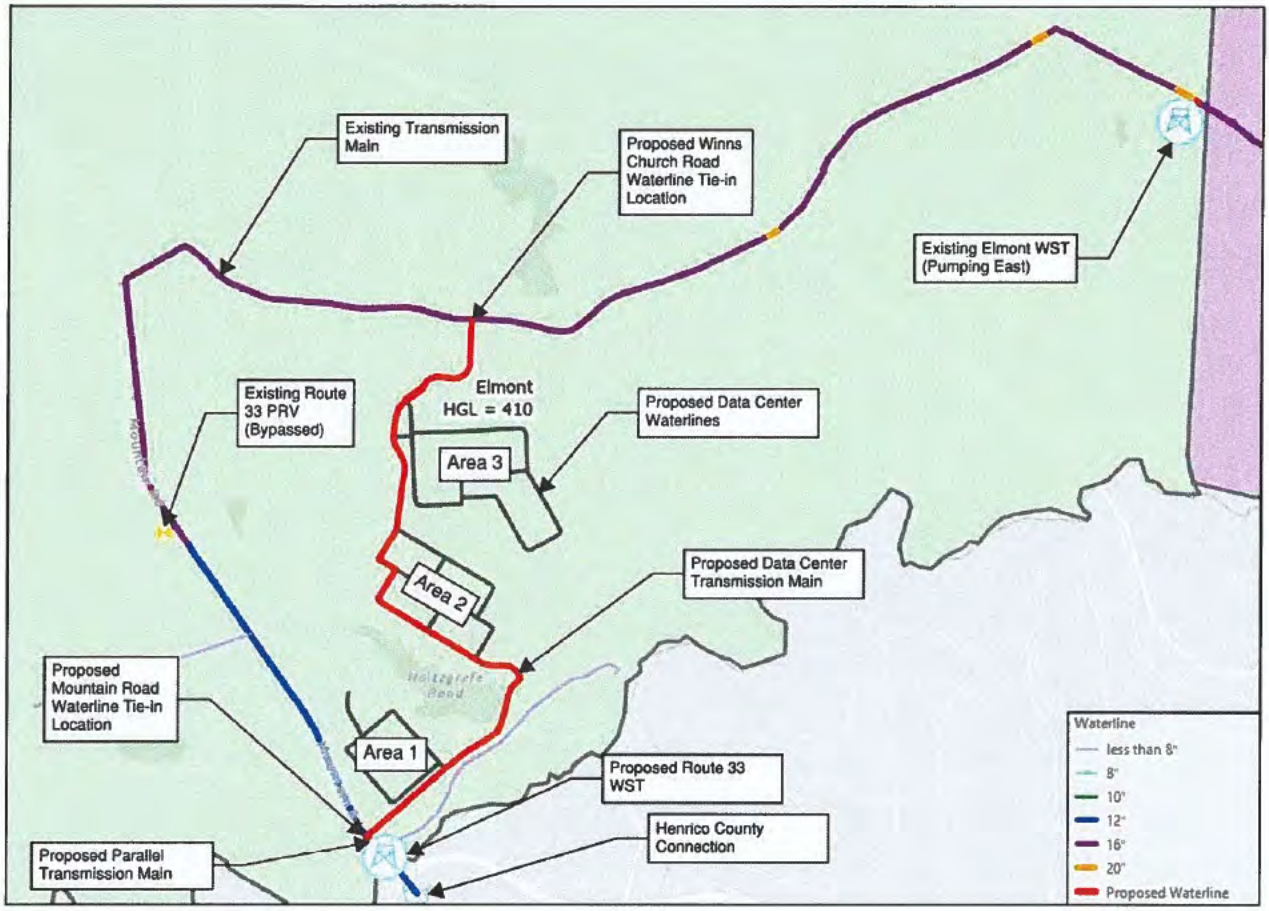


Figure 2 Route 33 WST Location

Based on the results of the analysis, the water system with the improvements outlined above can supply the water required by the buildout of the data center during MDD and fire flow conditions. The Route 33 WST operating at a capacity of 6 MGD can fully supply the data center during MDD conditions and maintain a system pressure above 40 psi throughout the Elmont PZ, while providing an additional maximum day capacity of about 1 MGD in the PZ.

During the fire flow scenario, the Route 33 WST, operating at a capacity of 6 MGD, can maintain system pressures above 40 psi throughout the Elmont PZ, including the data center development, while supplying the required 2,000 gpm of fire flow over 2 hours to the location of the fire event.

4. Summary and Conclusions

Based on the results of this evaluation, the existing Hanover County water system has sufficient capacity to supply water to the Route 33 data center development during both MDD and fire flow conditions. However, the proposed data center development is expected to utilize most (approximately 90%) of water supply capacity of the existing Elmont PZ, with approximately 0.25 - 0.3 MGD of maximum day capacity remaining. To support additional high-water users in the Small Area Plan[1], additional water capacity improvements would be required.

It is recommended that one of two solutions be implemented to allow for additional Elmont PZ capacity. Onsite storage tanks or other means to reduce the maximum day cooling demand or the construction of a new 6 MGD BPS and 1.0 MG WST. The new Route 33 WST would provide a redundant water supply for the data center development and provide additional capacity to serve future demands within the PZ. A future preliminary engineering report should be prepared to further evaluate the final location, and design of the Route 33 WST, as well as align with Hanover County's water supply agreements with Henrico County. The future PER should also evaluate infrastructure sizes to serve the needs of the surrounding service area.

1. *Route 33 Gateway Small Area Plan, Draft Plan (BOS Public Hearing), Last Revised August 4, 2025*

Kimley»Horn

February 6, 2026

Mr. Andrew Pompei
Deputy Director
Hanover County Planning

Re: *Mountain Road Technology Park*
Water and Sewer
Hanover County, VA

Dear Mr. Pompei:

The Mountain Road Technology Park will be served by Hanover County's public water and wastewater systems. The project team has met with the Hanover County Public Utilities Department to verify that sufficient system capacity is available to support the proposed development. The County has confirmed that the Tyson's facility previously received an allocation of 800,000 gallons per day. The Mountain Road Technology Park is projected to utilize an average of 600,000 gallons per day, which represents only a portion of the former Tyson's allocation.

The Public Utilities Department has indicated that adequate capacity currently exists, and it is our understanding that a formal will-serve letter will be issued following successful rezoning of the property. To further support utility planning and provide additional technical detail, the project team is also coordinating with the County's utilities consultant to evaluate the existing water distribution system under anticipated project demands. A scope of work has been approved to complete hydraulic modeling for the projected flows and to identify any potential public infrastructure improvements that may be required to meet development needs and fire flow requirements.

We trust that this information provides the necessary assurance regarding the availability of adequate water capacity to serve the proposed project.

Should you have any questions or wish to discuss this matter further, please feel free to contact me.

Sincerely,
KIMLEY-HORN AND ASSOCIATES, INC.

Ryan Perkins, P.E.
Vice President

Cemetery Research

D
A

Dutton + Associates
CULTURAL RESOURCE SURVEY, PLANNING, AND MANAGEMENT
a Timmons Group company

1001 Boulders Parkway
Suite 100
Richmond, VA 23225

www.dutton-associates.com
Phone: 804.897.1960

April 29, 2026

Dan Becht
Senior Director, Development
Tract

RE: Mountain Road Technology Park, Cemetery Research and Reconnaissance

Dear Mr. Becht:

At the request of Tract, Dutton + Associates, a Timmons Group company (D+A), undertook documentary research to determine the likelihood of cemeteries to be present within the Mountain Road Technology Park project area. This land was historically owned by R.M. Carver and his heirs. A 1920 deed (DB 71:82) related to a portion of land in the project area, as well as land outside of the project area, references two cemeteries. Additional research was undertaken to determine the location of these cemeteries; one of which was identified on a 1941 topographic map corresponding to today's Parcel 7757-88-1430. The second cemetery was not included in any plats or topographic maps. However, tracing the land records back, it was found that an 1868 plat (DB 2:515) related to a later, 1880, deed (DB 23:21) that references the second cemetery roughly corresponds to portions of modern Parcels 7758-71-6329, 7758-71-1520, 7758-71-4863, 7758-71-3828, and 7758-61-9775.

A review of deeds and property plats for what is known as the Tribble property was also undertaken to find evidence of recorded cemeteries on the current property. The Tribble property was not included in the 1920 deed that includes references to cemeteries. This property had been assigned to Mrs. Frances Carver as her dower and as such it would have held the family home. No references to cemeteries were found in deeds. A photograph of a burial marker and a reference to a cemetery was found in the Virginia Department of Historic Resources' (VDHR) Virginia Cultural Resource Information System (V-CRIS) file for a former structure located on the Tribble property. The marker was for a pet burial and the inscription read "Our Dog Mac, mans Best Friend." No other documentation of burials on this property was referenced.

To further confirm the presence or absence of burials, D+A archaeologists completed a systematic pedestrian reconnaissance of the Tribble property looking for surface evidence of burials or cemeteries to include inscribed markers, fieldstone markers, fencing, ornamental vegetation, and grave depressions. The results of the pedestrian reconnaissance did not reveal any visible evidence of human burials or cemeteries.

If you have any questions, please do not hesitate to contact me at 804-897-1960 or at dfriedberg@dutton-associates.com.

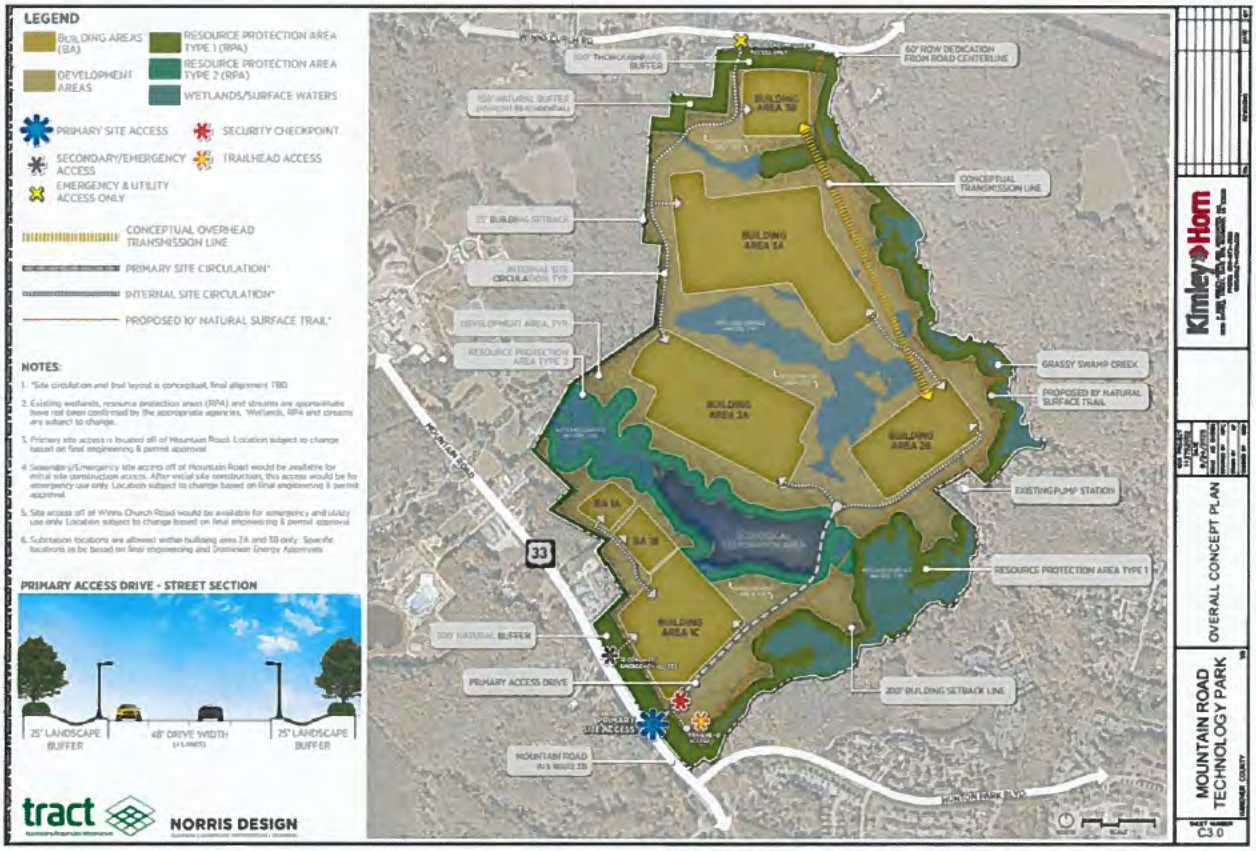
Sincerely,

Dara A. Friedberg
Research Historian, Principal Investigator

Community Meeting Notes

Community Meeting Notes
REZ2025-00023, Marchetti Properties, et. al.
CUP2025-00016 + SE2025-00023, VALCO Hanover County Four L.L.C.
Proposed Data Center Campus on U.S. Route 33 at the Chickahominy River

Date/Time	Thursday, October 30, 2025 (6:00 p.m.)
Meeting Location	Elmont Elementary School 12007 Cedar Lane Ashland, VA 23005
Request	Rezoning: A-1 to M-1 CUP: Substation SE: Buildings Taller than Permitted
Number of Attendees	Approx. 110
Board of Supervisors' Members Present	Susan Dibble (South Anna) Jeff Stoneman (Beaverdam)
Planning Commission Members Present	Larry Leadbetter (South Anna) Fred McGhee (Cold Harbor)
Staff Members Present	Gretchen Biernot Andrew Pompei



Applicant Overview

Ms. Dibble and Mr. Pompei provided a welcome/introduction. The applicant's representative (Erin Fosdick) introduced other team members from Tract (data center company) and led a presentation/overview of the proposed project, which encompasses about 428 acres along U.S. Route 33 adjacent to the Chickahominy River. She also provided information regarding the U.S. Route 33 Small Area Plan. Another representative from Tract (Grant Pulley) provided additional information about the features shown on the conceptual plan, indicating that about 40% of the site will remain as open space (building areas cover 30% of the site). He provided information about site access and building areas. Proposed buildings will have a maximum building height of 62 to 85 feet depending on the building area, with view profiles presented that show whether buildings are visible from different vantage points along U.S. Route 33 and Winns Church Road (considering buffers that are 200 feet in width along adjacent thoroughfares). Another representative from Tract provided information about power from Dominion Energy, with an expected service date in the first quarter of 2030, with Tract responsible for all extensions of power infrastructure to the site. The applicant provided an estimated fiscal impact 15 years after construction, as well as estimates on the number of jobs. A rendering of a natural surface trail was shown to provide an illustration of the proposed trails along the Chickahominy River and Grassy Swamp Creek. The applicant created a website at www.mountainroadtechpark.com.

Public Questions/Discussion

The following questions, concerns, and responses from the applicant were addressed in the meeting:

- *How big will the substation be?*
    - *Applicant*: Each substation will be 300 MW with a footprint that is 540 feet by 450 feet, with a height of up to 25 feet. Three substations are proposed in specific building areas on the site.
- *Will electricity rates increase?*
    - *Applicant*: Dominion Energy has changed its process to ensure other ratepayers are not impacted by the infrastructure needed to serve the site. The developer is responsible for all costs to extend infrastructure to the data center campus with significant deposits put in place. Each substation costs $450 million, with the developer signing a power agreement. The State Corporation Commission also reviews costs to ensure that data center customers "pay their fair share."
    - *Citizen*: Every state with data centers has experienced increased electricity rates. Dominion will likely raise rates. Dominion is also unreliable as nearby residents experience power outages all of the time. There are also outages for WiFi. How will this problem be fixed?
    - *Applicant*: In terms of cost and reliability, the applicant would not choose this area if they did not believe there is a reliable source of power. The substations for this project

will be on a different circuit than those serving homes, schools, etc. If the power is not reliable, the data center would not be built because consistent power is needed.

- *General Comments*: There are significant concerns about increasing power rates for customers and that Dominion will prioritize providing service to the data centers versus residential customers.
- *Citizen*: How many houses would 900 megawatts of electricity serve for residential uses? Research indicates it is about 10,000 homes.
- *Applicant*: The applicant did not know the answer.
- *Citizen:* Has a deposit been paid to Dominion Energy? Is the project in the queue?
- *Applicant:* A load study has been completed and a deposit has been paid for the load study. There is already an energization date for this site. A deposit of $250,000 has been paid for each substation for the initial study, with a deposit of $13 million required at the next review step.

- *Where is the water coming from? Will wells be impacted? What are the water pollution implications?*
  - *Applicant*: The project will use public water. There was a recent high-water user that was in this area that is no longer operating. The applicant will abide by all pollution prevention requirements. The project will connect to existing water mains on Winns Church Road and Mountain Road, creating a loop for redundancy. Water consumption varies by time of year, with it being consistent with residential uses. The water will be used for cooling purposes.
  - *Citizen*: What happens to the water after it is used as cooling?
  - *Applicant*: Cooling water will go into the sewage pump station that is nearby. The water is generally the same as what arrives at the site but is slightly more concentrated. It is the same composition as what comes into the site, but some evaporation occurs that makes some minerals concentrate.
  - *Citizen*: How much water will be used?
  - *Applicant*: Water usage is correlated with megawatts.
  - *Citizen*: Will rainwater be captured for reuse?
  - *Applicant*: Stormwater management practices will comply with state stormwater management requirements. An agreement for water supply with Hanover County would just be for usage. Enough water has to run off the site to supply local water bodies downstream.
  - *Citizen*: There are concerns about Hanover County purchasing water from the City of Richmond and the data center being prioritized for water if there is another water issue.
  - *Applicant*: Information about expected water usage will be available on the project website in the coming weeks.

- *What would the maximum building square footage be?*
    - *Applicant:* The applicant correlates building size to water usage and energy usage.
- *Will these buildings be two- or three-story data centers?*
    - *Applicant*: The two-story buildings will be up to 62 feet, with the three-story buildings being up to 82 feet. There will be a mix of two- and three-story buildings.
- *What research has been done to determine if the project will impact well water? Wells have been impacted in other areas.*
    - *Applicant*: The project will connect to public water. Stormwater management facilities will be designed to meet state requirements. In other areas, neighbors have been impacted by improper construction techniques, not by the data center development itself.
- *When will these buildings be built? Will there be demand for data centers then? What happens to the buildings if the data centers are no longer needed?*
    - *Applicant*: There is demand for these facilities due to significant online usage.
- *Is VDOT going to widen U.S. Route 33? Will a traffic signal be installed at U.S. Route 33/Winns Church Road?*
    - *Applicant*: Turn lanes will be constructed at the project entrance. The project will not generate a need for a signal at U.S. Route 33/Winns Church Road.
    - *Citizen*: There is a serious accident every four weeks along Route 33, which causes backups. There is traffic congestion in the mornings and evenings. The proposed project does not effectively mitigate traffic.
- *Once one rezoning is approved, more rezonings will be approved. U.S. Route 33 is designated for light industrial development within the Hanover County Comprehensive Plan.*
- *What will the noise impacts be? There should be more analysis and explanation regarding the noise concerns.*
    - *Applicant*: There is a noise ordinance that must be complied with. There are a variety of noise attenuation techniques that can be used to reduce noise.
- *How would a gated emergency entrance on Winns Church Road be accessed during an emergency?*
    - *Applicant*: There is a lock box emergency responders have codes or keys for access. It is a common practice.
- *Where is there a data center that is comparable in size that has three substations in Virginia?*
    - *Applicant*: There are similar-size facilities in Northern Virginia, but there is less land area. White Oak Technology Park in Henrico County has data centers that may be an accurate representation of what will be built on this site.

- *There is currently only one pond. Will you build more?*
    - *Applicant*: The blue areas are existing wetland areas.
- *Substations generate electromagnetic fields (EMFs).*
    - *Applicant*: Data centers do not generate any EMFs. The substations do not have radical ions. At the property lines, there are no EMFs from the substations per scientific tests. Reputable studies demonstrating this will be researched.
- *How much noise do generators make?*
    - *Applicant*: Generators must abide by local and state ordinances.
- *What are the building setbacks?*
    - *Applicant*: There is a 200' building setback along Winns Church Road and Mountain Road.
    - *Citizen*: There are concerns about there being visibility when leaves fall off the trees.
- *Can there be more engineering studies about how far noise will be heard? How tall are the trees and how long do they take to grow? Most of the questions relate to engineering issues.*
    - *Applicant*: More specific feedback will be provided on the project website. Not all of the details are known now, since the project is not at site plan review.
- *Will there be any incentives for this project provided by the County?*
    - *Applicant*: No.
- *The plan mentions fuel storage and water treatment. What do they mean?*
    - *Applicant*: If the cooling water needs further treatment, some water treatment would be provided. There is fuel storage for the generators.
- *How much revenue will this project generate? Hanover County needs more businesses to provide more tax revenue, helping alleviate tax burdens. Residential uses create tax burdens.*
- *Will there be another community meeting? Do you know when the Planning Commission public hearing will be scheduled?*
    - *Applicant*: Another community meeting has not yet been determined. The public hearing for the Planning Commission has not yet been determined, as staff comments have not been received.
- *How much more land do you plan to buy? How would the project connect to the transmission lines? Access to a transmission line would require more land.*
    - *Applicant*: We do not plan to buy more land.
- *Is there any discharge into the Chickahominy River?*
    - *Applicant*: Stormwater would be discharged to the Chickahominy River.
- *What is the purpose of the pump station?*

- *Applicant*: There is an existing public sewage pump station.

- *What would the estimated 300 employees working in the data center be doing?*
  - *Applicant*: There is a variety of jobs at different salaries and skill levels.
  - *Citizen*: Can a certain number of jobs be reserved for Hanover County residents?
  - *Applicant*: It is too early in the process to determine who will be employed on-site.
- *Concerns were noted regarding generator noise (including limiting testing to weekdays), building orientation, light, visual impacts from taller building heights, and other potential impacts the project may have on the property to the east along Grassy Swamp Creek, which is designated for residential development.*
- *Why do you want to locate this project in Hanover County and Virginia, where there is already a proliferation of data centers?*
  - *Applicant*: Infrastructure to support the internet started in Northern Virginia (related to national security and proximity to Washington, D.C.). In Hanover County, there is available power, and there are areas designated for data center uses.
- *Do data centers have a lifespan?*
  - *Applicant*: The equipment within the data centers has a lifespan, which influences personal property tax rates.
- *Is there anything that would prevent data centers from expanding outside of the development area?*
  - *Applicant*: The development areas cannot be expanded without a proffer amendment (zoning review and change).

Citizen Correspondence

Pompei, Andrew J.

From: Dibble, Susan P.
Sent: Thursday, May 14, 2026 11:19 AM
To: fcwillson@icloud.com
Cc: Leadbetter, Larry A; 'Frank Willson'; Travis C Willson; Biernot, Gretchen W.; Pompei, Andrew J.; Hunter, Jo Ann M.
Subject: Re: Mountain Road Technology Park Noise Topics

Thank you Frank.

Get Outlook for Android

From: fcwillson@icloud.com <fcwillson@icloud.com>
Sent: Thursday, May 14, 2026 11:07:43 AM
To: Dibble, Susan P. <spdibble@hanovercounty.gov>
Cc: Leadbetter, Larry A <laleadbetter@hanovercounty.gov>; 'Frank Willson' <fwillson@cox.net>; Travis C Willson <travis.c.willson@gmail.com>; Biernot, Gretchen W. <gwbiernot@hanovercounty.gov>; Pompei, Andrew J. <AJPompei@hanovercounty.gov>; Hunter, Jo Ann M. <JMHunter@hanovercounty.gov>
Subject: Mountain Road Technology Park Noise Topics

CAUTION: This email originated from outside your organization. Exercise caution when opening attachments or clicking links, especially from unknown senders.

Sue,
In preparation for our meeting next week, I wanted to prepare a recap of my family's main concern and recommendations for the proposed project and current proffers offered. We have outlined in detail under separate documents to you and the county information and research to support our concerns . My family's goal as a long-time property owner is to support the county's vision and direction . We just want to make sure this huge data center by national standards does not detrimentally impact our property and others in the area .

The specific potential impacts as documented in my research and recent publications validate our reason for concern . Research and effects are now beginning to surface from data centers that have been in production for some time now in Northern Va and elsewhere. The specific potential impact areas of concern are Health, Quality of life and land values. Establishing the correct Noise restrictions levels for both high frequency dBA and low frequency dBC and there restrictive hours and days for daytime and night time adherence are at the core of our concern. The decisions now effect many generations in the future.

Traditional fixed noise ordinances were not originally designed for data centers in mind that emit 7/24 continuous noise . Studies are now showing traditional fixed noise limits even when some projects are compliant that health issues are surfacing. Rural areas are found to be under protected and urban areas overly restricted. Sound perception is very sensitive. A 5 decibel increase people perceive a clear change and at 10 decibels the sound is perceived as doubled and 20 decibels is 4 times !. Rural areas nighttime in winter months ,which is the recommended measurement timeframe, is said to range form 25-40 dBA .

The difference between the actual and the counties fixed limits of 52/57 could leave the door open for a huge impact to existing and future residents.

Recommendations and discussion points:

-Discuss recent 2026 Heath document concerning data centers if necessary.

-Adopting a new Noise methodology specific for data centers such as Ambient L90 methodology that determines the lowest average noise baseline 90% of the time(winter test recommended) along all property lines. At a minimum know what the baseline noise level is today preconstruction . They can wait for a winter test as construction won't start for several years. You would just get applicant to agree to methodology to be used and increases allowed above baseline noise and Low Frequency gap etc..... Let applicant start to design now mitigating noise preconstruction not as a retro fit post. Treat each project individually with a goal of not changing the character of the existing environment.

-County decides an acceptable dBA increase above baseline established (ie 3/5 or 4/7 etc....) for day and night and also a new dBC limit proffered Low Frequency Gap (ie 15 dB) = dBC-dBA . Current proffered low frequency GAP of 20 dB is to high based on research and complaint data.

-Current proffered Restriction hours for current noise restriction do not match generator run and non-run times proffered. They do not give a break for weekends. Day restrictions should be M-F 8AM -4PM , no weekends, Night should be 4PM -8AM Monday-Thursday and Friday 4PM -Monday 8AM (Night time Hours all weekend) Need to protect home, outdoor and awake time of residents.

-County to contract and perform noise studies but funded by applicant to insure neutrality.

-County to perform semi or annual independent noise studies after production start.

-Multiply noise receptors along Grassy Creek during testing. Locations of receptors made available publicly for comment pre test unlike past noise study which did not reflect Grassy Swamp Creek.

I will stand by waiting for some meeting dates/times for next week as suggested. I appreciate you attention as it pertains to addressing my familys concerns. .

Respectfully,
Frank Willson

RECEIVED
MAY 13 2026
HANOVER COUNTY
PLANNING DEPARTMENT

Good afternoon Chairman Davis and Board Supervisors. My name is Bob Nelson. I reside in the Ashland District.

On Monday, I attended a community meeting for the Tradeport data center project on Route 54. Developers routinely discuss plans they want you to focus on, not the ones they don't. The Tradeport case was no exception. The applicant discussed two.

First, a stormwater detention pond was shown on the concept plan and described as a "nice" pond with a liner. Not mentioned, but one function of the pond would be containment of diesel fuel spills. Second, the applicant discussed a data center decommissioning plan to assure removal of hazardous material, like large lithium batteries.

Are these issues discussed in Tract's proffers, its memo to the Board, or staff reports for the Mountain Road project? The answer is no. No decommissioning plan, no discussion of storm water detention.

There seems to be no planning department check list and no best practices for data centers. If an applicant doesn't discuss an issue, it's don't ask, don't tell, don't make waves.

This must end. The Board should demand it. Thank you.

Bob Nelson, Ashland District

Marchetti Properties, et al., REZ2025-00023, et al.

Citizen Comments, Board of Supervisors Meeting, May 13, 2026

Friends of Hanover
Hanover, VA 23069
May 13, 2026

Hanover County Board of Supervisors
7516 County Complex Road
Hanover, VA 23069

Re: Mountain Road/Route 33 Hyperscale Data Center Application

Dear Members of the Board,

Friends of Hanover writes to urge the Board to deny the Mountain Road/Route 33 hyperscale data center application and to take a broader step: amend Hanover's zoning ordinance to remove data centers as a permitted by-right use in all zoning districts. We raise two distinct requests:

1. Deny this application.

The Mountain Road/Route 33 proposal is inconsistent with Hanover's Comprehensive Plan, the Route 33 Gateway Small Area Plan, and the community values both documents were built to reflect. Critical independent studies on groundwater, noise, natural resources, and emergency response, have not been completed. The applicant is a land acquisition company whose business model is to sell approved land to an unknown future operator. The Board is being asked to make a permanent, irreversible commitment on behalf of Hanover residents with an unknown counterparty and incomplete information. That is not a responsible basis for approval.

2. Amend the zoning ordinance to remove data centers as a by-right use.

Virginia's own JLARC has recommended reclassifying large-scale data centers out of Limited Industrial (M-1) zoning entirely. Removing data centers as a by-right use in any zoning district would not prevent data centers from being considered in Hanover but would ensure that any future proposal receives the full public scrutiny, independent review, and community input that a use of this magnitude requires.

Friends of Hanover is ready to assist the Board and county staff in any way that is helpful: connecting with subject matter experts, reviewing independent study requirements, or supporting a zoning ordinance amendment process. A detailed summary of our concerns, with supporting sources, is attached.

Respectfully,
Friends of Hanover
friendsofhanoverva@gmail.com

MOUNTAIN RD/33 PROPOSAL

Hyperscale Data Center Complex

1. WHY A HYPERSCALE DATA CENTER COMPLEX IS DIFFERENT

Hyperscale data centers are different from uses called for in Hanover's M-1 Limited Industrial zoning. The regulatory laws have not caught up.Hyperscale data centers are inappropriate for Hanover's M-1, Limited Industrial District. "The purpose of this district is to provide sufficient space in appropriate locations for certain types of business and manufacturing, relatively free from offense..."

Virginia's JLARC has moved toward reclassifying large-scale data centers from M-1 to General Industrial (M-2). Hanover has not. [1]

Factor	Traditional Data Center	Mountain Road/33 Hyperscale Data Center
Purpose	Email, cloud storage	AI training, machine learning
Site	Single building	~430 acres industrial campus
Power	5–15 kW per rack	900 MW — equal to a major metro area
Homes equiv. Energy Usage	500–2,500	~180,000 homes
Water Usage	None (air-cooled)	600K+ gal/day; 2M gal/day peak
Generators	Few or none	~300 industrial generators

2. THE PROPOSAL IS CONTRARY TO HANOVER'S OWN PLANS

Comp. Plan:"Preserve rural character," "strategically preserve critical natural resources." [2]
Route 33 Small Area Plan (SAP): "Maintaining the rural character of the area." [3]
Route 33 SAP: "Create new parks or open space, including along the Chickahominy River."[3]
Hanover Sound Ordinance: Permits construction noise 8am-10pm. Mountain Road construction is proposed from 7am-7pm. Permanent operational noise runs 24/7. [4]

The Rt. 33 Gateway SAP was built on community input that called specifically for low-traffic uses on Rt. 33, minimizing visibility of development from major roads, maintaining the rural character of the area, and creating parks and open space along the Chickahominy. Its own design guidelines call for recommendations on building heights, setbacks, and landscaping to reflect those preferences.

This proposal does not reflect that vision. The Rt. 33 Gateway SAP contemplated data centers, not a 900 MW hyperscale data center campus. The Board must decide whether the Mountain Road/33 proposal is consistent with what residents asked for when they participated in the planning process or whether the plan is being used to justify a use that simply does not fit.

3. THE REALITY OF POTENTIAL TAX REVENUE

Economic studies, including analysis by the National Bureau of Economic Research, show that the

external **costs of Hyperscale Data Centers will nullify, or even exceed, any collected tax revenues.**

• Data centers consume roughly 250 TWh of electricity, about 5-6% of U.S. generation, and generate approximately **$25 billion in gross external damages** from air pollution and greenhouse gas emissions. Texas and Virginia account for 30% of the national total. [5]

• Energy costs are rising now. Data center demand in the Mid-Atlantic led to an annual 800% jump in energy prices at the 2024 capacity auction, **expected to increase residential rates across thirteen states by 20% in summer 2026 and by 30-60% in 2030**. [6]

• Dominion Energy processed applications to add 70 gW of electricity to the grid to supply data centers, an "unprecedented" level of growth not seen since the "industrial revolution." [7]

• Tract's $901m tax revenue forecast assumes full build-out by 2036. Dominion has confirmed first-phase energization will not begin until late 2029. Virginia's data center sales tax exemption applies to local taxes, **reducing actual realized revenue**. [8]

4. HANOVER'S PLAN SAYS OUR GROUNDWATER CANNOT SUPPORT THIS

Hanover's Comprehensive Plan states directly: "the groundwater resources of Hanover County are restricted by quantity and quality and are **not viable for meeting the County's long-term water resource requirements."** The Mountain Road/33 proposal requires 600,000+ gallons per day with a peak demand of 2 million gallons per day.

- Amazon paid a $20.5M settlement for groundwater contamination in Oregon. The pollution remains and the data centers are still running. [9]
- Training the GPT-3 language model in Microsoft's state-of-the-art U.S. data centers can directly evaporate 700,000 liters of clean freshwater. [10]
- One study projects that data centers may withdraw as much as 150 billion gallons of water nationally over the next five years. [6]
- The applicant has committed to pay for any onsite accessory water storage tanks required by the Department of Public Utilities. They have not said from where this additional water will be sourced.
- County water is the only option for the water cooling and this data center would be add-on demand to Hanover Technology Park's water use. Where does this fit with DPU resiliency models?
- No baseline aquifer study has been conducted nor has an independent water quality study of the Chickahominy watershed been submitted. The Board should require both before any vote.

5. NATURAL RESOURCES AND WILDLIFE

A comprehensive assessment has not been conducted to find the **impact on our natural resources, native plants and wildlife habitat** within the boundaries of the project as well as to the **Chickahominy River, Grassy Swamp Creek and natural resources** beyond the boundaries of the project. These impacts include: converting open land to impervious surface, noise, air pollution, night sky glow, heat plume from data center and generators, humidity plume from evaporative cooling system, among others.

6. HANOVER'S NOISE ORDINANCE DOES NOT PROTECT US FROM THIS FACILITY

Hanover's noise ordinance was written for short-term disturbances such as barking dogs, parties, or construction hours. It governs time of day, not decibel levels, and does not address continuous 24/7 low-frequency industrial hum.

• Each building produces 60-65 dB of continuous noise. Backup generators produce 100-110 dB. Low-frequency noise cannot be reliably measured by a standard meter. Tract's noise study was not quantified. [11]
• Studies indicate that data centers may pose significant health risks, including diseases associated with air pollution from fossil fuel combustion, waterborne illnesses from excessive water usage, and mental/neurological health concerns related to noise pollution. The maximum civil penalty under Virginia noise law: $500. [12][13]
• JLARC (Dec. 2024) recommended localities require independent sound modeling studies before data center approvals and enforce low-frequency decibel limits via zoning ordinance. Hanover has neither. [1]

7. PROFFERS AND REGULATIONS CANNOT FULLY PROTECT RESIDENTS

Tract is a land acquisition company whose business model is to obtain approvals, then sell the land to a data center operator. Once sold, Tract has no further legal obligations. The ultimate operator, who could be Meta, Microsoft, Amazon, or a subcontractor, is not known to Hanover. The Board is being asked to approve proffers with an unknown counterparty who is an outside company with the resources to contest or ignore it. Hanover does not have the resources to litigate against these large companies. They will pay the fines and continue breaking ordinances.

- **xAI (Memphis)**: Installed 27+ unpermitted gas turbines. The NAACP is suing. [14]
- **Amazon (Oregon)**: $20.5M settlement for groundwater contamination. The pollution remains and the data centers are still running. [9]
- Studies indicate that data centers pose **significant health risks**, including diseases associated with air pollution from fossil fuel combustion, waterborne illnesses from excessive water usage, and mental/neurological health concerns related to noise pollution. [12]
- A single data center in Sterling, VA has permitted emissions estimated to result in $53–99 million per year in health-related damages (asthma, heart/lung disease).[15]
- The VA Department of Environmental Quality just set up a data center air monitoring system due to the health impacts from Hyperscale Data Centers in Loudoun County.[16]
- Maximum civil penalty for a Virginia noise ordinance violation: $500. [13]

Once a data center is built, residents are permanently exposed with no exit and no meaningful penalty mechanism.

8. FIRE, EXPLOSION, AND EMERGENCY RESPONSE RISK

In 2025, the Chirisa Technology Park in Chesterfield, Virginia experienced four separate fire incidents in a single year caused by battery manufacturing defects. In Hillsboro, Oregon, a data center fire burned for five hours producing toxic smoke one mile from schools. Lithium-ion battery fires can exceed 1,000°C, release hydrogen fluoride, and require days to extinguish. **Hanover's current fire and emergency services have not been assessed for adequacy against this risk profile.**

9. LAND-USE PRECEDENT

Loudoun serves as a factual case study for "industrial saturation" and the loss of rural lands. Supervisor Matthew Letourneau (R-Dulles) recently characterized the push for density as "absurd,"

noting that developers are now attempting to **"fit data centers into every square foot of land possible." [17]**

This saturation demonstrates a land-use lifecycle: once a region establishes a "Data Center Alley," the demand for proximity to existing high-voltage infrastructure often leads to aggressive infill that overrides the original zoning intent.

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For more information, contact friendsofhanoverva@gmail.com

Biernot, Gretchen W.

From:	fwillson@cox.net
Sent:	Wednesday, May 13, 2026 2:23 PM
To:	Biernot, Gretchen W.
Cc:	Pompei, Andrew J.; Hunter, Jo Ann M.; Dibble, Susan P.; Travis C Willson; Leadbetter, Larry A
Subject:	Complete 2026 Health Study on Data Centers
Attachments:	GMU Impact Study 2026.pdf; DBA DBC Combined BOS.docx

CAUTION: This email originated from outside your organization. Exercise caution when opening attachments or clicking links, especially from unknown senders.

Hanover Board of Supervisors,

My family has owned 220 acres adjoining Grassy Swamp Creek for almost 200 years. It is the largest designated suburban residential land use property bordering the project . The largest proposed building 3A borders Grassy Swamp Creek and our property. The county is aware of my family's desire to develop some of it for residential use. The county has done a good job mitigating most of the issues surrounding the project with the exception of noise which would have a huge impact on our future resident's health ,land value and quality of life .

This 2026 report titled " Health Implications of the Rapid Rise of Data Centers in Va "is based on a study of Northern Va Data Center Alley which includes Loudoun ,Fairfax and Prince William counties. These three counties represent approx. 80% of Va existing data centers. Many of them were approved using historical fixed noise limit ordinances similar to what is being proposed for compliance for the Mountain Road Technology Park. This paper is an assessment of the potential health issues created by these data centers. We need to learn from there experiences and results to date.

Both existing and proposed data centers pose a significant health and environmental challenge as discussed in this paper. Policy makers must mitigate the harms from operational data centers by enforcing stricter regulations to protect surrounding communities. The county can realize their vison and revenue for area and at the same time protecting the local community from harm with stricter noise regulations for data centers.

This report should raise caution as to how best to insure a safe and healthy future for old and new residents in the immediate area of the park. Historical fixed noise limit ordinances don't appear to be a total solution as their original design was not for continuous noise sources .

Why fixed dBA limits are increasingly viewed as inadequate:

1. Lack of sensitivity to low-frequency noise (misses hum/rumble)
2. Does not account for rural vs urban baseline differences
3. Can appear compliant while still causing community disturbance
4. Does not reflect human perception of changes (relative increases matter more)
5. Can be too lenient in quiet areas (allowing large increases)
6. Can be overly restrictive in already noisy environments
7. Fails to address cumulative and continuous noise sources like data centers

Why Ambient/L90 noise methodology is a viable option :
L90 captures existing consistent background conditions pre construction rather than temporary noise
Additional Considerations:
- L90 is not a new or experimental metric; it is a well-established standard in environmental acoustics.
- It is widely used by regulatory and technical bodies, including the U.S. Environmental Protection Agency (EPA) and international standards organizations such as ISO.
- L90 is a proven and accepted methodology used in transportation noise studies, environmental impact assessments, and community noise regulation.
- L90 itself is a statistical descriptor of sound levels and can be applied to both dBA and dBC measurements, meaning it can reflect both high-frequency and low-frequency noise when paired with appropriate weighting.

Core Policy Premise Behind Ambient /L90 Methodology :
-Do not change the character of the existing acoustic environment.
-New development should blend into the existing soundscape, not dominate it.
-Noise should be evaluated relative to ambient conditions, not fixed thresholds.
-Prevent introduction of continuous, perceptible mechanical noise (e.g., hum).
-Protect rural and low-noise environments from disproportionate impact.
-Focus on long-term, steady-state noise rather than short-term peaks.
-Ensure compatibility between industrial uses and surrounding communities.
-Maintain nighttime quiet conditions when human sensitivity to noise is highest

My family would strongly encourage the county to embrace a new approach to noise regulation for data centers such as the Ambient /L90 methodology for a safer and more balanced environment post construction.

Additionally, my family would request that where project adjoins current or potential future residential property such as ours the noise compliance hours for Daytime and Night Time match the current proffered hours for generator run and non-run times which are Day 8AM – 4PM Monday -Friday and no weekend . Night 4PM-8AM Monday thru Thursday and Friday is 4PM till following Monday 8AM. The weekend's are classified as night time. This is to replace the day and night time hours stated in current noise ordinance. Local residents deserve some break from noise in there home awake time and on weekends.

We would also would request the maximum difference between dBA level day or night and the dBC day or night be no more than 15 dB not the 20 dB currently proffered .This is to help partially mitigate serious potential health and quality of life impacts.

We would also prefer the county contracts for the sound studies to be done but funded by applicant to insure neutrality and compliance. This is pre and post construction. The county should consider performing annual or semiannual sound tests for all data centers to insure on going compliance .

Hanover County has an opportunity to set a new standard for data center development in Virgina while protecting its residents. Let's learn from surfacing health issues in Northern Virginia and with only more studies to come in future years . Let's not think doing the same thing others have done in the past will produce different results for us.

Thank you all for your service to the county.

Frank Willson
Willson Family LLC
220 Acres along Grassy Creek
Swamp

frontiers | Frontiers in Climate

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Health implications of the rapid rise of data centers in Virginia: an exploratory assessment

Neha Gour[1]*, Luis Ortiz[2] and Edward Maibach[1]

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Driven by advances in cloud computing, cryptocurrency, and artificial intelligence, the rapid proliferation of data centers may pose severe human and planetary health risks. This paper, to the best of our knowledge, is the first-of-its-kind assessment of the potential health implications associated with data centers. Here, we examine the case of Virginia's Data Center Alley, the world's largest concentrated data center hub, and argue that data centers can cause public health harms, harms that can be at least partially mitigated through improved planning and design. We assess the health risks associated with data centers, including air pollution, extensive water use, noise pollution, and detrimental land use's risk of disrupting natural ecosystems and community well-being. We also address how rising energy costs can worsen social determinants of health. To mitigate these risks, we recommend transitioning data centers to renewable energy, implementing strict regulations to minimize water consumption, and optimizing site planning with acoustic treatments and green zoning to reduce noise pollution. Additionally, we advocate enforcing responsible site selection and zoning regulations to curb adverse land use changes, equitable energy pricing to alleviate economic burdens, and strengthening health communication for informed public and governmental decision-making, action-oriented advocacy, and policy changes. Finally, we emphasize the need for transdisciplinary research integrating physical sciences, engineering, and public health to quantify specific health outcomes linked to data centers.

KEYWORDS

advocacy, climate change, data centers, public health, sustainable development

Introduction

The surge in demand for computing infrastructure, driven by advancements in cloud services, cryptocurrency, and artificial intelligence, has led to extensive data center construction globally (Masanet et al., 2020; International Energy Agency, 2024). There is a small but growing body of research on societal problems associated with data centers (see Al Kez et al., 2022; Lei et al., 2023) but to the best of our knowledge, research has not yet been done on the human health effects of data centers. Here, we make the case that data centers can cause public health harms, harms that can be at least partially mitigated through improved planning and design.

In this paper, we present evidence arguing that data centers may pose significant health risks, including diseases associated with air pollution from fossil fuel combustion, waterborne illnesses resulting from excessive water usage, and both mental and neurological health concerns related to noise pollution. We further discuss how data center construction drives large-scale land use changes, degrading natural ecosystems and community well-being, and

how rising energy costs can worsen social determinants of health. Finally, we emphasize that children, the elderly, and low-wealth groups can be particularly susceptible to the health impacts associated with data centers.

Although data centers are expanding globally, here we focus primarily on Northern Virginia because it is one of the largest concentrations of data centers anywhere in the world, using it as a case study to draw broader public health insights. This area is often referred to as the "Data Center Alley", handling an estimated 70% of the world's internet traffic (Samuelson, 2024). The region's proximity to Washington, D. C., coupled with early investments in fiber-optic networks and energy infrastructure, affordable land, low-cost energy, and minimal natural disaster risks, has made Northern Virginia a prime location for data centers since the 1960s (Kidd, 2023). State policies, such as the 2009 sales tax exemption for data center equipment, have further strengthened Virginia's leadership in the data center industry.

Figure 1 illustrates the geographical distribution and scale of both existing and proposed data centers in Northern Virginia, showing that nearly 80% are located in three counties: Loudoun, Prince William, and Fairfax. Data on existing and proposed data centers suggests that this geographic distribution will only get more concentrated in the region, with data center footprints expected to more than double in the region as more and larger installations go online. Other areas where data centers are currently concentrated include counties surrounding Virginia's capital, Richmond (e.g., Henrico and Hanover counties).

While Virginia's data centers generate economic benefits, which can be an asset in strengthening the region's social determinants of health, it is important to determine whether these gains are equitably distributed or whether they merely exacerbate existing economic and health disparities. Moreover, addressing the subtle yet growing climate threat from data centers, which poses a risk to Virginia's climate progress, is essential. Below, we discuss the potential health implications of data centers related to air pollution, excessive water use, noise pollution, land use changes, and economic burdens on low-income households.

This exploratory assessment draws on peer-reviewed and grey literature published from the early 2000s through 2025, identified through targeted searches of academic databases (Google Scholar, PubMed, Web of Science, and Scopus) using search terms including data centers, digital infrastructure, energy demand, air and water pollution, noise, land use change, climate change, and public health. Given the rapidly evolving nature of data center development and regulation, we also included grey literature such as government and regulatory reports, established environmental organizations reports,

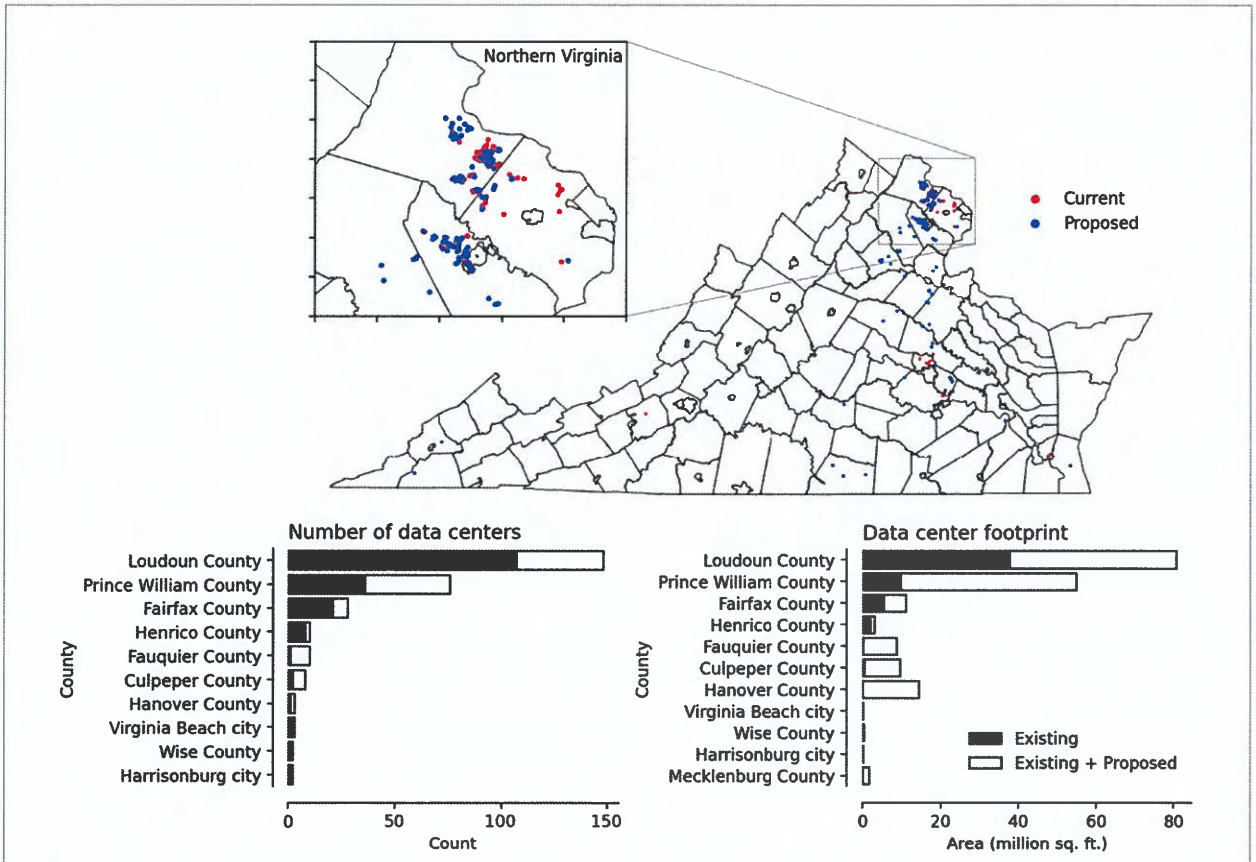


FIGURE 1
Distribution and scale of existing and proposed data centers in Northern Virginia. Data source: Piedmont Environmental Council (2024) (The Piedmont Environmental Council has pulled together this information on existing data center facilities (that they are aware of), along with pending data center proposals they have found on various town and county websites, as well as through various news outlets. It is their best approximation given the information available and is subject to change as more data centers are proposed, approved, or denied), Accessed March 2024.

and coverage from reputable media outlets, which were evaluated based on institutional authorship, transparency of sources, and consistency with peer-reviewed evidence. Sources were selected to synthesize converging evidence across disciplines and to identify plausible health pathways, knowledge gaps, and policy-relevant concerns.

Likely health impacts of data centers

Air pollution

Data center operations increase electricity demand and reliance on fossil fuel–based power generation and backup diesel generators, contributing to increase in air pollutant emissions [Cohen et al., 2017; Joint Legislative Audit and Review Commission (JLARC), 2024]. These emissions may contribute to both short-term exposures (e.g., acute respiratory and cardiovascular effects) and long-term health risks, including chronic disease, adverse reproductive outcomes, and premature mortality (Di et al., 2017; Rajagopalan et al., 2018; Conforti et al., 2018).

Data centers in Virginia are a major source of air pollution attributable to their round-the-clock energy-intensive operations, a critically strained electric grid, and backup diesel generators (Piedmont Environmental Council, 2024). Despite their essential role in the digital economy, data center sites in Virginia consume a substantial portion of the state's electricity, with an estimated power use of 5,050 megawatts [Joint Legislative Audit and Review Commission (JLARC), 2024]. The rising electricity demand from data centers, which accounted for 21% of Virginia's major utility company Dominion Energy's sales in 2022 and is projected to double by 2040 (Piedmont Environmental Council, 2024), drives higher greenhouse gas emissions and air pollution, thereby increasing chronic health risks.

Virginia's electricity generation heavily relies on fossil fuels, with 54% from natural gas and 4% from coal (U.S. Energy Information Administration, 2024b). Virginia imports a significant share of its electricity (36% in 2024), making it the largest net importer in the US, and because much of this power comes from coal-heavy states like West Virginia (where 86% of generation is coal-based), the state's demand shifts pollution burdens across its borders (U.S. Energy Information Administration, 2024a,c). This reliance on fossil fuels, primarily natural gas—which consists of 70–90% methane—contributes to greenhouse gas emissions and air pollutants such as sulfur dioxide, nitrogen oxide (NO_2), particulate matter (PM), and carbon dioxide (CO_2) exacerbating climate change and worsening air quality-related health risks (Cohen et al., 2017; Mailloux et al., 2022; Lelieveld et al., 2019; Vohra et al., 2021). These gaseous and particulate pollution are linked to serious health harms including respiratory and cardiovascular diseases, various cancers, neurological disorders, and conditions such as stroke, dementia, diabetes, and childhood asthma (Lelieveld et al., 2023; Peeples, 2020; Markandya and Wilkinson, 2007; Shah et al., 2015; Wang et al., 2022; Rajagopalan et al., 2018). Moreover, air pollution has been linked to reduced fertility, lower live birth rates, and increased risks of miscarriage and stillbirths, highlighting significant concerns for female reproductive health (Conforti et al., 2018).

Data centers' extensive use of diesel generators causes air pollution which may further exacerbate the health issues noted above. Virginia's data centers have more than 4,000 backup diesel generators. Used primarily during power outages, which Federal Energy Regulatory Commission (FERC) estimates to have been 6.78 h per year for the average customer in Virginia in 2022 and 2023, these generators also undergo routine testing 10–30 min per month [Joint Legislative Audit and Review Commission (JLARC), 2024], yielding an estimated number of hours in use statewide of approximately 35,000 to 51,000 h.[1] When in use, these diesel generators can emit harmful pollutants like NO2, particulate matter, and carbon monoxide (Tsai et al., 2011; Liu et al., 2005; Liang et al., 2005; Saiyasitpanich et al., 2005). Exposure to these pollutants has been associated with respiratory and cardiovascular diseases and neurological problems, particularly among older adults and children (Hesterberg et al., 2012; Peeples, 2020; Loh et al., 2007; Zhang, 2017).

Moreover, rising temperatures from climate change increase cooling demand and together with the rapid growth of data centers, add additional strain to the grid, raising the likelihood of power outages, particularly during heat waves (Do et al., 2023). Virginia has experienced increasingly frequent and severe heat waves over the past decades, with average summer temperatures rising by nearly 2 °F since 1970 (NOAA National Centers for Environmental information, 2025). Cooling degree-days have increased across all climate divisions in Virginia, rising by 11 to 25 °C days per decade over the past 60 years (First Virginia Climate Assessment, forthcoming 2025), which directly increases summer cooling demand—a key driver of data center energy use (Ruess et al., 2025). In June 2025, a record heat wave caused 828 heat-related emergency visits statewide in 4 days (Natural Resources Defense Council, 2025). The urban heat island effect, particularly pronounced in densely built regions like Northern Virginia, further increases local temperature extremes and cooling demands. These conditions heighten the energy needs of data centers, worsen air quality, and compound cardiovascular and respiratory risks, while also increasing the likelihood of power outages that impact individuals with existing health conditions.

Additionally, the reliance on diesel generators during power outages, particularly by hospitals and data centers, can worsen air pollution, further increasing health risks during these hot periods. Studies have shown that extreme heat can significantly increase cardiovascular mortality and, when combined with high PM 2.5 levels, can also elevate the risk of mortality from myocardial infarction, especially among women and the elderly (Khatana and Groeneveld, 2023; Xu et al., 2023).

Beyond air quality and health effects, data centers are also an emerging driver of climate change. U. S. data centers emitted 105 million tons of CO_2e in 2023–2024, accounting for 2.2% of national emissions (Guidi et al., 2024). While data centers currently account for a smaller share of global emissions than fossil fuel industries, their rapid growth and geographic concentration make them a rising climate and health risk. For perspective, Heede (2013) showed that just 90 fossil fuel producers

1 Calculations are based on an average annual outage of 6.78 h per customer (6.78 × 4,000 = 27,000 h) and aggregate monthly testing of 10–30 min per generator (10–30 min x 12 months x 4,000 generators = 8,000–24,000 h).

are responsible for nearly two-thirds of historic global emissions, underscoring the urgency of addressing emerging sources like data centers.

Water consumption and pollution

Data centers affect health indirectly through intensive water use and wastewater discharge associated with cooling systems, which can strain local water supplies and degrade water quality (Mytton, 2021). These changes can increase risks of water scarcity, waterborne diseases and poor maternal and infant health outcomes, with effects that may intensify over time under drought and climate stress (Currie et al., 2013; Stanke et al., 2013).

Data centers require significant resource consumption, with water playing a crucial role both directly in cooling systems and indirectly through electricity production. Globally, data centers significantly contribute to the water footprint, with projections indicating usage between 4.2 and 6.6 billion cubic meters by 2027—exceeding the annual water consumption of countries like Denmark (Li et al., 2025). In the U. S., they rank among the top 10 industrial water users, consuming roughly 513 million cubic meters in 2018 alone (Siddik et al., 2021). A medium-sized data center (15 megawatts) consumes as much water as three hospitals or two 18-hole golf courses, while hyperscale data centers (100 + megawatts)—the largest and most efficient type of public cloud facilities could use even more (Mytton, 2021; Wren, 2024; Powell, 2024). For perspective, Microsoft's data center used 700,000 liters of water to train GPT-3, while generating just one 100-word email using GPT-4 requires approximately 519 milliliters of water (Verma and Tan, 2024).

In Virginia, these pressures are particularly acute because water is already heavily allocated to thermoelectric power generation, agriculture, public supply, and industrial operations (McCarthy et al., 2022). Rapid growth in the data center sector, a 250% increase in water use over four years, now competes directly with these existing demands, intensifying stress on rivers and groundwater, particularly in warmer months [Sierra Club, n.d.; Joint Legislative Audit and Review Commission (JLARC), 2024]. This proliferation in drought-prone regions is worsening local water scarcity (S&P Global, 2025). Collectively, data centers in Northern Virginia consumed nearly 2 billion gallons (7.57 billion liters) of water in 2023—a 63% increase since 2019—underscoring how this new demand compounds longstanding pressures on Virginia's water system. Adding to these pressures, Virginia has spent much of the past decade in at least "Abnormally Dry" conditions as classified by the U. S. Drought Monitor, further straining already limited water supplies (U.S. Drought Monitor, 2024).

Beyond water quantity, data center cooling systems can affect water quality through the discharge of saline wastewater, or blowdown, from evaporative cooling towers (Siddik et al., 2021; Copley, 2022). Cooling water blowdown contaminants such as sodium, magnesium, sulfate, and potassium can contaminate groundwater supplies, posing serious health risks when their concentrations increase (Soliman et al., 2021). For example, high sulfate levels in groundwater can cause skin irritation and diarrhea, especially in infants (Miao et al., 2011). Exposure to contaminated drinking water during pregnancy has also been associated with adverse fetal outcomes, including low birth weight and preeclampsia (Currie et al., 2013; Thompson et al., 2022).

The reliance on water-scarce basins for data center operations may further worsens health risks, particularly in regions like Virginia, which is already experiencing droughts and water stress due to climate change. Drought conditions reduce water availability and flow, leading to stagnant, warm environments that promote the growth of pathogens, increasing the risk of waterborne diseases such as diarrheal illnesses, eye and ear infections, and *E. coli*, among others (Bell et al., 2018; Stanke et al., 2013). Drought has also been linked to increased wildfire risk, with downstream impacts on cardiovascular and respiratory health among children (Berman et al., 2017). In water-stressed agricultural regions, prolonged drought may additionally contribute to mental health risks, including heightened stress, anxiety, and psychological distress among affected populations (Polain et al., 2011; Berman et al., 2021).

Noise pollution

Continuous operation of cooling systems and generators produces persistent noise exposure near data centers, creating a direct environmental stressor. Short-term effects include sleep disturbance and annoyance, while long-term exposure is associated with cardiovascular, cognitive, and mental health impacts (Babisch et al., 2013; Thompson et al., 2022).

Data centers contribute to local noise pollution through their cooling systems, backup diesel generators, and other machinery (Judge, 2022). Operating 24/7, data centers in Virginia generate a persistent humming noise, described as an industrial-scale 'drone' or 'hum' similar to amplified house air conditioning, with levels ranging between 40 and 59 decibels [Joint Legislative Audit and Review Commission (JLARC), 2024]. While the U. S. Environmental Protection Agency (EPA) recommends a 24-h average outdoor noise limit of 55 dBA (day–night average) or 45 dBA indoors to protect public health (U.S. Environmental Protection Agency, 1974), data center operations in residential areas often approach or exceed these thresholds.

The health impacts of noise pollution include long-term risks such as heart disease, permanent hearing loss, and tinnitus; chronic effects such as hypertension and endocrine disruption; and acute effects like decreased sleep quality and temporary hearing changes (Babisch et al., 2013; Hammer et al., 2014). Noise pollution has also been linked with an increase in mental health concerns, such as stress-related disorders and increased annoyance, particularly in sensitive individuals (Meerlo et al., 2008; Sandrock et al., 2008). Past research has shown that noise pollution is particularly concerning for children, as exposure can lead to poor cognition (Thompson et al., 2022). For instance, studies have found that children in noisy environments, defined by the U. S. EPA as chronic exposure above 55 dBA (day–night average), exhibit poor school performance, increased stress, and behavioral issues, with noise pollution also being linked to decreased learning, lower reading comprehension, and concentration deficits (Lercher et al., 2003; Stansfeld and Clark, 2015). For children residing near data centers, the constant noise from 24/7 operations could further exacerbate these developmental and cognitive risks, potentially impacting their long-term health outcomes.

Land use changes

Large-scale land conversion for data center development alters local ecosystems and built environments, indirectly affecting health

through loss of green space, increased heat exposure, air pollution, and psychosocial stress. These effects are cumulative and long-term, with disproportionate impacts on rural and historically marginalized communities (Aerts et al., 2018; Johnson-Jennings et al., 2020).

Data centers require vast amounts of land, often converting areas near natural green spaces and agricultural lands into data center sites. Data from the Piedmont Environmental Council (2024) show that existing data centers in Northen Virginia currently occupy about 6,200 acres of land, while proposed projects would add nearly 21,000 acres, more than tripling the current footprint in Northern Virginia alone, where roughly 80% of data centers are located.

Our analysis of existing and proposed data centers in Northern Virginia found that the 152 proposed facilities are, on average, five times larger than the existing 191 data centers. The rapid data center expansions in Northern Virginia are increasingly targeting rural land near national parks and agricultural land into industrial zones, posing risks to public health. For example, Prince William County is facing its largest land-use transformation in decades, with developers targeting 2,400 acres of undeveloped land in the Rural Crescent for data center construction. This area contains two federally protected national parks, Prince William Forest National Park and Manassas Battlefield National Park, which together attract over a million visitors annually (Regelbrugge, 2022). Moreover, over 100 additional projects are currently planned in Northern Virginia, collectively adding roughly 180 million square feet of data center space, equivalent in area to 1,000 Walmart Supercenters (Sierra Club, n.d.). Moreover, residents have raised concerns about vehicle traffic from data center construction, citing road damage, congestion, and blocked access for school buses and emergency vehicles [Joint Legislative Audit and Review Commission (JLARC), 2024]. This can increase local air pollution (e.g., particulate matter and diesel exhaust), indirectly contributing to respiratory and cardiovascular health risks, especially among vulnerable populations.

This rapid transformation threatens rural populations, contributing to increased psychological stress, exacerbated by limited healthcare access. The loss of farmland can disrupt local economies and erode cultural and historical ties, particularly for Indigenous people and farmers who see the land as central to their identity and psychological well-being (Johnson-Jennings et al., 2020; Reed and Claunch, 2020; Yazd et al., 2019; Brigance et al., 2018).

Importantly, the proximity of data centers to green spaces degrades ecosystems by replacing vegetation with impervious surfaces, fragmenting habitats, and disrupting hydrology, thus reducing their capacity to filter air, regulate temperature, and sustain biodiversity [Joint Legislative Audit and Review Commission (JLARC), 2024; Nguyen et al., 2021]. Combined with air, water, and noise pollution from data centers, this ecological degradation can weaken green spaces' protective functions and increase health risks in nearby communities. Conversely, green spaces are linked to health benefits by reducing air pollution and the urban heat island effect, encouraging physical activity, and enhancing mental health, contributing to overall better health and increased life expectancy (Nowak et al., 2006; Jones, 2018; Shanahan et al., 2016). For example, increased tree cover has been shown to enhance natural air pollutant absorption, reducing the incidence of respiratory illnesses like asthma, Chronic Obstructive Pulmonary Disease, and cardiovascular diseases, especially among children (Liang et al., 2019; World Health Organization, 2016; Ruokolainen et al., 2015). Past research has also emphasized the importance of green spaces in improving the health of pregnant women and people with existing illnesses (Dzhambov et al., 2014; Ray and Jakubec, 2014). Research also emphasizes that proximity to green spaces is linked to better mental well-being and social support (Wigand et al., 2022; Aerts et al., 2018).

Economic harms and social inequality

Rising electricity demand from data centers places upward pressure on energy prices, indirectly affecting health through increased energy insecurity. Short-term impacts include heat- and cold-related illness due to inadequate household energy access, while long-term effects include chronic stress, food insecurity, and widening health disparities (Ballesteros-Arjona et al., 2022).

While data centers generate notable economic benefits, these gains are often concentrated among a select few, neglecting the broader public. Data centers are significant consumers of electricity, substantially increasing local energy demand and associated costs (Pipkin, 2024). According to Goldman Sachs (2024) Research, the data center's global power demand is projected to grow by 160% by 2030. In Virginia, the current energy need of data centers is estimated at about 5,050 MW of load and 11,000 GWh annually (Howland, 2024). Dominion Energy anticipates that Virginia data centers will be the primary driver of increased energy demand over the next 15 years, forecasting a need for about 13.3 gigawatts by 2038 (Vogelsong, 2024). While these data centers currently pay the full cost of service under existing rate structures, their rising energy demand strains Virginia's grid and could raise typical residential bills by $14–33 per month by 2040 [Joint Legislative Audit and Review Commission (JLARC), 2024]. Wholesale electricity prices near major data center hubs have already increased sharply, rising by up to 267% over the past 5 years (Bloomberg News, 2025). These rising energy costs disproportionately affect lower-income households and marginalized communities, exacerbating existing social inequality and health disparities (Ballesteros-Arjona et al., 2022).

Past studies have shown that energy poverty forces vulnerable families to choose between paying for energy and meeting essential needs such as food, healthcare, and education (Pitt et al., 2022; Riva et al., 2023; Harrington et al., 2005). Because climate change is increasing the frequency of hot days, there is also a rising demand for residential cooling systems like air conditioning units (Colelli et al., 2023; Sherman et al., 2022). Rising energy costs may prevent low-income households from accessing adequate cooling, raising the risk of heat-related illnesses, such as heat exhaustion and heat stroke, and worsening pre-existing conditions (Pitt et al., 2022; Hernández, 2013). Moreover, some low-income families may prioritize cooling units over purchasing healthy food, resulting in malnutrition and food insecurity, particularly among children, which can negatively affect their physical growth, cognitive development, and academic performance (Frank et al., 2006; Cook et al., 2008).

Conversely, on colder days, inadequate heating can increase health risks such as respiratory conditions and cardiovascular stress, including heart attacks and strokes (Thomson et al., 2017). Elevated energy costs can also contribute to poor mental health among adults, leading to increased anxiety, stress, and depression (Harrington et al., 2005; Oliveras et al., 2020). Therefore, addressing the rising energy demands and costs associated with data centers is critical to mitigating

social inequality and safeguarding the health and well-being of vulnerable communities (Figure 2).

Potential strategies to mitigate the health harms of data centers

The rapid expansion of data centers, fueled by the rising demand for digital infrastructure, poses serious health risks that require coordinated mitigation across energy, water, noise, land use, governance and communication domains. The strategies below are organized by thematic risk pathways identified earlier in the paper and distinguish between policy-level, industry-level, and community-level interventions.

Energy-related strategies (policy and industry level)

Transitioning from fossil fuels to renewable energy for data centers can substantially reduce air pollution and related health issues, as well as lower energy costs. Ortiz et al. (2023) estimate that shifting to renewables for electricity production in Virginia could prevent deaths, reduce hospital admissions, decrease work-loss days, and save up to $350 million annually in health costs by 2045. Several technology companies have already demonstrated the feasibility of such transitions. For example, Microsoft's Project Natick tested underwater data centers powered by offshore renewables, showing improved reliability and reduced environmental footprint (Roach, 2020). In 2024, Google powered its data centers with 100% renewables and added 2.5 GW of clean energy, cutting emissions by 12% despite a 27% rise in electricity use (Google, 2024). These examples highlight the potential for cleaner and healthier digital infrastructure.

Water use and water quality strategies (policy and industry level)

Beyond cutting emissions, reducing data centers' water consumption and water contamination is critical to mitigating public health. Using non-potable water, like Amazon's use of recycled cooling water in Virginia, can ease pressure on drinking water supplies. Targeted cooling methods, such as shifting from whole-room to focused server-row cooling, can cut water use and boost energy

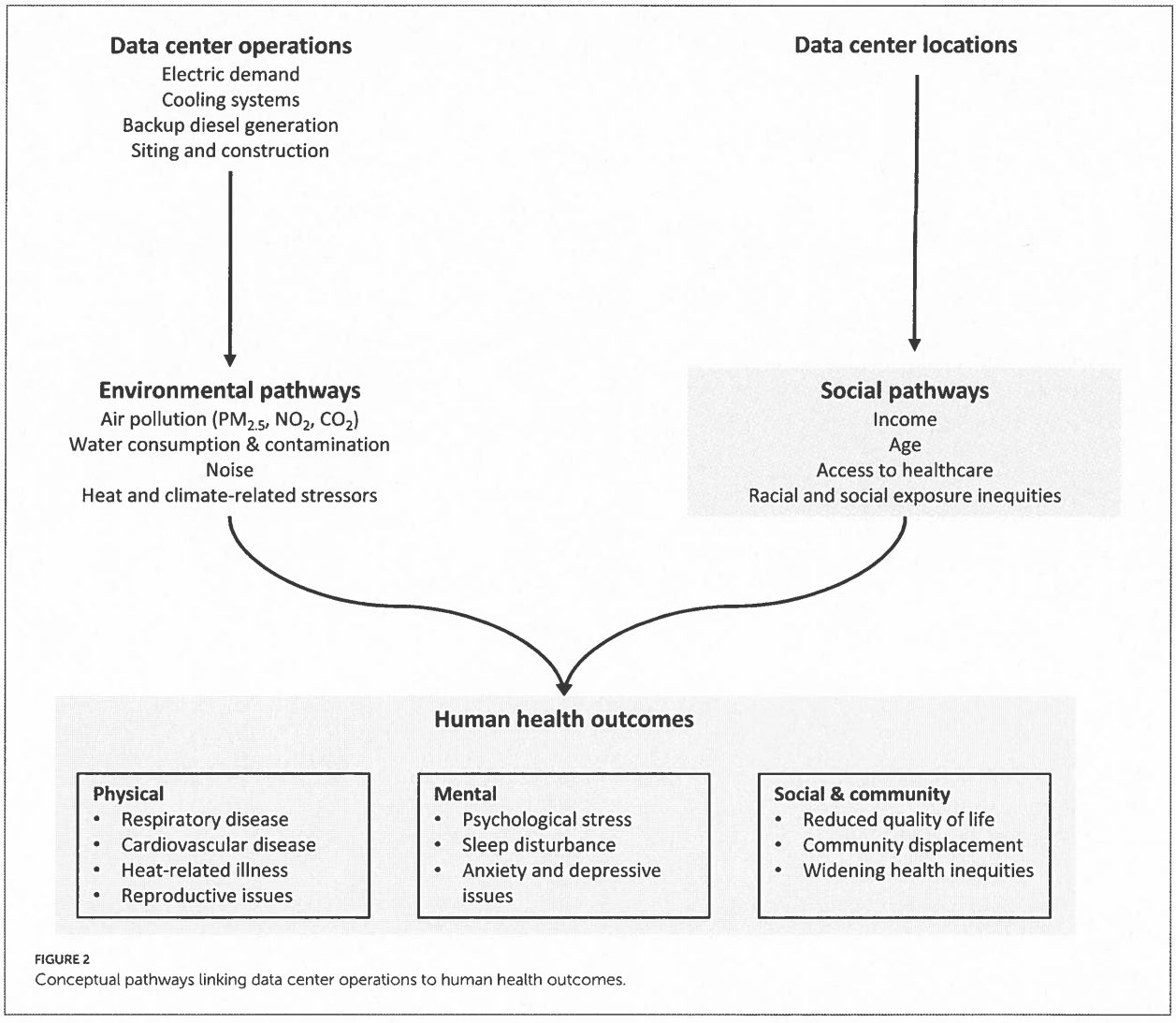


FIGURE 2
Conceptual pathways linking data center operations to human health outcomes.

efficiency by 29% (Moazamigoodarzi et al., 2019). Advanced water recycling and filtration, such as nanofiltration and reverse osmosis, can prevent contamination (see Envirogen, 2023). Moreover, to drive industry-wide change, local governments should enforce water limits during droughts and mandate data centers to adopt alternative cooling methods, such as air cooling, closed-loop systems, or hybrid models with water-side economizers to minimize freshwater dependence and reduce water contamination health risks (Silva-Llanca et al., 2023; Wang et al., 2018). Currently, however, Virginia data centers are not subject to direct regulations on their energy efficiency, emissions, or water use, relying only on general air, stormwater, and wetland permits [Joint Legislative Audit and Review Commission (JLARC), 2024].

Noise and land-use strategies (policy and community level)

Further, mitigating noise pollution is essential, especially in residential areas near data centers. Effective strategies can include locating data centers away from densely populated regions and implementing noise reduction measures such as acoustic treatments and green zoning. Proactive site selection and thoughtful design, considering urban layout and building density, can significantly reduce noise-related health issues (Chan, 2023; Dzhambov and Dimitrova, 2014). For example, a Leesburg Virginia data center reduced noise pollution by re-engineering fan mounts and cutting low-frequency tonal noise by 20% (Compass Datacenters, 2024). Additionally, to limit adverse impacts from land use changes, policymakers should mandate responsible site selection and enforce zoning regulations that prioritize building data centers on existing industrial sites. Engaging local communities through public hearings and transparent decision-making processes can also help address residents' concerns about environmental and health consequences.

Equity and governance strategies (policy level)

Moreover, rising energy costs associated with data center operations disproportionately burden low-income households. When demand exceeds supply, Virginia follows PJM (originally the Pennsylvania–New Jersey–Maryland Interconnection) curtailment rules prioritizing homes and critical services, but no current policy requires data centers to switch to backup power [Joint Legislative Audit and Review Commission (JLARC), 2024], increasing the risk of AC interruptions and related health issues during heat waves for heat-sensitive people. Policymakers should also establish equitable energy pricing by introducing a dedicated data center rate class to shield vulnerable communities from escalating costs. Utility rates, which are currently adjusted every one to two years, need to be revised more frequently to accurately reflect cost growth [Joint Legislative Audit and Review Commission (JLARC), 2024]. Promoting a diversified energy portfolio, such as integrating renewable energy sources can help stabilize electricity prices and reduce dependency on fossil fuels. Additionally, local governments should mandate Community Benefit Agreements to ensure economic benefits from data centers directly support vulnerable populations through infrastructure enhancements, workforce training, and community reinvestment.

Health communication and public engagement strategies (policy and community level)

Finally, raising awareness about the health impacts of data centers is crucial for informed public and governmental decision-making. While community opposition to data centers, often labeled as NIMBYism (Not in My Backyard), frequently centers around concerns about noise, air and water pollution, these concerns reflect legitimate public health risks that demand policy attention (see Paullin, 2025; Paddison and Marsh, 2025). Through strategic health communication, public understanding can be improved, and government action encouraged toward health-focused regulation and more sustainable data center practices. Importantly, engaging trusted stakeholders, such as healthcare professionals, policymakers, and other opinion leaders, is key to this effort (Maibach et al., 2007; Campbell et al., 2025). Primary care doctors, trusted by 69% of American voters for information on global warming (Campbell et al., 2023), are particularly well-positioned to address public concerns about data centers, which raise similar health risks. Simple, clear, and repeated messaging from physicians and other health professionals can build credibility, support action-oriented advocacy, and help drive policy change (Maibach et al., 2014).

Limitations and possible future research directions

While this paper underscores the substantial health risks associated with data centers, it is primarily an exploratory assessment. As such, some limitations should be acknowledged.

First, there is the lack of data center specific epidemiological evidence directly linking data center operations to measured health outcomes. Most existing research examines related environmental exposures, such as air pollution, water use, noise, and heat, without attributing data centers as a distinct source. Second, attributing observed health impacts specifically to data centers is challenging in regions such as Northern Virginia, where multiple industrial, transportation, and power-generation sources coexist. Disentangling data center related exposures from other regional contributors requires high-resolution environmental monitoring and spatially explicit exposure assessment, which remains limited given the novelty of data centers as a public health research domain.

Third, this review also relies on grey literature, reflecting the emerging nature of the topic and the current scarcity of peer-reviewed studies focused explicitly on data centers and health impacts. Finally, this assessment is conceptual rather than quantitative and identifies plausible exposure pathways and health risks without estimating effect sizes or population-level disease burdens.

Future research should conduct quantitative, interdisciplinary studies that integrate physical sciences, engineering, and public health to directly measure emissions, exposures, and health outcomes linked to data center operations. Such work could assess pollutant emissions from increased electricity demand and their respiratory and cardiovascular impacts, as well as unresolved questions related to water demand, regional water management, noise exposure, and climate-related environmental and health effects. Moreover, expanding analyses beyond Virginia to other regions experiencing rapid data center growth would enable comparative assessment across regulatory and geographic contexts and help refine mitigation strategies. In addition, future studies should examine the role of trusted opinion leaders such as healthcare professionals, policymakers, and government officials and effective communication strategies, including message framing, to enhance issue awareness and positively influence public attitudes and behaviors.

Conclusion

As data centers expand, both existing and proposed facilities pose significant health and environmental challenges that demand urgent action. Policymakers must mitigate harms from operational data centers by enforcing stricter environmental regulations, monitoring emissions, and mandating mitigation measures to protect surrounding communities. Transparency is essential. Residents have the right to know the risks associated with data centers and should be actively informed about industry practices. Conversely, developers must engage the public to address their concerns, especially as opposition grows under NIMBY movements. Moreover, for proposed new data centers, public input must guide decision-making—do residents want them, and if so, under what conditions? Developers must adhere to clear design and operational safeguards, including renewable energy integration, water conservation, noise pollution control measures, and responsible land siting. By prioritizing sustainability, data centers can achieve responsible growth without compromising public health.

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HOW dBA & dBC WORK TOGETHER

Understanding overall loudness (dBA) and low-frequency content (dBC) for fair, science-based noise decisions.

dBA = OVERALL LOUDNESS

A-weighting matches how the human ear hears. Used for most noise rules and to measure how loud something sounds.

dBC = LOW-FREQUENCY CONTENT

C-weighting is flatter and captures more low-frequency (bass, hum, throb) energy that dBA can understate.

WHY THIS MATTERS

- People can notice a hum or throb even when dBA numbers look "okay."
- Low-frequency sound travels farther and can be felt as well as heard.
- Using both dBA and dBC provides a more complete picture of potential impact.

HOW dBA INCREASES ARE PERCEIVED (Compared to Ambient)

Increase in dBA ($L_{A,project} - L_{A90,ambient}$)	Perceived Change (How It Sounds)	Perceived Loudness (Compared to Original)	What It Means
0 dB	No change	1× as loud	Same as before
+3 dB	Barely noticeable	1.2× as loud	Small change
+5 dB	Clearly noticeable	1.4× as loud	Threshold where most people notice
+10 dB	~2× as loud	2× as loud	Major, obvious increase
+15 dB	~3× as loud	3× as loud	Very intrusive
+20 dB	~4× as loud	4× as loud	Very loud
+25 dB	~5–6× as loud	5–6× as loud	Severe; difficult to ignore
+30 dB	~8× as loud	8× as loud	Extremely disruptive

Approximate human perception. Loudness does not increase linearly with dB.

LOW-FREQUENCY SCREENING: dBC – dBA GAP

dBC – dBA Gap	What It Suggests	Practical Interpretation
0 – 9 dB	Little sign of dominant low-frequency content	Mostly ordinary broadband noise
10 – 14 dB	Borderline / worth watching	Some bass or hum character may be present
15 – 19 dB	Common screening flag	Many methods use this as threshold to trigger further low-frequency review
20+ dB	Strong low-frequency warning sign	Often indicates unbalanced spectrum and potential low-frequency annoyance

If the dBC–dBA gap is ≥15 dB, or ≥20 dB, a detailed low-frequency assessment (e.g., 1/3-octave analysis per methods like DEFRA NANR45) is recommended.

CONTEXT MATTERS: RURAL (QUIET) vs. URBAN (NOISY)

RURAL / QUIET SETTING

- Background noise is low (often 25–40 dBA L90 at night)
- Small increases are more noticeable
- Steady sounds and low-frequency hums stand out
- +5 dBA above ambient can already be intrusive
- Large dBC–dBA gaps (15–20+ dB) increase the chance of hum, throb, or pressure complaints

vs.

URBAN / NOISY SETTING

- Background noise is higher (often 50–70+ dBA L90 at night)
- More masking from traffic and activity
- Same +5 dBA increase may blend in more
- Low-frequency can still stand out, especially at night or indoors
- Large dBC–dBA gaps can still cause annoyance or vibration sensations

COMBINED dBA + dBC SCREENING FORMULA

1) Standard Loudness Intrusion
(How much louder than ambient)

$$\Delta dBA = L_{A,project} - L_{A90,ambient}$$

2) Low-Frequency Gap
(Screen for bass / hum dominance)

$$LF\ Gap = dBC - dBA$$

3) Combined Screening Rule
(Trigger for concern / further review)

CONCERN if:
$\Delta dBA > +5$ dB **OR** $(dBC - dBA) \geq 15$ to 20 dB

If BOTH occur together → strong potential for low-frequency annoyance.

How to Use

Measure dBA and dBC at the property line. Compare to ambient (LA90). Apply the formula and consider the context (rural vs. urban).

EXAMPLE SCENARIOS (Illustrative Only)

EXAMPLE A: RURAL SITE

Ambient Night (L_{A90})	Project Level (dBA)	Measured dBC	Results
32 dBA	37 dBA	55 dBC	ΔdBA = +5 dB (clearly noticeable) dBC–dBA = 18 dB (flagged) Quiet setting + large gap → likely noticeable hum complaint

EXAMPLE B: URBAN SITE

Ambient Night (L_{A90})	Project Level (dBA)	Measured dBC	Results
52 dBA	57 dBA	66 dBC	ΔdBA = +5 dB (clearly noticeable) dBC–dBA = 9 dB (not flagged) Noisy setting + small gap → less likely to be described as hum

KEY TAKEAWAYS

- +5 dBA above ambient is the tipping point for most people.
- dBC–dBA ≥15 dB is a screening flag for low-frequency content.
- Larger gaps (≥20 dB) indicate stronger potential for hum, throb, or pressure.
- The same +5 dBA can feel very different depending on the low-frequency content and the background environment.

COMMON LOW-FREQUENCY DESCRIPTIONS

Hum · Drone · Throb · Rumble · Pressure

REFERENCE METHODS

These concepts are consistent with recognized guidance including:

- EPA Noise Policy for Industry (2017)
- WHO Environmental Noise Guidelines
- DEFRA NANR45 (Low Frequency Noise Evaluation) and related technical literature.

This chart is a screening tool for planning and impact assessment. Detailed studies may be required for specific projects or complaints.

Willson Family

Noise Concerns and Recommendations

Mountain Road Technology Park May 10, 2026

OVERVIEW

The Willson Family owns 220 acres along the Grassy Creek Boundary of the project. The family has owned this property for almost 200 years.

Thru several discussions with staff and the developer we have resolved many of our issues surrounding the project but not our major one.

Our most important concern is Noise and the decades old methodology being used to measure the true community impact on the existing local environment, health and future land valuation.

These concerns are substantiated and confirmed by a Feb 2026 study "Health Implications of the of the Rapid Rise of Data Centers in Virginia" This study is based on findings of Virginia Data Center Alley which includes Loudoun, Prince William and Fairfax counties.

The study research argues that despite past efforts by these counties and others, data centers still pose significant health and environmental challenges that can be at least partially mitigated through improved planning and design. It states policy makers must mitigate harms by enforcing stricter environmental regulations, monitoring emissions and mandating mitigating measures to protect the surrounding community. The study was produced by two PhD's and others from George Mason University and extensively documented and vetted. See attached complete study.

The study indicates traditional fixed noise limits used in the past which many are based on EPA noise guidelines from 1974 with some modifications are not mitigating all the health issues now surfacing with the potential for more surely to come in the future.

There is an important shift nationally in how to evaluate noise from data centers and there continuous 7/24 noise. The shift is toward standards that reflects a more balanced, healthier and community-focused approach. Noise and its effects is one of the most common complaints voiced by residents near data centers.

Historically, noise has been regulated using fixed limits, such as a maximum decibel level for day and night. But this approach has clear limitations. It does not account for whether a project is located in a quiet rural setting or a busy urban area, and it often fails to reflect how people actually experience sound in their daily lives. Traditional

approaches fail to identify what was the baseline/Ambient noise level prior to construction along adjoining property lines.

Rural areas are found to be under protected and urban areas overly restricted. Most fixed limits monitor only (dBA) high frequency noise levels and not dBC low frequency noise which is associated with consistent HUM a serious common complaint with Data Centers.

The ambient noise methodology addresses this by measuring the existing background sound—the baseline environment before construction—and then limiting how much a new project can increase that level during the day and at night. In simple terms, it **shifts the focus from absolute limits (52/57 dBA) to relative impact.**

Sound perception is highly sensitive. A 3-decibel increase is just noticeable. At 5 decibels, people begin to perceive a clear change, and at 10 decibels, the sound is perceived as twice as loud. The tipping point for most people is an increase of 5 dBA. (See Attached Chart On dBA and dBC)

At the center of the ambient approach is an established noise metric call L90. L90 represents the sound level that is present 90 percent of the time at points on property lines, filtering out temporary noises like passing cars. This allows us to capture the true, steady background sound—the sound people actually live with before construction.

This is particularly important for data centers, which generate continuous high and low-frequency noise such as a persistent hum. Low frequency sound can travel longer distances than high frequency and is capable of penetrating buildings and being physically felt. Low frequency sound can create noticeable and harmful impacts—even when traditional fixed limit measurements suggest compliance.

Because of this some suggest today limiting increases to no more than 3 dBA at night and 5 dBA during the day while also using both dBA (high freq.) and dBC (low freq.) measurements to capture the full frequency spectrum, including a low-frequency noise limit that can otherwise be missed.

Low frequency screening can be accomplished by taking the dBA level after construction (not fixed limit as proffered)) and subtracting it from the dBC level after construction to establish the low frequency Gap. LF Gap = dBC-dBA. A Gap of 10-14 is borderline and 15-20 should trigger a flag for more low frequency review as this is the range where complaints and health issues escalate. With this in mind I would strongly suggest the county establish at a minimum the Low Frequency GAP be = or < 15 dB not the 20 dB currently proffered.

This Gap must be based on current ambient noise level today not the current fixed limit as currently proffered. Some simple math would show that using the fixed limits of 52

dBA night and 57dBA day could leave the door open to sound increases over the current environment of 2-4 times! This is based on data that shows rural background noise typically ranges from 25-40 dBA L90 at night. Even at the highest level for night 40+3dBA and at the currently proffered 72 dBC for night the GAP would be 72-43=29! This number would only get larger if actual dBA for night at property lines before construction was lower. This result would unquestionably generate numerous serious community complaints and potential health issues as attached 2026 study indicates.

The referenced 2026 paper states continuous operation of cooling systems and generators produces persistent noise exposure near data centers creating a direct environmental stressor. Short term effects include sleep disturbance and annoyance while long term exposure is associated with cardiovascular, cognitive and mental health impacts.

There is a core policy principle behind the suggested approach of measuring the existing noise level today preconstruction and the county establishing realistic attainable increase limits for high and low frequency. **Do not change the character of the existing acoustic environment or create any potential health hazards** at the same time being able to execute on the Small Area Plan for Mountain Road.

New development should blend into the existing soundscape—not dominate it. It should protect quiet environments, especially at night, and minimize the introduction of continuous, perceptible noise. There are numerous techniques that the applicant can use today to meet and exceed the most rigorous sound limits which are attached. Lenient municipal restrictions and cost are the driving factors for a developer not to mitigate harmful noise as much as possible in construction. It is surely not studies reflecting high levels of dBA and dBC have minimal health or quality of life impacts.

The Day time and Night time noise restrictions hours should blend into the existing rural community not change it. The day and night hours should be the same as the proffered hours for non-generator and generator run times Monday thru Friday and weekends. Day time 8AM – 4PM (no weekends) not 7AM -10PM Monday thru Friday. Nighttime restrictions hours would be 4PM- 8AM Monday thru Friday and all weekend till following Monday at 8AM This is not how it is currently proffered.

Hanover County has an opportunity to benefit from the experience of other municipalities and new health and environmental studies starting to emerge now concerning the impacts of data centers only not as currently proffered.

There will only be more innovations in mechanical equipment that surface as technology advances and municipalities increase restrictions over the next 3-5 years before applicant's construction start date which they can benefit from. Another point to remember is you can always relax your restrictions later if warranted but hard to

increase them contractually. Leave your options open as the next 3-5 years of data center data and as new studies surface. Let them design noise mitigation upfront and not rely on potential retrofits after completion.

In closing, the shift toward ambient-based standards and the L90 metric represents a smarter, more balanced approach—one that allows for growth and development while preserving the quality of life in surrounding communities. It is site specific versus a one size fits all approach when addressing data center noise limits. Importantly, this is not a new or experimental concept. L90 is a valid established metric.

The proposed Mountain Road Technology Park at 900 MW puts this site in the upper 1 % in size of the current approximately 3,000 data centers in operation today nationwide. This site represents a huge potential noise source with over 300 approx. 100,000 lb. generators and 900 chillers.

My family would like to see the county select one of two options as it pertains to noise restrictions on the mountain Road Technology Park:

Option 1 For data centers use Ambient methodology using the L90 metric and establish reasonable dBA increases for day and night as suggested and lower Low Frequency Gap from 20 dB to less than 15 dB and the day and night hours suggested above.

Options 2 Worst case and not preferred. Lower your existing noise ordinance fixed level limits to better reflect a rural environment. The goal being to keep the perceived noise increase below 2X the existing noise level preconstruction. Maybe 42/47 at a minimum.

Virginia is in a transition phase regarding data center noise regulations. The general assembly has not yet mandated L90 based standards, but there is a clear movement toward ambient based framework. JLARC has formally backed stronger preconstruction sound modeling, better local authority and the use of low frequency noise metrics which is not measured in traditional ordinances.

Modern data centers operate continuously and relay on extensive mechanical equipment such as cooling systems, generators and server fans that generate persistent environmental noise. Managing and accessing this noise is essential for regulatory compliance, community relations and site planning. The restrictions made today effect multiply future generations health, quality of life and land valuation and warrants very careful consideration.

Hanover County has an opportunity to benefit from the experience of other municipalities and new health and environmental studies and to set a new standard that protects and allows growth.

Frank Willson

Attachments:

-Chart How dBA and dBC work together

-Chart How Data Centers can Reduce dBA and dBC

-Ambient Noise/L90 Methodology for Data Center Perception and Measurement

-Recommended Noise Proffers for Mountain Road Technology Park

-Reasons to Support Strict Sound Proffers

-Community and Quality of Life Impacts

-Health Implications of the rapid rise of data centers in Virginia

HOW dBA & dBC WORK TOGETHER

Understanding overall loudness (dBA) and low-frequency content (dBC) for fair, science-based noise decisions.

dBA = OVERALL LOUDNESS

A-weighting matches how the human ear hears. Used for most noise rules and to measure how loud something sounds.

dBC = LOW-FREQUENCY CONTENT

C-weighting is flatter and captures more low-frequency (bass, hum, throb) energy that dBA can understate.

WHY THIS MATTERS

- People can notice a hum or throb even when dBA numbers look "okay."
- Low-frequency sound travels farther and can be felt as well as heard.
- Using both dBA and dBC provides a more complete picture of potential impact.

HOW dBA INCREASES ARE PERCEIVED (Compared to Ambient)

Increase in dBA ($L_{A,project} - L_{A90,ambient}$)	Perceived Change (How It Sounds)	Perceived Loudness (Compared to Original)	What It Means
0 dB	No change	1× as loud	Same as before
+3 dB	Barely noticeable	1.2× as loud	Small change
+5 dB	Clearly noticeable	1.4× as loud	Threshold where most people notice
+10 dB	~2× as loud	2× as loud	Major, obvious increase
+15 dB	~3× as loud	3× as loud	Very intrusive
+20 dB	~4× as loud	4× as loud	Very loud
+25 dB	~5–6× as loud	5–6× as loud	Severe, difficult to ignore
+30 dB	~8× as loud	8× as loud	Extremely disruptive

Approximate human perception. Loudness does not increase linearly with dB.

LOW-FREQUENCY SCREENING: dBC – dBA GAP

dBC – dBA Gap	What It Suggests	Practical Interpretation
0 – 9 dB	Little sign of dominant low-frequency content	Mostly ordinary broadband noise
10 – 14 dB	Borderline / worth watching	Some bass or hum character may be present
15 – 19 dB	Common screening flag	Many methods use this as threshold to trigger further low-frequency review
20+ dB	Strong low-frequency warning sign	Often indicates unbalanced spectrum and potential low-frequency annoyance

If the dBC–dBA gap is ≥15 dB, or ≥20 dB, a detailed low-frequency assessment (e.g., 1/3-octave analysis per methods like DEFRA NANR45) is recommended.

CONTEXT MATTERS: RURAL (QUIET) vs. URBAN (NOISY)

RURAL / QUIET SETTING

- Background noise is low (often 25–40 dBA L90 at night)
- Small increases are more noticeable
- Steady sounds and low-frequency hums stand out
- +5 dBA above ambient can already be intrusive
- Large dBC–dBA gaps (15–20+ dB) increase the chance of hum, throb, or pressure complaints

vs.

URBAN / NOISY SETTING

- Background noise is higher (often 50–70+ dBA L90 at night)
- More masking from traffic and activity
- Same +5 dBA increase may blend in more
- Low-frequency can still stand out, especially at night or indoors
- Large dBC–dBA gaps can still cause annoyance or vibration sensations

COMBINED dBA + dBC SCREENING FORMULA

1) Standard Loudness Intrusion
(How much louder than ambient)

$$\Delta dBA = L_{A,project} - L_{A90,ambient}$$

2) Low-Frequency Gap
(Screen for bass / hum dominance)

$$LF\ Gap = dBC - dBA$$

3) Combined Screening Rule
(Trigger for concern / further review)

CONCERN if:
$\Delta dBA > +5$ dB **OR** $(dBC - dBA) \geq 15$ to 20 dB

If BOTH occur together → strong potential for low-frequency annoyance.

How to Use

Measure dBA and dBC at the property line. Compare to ambient (LA90). Apply the formula and consider the context (rural vs. urban).

EXAMPLE SCENARIOS (Illustrative Only)

EXAMPLE A: RURAL SITE

Ambient Night (L_{A90})	Project Level (dBA)	Measured dBC	Results
32 dBA	37 dBA	55 dBC	ΔdBA = +5 dB (clearly noticeable) dBC–dBA = 18 dB (flagged) Quiet setting + large gap → likely noticeable hum complaint

EXAMPLE B: URBAN SITE

Ambient Night (L_{A90})	Project Level (dBA)	Measured dBC	Results
52 dBA	57 dBA	66 dBC	ΔdBA = +5 dB (clearly noticeable) dBC–dBA = 9 dB (not flagged) Noisy setting + small gap → less likely to be described as hum

KEY TAKEAWAYS

- +5 dBA above ambient is the tipping point for most people.
- dBC–dBA ≥15 dB is a screening flag for low-frequency content.
- Larger gaps (≥20 dB) indicate stronger potential for hum, throb, or pressure.
- The same +5 dBA can feel very different depending on the low-frequency content and the background environment.

COMMON LOW-FREQUENCY DESCRIPTIONS

Hum · Drone · Throb · Rumble · Pressure

REFERENCE METHODS

These concepts are consistent with recognized guidance including:

- EPA Noise Policy for Industry (2017)
- WHO Environmental Noise Guidelines
- DEFRA NANR45 (Low Frequency Noise Evaluation) and related technical literature.

This chart is a screening tool for planning and impact assessment. Detailed studies may be required for specific projects or complaints.

DATA CENTER NOISE CONTROL

STARTING POINT	~95 dBA Generator Source
GOAL	Minimize property line impact while preserving ambient conditions
CORE STRATEGY	Layered mitigation + distance + L90 alignment

dBA REDUCTION TOOLKIT

Measure	Reduction
Acoustic Enclosure	10–20 dBA
Exhaust Silencer	15–30 dBA
Intake Silencer	5–15 dBA
Barrier Walls	5–15 dBA
Layout / Shielding	5–12 dBA
Distance (doubling)	≈ 5–6 dBA

LOW-FREQUENCY (dBC) CONTROL

Measure	Effect
Heavy Enclosures	5–10 dB LF
Tuned Silencers	5–15 dB
Vibration Isolation	High Impact
Low-RPM Equipment	Moderate
Spacing / Phasing	Moderate
Distance	Effective (slower decay)

dBC – dBA DIFFERENTIAL

Differential	Interpretation
< 10 dB	Minimal concern
10 – 20 dB	Noticeable low-frequency
≥ 15 dB	Red Flag
≥ 20 dB	Problem zone – hum/vibration complaints likely

Ambient Noise Methodology Using the L90 Metric for Data Center Noise Perception and Measurement.

Because fixed dBA limits are increasingly viewed as inadequate Virginia is in a transition phase regarding date center noise regulations. The general assemble has not yet mandated L90 based standards, but there is a clear movement toward ambient based framework. JLARC has formally backed stronger preconstruction sound modeling, better local authority and the use of low frequency noise metrics which is not measured by traditional dBA only methodology.

Modern data centers operate continuously and rely on extensive mechanical equipment- such as cooling systems, generators, and server fans- that generate persistently environmental noise. Managing and accessing this noise is essential for regulatory compliance, community relations, and site planning.

What is Ambient Noise Methodology using L90 Metric?

1. Ambient Noise Definition

Ambient noise is the baseline sound environment at a location, excluding temporary or unusual events, representing typical background conditions.

2. Ambient Noise Methodology

Instead of using fixed limits (e.g., 50 dBA), the ambient method sets allowable noise based on existing conditions:
"Project noise cannot increase more than X decibels above ambient levels."

Why it matters:
- Accounts for rural vs urban differences
- Protects quiet nighttime environments
- Reflects how humans perceive change in sound

3. L90 Metric

L90 represents the steady background noise level—the sound level present 90% of the time—filtering out short-term spikes such as passing cars or sudden noises.

4. Why L90 is Used for Ambient

L90 captures consistent background conditions rather than temporary noise events, making it the most reliable measure of true ambient sound.

5. Why This Matters for Data Centers

Data centers generate continuous and often low-frequency noise. Using L90 ensures that baseline conditions are not overstated and that subtle but persistent impacts are properly evaluated.

6. Human Perception of Loudness (Decibel Scale)

Sound levels are measured on a logarithmic scale. Small numerical increases can result in significant perceived changes:

- +3 dB: Just noticeable
- +5 dB: Clearly noticeable (complaints begin)
- +10 dB: Perceived as twice as loud
- +15–20 dB: Highly intrusive

7. dBA vs dBC (Frequency Weighting)

dBA emphasizes mid-to-high frequencies aligned with human hearing, while dBC captures the full sound spectrum, including low-frequency energy. Data centers often generate low-frequency noise (generators, transformers) that may not be fully captured by dBA measurements.

8. Low-Frequency Noise and Community Impact

Low-frequency noise travels farther, penetrates structures, and can be perceived as a hum or pressure sensation.

The difference between dBC and dBA is used as a screening tool:

- <10 dB: Minimal concern
- 10–20 dB: Noticeable
- ≥15 dB: Likely complaint zone

9. Policy Implications

Reliance solely on dBA can underestimate actual community impact.

Recommended practices include:

- Use both dBA and dBC metrics
- Limit increases to ≤3 dBA at night
- Flag low-frequency issues when dBC - dBA ≥ 15 dB

10. Why Fixed dBA Limits Are Increasingly Viewed as Inadequate

Fixed dBA limits do not fully reflect real-world noise impacts. Key limitations include:

1. Lack of sensitivity to low-frequency noise (misses hum/rumble)
2. Does not account for rural vs urban baseline differences
3. Can appear compliant while still causing community disturbance
4. Does not reflect human perception of changes (relative increases matter more)
5. Can be too lenient in quiet areas (allowing large increases)
6. Can be overly restrictive in already noisy environments
7. Fails to address cumulative and continuous noise sources like data centers

11. Why L90 is Used

L90 captures consistent background conditions rather than temporary noise.

Additional Considerations:

- L90 is not a new or experimental metric; it is a well-established standard in environmental acoustics.
- It is widely used by regulatory and technical bodies, including the U.S. Environmental Protection Agency (EPA) and international standards organizations such as ISO.
- L90 is a proven and accepted methodology used in transportation noise studies, environmental impact assessments, and community noise regulation.
- L90 itself is a statistical descriptor of sound levels and can be applied to both dBA and dBC measurements, meaning it can reflect both high-frequency and low-frequency noise when paired with appropriate weighting.

12. Core Policy Premise Behind Ambient Methodology (L90)

-Do not change the character of the existing acoustic environment.

-New development should blend into the existing soundscape, not dominate it.

-Noise should be evaluated relative to ambient conditions, not fixed thresholds.

-Prevent introduction of continuous, perceptible mechanical noise (e.g., hum).

-Protect rural and low-noise environments from disproportionate impact.

-Focus on long-term, steady-state noise rather than short-term peaks.

-Ensure compatibility between industrial uses and surrounding community

-Maintain nighttime quiet conditions when human sensitivity to noise is highest

Noise Methodology Recommendations

Mountain Road Technology Park

May 10 , 2026

Baseline Ambient night noise level acquired for all project property lines preconstruction.

-Performed 10pm - 7am

-Test Length 72 hr.

-Performed winter months vs. summer (Dec., Jan., Feb.)

Insect noise, frogs etc... can skew results especially in creek and swamp areas. This is the industry suggested study months.

Should not impact applicant to wait as construction is 3-6 years away.

- Grassy Swamp Creek to have minimum 4-6 sound receptors. Receptor locations made publicly available for comment pre testing. Unlike current sound study. All property lines to have receptors.

-Ambient night study to produce the existing L90 Acoustic Metric for pre and post construction use. L90 represents the steady background noise level that is present 90% of the time filtering out short term spikes such as sirens, passing cars or sudden noises.

-Baseline/Ambient study performed by Qualified Acoustic Engineering firm. Study to be signed and sealed if appropriate. Study data available to County and residents if requested.

-County to establish limits for day and night compliance above L90 dBA number (baseline) established in study for post construction compliance

-dBA Limits - Daytime = Baseline + 5dBA

Night time = Baseline + 3dBA

Appropriate noise increase limits to be determined by Hanover County

-High Frequency dBC Limits

Low Frequency GAP (dBC - dBA) (Day/Night) < or = 15dB

-Daytime Hours of Compliance - 8am - 4pm Monday thru Friday and no weekend hours (Match proffered generator hours of operation)

-Nighttime Hours of Compliance 4pm - 8am Monday thru Friday and all weekend till 8AM Monday AM. (Match Generator non run hours)

-County to establish significant penalties that force timely mitigation and compliance.

-30 days after ready for service date of each data center building constructed at project, the applicant shall provide a noise study that included ALL data centers in production at all property lines. Not just applicable new Data Center Bldg. but all combined Buildings in operation.

-If possible, Applicant should agree to have certificate of Liability Insurance to cover any medical related damages brought my community in future years based on operations.

-Pre and Post noise studies contracted and supervised by county but funded by applicant.

-County/applicant to perform annual or semiannual noise studies to ensure ongoing compliance from revenues generated from multiply data centers in county.

Option 2 Not preferred but compromise but better than current.

County creates a new noise ordinance for data center modifying existing fixed limit policy for rural areas and significantly lowering fixed at a minimum to at least 42 Night /47 Day. With a Low Frequency Gap of 15 dB or less not 20 as currently proffered. Expanded restrictive night hours similar as above to preserve quality of local life. This is not as accurate an approach as the ambient for attempting to mitigating impacts on health and quality of life.

REASONS FOR SUPPORT OF AMBIENT METHODOLOGY

- Goal is to be fairer to community and not significantly change the acoustic environment.
- Shift the focus from absolute sound limits to relative impact by site location.
- Allows growth and development while preserving the existing quality of life.
- Traditional noise ordinance penalizes rural areas.
- Measuring ambient sound levels before and after construction and use of the L90 metric is a proven methodology and metric
- While the general assembly has not yet mandated L90 based standards, there is clear movement toward ambient based framework.
- Strict guidelines, penalties and enforcement is at a minimum what the community expects from the County to ease opposition tension. Impact generational.
- You can always go up on sound limits later but hard to go down contractually.
- Construction 3 - 7 years away which allows for implementation of new sound reduction equipment and techniques. Bldg. 3A last one built and largest and most impactful to environment.
- Technology exists today for applicant to meet or exceed limits requested
- Early design decisions by applicant significantly impacts final outcome. Retrofit after construction are more costly and less effective.
- More Health-related issues and studies will continue to surface in relations to data center noise/sound over time. All the more reason to lean on the conservative side to mitigate risk in the future.
- Help mitigate impact on surrounding residential and development land value with strict guidelines on sound, lighting, buffers, water pollution and emissions.
- The size of this project being in top 1% of existing data centers warrants careful and strict consideration.
- Hanover has opportunity to set new data center standards for Virginia municipalities.
- Applicant is well aware of sound and noise attenuation issues in the industry.

24/7 DATA CENTER OPERATIONS
Community & Quality-of-Life Impacts

Perception & Sound Experience

- Continuous audible presence (no quiet periods)
- Tonal / low-frequency hum more noticeable than typical noise
- Perceived louder than measured (dBA vs real experience)
- Nighttime prominence due to low ambient baseline
- Loss of natural quiet → 'always on' awareness

Property & Economic Effects

- Perceived property value decline
- Reduced home marketability
- Buyer hesitation near industrial-scale infrastructure
- Longer time-on-market for residential sales

Community & Social Dynamics

- Increased resident complaints
- Community division (growth vs quality-of-life)
- Strained relationships with local government
- Erosion of trust in zoning and approvals
- Rise in organized opposition / advocacy groups

Lifestyle & Daily Living Changes

- Less use of yards, porches, outdoor spaces
- More time with windows closed
- Altered sleep routines (perception-driven)
- Consideration of relocation over time

Psychological & Perceptual Response

- Persistent annoyance / irritation
- Loss of sense of place (rural → industrial feel)
- Hyper-awareness of sound ('can't unhear it')
- Feeling of no control over environment

Regulatory & Enforcement Challenges

- Facilities may be compliant but still disruptive
- Fixed dBA limits often don't capture tonal/low-frequency
- Measurement disputes (ambient vs fixed limits)
- Difficulty addressing continuous vs intermittent sources

Environmental Character & Aesthetics

- Shift toward industrial character
- Combined impacts: noise + lighting + visual scale
- Loss of natural soundscape (wildlife, quiet nights)

24/7 Operational Reality

- Constant operation (unlike traffic or construction)
- Generator testing spikes reinforce awareness
- Cumulative impact from multiple nearby campuses
- Interaction with other infrastructure (roads, substations)

Core Policy Insight (Tie to L90 Methodology)

- The issue is not just how loud a facility is — but whether it changes the existing character of the environment.

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Health implications of the rapid rise of data centers in Virginia: an exploratory assessment

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Driven by advances in cloud computing, cryptocurrency, and artificial intelligence, the rapid proliferation of data centers may pose severe human and planetary health risks. This paper, to the best of our knowledge, is the first-of-its-kind assessment of the potential health implications associated with data centers. Here, we examine the case of Virginia's Data Center Alley, the world's largest concentrated data center hub, and argue that data centers can cause public health harms, harms that can be at least partially mitigated through improved planning and design. We assess the health risks associated with data centers, including air pollution, extensive water use, noise pollution, and detrimental land use's risk of disrupting natural ecosystems and community well-being. We also address how rising energy costs can worsen social determinants of health. To mitigate these risks, we recommend transitioning data centers to renewable energy, implementing strict regulations to minimize water consumption, and optimizing site planning with acoustic treatments and green zoning to reduce noise pollution. Additionally, we advocate enforcing responsible site selection and zoning regulations to curb adverse land use changes, equitable energy pricing to alleviate economic burdens, and strengthening health communication for informed public and governmental decision-making, action-oriented advocacy, and policy changes. Finally, we emphasize the need for transdisciplinary research integrating physical sciences, engineering, and public health to quantify specific health outcomes linked to data centers.

KEYWORDS

advocacy, climate change, data centers, public health, sustainable development

Introduction

The surge in demand for computing infrastructure, driven by advancements in cloud services, cryptocurrency, and artificial intelligence, has led to extensive data center construction globally (Masanet et al., 2020; International Energy Agency, 2024). There is a small but growing body of research on societal problems associated with data centers (see Al Kez et al., 2022; Lei et al., 2023) but to the best of our knowledge, research has not yet been done on the human health effects of data centers. Here, we make the case that data centers can cause public health harms, harms that can be at least partially mitigated through improved planning and design.

In this paper, we present evidence arguing that data centers may pose significant health risks, including diseases associated with air pollution from fossil fuel combustion, waterborne illnesses resulting from excessive water usage, and both mental and neurological health concerns related to noise pollution. We further discuss how data center construction drives large-scale land use changes, degrading natural ecosystems and community well-being, and

how rising energy costs can worsen social determinants of health. Finally, we emphasize that children, the elderly, and low-wealth groups can be particularly susceptible to the health impacts associated with data centers.

Although data centers are expanding globally, here we focus primarily on Northern Virginia because it is one of the largest concentrations of data centers anywhere in the world, using it as a case study to draw broader public health insights. This area is often referred to as the "Data Center Alley", handling an estimated 70% of the world's internet traffic (Samuelson, 2024). The region's proximity to Washington, D. C., coupled with early investments in fiber-optic networks and energy infrastructure, affordable land, low-cost energy, and minimal natural disaster risks, has made Northern Virginia a prime location for data centers since the 1960s (Kidd, 2023). State policies, such as the 2009 sales tax exemption for data center equipment, have further strengthened Virginia's leadership in the data center industry.

Figure 1 illustrates the geographical distribution and scale of both existing and proposed data centers in Northern Virginia, showing that nearly 80% are located in three counties: Loudoun, Prince William, and Fairfax. Data on existing and proposed data centers suggests that this geographic distribution will only get more concentrated in the region, with data center footprints expected to more than double in the region as more and larger installations go online. Other areas where data centers are currently concentrated include counties surrounding Virginia's capital, Richmond (e.g., Henrico and Hanover counties).

While Virginia's data centers generate economic benefits, which can be an asset in strengthening the region's social determinants of health, it is important to determine whether these gains are equitably distributed or whether they merely exacerbate existing economic and health disparities. Moreover, addressing the subtle yet growing climate threat from data centers, which poses a risk to Virginia's climate progress, is essential. Below, we discuss the potential health implications of data centers related to air pollution, excessive water use, noise pollution, land use changes, and economic burdens on low-income households.

This exploratory assessment draws on peer-reviewed and grey literature published from the early 2000s through 2025, identified through targeted searches of academic databases (Google Scholar, PubMed, Web of Science, and Scopus) using search terms including data centers, digital infrastructure, energy demand, air and water pollution, noise, land use change, climate change, and public health. Given the rapidly evolving nature of data center development and regulation, we also included grey literature such as government and regulatory reports, established environmental organizations reports,

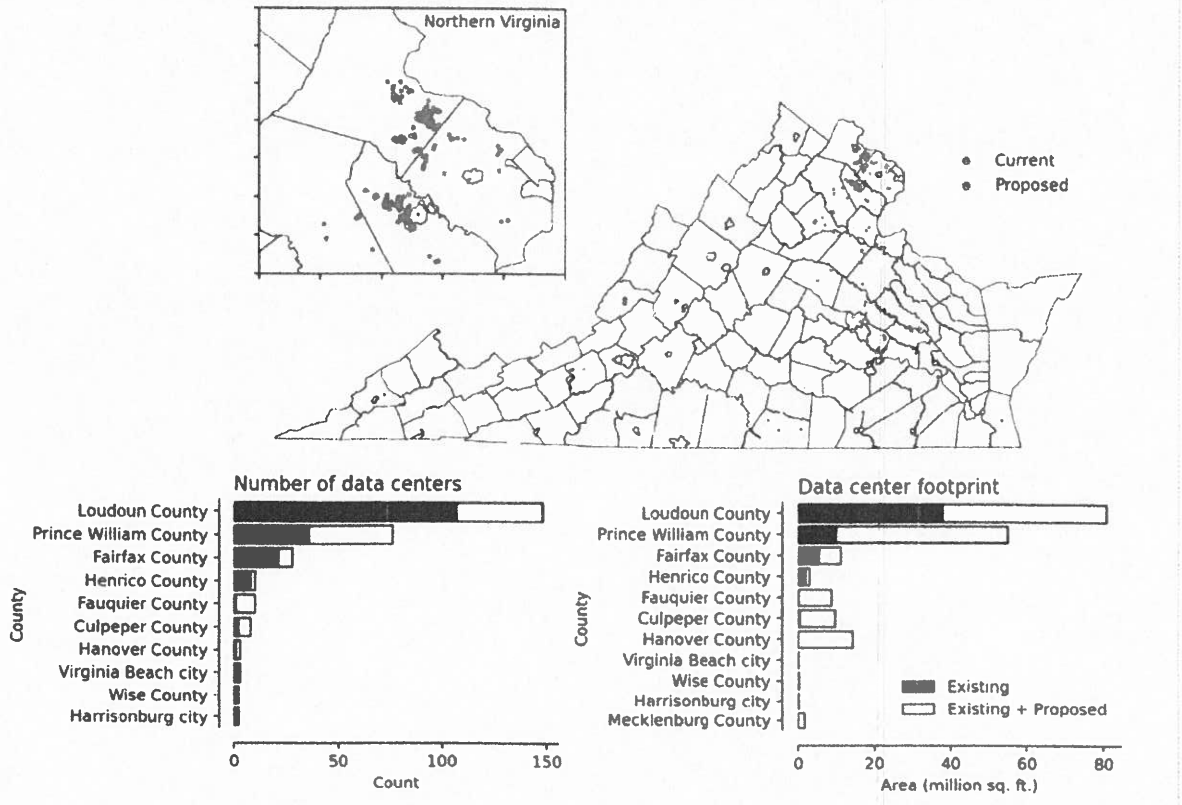


FIGURE 1
Distribution and scale of existing and proposed data centers in Northern Virginia. Data source: Piedmont Environmental Council (2024) (The Piedmont Environmental Council has pulled together this information on existing data center facilities (that they are aware of), along with pending data center proposals they have found on various town and county websites, as well as through various news outlets. It is their best approximation given the information available and is subject to change as more data centers are proposed, approved, or denied). Accessed March 2024.

are responsible for nearly two-thirds of historic global emissions, underscoring the urgency of addressing emerging sources like data centers.

Water consumption and pollution

Data centers affect health indirectly through intensive water use and wastewater discharge associated with cooling systems, which can strain local water supplies and degrade water quality (Mytton, 2021). These changes can increase risks of water scarcity, waterborne diseases and poor maternal and infant health outcomes, with effects that may intensify over time under drought and climate stress (Currie et al., 2013; Stanke et al., 2013).

Data centers require significant resource consumption, with water playing a crucial role both directly in cooling systems and indirectly through electricity production. Globally, data centers significantly contribute to the water footprint, with projections indicating usage between 4.2 and 6.6 billion cubic meters by 2027—exceeding the annual water consumption of countries like Denmark (Li et al., 2025). In the U. S., they rank among the top 10 industrial water users, consuming roughly 513 million cubic meters in 2018 alone (Siddik et al., 2021). A medium-sized data center (15 megawatts) consumes as much water as three hospitals or two 18-hole golf courses, while hyperscale data centers (100 + megawatts)—the largest and most efficient type of public cloud facilities could use even more (Mytton, 2021; Wren, 2024; Powell, 2024). For perspective, Microsoft's data center used 700,000 liters of water to train GPT-3, while generating just one 100-word email using GPT-4 requires approximately 519 milliliters of water (Verma and Tan, 2024).

In Virginia, these pressures are particularly acute because water is already heavily allocated to thermoelectric power generation, agriculture, public supply, and industrial operations (McCarthy et al., 2022). Rapid growth in the data center sector, a 250% increase in water use over four years, now competes directly with these existing demands, intensifying stress on rivers and groundwater, particularly in warmer months [Sierra Club, n.d.; Joint Legislative Audit and Review Commission (JLARC), 2024]. This proliferation in drought-prone regions is worsening local water scarcity (S&P Global, 2025). Collectively, data centers in Northern Virginia consumed nearly 2 billion gallons (7.57 billion liters) of water in 2023—a 63% increase since 2019—underscoring how this new demand compounds longstanding pressures on Virginia's water system. Adding to these pressures, Virginia has spent much of the past decade in at least "Abnormally Dry" conditions as classified by the U. S. Drought Monitor, further straining already limited water supplies (U.S. Drought Monitor, 2024).

Beyond water quantity, data center cooling systems can affect water quality through the discharge of saline wastewater, or blowdown, from evaporative cooling towers (Siddik et al., 2021; Copley, 2022). Cooling water blowdown contaminants such as sodium, magnesium, sulfate, and potassium can contaminate groundwater supplies, posing serious health risks when their concentrations increase (Soliman et al., 2021). For example, high sulfate levels in groundwater can cause skin irritation and diarrhea, especially in infants (Miao et al., 2011). Exposure to contaminated drinking water during pregnancy has also been associated with adverse fetal outcomes, including low birth weight and preeclampsia (Currie et al., 2013; Thompson et al., 2022).

The reliance on water-scarce basins for data center operations may further worsens health risks, particularly in regions like Virginia, which is already experiencing droughts and water stress due to climate change. Drought conditions reduce water availability and flow, leading to stagnant, warm environments that promote the growth of pathogens, increasing the risk of waterborne diseases such as diarrheal illnesses, eye and ear infections, and *E. coli*, among others (Bell et al., 2018; Stanke et al., 2013). Drought has also been linked to increased wildfire risk, with downstream impacts on cardiovascular and respiratory health among children (Berman et al., 2017). In water-stressed agricultural regions, prolonged drought may additionally contribute to mental health risks, including heightened stress, anxiety, and psychological distress among affected populations (Polain et al., 2011; Berman et al., 2021).

Noise pollution

Continuous operation of cooling systems and generators produces persistent noise exposure near data centers, creating a direct environmental stressor. Short-term effects include sleep disturbance and annoyance, while long-term exposure is associated with cardiovascular, cognitive, and mental health impacts (Babisch et al., 2013; Thompson et al., 2022).

Data centers contribute to local noise pollution through their cooling systems, backup diesel generators, and other machinery (Judge, 2022). Operating 24/7, data centers in Virginia generate a persistent humming noise, described as an industrial-scale 'drone' or 'hum' similar to amplified house air conditioning, with levels ranging between 40 and 59 decibels [Joint Legislative Audit and Review Commission (JLARC), 2024]. While the U. S. Environmental Protection Agency (EPA) recommends a 24-h average outdoor noise limit of 55 dBA (day–night average) or 45 dBA indoors to protect public health (U.S. Environmental Protection Agency, 1974), data center operations in residential areas often approach or exceed these thresholds.

The health impacts of noise pollution include long-term risks such as heart disease, permanent hearing loss, and tinnitus; chronic effects such as hypertension and endocrine disruption; and acute effects like decreased sleep quality and temporary hearing changes (Babisch et al., 2013; Hammer et al., 2014). Noise pollution has also been linked with an increase in mental health concerns, such as stress-related disorders and increased annoyance, particularly in sensitive individuals (Meerlo et al., 2008; Sandrock et al., 2008). Past research has shown that noise pollution is particularly concerning for children, as exposure can lead to poor cognition (Thompson et al., 2022). For instance, studies have found that children in noisy environments, defined by the U. S. EPA as chronic exposure above 55 dBA (day–night average), exhibit poor school performance, increased stress, and behavioral issues, with noise pollution also being linked to decreased learning, lower reading comprehension, and concentration deficits (Lercher et al., 2003; Stansfeld and Clark, 2015). For children residing near data centers, the constant noise from 24/7 operations could further exacerbate these developmental and cognitive risks, potentially impacting their long-term health outcomes.

Land use changes

Large-scale land conversion for data center development alters local ecosystems and built environments, indirectly affecting health

Conclusion

As data centers expand, both existing and proposed facilities pose significant health and environmental challenges that demand urgent action. Policymakers must mitigate harms from operational data centers by enforcing stricter environmental regulations, monitoring emissions, and mandating mitigation measures to protect surrounding communities. Transparency is essential. Residents have the right to know the risks associated with data centers and should be actively informed about industry practices. Conversely, developers must engage the public to address their concerns, especially as opposition grows under NIMBY movements. Moreover, for proposed new data centers, public input must guide decision-making—do residents want them, and if so, under what conditions? Developers must adhere to clear design and operational safeguards, including renewable energy integration, water conservation, noise pollution control measures, and responsible land siting. By prioritizing sustainability, data centers can achieve responsible growth without compromising public health.

Author contributions

NG: Conceptualization, Writing – original draft, Writing – review & editing. LO: Conceptualization, Visualization, Writing – review & editing. EM: Conceptualization, Writing – review & editing.

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Acknowledgments

Thank you to Samantha Ahdoot, Robert Kitchen, Jerome A. Paulson, Paul DiLorenzo, John Bagwell, and Ryan Adams of Virginia Clinicians for Climate Action for sharing relevant academic papers, recommending grey-literature sources, and offering feedback on the manuscript.

Conflict of interest

The author(s) declared that this work was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

Generative AI statement

The author(s) declared that Generative AI was not used in the creation of this manuscript.

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Biernot, Gretchen W.

From: Anne Magee <annenmagee@gmail.com>
Sent: Tuesday, May 12, 2026 8:27 PM
To: Biernot, Gretchen W.
Cc: Dibble, Susan P.; Hunter, Jo Ann M.; Pompei, Andrew J.
Subject: Re: FW: [EXTERNAL]FW: Mountain Road tech park: historic site

CAUTION: This email originated from outside your organization. Exercise caution when opening attachments or clicking links, especially from unknown senders.

Dear Ms. Biernot,

Thank you for your response stating that there are no cemeteries within the Mountain Road Technology Park project area.

I am writing to ask that Hanover County take a closer look at the basis for that conclusion. The letter from Dutton + Associates states that there are no cemeteries in the project area, their review focused on the historic Carver tract, which is located north of the historic Chiles tract.

The current Marchetti parcels align with portions of the historic Chiles tract, but I do not see that these were reviewed or mentioned in the Dutton + Associates letter. I find it strange that the only parcel mentioned that was reviewed is the Tribble tract, which is 99 acres of the 427 acre Mountain Road Technology Park project area.

That distinction matters because the historic Chiles tract contains a deed reservation for a graveyard. Specifically, an 1894 deed states **"the family graveyard on said land is not hereby conveyed."**

In addition, the Chancery Records Index from the Library of Virginia identifies a case involving the sale of Ann R. Chiles' land after she died intestate. That record likewise references the land sale while **"reserving 1/2 acre on said land for a graveyard."**

Because of this, I am concerned that the applicant's cultural resources review looked at the wrong historic tract, or at least failed to reconcile the Carver tract information with the Chiles tract deed and chancery record. The Mountain Road Project area encompasses seven GPINs, and the Dutton + Associates letter only reviewed those attached to the Tribble parcel. The Chiles tract is within the Mountain Road Technology Park project area, so the conclusion that there are "no cemeteries" is false.

1. Did Dutton + Associates specifically review the historic Chiles tract, not just the Carver tract?
2. Did Dutton + Associates specifically review all parcels attached to the project?
3. Did the applicant or consultant review the 1894 deed reserving a 1/2-acre graveyard?
4. Did the applicant or consultant review the Library of Virginia Chancery Records Index case involving the sale of Ann R. Chiles' land and the reservation of a 1/2-acre graveyard?
5. Where is the reserved 1/2-acre graveyard shown on the current site plan?
6. Has the applicant conducted any field investigation, archaeological review, cemetery delineation, or ground-penetrating radar to determine the location of the reserved graveyard?

7. Has the graveyard area been buffered, avoided, and protected from grading, utilities, stormwater facilities, roads, or other land disturbance?

A deeded graveyard reservation should not be dismissed simply because a consultant letter says no cemeteries were identified, especially if the review inexplicably did not include all parcels of the project area. Before the County accepts the applicant's conclusion, we request that the County require a clear chain-of-title explanation, a thorough survey and ground penetrating radar of all parcels, a mapped location of the reserved graveyard, appropriate cemetery protections, and a review by the Hanover County Historical Commission. Since the Dutton + Associates initial report appears to have been lacking thoroughness, any further reporting needs be independently verified by the County.

Please include this email and the referenced deed/chancery issue in the public record for the Mountain Road Technology Park application REZ2025-00023, CUP2025-00016, SE2025-00023.

Sincerely,

Anne Magee

On Fri, May 8, 2026 at 10:09 AM Biernot, Gretchen W. <gwbiernot@hanovercounty.gov> wrote:

> Ms. Magee,
>
> I forwarded your concerns to the applicant, and they have indicated that they hired Dutton and Associates to confirm whether or not there are cemeteries on the project site. See the attached letter confirming that there are no cemeteries on the Mountain Road Tech Park site.
>
> Please let me know if you have any questions.

Gretchen W. Biernot, AICP

Current Planning Manager

Hanover County Planning Department

Direct Line:(804) 365-6369

Main Line: (804) 365-6171

Hanover County VA

From: Erin Fosdick <erin.fosdick@tract.com>
Sent: Thursday, May 7, 2026 4:58 PM
To: Biernot, Gretchen W. <gwbiernot@hanovercounty.gov>
Cc: Dan Becht <Dan.Becht@tract.com>
Subject: Re: [EXTERNAL]FW: Mountain Road tech park: historic site

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Gretchen,

Thank you for forwarding this email. As I mentioned, we have conducted analysis on the possible presence of cemeteries on the MRTP project site; I'm attaching a letter that describes our findings in greater detail. The bottom line is that early deed research flagged that there could be cemeteries on the site or in the vicinity. Additional research showed that the actual location is not on any of the properties associated with the MRTP project.

Please review the attached information and let me know if you have additional questions. Thanks!

Erin Fosdick, AICP
Director of Entitlements
erin.fosdick@tract.com
720-552-9172
www.tract.com

From: Biernot, Gretchen W. <gwbiernot@hanovercounty.gov>
Sent: Thursday, May 7, 2026 7:16 AM
To: Erin Fosdick <erin.fosdick@tract.com>
Subject: [EXTERNAL]FW: Mountain Road tech park: historic site

FYI

Gretchen W. Biernot, AICP

Current Planning Manager

Hanover County Planning Department

Direct Line:(804) 365-6369

Main Line: (804) 365-6171

Hanover County VA

From: Anne Magee <annenmagee@gmail.com>
Sent: Wednesday, May 6, 2026 7:42 PM
To: Biernot, Gretchen W. <gwbiernot@hanovercounty.gov>
Subject: Mountain Road tech park: historic site

CAUTION: This email originated from outside your organization. Exercise caution when opening attachments or clicking links, especially from unknown senders.

Ms. Biernot:

I am a resident and homeowner in the South Anna district, less than a mile from the proposed Mountain Road data center. I have multiple concerns about this project, but wanted to convey the following issues:

Regarding the Tract data center application for Mountain Rd/33, Marchetti Properties, et al & VALCO Hanover County Four, L.L.C. (Tract, REZ2025-0002, CUP2025-00016, SE2025-0002):

I have reviewed the application materials and noticed that the page requesting information on historic resources appears to have been left blank. However, deed and court records show a reserved one-half-acre graveyard on the property.

1. Has the applicant completed a cultural resources study or archaeological survey for this property? If so, please provide a copy of the study, including any cemetery mapping, archaeological findings, recommendations, and proposed buffers.

2. Has the reserved one-half-acre graveyard been located on the site plan? I have not been able to identify this graveyard area on the submitted site plan. Please identify where it appears in the application materials.

3. Has this graveyard been buffered, protected, and mitigated?

4. Should this application be referred to the Hanover County Historical Commission? The County's application materials require identification of known or suspected historic resources, including cemeteries. If this was left blank, the record is incomplete.

5. Why was this information not provided by the applicant during the application process? The public, Planning Commission, Historical Commission, and Board of Supervisors cannot properly evaluate impacts if a known deeded graveyard was omitted from the application.

I request that the County require the applicant to:
- identify the graveyard on all site plans;
- provide the deed language reserving the cemetery area;
- conduct a professional cemetery/cultural resources survey;
- establish appropriate cemetery boundaries and buffers;
- refer the matter to the Hanover County Historical Commission before final action; and
- defer any vote until this issue is fully documented in the public record.

Please enter this correspondence into the record for the Mountain Road data center application.

Sincerely,

Anne Magee

Biernot, Gretchen W.

From: ali Dews <alidews68@gmail.com>
Sent: Wednesday, May 6, 2026 2:33 PM
To: Biernot, Gretchen W.
Cc: Pompei, Andrew J.; Leadbetter, Larry A; Hunter, Jo Ann M.; Dibble, Susan P.
Subject: Re: Mountain Rd tech center Tract reports

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Dear Gretchen,
Given the significance of this project to the community, particularly around wetland impacts and dam removal, I believe the applicant has an obligation to be more transparent about what studies have or have not been conducted. If these studies exist, they should be made available for public review.

I also want to flag a serious concern regarding the historic resources section of the application, which has been left blank. If a cultural resources study exists and relevant historic resources have been identified, this application should be referred to the historical commission for review. Leaving that section empty while Tract has a study is in hand raises questions about whether the applicant is attempting to circumvent that process, which needs to be addressed before this moves any further.

I'd appreciate clarification from the applicant on both of these points.

Kind Regards,
Allison Dews

On Tue, May 5, 2026 at 1:38 PM Erin Fosdick <erin.fosdick@tract.com> wrote:

> Gretchen,
>
> Thanks for sending this email. The information referenced by Ms. Dews was intended to show the due diligence that is performed for complex projects like the Mountain Road Technology Park, not specific reports that would be submitted as part of our application package; as you know, this is part of the typical development process.
>
> As part of our due diligence for this site, we've prepared environmental site assessments, wetlands delineations, cultural resource studies, geotech analysis, habitat studies, and other diligence to ensure developability of the site as we move through the process. As you know, these are not required as part of the rezoning, CUP, or SE; they are proprietary information used to assist with our due diligence.
>
> This information will be used to support future applications with regulatory agencies should our initial applications be approved. At that time, we will prepare detailed, site specific applications for dam removal, pond restoration, site planning, public improvements, etc. The information will be submitted to the County, VDEQ, VDOT, and other local, state, and federal agencies, as required. At that time, we are happy to share information.

Please feel free to contact me with additional questions.

Erin Fosdick, AICP

Director of Entitlements

erin.fosdick@tract.com

720-552-9172

www.tract.com

From: Biernot, Gretchen W. <gwbiernot@hanovercounty.gov>
Sent: Monday, May 4, 2026 3:08 PM
To: Erin Fosdick <erin.fosdick@tract.com>
Cc: ali Dews <alidews68@gmail.com>; Pompei, Andrew J. <AJPompei@hanovercounty.gov>
Subject: RE: Mountain Rd tech center Tract reports

Erin –

Allison Dews is interested obtaining additional information about various studies noted on the project website. Would you point Ms. Dews to the information requested below?

The Sound/Noise study can be found on our webpage:
https://www.hanovercounty.gov/m/newsflash/Home/Detail/1014

Thank you!

Gretchen W. Biernot, AICP

Current Planning Manager

Hanover County Planning Department

Direct Line:(804) 365-6369

Main Line: (804) 365-6171

Hanover County VA

From: ali Dews <alidews68@gmail.com>
Sent: Monday, May 4, 2026 4:48 PM
To: Biernot, Gretchen W. <gwbiernot@hanovercounty.gov>
Subject: Mountain Rd tech center Tract reports

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Hi Gretchen,

I was looking through tracts website on the Mtn rd proposal and on page 14 of the document below- they have check marks after each of these:

• Phase I Environmental Site Assessment • Phase II Site Assessment (as needed) • Environmental Studies • Aquatic resources & buffers • Endangered species Cultural resources • Geology / Geotechnical Local • Compliance with Zoning Conditions • Sound Study State • Stormwater Detention • Aquatic Resources & Buffers Impacts • DOT ROW permits Federal • Aquatic resources avoidance and mitigation • Endangered species avoidance and mitigation • Cultural resource avoidance and mitigation

Since the work has been checked off, do you have the findings of each of these that you can please share with me.

Here is the website for your reference: Page 14

https://mountainroadtechpark.com/wp-content/uploads/Mountain-Road-Tech-Park-Community-Open-House-Boards.pdf

Thank you Very much!

Allison Dews

Biernot, Gretchen W.

From: A MC <amendesign2@gmail.com>
Sent: Tuesday, May 5, 2026 10:28 PM
To: Biernot, Gretchen W.; Hunter, Jo Ann M.; Leadbetter, Larry A; Dibble, Susan P.
Subject: Comments from 4_16 PC Meeting re: 33 Data Center

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Hi Gretchen,
Please add my comments from the PC meeting to the public record and also the previous comments from Citizens' Time regarding this proposal. I expect to see them in the staff report. (The staff reports have not been including people's submissions.)
Thank you,
Amy

Good evening, Citizens of Hanover, Board members and staff.

Tonight you have a significant milestone opportunity before you. Tonight, you have an opportunity to be heroes in our community.

Please vote no to the 33 Mountain Road Data Center Proposal.

I say that because the evidence is clear.

Tract's proposal is completely speculative, it's a national security risk as we have no idea who the end user will be. Additionally, this particular area is almost entirely in a Chesapeake Bay Management area (which hasn't been accounted for and too often is relegated to "figuring it out after approval."

And there are traffic impacts (that simply cannot be mitigated-especially with flaggers and an ineffective U-turn scheme).

Even more relevant is this area's designation in the Comp Plan - a Data Center is not an employment center.

This data center would employ few full-time employees and doesn't transition well next to the suburban housing developments that will eventually surround this proposal. With this approval you would be negatively impacting the surrounding area homeowner's ability to have their highest potential value reached due to noise and environmental threats.

An employment center is supposed to transition well with its surrounding land use types. A data center complex is a heavy industrial chemical and fuel storing plant that needs to be with other heavy industrial developments far away from housing and schools.

In the small area plan focus corridor plan - which I and others here participated in - there were over 5,000 comments,

The majority of citizens said they wanted local businesses, restaurants, places to shop, and places to get a hair cut - they didn't want data centers in this part of the county.

This plan before you is simply not what the community told you in the Small Area Plan Process. We know that the SAP was tailored for this specific applicant as we have found evidence from FOIA's of Non-Disclosure agreements, and emails of Dominion Energy and Hanover collaboration to make this application happen, long before plan adoption .

And now, in the last 8 months, the community has invested a lot of taxpayer time and money to let you all know their thoughts and opinions about this plan.

To that end, would those here in opposition to this rezoning, please rise. And, remain standing.

Unlike other counties in Virginia, Hanover has a history and tradition of generations of families living on this beloved land.

Your decisions tonight could severely impact this legacy - of not only the land you are stewards of - but of yourselves and the elected officials that you represent.

We urge you tonight to vote no to the Tract 33 data center.

Biernot, Gretchen W.

From: amy Mendelson Cheeley <amendesign2@gmail.com>
Sent: Friday, April 10, 2026 12:03 PM
To: Herzberg, F. Michael; Dibble, Susan P.; Pompei, Andrew J.; Hunter, Jo Ann M.; Biernot, Gretchen W.; Leadbetter, Larry A; McGhee, Jr, Fredric I.; Stoneman, Jeff S.; Davis, Sean M.; Floyd, Danielle G.; Hudson, Ryan M.; Prichard, Faye O.; Iverson, Edmonia P.; ctyadm; Heizer, Brett; Parker IV, Clifton L.; Martin, William E.; Abbott, Alan C.
Subject: 33 Mountain Road Marchetti Valco

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please add to the application files:

Good morning, All.

I have spoken at Citizens' Time regarding this project and have submitted those comments (primarily regarding the Comp Plan and SAP process) but I want to make sure to reiterate today my intention to continue to oppose this proposal for the before mentioned reasons and more detailed reasons below.

But, before I get to the specifics, I would like to offer the following philosophical overview...

This and other data center applicants are asking YOU ALL to agree to allow vague opaque plans to build technology (that doesn't exist-as it's constantly evolving) starting in a few years, that could be OBSOLETE by the time they're completed - ten years later. Would we approve this for any other type of applicant?

Back to some additional specific items to consider:

1. Security. The amount of security that's needed for a data center is something that's not been discussed. Would we allow speculative development with this type of national security risk of any other kind? A data center is under constant bombardment from global cyberattacks. It requires massive firewalls, DDoS protection, and encrypted internal networks.

These are more like prisons, military bases, or Detention Centers. Some of the security needs are:

High-tensile fencing, K-rated
crash bollards, and anti-climb walls.

24/7 4K thermal imaging and
AI-driven "pixel change" detection for movement.

Biometric scanners (iris, palm vein, fingerprint) and
"tailgating" sensors.

Does this belong next to hundreds of homes?

2. Foreign Government and Federal Government. In keeping with the security and not knowing the end user... do we really want to create a county where outside government and or **foreign governments** will dictate what happens on our soil? Because that's quite possibly what will happen if a foreign company buys one of these speculative shell buildings. We will have no control about what's going on. They are also more of a target. **You will be putting our community at risk.**

3. Gateway Hanover/Tourism. The only major road entering Western Hanover from the interstate is 33. When I worked on previous iterations of the Comp Plan, we discussed creating a beautiful gateway to our county. The Balloon test proved absolutely nothing to me and the community. Noise will be heard, buildings will be seen. There's not enough distance to change these facts. (Go to the QVS site in eastern Henrico-it's miles away from anything-not 50-200 feet away).

With the launching of the new Hanover County tourism site, I was surprised to see the juxtaposition of what is being promised to tourists - things that our own community will not experience with data centers in our midst.

4. Environmental concerns have been discussed and stressed **with little regard to figuring it out now.** Too often Hanover County allows the applicant to "figure it out" later after approval or "that's a DEQ, or EPA issue." But, that's just not acceptable when you're talking about this particular piece of property as it's almost entirely in a Chesapeake Bay Management Area. With some of it in the Chesapeake Bay Protection area with even more stringent building requirements. There's no doubt that Tyson's and the Holzgraffe Pond areas have been compromised with years of pollution. **As with the Superfund site just down the street - H and H Burn pit - this area and its constituents have had to deal with environmental issues that can adversely affect our health outcomes.** You all have been informed and cannot claim plausible deniability when things go wrong with regard to these toxicities if you approve it.

To wrap up this specific communication... I have and will continue to also remind you and our communities of the dangerous precedent approving data centers in this area will create. Given the NDAs, Dominion deposits a full year before the SAP and Tract application, and the survey and meeting notes...

Hanover County appears to have defrauded the community with a Small Area Plan that was tailor made for Tract. You can't claim to create and uphold a Comprehensive Land Use Plan nor "trust the process" when it has disenfranchised the communities it's supposed to serve. We (the community) have obtained the emails and Dominion correspondence and plans to back these claims up.

Additionally, I have read each survey (which I participated in) comment and reviewed the meeting notes. And, the overwhelming sentiment then-that continues today is that **no one wants these data centers here.**

Please VOTE NO for this Data Center Scheme.

Thank you for taking the time to read,
Amy

Amy Mendelson Cheeley
Amy Mendelson Design
Amendesign2@gmail.com

804-339-7266
Instagram Fine Art & Illustration: @amendesign

Biernot, Gretchen W.

From: Planning
Sent: Tuesday, May 5, 2026 10:06 AM
To: Biernot, Gretchen W.
Subject: Fw:

Thank you,

Makayla Stepp-Davis
Planning Technician II
Planning Department
(804) 365-6362
Hanover County

From: John McLaughlin <jmclaughlin3798@gmail.com>
Sent: Tuesday, May 5, 2026 9:13 AM
To: Planning <planning@hanovercounty.gov>
Subject:

CAUTION: This email originated from outside your organization. Exercise caution when opening attachments or clicking links, especially from unknown senders.
No data centers!!!

RECEIVED

MAY 04 2026

HANOVER COUNTY
PLANNING DEPARTMENT

DATA CENTER ELECTRIC SERVICE AND TAX REVENUE IMPACTS

This position paper discusses the electric capacity standards, development timelines, and impacts on county tax revenues for Tract's 900 MW data center campus. Marchetti Properties, et al., REZ2026-00023, et al. Essential to understanding the issues is a case pending before the VA State Corporation Commission (SCC) - PUR-2026-00011. The "Large-Load Connection Queue Process Standards" (Process Standards) case was filed by Virginia Electric and Power Company (VEPCO) and set for hearing. Direct and rebuttal testimony has been filed by the parties. Tract filed direct testimony.

EXECUTIVE SUMMARY

Requests for 300 MW electric substations at campus-style data center projects, like Tract's, are processed by Dominion sequentially. There is a three year interval between energizing substations; and a utilization rate of 80% must be met for an operational substation before another one moves forward. These requirements are solidly grounded in well-established industry standards. 300 MW is a prudent upper bound from a reliability and operational risk perspective and justified given sudden large load loss concerns. It also reduces the risk of overbuilding facilities that may not be needed.

The Process Standards are certainly justified for Tract. To date, the company has given no indication that it has data center customers for its 8 substation, 2,400 MW Hickory Hill campus consistent with its tax revenue projections and promises to the Board. The Ernst & Young (EY) tax revenue report in this case suffers from the same failures.

The EY report shows increasing collection of county data center tax revenues from the first substation energization in 2030 to energization of all substations in 2034. However, based on the Process Standards and the three year substation separation, the earliest likely energization date for the first substation at Mountain Road is August 2031, with the third one energized in August 2037. Because tax assessments are effective on January 1st, no county data center tax revenues will be collected in 2030 and 2031 and collections will be sharply reduced from 2032 to 2037 compared to EY projections. The bottom line on tax revenue projections from Mountain Road data center customers is more of the same - broken promises and a failure to perform by Tract.

ELECTRIC TRANSMISSION AND DISTRIBUTION FUNCTIONS

Under the Process Standards, the "Company" is defined as the "transmission function of VEPCO d/b/a Dominion Energy Virginia" (Dominion). The "Electric Distribution

Company" (EDC) is defined as a "utility company . . . responsible for distributing electricity to retail customers within a specific geographic area." The EDC performing the "distribution function" is referred to as Dominion Energy Virginia Distribution (DEV Distribution).

As discussed in the rebuttal testimony of VEPCO's Jacqueline Vitiello in the SCC case:

> "The Company's Electric Transmission business does not manage the financial relationship with the end-use customer – that is the role of the EDC. From the Company's transmission perspective, the Company's customer is the EDC – not the end-use developer – and the EDCs, which include cooperatives, maintain their own contractual structures that may impose progressively increasing financial obligations designed to screen out speculative projects."

As she explained, DEV Distribution uses a three-part contract structure – the Engineering Letter of Authorization, the Construction Letter of Authorization, and the Electric Service Agreement. None of those documents have been filed in this case.

The queue process involves both transmission and distribution functions. DEV Distribution (EDC) makes requests to Dominion (Company) for transmission facilities and substations to provide service to Tract's data center customers. The separation of functions is in place to address affiliate concerns and federal and state jurisdiction. The Federal Energy Regulatory Commission (FERC) and PJM, a regional transmission organization, have authority over the interstate transmission of electricity.

TRACT'S REQUESTS AND THE PROCESS STANDARDS

Sometime before September 13, 2024, Tract submitted a request to DEV Distribution for two 300 MW substations to serve data center customers. Dominion received the request and assigned them to Batch 13. The substations were named Flamingo and Pelican.

Only Flamingo has been evaluated to date. In a September 13, 2024 "need" report and a later October 8, 2025 "solution" report to PJM, Dominion shows a requested in-service data of 01/01/2029 and a projected 2029 summer load of 47.0 MW and winter load of 42.5 MW for DEV Distribution. No change there. In the solution report, Dominion shows a projected in-service date of 12/31/2029. Project status is Engineering. Project cost is $20.0 million for the substation and $10 million for transmission lines.

Dominion's Process Standards contain four stages with a range to complete. They are Project Initiation – 7 to 10 months, Project Feasibility – 8 to 12 months, Project Development – 20 to 48 months, and Project Execution – 24 to 48 months. What is the status of DEV Distribution's request for service to Tract and its data center customers?

The request may have advanced beyond the Project Feasibility Stage. To progress through that stage, DEV Distribution "must" provide a "zoning conformance letter, i.e., a municipality [Hanover County] acknowledges land is or will be zoned" for the substation; a 30% engineering site plan provided; and a Feasibility Report prepared. It's not clear that has been done, but it is possible that a letter agreement has been entered into authorizing engineering expenditures and establishing the anticipated target energization date. If so, DEV Distribution service to Tract for data center customers may be in the Project Development Stage since October 8, 2025 when Dominion informed PJM of a Flamingo "solution" and a projected 12/31/2029 energization date.

Together, the Project Development and Project Execution Stages range from 44 to 96 months. Assuming October 2025 was the start for these stages, an assumption which results in earlier tax revenues, substation energization and DEV Distribution service for Tract will occur sometime between June 2029 and October 2033. In order to meet an energization date and have data centers constructed and operating, easements for offsite facilities must be negotiated and transmission facilities constructed across Winns Church Road to the Flamingo substation. Dam and pond removal will take 21 to 30 months and affect linking the substation to data center facilities as long as a mile away near the construction entrances. Tract hasn't filed any construction plans and has no data center customers. On top of that, Dominion has to consider electric generation and transmission service and rate issues involving its system, FERC, and PJM. For these reasons, the midpoint of the range - August 2031 - is likely to be the earliest energization date for the Flamingo substation and DEV Distribution service to Tract's unknown data center customers.

PROCESS STANDARDS FOR TRACT'S CAMPUS-STYLE DATA CENTER PROJECT

Under the Process Standards, energization of substations for campus-style development proceeds sequentially with a three year separation between 300 MW substations and an 80% utilization or ramp rate required on the first substation before a third substation can move forward. Tract's Brandon Smith filed testimony in PUR-2026-00011 opposing the

80% ramp rate requirement and the three year separation between 300 MW substations.

In her rebuttal testimony, Ms. Vitiello responded to issues raised by Tract's witness and others. She stated limiting requests to 300 MW "is grounded in well-established industry reliability standards and the Company's Facility Interconnection Requirements." The limit aligns with broader industry reliability standards, which recognize the loss of 300 MW or more of firm load as a significant system disturbance requiring a report to the U.S. Department of Energy. Thus, 300 MW "represents a prudent upper bound for a single point of connection from a reliability and operational risk perspective." In an industry where sudden losses of data center and other large loads of 1,000 MW or more are a real and documented reliability concern, her justification for the 300 MW substation limit is compelling. https://www.utilitydive.com/news/data-center-load-disruptions-nerc-alert-recommendations/818036/.

Responding to Tract's witness, Ms. Vitiello stated that campus-style developments "are treated consistently with other DP [Delivery Point] Requests sequenced based on the DP Request submittal date;" and the sequential energization approach reflects prudent system planning. "Historical experience demonstrates that large-load customers, including those associated with campus developments, typically require several years to fully utilized the capacity initially requested."

Ms. Vitiello also testified that staggered study and construction of later substations better aligns infrastructure with demonstrated load growth, "reducing the risk of overbuilding facilities that may not be immediately needed." Prudent utilities do not overbuild facilities that are not needed. It increases the risk of regulators deferring and disallowing recovery of the investment in a rate case.

Her observation on risks of overbuilding facilities was also a subtle response to Mr. Smith's testimony. At several times, he claimed that the Process Standards delay "shovel ready projects" and ignore a customer's demonstrated readiness to receive service in "executed agreements" and "committed load."

Tract has done little to advance substation energization and actual service to data center customers at Hickory Hill. The company's sole construction plan for a loop road was filed in August 2025, 17 months after Board approval, and remains pending, in part, because Tract hasn't filed agreements with Dominion and Viriginia Natural Gas. No shovel ready data center pads exist. No executed agreements exist with future customers for data

centers. There is no data center committed load to support a 300 MW substation. Tract's campus-style developments are like colleges without students, classrooms, or agreements.

Dominion's risk in building facilities for Tract's data centers in this case is $30 million for the Flamingo substation and transmission facilities. It's real. The Process Standards at issue in PUR-2026-00011 are well supported and fully justified for Tract and its speculative data centers.

IMPACT OF THE PROCESS STANDARDS ON TRACT'S PROJECT AND TAX REVENUES

Under the Process Standards, data centers will be constructed and operational no earlier than the energization dates for the three substations (August 2031, August 2034, August 2037). The EY report, however, assumes that all data centers will become operational and real and personal property taxes paid between 2030 and 2034. County data center tax revenues will not be realized as projected in the EY report. The projections are not grounded in the reality of the Process Standards or supported by Tract's performance to date. The county will receive no data center tax revenues from the Mountain Road project in 2030 and 2031 and tax revenues will be reduced from 2032 to 2037 compared to the EY projections.

Ms. Fosdick has noted that the county will receive tax revenues on the land if the parcels are zoned M-1. This is truly a pathetic comment coming from Tract. The company promises massive county tax revenues from data center development, not from undeveloped rezoned land. County tax revenues on undeveloped land are invisible on Tract's bar graphs showing $1.78 billion in Hickory Hill data center revenues and $901 million in Mountain Road data center revenues. Ms. Fosdick believes Hanover County should be satisfied with tax scraps while her employer leisurely proceeds with the destruction of 1,650 acres for data centers.

Bob Nelson, Ashland District; May 4, 2026

Attachments: Large-Load Connection Queue Process Standards
Dominion Need and Solution Submissions to PJM - Flamingo Substation
Tract Data Center Revenue Projections - Hickory Hill and Mountain Road

VIRGINIA ELECTRIC AND POWER COMPANY'S
LARGE-LOAD CONNECTION QUEUE PROCESS STANDARDS

A. Purpose

The purpose of these standards is to outline Virginia Electric and Power Company's ("Dominion Energy Virginia" or the "Company") electric transmission planning process to evaluate and plan for Delivery Point ("DP") Requests from Electric Distribution Companies ("EDCs") to serve data centers (the "Standards"). These Standards memorialize: (i) a formal process including a "queue" to manage the pipeline of new large-load DP Requests and the Company's evaluation of those DP Requests; (ii) requirements for new DP Requests to be submitted in advance through the evaluation process; and (iii) enhanced communication by providing regular updates on ongoing Projects and information to be shared with stakeholders of process changes. These Standards and the process they outline promote transparency for stakeholders, protect customers and reliability by aligning DP Requests with system availability, and seek to provide predictable energization sequencing for EDCs and their customers.

B. Definitions (Capitalized Terms)

1. Acknowledgement of Intent ("AOI"): Formal EDC confirmation, within a defined deadline, that a DP Request should remain active and proceed through the evaluation process after initial screening.
2. Batch: DP Requests are queued and grouped in batches (approximately ten per batch, with each batch typically representing two to three gigawatts ("GW") of aggregate load) and given a Batch Number to evaluate system needs holistically, set energization sequencing, and maintain transparency.
3. Campus-Style Developments: Large data center sites that require multiple substations on a single or contiguous parcel of land.
4. Company: For purposes of these Standards, the transmission function of Virginia Electric and Power Company d/b/a Dominion Energy Virginia.
5. Customer: For the purposes of these Standards, the Customer is the EDC.
6. Delivery Point ("DP"): The specific point of electrical connection between the Company's facilities and Customer's facilities.
7. Delivery Point Exchange ("DPE"): The online platform used by EDCs to submit and track their DP Requests to the Company. Only EDCs can access their own DP Requests as well as those of their member cooperatives.
8. Delivery Point Request ("DP Request" or "DPR"): The formal request submitted by an EDC to initiate evaluation of a new or modified DP, that details how and where electricity is requested by a Customer.
9. Electric Distribution Company ("EDC"): A utility company, cooperative, or municipality responsible for distributing electricity to retail customers within a specific geographic area. EDCs manage the infrastructure that delivers electricity from the transmission system to homes and businesses.
10. Feasibility Report: Consolidated technical assessment of local connection options, network impacts (including batch-level review), preliminary costs, and timeline inputs to support Letter Agreement and progression.

11. Letter Agreement ("LA"): Binding agreement that confirms intent to proceed into development, documents the target energization or connection date, and establishes cost/execution implications.
12. Project: The initiation, feasibility, development, and execution of a solution to address a DP Request.
13. Queue: Sequential order of DP Requests moving through the Large-Load Connection Queue Process in assigned Batches.
14. Stage: A phase of the Large-Load Connection Queue Process defined by specific milestones and deliverables, which when achieved allow a DP Request to progress to the next Stage. The Process includes four Stages: Project Initiation; Project Feasibility; Project Development; and Project Execution, each of which is discussed in detail in Section E below.

C. Applicability

These Standards are applicable to DP Requests associated with large loads of approximately 100 megawatts ("MW") or more, serving data center customers within the Dominion Zone ("DOM Zone"). Individual DP Requests are limited to a maximum of 300 MW each. The Company reserves the right to apply the Standards to DP Requests approaching 100 MW in order to prevent efforts by EDCs to scale load to avoid applicability of the Standards.

The Company and EDCs have Memorandums of Agreements ("MOA") that enumerate the parties' relationships and govern how they interact; those MOAs are not superseded by these Standards.

D. Delivery Point Exchange

The Company uses its Delivery Point Exchange or DPE, an online platform, to receive and manage DP Requests and communicate with EDCs. New EDCs, without an existing DPE account, should contact deliverypointexchange@dominionenergy.com to obtain access to the DPE and to create an account profile. EDCs have the ability to manage their own company account by adding or removing authorized DPE users from their organization and assigning role responsibilities to those users within the DPE.

E. The Large-Load Connection Queue Process

The Large-Load Connection Queue Process encompasses four stages: (1) Project Initiation, (2) Project Feasibility, (3) Project Development, and (4) Project Execution. To allow the Company to plan, design, construct, and operate the DP and for a DP Request to advance through the process, each stage in the process requires the EDC to provide certain information for Company review before proceeding to the next stage. The information required by a DP Request is outlined herein and detailed further in Attachment 2 ("Customer Delivery Point Request") to the Company's Facility Interconnection Requirements ("FIR").[1] A DP Request advances from one stage to the next once the Company has determined that a DP Request has satisfied the criteria for one stage and is ready to advance.

[1] https://www.dominionenergy.com/-/media/content/large-business-services/pdfs/virginia/facility-interconnection-requirements.pdf.

Each stage of the process is detailed in the following subsections of these Standards, with Figure 1 below providing a visual timeline of the entire process.

Figure 1[2]

Delivery Point Request Stage Timeline



a. Project Initiation Stage

The Project Initiation stage represents the first stage in advancing a Project from submission toward feasibility and eventual construction and includes the Submittal, Initial Review, and Queue Sub-stages. The Project Initiation stage duration will depend upon the duration of the Queue Sub-stage and the DP Request's Batch Number assignment.

i. Submittal Sub-Stage

During the Submittal Sub-stage, the EDC submits through the DPE a complete DP Request containing all required technical and site information. The key types of required information include: requested load, voltage, and energization date; anticipated peak seasonal demand; load composition; data center load, cooling center, voltage, frequency, and emergency backup information; data center customer equipment information; and campus information where applicable. In addition, the EDC must submit the following:

(1) a preliminary site plan, including notable substation characteristics such as pad size allocated and access road plans, as well as a scaled layout displaying major features/structures and parcel access;
(2) geospatial coordinates; and
(3) a preliminary construction one-line diagram.

Each DP Request is limited to 300 MW, which supports orderly planning and sequencing of large-load connections and is consistent with the FIR.

ii. Initial Review Sub-Stage

Once submitted, the Company reviews the DP Request submission for completeness and acceptability.

[2] Durations listed are average durations and assume all necessary documents are submitted to Dominion Energy in a timely manner. Each project will need to be evaluated on an individual basis to establish project durations/timelines.

During the Initial Review Sub-stage, the Company performs an initial connection study to determine whether the proposed DP is viable. A DP is considered viable when there is adequate land for a substation, constructible route(s) for grid connection, and no significant environmental factors that would impede construction. If the initial connection study determines the request is not viable at the proposed location, the EDC is notified, and a Batch Number is not assigned. At that point, the EDC can modify its DP Request or cancel it.

iii. Queue Sub-Stage

Once the Initial Review Sub-stage is complete, the DP Request enters the Queue Sub-stage, in which it is placed into the Queue and assigned to a Batch Number based on the date on which the DP Request was submitted by the EDC. The Company groups DP Requests into Batches of approximately ten per Batch, with each Batch typically representing two to three GW of aggregate load.

DP Requests for a Campus-Style Development that are submitted concurrently are evaluated as a group, while subsequent requests submitted after the initial DP Request are assigned to the next available Batch. The DPE tracks the campus name and total expected load, enabling the Company to align related DP Requests during regional planning studies. Campus-Style Development energizations proceed sequentially, typically with approximately three years between energizations. For the first two substations, energization occurs in order and with about a three-year separation in energization. Advancement of the third substation is contingent upon confirmation that the first substation is approaching 80 percent of its requested ramp rate, which serves as a stage gate to move forward with the third substation. Each additional substation is contingent upon the second to last substation approaching 80 percent of its requested ramp rate. For example, the fourth substation is contingent upon the second substation and the fifth substation is contingent upon the third substation.

When the Project is eligible to advance to the Project Feasibility stage, the EDC is notified through the DPE of the issuance of an Acknowledgement of Intent ("AOI"), which includes any revision to the DP Request made by the EDC during the queuing period. These revisions may include more detailed site plan information and any updates to load ramp schedules to ensure feasibility studies are based on current and accurate project information. All revisions to the DP Request require EDC signature. The AOI requires the EDC to confirm and, if necessary, revise the DP Request, certifying that all information and attachments are current and ready for detailed studies and planning that occur during the Project Feasibility Stage. The AOI must be authorized by the EDC within 45 days to proceed.

b. Project Feasibility Stage

The Project Feasibility stage focuses on determining whether constructible electric infrastructure solutions can support the Project, which includes additional planning analyses. To progress through the Feasibility Stage, the EDC must provide:

(1) A zoning conformance letter, *i.e.*, a local municipality acknowledges that land is or will be zoned for a solution to the DP Request; and
(2) A 30% engineering site plan, including evidence of pad location, storm water management, access roads and grading per substation design.

During this stage, the Company evaluates the DP Request and produces the Feasibility Report. In coordination with the EDC, the Company advances a selected solution through the execution of a formal Letter Agreement ("LA"). The LA is a binding document that authorizes engineering expenditures, establishes the anticipated target energization date, and initiates the Project Development stage. The EDC must execute the LA within 120 days of receipt.

Upon the completion of the above, the DP Request is advanced to the Development stage. The Feasibility stage typically spans 8-12 months.

c. Project Development Stage

During the Project Development stage, the DP Request proceeds through conceptual and detailed engineering design phases to finalize the Project design and prepare for construction. The EDC must provide the following additional deliverables to proceed through the Project Development Stage:

(1) Use or exception permit, if required;
(2) Federal and state permitting approvals;
(3) Local permitting approval, if required;
(4) 100% grading plan; and
(5) Construction one-line diagram.

During this stage, the Company completes engineering designs, prepares for construction bid packages, and secures all necessary regulatory reviews and filings (including, if required, a Certificate of Public Convenience and Necessity from the appropriate state regulatory commission).

Once the above requirements are met, the DP Request proceeds to the Project Execution Stage. The Project Development stage typically spans 20 to 48 months.

d. Project Execution Stage

The Project Execution stage encompasses the final design, construction, and energization of the electric infrastructure required to serve the Project. The EDC must provide the following additional deliverables to progress through this stage:

(1) As-built grading plan;
(2) Noteworthy load characteristics;
(3) Customer equipment information;
(4) Operating one-line diagram;
(5) Transformer test reports and loss curve;
(6) Operating procedures description;
(7) Protection scheme functional diagram;
(8) Protection device information; and
(9) Catalog sheet.

During this stage, the Company completes conceptual and detailed design of the selected Project solution, issues construction packages for bid, and constructs and energizes the approved DP.

Upon completion, the DP Request is formally closed and transitioned to the Company's operations and maintenance organization. The Project Execution stage typically spans 24 to 48 months.

F. Queue and Standards Updates

a. ***Annual Updates of Queue Status through DPE***

The Company provides annual updates to the EDC following the Company's review of the Queue, including updates to the status of the DP Request during the Queue sub-stage of the Project Initiation stage. Annual updates typically occur during the second quarter of the calendar year.

b. ***Future Updates of Standards***

Updates to the Standards will be made as needed and incorporated into the FIR annually, as required by NERC.

Dominion Transmission Zone: Supplemental Customer Load Request

Need Number: DOM-2024-0058
Process Stage: Need Meeting 9/13/2024
Project Driver: Customer Service

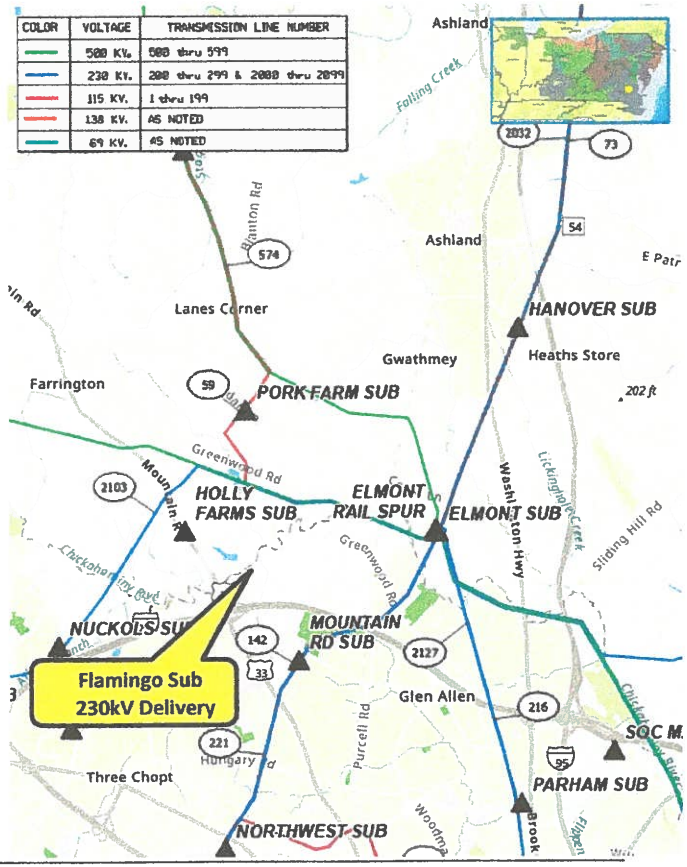
Specific Assumption References:

Customer load request will be evaluated per Dominion's Facility Interconnection Requirements Document and Dominion's Transmission Planning Criteria.

Problem Statement:

DEV Distribution has submitted a DP Request for a new substation (Flamingo) to serve a data center in Hanover County with a total load in excess of 100MW. The requested in-service date is 01/01/2029.

Initial In-Service Load	Projected 2029 Load
Summer: 47.0 MW Winter: 42.5 MW	Summer: 47.0 MW Winter: 42.5 MW



Dominion Transmission Zone: Supplemental Customer Load Request

Need Number: DOM-2024-0058
Process Stage: Solution Meeting 10/08/2025
Previously Presented: Need Meeting 09/10/2024
Project Driver: Customer Service

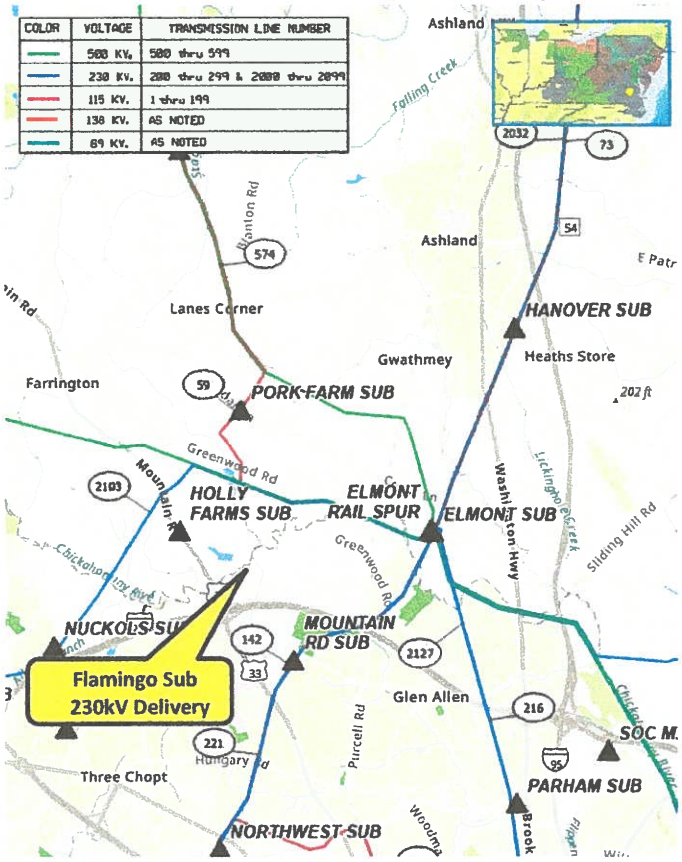
Specific Assumption References:

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Problem Statement:

DEV Distribution has submitted a DP Request for a new substation (Flamingo) to serve a data center in Hanover County. The requested in-service date is 01/01/2029.

Initial In-Service Load	Projected 2029 Load
Summer: 47.0 MW Winter: 42.5 MW	Summer: 47.0 MW Winter: 42.5 MW



Dominion Transmission Zone: Supplemental Flamingo 230kV Delivery - DEV

Need Number: DOM-2024-0058

Process Stage: Solution Meeting 10/08/2025

Project Driver: Customer Service

Proposed Solution:
Cut existing 230kV Line 2103 (Elmont to Short Pump) in and out of proposed Flamingo substation. Lines to terminate initially in a 230kV four-breaker ring arrangement, with an ultimate six-breaker configuration.

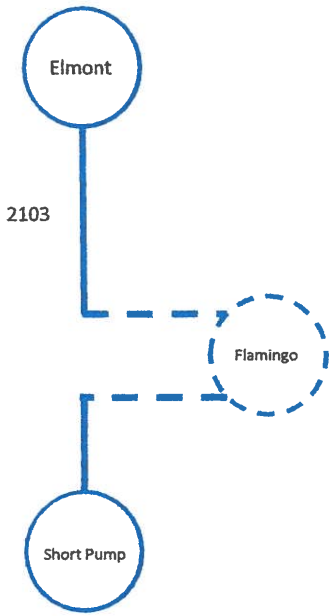
Estimated Project Cost: $20.0M Substation, $10M Transmission Lines

Alternatives Considered: None, new station is on customer owned land and adjacent to existing transmission lines

Projected In-service Date: 12/31/2029

Project Status: Engineering

Model: 2029 RTEP



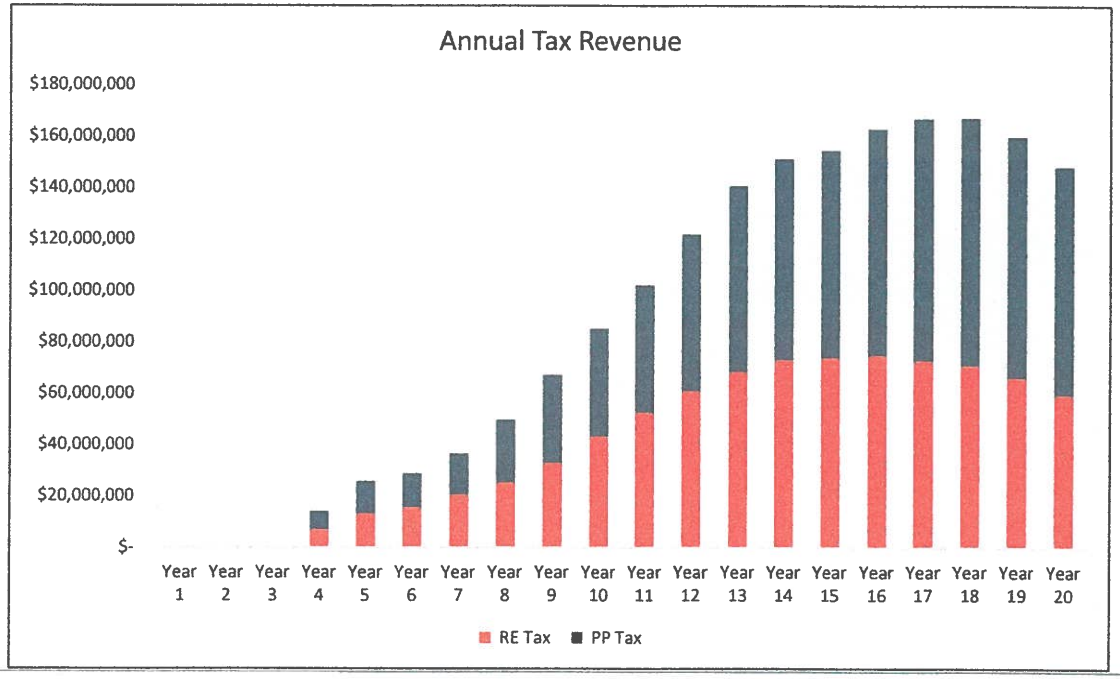
Positive Economic Impacts to Hanover County

tract

- Real Estate Tax Revenue
- Data Center Tax Revenue
- Incremental Taxes Collected
  - 2028 = $25.7M
  - 2034 = $102M
  - 2041 = $167M
- Taxes Estimated reflect full build-out of Blenheim & S. Wales properties.
- Over 20 years, an estimate of $1.78B in taxes will be collected by the County
- Well-paying jobs

Tract has collaborated with the Hanover County Commissioner of Revenue to create a DIRECT fiscal impact estimate based on the expected timing of Real and Personal Property investments connected to this project

Total 20 Year Estimated Tax Receipts	**$ 1,781,393,321**
Average Annual Estimated Tax Receipts	**$ 89,069,666**
Max Annual Estimate Tax Receipts	**$ 167,130,737**

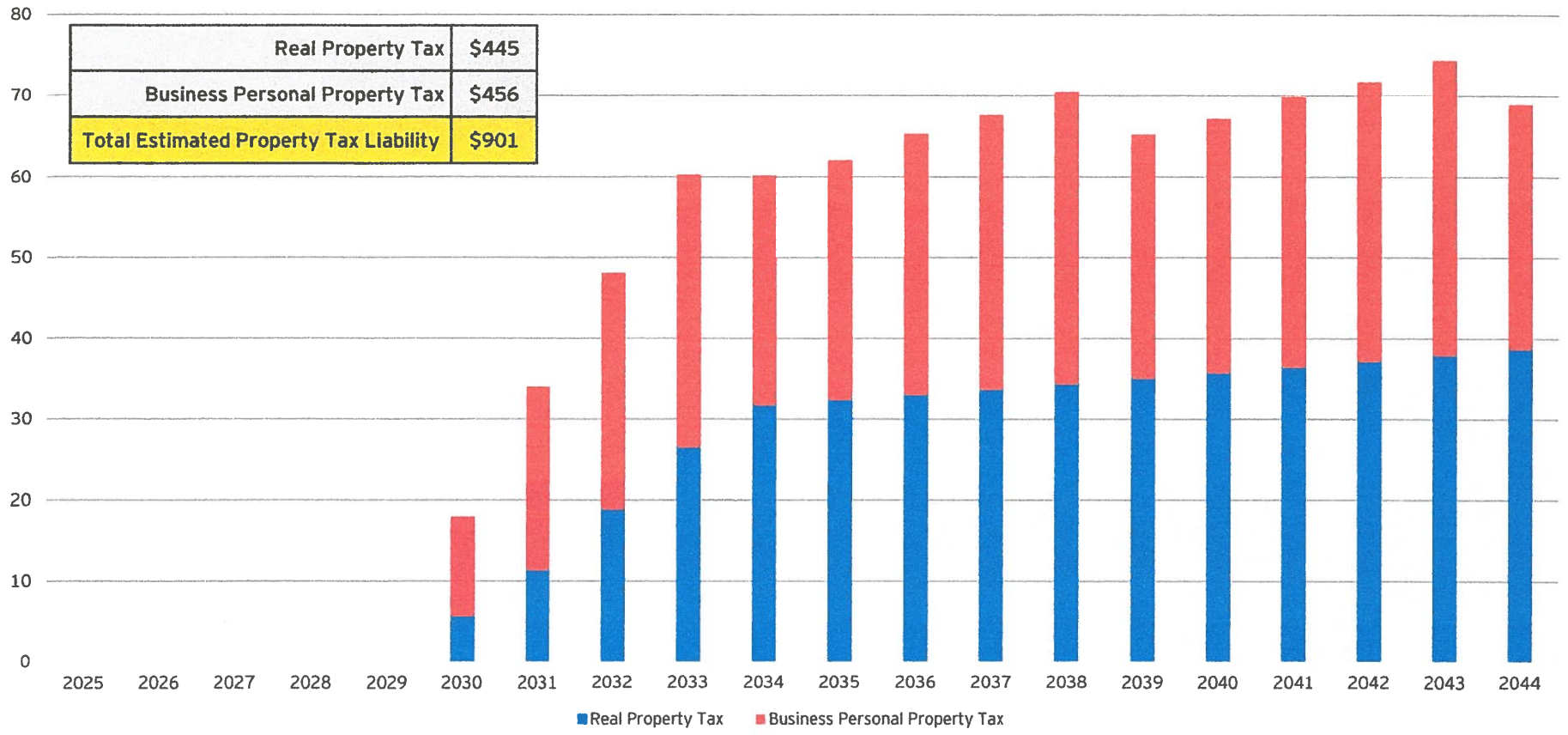


Property Tax

Estimated 20-yr property tax projections*

Values below are expressed in millions of USD

Real Property Tax	$445
Business Personal Property Tax	$456
Total Estimated Property Tax Liability	$901



Biernot, Gretchen W.

From: Robert Nelson <ranelsonjr1@verizon.net>
Sent: Tuesday, April 28, 2026 11:11 AM
To: Davis, Sean M.; Dibble, Susan P.; Floyd, Danielle G.; Herzberg, F. Michael; Hudson, Ryan M.; Prichard, Faye O.; Stoneman, Jeff S.; Hunter, Jo Ann M.; Pompei, Andrew J.; Biernot, Gretchen W.
Subject: Supplemental Traffic Position Paper - Marchetti Properties, et al., REZ2025-00023
Attachments: SUPPLEMENTAL TRAFFIC POSITION PAPER.docx

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Good morning Chairman Davis, Supervisor Dibble, Supervisor Floyd, Supervisor Herzberg, Supervisor Hudson, Supervisor Prichard, and Supervisor Stoneman; Senior Director of Planning and Community Development Hunter, Deputy Director Pompei, and Current Planning Manager Biernot;

Find attached a three page supplemental traffic position paper in this case. It discusses Tract's failure to consider the 12th Edition of the ITE Trip Generation Manual in its application and Traffic Impact Analysis and includes an executive summary and conclusions.

The position paper was filed with the Planning Department today. I request that the position paper be included in the record and in any staff report in this case.

Thank you for your consideration. Bob Nelson, Ashland District

SUPPLEMENTAL TRAFFIC POSITION PAPER – MARCHETTI PROPERTIES, REZ2025-00023

This supplemental position paper discusses Tract's failure to consider the 12th Edition of the ITE Trip Generation Manual in its application and Traffic Impact Analysis (TIA). Data center trip generation should be calculated using the 12th Edition, and a new TIA should be prepared.

EXECUTIVE SUMMARY

Trip generation is the foundation of every TIA. The ITE Trip Generation Manual is the bible. Data center trip generation in the 12th Edition was ignored by Tract in the application and every TIA in this case; the existence of the edition was never even acknowledged. The data center trip generation in Tract's traffic documents was false; and the failure to use the 12th Edition was dishonest, deceitful, and without basis.

Honesty and integrity must be restored. A new TIA must be prepared based on the 12th Edition. In addition to the normal reviews, the county traffic engineer and the Department of Public Works (DPW) should review the new TIA. The Transportation Committee should also review all traffic documents and provide independent recommendations on the issues. The traffic discussion in the staff report should be revised.

ITE TRIP GENERATION MANUAL, 12th EDITION

On August 18, 2025, ITE released the 12th Edition of its Trip Generation Manual. A report on the 12th Edition by Gorove Slade, a regional traffic engineering firm, states: "Trip generation rates are the foundation of every traffic impact analysis." https://goroveslade.com/whats-changed-in-the-ite-trip-generation-manual-12th-edition-and-why-it-matters-for-your-project/. The report discusses their importance:

> "Lower rates might mean fewer required improvements and faster approvals. Higher rates may necessitate additional study requirements or mitigation measures."

The Gorove Slade report then highlights key changes between the 11th and 12th Edition for data center trip generation:

> "Data Centers: Significantly Lower Rates with More Robust Data
>
> This is one of the most dramatic changes. In the 11th edition, data centers had only three data points — barely enough for statistical confidence. The 12th

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HANOVER COUNTY
PLANNING DEPARTMENT

edition includes substantially more data, and the resulting trip generation rates are notably lower than what we've been working with."

The 12th Edition certainly has more data. 16 to 20 studies were used for data center weekday and AM and PM peak period trip generation. The 11th and 12th editions do have one thing in common. Both report data center trip generation rates "per 1,000 square feet."

On September 23, 2025, over a month after the 12th Edition was released, Mr. David Capparuccini with Kimley-Horn signed a TIA compliance form in Tract's application. The completed form claims all editions, land use codes, and pages in ITE Trip Generation Manuals are "N.A." - not applicable, not available - for Tract's data center project.

Instead, Tract's hypothetical trips "per 100 megawatts" approach was used to calculate trip generation on the form and then in the TIA. The weekday and AM/PM peak hour trip generation ignored the only ITE recognized basis for data center trip generation – per 1,000 square feet.

The 12th Edition must be rated triple A - applicable, available, accurate. Data center trip generation was reported with statistical confidence. With contempt for the 12th Edition, Tract's traffic engineer chose to complete and sign a form which was 100% false.

The pre-scope of work form (Appendix B) and the trip generation (Appendix F) in the TIA's provide no justification for these actions.

*The form is undated and unsigned; only issues with the 11th Edition are discussed.

* Nowhere in the two appendices is it stated that megawatts and employees from a Tract hypothetical data center campus of six identical buildings has been used.

* The 12th Edition and the Bowman analysis recommend square feet for trip generation.

* The 12th Edition of the ITE Trip Generation Manual cures the deficiencies in the 11th Edition and was released a month before the application was filed and the TIA submitted.

TRACT DATA CENTER TRIPS PER 1,000 SF - 12TH EDITION AND BOWMAN

I reviewed the 12th Edition at the Planning Department offices. Notes were taken on the six pages for the data center land use code. The trip generation rates per 1,000 sf for weekday and AM/PM peak hours (adjacent street) from three pages in the 12th Edition

are used below. My April 6th traffic position paper contains data center trip generation based on Bowman recommended per 1,000 sf rates which have been used in every recent data center case in Hanover County.

A comparison of Tract's trip generation for the 2.6 million sf scenario (six operational data centers, full buildout) based on the 12th Edition and Bowman is as follows:

	Weekday	AM Peak Hour	PM Peak Hour
12th Edition ITE Manual	1,898	182	130
Bowman	1,950	234	78
12th Edition decrease/increase	(52)	(52)	52

A comparison of Tract's trip generation under the construction (1,100 workers) and partial buildout (two operational data centers) scenario is as follows:

	Weekday	AM Peak Hour	PM Peak Hour
12th Edition ITE Manual	2,833	831	813
Bowman	2,850	848	796
12th Edition decrease/increase	(17)	(17)	17

The difference in weekday trip generation between the 12th Edition and Bowman is less than 3% for the full buildout scenario. However, the differences in peak hour trip generation between the two sources are significant. The 12th Edition found a lower trip generation rate should be used in the AM peak hour and a higher trip generation rate should be used in the PM peak hour compared to Bowman. The full buildout difference between AM and PM peak hour trip generation is a more reasonable 53 trips based on the 12th Edition versus 156 trips for Bowman. Of the two, the trip generation in the 12th Edition is based on more studies and data points; and the rates are more reasonable.

CONCLUSIONS

A new TIA is required. It should be prepared based on the trip generation rates in the 12th Edition and reviewed by the county traffic engineer, DPW, and the Transportation Committee before a Board of Supervisors decision is made in these cases.

Bob Nelson, Ashland District; April 28, 2026

Biernot, Gretchen W.

From: Hunter, Jo Ann M.
Sent: Monday, March 9, 2026 11:55 AM
To: Biernot, Gretchen W.; Pompei, Andrew J.
Subject: FW: Data Centers

Please add to public comment.

From: Davis, Sean M. <smdavis@hanovercounty.gov>
Sent: Monday, March 9, 2026 10:14 AM
To: Steve Dabney <steve.dabney@asphalt-emulsion.com>
Cc: Martin, William E. <WEMartin@hanovercounty.gov>; Budesky, John A. <jabudesky@hanovercounty.gov>; Walter, Dennis A. <dawalter@hanovercounty.gov>; Hunter, Jo Ann M. <JMHunter@hanovercounty.gov>; Smith Dunlop, Kristin K. <KKSmithDunlop@hanovercounty.gov>
Subject: Re: Data Centers

Mr. Dabney,

The matter you are referencing was deferred by the Planning Commission.

This matter has not come to the Board of Supervisors, for a public hearing, at this time.

Respectfully,
Sean

Sean M. Davis
Chairman
Board of Supervisors
Hanover County, Virginia

On Mar 9, 2026, at 9:04 AM, Steve Dabney <steve.dabney@asphalt-emulsion.com> wrote:

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Mr. Davis,

At the last meeting concerning the data center at the Mountain Road Tech Park, I notice that the vote was deferred. Deferred? Why? Just say no in your vote for these data monstrosities. Every single data center that files to come to Hanover needs to be shut down before they even get started. Let them know that our county is not for sale. The hired presentation henchmen at the meetings paint the beautiful picture of minimal impact on electricity, water and noise. They tell you of the wonderful rows of trees that will be planted between the facility and the neighborhoods as if that will fix everything. They seem to have all the answers. Laughable. Do you believe them? At the rate the door has been opened,

the entire county will be one big data center in the near future. What do you think our landscape and environment will look like in ten or twenty years? Acres and acres of giant buildings that litter the once pristine farm lands of the country, pumping their corporate greed and chemicals into the landscape. What happens to the heated water that's full of "forever chemicals"? Where does the condensation from these giants go? Does it rain back down in the form of chemical vapor? Does it pollute the small amount of water that's left? These things have popped up so fast that no one knows the long term impact. No one knows if they are safe, much less the given eyesore they create. They build mostly unregulated, meanwhile the taboo of urban sprawl will keep me from subdividing my little plot of land with all its rules and guidelines. Double standard? You supervisors need to put the word out that Hanover and its citizens not for sale. Period. Stand up for your county and its citizens that voted you in for the trust you promised. Don't cave to corporate pressure.

We all see the soft, sun filled advertisements on the television talking about the glorious achievements and economic uplift to the community through the building of these boxes of despair. Do you think for once that if they were so great they would have to create costly advertisements and PR campaign on their behalf? Wake up!! I can't for the life of me figure out why you would even entertain these demons. The jobs? After construction the people hired are few. Tax base? The tax base they create seems to be minimal with all the incentives they receive. It's a catch 22 to me. We wouldn't need all these glorious taxes I hear so much about if we didn't have to pay for infrastructure to support these things. They get an incentive while my taxes go up year by year. What's wrong with that picture?

Don't sellout. Do the right thing for your neighbors. Don't be a tool for the oligarchs that have been spying on you for the last fifteen years.

Ask yourself " how would I vote if it were going up in my back yard?" Hopefully in the future, your grandchildren will think of you with admiration for your courage and insight into their future rather than the disgrace of your choice to impose elements on them that cannot be reversed.

You cant buy back the buffalo once they're gone. Have we learned nothing?

Steve Dabney
804-305-4170

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Good evening Chairman Davis and Board Supervisors. My name is Bob Nelson. I reside in the Ashland District.

Last week the Planning Commission recommended approval of Tract's Mountain Road project. Tonight I'd like to discuss some major issues with the case.

First, the concept plan should not be the single sheet referenced in the proffers. Essential information for reviewing construction plans is in the complete plan. Acreage for complying with building coverage requirements is just one example. The complete concept plan should be proffered. Planning staff should insist on it.

Second, removal of the dam and pond should not be off limits, a subject not even addressed in the proffers. The sediment behind the dam contains microplastics and God knows what else from decades of chicken plant operations. Moreover, the sediment should not be re-used on site as Tract's Environmental Manager proposed. Grading with noxious sediment to increase the ground level elevation for data center buildings would be a shameless construction practice. Proffers are absolutely required here.

Third, we heard about Hanover's history tonight. Tract claims there are no known or suspected historic resources on the property or adjacent properties. The page in its application is blank, the signature unreadable; and this project is 100 acres greater than the Lake District case. Hanover County cares about historic resources. Tract has contempt for them.

Fourth, there are no limits on the number of data centers that can be under construction at one time. This gaping hole in the proffers must be plugged.

Fifth, notice should be given, a public hearing should be held, and Board or Planning Commission approval should be required for all construction and management plans. Time and time again, Tract has demonstrated that it cannot be trusted.

Today is Earth Day. If the Board cares about the environment, denial of Tract's applications is the required response. Thank you.

Marchetti Properties, et al., REZ2025-00023, et al.

Citizen Comments, Board of Supervisors Meeting, April 22, 2026 (video 38:15-40:28)

Attachment: March 27-April 8, 2025 emails re: water quality and uses of pond on Marchetti property, company investigating development, and related issues.

From: Pompei, Andrew J. <AJPompei@hanovercounty.gov>
Subject: RE: Gateway EDZ: latest set
To: Bachmann, John <John.Bachmann@stantec.com>; Hunter, Jo Ann M. <JMHunter@hanovercounty.gov>
Cc: Beske, Jason <Jason.Beske@stantec.com>; McCray, Andrew <Andrew.McCray@stantec.com>; Oyuela-Bonzani, Isabel <Isabel.OyuelaBonzani@stantec.com>; Alaimo, Vince <vince.alaimo@stantec.com>; Connor, Maggie <Maggie.Connor@stantec.com>
Sent: April 8, 2025 1:51 PM (UTC+00:00)

Thank you for the info! I don't think we want to do an in-depth analysis or anything, I was just thinking we'd mention it as a potential issue.

Based on Ms. Dibble and Mr. Leadbetter's availability, the next public meeting to share study recommendations will be Monday, May 12 at 6:00 p.m. We are working to finalize the meeting location.

See you tomorrow,
Andrew

From: Bachmann, John <John.Bachmann@stantec.com>
Sent: Monday, April 7, 2025 5:26 PM
To: Pompei, Andrew J. <AJPompei@hanovercounty.gov>; Hunter, Jo Ann M. <JMHunter@hanovercounty.gov>
Cc: Beske, Jason <Jason.Beske@stantec.com>; McCray, Andrew <Andrew.McCray@stantec.com>; Oyuela-Bonzani, Isabel <Isabel.OyuelaBonzani@stantec.com>; Alaimo, Vince <vince.alaimo@stantec.com>; Connor, Maggie <Maggie.Connor@stantec.com>
Subject: RE: Gateway EDZ: latest set

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Good afternoon!

Given the way water flows on the site and the way chicken is usually packaged, it seems logical that Holtzgrefe pond would be a place for microplastics to accumulate. We can do environmental and/or remediation analysis (I'm copying Vince, from our interview), but it isn't currently part of the scope. We can add a task if you want. We have the expertise in Williamsburg.

In the meantime, in terms of implications contamination for the concept plan:

- If the pond's future function is primarily stormwater detention on a data center campus, then remediation probably wouldn't be necessary. The regulatory framework for drinking water does not require it.
- If you go with Option 2 and target a fishable or swimmable public facility, then clearly there is work to be done.

We have a working outline for the design guidelines and can share it with you at Thursday's meeting.

John

From: Pompei, Andrew J. <AJPompei@hanovercounty.gov>
Sent: Monday, April 7, 2025 2:15 PM
To: Bachmann, John <John.Bachmann@stantec.com>; Hunter, Jo Ann M. <JMHunter@hanovercounty.gov>
Cc: Beske, Jason <Jason.Beske@stantec.com>; McCray, Andrew <Andrew.McCray@stantec.com>; Oyuela-Bonzani, Isabel <Isabel.OyuelaBonzani@stantec.com>
Subject: RE: Gateway EDZ: latest set

Good Afternoon!

Jo Ann and I are reviewing the drawings prior to our meeting on Thursday.

According to the company investigating development of the Marchetti property, high levels of microplastics were found in Holtzgrefe Pond. At our meeting on Thursday, could be prepared to tell us how that impacts potential development of the property, what remediation steps may be necessary, and how that information could be incorporated into the small area plan (if it needs to be)?

We would also like to discuss the design guidelines.

We are coordinating with Ms. Dibble, but we are thinking the next public meeting will be May 12 or May 19. We will likely begin advertising those dates soon, so we would like to ensure we will have the necessary work product by then to present to the public.

Thank you,
Andrew

From: Bachmann, John <John.Bachmann@stantec.com>
Sent: Wednesday, April 2, 2025 2:19 PM
To: Pompei, Andrew J. <AJPompei@hanovercounty.gov>; Hunter, Jo Ann M. <JMHunter@hanovercounty.gov>
Cc: Beske, Jason <Jason.Beske@stantec.com>; McCray, Andrew <Andrew.McCray@stantec.com>; Oyuela-Bonzani, Isabel <Isabel.OyuelaBonzani@stantec.com>
Subject: Gateway EDZ: latest set

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Andrew and JoAnn –

Please find attached an updated set of drawings that reflects our discussion last week. I am sending them as individual files, in case you want to mix and match for your meeting today.

Regards
John

From: Pompei, Andrew J. <AJPompei@hanovercounty.gov>
Sent: Thursday, March 27, 2025 1:28 PM
To: Bachmann, John <John.Bachmann@stantec.com>; Beske, Jason <Jason.Beske@stantec.com>; McCray, Andrew <Andrew.McCray@stantec.com>
Subject: National Wetlands Inventory

Good Afternoon!

Our GIS team uses the National Wetlands Inventory as a tool to determine if there are potential wetlands in an area:
https://fwsprimary.wim.usgs.gov/wetlands/apps/wetlands-mapper/

This shows some potential wetlands areas within the Marchetti property.

Thank you,
Andrew

Andrew J. Pompei, CZA, AICP
Hanover County Planning Department
Deputy Director of Planning
(804) 365-6871
ajpompei@hanovercounty.gov

Biernot, Gretchen W.

From: Pompei, Andrew J.
Sent: Monday, April 20, 2026 2:42 PM
To: Biernot, Gretchen W.
Subject: FW: Mountain Road Tech Park

From: fcwillson@icloud.com <fcwillson@icloud.com>
Sent: Monday, April 20, 2026 11:19 AM
To: Dibble, Susan P. <spdibble@hanovercounty.gov>
Cc: Leadbetter, Larry A <laleadbetter@hanovercounty.gov>; Hunter, Jo Ann M. <JMHunter@hanovercounty.gov>; Pompei, Andrew J. <AJPompei@hanovercounty.gov>; Travis C Willson <travis.c.willson@gmail.com>
Subject: Mountain Road Tech Park

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Sue Dibble,

I would like to thank Mr. Leadbetter and the Planning Commission for requesting a review of Hanover's noise ordinance and it appropriateness for use as it pertains to 7/24 hr. noise created by data centers. There is growing known information that data centers can have community health and non-health impacts that can at least be partially mitigated through improved planning and design. These impacts are my families #1 concern at this point.

I would like to request that this case does not come up on the Supervisors docket for vote at a minimum until June . This will assure time for staff to properly research topic and talk with other counties or consultants. This would also facilitate staff to meet with my family and others to discuss their findings and compare them to my families' thoughts and feeling on matter. It would also allow for proper time to negotiate with all parties.

My family would like to avoid a similar situation like we had at this last Planning Commissioners meeting where Tract was making proffer changes effecting my family's land up until a few hours before the meeting and we were not afforded a proper time to review or comment. My experience is Tract does not respond timely to requests but rather at last minute .

In addition, I would also like to request a meeting with Planning Staff when they are ready to discuss their findings and what my family feels are appropriate noise methodology/restriction limits(high and low Frequency) based on our research . My family feels it has an obligation to protect the community and ourselves from Data Center impacts by requesting strict guidelines and penalties that could in fact help set a standard for Virginia. Please let us know if you can accommodate our request for a June Supervisor Calendar date or later.

Respectfully ,
Frank Willson
757-478-2222

Biernot, Gretchen W.

From: Planning
Sent: Friday, April 17, 2026 1:20 PM
To: Biernot, Gretchen W.
Subject: Fw: Data Centers

Thank you,
Makayla Stepp-Davis
Planning Technician II
Planning Department
(804) 365-6362
Hanover County

From: Abbott, Alan C. <acabbott@hanovercounty.gov>
Sent: Friday, April 17, 2026 1:15 PM
To: Randall I <rmi.architect@gmail.com>
Cc: Planning <planning@hanovercounty.gov>
Subject: Re: Data Centers

Mr. Ingram,

Yes, there is still opportunity for public input. This case will now move to the Board of Supervisor's agenda. I'm not sure which meeting this case will be heard, but their next meeting is 4/22.

You can keep an eye on their agenda(s) here -->https://hanovercova.portal.civicclerk.com/

I've CC'd staff so your thoughts can be entered into record.

Please reach out to them if you have any other thoughts or concerns.

Thank you,

Alan

Alan Abbott
Planning Commissioner
Ashland District Representative
P.O. Box 45 | Ashland, VA 23005 | 804.496.1222
View Active Land Use Cases
Planning Commission Meetings

From: Randall I <rmi.architect@gmail.com>
Sent: Friday, April 17, 2026 10:12 AM
To: Abbott, Alan C. <acabbott@hanovercounty.gov>
Subject: Fwd: Data Centers

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Mr.Abbott,
Thank you for voting your conscious. I appreciate it. You heard the concerns of residents, and was not swayed by corporate greed.

I realize I am late to the game, but I have several concerns. Is there a path or avenue still to speak out in opposition?

The Small Area study plan was meant to encourage new business, and attract patrons and visitors to this section of the County. Such projects as the Sports Complex at Virginia Center, or the Lake project in Chesterfield attrack out of towners who visit, need places to stay, and spend money while here. During the Small Area plan study, the vast majority of residents, 85%, were in favor of buildings less than 3 stories, or 40' in height. They also wanted an architectural aesthetic indicative of a rural community, with gabled roofs and character over large concrete boxes. Why are you not enforcing building heights to this developer?

As to efficiency and job creation, I realize it'll promote jobs during construction, but once complete, it'll employ 1 person per 1.2 acres. Does this sound like it is placemaking, creating jobs for our residents? 350 people would take up .5 acres in a 2 story building. We have surrendered 426 additional acreas.

I'm a nearby homeowner in Henrico County. I live in Rock Springs Estates and my home backs up to the Chickahominy River, some 500' away.
I realize a Data center makes economic sense for the County and it is a good use of the parcel with regards to traffic. However, I do not want to see or hear it from my yard. I spoke in opposition at the February meeting regarding setbacks and the drain on our natural resources and amount of energy consumption. I asked for greater setbacks on the Southern and Eastern property line. This development is 427 acres. Tract's response to the February meeting was to increase the buffer from 200' to a variable width up to 300'. The additional 100' buffer is twice the width of the room we met in last night. That's it? They have 427 acres. This does not go far enough in my opinion. Why not limit the building heights to 40', and a 500' buffer? This will still provide plenty of area to disturb and generate more than enough income for the County. We were told a development this size would generate 1,000 x more revenue than a typical mixed use development. It would seem if you limited the number of buildings and height, we could find a happy medium to serve both the County and its residents.
Why not carve out 50-100 acres as a natural resource and park to be enjoyed by the residents? Instead, this area will be gated, fenced and highly secured.

You asked for community engagement, and you received it. It's been mentioned many times the attendance regarding this hearing has been greater than any other case in quite some time. The

community is speaking, yet the Commission isn't listening. The direction they are taking goes against the wishes of the residents and adjoining property owners. It is such a display of Corporate and Government greed and it is sickening to watch and witness.

Please help. What can be done to impose more restrictions?

Respectfully,
Randall Ingram

Biernot, Gretchen W.

From:	Planning
Sent:	Friday, April 17, 2026 8:43 AM
To:	Biernot, Gretchen W.
Subject:	Fw: Marchetti Properties, et al., REZ2025-00023, et al. - Opposing Comments, Planning Commission 4-16-2026 Mtg.
Attachments:	Marchetti Properties, REZ2025-00023 -Opposing Comments - 4-16-2026 PC Mtg.docx

Thank you,

Makayla Stepp-Davis
Planning Technician II
Planning Department
(804) 365-6362
Hanover County

From: Robert Nelson <ranelsonjr1@verizon.net>
Sent: Friday, April 17, 2026 8:35 AM
To: Davis, Sean M. <smdavis@hanovercounty.gov>; Dibble, Susan P. <spdibble@hanovercounty.gov>; Floyd, Danielle G. <DGFloyd@hanovercounty.gov>; Herzberg, F. Michael <fmherzberg@hanovercounty.gov>; Hudson, Ryan M. <RMHudson@hanovercounty.gov>; Prichard, Faye O. <foprichard@hanovercounty.gov>; Stoneman, Jeff S. <JSStoneman@hanovercounty.gov>; Planning <planning@hanovercounty.gov>
Subject: Marchetti Properties, et al., REZ2025-00023, et al. - Opposing Comments, Planning Commission 4-16-2026 Mtg.

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Good morning Chairman Davis, Supervisor Dibble, Supervisor Floyd, Supervisor Herzberg, Supervisor Hudson, Supervisor Prichard, and Supervisor Stoneman; Planning Department;

Attached please find my opposing comments, along with references to the video, from last night's Planning Commission meeting on Tract's Mountain Road data center project. I request that this email and the comments be included in the record and future staff reports in these cases.

Thank you for your consideration.

Bob Nelson, Ashland District

Good evening Chairman Leadbetter, Planning Commissioners. My name is Bob Nelson. I reside in the Ashland District.

This is Tract's $1.78 billion dollar tax revenue study for its Hickory Hill project. Data center tax revenues were projected to be $25.7 million in 2028, over $100 million from 2028 to 2030. Supporters gushed about Tract's tax revenues. Game changing. Transformational. Data center tax revenues are now projected to be zero in 2028 to 2030. Instead of working on Hickory Hill, between March 2024 and August 2025 Tract pivoted to a new project. This one. Mountain Road. Broken promises. Bad faith. Trust destroyed. We can rip this one up. [document ripped up]

Hickory Hill's proffers and concept plan mandate the preservation of buffers and natural areas. Tract's construction plan for a loop road violated them. We don't need to rip the proffers and concept plan up. Tract already has.

In this case, Tract minimized traffic by ignoring data center building square feet and used contradictory assumptions for construction workers in the TIA and the revenue study. The TIA was public in September, but Tract withheld the report on tax revenues until late February. Deceit, dishonesty, games, and spin. These reports can be ripped up. [documents ripped up] Tract lacks corporate integrity.

Tract is headquartered in Colorado. It has 14 active data center projects in 7 states, but none are in Colorado. Tract needs to practice what it preaches. Sing "Rocky Mountain high." Open a data center in Colorado.

In Virginia, however, Tract needs to leave. Self deport. In Hanover County, the fate of Tract's applications should be burial. RIP. Rest in peace.

Opposing Comments, Marchetti Properties, et al., REZ2025-00023, et al.

Planning Commission Meeting, April 16, 2026 (video at 2:29:10 – 2:31:40)

Biernot, Gretchen W.

From:	Holly Manke <hmanke@yahoo.com>
Sent:	Friday, April 17, 2026 7:41 AM
To:	Planning; Biernot, Gretchen W.; Leadbetter, Larry A; Abbott, Alan C.; McGhee, Jr, Fredric I.; Martin, William E.; Iverson, Edmonia P.; Heizer, Brett; Parker IV, Clifton L.
Cc:	Dibble, Susan P.; Floyd, Danielle G.; Herzberg, F. Michael; Prichard, Faye O.; Stoneman, Jeff S.; Hudson, Ryan M.; Davis, Sean M.
Subject:	Mountain Road Technology Park

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I will say it. The Love of Money is the Root of all Evil and it was on display last night. Last minute conceptual site plan changes. Last minute Proffers and reports from the commissioner of the revenue. All these items and more posted 4/16/2026, right before the Planning Commission meeting.

Let me ask you this. Did you read it? Did you read the all of the proffers posted 4/16/2026? Read all of the conceptual site plan posted 4/16/2026? All the footnotes, etc.? Or did you rely on someone else to tell you what changed, what was new, and what it said? Would you sign a contract you had not read yourself? That's what you did last night when you voted Yes. You signed a contract with Tract without reading all the fine print.

Do not try and say that you are not the final decision because you gave your approval without reading it. If you would have read it you would have seen this under section 15

(b) Private Wells for Cooling Prohibited: The use of private well water for water cooling data center equipment is strictly prohibited.

This says the use of private wells for cooling is prohibited. Not prohibited for any other use? All uses? No, just for water cooling.

As in contracts, it's all in the specifics. That's probably only one of the problems since I have not had the chance to read it entirely either since it was updated day of. This is something I had to say in my speech from the problems that were already there before the proffers were changed day of the meeting.

I was disenfranchised last night. I tried to sign up to speak Friday morning to Sunday on my phone. I know you were notified that the mobile sign up option was not working. Not that my particular reasons for only having my phone to sign up are important, but I was farm sitting in Montpelier for a friend and did not have access to a computer until I returned home Sunday. When I did, I was waitlisted. The people on the waitlist should have been allowed to speak. There were only eight speakers for the support so that additional time could have been used for the citizens of Hanover to speak, especially sine you knew there were registration problems.

I am not bold enough to think my words alone would have altered this decision. I am bold enough to say that if this is how Hanover conducts business, things need to change. Any commission worth its salt would never approve anything based on what others say it says but would have read it themselves. That's why day of changes should result in an automatic deferral.

Holly Manke
South Anna
Friends of Hanover

"Don't be afraid to go where you've never gone and do what you've never done, because both are necessary to have what you've never had and be who you've never been." - The Universe

Pompei, Andrew J.

From: Robert Nelson <ranelsonjr1@verizon.net>
Sent: Monday, April 20, 2026 7:54 AM
To: Davis, Sean M.; Dibble, Susan P.; Floyd, Danielle G.; Herzberg, F. Michael; Hudson, Ryan M.; Prichard, Faye O.; Stoneman, Jeff S.; Hunter, Jo Ann M.; Pompei, Andrew J.; Biernot, Gretchen W.; Planning
Subject: Data Center Building Sizes and Heights - Marchetti Properties, et al., REZ2025-00023, et al.

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Good morning Chairman Davis, Supervisor Dibble, Supervisor Floyd, Supervisor Herzberg, Supervisor Hudson, Supervisor Prichard, and Supervisor Stoneman; Senior Director of Planning and Community Development Hunter, Deputy Director Pompei, and Current Planning Manager Biernot;

The Special Exception request for Tract's proposed data center project on Mountain Road is now before the Board. What kind of data center buildings can we expect Tract to construct? Based on available information and reasonable assumptions, that determination can be made. That is the purpose of this email.

Building Size. While Tract has not indicated what it will do, the Ernst & Young (EY) tax revenue study and the most recent concept plan show what is possible, indeed likely. The EY report shows 6 buildings with a total of 2,600,000 square feet (sf). Based on the most recent concept plan, the acreage available for data centers in the three building areas is also known. They are 29.9 acres (1A, 1B, 1C), 31.2 acres (2A), and 40.2 acres (3A). See, Real and Personal Property Tax Revenues position paper, p. 3, n. 3 (March 10, 2026). Area 1 is the smallest and has the most irregular shape. Area 2A is the next largest and has the most rectangular shape. Area 3A is the largest.

Assuming two data center buildings in Area 1 that are half the size of the four data center buildings in Areas 2 and 3, then each building in Area 1 is 260,000 sf; and each building in Areas 2 and 3 is 520,000 sf. The total of 2.6 million sf for 6 data center buildings agrees with the EY study.

The data center building acreage is 11.94 acres in Area 1. The data center building acreage is 23.88 acres in Area 2 and Area 3. The acreage for data centers in the building areas is less than the acreage available in the areas, and the building coverage provision in the proffers is met based on the development acreage in these areas.

Are there 260,000 sf and 520,000 sf buildings in Hanover County? Yes, and they are in the South Anna District.

Based on a review of county property tax records, the mega warehouse building on Cedar Lane across from Chickahominy Falls is 260,000 sf - 1000 feet long and 260 feet wide (GPIN 7787-17-2488). Cedar Lane Industrial Park, SPR2019-00032. This building is on an M-2 zoned parcel with an assumed maximum height of 45 feet or less.

The Winding Brook mega warehouse building across from Bass Pro is 552,276 sf - with slightly irregular dimensions of 1156 to 1176 feet long and 450 to 470 feet wide (GPIN 7788-63-3346). Winding Brook SW Industrial, SPR2022-00004. This building is also on a M-2 zoned parcel, and a construction plan cover sheet notes that its height is 48 feet subject to a special exception.
The square feet of the Winding Brook building is 6.2% greater than a 520,000 sf data center building - less than an acre. Recently, an ICE detention facility use was proposed for this building before being withdrawn.

Building Heights. Envision Hanover designates this area for Employment Center land use. Appropriate zoning districts for Employment Center are B-1, B-2, OS, BP, MX, and M-1.

Tract has requested M-1 zoning, M-2 is not available. Under the M-1 zoning ordinance, the maximum building height is 35 feet. Section 26-170.2. Without referencing the M-1 ordinance, Tract filed a special exception for a maximum data center building height of 82 feet.

What does the Route 33 Gateway Small Area Plan (SAP) say about building heights? Without discussing Envision Hanover land use, appropriate zoning districts, or the M-1 ordinance, the SAP provides 62 feet maximum building heights for industrial uses if conditions are met. SAP, p. 31 (reference to 35 feet and 62 feet building heights).

Tract has amended its SE application to now seek a maximum 62 feet height for its 6 data centers. Four data centers will be 14 feet higher than the Winding Brook warehouse. Two data centers will be 17 feet higher than the Cedar Lane warehouse.

Conclusions. Under reasonable assumptions, Tract seeks Board approval for 4 data centers about the size of the Winding Brook warehouse and 2 data centers the size of the Cedar Lane warehouse. The heights of all 6 data centers are 14 feet or more higher than the Winding Brook and Cedar Lane warehouses. At the Route 33 gateway, 6 data centers of this size and height should not welcome visitors and residents to western Hanover County.

Bob Nelson, Ashland District

Mr. Leadbetter, Planning Commission and Staff, April 12, 2026

My family owns 220 acres in the eastern boundary of project along Grassy Swamp Creek. Our property is the largest residential land use property adjoining the proposed Technology Park.

We have had several discussions with Tract and staff, and Mr. Leadbetter on our primary concerns which are Noise Attenuation, Buffers/Screening, Lighting, Water, Wildlife Conservation, Land Value Impact and Traffic. We have reached solutions on several of our concerns recently some of which are not currently recorded in the proffers dated April 3, 2026.

One major issue we have serious concerns is Noise Attenuation for the project. As it pertains to data centers nationally, it is one of the primary complaints. As it pertains to data centers approvals, it is as important as traditional studies for traffic, wetlands and environmental for local residents, etc. These traditional reports have been discussed and reviewed on this project for 6 months. Conversely, the first noise study was just presented 10 days ago .

After reviewing the study, my family has serious concerns about the accuracy and validity of the report and methodology. As you might appreciate, a software model results are directly related to the variable and assumptions imputed. The report did not show some key variables and assumptions used in the report and some of the ones they used are not currently proffered as of April 3, 2026. I have prepared a separate document listing some but not all of our numerous comments and requests for clarification as it pertains to the recently submitted Tract Noise Report April 3rd.

My family's primary interest as it relates to High- and Low-level noise and hum at Building 3A, the largest site of the project and adjoins our property along Grassy Swamp Creek. It appears from our calculations to be approximately 40% larger than A1 site and 25% larger than Building 2A site. This is after subtracting for the substation's acreage in 2B and 3B. More acreage should equate to more data center space and more power required to support it. More power means more generators and chillers and more noise.

I should mention I have had several discussions with Tract if they plan to build Building

3A, as depicted in there Engineering submittal C 3.3 It shows 6 bldgs. labeled #4 Generator/Chiller/Mechanical Building. This building Type #4 is not called out on the other 2 building sites. They were very non-committal despite their engineers potentially feeling this was the necessary design recommendations based on large number of generators/chillers and proximity to potential residential boundary. Building walls block sound. I question why the conceptual plan BLDG 3A was submitted if they have no plans to build as submitted. The same C3.3 drawing does not call for rooftop chiller mounting but the report model stated the report assumed all chillers were roof mounted. Drawing C3.3 only calls for rooftop chillers on 50% of Building 2A. Additionally, the chiller Tract requested used in the Noise Report was to be a low noise chiller. A low noise chiller is not proffered as are not the enhanced acoustical enclosures they reference in Noise report. These are just a few of the many observations made when reviewing report that might influence results. My separate noise comment write up has many more omissions and questions.

There are too many questions about the Noise Report to comfortably know where we stand at this point. This situation caused me to spend the full weekend researching the topic of data center noise attenuation and testing methods and sound reduction options. I also reviewed national standards for generator noise reduction specification. I also reviewed what noise standard are being used by various municipalities nationwide on various methodology. I used AI to assist me in my research and uncovered a wealth of very valuable information.

I applaud Hanover for establishing a noise baseline for day and night Noise Level dBA of 52/57. Ironically, research uncovered some major problems/pitfalls with this policy as it pertains to using it 7/24 hr. data center use. This method can be too lenient on developers to make standards in rural areas (noticeable hum complaints) saving developers a lot of money at local community expense and too strict in urban areas.

The baseline night noise level is lower than urban thus requiring developer to be considerably less noise attenuation to meet the 52/57 ceiling. This saves the developer a lot of money but significantly hurts the local community with excessive noise that could have been reduced. A 2024-2025 Virginia legislative report confirms a broader issue that most localities rely on generic noise ordinances which are not designed for continuous industrial noise, and they are weak for low frequency (hum). Stronger regulations would require zoning-based limits (ie. rural, suburban, urban) with measurable dba thresholds and enforce thresholds and enforceable methods.

An alternative method being used with success for data center acoustic modeling utilizes L90, a recognizable acoustic engineering and environmental noise metric. It is used by in ISO standards and by the EPA and federal highway administrative for guidance.

The L90 method is based on a very important premise "don't change the character of the environment". L90 is ambient-based on sound condition 90% of time at night between 10pm until 7am before project exists with spikes taken out. It includes distant traffic, wind in trees, insects and any existing mechanical hum. It is suggested test is done in winter season to avoid excessive insect and other animal noises in summer which definitely would be the case effecting readings along Grassy Swamp Creek and River. It measures all levels of noise spectrum, Low to High. Sound sensors are set at certain key boundary lines such as center of Building 3A on Grassy Creek. Mountain Road would probably realize different results. Requirements could be customized to existing noise levels at various locations rather than one size fits all.

The results of the test will provide a steady baseline dBa which represents a noise level of 90% recorded. It does not include temporary unusual sounds such as sirens, passing trucks, construction, etc. Once the dba number is provided, then the County would set an allowable range the project can exceed the existing noise. The dBa goal may very well differ at different boundary lines, such as Mountain Road versus Grassy Swamp Creek.

The add on dba range utilized might be 3-5 dba or a little higher. For example, if L90 model comes back with an ambient night number of 40 the acceptable dba level after project completion would be 43dBA Night -45 dBA Day. Why the 3-5 dba? The following dba reference information should help.

-3dba change barely noticeable

-5dba clearly noticeable

-10dba sounds roughly twice as loud

With this sort of approach, the County can then put the burden on the developer to design and meet those attenuation requirements and present them with construction plans to planning. As it compares to the Noise Report just received, you would not have to question the numerous variables and assumptions used.

Additional Benefits of Ambient Noise Approach:

-Customized noise lever per location versus one size fits all

-Addresses issues created by Data Center 7/24 operation which require different rules

-Higher community satisfaction and less complaints

-Easier to administer per project, and test before and after for compliance/enforcement

-Supported by Virginia JLARC and legislative efforts and direction.

-Consideration of Low Frequency Noise not just Mid and High level as has been practice.

My research also revealed that a national standard generally being installed at many data centers would include: level 2-3 generator enclosures, critical grade silencer, acoustical walls on berms, strategic layout of generators. Current proffer does not spell out attenuation sound enclosure or any silencer which is a relatively inexpensive addon with but both provide a lot of dba reduction. There are different typers of silencer critical is higher than hospital rating. I would suggest at a minimum the County requires all data center at a minimum to have level 2-3 acoustic enclosures and a critical grade silencer (Not Hospital). These should be non-negotiable. An additional item to request is Walls for all generators facing property lines. A separate discussion needs to address specifically what attenuation measures will be taken to reduce Low noise levels after construction. Reduction of low-level noise will be influenced mostly by the 7/24 hr. running of chillers. They will produce the most low-level noise followed by generators when running. Low noise level chillers should be specified.

My family strongly requests the county deny/defer the approval at this time. There are too many questions surrounding this current noise topic, water and traffic. The county should take time to get answers to question I presented and others and to evaluate the path/methodology they want to take going forward based on some of the new state and national info I have presented. In addition, they need to ensure they have all the proper proffers in place. Noise is the biggest area of complaint with data centers nationally. In addition, there are several proffer items that need to be corrected or clarified and some new ones to add that I have discussed with Mr. Leadbetter and Tract and some that have not been finalized. We feel there is too much to resolve before the April 16 meeting.

My family would however feel much better in continuing our support for the county's small area plan if they were to adopt a new noise guideline for this project based on lessons learned by others using the ambient/L90 approach. This method best handles the unique requirements presented by one of the largest proposed data centers in the country. As of 2026 only 1% of the approximately 2500-3,000 data centers in US are 900 MW or higher. Please see attached charts.

This project is not the standard project but the exception even nationally and should be very carefully reviewed to mitigate the potential impact to local residents physically, mentally, visually, emotionally and financially. Let's take advantage of lessons learned nationally and locally with other existing data centers experiences. Hanover could set a new standard for Virginia that supports coexistence without taking away all of our rural feel and environment.

Respectfully, Frank Willson

Biernot, Gretchen W.

From: Planning
Sent: Thursday, April 16, 2026 8:32 AM
To: Biernot, Gretchen W.
Subject: Fw: Opposition to the proposed Route 33 Data Center

Thank you,

Makayla Stepp-Davis
Planning Technician II
Planning Department
(804) 365-6362
Hanover County

From: Chrystal Doyle <cdoylefnp@gmail.com>
Sent: Wednesday, April 15, 2026 10:15 PM
To: Planning <planning@hanovercounty.gov>; Davis, Sean M. <smdavis@hanovercounty.gov>; Stoneman, Jeff S. <JSStoneman@hanovercounty.gov>; Prichard, Faye O. <foprichard@hanovercounty.gov>; Floyd, Danielle G. <DGFloyd@hanovercounty.gov>; Herzberg, F. Michael <fmherzberg@hanovercounty.gov>; Hudson, Ryan M. <RMHudson@hanovercounty.gov>; Dibble, Susan P. <spdibble@hanovercounty.gov>; dan@brooklandsupervisor.com <dan@brooklandsupervisor.com>; Hyland F Fowler <DelBFowler@house.virginia.gov>; Schuyler VanValkenburg <senatorvanvalkenburg@senate.virginia.gov>; sbarnhouse@wtvr.com <sbarnhouse@wtvr.com>
Subject: Fwd: Opposition to the proposed Route 33 Data Center

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To Whom It May Concern:

I am writing with a formal comment regarding zoning for the data center and implore you to oppose the development proposed by Stack. I do not know if I can attend the entire meeting so I did not sign up to speak but am very passionate about this topic and have serious concern for the long-term repercussions to Hanover and neighboring communities in Henrico that border.

I sent the message (forwarded below) before the March meeting and never heard a response. The points remain salient to the issue. Also, Stack is owned by the private equity company Blue Owl with one mission: maximize stakeholder wealth and center stakeholder interests. I include the image below from the developer's website that indicates the priority for massive data center projects. This is not a long-term investment in Hanover County; this is a short-term money grab using our precious resources.



Respectfully,
Chrystal Doyle
Nurse Practitioner
Resident who lives off Route 33

---------- Forwarded message ---------
From: **Chrystal Doyle** <cdoylefnp@gmail.com>
Date: Fri, Mar 6, 2026 at 10:07 PM
Subject: Opposition to the proposed Route 33 Data Center
To: <smdavis@hanovercounty.gov>, <jsstoneman@hanovercounty.gov>, <foprichard@hanovercounty.gov>, <dgfloyd@hanovercounty.gov>, <fmherzberg@hanovercounty.gov>, <rmhudson@hanovercounty.gov>, <spdibble@hanovercounty.gov>, <dan@brooklandsupervisor.com>, Hyland F Fowler <DelBFowler@house.virginia.gov>, Schuyler VanValkenburg <senatorvanvalkenburg@senate.virginia.gov>
Cc: James Doyle <Jimbodoyle1@gmail.com>

Dear Hanover County Supervisors, Henrico Supervisor Dan Schmitt, Delegate Fowler, and Senator VanValkenburg,

I write to all of you collectively because you influence the decision to allow a massive, harmful data center to residents in your County and/or representative districts. The tract is approx. 430 acres and the

proposal is for 30% land use for multiple large data centers ranging in height from 60-80 feet--that's over 100 acres of data centers polluting a dense suburban neighborhood with noise, light, and diesel pollution.

Please accept this letter as formal opposition on behalf of me and many other residents in the Hunton Park corridor, which is the community on the Hanover-Henrico County lines adjacent to the proposed data center project.

I live in one of the neighborhoods that directly abuts the proposed data center and am deeply heartbroken that such a harmful, massive industrial project is being proposed next door to a densely populated development known for its large population of children and families who play in the streets, walk the Boulevard, and enjoy an amazing sense of community.

The amount of noise and light pollution, water and electricity usage, and diesel air emissions will wreak havoc on the physical and mental health of residents, not to mention increase traffic, traffic accidents in a deadly corridor of route 33, and drive down property values.

- "Data centers cause noise pollution. First, the heavy equipment used to construct the facilities are loud. Then, once they are up and running, diesel generators plus heating, ventilation, and air conditioning (HVAC) systems create a constant hum that can be audible to neighboring residents and wildlife. Data centers generate noise levels that may exceed 90 decibels. Noise levels above 85 decibels are harmful to hearing." (https://www.environmentalhealthproject.org/post/the-dangers-of-data-centers)
- Diesel exhaust and gas turbine emissions release harmful pollutants. A 2025 model estimated that U.S. data centers could cause roughly 1,300 premature deaths annually by 2030.
- "AI centers, on top of their energy use from the grid, also employ backup generators in case of grid failure; these diesel generators can release 200 to 600 times more nitrous oxides (NOx) than a natural gas plant while producing the same amount of energy. NOx pollution can cause irritation in the eyes, throat, and nose, as well as more severe cases of respiratory infection, reduced metabolism, and even death. According to the Institute of Electrical and Electronics Engineers, IEEE, data centers caused about $6 billion in public health damages due to this type of air pollution in 2023" (https://sites.uab.edu/humanrights/2025/10/02/construction-and-consequences-the-human-impacts-of-artificial-intelligence-data-centers/).

We've seen the families on TV with anxiety, insomnia, headaches, and more. The harm is widely documented. These are facts. DO YOU WANT THEM TO BE YOUR FACTS? YOUR TRUTH? YOUR FAULT?

Hanover Board of Supervisors, I implore you to select a site that is more rural and does not abut a densely populated neighborhood. While this neighborhood is "not in your County," it is still a very human issue and the humane decision is to select another location. I recognize that Hanover schools need repair and data centers bring in land use revenue, BUT AT WHAT COST? Trading the health of residents is not worth it.

Henrico Supervisor Schmitt - These are your colleagues and they are making a decision that HUGELY impacts Brookland residents. I implore you to meet with your colleagues and attend the March 19th meeting on our behalf to STRONGLY OPPOSE this project. I know you've heard from others about this issue. And, I don't believe you have no voice...it's whether you choose to use it to advocate for Brookland.

Delegate Fowler - THIS IS YOUR BACKYARD. YOUR HOME. I am your constituent. Your opposition to this proposal and advocacy on behalf of your constituents' health and welfare is crucial. Proposed jobs are temporary but the health and welfare of residents and the negative economic impact of disability in your district is long-term. I implore you as a constituent, mom, and nurse practitioner dedicated to ensuring we work to improve the lives of people in Virginia.

Senator VanValkenburg - Data centers are a state-wide issue but now it's an issue affecting your Senate District and constituents. You've worked hard to advocate for families, education, and now you're on the Senate Education and Health Committee and we have a PREVENTABLE health crisis on our hands. Please attend the meeting and represent those who cannot.

I suspect I have not shared unique data points or passion. I suspect you have heard the pleas and outrage before. And I know from working in cardiac telemetry nursing that "alarm fatigue" commonly occurs when you frequently hear alarms...alarms just become the normal background noise and are easy to miss or ignore. But, this is not normal background noise. Building 100 ACRE DATA CENTER effectively in a neighborhood is not normal. **Your constituents are sounding alarms. Please do not ignore them. Please do not approve zoning for the data center.**

Respectfully,
Chrystal Doyle
Nurse Practitioner
Resident who lives off Route 33

Biernot, Gretchen W.

From:	quailfield@aol.com
Sent:	Wednesday, April 15, 2026 5:06 PM
To:	Iverson, Edmonia P.; Planning; Biernot, Gretchen W.
Subject:	Renewed opposition to the Route 33 data center proposal
Categories:	Red Category

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Dear Ms. Iverson and esteemed members of the Planning Commission—

On the eve of your reconsideration of this proposal, I again write you as a 25 year resident of the Beaverdam district to oppose this project and all other upcoming proposals (of which I am aware) as well. As I have previously stated, we will sadly have to endure the Hickory Hill data center, but as I'm sure you're all perfectly aware through social media and other outlets, Federal, State, and local governments are increasingly opposing any further proliferation of these monstrosities which are a scourge on rural communities and the environment. Moratoria and even total bans are being proposed and enacted nationwide. The US has over half of the world's data centers and we do not need to destroy rural landscapes to accommodate any more. The resources consumed are staggering, with costs passed along to residents. These centers take take take and never stop. They ruin land and communities and have an endless thirst for water and power. The recently published VCU study clearly documents how dirty this technology is. Moreover, "unintended consequences" include potential new destructive pathways for transmission lines (Valley Link and Kraken come to mind), which threaten thousands of acres of pristine Virginia land as well as homes and schools.

These proposals, including the current one, run antithetical to any sort of rural preservation for the county and in no way shape or form do any of these "fit ". The "Envision Hanover" document proposes to maintain the majority of the County as Agricultural/Rural. Therefore, in no way would this data center fit into the plan. Moreover, other proposals which lie in areas potentially designated for future development, lie within areas that quite frankly were expanded before we had any idea what data center technology meant. Particularly the areas of the I-95 corridor (Including that within which the Hickory Hill proposal lies) were added nearly 20 years ago, and no one knew what the implication of data centers were.
In the context of widespread nationwide opposition to these centers, (and overwhelming local opposition as you have seen!) , there is no way that Hanover should proceed in any which way with adding any more of these. The responsibility of the County is the current residents not to Corporations, especially those outside of the county or the state, including Tract from Colorado who have already inflicted the Hickory Hill project on us. Again, the role of a former County employee with Tract must raise eyebrows...
The residents of the county, your constituents need to be protected. We live in rural areas for a reason. Therefore, please include me with the group of residents in staunch opposition to the current Route 33 proposal as well to any future proposals for the county. Sadly, the Hickory Hill 1200 acre debacle is enough.
Thank you in advance for your consideration.

Doug Boardman,
Old Ridge Rd.,
Beaverdam District.

MOUNTAIN ROAD TECHNOLOGY PARK

ENVIRONMENTAL NOISE ASSESSMENT

COMMENTS - WILLSON FAMILY

April 10, 2026

My family has some serious concerns and questions about the accuracy and validity of the Noise Report just submitted in April 3rd. The Willson family is greatly affected by this project and future noise. Both low (Hum) and high frequency is one of our biggest concerns effecting our property development and valuation. The Model submitted primary addresses high level noise dBA only. Low-level (dBC) and High level noise levels create the highest number of complaints residents near Data Centers Voice. This is followed by emissions and visual impact.

Any modeling system results are directly related to the data and assumptions used and or omitted.

Please find below a partial list of our comments:

-Not provided specific per MW allocated per building which determines the # chillers needed and # generators per building.

-MW power allocated appears to be 300MW as their test model shows 3 generators running per building in maintenance model and total onsite power is 900 MW.900 MW would need approximately 900 chillers and 300 generators total onsite. See attached Picture of 3.5 GW Generator.

-Building 3A is the largest building site of the project by approximately 12 acres and the closet to our property. After subtracting acreage for substations in 2B and 3B , it is approximately 40% and 25% larger than Building 1A and 2A respectfully. If this is the case it should warrant many more generators and chillers than sites 1A and 2A from the total number of generators required. 3A grow, for example, from 100 to 120 generators and 300 chillers to 360 significantly changing the high and very important low frequency noise effect to our results

along Grassy Swam Creek and Winns Church Road. The actual MW needed for building 3A may be even higher than this estimate and is of major concern.

-Chillers and generators are the main sources of noise at Data Center making these two numbers critical. See attached picture of 3.5 generator analysis. One would clearly think Building 3A, being 40% and 25% larger than 1A and 2A would require more power.

-We are not provided the number of chillers used in noise model by building and in total for 900 MW. Chillers are the primary source of low frequency noise(HUM) Low frequency travels farther than dBA high frequency and can travel thru walls and residences. The model does not address this.

-Page 10.32 of the Noise Report was calculated for model using one generator per 3.5 MW of building power. The Data Center industry standard for this calculating is 3.0 MW (85% peak loud) for calculation and using 3.5 MW underestimates the number of generators needed by 15% .

-Page 10 of report also lists it used at Tracts request a low noise level chiller for model. What was the model and low frequency level? The April 3rd prefaces does not call the use of only low noise chillers. What is the definition of low noise chillers as it does for Category IV generators for emissions control.?

-Page 10 of Noise Report also states that the testing utilized are an acoustically rated enclosure for the generator. However, the April 3rd prefaces Page 21 # 16 only states all generators shall be enclosed with manufacturer approved enclosures. No references to acoustical rated enclosures. There are multiply levels of enclosers. Level should be proffered.

-Page 10 of the Noise Report states noise generator maintenance and testing model was run with 9 generators, 3 at each building. We are not given the location specifically of those generators in relation to Building 3A and Grassy Creek. Were they on the Grassy Creek side of a building or on the rear? Were they blocked by a building? Were they behind walss? The location greatly effects noise levels. Additionally, generator yard layout and distance between units as well as direction they are facing makes a difference.

-The report did not relay if they used the conceptual site layout plan C3.3 submitted by Tract for each building which should show proposed generators location and data center buildings.

-We don't ever have conceptual testing of maintenance plan from Tract based on # of generators. How many need to be running at same time between 8AM and 4PM to meet there monthly maintenance requirements based on total number of generators.

-The Noise Report stated on Page 10 that the chillers were modeled on the rooftops of the

data center buildings. However, Tracts submitted site plans C3.3 only depicts rooftop chillers for 1/2 of Building 2A with the rest ground mounted . (See C3.3 submitted drawing) What is this impact? Were they behind parapet walls? Were the walls acoustic?

-Did the model take into account project traffic noise from 750-1000 trips a day for employee and deliveries?

-Did the model account for tree/vegetation clearing to buffers for proposed Dominion main transmission line easement(100 Feet) and setback from buildings?

-The Noise Report, Page 10, under Methodology, states the model software considers factors such as source, sound level and directivity, distance attenuation source receptior generators, barrier effect of buildings, topography, ground and atmospheric attenuation. The input assumptions in these areas were not openly shared.

-In the test model, there was not receptor placed on our 220 acre property, which occupies the majority of Grassy Creek. Closest receptors on model to our property is R07, which is close to Winns Church Road and low noise substitution and R08 which is 1/2 mile from Grassy Creek and at a higher elevation coupled with forest would reduce sound. Why did our property get excluded?

-Why was Noise Report submitted just recently as compared to other studies?

-There was no existing baseline of noise level that currently exists at night or during the day along the project property lines before construction so true impact to residents can not be accurately measured..

Summation:

Sound attenuation/Noise levels (High and Low) should be equally important to the county's control and approval of this project as traffic, wetlands, water consumption, wetlands and environmental studies, etc...

This is new ground for planning and we should completely understand the impact of attenuation specs and standards, as community will have to live with them for many years.

The county should also not be at the mercy of developer in this somewhat uncharted water but rather seek to protect residents and community from lessons learned by other municipalities local and nationally.

There are newer methods/policies being used for handling sound for data centers that the

county might want to consider using for this project. The new systems better handle the requirements created by a data center running 7/24 that current fixed noise levels ordinances do not properly address.

I will submit under a different document some of those options that the county should consider before approving this project. They are much easier to implement and monitor versus the effort and expertise required to question the current model presented for this project. The newer methods for Noise a can reduce risk and complaint levels for residents as well.

This project approval needs to be postponed until sufficient time is available to review options , get answers listed here and others, and get proffers in line with commitments with out a last-minute push.

Respectfully,

Frank Willson

Willson Family

Biernot, Gretchen W.

From: Planning
Sent: Thursday, April 16, 2026 8:32 AM
To: Biernot, Gretchen W.
Subject: Fw: Opposition to the proposed Route 33 Data Center

Thank you,

Makayla Stepp-Davis
Planning Technician II
Planning Department
(804) 365-6362
Hanover County

From: Chrystal Doyle <cdoylefnp@gmail.com>
Sent: Wednesday, April 15, 2026 10:15 PM
To: Planning <planning@hanovercounty.gov>; Davis, Sean M. <smdavis@hanovercounty.gov>; Stoneman, Jeff S. <JSStoneman@hanovercounty.gov>; Prichard, Faye O. <foprichard@hanovercounty.gov>; Floyd, Danielle G. <DGFloyd@hanovercounty.gov>; Herzberg, F. Michael <fmherzberg@hanovercounty.gov>; Hudson, Ryan M. <RMHudson@hanovercounty.gov>; Dibble, Susan P. <spdibble@hanovercounty.gov>; dan@brooklandsupervisor.com <dan@brooklandsupervisor.com>; Hyland F Fowler <DelBFowler@house.virginia.gov>; Schuyler VanValkenburg <senatorvanvalkenburg@senate.virginia.gov>; sbarnhouse@wtvr.com <sbarnhouse@wtvr.com>
Subject: Fwd: Opposition to the proposed Route 33 Data Center

CAUTION: This email originated from outside your organization. Exercise caution when opening attachments or clicking links, especially from unknown senders.
To Whom It May Concern:

I am writing with a formal comment regarding zoning for the data center and implore you to oppose the development proposed by Stack. I do not know if I can attend the entire meeting so I did not sign up to speak but am very passionate about this topic and have serious concern for the long-term repercussions to Hanover and neighboring communities in Henrico that border.

I sent the message (forwarded below) before the March meeting and never heard a response. The points remain salient to the issue. Also, Stack is owned by the private equity company Blue Owl with one mission: maximize stakeholder wealth and center stakeholder interests. I include the image below from the developer's website that indicates the priority for massive data center projects. This is not a long-term investment in Hanover County; this is a short-term money grab using our precious resources.



Respectfully,
Chrystal Doyle
Nurse Practitioner
Resident who lives off Route 33

---------- Forwarded message ---------
From: **Chrystal Doyle** <cdoylefnp@gmail.com>
Date: Fri, Mar 6, 2026 at 10:07 PM
Subject: Opposition to the proposed Route 33 Data Center
To: <smdavis@hanovercounty.gov>, <jsstoneman@hanovercounty.gov>, <foprichard@hanovercounty.gov>, <dgfloyd@hanovercounty.gov>, <fmherzberg@hanovercounty.gov>, <rmhudson@hanovercounty.gov>, <spdibble@hanovercounty.gov>, <dan@brooklandsupervisor.com>, Hyland F Fowler <DelBFowler@house.virginia.gov>, Schuyler VanValkenburg <senatorvanvalkenburg@senate.virginia.gov>
Cc: James Doyle <Jimbodoyle1@gmail.com>

Dear Hanover County Supervisors, Henrico Supervisor Dan Schmitt, Delegate Fowler, and Senator VanValkenburg,

I write to all of you collectively because you influence the decision to allow a massive, harmful data center to residents in your County and/or representative districts. The tract is approx. 430 acres and the

proposal is for 30% land use for multiple large data centers ranging in height from 60-80 feet--that's over 100 acres of data centers polluting a dense suburban neighborhood with noise, light, and diesel pollution.

Please accept this letter as formal opposition on behalf of me and many other residents in the Hunton Park corridor, which is the community on the Hanover-Henrico County lines adjacent to the proposed data center project.

I live in one of the neighborhoods that directly abuts the proposed data center and am deeply heartbroken that such a harmful, massive industrial project is being proposed next door to a densely populated development known for its large population of children and families who play in the streets, walk the Boulevard, and enjoy an amazing sense of community.

The amount of noise and light pollution, water and electricity usage, and diesel air emissions will wreak havoc on the physical and mental health of residents, not to mention increase traffic, traffic accidents in a deadly corridor of route 33, and drive down property values.

- "Data centers cause noise pollution. First, the heavy equipment used to construct the facilities are loud. Then, once they are up and running, diesel generators plus heating, ventilation, and air conditioning (HVAC) systems create a constant hum that can be audible to neighboring residents and wildlife. Data centers generate noise levels that may exceed 90 decibels. Noise levels above 85 decibels are harmful to hearing." (https://www.environmentalhealthproject.org/post/the-dangers-of-data-centers)
- Diesel exhaust and gas turbine emissions release harmful pollutants. A 2025 model estimated that U.S. data centers could cause roughly 1,300 premature deaths annually by 2030.
- "AI centers, on top of their energy use from the grid, also employ backup generators in case of grid failure; these diesel generators can release 200 to 600 times more nitrous oxides (NOx) than a natural gas plant while producing the same amount of energy. NOx pollution can cause irritation in the eyes, throat, and nose, as well as more severe cases of respiratory infection, reduced metabolism, and even death. According to the Institute of Electrical and Electronics Engineers, IEEE, data centers caused about $6 billion in public health damages due to this type of air pollution in 2023" (https://sites.uab.edu/humanrights/2025/10/02/construction-and-consequences-the-human-impacts-of-artificial-intelligence-data-centers/).

We've seen the families on TV with anxiety, insomnia, headaches, and more. The harm is widely documented. These are facts. DO YOU WANT THEM TO BE YOUR FACTS? YOUR TRUTH? YOUR FAULT?

Hanover Board of Supervisors, I implore you to select a site that is more rural and does not abut a densely populated neighborhood. While this neighborhood is "not in your County," it is still a very human issue and the humane decision is to select another location. I recognize that Hanover schools need repair and data centers bring in land use revenue, BUT AT WHAT COST? Trading the health of residents is not worth it.

Henrico Supervisor Schmitt - These are your colleagues and they are making a decision that HUGELY impacts Brookland residents. I implore you to meet with your colleagues and attend the March 19th meeting on our behalf to STRONGLY OPPOSE this project. I know you've heard from others about this issue. And, I don't believe you have no voice...it's whether you choose to use it to advocate for Brookland.

Delegate Fowler - THIS IS YOUR BACKYARD. YOUR HOME. I am your constituent. Your opposition to this proposal and advocacy on behalf of your constituents' health and welfare is crucial. Proposed jobs are temporary but the health and welfare of residents and the negative economic impact of disability in your district is long-term. I implore you as a constituent, mom, and nurse practitioner dedicated to ensuring we work to improve the lives of people in Virginia.

Senator VanValkenburg - Data centers are a state-wide issue but now it's an issue affecting your Senate District and constituents. You've worked hard to advocate for families, education, and now you're on the Senate Education and Health Committee and we have a PREVENTABLE health crisis on our hands. Please attend the meeting and represent those who cannot.

I suspect I have not shared unique data points or passion. I suspect you have heard the pleas and outrage before. And I know from working in cardiac telemetry nursing that "alarm fatigue" commonly occurs when you frequently hear alarms...alarms just become the normal background noise and are easy to miss or ignore. But, this is not normal background noise. Building 100 ACRE DATA CENTER effectively in a neighborhood is not normal. **Your constituents are sounding alarms. Please do not ignore them. Please do not approve zoning for the data center.**

Respectfully,
Chrystal Doyle
Nurse Practitioner
Resident who lives off Route 33

Data Center Noise Policy in Virginia: L90, Ordinances, and Emerging Standards

Executive Summary

Virginia is in a transition phase regarding data center noise regulation. While the General Assembly has not yet mandated L90-based standards, there is clear movement toward ambient-based frameworks.

Key Takeaways:
- Fixed dBA limits are increasingly viewed as inadequate
- Rural areas are under protected; urban areas over-restricted
- JLARC and legislative activity support alternative metrics
- Counties are building frameworks that enable L90 adoption

Emerging Standard:
- Night: L90 + 5 dBA
- Day: L90 + 10 dBA
- Inclusion of low-frequency (dBC) controls

Strategic Direction:
- Hybrid standards (ambient + absolute caps)
- Pre/post construction noise studies
- Increased scrutiny on low-frequency noise

Why Fixed dBA Limits Are Increasingly Viewed as Inadequate

1. Lack of Context Sensitivity:
Fixed dBA limits do not adjust for local environmental conditions. A single limit (e.g., 50 dBA) applies equally to both rural and urban settings, despite vastly different background noise levels.

2. Rural Impact (Too Lenient):
In rural areas, nighttime ambient noise levels can be as low as 25–35 dBA. A fixed 50 dBA limit allows noise that is 15–25 dB above ambient, which is highly noticeable and often perceived as intrusive or disruptive.

3. Urban Constraint (Too Strict):

In urban environments, ambient levels may already be 50–65 dBA. A fixed 50 dBA limit may be below existing background noise, creating unnecessary design constraints without meaningful community benefit.

4. Poor Representation of Human Perception:
Human perception of noise is relative, not absolute. People notice changes above background levels more than fixed thresholds. Fixed dBA limits fail to capture this reality.

5. Failure to Address Low-Frequency Noise:
dBA weighting underrepresents low-frequency sound (e.g., generator hum, chiller noise), which travels farther and penetrates buildings more easily.

6. Incompatibility with Continuous Noise Sources:
Data centers produce steady, continuous noise. Fixed limits were originally designed for intermittent sources and do not effectively regulate constant background hum.

7. Enforcement Challenges:
Without a defined ambient baseline, it is difficult to determine whether noise is contextually appropriate, leading to disputes between operators and communities.

These limitations are driving the transition toward L90-based and hybrid noise standards.

1. Virginia General Assembly & Policy Direction

Virginia has not yet codified L90-based standards, but JLARC and legislative efforts support:
- Local authority on noise limits
- Noise impact studies
- Consideration of low-frequency and alternative metrics

2. Virginia County Activity

Prince William County:
- Low-frequency (dBC) enforcement

Loudoun County:
- Noise studies and monitoring framework

Albemarle County:
- Fixed dBA limits with validation

Fairfax County:
- Case-by-case approvals

Henrico County:
- Evaluating Northern Virginia models

3. Model Ordinance Framework

Night: L90 + 5 dBA
Day: L90 + 10 dBA
Low-frequency: L90 (dBC) + 10 dB, max 50–55 dBC
Tonal penalty: +5 dB
Absolute caps: 45–65 dBA depending on zone

4. Virginia County Approval Strategy (Practical)

To successfully permit a data center in Virginia under emerging standards:

1. Design to exceed requirements:
- Target L90 + 3 dBA instead of +5

2. Address low-frequency early:
- Use low-noise chillers
- Enhanced generator enclosures

3. Conduct robust ambient studies:
- 72-hour minimum

4. Engage proactively with counties:
- Align with Loudoun / Prince William expectations

5. Plan for mitigation budget:
- Barriers, silencers, layout adjustments

6. Prepare for future tightening:
- Assume L90-based rules will be adopted

Ambient Noise Methodology Using the L90 Metric for Data Center Noise Perception and Measurement

Because fixed dBA limits are increasingly viewed as inadequate Virginia is in a transition phase regarding data center noise regulations. The general assemble has not yet mandated L90 based standards, but there is a clear movement toward ambient based framework. JLARC has formally backed stronger preconstruction sound modeling, better local authority and the use of low frequency noise metrics which is not measured by traditional dBA only methodology.

Modern data centers operate continuously and rely on extensive mechanical equipment—such as cooling systems, generators, and server fans—that generate persistent environmental noise. Managing and accessing this noise is essential for regulatory compliance, community relations, and site planning.

What is Ambient Noise Methodology using L90 Metric

1. Ambient Noise Definition

Ambient noise is the baseline sound environment at a location, excluding temporary or unusual events, representing typical background conditions.

2. Ambient Noise Methodology

Instead of using fixed limits (e.g., 50 dBA), the ambient method sets allowable noise based on existing conditions:
"Project noise cannot increase more than X decibels above ambient levels."

Why it matters:
- Accounts for rural vs urban differences
- Protects quiet nighttime environments
- Reflects how humans perceive change in sound

3. L90 Metric

L90 represents the steady background noise level—the sound level present 90% of the time—filtering out short-term spikes such as passing cars or sudden noises.

4. Why L90 is Used for Ambient

L90 captures consistent background conditions rather than temporary noise events, making it the most reliable measure of true ambient sound.

5. Why This Matters for Data Centers

Data centers generate continuous and often low-frequency noise. Using L90 ensures that baseline conditions are not overstated and that subtle but persistent impacts are properly evaluated.

6. Human Perception of Loudness (Decibel Scale)

Sound levels are measured on a logarithmic scale. Small numerical increases can result in significant perceived changes:

- +3 dB: Just noticeable
- +5 dB: Clearly noticeable (complaints begin)
- +10 dB: Perceived as twice as loud
- +15–20 dB: Highly intrusive

7. dBA vs dBC (Frequency Weighting)

dBA emphasizes mid-to-high frequencies aligned with human hearing, while dBC captures the full sound spectrum, including low-frequency energy. Data centers often generate low-frequency noise (generators, transformers) that may not be fully captured by dBA measurements.

8. Low-Frequency Noise and Community Impact

Low-frequency noise travels farther, penetrates structures, and can be perceived as a hum or pressure sensation.

The difference between dBC and dBA is used as a screening tool:

- <10 dB: Minimal concern
- 10–20 dB: Noticeable
- ≥20 dB: Likely complaint zone

9. Policy Implications

Reliance solely on dBA can underestimate actual community impact.

Recommended practices include:

- Use both dBA and dBC metrics
- Limit increases to ≤3 dBA at night
- Flag low-frequency issues when dBC - dBA ≥ 20 dB

10. Why Fixed dBA Limits Are Increasingly Viewed as Inadequate

Fixed dBA limits do not fully reflect real-world noise impacts. Key limitations include:

1. Lack of sensitivity to low-frequency noise (misses hum/rumble)
2. Does not account for rural vs urban baseline differences
3. Can appear compliant while still causing community disturbance
4. Does not reflect human perception of changes (relative increases matter more)
5. Can be too lenient in quiet areas (allowing large increases)
6. Can be overly restrictive in already noisy environments
7. Fails to address cumulative and continuous noise sources like data centers

11. Why L90 is Used

L90 captures consistent background conditions rather than temporary noise.

Additional Considerations:
- L90 is not a new or experimental metric; it is a well-established standard in environmental acoustics.
- It is widely used by regulatory and technical bodies, including the U.S. Environmental Protection Agency (EPA) and international standards organizations such as ISO.
- L90 is a proven and accepted methodology used in transportation noise studies, environmental impact assessments, and community noise regulation.
- L90 itself is a statistical descriptor of sound levels and can be applied to both dBA and dBC measurements, meaning it can reflect both high-frequency and low-frequency noise when paired with appropriate weighting.

12. Core Policy Premise Behind Ambient Methodology (L90)

-Do not change the character of the existing acoustic environment.

-New development should blend into the existing soundscape, not dominate it.

-Noise should be evaluated relative to ambient conditions, not fixed thresholds.

-Prevent introduction of continuous, perceptible mechanical noise (e.g., hum).

-Protect rural and low-noise environments from disproportionate impact.

-Focus on long-term, steady-state noise rather than short-term peaks.

-Ensure compatibility between industrial uses and surrounding communities.

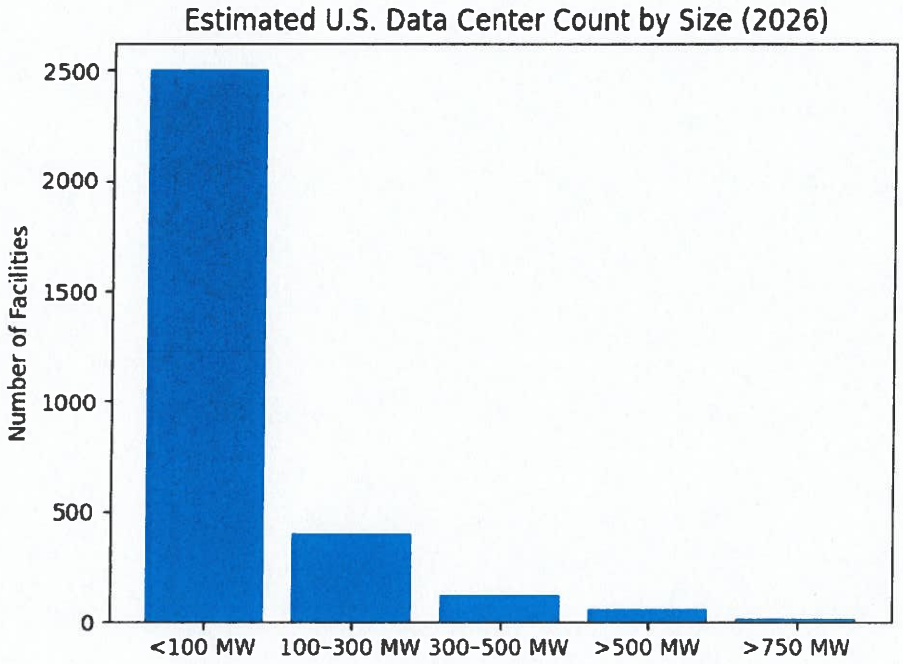
-Maintain nighttime quiet conditions when human sensitivity to noise is highest

Key Takeaway

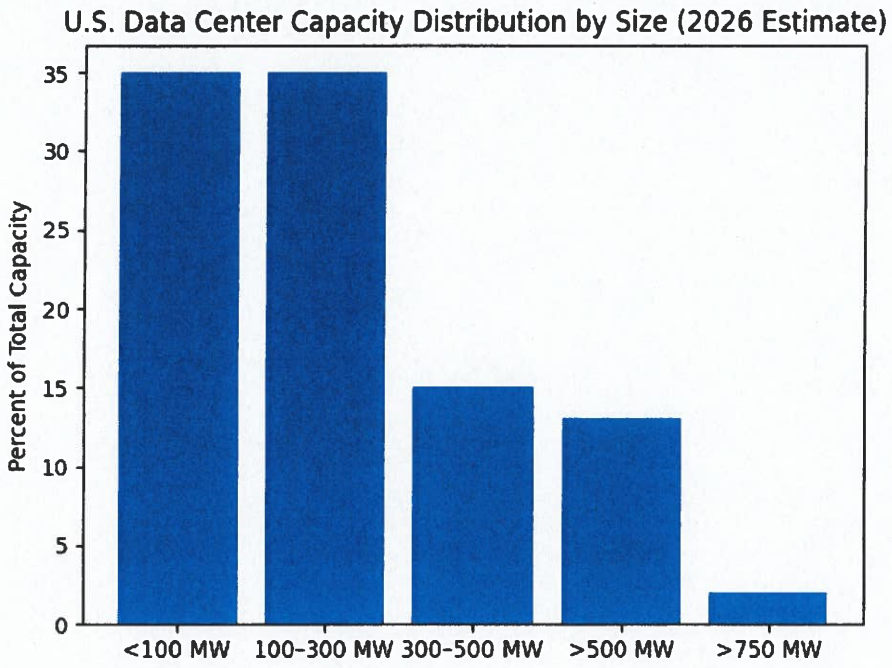
The ambient method establishes the existing sound environment, while the L90 metric quantifies its stable background level. Together, they form a standardized approach for evaluating and managing the acoustic impact of data centers, ensuring operations remain compatible with surrounding communities.

U.S. Data Center Size Distribution (2026)

Facility Count



Capacity Distribution


U.S. Data Center Capacity Distribution by Size (2026 Estimate)
Percent of Total Capacity
0
5
10
15
20
25
30
35
<100 MW
100–300 MW
300–500 MW
>500 MW
>750 MW

GREATER RICHMOND PARTNERSHIP

The City of Richmond and Counties of Chesterfield, Hanover and Henrico, VA

April 16, 2026

Hanover Planning Commission
7516 County Complex Road
Hanover, VA 23069

Dear Planning Commission members,

Greater Richmond Partnership (GRP), the lead regional economic development organization focused on promoting economic prosperity, expresses our strong support for the Mountain Road Technology Park project. The Greater Richmond Partnership supports projects which aggressively generate economic opportunities, create quality jobs for all the citizens of the region while increasing the tax base for needed community services. The Mountain Road Technology Park project has the potential to do just that.

The Mountain Road Technology Park site already has stringent restrictions to keep the intended focus on mission critical assets and this project is expected to bring significant and sustained economic benefits to the Richmond Region, including job creation, increased tax revenue and enhanced opportunities for local businesses in the technology and construction sectors.

We're already seeing the benefit of investment from the mission critical industry. Suppliers are attracted to our region's business growth as companies such as announcements of CEEUS and Rosendin in Hanover. And in other parts of Greater Richmond, Eaton, Condair and Anord Mardix have planned job opportunities and invested millions of dollars in taxable income.

GRP is proud to support our local partner and our statewide colleagues in advancing the Mountain Road Technology Park project. Please feel free to contact us should you require additional information.

Thank you for your consideration.

Jennifer Wakefield

President + CEO
Greater Richmond Partnership

Biernot, Gretchen W.

From: Jarrett Rice <jarrett.rice@icloud.com>
Sent: Tuesday, April 14, 2026 2:36 PM
To: Dibble, Susan P.
Cc: Biernot, Gretchen W.; Jennifer Rice
Subject: Statement of Support: Proposed Data Center in Route 33 Gateway Area

CAUTION: This email originated from outside your organization. Exercise caution when opening attachments or clicking links, especially from unknown senders.

Dear Sue,

I am writing to express my strong support for the proposed data center to be developed in the Route 33 Gateway area. This project represents a compelling opportunity for our community that aligns with the Route 33 Gateway Small Area Plan and represents a strategic investment in our local economy.

Data centers offer a high return on public investment — significant tax revenue and infrastructure improvements with relatively modest demands on county services like schools, roads, or emergency response compared to residential or heavy industrial development. Their operations are quiet, clean, and unobtrusive — exactly the kind of development our Route 33 Gateway Small Area Plan was designed to accommodate.

Furthermore, data centers often catalyze broader infrastructure improvements — upgraded power grids, expanded fiber connectivity, and road enhancements — that benefit the entire county and attract additional investment.

With appropriate planning and oversight, concerns such as energy use, water management, and noise can be effectively addressed through modern design standards and operational best practices. Approving this project will help position our county for long-term economic growth while making responsible use of land already designated for this type of development.

My wife, our four boys, and I live on Greenwood Road and also own property on Mountain Road, so we have a personal stake in seeing this area develop thoughtfully. Unfortunately, we are unable to attend the meeting, but we would be grateful if you could forward this email to the Planning Commissioners so our support is on record.

Thank you for your time and your service to our community.

Sincerely,
Jarrett Rice
(804) 683-5806

Biernot, Gretchen W.

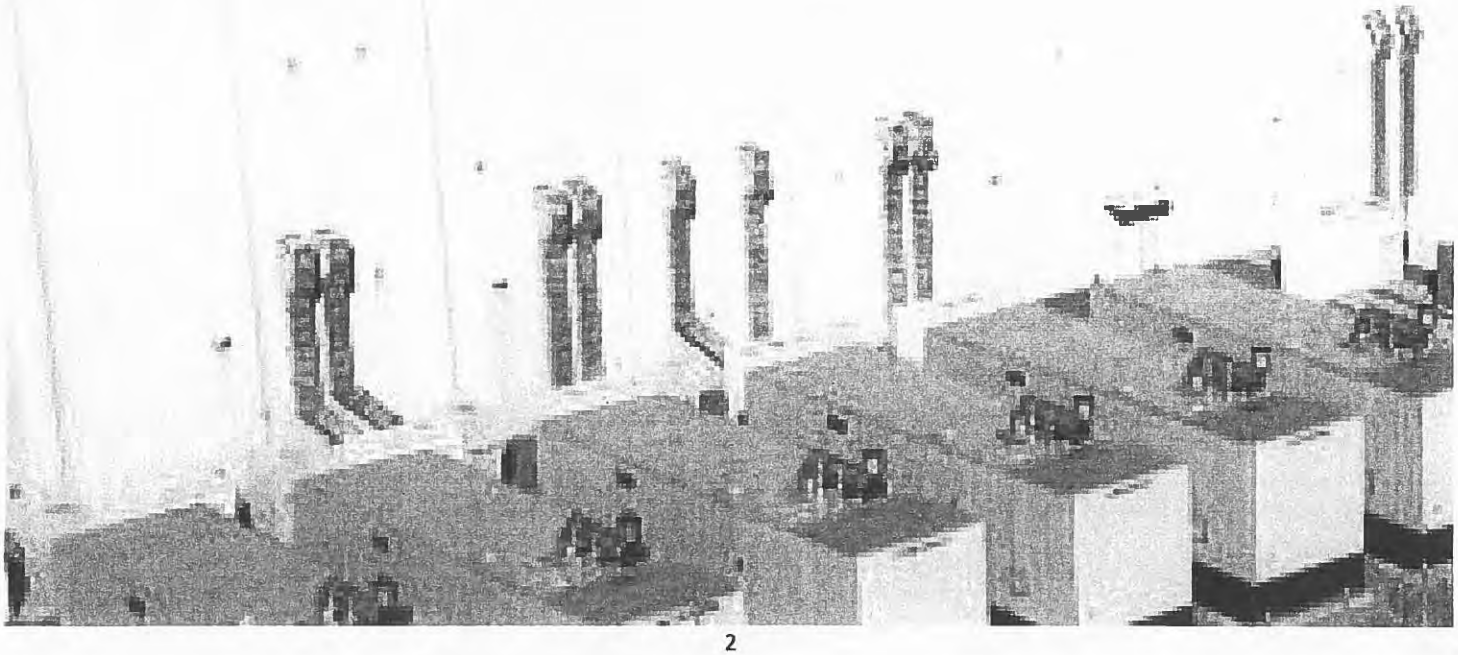
From: Robin Schroeder <robins@rokainc.com>
Sent: Tuesday, April 14, 2026 9:05 AM
To: Herzberg, F. Michael; Stoneman, Jeff S.; Davis, Sean M.; Floyd, Danielle G.; Prichard, Faye O.; Hudson, Ryan M.; Dibble, Susan P.; Martin, William E.; Parker IV, Clifton L.; McGhee, Jr, Fredric I.; Iverson, Edmonia P.; Leadbetter, Larry A; Heizer, Brett; Abbott, Alan C.; Hunter, Jo Ann M.; Pompei, Andrew J.; Biernot, Gretchen W.
Subject: CNN article on data center environmental impact (raising temperatures in surrounding region)

CAUTION: This email originated from outside your organization. Exercise caution when opening attachments or clicking links, especially from unknown senders.

This article shares a carefully vetted study of yet another negative impact the rush to build data centers is having on communities and the environment. We already know about excess water and energy consumption as well as air quality impacts. Please protect the rural and agricultural legacy residents have struggled to maintain since the 1600's.

https://www.cnn.com/2026/03/30/climate/data-centers-are-having-an-underrported





Cooling vent fans on the roof of a Digital Realty data center in Ashburn, Virginia on November 12, 2025. Andrew Caballero-Reynolds/AFP/Getty Images

Biernot, Gretchen W.

From:	Thomas <thomasf98@yahoo.com>
Sent:	Monday, April 13, 2026 9:13 PM
To:	Biernot, Gretchen W.; Planning; Pompei, Andrew J.; Hunter, Jo Ann M.
Subject:	Please REJECT the Mountain Road Tech Park Data Center Project
Attachments:	MountainRoadTechPark2.jpg

CAUTION: This email originated from outside your organization. Exercise caution when opening attachments or clicking links, especially from unknown senders.

Dear Hanover County Planning Commission:

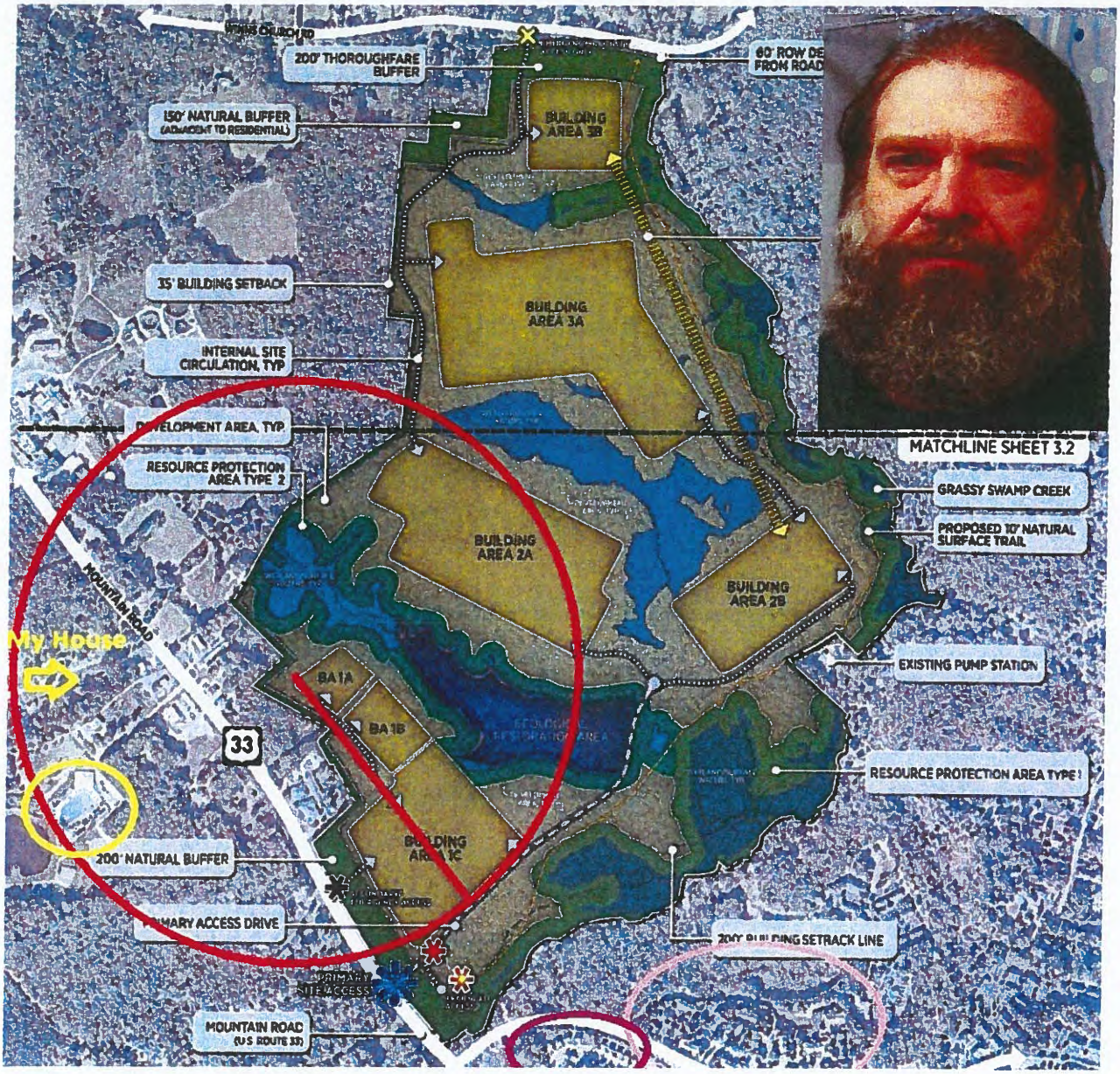
My name is Thomas Foster, and I have been a Hanover County resident at 13135 Overhill Drive, Glen Allen, Virginia 23059 for 23 years. I am writing to you to ask you to REJECT the Mountain Road Tech Park data center project. Most of you will recognize me, as I have been regularly attending Planning Commission Meetings and holding up a sign during Citizen Time. My photo is on the attached image.

The Mountain Road Tech Park data center project is incompatible with existing uses of land adjacent to the proposed project. My home is marked by a Yellow Arrow on the attached map. I would be within 1 building length of building complex 1. Also within 1 building length of Building Complex 1 is Cobblestone Waterpark, Hanover County's second largest family waterpark where thousands of people spend their summers every year. South of the project is the Hunton Park Subdivision. The area where the Mountain Road Tech Park is proposed is on land that was designated as a Suburban Service Area in 1982. A 900-megawatt data center with its accompanying 900-megawatts of Tier 4 natural gas fired backup generators does not belong in the suburban service area and will have negative impact existing land uses. The Noise, Air Pollution, and Thermal Heat Plume produced by the data center will adversely impact nearby resident and wildlife health and quality of life. The Traffic Congestion during construction of the data center would disrupt traffic flow for years along Route 33. Additionally, the data center will adversely impact property values of nearby residents and property owners near the data center because nobody will want to buy or rent a home near a data center.

Please REJECT the Mountain Road Tech Park project.

Thanks,

Thomas Foster
13135 Overhill Drive
Glen Allen, VA 23059
(804)248-2201



Thomas Foster
13135 Overhill Drive, Glen Allen, VA 23059

Biernot, Gretchen W.

From:	Holly Manke <hmanke@yahoo.com>
Sent:	Monday, April 13, 2026 4:12 PM
To:	Leadbetter, Larry A; Abbott, Alan C.; Iverson, Edmonia P.; McGhee, Jr, Fredric I.; Heizer, Brett; Martin, William E.; Parker IV, Clifton L.; Biernot, Gretchen W.; Planning
Cc:	Dibble, Susan P.; Stoneman, Jeff S.; Herzberg, F. Michael; Prichard, Faye O.; Hudson, Ryan M.; Davis, Sean M.; Floyd, Danielle G.
Subject:	Re: Mountain Road Technology Park

CAUTION: This email originated from outside your organization. Exercise caution when opening attachments or clicking links, especially from unknown senders.

Good Afternoon. I am writing to respond to Tract's response on revenue and state sales tax exemption granted by the Commonwealth of Virginia. I have learned that when the State grants a data center sales tax exemption, currently until 2035, it also grants them abatement from the 1% sales tax that is the share due to Hanover County from the sales tax collection. So Tract stating that Hanover County will received the 1% of the sales tax is a completely fictitious. I questioned that earlier in the process and I am disappointed in their responses. I am attaching article and reference for your review.

"According to the Joint Legislative Audit and Review Commission (JLARC), the $1.02 billion figure does not include the 1% local (county) share of the sales and use tax, or any regional losses, which also get abated when the state certifies a data center as sales tax exempt."

https://goodjobsfirst.org/the-hidden-costs-of-virginias-data-center-subsidy-and-how-they-undermine-public-schools/

Please deny the Mountain Road Technology Park.

Sincerely,
Holly Manke
South Anna

"Don't be afraid to go where you've never gone and do what you've never done, because both are necessary to have what you've never had and be who you've never been." - The Universe

On Friday, February 20, 2026 at 09:43:14 AM EST, Holly Manke <hmanke@yahoo.com> wrote:

Good Morning,

Thank you so much for your thoughtful consideration last night about the Mountain Road Technology Park. I do have a few additional questions I was hoping you could obtain answers to before the next meeting March 19, 2026 and correct some misinformation I heard last night about sales taxes and types of taxes in Hanover County.

Since power is expected to available to this site Quarter 4 of 2029 and they need to start construction 18 to 24 months prior to that, shouldn't they have actual plans and not conceptional plans. I mean this should start construction by Quarter 4 on 2027 and that is the same time as the Hickory Hill Project. Since we learned Hickory Hill has been delayed already by 2 years from providing revenue and no plans have been filed for that yet either. I think these timelines will not be able to be met for revenue estimates for either sites again.

Additionally, I know that all Data Centers are Sales Tax Exempt for the State of Virginia. Sales Tax is a State of Virginia collection and not a county collection. Hanover does not receive any Sales Tax Revenue from Data Center purchases period. If you feel I am mistaken please explain this to me. Tract also said the products will be purchased out of state so no Hanover Businesses will make any money from this equipment.

The real estate tax will be generated on these properties and when buildings are finished. The building improvements will generate Revenue on the Real Estate assessment increases. The Business Tangible property is not collected until material items are purchased and every business in Hanover pays $3.57 per every $100 of property while Data Centers only pay $.045 for every $100. The County offers a very generous depreciation rate for Business Tangible property each year and only takes a percentage of the purchase price starting the year it is purchased. I am sure the Commissioner of the Revenue's office can explain it better than I do and certainly much better than Tract did.

I saw no comments from the Commissioner of the Revenue's Office about the revenues that Tract says Hanover County will receive. There were comments from their office on the Hunting Hawk proposal revenues so why not on this one? If I missed it in all the numerous pages of documents, please direct me to it.

Sincerely,

Holly Manke

South Anna

"Don't be afraid to go where you've never gone and do what you've never done, because both are necessary to have what you've never had and be who you've never been." - The Universe

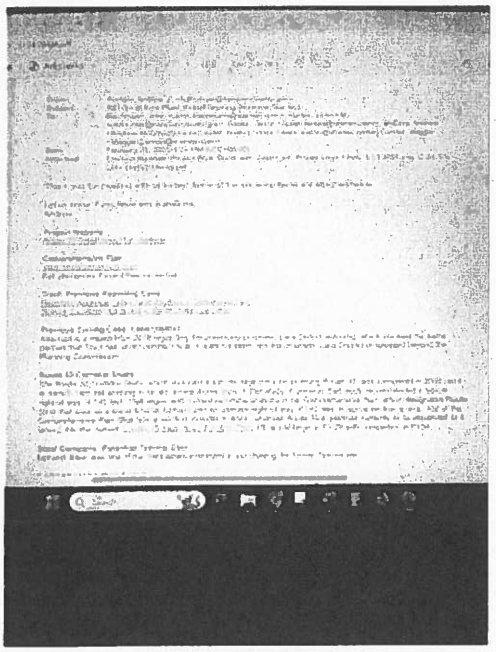
Biernot, Gretchen W.

From: Holly Manke <hmanke@yahoo.com>
Sent: Sunday, April 12, 2026 12:32 PM
To: Kempf, Philip S.
Cc: Hunter, Jo Ann M.; Biernot, Gretchen W.; Leadbetter, Larry A; Abbott, Alan C.; Heizer, Brett; Martin, William E.; Iverson, Edmonia P.; McGhee, Jr, Fredric I.; Parker IV, Clifton L.; Dibble, Susan P.; Stoneman, Jeff S.; Davis, Sean M.; Prichard, Faye O.; Herzberg, F. Michael; Floyd, Danielle G.; Hudson, Ryan M.
Subject: Re: Mountain Road Technology Park

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Thank you for the information. I did locate where it was stated the road widening on 33 to Winns Church has en expectation to be completed in 2034 (per the County 10 year plan). This would be the same time frame as the Mountain Road Teechnology Park completion date and both of these at the same time will completely disable traffic in this area.

Please deny the Mountain Road Technology Park. The traffic concerns are to great to overcome.



Sent from my iPhone

On Mar 25, 2026, at 3:07 PM, Kempf, Philip S. <PSKempf@hanovercounty.gov> wrote:

Good afternoon Holly,

As Jo Ann mentions, Hanover County was awarded $4M in CVTA Regional Funding to conduct preliminary engineering (PE) on the US 33 widening project. DPW is currently in the process of issuing a

RFP to solicit bids from engineering firms to perform this work. It is estimated that the PE phase of the project could take 2.5 years to complete, once we have a firm under contract. This project is in the very infancy of development, so no timeline has been established for the Right of Way (R/W) and Construction (CN) phases of the project yet.

I hope this information is helpful, but please let me know if I can answer any questions or provide additional information.

Sincerely,

Philip S. Kempf, AICP
Capital Projects Specialist
Dept. of Public Works
(804) 365-3282
pskempf@hanovercounty.gov
Hanover County VA

From: Hunter, Jo Ann M. <JMHunter@hanovercounty.gov>
Sent: Wednesday, March 25, 2026 12:22 PM
To: Holly Manke <hmanke@yahoo.com>
Cc: Kempf, Philip S. <PSKempf@hanovercounty.gov>
Subject: RE: Mountain Road Technology Park

Holly –

I spoke with Philip Kempf with Public Works who is the project manager (copied on this email). They do not have specific dates for construction but are definitely hopeful to have the additional funding and start soon after the award.

Philip, can you provide more information?

Jo Ann

From: Holly Manke <hmanke@yahoo.com>
Sent: Tuesday, March 24, 2026 6:29 PM
To: Hunter, Jo Ann M. <JMHunter@hanovercounty.gov>
Subject: Re: Mountain Road Technology Park

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Thank you for the I information. I thought I read that the road widening for 33 would begin on 2029 and finish around 2034.

Best,

Holly
Sent from my iPhone

On Mar 24, 2026, at 11:58 AM, Hunter, Jo Ann M. <JMHunter@hanovercounty.gov> wrote:

Ms. Manke –

Thank you for your comments. I did want to clarify with you that the County has received $ Mill from the CVTA for the design and engineering of the US 33/Mountain Road Widening Project. The 2028 completion dates is for engineering only. Currently there is no timeframe for construction.

Let me know if you have additional questions.

Jo Ann Hunter

From: Biernot, Gretchen W. <gwbiernot@hanovercounty.gov>
Sent: Tuesday, March 24, 2026 8:43 AM
To: Hunter, Jo Ann M. <JMHunter@hanovercounty.gov>; Pompei, Andrew J. <AJPompei@hanovercounty.gov>
Subject: FW: Mountain Road Technology Park

From: Holly Manke <hmanke@yahoo.com>
Sent: Monday, March 23, 2026 7:45 PM
To: Leadbetter, Larry A <laleadbetter@hanovercounty.gov>; McGhee, Jr, Fredric I. <fimcghee@hanovercounty.gov>; Heizer, Brett <BHeizer@hanovercounty.gov>; Abbott, Alan C. <acabbott@hanovercounty.gov>; Martin, William E. <WEMartin@hanovercounty.gov>; Iverson, Edmonia P. <epiverson@hanovercounty.gov>; Parker IV, Clifton L. <CLParker@hanovercounty.gov>; Planning <planning@hanovercounty.gov>; Biernot, Gretchen W. <gwbiernot@hanovercounty.gov>
Cc: Davis, Sean M. <smdavis@hanovercounty.gov>; Stoneman, Jeff S. <JSStoneman@hanovercounty.gov>; Herzberg, F. Michael <fmherzberg@hanovercounty.gov>; Prichard, Faye O. <foprichard@hanovercounty.gov>; Hudson, Ryan M. <RMHudson@hanovercounty.gov>; Floyd, Danielle G. <DGFloyd@hanovercounty.gov>; Dibble, Susan P. <spdibble@hanovercounty.gov>
Subject: Mountain Road Technology Park

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I would like to speak to you about the new Traffic study and the conclusions provided for the Mountain Road Technology Park. No new study was performed just new analysis. I explained on February 19th at the Planning Commission Meeting why a new study should be conducted for the entrance and exits ramps for 295 at Mountain Road. The counts were conducted in 2022, before the traffic patterns changed for Western

Hanover because access to 64 was brought to a standstill by the construction on Ashland Road in Goochland. The counts are out dated and under represent the actual traffic that travel Mountain Road to and from 295 in Hanover County.

Th new plan does not take into account the widening of 33/Mountain Road to 4 lanes that is scheduled to begin the same time as this construction for the data center. This will be the perfect storm that will incapacitate traffic in this corridor for at least 10 years.

While I appreciate the traffic plan no longer has flaggers, it does make assumptions that cannot be enforced by the developer. It states that the construction traffic entering and exiting will be limited to non-peak hours. How can this happen when construction needs daylight for most operations, especially in the beginning? It also stated that they will utilize the U Turn method to get back to 295, however, you must read very carefully, because the U Turn Median method is only for the passenger cars exiting the site (attached Page 7 Paragraph 5). The commercial vehicles will still use the primary left turn exit plan.

Speed limit on 33/ Mountain Road is 55 MPH. There will be many, many, accidents when commercial vehicle turn left in front of traffic traveling 55 MPH and no way to avoid large commercial trucks.

I have attached the 3 specific pages I referenced in the Traffic Study.

All this new analysis did was create even more problems that can easily be relieved by denying the Rezoning for Mountain Road Technology Park and the Conditional Use Permit.

Please do not subject the people of Western Hanover to terrible traffic congestion and accidents by allowing this development to proceed.

Thank you for your Consideration,

Holly Manke

South Anna

"Don't be afraid to go where you've never gone and do what you've never done, because both are necessary to have what you've never had and be who you've never been." - The Universe

<TIA FEB26.pdf>

Biernot, Gretchen W.

From: amy Mendelson Cheeley <amendesign2@gmail.com>

Sent: Friday, April 10, 2026 12:03 PM
To: Herzberg, F. Michael; Dibble, Susan P.; Pompei, Andrew J.; Hunter, Jo Ann M.; Biernot, Gretchen W.; Leadbetter, Larry A; McGhee, Jr, Fredric I.; Stoneman, Jeff S.; Davis, Sean M.; Floyd, Danielle G.; Hudson, Ryan M.; Prichard, Faye O.; Iverson, Edmonia P.; ctyadm; Heizer, Brett; Parker IV, Clifton L.; Martin, William E.; Abbott, Alan C.
Subject: 33 Mountain Road Marchetti Valco

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please add to the application files:

Good morning, All.

I have spoken at Citizens' Time regarding this project and have submitted those comments (primarily regarding the Comp Plan and SAP process) but I want to make sure to reiterate today my intention to continue to oppose this proposal for the before mentioned reasons and more detailed reasons below.

But, before I get to the specifics, I would like to offer the following philosophical overview...

This and other data center applicants are asking YOU ALL to agree to allow vague opaque plans to build technology (that doesn't exist-as it's constantly evolving) starting in a few years, that could be OBSOLETE by the time they're completed - ten years later. Would we approve this for any other type of applicant?

Back to some additional specific items to consider:

1. Security. The amount of security that's needed for a data center is something that's not been discussed. Would we allow speculative development with this type of national security risk of any other kind? A data center is under constant bombardment from global cyberattacks. It requires massive firewalls, DDoS protection, and encrypted internal networks.

These are more like prisons, military bases, or Detention Centers. Some of the security needs are:

High-tensile fencing, K-rated
crash bollards, and anti-climb walls.

24/7 4K thermal imaging and
AI-driven "pixel change" detection for movement.

Biometric scanners (iris, palm vein, fingerprint) and
"tailgating" sensors.

Does this belong next to hundreds of homes?

2. Foreign Government and Federal Government. In keeping with the security and not knowing the end user... do we really want to create a county where outside government and or **foreign governments** will dictate what happens on our soil? Because that's quite possibly what will happen if a foreign company buys one of these speculative shell buildings. We will have no control about what's going on. They are also more of a target. **You will be putting our community at risk.**

3. Gateway Hanover/Tourism. The only major road entering Western Hanover from the interstate is 33. When I worked on previous iterations of the Comp Plan, we discussed creating a beautiful gateway to our county. The Balloon test proved absolutely nothing to me and the community. Noise will be heard, buildings will be seen. There's not enough distance to change these facts. (Go to the QVS site in eastern Henrico-it's miles away from anything-not 50-200 feet away).

With the launching of the new Hanover County tourism site, I was surprised to see the juxtaposition of what is being promised to tourists - things that our own community will not experience with data centers in our midst.

4. Environmental concerns have been discussed and stressed **with little regard to figuring it out now.** Too often Hanover County allows the applicant to "figure it out" later after approval or "that's a DEQ, or EPA issue." But, that's just not acceptable when you're talking about this particular piece of property as it's almost entirely in a Chesapeake Bay Management Area. With some of it in the Chesapeake Bay Protection area with even more stringent building requirements. There's no doubt that Tyson's and the Holzgraffe Pond areas have been compromised with years of pollution. **As with the Superfund site just down the street - H and H Burn pit - this area and its constituents have had to deal with environmental issues that can adversely affect our health outcomes.** You all have been informed and cannot claim plausible deniability when things go wrong with regard to these toxicities if you approve it.

To wrap up this specific communication... I have and will continue to also remind you and our communities of the dangerous precedent approving data centers in this area will create. Given the NDAs, Dominion deposits a full year before the SAP and Tract application, and the survey and meeting notes...

Hanover County appears to have defrauded the community with a Small Area Plan that was tailor made for Tract. You can't claim to create and uphold a Comprehensive Land Use Plan nor "trust the process" when it has disenfranchised the communities it's supposed to serve. We (the community) have obtained the emails and Dominion correspondence and plans to back these claims up.

Additionally, I have read each survey (which I participated in) comment and reviewed the meeting notes. And, the overwhelming sentiment then-that continues today is that **no one wants these data centers here.**

Please VOTE NO for this Data Center Scheme.

Thank you for taking the time to read,
Amy

Amy Mendelson Cheeley
Amy Mendelson Design
Amendesign2@gmail.com

804-339-7266
Instagram Fine Art & Illustration: @amendesign

Biernot, Gretchen W.

From:	Holly Manke <hmanke@yahoo.com>
Sent:	Thursday, April 9, 2026 4:44 PM
To:	Holly Manke; Abbott, Alan C.; Heizer, Brett; McGhee, Jr, Fredric I.; Planning; Parker IV, Clifton L.; Leadbetter, Larry A; Iverson, Edmonia P.; Martin, William E.; Biernot, Gretchen W.
Cc:	Floyd, Danielle G.; Herzberg, F. Michael; Prichard, Faye O.; Stoneman, Jeff S.; Hudson, Ryan M.; Davis, Sean M.; Dibble, Susan P.
Subject:	Re: Noise Study Mountain Road Technology Park

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I am emailing because I have not received any response. The PC meeting is now less than a week away and the noise study is extremely pertinent. Without this information it is impossible for Tract to make the claim that the noise is within limits.

Thank you,

Holly Manke
Sent from my iPhone

On Apr 3, 2026, at 6:05 PM, Holly Manke <hmanke@yahoo.com> wrote:

Hello,

I am inquiring about the noise study posted today for the Mountain Road Technology Park. The conclusions say:

Conclusions
An environmental noise assessment was completed for the proposed Mountain Road Tech Park data center site. The conceptual layout and equipment information was provided by Tract. The results of the assessment indicate the facility sound levels are expected to comply with the applicable Hanover County sound level limits during normal operations and during occasional generator maintenance and testing operations.

I specifically am asking for the the equipment information provided by Tract. Since all of the plans provided by Tract are conceptional and they cannot even provide what type of cooling system they are using for the site, I question exactly what specific information they were able to provide to the company that conducted the noise study.

Tract claims no specific information can be provided until a tenant is determined and decides what type of cooling, building location, etc., how can they possible provide specific information that could make any noise study accurate.

So please ask them to provide what information they provided to this company for a report to be made claiming the noise will comply with acceptable sound levels.

Thank you,
Holly Manke
South Anna

"Don't be afraid to go where you've never gone and do what you've never done, because both are necessary to have what you've never had and be who you've never been." - The Universe

Biernot, Gretchen W.

From: Hunter, Jo Ann M.
Sent: Thursday, April 9, 2026 2:52 PM
To: Pompei, Andrew J.; Biernot, Gretchen W.
Subject: FW:

From: Dibble, Susan P. <spdibble@hanovercounty.gov>
Sent: Thursday, April 9, 2026 2:32 PM
To: Hunter, Jo Ann M. <JMHunter@hanovercounty.gov>
Subject: Fw:

Susan P. 'Sue' Dibble

Hanover County Board of Supervisors

South Anna District Representative

From: Kim McCallister <ksmc8284@gmail.com>
Sent: Thursday, April 9, 2026 1:45 PM
To: Herzberg, F. Michael <fmherzberg@hanovercounty.gov>; Davis, Sean M. <smdavis@hanovercounty.gov>; Prichard, Faye O. <foprichard@hanovercounty.gov>; Stoneman, Jeff S. <JSStoneman@hanovercounty.gov>; Floyd, Danielle G. <DGFloyd@hanovercounty.gov>; Hudson, Ryan M. <RMHudson@hanovercounty.gov>; Dibble, Susan P. <spdibble@hanovercounty.gov>
Subject:

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Dear members of the Hanover County Board of Supervisors,

First let me say that I am hoping to attend the planning meeting next week in a show of support for all of those OPPOSED to the data center proposal on Rt 33 in the Tyson's location.

About me: I lived in rural Beaverdam for over 35 years, and Hanover County since 1987. My husband and I raised our two children in Hanover, and only left because we retired and downsized our home and the 17 acres in Beaverdam on which we had lived the last 25 years. We saw many changes come to Hanover; some changes were difficult to see unfold, but liveable. Most retained the rural feel with which Hanover prides itself. Subdivisions with acreage may not be 100% desirable due to the strain it puts on the schools, roads, and other public services but it at least was introducing other families to the rural beauty of

Hanover County. As taxes/ real estate assessments increased to support those services, we reminded ourselves that there were other people who deserved to enjoy a more rural lifestyle. I worked many years within HCPS and saw the strain a limited budget put on the school system. However, tax dollars were being provided by neighbors and human beings, not by a large corporation who wants to build something that residents oppose.

Although I understand wanting to increase a revenue stream for services within the county, I feel that using a data center to provide those tax dollars when most of the residents abhor having one located within rural Hanover....that is disgraceful. You are turning your backs on those who elected you, and no longer listening to the voices of those in your own community. The cons far outweigh the pros and there are still far too many unknown factors that of course the data center developers will try to convince you of their solutions, predictions and projections.

I can remember when there was a lot of discussion about widening all of 33 to accommodate the heavy traffic that exists during work and school hours. It never happened. And you want to increase the traffic along that stretch of road?! Are you kidding me?

Although I have moved from Hanover, our goal was to find a 55+ community as close to western rural Hanover as we could get. It landed us just across the Hanover/Henrico line with the Chickahominy river behind us. I now live in Hunton Park's Manor Grove and am furious that a data center is being considered for the old Tyson location. I understand that Harris Farm Lane is also under consideration. Again, unacceptable. I feel for your residents who wanted a quiet rural lifestyle and are now faced with these excessively loud, water hogging, electricity sucking, traffic producing, unattractive monstrosities.

I encourage you to please communicate to the planning commission a loud NO VOTE to any data center being placed in beautiful Hanover County. I may have moved less than a year ago, but my heart remains a Hanoverian always.

Kim McCallister

Good afternoon Chairman Davis and Board Supervisors. My name is Bob Nelson. I reside in the Ashland District.

A quarterly Board meeting involving roads and traffic is a good opportunity. So my comments today concern the median U turn proposal to address data center construction issues on Mountain Road.

Under the proposal, construction workers leaving the project would not be allowed to use an existing median break. Instead they would make a right turn and head north on Mountain Road. After driving a short distance, a new median break would be created for vehicles to make a U turn and head south on Mountain Road towards I-295.

Some construction traffic could still use the existing median break. Construction workers could use it to make a left turn into the project, and trucks and commercial vehicles could use it to make a left turn out of the project outside two peak PM hours.

I believe the major traffic problems with this proposal aren't on Mountain Road north. They are on the other side of Mountain Road headed south towards I-295.

On that side, Mountain Road divides and widens to two lanes near a storage facility south of Kitchen 33. Vehicles of all types will be able to accelerate and drive south at speeds of 45 to 55 miles per hour on Mountain Road. Construction workers using the new median U turn will have to deal with two lanes of traffic in crossing or merging into the left lane. They will also have to deal with construction traffic at the existing median break.

Overall, we have high traffic movements, crisscrossing vehicle mergers and lane changes, and vehicles travelling south on Mountain Road at high speeds. Nothing like this happens today. In the future, this will occur in 1/10th of a mile.

This median U turn proposal will be a traffic and safety nightmare on Mountain Road south for many years. If you leave Cobblestone Water Park in a car or bus with happy kids, that nightmare could be yours. Tract's data center proposal should be denied based on construction traffic and safety concerns.

Thank you for your consideration.

Citizen Comments, Board of Supervisors Meeting, April 8, 2026

Biernot, Gretchen W.

From: Holly Manke <hmanke@yahoo.com>
Sent: Thursday, April 9, 2026 7:56 AM
To: Planning; Biernot, Gretchen W.; Leadbetter, Larry A; Abbott, Alan C.; Heizer, Brett; Parker IV, Clifton L.; McGhee, Jr, Fredric I.; Iverson, Edmonia P.; Martin, William E.; Floyd, Danielle G.; Herzberg, F. Michael; Prichard, Faye O.; Stoneman, Jeff S.; Hudson, Ryan M.; Davis, Sean M.; Dibble, Susan P.
Subject: Mountain Road Technology Park

CAUTION: This email originated from outside your organization. Exercise caution when opening attachments or clicking links, especially from unknown senders.

Good Morning,

I am attaching a copy of the information I gave yesterday at the Board Of Supervisors Meeting during Citizens Time. All of these Data Center applications must be considered as cumulative effects on our resources and not as independent effects. The sheer number of these applications warrants an immediate moratorium until these cumulative effects can be studied. Since we have one data center approved, shouldn't we allow time for it to be developed and then determine if this is an industry we want to expand in Hanover County? I think the citizens would definitely vote no to more data centers in Hanover County.

Hanover County needs a moratorium on all future Data Center developments. At a bare minimum there needs to be an ordinance for these massive developments that want to come into Hanover County. There is already another one on 33 at Harris Farm Lane that is in pre-application meetings. This one is within earshot of the Tract Mountain Road Technology Park site, which I am vehemently opposed to. This brings the total to seven that have or are attempting to develop Data Centers in Hanover.

SEVEN

Hanover Technology Park – approved March 2024

Hunting Hawk Technology Park – withdrawn Feb 2026

Mountain Road Technology Park - in process

Iron Horse - in process

Old Ridge - in process

Rt 30 / Binns Road – letters sent to neighbors about plans for site

Harris Farm Lane – pre-application meetings

I ask you…. How many data centers do we need in Hanover? Isn't one enough. Especially since that one is 1200 acres and 2400 mega watts of power.

Tract promised 1.78 Billion, that's Billion with a B, in revenue dollars over the next 20 years for Hanover County from this one development at Hanover Technology Park. They promised 25.7 Million starting in 2028. We know that this is now pushed back at least 2 years. Isn't approximately 89 million dollars a year in revenue from this one already approved data center enough? It is over 10% of our county budget. I think the old adage of not putting all your eggs in one basket applies here.

Do we really need any additional Data Centers in Hanover County? Shouldn't we wait to see if Tract fulfills it promises it made to you in March of 2024 before a new development is considered? Our Resources are not limitless and neither is the patience of the Hanover County Citizens.

Please send a clear message that Hanover is not for sale to these data center developers and place a moratorium on all future Data Centers.

Thank you for your consideration,

Holly Manke

"Don't be afraid to go where you've never gone and do what you've never done, because both are necessary to have what you've never had and be who you've never been." - The Universe

TRAFFIC POSITION PAPER – MARCHETTI PROPERTIES, ET AL., REZ2025-00023

This position paper analyzes data center traffic for the construction and operation of Tract's technology park. Tract and its consultants cherry picked assumptions that minimize trip generation in the Traffic Impact Analysis (TIA). Major errors were made; major corrections are required. Project trip generation will be far higher. Data center traffic will create major delays and safety issues on Mountain Road.

EXECUTIVE SUMMARY

Kimley-Horn has prepared three TIA's based primarily on assumptions provided by Tract. They are directly contradicted by data and information in documents Tract has recently made public. Data center square feet of 2.6 million should be used for operational trip generation. 1,100 employees should be used for data center construction trip generation.

Moreover, data centers will be in operation during construction of other data centers. Maximum trip generation will be additive, the sum of construction and operational (partial buildout) data center traffic.

Under all construction and operation scenarios, data center trip generation will be significantly higher than is reflected in the Tract TIA's. The TIA's Tract has submitted are fatally flawed.

TRIP GENERATION – DATA CENTER OPERATION, FULL BUILDOUT

The ITE Trip Generation Manual, 11th Edition (ITE Manual) reports data center trip generation (weekday, AM peak hour, PM peak hour) in trips per 1,000 square feet (sf). However, the manual cautions that "the database contains a small number of sites with limited data on the number of tenants and employees." In a March 2023 memorandum, Bowman Consulting Group (Bowman) analyzed the relationship between actual, detailed trip data and square feet and employees for six Amazon Web Services (AWS) data center campuses ranging from 285,000 to 725,000 square feet and from 50 to 160 employees. Bowman derived weighted average trip generation factors per 1,000 sf of 0.75 trips for weekdays, 0.09 trips for the AM peak hour, and 0.03 trips for the PM peak hour. These trips per 1,000 sf factors were recommended for all future AWS data center developments in Virginia. With the exception of Tract's two projects, the TIA's for every proposed data center project in Hanover County (Iron Horse, Hunting Hawk, Farley/Huff) have been based on Bowman trip generation factors per 1,000 sf.

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PLANNING DEPARTMENT

The Bowman analysis did not report electric capacity in megawatts (MW) for the six campuses. Square feet and employees were relevant, megawatts was not. By contrast, in the Hickory Hill case, Tract's TIA posited a generic data center campus with six identical 48 MW buildings and 112 employees, calculated 39 employees per 100 MW, and then derived trip generation. Tract's calculation of 39 employees per 100 MW for a single hypothetical campus was contrary to the ITE Manual's warning about using a "small number of sites" and Bowman's robust analysis of detailed, actual data on trips, square feet, and employees for six existing campuses. There's no basis to discard the square feet trip generation factors recommended by Bowman for Tract's megawatts method.

Tract used the Hickory Hill megawatts method in its TIA's here, but there's a major difference. Based on discussions with Tract, Ernst & Young (EY) used a total data center building area of 2,600,000 sf in two reports on tax revenues. EY reports, pp. 3, 4.[1] Bowman trip generation factors per 1,000 sf can and should be applied here.

A comparison of the Tract TIA trip generation based on megawatts to trip generation based on square feet is as follows:[2]

	Weekday	AM Peak Hour	PM Peak Hour
Megawatts - 900	1,488	186	60
Square feet – 2.6 million	1,950	234	78
Trip generation increase	31.0%	25.8%	30%

The Tract TIA's significantly understate operational trip generation based on megawatts compared to operational trip generation based on square feet. Square feet should be used for trip generation consistent with the ITE Manual, the Bowman memorandum, the EY reports, and the TIA's submitted for all other data center projects in Hanover County.

TRIP GENERATION – DATA CENTER CONSTRUCTION

As VDOT noted in comments on the Iron Horse data center TIA (Tradeport Hanover Land LLC, REZ2025-00010): "The Department has recently found that the impacts during construction of data centers is often greater, sometimes greatly so, than the impacts

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[1] The first EY report has a September 2025 date but was not disclosed until late February 2026.
[2] Megawatts – Tract September and November 2025 TIA's, p. 28. Square feet – Weekday: 2,600 x 0.75 = 1,950; AM peak hour: 2,600 x 0.09 = 234; PM peak hour: 2,600 x 0.03 = 78.

expected once in operation." Using 800 construction employees working a single daytime shift and a trip generation of 1,600 (which assumes employees enter/exit the site only once each day), the Tract TIA's assign 50% or 800 trips to the AM period and 800 trips to the PM period. For AM and PM peak hours, the Planning Commission requested an additional review; and a Supplemental TIA used a 70% assignment - 560 trips for the AM peak hour (6 AM to 7 AM) and 560 trips for the PM peak hour (4 PM to 5 PM). The 70% assignment and the peak hours chosen are reasonable.

Is 800 construction employees the correct starting point to use for trip generation? The answer is no.

The two EY reports estimate 1,100 construction jobs (peak). EY reports, pp. 3, 4. This is the number Tract favored for revenue projections, and multiple documents were made public starting in early February 2026 referencing 1,100 construction jobs. Recently Dewberry analyzed water needs for this project. The analysis assumes that electric capacity will be available for area 1 in 2030, area 2 in 2031, and area 3 in 2032. The water capacity analysis indicates data center development will start in area 1 near Mountain Road and proceed north to areas 2 and 3, the largest building development areas.

Based on a 70% peak hour trip assignment, the construction trip generations for 800 and 1,100 employees are as follows:

	Weekday	AM Peak Hour	PM Peak Hour
Employees - 800	1,600	560	560
Employees - 1,100	2,200	770	770
Trip generation increase	37.5%	37.5%	37.5%

Construction trip generation should be based on 1,100 construction employees, not 800. Tract and EY agreed to use 1,100 construction employees for tax revenue projections, and Tract should be held to that number for data center trip generation and traffic studies.

TRIP GENERATION – DATA CENTER CONSTRUCTION AND OPERATION, PARTIAL BUILDOUT

The TIA's assume that no data centers will be operational during construction. Trip generation for construction and for operation of the data centers are assumed to be separate - there is no overlap. That assumption is false.

Data centers can be in operation, and other data centers can be under construction at the same time. Trip generation will be additive. Up to four data centers may be operational when remaining data centers are under construction.

Assuming that two data centers are operational during construction, a reasonable assumption, the trip generation for Tract's data center project will be as follows:

	Weekday	AM Peak Hour	PM Peak Hour
Construction – 1,100 employees	2,200	770	770
Operation – 2 data centers [3]	650	78	26
Total trip generation	2,850	848	796

These total trip generation numbers can be compared to the construction trip generation for 800 employees shown on page 3 (the highest in any Tract TIA). Weekday trip generation is 1,250 higher, AM peak hour trip generation is 288 higher, and PM peak hour trip generation is 236 higher.

The TIA's Tract has submitted are fatally flawed. Traffic, delays, and safety issues will be major problems on Mountain Road, the primary north-south highway and I-295 access point in western Hanover County.

April 6, 2026

Bob Nelson, Ashland District

[3] 1/3 of the 2.6 million square feet trip generations shown on page 2 and derived in footnote 2.

Biernot, Gretchen W.

From:	Holly Manke <hmanke@yahoo.com>
Sent:	Friday, April 3, 2026 6:05 PM
To:	Planning; Biernot, Gretchen W.; Leadbetter, Larry A; McGhee, Jr, Fredric I.; Abbott, Alan C.; Heizer, Brett; Martin, William E.; Iverson, Edmonia P.; Parker IV, Clifton L.
Cc:	Floyd, Danielle G.; Herzberg, F. Michael; Prichard, Faye O.; Stoneman, Jeff S.; Hudson, Ryan M.; Davis, Sean M.; Dibble, Susan P.
Subject:	Noise Study Mountain Road Technology Park

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Hello,

I am inquiring about the noise study posted today for the Mountain Road Technology Park. The conclusions say:

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I specifically am asking for the the equipment information provided by Tract. Since all of the plans provided by Tract are conceptional and they cannot even provide what type of cooling system they are using for the site, I question exactly what specific information they were able to provide to the company that conducted the noise study.

Tract claims no specific information can be provided until a tenant is determined and decides what type of cooling, building location, etc., how can they possible provide specific information that could make any noise study accurate.

So please ask them to provide what information they provided to this company for a report to be made claiming the noise will comply with acceptable sound levels.

Thank you,
Holly Manke
South Anna

"Don't be afraid to go where you've never gone and do what you've never done, because both are necessary to have what you've never had and be who you've never been." - The Universe

Biernot, Gretchen W.

From: Holly Manke <hmanke@yahoo.com>
Sent: Monday, April 6, 2026 10:32 AM
To: Planning; Biernot, Gretchen W.; Leadbetter, Larry A; Abbott, Alan C.; Heizer, Brett; Parker IV, Clifton L.; Martin, William E.; Iverson, Edmonia P.; McGhee, Jr, Fredric I.
Cc: Floyd, Danielle G.; Herzberg, F. Michael; Prichard, Faye O.; Stoneman, Jeff S.; Hudson, Ryan M.; Davis, Sean M.; Dibble, Susan P.

Subject: Mountain Road Technology Park

CAUTION: This email originated from outside your organization. Exercise caution when opening attachments or clicking links, especially from unknown senders.

Hello,

I am contacting you today about the Tract planning commission response letter dated 4/2/26. I would like to respond to some of their responses in this letter and discuss the incomplete and misleading information provided.

Peak Water Demand and the Dewberry evaluation.

The Dewberry conclusions in their report on page 6 state:

"Based on the results of this evaluation, the existing Hanover County water system has sufficient capacity to supply water to the Route 33 data center development during both MDD and fire flow conditions. However, the proposed data center development is expected to utilize most (approximately 90%) of water supply capacity of the existing Elmont PZ, with approximately 0.25 - 0.3 MGD of maximum day capacity remaining. To support additional high-water users in the Small Area Plan, additional water capacity improvements would be required."

90% is significant and something that should not be ignored. No other developments can go into the small area plan without improvements, paid for by the people of Hanover, without SIGNIFICANT improvements. That is not clearly stated in Tract's responses, only in the conclusion of the Hydraulic Analysis dated 3/24/26.

Power Costs

Tract states the GS-5 rates will recover the cost of service (to include distribution, transmission, and generation) through the unique structure rate. It is approved to take affect January 1, 2027, so Tract will likely be grandfathered for the Mountain Road and Hanover Technology Parks and that would make this response from them moot.

Here is what GS-5 rate states. The specifics are:

"In addition, to help insulate ratepayers from the costs around the rapid build-out and construction of infrastructure to support businesses such as data centers, certain large-scale customers will be required to pay a minimum of 85% of contracted distribution and transmission demand, and 60% of generation demand, among other requirements." according to the SCC press release

https://www.scc.virginia.gov/about-the-scc/newsreleases/release/scc-issues-order-on-dev-biennial-review-2025/scc-rules-in-dev-biennial-review-case.html

This clearly not 100% of costs, so again I reiterate that the people of Hanover will pay for this through additional costs of electricity and more than likely Tract will be grandfathered and the people of Hanover will pay for everything except the electricity and improvements on the actual site.

Balloon Test.

I see no results. I know I clearly saw the balloon on 33 and this entire building will be visible.

Tax Generation

I see no information from Hanover County on whether the figures are accurate. I will say that based on the experience from the Hanover Technology Park, we cannot expect money on the dates promised. I strongly recommend that we allow Tract to prove itself with the Hanover Technology Park and providing revenue before we grant them another data center development. Tract does NOT have any data centers anywhere, only projects in development, with only 2 in construction. One of those is the Hanover Technology Park. They have only been in business since 2020 and should have completed at least one project by now. There is no way they can provide any information on revenue for their projects as they have none completed. Projects completed in Loundon, VA are a completely different animal.

Dam removal & Traffic

I will send another email on that because there too much to discuss on these issues. I have sent a previous email on traffic and will let Bob Nelson's response to their traffic study revision about how it was not conducted appropriately speak for me.

I ask you to Deny the Zoning Request and Conditional Use Request by Tract for the Mountain Road Technology Park.

Thank you for your consideration.

Best,

Holly Manke

South Anna

"Don't be afraid to go where you've never gone and do what you've never done, because both are necessary to have what you've never had and be who you've never been." - The Universe

Biernot, Gretchen W.

From: Hunter, Jo Ann M.
Sent: Wednesday, March 25, 2026 11:20 AM
To: Biernot, Gretchen W.
Subject: FW: Potential Impact of Hyperscale Data Center Development on Nearby Residential Property Values...
Attachments: Hanover Data Center Memo (vBoS).pdf; Hanover Data Center Appendix_ Review of GMU Study (vBoS).pdf; Hanover Data Center Appendix_ Comparables (vBoS).pdf

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From: Dibble, Susan P. <spdibble@hanovercounty.gov>
Sent: Tuesday, March 24, 2026 8:40 PM
To: Leadbetter, Larry A <laleadbetter@hanovercounty.gov>
Cc: Hunter, Jo Ann M. <JMHunter@hanovercounty.gov>; Pompei, Andrew J. <AJPompei@hanovercounty.gov>
Subject: Fw: Potential Impact of Hyperscale Data Center Development on Nearby Residential Property Values...

Fyi

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From: Rick E <rwelliott01@gmail.com>
Sent: Tuesday, March 24, 2026 5:12:16 AM
To: Davis, Sean M. <smdavis@hanovercounty.gov>; Stoneman, Jeff S. <JSStoneman@hanovercounty.gov>; Dibble, Susan P. <spdibble@hanovercounty.gov>
Subject: Potential Impact of Hyperscale Data Center Development on Nearby Residential Property Values...

CAUTION: This email originated from outside your organization. Exercise caution when opening attachments or clicking links, especially from unknown senders.

Members of the Hanover Board of Supervisors,

I wanted to share the attached memorandum regarding the potential impact on nearby residential property values of rezoning land for use as a hyperscale data center campus. I've used multiple approaches to try to quantify the impact. My conservative estimate is that homes within roughly 1 to 2 miles of a new facility could experience relative value impacts exceeding 10%, with the strongest effects closest to the site.

I prepared the attached memorandum after hearing counsel for the Hunting Hawk Technology Park cite a George Mason University study during the January 15th Board of Supervisors meeting. During that meeting, counsel stated that the study shows that building a data center actually increases nearby property values. After reviewing that GMU study in depth, I do not believe that is the proper conclusion. Based on a comprehensive analysis, the study is not appropriate to support that conclusion, particularly in the context of very large hyperscale campuses located near residential neighborhoods. The memorandum and supporting appendices address these issues in detail, and provide a more comprehensive review of the study's limitations.

Although that particular project was rejected — thank you for that decision — I thought it would still be useful to provide a more complete and careful analysis of the impact on home values. The attached memo is intended to do that. It focuses on localized residential impacts and explains why the available evidence suggests that

homes closest to a large hyperscale data center campus are likely to face measurable value reductions, with the greatest impacts closest to the facility.

My hope is simply that this memo may be helpful as a reference point in evaluating future proposals involving large-scale data center development near residential communities.

Thank you for your time and for your continued service.

Sincerely,

Rick Elliott

To: Hanover Board of Supervisors
Fr: Richard Elliott
Date: Mar 22, 2026

Subject: Potential Impact of Hyperscale Data Center Development on Nearby Residential Property Values

Purpose

This memorandum evaluates the potential impact on nearby residential property values associated with rezoning land for development as a hyperscale data center campus. The analysis is intended to inform land-use decision-making by summarizing available evidence on how large industrial-scale infrastructure projects affect nearby housing markets.

While economic development benefits associated with data centers are often discussed at the regional level, the focus of this memorandum is on **localized residential impacts**, particularly where large industrial facilities are introduced near existing residential neighborhoods or rural residential areas through rezoning.

Key Finding

Based on multiple independent analytical approaches—including evidence from industrial land-use studies, infrastructure disamenity research, and housing demand behavior—homes located closest to a large hyperscale data center campus are likely to experience measurable reductions in value, with impacts commonly exceeding 10% for homes closest to the facility and diminishing with distance.

Across these approaches, the estimated range of impact is broadly consistent (details & supporting analysis are provided in the Appendices):

- **Industrial land-use literature:** approximately **4%–11% localized price impacts**
- **Infrastructure disamenity analogs (e.g., high-voltage transmission infrastructure):** approximately **8%–25% impacts for homes closest to major structures**
- **Buyer pool contraction and housing demand sensitivity:** approximately **10%–20% buyer withdrawal,** with localized price effects of similar order of magnitude and potentially larger depending on market elasticity.

Across multiple independent analytical approaches, **the available evidence consistently indicates that homes located within approximately two miles of a hyperscale data center campus are likely to experience value reductions exceeding 10%, with the largest impacts occurring closest to the facility and diminishing with distance.**

Primary Characteristics of Hyperscale Data Center Campuses Impacting Residential Real Estate Values

Hyperscale data center campuses are large industrial-scale developments that operate continuously and require substantial mechanical and electrical infrastructure. While the physical scale of these facilities varies, three operational characteristics tend to have the greatest influence on nearby residential experience and, therefore, housing market perceptions: **continuous facility lighting**, **backup power systems that rely on large generators**, and **cooling and mechanical systems that operate around the clock**. These factors introduce persistent light pollution, emissions from generator testing and operation, and continuous mechanical sound into areas that may previously have been residential or rural in character.

Among these factors, the most persistent day-to-day impact experienced by nearby residents is often the **continuous operation of cooling equipment and mechanical infrastructure**.

Hyperscale facilities rely on large arrays of industrial cooling systems that run **24 hours per day, year-round** to maintain stable operating temperatures for servers. Unlike intermittent industrial noise sources, these systems operate continuously.

The sound produced by these systems is also different from typical neighborhood noise. Cooling equipment commonly generates **persistent low-frequency sound**, which behaves differently from higher-frequency noise such as traffic or standard machinery.

Low-frequency sound travels farther and is more difficult for typical building materials to block. Standard residential insulation is designed primarily to reduce mid- and high-frequency noise, meaning lower-frequency vibrations can penetrate into homes even when the source is located some distance away.

A useful analogy is the experience of hearing a car with a powerful subwoofer several blocks away. You may not hear the music itself, but you can still perceive the deep bass vibration or feel windows subtly rattling. Hyperscale data center cooling systems can produce a similar type of persistent low-frequency hum, which can be experienced as a continuous background vibration similar to low-frequency bass.

This effect is often more noticeable at night, when quiet bedrooms cause the human auditory system to effectively "gain up" to detect faint sounds. Because low-frequency noise is not easily blocked by typical residential construction materials, it can become the dominant background sound the brain processes, making the persistent hum feel disproportionately noticeable and intrusive.

Evidence from Comparable Industrial and Infrastructure Uses

Although academic research specifically focused on hyperscale data centers remains limited, a substantial body of research exists examining residential value impacts associated with large industrial facilities and infrastructure.

Three strands of research are particularly informative (all further supported in Appendix):

1. Industrial Land-Use Studies

Empirical research examining the impact of industrial sites and logistics facilities on nearby housing markets consistently finds localized residential price reductions associated with proximity to large non-residential land uses. Across multiple studies, typical impacts range from approximately **4% to 11%**, with the largest effects concentrated closest to the facility.

These effects are commonly attributed to perceived quality-of-life factors such as traffic, visual scale, noise, and changes in neighborhood character.

2. Infrastructure Disamenity Research

Studies examining residential property values near major infrastructure—particularly high-voltage transmission lines—provide an additional benchmark. While the underlying infrastructure differs, these studies illustrate how visible and persistent infrastructure can affect nearby housing values.

Homes located closest to transmission structures often experience price reductions in the range of approximately **8% to 25%**, with effects diminishing rapidly with distance.

3. Housing Demand and Buyer Pool Effects

Housing choice research shows that when strong localized disamenities are introduced, some buyers simply stop considering affected homes rather than remaining in the market and negotiating on price.

Across comparable industrial and infrastructure uses, studies commonly find that **10–20% of potential buyers may exclude homes located near such facilities from their consideration set.**

In practical terms, even a partial reduction in the number of buyers willing to consider a home can translate into meaningful price adjustments for the properties most directly affected.

Limitations of Existing Data Center Research

A frequently cited academic study conducted by George Mason University examined housing prices and proximity to data centers in Northern Virginia. The study is sometimes cited as suggesting that homes closer to data centers may be more valuable - holding all else equal.

However, the study was not designed to evaluate localized impacts of large hyperscale data center campuses and has several limitations when applied to site-specific rezoning decisions.

Among other factors:

- The broad Northern Virginia market is highly atypical due to its global-scale concentration of data centers and extremely strong housing demand.
- The analysis models distance effects across a very large geographic area (up to roughly 20 miles), where proximity to a data center is unlikely to have any meaningful effect on home values. At those distances, the distance variable increasingly captures broader regional housing patterns - such as the transition from higher-value suburban areas to lower-value rural areas - rather than the localized effects most relevant to rezoning a large hyperscale campus near homes.
- Small urban data facilities and large hyperscale campuses are treated as equivalent despite major differences in scale and infrastructure. This has a direct implication for how the results should be interpreted: the analysis combines small, low-impact data facilities located in high-value urban areas with large hyperscale campuses that have substantially greater physical and operational impacts. These are not comparable uses. Including both in a single model confounds the results and makes the study an unreliable indicator of the localized impacts associated with large hyperscale campuses near residential neighborhoods.

As a result, the study's findings primarily reflect regional housing patterns (i.e. rural areas vs. suburban vs. small urban) in Northern Virginia rather than the localized effects most relevant to evaluating the introduction of large hyperscale data center campuses near residential areas.

Conclusion

Although precise impacts vary by location and market conditions, the available evidence indicates that the introduction of large hyperscale data center campuses near residential areas is likely to produce **localized reductions in residential property values**.

Across multiple independent analytical approaches, estimated impacts for homes closest to such facilities commonly **exceed 10 percent**, with the largest effects occurring near the facility and diminishing with distance.

These localized impacts do not necessarily outweigh broader economic benefits associated with data center development. However, they represent an important planning consideration when

evaluating land-use compatibility and rezoning decisions involving large industrial-scale infrastructure located near existing residential communities.

Author Background

The author has a background in engineering, management consulting, and financial services, with deep experience in quantitative analysis and evaluation of complex systems. He previously worked at Bain & Company, where he advised on strategic and analytical topics. He also worked with Capital One for over 20 years, holding senior leadership roles which included responsibility for large analytical teams and credit decisioning. His work has included residential real estate-related analysis, the evaluation of risk, modeling assumptions, and the robustness of analytical conclusions. This background informs the analytical approach used in this memorandum.

Appendix: Evaluation of GMU Study Applicability to Site-Specific Rezoning Decisions

Purpose of Appendix

This appendix explains why the George Mason University (GMU) study "Data Centers and 2023 Home Sales in Northern Virginia - Aug 2025" should not be used to conclude that building a large hyperscale data center near existing residential neighborhoods has no negative impact on nearby home values. The GMU study is a broad regional analysis and is not designed to evaluate localized impacts associated with rezoning a specific site for a large hyperscale campus.

Why the GMU Study Is Not a Site-Specific Rezoning Tool

The GMU study evaluates housing prices across Northern Virginia using a regional dataset. Rezoning decisions, however, are inherently local and depend on conditions experienced within a relatively small geographic area. A model designed to explain variation across a specific region is not necessarily well suited to evaluate localized impacts near a specific proposed facility.

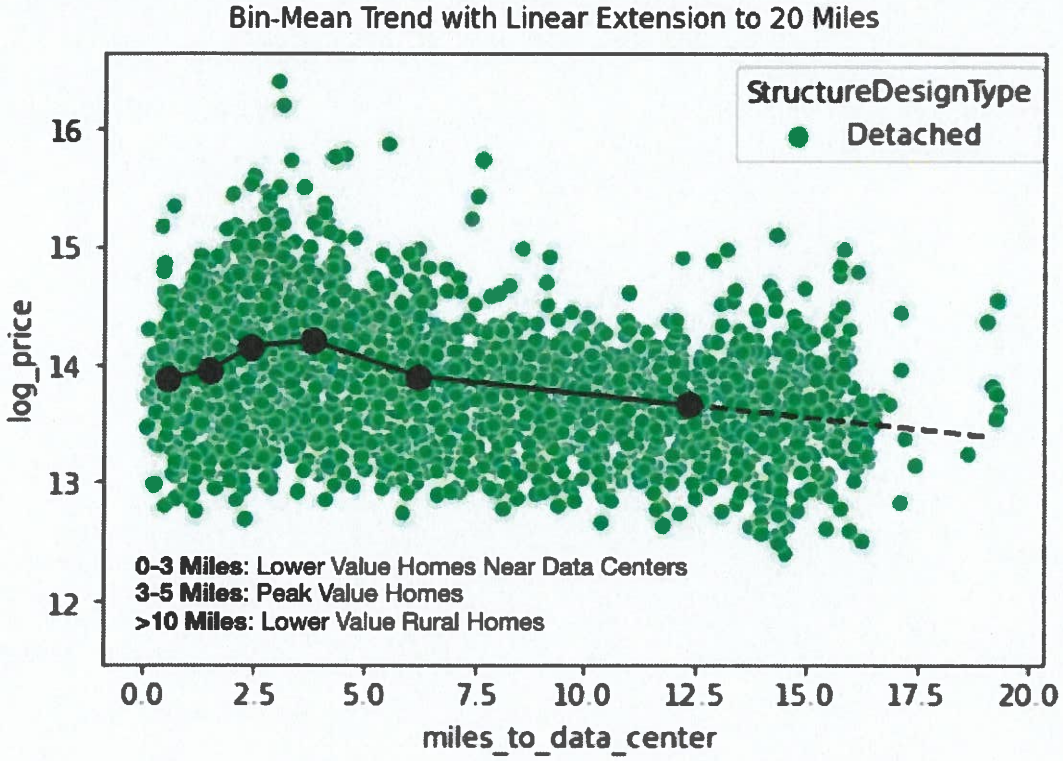
Because the study aggregates across diverse housing markets—urban, suburban, and rural—it reflects broad market structure rather than localized land-use compatibility. As a result, it should not be used to draw conclusions about the impact of introducing a large hyperscale data center adjacent to an existing neighborhood.

Distance Pattern in the GMU Data Is Nonlinear, But is Treated as Linear in the GMU Analysis

The GMU study presents a scatterplot of home prices relative to distance from data centers. When visually examined, the relationship is not strictly linear. ***Instead, the data suggest a pattern in which home prices are non-monotonic (lower closest to data centers, higher at intermediate distances, and lower again in more rural areas).***

This visible pattern indicates that the relationship between price and distance is not well represented by a single linear term (as used in the GMU model).

Figure 1: GMU Data Reinterpreted by Distance Bands



When read by distance bands rather than a single fitted line, the GMU data suggest a nonlinear pattern: lower values close to data centers, higher values at intermediate suburban distances, and lower values again farther out in more rural areas.

Why a Single Linear Distance Variable Across a Large Distance Can Mask Localized Effects

The GMU model uses a single linear distance variable applied across a wide geographic range (approximately 20 miles). At those distances, proximity to a data center is unlikely to have any meaningful effect on home values. Instead, variation in home prices increasingly reflects broader structural differences in the housing market—such as the transition from higher-value suburban areas to lower-value rural areas in Western Loudoun.

As a result, the distance variable begins to capture regional housing patterns rather than the effect of proximity to data centers. When a single linear regression is applied across this full range, these structural differences can produce a downward-sloping relationship with distance that is **not** causal.

This has an important implication for rezoning decisions: the model does not isolate localized impacts near a facility. Instead, it blends together near-field effects with unrelated regional variation, obscuring the very impacts that are most relevant to nearby residential neighborhoods. ***This limitation is compounded by a second issue: the model does not distinguish between fundamentally different types of data center facilities.***

Why Small Urban Facilities and Large Hyperscale Campuses Should Not Be Treated as Equivalent

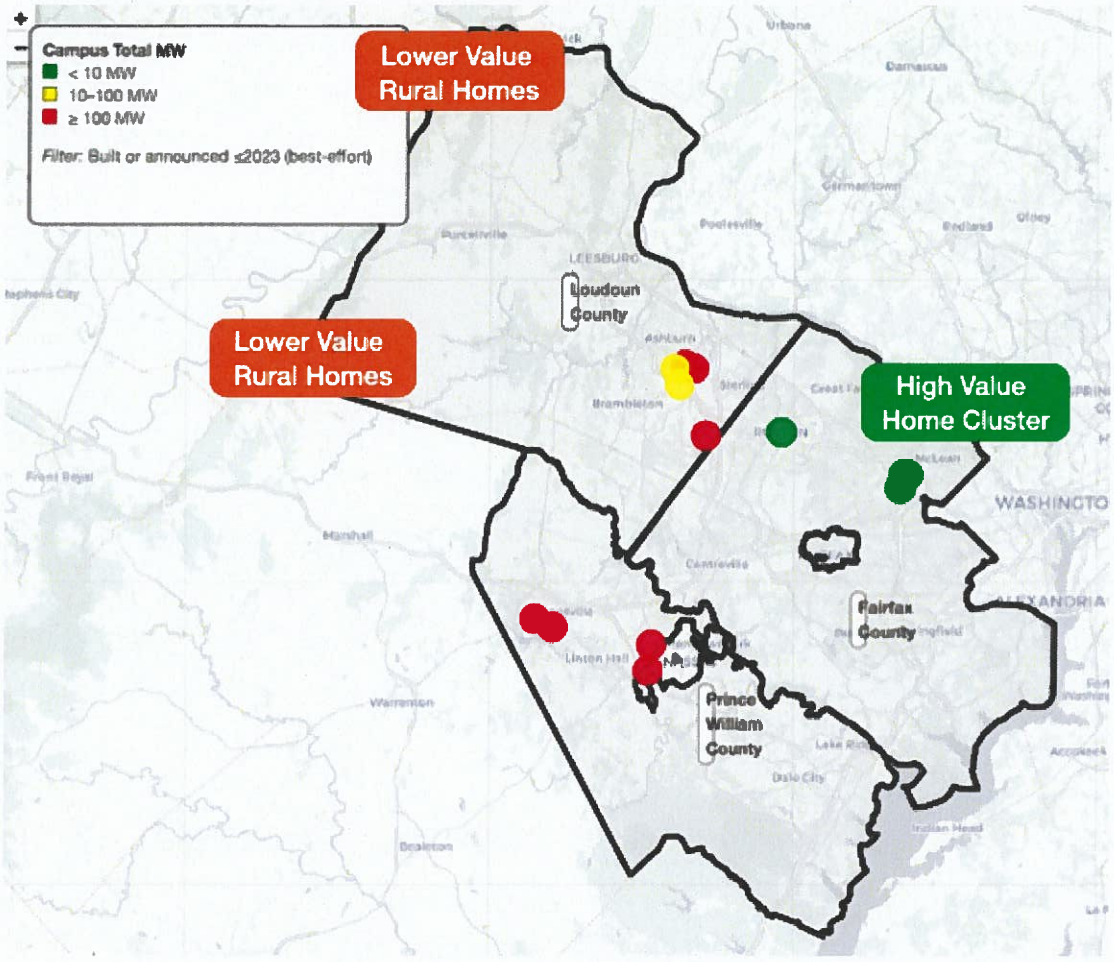
The GMU analysis does not distinguish between small data facilities located in dense urban areas and large hyperscale campuses located in suburban or rural settings. These facility types differ materially in scale, visibility, noise, lighting, and operational intensity. A small urban data facility embedded in an office setting is not comparable to a multi-building hyperscale campus with extensive mechanical, electrical, and site infrastructure. The sound, light, and pollution impacts are very meaningfully different.

This has a direct implication: combining these fundamentally different facility types confounds the results. The study therefore does not provide a reliable indicator of the localized impacts associated with large hyperscale campuses near residential neighborhoods.

Figure 2 shows the central problem with applying the GMU study to a site-specific hyperscale rezoning. The GMU model does not distinguish between small urban data centers and large hyperscale campuses, and it applies a single linear distance term across a 20-mile geography. As a result, it combines very different market contexts into one coefficient: some of Northern Virginia's highest-value homes happen to be near small, low-impact data facilities in places like McLean, while many homes far from data centers are lower-value rural homes in Western Loudoun for reasons unrelated to data centers. The resulting coefficient is therefore driven by regional housing patterns rather than the localized effects of data centers. In effect, beyond a few miles, the distance variable is no longer measuring exposure to a data center - it is measuring where a home sits within the broader Northern Virginia housing market.

In short, the result reflects urban, suburban, and rural geography in Northern Virginia - not the effect of proximity to a hyperscale data center.

Figure 2: Variation in Data Center Types and Surrounding Context



The GMU "distance from data center" coefficient answers a regional geography question, not the rezoning questions faced by this Board of Supervisors.

Bottom-Line Implication for Rezoning Decisions

The GMU study may be informative as a broad regional observation about Northern Virginia home prices, but it is not appropriate evidence for concluding that a large new hyperscale data center located near an existing neighborhood will not negatively impact nearby home values. The features that drive its regional result - facility aggregation and a linear distance effect across a 20-mile geography - are the same features that make it poorly suited to the localized rezoning question at issue here.

For reference, the GMU study can be found at: https://cra.gmu.edu/wp-content/uploads/2025/08/NoVa_DataCenters.pdf

Appendix: Empirical Comparables for Residential Value Impacts from Large Industrial and Infrastructure Uses

This appendix supports the accompanying memo's conclusion that homes closest to a large hyperscale data center campus are likely to face material localized value impacts. It is intentionally more technical than the memo and is meant to show why a **>10%** near-field effect is grounded in multiple empirical literatures rather than any single analogy.

Purpose and Framing

Direct academic research on hyperscale data center campuses remains limited. For that reason, this supporting appendix relies on three well-established empirical bodies of evidence that measure how residential markets react to localized disamenities: (1) industrial land-use studies, (2) high-voltage transmission line (HVTL) studies, and (3) buyer-choice and residential sorting studies. These studies do not describe identical types of development, but they do measure the same underlying economic mechanism: when a large, visible, persistent, or intrusive use is introduced near homes, a subset of buyers withdraws or demands a price concession, and that effect is capitalized into nearby home values.

Across these independent approaches, the evidence is directionally consistent: impacts are strongest close to the source, diminish with distance, and commonly support a localized effect in the approximate **10% to 20%** range for homes closest to the disamenity. The sections below provide the supporting detail behind that conclusion.

Synthesis of Comparable Evidence

Evidence category	Typical localized impact	Why it matters here
Industrial / industrial-adjacent land uses	Approximately **4% to 11%**	Shows how large, incompatible non-residential uses affect nearby home values through noise, traffic, scale, and neighborhood change.
HVTL / major infrastructure disamenity	Approximately **8% to 25%** very close in	Provides a well-studied benchmark for visible, persistent infrastructure whose effects are sharply localized and economically meaningful.
Buyer rejection / demand contraction	Approximately **10% to 20%** buyer withdrawal	Explains the mechanism by which localized disamenities translate into lower equilibrium prices for affected homes.

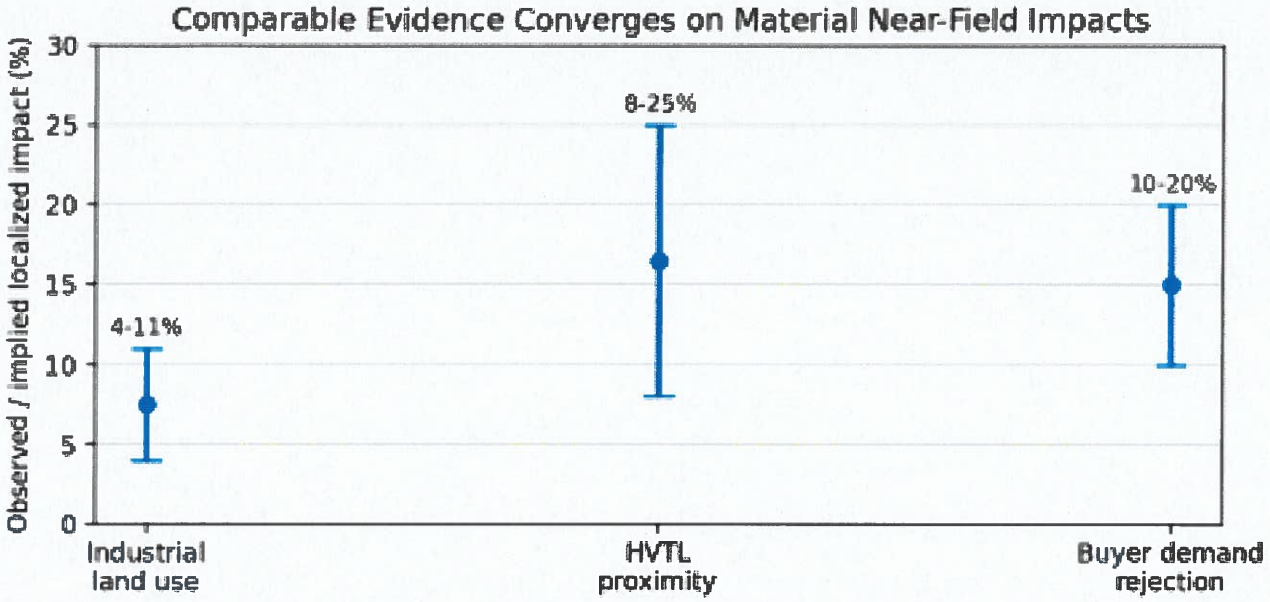


Figure 1. Multiple comparable evidence frameworks converge on localized impacts in the same general range, with HVTL studies anchoring the upper end for immediately adjacent homes and buyer-demand evidence explaining how those impacts are capitalized into prices.

Industrial Land-Use Literature

The industrial land-use literature is the most direct comparable because it examines how nearby residential prices respond when large non-residential uses are introduced into or adjacent to existing communities. Across the studies cited in the memo, the repeated finding is that price effects are **localized**, **distance-sensitive**, and **larger for bigger / heavier uses**. Representative examples include Currie, Davis, Greenstone, and Walker (2015), de Vor and de Groot (2009), and empirical work on large logistics / fulfillment facilities referenced in the memorandum.

The strongest common takeaway is not that every industrial use causes the same discount, but that housing markets do capitalize localized disamenities from large incompatible uses. Across these industrial comparables, the range most commonly observed for homes nearest the use is approximately **4% to 11%** (Currie et al. 2015; de Vor & de Groot 2009; logistics-facility evidence summarized in the memo).

- Currie et al. (2015): plant openings and closings show economically meaningful housing-value impacts very close to facilities, with effects sharply attenuating with distance.
- de Vor & de Groot (2009): industrial sites reduce nearby residential values, with larger and more intensive sites generating larger discounts.
- Large logistics / fulfillment center evidence: near-field price effects are generally negative, strongest close to the facility, and tied to traffic, noise, visual dominance, and neighborhood character.

Infrastructure Disamenity Research: High-Voltage Transmission Lines (HVTLs)

HVTL studies are not direct data center studies, but they are highly useful because they examine a visible, persistent infrastructure disamenity that can be measured precisely in space. This literature is especially valuable for three reasons. First, it is mature and heavily cited. Second, it shows a very

clear distance gradient. Third, it isolates the market effect of a feature that buyers experience as intrusive even when direct physical risk is low or uncertain.

The HVTL literature consistently finds that observed effects are concentrated very close to the structures themselves and are often economically meaningful in that near-field zone. The strongest studies also emphasize that the effect is driven primarily by visibility / visual encumbrance and direct experiential nuisance rather than broad neighborhood decline (Hamilton & Schwann 1995; Des Rosiers 2002; Sims & Dent 2005).

Distance to nearest pylon	Estimated price effect	Interpretation
0-50 meters	**-13% to -25%**	Strongest near-field visual / infrastructure intrusion
50-100 meters	**-8% to -18%**	Still material, but clearly attenuating
100-200 meters	**0% to -8%**	Mixed to modest effects as structures become less dominant
Beyond ~200-250 meters	**~0%**	Often statistically or economically negligible

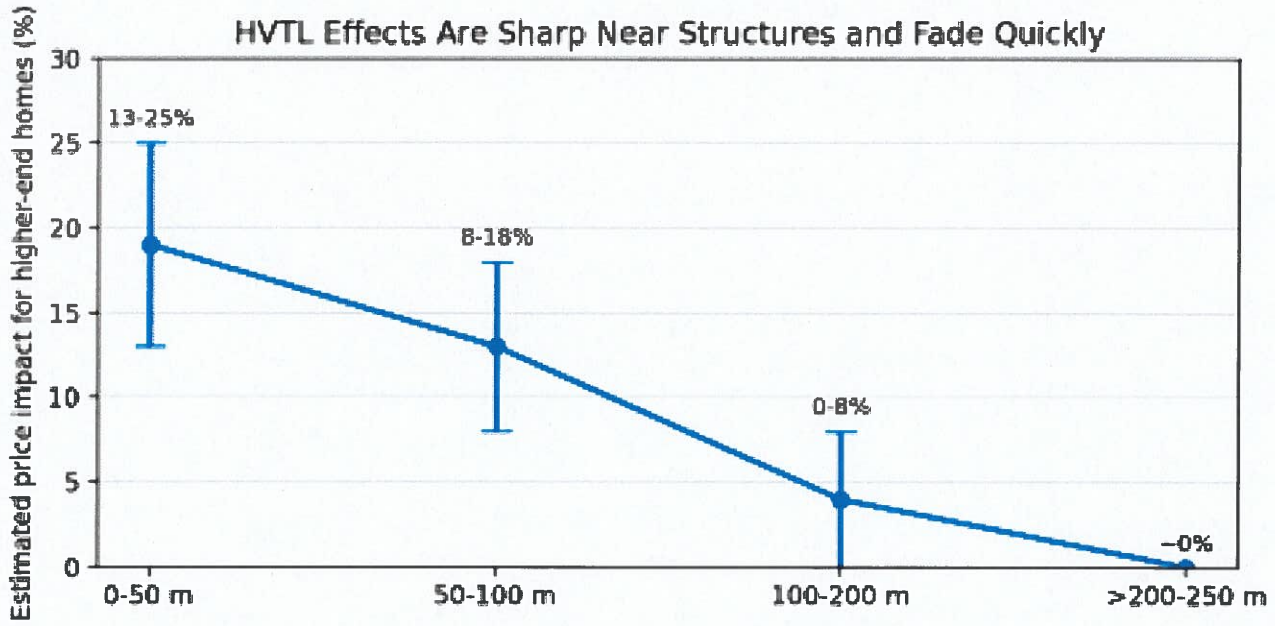


Figure 2. Representative HVTL distance gradient based on ranges synthesized in the draft appendix from Hamilton & Schwann (1995), Des Rosiers (2002), and Sims & Dent (2005). The exact studies differ in method and geography, but all support the same principle: impacts are strongest very close to the source and fade rapidly with distance.

Why this matters here: HVTLs operate through a narrower channel than hyperscale data centers. A data center campus introduces not one but several persistent disamenity channels at once - visual scale, lighting, traffic, generators, and continuous mechanical noise. That does not mean the effect must be larger in every case, but it does support using HVTL studies as a meaningful infrastructure benchmark for the **magnitude** of near-field capitalization when a persistent, visible, and intrusive use is introduced near homes.

Buyer Rejection Effects from Choice-Based Housing Studies

The buyer-choice literature adds something the industrial and HVTL studies do not: it directly explains the **mechanism** by which localized disamenities translate into price declines. In housing choice models, some buyers behave compensatorily (they are still willing to buy, but only at a lower price). Other buyers behave non-compensatorily (they remove affected homes from consideration altogether). The second group is critical, because even a partial contraction of the buyer pool can force sellers to reduce prices to clear the market.

Disamenity category	Method	Typical buyer rejection / avoidance	Distance pattern
Large industrial / logistics uses	Discrete choice / sorting	**~10% to 25%**	Strongest near facility, attenuates with distance
Waste facilities / landfills	Choice experiments / stated preference	**~15% to 35%**	Sharp near-field effects, then rapid decline
HVTL / energy infrastructure	Choice models / sorting	**~10% to 25%**	Primarily visual; fades as structure leaves viewshed
Environmental / neighborhood-quality degradation	Sorting / equilibrium demand	**~5% to 20%**	Highly localized
Hyperscale data center (proxy synthesis)	Cross-category inference	**~10% to 20%**	Expected to attenuate with distance

Representative studies supporting this framework include Bayer, McMillan & Reuben (2004), Bayer, Keohane & Timmins (2009), Kuminoff, Smith & Timmins (2013), Garrod & Willis (1998), Alberini et al. (2005), and the infrastructure / industrial papers also cited elsewhere in this appendix. The specific categories differ, but the behavioral pattern is consistent: a meaningful subset of buyers simply rejects homes near localized disamenities.

Why These Comparables Are Relevant to Hyperscale Data Centers

No single comparable captures every relevant feature of a hyperscale campus. The relevant question is whether multiple literatures point in the same direction when they examine nearby homes exposed to large-scale incompatible uses, persistent infrastructure, and localized buyer rejection. Here they do.

Hyperscale data centers combine several channels at once: industrial-scale visual massing, permanent rezoning, around-the-clock lighting, traffic and service activity, generator infrastructure, and continuous mechanical sound. The industrial studies capture land-use incompatibility; the HVTL studies capture visible infrastructure disamenity; and the buyer-choice studies capture how disamenities reduce the pool of willing buyers. Used together, they provide a strong empirical basis for the memorandum's >10% localized-impact conclusion.

Consistent Distance Decay Across the Evidence

A notable strength of the comparable evidence is that the **distance pattern itself** is highly consistent across categories. Industrial studies show the largest effects nearest the site. HVTL studies show the largest effects nearest the pylon. Choice and sorting studies repeatedly find that rejection effects are concentrated where the disamenity is visible, experienced in daily travel, or perceived as being 'in the neighborhood.'

That matters because the findings are that the impacts are localized. Across the evidence reviewed here, the common pattern is strongest impacts within roughly the first 0 to 1 mile, meaningful but attenuating effects over the next one to two miles, and little or no material effect once the disamenity is no longer part of the daily residential experience. This is fully consistent with the memo's use of a roughly 1- to 2-mile near-field zone for the strongest effects and a broader tapering zone out toward approximately 3 miles.

How Buyer Pool Contraction Becomes Price Impact

The final step is economic translation. Housing prices are set at the margin. If a meaningful subset of potential buyers exits the market for a particular home or neighborhood, sellers must accept a lower price to attract the remaining buyers. In markets where nearby substitutes exist - especially suburban markets with multiple neighborhood options - this adjustment tends to happen through price rather than quantity.

That is why a buyer-rejection range of roughly **10% to 20%** can plausibly translate into a similar order of magnitude for price effects on the most directly affected homes. The exact elasticity will vary by local market conditions, but the empirical point is straightforward: when a disamenity causes part of the demand curve to disappear, price must adjust downward until the market clears.

Overall Conclusion from Comparable Evidence

Taken together, the industrial literature, HVTL literature, and buyer-choice literature provide a robust empirical basis for the memorandum's conclusion. They do not prove that every hyperscale data center causes the same impact in every location. They do show, however, that large localized disamenities with persistent visual, noise, traffic, and land-use effects are routinely capitalized into nearby residential values and that impacts of approximately **10% to 20%** for homes closest to the source are well within the range supported by comparable evidence.

In that sense, this appendix is not offering one analogy; it is showing convergence across multiple empirical frameworks. That convergence is what makes the memorandum's estimate defensible.

Representative References Cited in this Appendix

- Alberini, A., et al. (2005). Valuing health and environmental risks from waste facilities.
- Bayer, P., McMillan, R., & Reuben, K. (2004). An equilibrium model of sorting in an urban housing market. • Bayer, P., Keohane, N., & Timmins, C. (2009). Migration and hedonic valuation: the case of air quality.
- Currie, J., Davis, L., Greenstone, M., & Walker, R. (2015). Environmental health risks and housing values: evidence from 1,600 toxic plant openings and closings.
- de Vor, F., & de Groot, H. (2009). The impact of industrial sites on residential property values.
- Des Rosiers, F. (2002). Power lines, visual encumbrance, and house values.
- Garrod, G., & Willis, K. (1998). Estimating lost amenity due to landfill waste disposal.
- Hamilton, S., & Schwann, G. (1995). Do high voltage electric transmission lines affect property value? • Kuminoff, N., Smith, K., & Timmins, C. (2013). The new economics of equilibrium sorting.
- Sims, S., & Dent, P. (2005). High-voltage transmission lines and residential property values.

Biernot, Gretchen W.

From:	Holly Manke <hmanke@yahoo.com>
Sent:	Monday, March 23, 2026 7:45 PM
To:	Leadbetter, Larry A; McGhee, Jr, Fredric I.; Heizer, Brett; Abbott, Alan C.; Martin, William E.; Iverson, Edmonia P.; Parker IV, Clifton L.; Planning; Biernot, Gretchen W.
Cc:	Davis, Sean M.; Stoneman, Jeff S.; Herzberg, F. Michael; Prichard, Faye O.; Hudson, Ryan M.; Floyd, Danielle G.; Dibble, Susan P.
Subject:	Mountain Road Technology Park
Attachments:	TIA FEB26.pdf

CAUTION: This email originated from outside your organization. Exercise caution when opening attachments or clicking links, especially from unknown senders.

I would like to speak to you about the new Traffic study and the conclusions provided for the Mountain Road Technology Park. No new study was performed just new analysis. I explained on February 19th at the Planning Commission Meeting why a new study should be conducted for the entrance and exits ramps for 295 at Mountain Road. The counts were conducted in 2022, before the traffic patterns changed for Western Hanover because access to 64 was brought to a standstill by the construction on Ashland Road in Goochland. The counts are out dated and under represent the actual traffic that travel Mountain Road to and from 295 in Hanover County.

Th new plan does not take into account the widening of 33/Mountain Road to 4 lanes that is scheduled to begin the same time as this construction for the data center. This will be the perfect storm that will incapacitate traffic in this corridor for at least 10 years.

While I appreciate the traffic plan no longer has flaggers, it does make assumptions that cannot be enforced by the developer. It states that the construction traffic entering and exiting will be limited to non-peak hours. How can this happen when construction needs daylight for most operations, especially in the beginning? It also stated that they will utilize the U Turn method to get back to 295, however, you must read very carefully, because the U Turn Median method is only for the passenger cars exiting the site (attached Page 7 Paragraph 5). The commercial vehicles will still use the primary left turn exit plan.

Speed limit on 33/ Mountain Road is 55 MPH. There will be many, many, accidents when commercial vehicle turn left in front of traffic traveling 55 MPH and no way to avoid large commercial trucks.

I have attached the 3 specific pages I referenced in the Traffic Study.

All this new analysis did was create even more problems that can easily be relieved by denying the Rezoning for Mountain Road Technology Park and the Conditional Use Permit.

Please do not subject the people of Western Hanover to terrible traffic congestion and accidents by allowing this development to proceed.

Thank you for your Consideration,

Holly Manke

South Anna

"Don't be afraid to go where you've never gone and do what you've never done, because both are necessary to have what you've never had and be who you've never been." - The Universe

Biernot, Gretchen W.

From: Jennifer Corpus <jennifercorpus712@gmail.com>
Sent: Wednesday, March 25, 2026 10:11 PM
To: Planning; Biernot, Gretchen W.; Martin, William E.; Parker IV, Clifton L.; McGhee, Jr, Fredric I.; Iverson, Edmonia P.; Leadbetter, Larry A; Heizer, Brett; Abbott, Alan C.; Floyd, Danielle G.
Subject: Speaking Time for Mountain Rd PC

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Hello Planning Department and all others whom it may concern -

I am requesting that you extend the number of speakers for the upcoming Planning Commission hearing on the Mountain Road data center proposal to at least 25 for both support/oppose residents of Hanover.

While I understand that public input was received at the previous meeting, many nearby residents and directly impacted neighbors were more recently informed of this project and would like the opportunity to be heard.

Additionally, fairness in the process means that citizens be given enough time to respond to any new or continued presentations by the applicant. If the developer is permitted to provide additional information or arguments beyond what was shared at the first PC hearing, members of the public should be afforded a reasonable and proportional opportunity to review and rebut that information.

Extending the number of speakers would help ensure that all perspectives are heard and that the process remains transparent and balanced for everyone involved.

Very respectfully,
Jennifer Corpus

Biernot, Gretchen W.

From: amy Mendelson Cheeley <amendesign2@gmail.com>
Sent: Wednesday, March 25, 2026 9:59 PM
To: Planning; Hunter, Jo Ann M.; Leadbetter, Larry A; Dibble, Susan P.; Biernot, Gretchen W.; McGhee, Jr, Fredric I.
Subject: 33 Mountain Road Planning Commission Meeting Public Heading limits

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Good evening.

Due to the significant changes that the applicant will present, the county should make available the same ability for citizens to comment - about this updated information. 25 in county, and 5 outside.

By reducing the number of speakers (from previous meetings) and allowing the applicant another opportunity to present their full presentation, you're disenfranchising the community. This isn't a level playing field.

Please adjust this.

Thank you.
Amy

Amy Mendelson Cheeley
Amendesign2@gmail.com
804-339-7266

Biernot, Gretchen W.

From:	Pompei, Andrew J.
Sent:	Wednesday, March 25, 2026 10:47 AM
To:	Crews, Jessica R.; Biernot, Gretchen W.; McHugh, Brendan R.; Henley, Travis N.
Subject:	FW: URGENT: Air Quality and Industrial Dust Concerns in Mechanicsville District
Attachments:	1000080510.jpg; 1000081431.jpg; 1000075324.jpg; 1000078973.jpg; 1000077570.jpg; 1000080473.jpg; 1000075323.jpg

Concerns expressed earlier today regarding potential larger impacts of data centers on the community. If you have further insight based on your research or experience, please discuss with me.

From: Dibble, Susan P. <spdibble@hanovercounty.gov>
Sent: Monday, March 23, 2026 2:16 PM
To: Hunter, Jo Ann M. <JMHunter@hanovercounty.gov>; Pompei, Andrew J. <AJPompei@hanovercounty.gov>
Subject: FW: URGENT: Air Quality and Industrial Dust Concerns in Mechanicsville District

fyi

Susan P. 'Sue' Dibble

Hanover County Board of Supervisors

South Anna District Representative

From: Stephanie Gaskins <s.gaskins92@gmail.com>
Sent: Monday, March 23, 2026 2:01 PM
To: Dibble, Susan P. <spdibble@hanovercounty.gov>
Subject: URGENT: Air Quality and Industrial Dust Concerns in Mechanicsville District

CAUTION: This email originated from outside your organization. Exercise caution when opening attachments or clicking links, especially from unknown senders.

To the Hanover County Board of Supervisors,

I am a resident of the Mechanicsville District, and I am writing to express my deep concern regarding the rapid accumulation of fine, grayish-white dust in my home. As our county continues to approve and expand data center campuses, the daily quality of life for residents is being severely impacted by industrial byproducts that current mitigation strategies are clearly failing to contain.

Within 24 hours of cleaning, a visible layer of particulate matter settles on every surface in my house. I am concerned that this is a result of cooling tower drift, diesel generator emissions, or the constant construction associated with the six data centers within a 30-minute radius of my home.

As my elected representatives, I urge you to:
Require independent air quality monitoring at all active data center sites in Hanover County.
Investigate the specific mineral/chemical profile of the dust currently affecting Mechanicsville residents.
Halt further approvals for data center expansions, such as the Mountain Road Technology Park, until these existing air quality issues are identified and resolved.

The included pictures showcase the constant haze in and outside of our home, as well as one of the several measures that we have taken to protect our home by sealing off the vents and the windows just for the dust to continue to accumulate through the plastic. We have gone as far as to buy air purifiers for every single room of the house, including an $800 hospital grade Austin air unit, none of which have helped reduce the particulate matter in our home. We wake up choking every single morning on this dust, which is gritty and acts as a constant irritant to our eyes, lungs, and throat. I have also taken a video of our dog choking on the dust inside the home, but due to Gmail's data limitations, that could not be included.

I have already filed a formal complaint with the Virginia DEQ and look forward to your support in protecting the health and property of Hanover citizens.

Sincerely,
Stephanie Gaskins and Nathaniel Christhilf
(757)746-4227

Biernot, Gretchen W.

From: Stepp-Davis, Makayla L.
Sent: Monday, March 9, 2026 2:59 PM
To: Biernot, Gretchen W.
Subject: Fw: The Mountain Road Technology Park

Thank you,

Makayla Stepp-Davis
Planning Technician II
Planning Department
(804) 365-6362
Hanover County

From: Jackie Warren <warrenjackie49@gmail.com>
Sent: Monday, March 9, 2026 1:56 PM
To: Planning <planning@hanovercounty.gov>
Subject: The Mountain Road Technology Park

CAUTION: This email originated from outside your organization. Exercise caution when opening attachments or clicking links, especially from unknown senders.
Dear Hanover Planning Commission:

A massive industrial transformation is proposed for the border of our community. The Mountain Road Technology Park-Route 33 is slated as a "business park", but in reality, it is a heavy industrial utility. The environmental and visual impact will be felt in Hanover and parts of Henrico County. Our local grid will be affected by the electrical draw of 900 MW. There will be over 300 industrial diesel generators and a potential of one million gallons of water used per day. Over 40% of the site is in a Resource Protection area (RPA).

When reading about the problems neighboring residents face, the continuing thread is noise and light pollution twenty four hours a day. We will also face traffic issues with Mountain Road being two lanes feeding into Route 33. Importantly, the RPA should not be violated.

We would greatly appreciate your support in shutting down this proposal.

Thank you,
Jackie and Nick Warren

Biernot, Gretchen W.

From: Hunter, Jo Ann M.
Sent: Monday, March 9, 2026 5:57 PM
To: Biernot, Gretchen W.; Pompei, Andrew J.; McGhee, Jr, Fredric I.
Subject: Fw: Speakers for 3/19

Get Outlook for iOS

From: Ashly Covington <ashlycovington@gmail.com>
Sent: Monday, March 9, 2026 5:55:08 PM
To: Hunter, Jo Ann M. <JMHunter@hanovercounty.gov>; Leadbetter, Larry A <laleadbetter@hanovercounty.gov>
Subject: Speakers for 3/19

CAUTION: This email originated from outside your organization. Exercise caution when opening attachments or clicking links, especially from unknown senders.

Hello,

I am writing to express my deep concern about the decision to reduce the number of citizen speakers allowed at the upcoming public hearing on 3/19 from 25 speakers at previous meetings + 5 non residents, down to 13.

This reduction is highly worrisome, and frankly, suspect, especially since the applicant, Tract Capital, is being given their full, uninterrupted time to present updates, changes, and comments. Those of us who have spoken at multiple meetings have never repeated a single speech. Every time, we bring new facts, new research, and new concerns. To silence half of those voices while giving the developer their full platform creates an undeniable appearance of imbalance.

How can the public have confidence in a process that reduces community input while the applicant's time remains untouched? What message does this send about whose voice matters to the board?

I urge you to reconsider this decision and restore the full 25-speaker allotment for county residents. Transparency and public participation are not optional extras; they are the foundation of good governance.

Thank you for your attention to this matter.

 what you do,
Ashly Covington



Every Day on Set is a Great Day!

804.307.9946

Biernot, Gretchen W.

From: Planning
Sent: Tuesday, March 10, 2026 2:29 PM
To: Biernot, Gretchen W.
Subject: Fw: No Data Center off Rte 33

Thank you,

Makayla Stepp-Davis
Planning Technician II
Planning Department
(804) 365-6362
Hanover County

From: Robert M <bobmcgary@gmail.com>
Sent: Tuesday, March 10, 2026 2:26 PM
To: Planning <planning@hanovercounty.gov>
Subject: No Data Center off Rte 33

CAUTION: This email originated from outside your organization. Exercise caution when opening attachments or clicking links, especially from unknown senders.

David Maloney and members of the Hanover County planning commission:

I write to ask that you vote "no" to the data center proposal on Route 33 near the Hanover/Henrico County line.

Please consider the impact of noise and light pollution, light trespass, and the need to preserve the land's Resource Protection Area designation. Mostly, be mindful of the citizens you serve, as well as those of neighing counties, who have overwhelmingly expressed their opposition to any more data centers in our area.

Thank you.
Robert McGary
3519 Gwynns PL
Glen Allen, Virginia 23060

Biernot, Gretchen W.

From: Stepp-Davis, Makayla L.
Sent: Monday, March 9, 2026 2:59 PM
To: Biernot, Gretchen W.
Subject: Fw: Planning Committee Meeting 3/19

Thank you,

Makayla Stepp-Davis
Planning Technician II
Planning Department
(804) 365-6362
Hanover County

From: Shannon Todd <shannontodd26@gmail.com>
Sent: Monday, March 9, 2026 2:28 PM
To: Planning <planning@hanovercounty.gov>
Subject: Planning Committee Meeting 3/19

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Good afternoon,

I am writing in regards to the Planning Committee meeting on 3/19. Specifically for the Mountain Road Tech Park proposal. After attending the developer's balloon test today and speaking with Mr. Leadbetter, I am writing to strongly urge the planning committee to allow the same about of speakers as the previous meetings. Citizens are concerned and would like the chance for 25 Hanover residents and 5 non-Hanover residents to speak for each side.

There has been new information that we have been presented with, and more information the developer needs to disclose. This information is critical and the community deserves the opportunity to respond.

Thank you for your attention to this matter,
-Shannon Todd

Good evening, Citizens, Planning Commissioners, BOS, and Staff.

Most of you know my history with the Hanover County Planning Department as well as the Richmond Regional Planning Commission. For over 30 years I have always sought to be a "part of the solution type of neighbor." Not a NIMBY or "part of the problem."

To that end, I am here tonight at Citizens' Time to discuss two very important topics:

1. The Comprehensive Land Use Plan – Envision Hanover and SAPs
2. FOIAs and their associated issues and fees – specifically for Hanover County

First, regarding the Hanover County Comprehensive Plan and updates from Envision Hanover. The Board of Supervisors who are the stewards of taxpayer monies, approved the creation of Envision Hanover in 2021, which was heralded as the following: "Throughout 2022 and 2023, Hanover County worked with residents, businesses, landowners, and other community members to update its long-range vision for the future."

The community has evidence, based on FOIA requests that **sections of the document were pre-determined**. This resulting in the **illegitimacy of the plan** and the **disenfranchising of Hanover County Citizens.** This plan cost hundreds of thousands of dollars of taxpayer money and should be investigated thoroughly.

Second, the FOIA system is currently woefully slow (**failing to meet the required 5 days**), and **not responding to serious issues, such as private information that errantly appears in FOIAs.** Citizens, including myself, have received private information. **This is a serious data breech.** The county FOIA representative was notified on Friday, March 13, 2026 and has not responded as of this morning, Thursday, March 10, 2026. I am, here again, asking that this is investigated thoroughly.

Another issue with the **FOIA quotes we have been given – is that they include an approximately $60 an hour (for staff time) wage. Is that what we charge for staff time for applicants?**
For example, 4 employees at a Balloon Test for 3 hours each = 12 hours X $60 = $720.00. Is this what the applicant paid? What about 2-3 years of prior work done before the application? **Do they pay for staff time, or do we, the taxpayers?**

Both of the topics are significant issues to the taxpaying community.

Again, I am requesting investigations into what happened during the Comprehensive Land Use Plan – Envision Hanover and its amendments and SAPs.

And, the FOIA issues – the data breach, timing and the inequitable fee structure (with regard to staff time) that we are experiencing.

Below please find my comments for tonight's Citizen's Time.

I am including them in this e-mail to help explain the following request:

When granting the applicant's voluntary request at tonight's meeting (in connection with Case Number REZ2025-00023 and CUP2025-00016), please strike the following language:

"Please be advised that this is a voluntary request, and I hereby waive the following (as applicable):
• Requirement that the Planning Commission make a recommendation to the Board of Supervisors within 100 days after its first public hearing on this request, per Virginia Code Section 15.2-2285(B) and Hanover County Code Section 26-303; and
• Requirement that the Board of Supervisors act on a zoning request within one year of application acceptance, per Virginia Code Section 15.2-2286(A)(7).

I desire to have these time periods begin from the date to which the Planning Commission or Board of Supervisors defers my case as requested herein."

Tract has been working on this plan/scheme with Hanover County Representatives for nearly 3 years. They should not keep getting additional time with staff for one more year starting today. This is a waste of taxpayer money.

Again, please see below to help explain why the applicant should not be allowed to have one more year.

Thank you for your time and consideration.

Amy

Biernot, Gretchen W.

From:	Holly Manke <hmanke@yahoo.com>
Sent:	Thursday, March 19, 2026 9:35 AM
To:	Planning; Biernot, Gretchen W.; Leadbetter, Larry A; McGhee, Jr, Fredric I.; Abbott, Alan C.; Iverson, Edmonia P.; Martin, William E.; Heizer, Brett; Parker IV, Clifton L.
Cc:	Floyd, Danielle G.; Davis, Sean M.; Dibble, Susan P.; Herzberg, F. Michael; Prichard, Faye O.; Stoneman, Jeff S.; Hudson, Ryan M.
Subject:	Tract Deferral Request
Attachments:	Tract Deferral Request.pdf

CAUTION: This email originated from outside your organization. Exercise caution when opening attachments or clicking links, especially from unknown senders.

Good morning,

I am writing in reference to the deferral request made by Tract for the Planning Commission Meeting 3/19/26. I am not against the deferral request for one month. I do have questions about the specific wording under the request:

I desire to have these time periods begin from the date to which the Planning Commission or Board of Supervisors defers my case as requested herein.

as it applies to:

Requirement that the Board of Supervisors act on a zoning request within one year of application acceptance, per Virginia Code Section 15.2-2286(A)(7).

I do not think this warrants granting starting the requirement above on the date of the deferment as is requested in this deferment application. This requirement should not be adjusted and removed from the deferment approval. Why show special consideration to Tract for delaying the process? The one year application process should still apply and not be adjusted to start 3/19/26. Tract has been working on this with Hanover County since 2023 as evidenced in the FOIA process and should not be granted any extension on the actual application process.

Sincerely,

Holly Manke

"Don't be afraid to go where you've never gone and do what you've never done, because both are necessary to have what you've never had and be who you've never been." - The Universe

Pompei, Andrew J.

From: Biernot, Gretchen W.
Sent: Thursday, April 9, 2026 11:34 AM
To: Pompei, Andrew J.
Subject: FW: Please vote no on the Mountain Rd and Rt 33 data center

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From: Michael Noto <notomj@gmail.com>
Sent: Wednesday, March 18, 2026 8:09:19 PM
To: Dibble, Susan P. <spdibble@hanovercounty.gov>; Herzberg, F. Michael <fmherzberg@hanovercounty.gov>; Davis, Sean M. <smdavis@hanovercounty.gov>; Prichard, Faye O. <foprichard@hanovercounty.gov>; Stoneman, Jeff S. <JSStoneman@hanovercounty.gov>; Floyd, Danielle G. <DGFloyd@hanovercounty.gov>; Hudson, Ryan M. <RMHudson@hanovercounty.gov>
Subject: Please vote no on the Mountain Rd and Rt 33 data center

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Good evening,

As a nearby resident of the proposed Mountain Rd and Rt 33 data center project, I am urging you to please vote NO to this and all data center projects.

They are a massive scam by giant corporations that don't care about the communities where they operate and are only pursuing the latest trend for elites to make money--AI and its infrastructure. The benefits for these projects will all go to the top as they destroy ecosystems, harm public health from extra pollution and water usage, drive up electricity costs for normal residents, become obsolete almost immediately, and never produce the tax revenues or employment numbers they promise. When this AI trend doesn't pan out and the bubble bursts, which it will, just like the metaverse and NFTs, what use will these huge data center buildings serve then? None. They cannot be repurposed for anything helpful to the community.

No one wants these data centers but the upper upper class. Since we live so close to the proposed Mountain Rd and Rt 33 center, I am worried for the health and well-being of my children and our economic viability, which will all be strained from projects like these moving forward. Please vote NO.

Thank you,
Michael Noto

Biernot, Gretchen W.

From: Holly Manke <hmanke@yahoo.com>
Sent: Tuesday, February 24, 2026 7:42 AM
To: Planning; Biernot, Gretchen W.; Leadbetter, Larry A; Heizer, Brett; McGhee, Jr, Fredric I.; Iverson, Edmonia P.; Abbott, Alan C.; Martin, William E.; Parker IV, Clifton L.
Cc: Herzberg, F. Michael; Prichard, Faye O.; Davis, Sean M.; Dibble, Susan P.; Stoneman, Jeff S.; Hudson, Ryan M.; Floyd, Danielle G.
Subject: Mountain Road Technology Park

CAUTION: This email originated from outside your organization. Exercise caution when opening attachments or clicking links, especially from unknown senders.

Hello,

I was hoping you would get Tract to clarify to everyone what exactly they pay for when it comes to the electricity from Dominion. I heard them say at the Planning Commission meeting that they pay for everything. It is my understating that the public, meaning you and me, pay for the transmission line upgrades to the development and the actual substations at the development since they are owned by Dominion. If you could get clarification on exactly what is Tract's responsibility for these specific items it would be appreciated. I would like clarification on who pays for what please.

Thank you,

Holly Manke
South Anna

"Don't be afraid to go where you've never gone and do what you've never done, because both are necessary to have what you've never had and be who you've never been." - The Universe

Biernot, Gretchen W.

From: Ashly Covington <ashlycovington@gmail.com>
Sent: Thursday, March 12, 2026 9:56 AM
To: Stoneman, Jeff S.; Herzberg, F. Michael; Davis, Sean M.; Floyd, Danielle G.; Prichard, Faye O.; Hudson, Ryan M.; Dibble, Susan P.; Leadbetter, Larry A; Hunter, Jo Ann M.; Pompei, Andrew J.; Biernot, Gretchen W.; Planning
Subject: 20260312 Citizens Time

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One of the supervisors said that residents speaking out against data centers haven't been bringing facts. Here are the facts, verified, sourced, and documented, not from facebook.

Fact: Data centers blast 55 or 85 decibels continuously, well above the WHO's safe limit of 40 decibels, with low-frequency noise heard in a 2-mile radius, where there are many county schools.

techtarget.com

Yes, it is Youtube but this is a valuable (scary) study, Please watch!

UK Gov Planning

backblaze

Environmental Industrial Noise Review

(Echo Lake Elementary school, Glennallen, Elementary school, Glen Allen, high school, and Hungary Creek middle school)

Fact: Data Centers are causing water crises in rural communities across the country
Newton County, GA

KnoxViews - Newton County

News USA Today - Water Crisis by 2030

Bluefield Research

Fact: Diesel generators emit nitrogen oxides and fine particulate matter linked to asthma, heart disease, and cancer.
VCU News - Pollution in NoVA

Inside Climate News

Diesel Generators

Fact: A 2024 peer-reviewed study found that by 2030, U.S. data centers could contribute to nearly 1,300 deaths annually, creating a public health burden exceeding $20 billion.

New Scientist - Health Burden

WRIC 8 News - Lung Issues

Asthma, Heart Attacks, Data Center Pollution

AI Power Weekly - Health Costs of Living Near Data Centers

US Admits Data Centers are harmful to health

Fact: Just like Loudoun County, our electric bills will rise to subsidize upgrades for Data Centers.

Data Centers Driving Up Utility Costs

Fact: Data Centers are targets for war using Drones.

BBC

Indian Express

New York Mag - The Future of War is Drones Bombing Data Centers

Fact: Tract Has Never Completed a Data Center, anywhere.
Data Center Map

Fact: Tract hires its sister company, Fleet, for construction. After completion, Data centers create only 30-50 permanent positions.

Tract Capital Introduces Fleet

Fleet is Launched

Data Center Frontier

Fact: "Tier 4 Equivalent" Is a Lie. Emergency generators can legally run on dirtier Tier 2 engines. Developers buy Tier 2 engines, add minimal parts, and call them "Tier 4 equivalent." If they don't use Diesel Exhaust Fluid, they're running a dirtier engine.

Henrico Citizen - Regulations

Inside Climate News

Fact: We don't know who will operate here. Tract has no tenant. But we know what other tenants have done.

(we know this from the proposal)

If it's xAI they installed 27 methane gas turbines in Mississippi without permits. Thermal drone footage shows they're still running them. in Memphis — they added 100 megawatts of gas turbines without any environmental review. They were caught running turbines without required air permits.

Southern Environmental Law Center

The Guardian - Violations by xAI

xAI illegal turbines

Time - Memphis battles xAI

EarthJustice - NAACP lawsuit

Newsweek - Lawsuit over air pollution

If it's Amazon — In Oregon, they are using contaminated water for cooling, concentrating toxins, and spreading them on farmland. Residents report high rates of miscarriages and cancer linked to nitrate exposure. Oregon fined Amazon for operating without permits.

Techspot - Cancers & Miscarriages in Oregon

Wastewater contamination in local water supply

Oregon Water Contamination

Fact: Hanover County does not have the resources to go up against whatever trillion dollar company takes over and starts polluting

Goochland $250k to fight lawsuit

Fact: Good Things Aren't Hidden
In Wisconsin, tech companies use anonymous LLCs registered to strip malls. In West Virginia, residents discovered a 77-page permit application by chance, critical details redacted.

NBC News - NDA's

Draftwire - Transparency is public right

Wisconsin secrecy deals

West VA additional discovery

WVA - appeal for information

Confidentiality Claims

If this were good for Hanover, developers would hold town halls from the beginning. There would not be NDA's, private meetings, and emails going back years.

So today, I'm asking you to consider one thing: A moratorium on data center development for at least one year.

A year to study the impacts around the country. A year to ask the hard questions. A year to demand transparency before we commit hundreds of acres of our rural land to an industry that, everywhere it goes, hides the truth until it's too late.

Municipalities across the country are considering or have enacted moratoriums. They're asking the same questions.

Moratoriums

Rural counties getting ahead with Moratoriums

Push for Moratoriums

(& really just google Bernie Saunders and Moratoriums for a wealth of information.)

We have a choice. Rush forward with no tenant, no transparency, and no plan. Or pause. Study. Demand developers show their hand.

Things that are good for communities don't need to be hidden or rushed. Places across the country that have constructed these AI data centers are finding that out with horrifying consequences.

Instead of gambling away our land, focus on building strong local economies that deliver long-term gains and positive impact.

I hope to hear from each one of you.

 what you do,
Ashly Covington

Biernot, Gretchen W.

From: Hunter, Jo Ann M.
Sent: Thursday, March 12, 2026 9:06 AM
To: Biernot, Gretchen W.
Subject: FW: Please Reject The Data Center Takeover of Hanover County

---

From: Dibble, Susan P. <spdibble@hanovercounty.gov>
Sent: Thursday, March 12, 2026 8:52 AM
To: Hunter, Jo Ann M. <JMHunter@hanovercounty.gov>; Pompei, Andrew J. <AJPompei@hanovercounty.gov>
Subject: Fw: Please Reject The Data Center Takeover of Hanover County

fyi

Susan P. 'Sue' Dibble

Hanover County Board of Supervisors

South Anna District Representative

From: Dibble, Susan P. <spdibble@hanovercounty.gov>
Sent: Wednesday, March 11, 2026 1:18 PM
To: Babichenko, Mackenzie <mkbabichenko@hanovercounty.gov>
Subject: Fw: Please Reject The Data Center Takeover of Hanover County

Get Outlook for Android

From: Amy Mendelson <kwautomail@phone2action.com>
Sent: Wednesday, March 11, 2026 11:23:31 AM
To: Dibble, Susan P. <spdibble@hanovercounty.gov>
Subject: Please Reject The Data Center Takeover of Hanover County

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Dear ,

These are 24-7 industrial menaces. While I understand the financial allure, you all know that these have been planned and the comp plan was drawn up to accommodate these: that's not only unethical, it may be illegal and disenfranchises all of your constituents. They will remember that at voting time.

I'm writing as your constituent to urge you to reject the rezoning of valuable agricultural land for the purpose of a massive data center build out in Hanover.

As the data center capital of the world, Virginia has seen firsthand the many problems these facilities bring when built near residential areas—constant noise, heavy water usage, air pollution, expensive energy bills, and a dangerous precedent that puts corporate interests above the wellbeing of taxpaying residents.

Data centers generate relentless noise, often between 55–85 decibels, from cooling systems and generators—day and night. In Northern Virginia, nearby residents have reported serious quality-of-life impacts, prompting local governments to enact new zoning restrictions. These facilities also emit low-frequency noise, which is harder to measure but can have serious health implications. Hanover currently lacks the safeguards and accountability mechanisms needed to protect nearby communities from these effects.

Water consumption is another major concern. We don't have all the answers about how much water will be consumed by all of these facilities, and there has not been enough transparency about how these data center campuses will impact our water quality and access. Even small data centers consume hundreds of thousands of gallons of water per day, and AI facilities can use as much as 5,000,000. That's a huge strain on local resources and raises questions about future water access, quality, and rising utility costs for residents.

Another concern is the precedent of approving these massive data center campuses next to neighborhoods and schools. Approving projects of this size and scale so close to people's homes risks lowering property values, disturbing the peace, and sending a message that invites more of the same. If you approve these projects, it signals to the industry that Hanover is willing to harm its communities in order to accommodate big tech.

I want to be clear: Rezoning agricultural land to industrial use for the sole purpose of projects that so clearly harms nearby, tax-paying residents is simply unfair. Please don't change the rules because the industry doesn't like the game. Protect the people who live here. Reject the rezoning requests.

Thank you for your consideration, and for your service to our county.

Sincerely,

Amy Mendelson
15134 Abner Church Rd
Glen Allen, VA 23059
amendesign@aol.com
(804) 339-7266

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with

Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

Biernot, Gretchen W.

From: Hunter, Jo Ann M.
Sent: Thursday, March 12, 2026 9:05 AM
To: Biernot, Gretchen W.
Subject: FW: Please Reject The Data Center Takeover of Hanover County

---

From: Dibble, Susan P. <spdibble@hanovercounty.gov>
Sent: Thursday, March 12, 2026 8:54 AM
To: Hunter, Jo Ann M. <JMHunter@hanovercounty.gov>; Pompei, Andrew J. <AJPompei@hanovercounty.gov>
Subject: Fw: Please Reject The Data Center Takeover of Hanover County

fyi

Susan P. 'Sue' Dibble

Hanover County Board of Supervisors

South Anna District Representative

From: Clint Robertson <kwautomail@phone2action.com>
Sent: Wednesday, March 11, 2026 11:40 AM
To: Dibble, Susan P. <spdibble@hanovercounty.gov>
Subject: Please Reject The Data Center Takeover of Hanover County

CAUTION: This email originated from outside your organization. Exercise caution when opening attachments or clicking links, especially from unknown senders.

Dear ,

We elected you to protect us from this exact kind of thing. We have told you time and time again that we want to keep Hanover rural. This is not a rural use because of the amount of pollution it will cause. Data centers poison the air and the evidence is everywhere that data centers have been built. Please say no! Do your research. Don't trust what the developer is telling you because it doesn't match the evidence. The noise pollution and the air pollution will negatively affect the people that live within 2 miles of this facility. No amount of un-guaranteed money is worth our health. Data centers are not what the people have been asking for. We need you to be responsible and pay attention and remember we elected you. If you don't do what is right to protect this county, we will elect someone that will.

I'm writing as your constituent to urge you to reject the rezoning of valuable agricultural land for the purpose of a massive data center build out in Hanover.

As the data center capital of the world, Virginia has seen firsthand the many problems these facilities bring when built near residential areas—constant noise, heavy water usage, air pollution, expensive energy bills, and a dangerous precedent that puts corporate interests above the wellbeing of taxpaying residents.

Data centers generate relentless noise, often between 55–85 decibels, from cooling systems and generators—day and night. In Northern Virginia, nearby residents have reported serious quality-of-life impacts, prompting local governments to enact new zoning restrictions. These facilities also emit low-frequency noise, which is harder to measure but can have serious health implications. Hanover currently lacks the safeguards and accountability mechanisms needed to protect nearby communities from these effects.

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Another concern is the precedent of approving these massive data center campuses next to neighborhoods and schools. Approving projects of this size and scale so close to people's homes risks lowering property values, disturbing the peace, and sending a message that invites more of the same. If you approve these projects, it signals to the industry that Hanover is willing to harm its communities in order to accommodate big tech.

I want to be clear: Rezoning agricultural land to industrial use for the sole purpose of projects that so clearly harms nearby, tax-paying residents is simply unfair. Please don't change the rules because the industry doesn't like the game. Protect the people who live here. Reject the rezoning requests.

Thank you for your consideration, and for your service to our county.

Sincerely,

Clint Robertson
12391 Winns Church Rd
Glen Allen, VA 23059
eastwd2003@yahoo.com
(540) 421-8980

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

Biernot, Gretchen W.

From: Planning
Sent: Friday, March 13, 2026 8:30 AM
To: Biernot, Gretchen W.
Cc: Pompei, Andrew J.
Subject: Fw: Strong Opposition to Proposed Data Center Development in Our Community

Thank you,

Makayla Stepp-Davis
Planning Technician II
Planning Department
(804) 365-6362
Hanover County

From: Gomes V <mailtogomesv@gmail.com>
Sent: Friday, March 13, 2026 7:17 AM
To: Planning <planning@hanovercounty.gov>; brookland@henrico.gov <brookland@henrico.gov>
Subject: Strong Opposition to Proposed Data Center Development in Our Community

CAUTION: This email originated from outside your organization. Exercise caution when opening attachments or clicking links, especially from unknown senders.
Dear Members of the Board of Supervisors,

I am writing as a resident of the Hunton Park community to express my strong opposition to the proposed data center development near our neighborhood.

While I recognize that technology infrastructure plays an important role in the modern economy, this particular proposal raises significant concerns regarding land use compatibility, environmental impact, infrastructure strain, and long-term community well-being.

First, the proposed location is incompatible with the character and planning vision of our residential community. Large-scale data centers are industrial facilities that operate 24/7 and fundamentally alter the surrounding environment. Approving such a facility near residential neighborhoods risks undermining the quality of life for existing residents and contradicts the principles of thoughtful land-use planning.

Second, data centers place enormous demand on critical infrastructure. These facilities require substantial electricity and water resources to operate and cool their systems. Our community should not bear the burden of increased pressure on local utilities, power grids, and water systems—particularly when those resources are already under strain in many regions.

Third, the environmental and quality-of-life impacts cannot be ignored. Data centers often rely on large backup generators and cooling systems that can generate continuous noise pollution, air emissions, and increased traffic during construction and maintenance. These impacts would be felt directly by nearby residents and families.

Fourth, while data centers are sometimes promoted as economic development projects, they typically generate very limited permanent employment relative to their footprint and resource consumption. In many cases, communities give up valuable land and infrastructure capacity while receiving minimal long-term economic benefit.

Our county has worked hard to maintain a balance between growth, environmental stewardship, and preserving the character of our communities. Approving a major industrial data center in close proximity to residential areas risks setting a precedent that could permanently alter that balance.

I respectfully urge the Board of Supervisors to reject this proposal or, at minimum, require a much more rigorous evaluation of its impacts on local residents, infrastructure, and environmental sustainability.

Thank you for your service and for considering the voices of the residents who call this community home.

Sincerely,
Gomathinayagam Velayutham
117 Siena lane
Glen Allen VA 23059

Biernot, Gretchen W.

From: Hunter, Jo Ann M.
Sent: Monday, March 16, 2026 10:13 AM
To: Biernot, Gretchen W.; Pompei, Andrew J.
Subject: FW: Planning Commission Meeting 3-19

From: amy Mendelson Cheeley <amendesign2@gmail.com>
Sent: Thursday, March 12, 2026 8:42 AM
To: Hunter, Jo Ann M. <JMHunter@hanovercounty.gov>
Cc: Biernot, Gretchen W. <gwbiernot@hanovercounty.gov>; Leadbetter, Larry A <laleadbetter@hanovercounty.gov>; McGhee, Jr, Fredric I. <fimcghee@hanovercounty.gov>; Dibble, Susan P. <spdibble@hanovercounty.gov>; Davis, Sean M. <smdavis@hanovercounty.gov>; Iverson, Edmonia P. <epiverson@hanovercounty.gov>; Stoneman, Jeff S. <JSStoneman@hanovercounty.gov>
Subject: Re: Planning Commission Meeting 3-19

CAUTION: This email originated from outside your organization. Exercise caution when opening attachments or clicking links, especially from unknown senders.

Good morning, all.

This is a response to Tract's application for deferral and its contents. Wait a minute. Are we saying that we are willing to give Tract's 33 Mountain Road Data Center scheme an extension? (See their language on the application.) So in other words they will be able to be heard until February 19, 2027 or March 19, 2027? If they can't move forward within the original agreed upon time period, they should withdraw their application. And have to pay for a new one. This is another example of how applicants change the rules.

This is wasting taxpayer time and money by leaving it open a whole other year.

This entire scheme from the beginning has been unreasonable and poor, and disenfranchising and opaque to the citizens of Hanover County.

They started talking to you at the county three years ago when they approached you about the Wilson and Marchetti properties. Then you helped them get in touch with the Wilson property. Then the scheme went through the comp plan. And, the county tailored the comp plan to Tract's needs. At Hickory Hill and 33.

Tract put a huge amount of money down after having "tested the political will," before the comp plan was complete and an entire year before they applied. (And, after having one-on-one conversations with individual Supervisors.)

In September 2025, they finally had crafted the comp plan (which the county and Tract had already worked on) and then they went ahead and submitted a very poor plan that they can't answer questions for?

And now you're gonna end up letting them have a whole other year? And then we all waste our time for a whole other year?

Please do not accept this agreement as is. **Remove their request for another year.** Make them withdraw permanently. And resubmit later and pay the application fees again.

This is wasting taxpayer time and money by leaving it open a whole other year.

Thank you.

Amy Mendelson Cheeley
Amendesign2@gmail.com
804-339-7266

> On Mar 11, 2026, at 5:35 PM, amy Mendelson Cheeley <amendesign2@gmail.com> wrote:
>
> Thank you for letting me know.
> I will share with the community!
>
> Amy Mendelson Cheeley
> Amendesign2@gmail.com
> 804-339-7266
>
> > On Mar 11, 2026, at 4:29 PM, Hunter, Jo Ann M. <JMHunter@hanovercounty.gov> wrote:
> >
> > Amy - we just received word about 15 minutes ago that Tract will be deferring this matter to the April 16, 2026 PC meeting. No public hearing regarding the proposed development and associated zoning requests will be held on March 19, 2026. The letter has been posted to E-Trak It and we are working with our Communications Team on getting the word out on our social media channels.

I have attached the deferral letter.

Jo Ann Hunter

-----Original Message-----

From: amy Mendelson Cheeley <amendesign2@gmail.com>

Sent: Wednesday, March 11, 2026 4:24 PM

To: Hunter, Jo Ann M. <JMHunter@hanovercounty.gov>; Biernot, Gretchen W. <gwbiernot@hanovercounty.gov>; Leadbetter, Larry A <laleadbetter@hanovercounty.gov>; McGhee, Jr, Fredric I. <fimcghee@hanovercounty.gov>

Subject: Re: Planning Commission Meeting 3-19

CAUTION: This email originated from outside your organization. Exercise caution when opening attachments or clicking links, especially from unknown senders.

Good afternoon.

We are just checking back in on this. We have not see an updated schedule.

Thank you,

Amy

> On Mar 9, 2026, at 9:42 AM, amy Mendelson Cheeley <amendesign2@gmail.com> wrote:
>
> Good morning.
>
> Per my discussion just now with Larry.
>
> The community is concerned and would like to urge the county to allow the 25 spots for Hanoverians for opposition and support of the 33 data center project at the 3-19 meeting. And, 5 for non-residents.
>
> The applicant is presenting new material so the community deserves to have the full opportunity to respond. You're stifling input by reducing the number of speakers.
>
> Please don't limit the community.
>
> Thank you.

Amy

Amy Mendelson Cheeley
Amendesign2@gmail.com
804-339-7266

<Hanover County Deferral Request Form_MRTP_03112026.pdf>

RECEIVED
MAR 10 2026
HANOVER COUNTY
PLANNING DEPARTMENT

REAL AND PERSONAL PROPERTY TAX REVENUES

This position paper discusses real and personal property tax revenues for Tract's 900 megawatt (MW) Mountain Road data center project. Marchetti Properties, et al., REZ2025-00023, et al. A report on tax revenues was prepared by Ernst & Young (EY) for Tract and recently posted on eTRAKiT. In preparing the report, EY relied on information from Tract.

Tract also prepared a tax revenue projection for its 2,400 MW Hickory Hill data center project and presented it to the Board of Supervisors (Board) on March 27, 2024. That projection is relevant to the EY report.

DATES AND PRIORITIES

The first page of the EY report shows "September 2025 (Updated Report)." These words are highly misleading and very important.

Tract asked the county to review EY assumptions in early February of this year, and the county provided emails related to the review in response to my FOIA request.[1] At page 3 of the emails, one of EY's assumptions was:

> "This guidance is current as of May 19, 2025. EY is not responsible for any subsequent changes to these projections." (emphasis added)

Compare this to page 5 of the EY report:

> "This guidance is current as of September 24, 2025. EY is not responsible for any subsequent changes to these projections." (emphasis added) [2]

Tract was careless and sloppy, but its mistake is so insightful. Tract asked the county to review assumptions from an undisclosed May 2025 EY document, not the EY report! The September 2025 EY report updates the May document. There is no later report.

In addition to withholding the EY report until February 2026, Tract's priorities are clear. Tract retained EY to prepare a tax analysis for the Mountain Road data center project

---

[1] The emails involved Ms. Fosdick with Tract and Mr. Stevens with the Commissioner of the Revenue. They are attached to this position paper.

[2] Other differences in the assumptions in the EY report compared to the emails include changes in land use and market value for real property, an increase from 4 to 6 data center buildings, and the addition of data center building square feet (sf) of 2.6 million.

before May 19, 2025 and prior to filing its first construction plan for Hickory Hill in late August 2025. Tract's top priority is acquiring land for data centers. Development is low priority. Tract has not begun to develop Hickory Hill, and the county will receive no data center tax revenues in 2028, 2029, and 2030.

LACK OF TRANSPARENCY

The first two lines at the top of page 7 in the EY report list new buildings constructed by year and real property expenditures spent on data center improvements. On page 4, the value of the data center buildings was assumed to be $1,300 per sf.

The third line on page 7 shows the "Taxable Market Value (Real Property)" by year. That line is the sum of the land value and the improvement value, but they aren't disclosed. There is also no breakout of the data center sf by year, and one can't determine how the $1,300 per sf value was used in the analysis. These same issues are also present for the total real property spend line - the cost of improvements.

The EY report fails to disclose how "Taxable Market Value (Real Property)" was derived. Assumptions and numbers aren't calculations. Key calculations are missing for $445 million in tax revenues.

TAX REVENUES PER MW, BUILDING HEIGHTS AND FLOORS

Total real and personal property tax revenues in the EY report are $901 million for the 900 MW Mountain Road data center project. Tract's total real and personal property tax revenues are $1.78 billion for the 2,400 MW Hickory Hill project.

Can tax revenues from the two projects be compared? Yes. Megawatts is one number which takes relative project size into account.

Total tax revenues are $742,000 per MW for Hickory Hill and $1,000,000 per MW for Mountain Road. Tract projects that total tax revenues per MW for Mountain Road will be 34.8% higher than Hickory Hill. There is no support for that percentage increase, and the difference is undercut by considering building heights and floors and the proffered elimination of 3 floor buildings at Mountain Road which reduces the $1 million amount.

For the Hickory Hill project, the Board approved building heights of 110 feet, except for 75 feet in two small areas (Building Area 8 - one of the two smallest, a portion of Building Area 7 - smaller than area 8). That would allow at least three floors in the 110 foot buildings and at least two floors in the 75 foot buildings.

For the Mountain Road project, Tract originally proposed 62 foot buildings with two floors and 85 foot buildings with three floors. However, on February 19th, Tract proffered that the buildings for the Mountain Road project will be no more than 62 feet - or only two floors. This has two major impacts.

First, the EY report assumes 3 three floor data centers. The impact of reduced building heights and number of floors has not been considered.[3]

Second, Mountain Road real and personal property tax revenues are dependent on data center building heights and the number of floors. Total tax revenues will be less than the $901 million in the EY report, and the $1 million per MW amount will also be reduced.

CONCLUSIONS

The EY report lacks transparency. Key calculations needed to verify $445 million in real property tax revenues are missing. On a per megawatt basis, Mountain Road real and personal property tax revenues are significantly greater than the Hickory Hill tax revenues Track presented to the Board in March 2024. Proffered reductions in Mountain Road data center building heights and floors will reduce tax revenues below $901 million and on a per megawatt basis. The EY report overstates county real and personal property tax revenues and does not support a decision to approve the Mountain Road data center project.

March 10, 2026

Bob Nelson, Ashland District

Attachment: February 9, 2026 emails between Ms. Fosdick and Mr. Stevens

---

[3] Major changes would be required to construct data center buildings with larger footprints to offset a 3 floor reduction. Because an estimated 19.0 acres in Building Area 2-B and 8.9 acres in Building Area 3-B are needed for Dominion substations and transmission lines, only 101.3 acres is available for data center buildings, generators, chillers, parking, and supporting uses. Concept Plan, Sheets C3.0 - C3.4 (3/9/2026). Buildings with larger footprints will also increase impervious surface, storm water runoff, and acreage for detention facilities; and Holtzgraph Dam and pond will be an ecological restoration area under the Concept Plan, not the water detention facility it is today.

Stevens, Felix L.

From: Stevens, Felix L.
Sent: Monday, February 9, 2026 4:37 PM
To: Erin Fosdick; Null, Lauren K.
Subject: RE: Follow up information on tax analysis assumptions

Afternoon, Ms. Fosdick

You'll find responses to your methodology below each note. The responses include references to the department that should address your inquiry.
Note, this is a review of your methodology but does not confirm the results of your analysis.

Hope this helps.

All the best. Felix

Felix Stevens
Business Services Tax Administrator
Hanover County
www.hanovercounty.gov
Ph. 804-365-6823
Fax 804-365-6111

Hoping all is well.

All the best. Felix

Felix Stevens
Business Services Tax Administrator
Hanover County
www.hanovercounty.gov
Ph. 804-365-6823
Fax 804-365-6111

> **From:** Erin Fosdick <erin.fosdick@tract.com>
> **Sent:** Monday, February 9, 2026 11:39 AM
> **To:** Null, Lauren K. <lknull@hanovercounty.gov>
> **Cc:** Stevens, Felix L. <FLStevens@hanovercounty.gov>
> **Subject:** Follow up information on tax analysis assumptions
>
> CAUTION: This email originated from outside your organization. Exercise caution when opening attachments or clicking links, especially from unknown senders.
>
> Good morning -

I hope you both enjoyed your weekend. Lauren, thanks for your time last week. As I mentioned, I have also briefly corresponded with Felix, so I'm copying him on this email as well.

As we discussed, we work with EY (Ernst & Yough) to prepare tax generation analysis for our projects. They have completed an analysis for the Mountain Road Technology Park project in the South Anna District. I think it might be helpful to meet with their team so they can walk you all through their methodology. Here are some times that their team is available this week:

- Wednesday, February 11th | 12:00–12:30 PM EST
- Wednesday, February 11th | 3:00–3:30 PM EST
- Thursday, February 12th | 11:30 AM–12:00 PM EST

Can you let me know if any of these work for you and I can circulate a calendar invite? In the meantime, I am sharing their notes on the assumptions that informed this analysis. As I've shared with both of you, I'm looking for the county to weigh in on if the assumptions make sense and if this is consistent with how other project have conducted analysis. Thank you for your consideration!

Real Property Notes and Assumptions

The estimated Market Values (MV) used in the calculations assume no reduction via appeal or litigation.

- **Assessor's Office (assessor@hanovercounty.gov 804-365-6029)**

This analysis is based on construction costs and percentage of completion information provided by the Client. EY researched current market data and Hanover County assessment information.

- **Assessor's Office**

3) In Virginia, Assessors must estimate the market value of each property as of every January 1. Industrial property assessments have been increasing from 2024 to 2025. After construction is complete, this analysis assumes 2% year over year growth in value of improvements, however it could increase more depending on market conditions.

- **Assessor's Office**

4) The process of calculating, imposing, and collecting Virginia taxes for a year is paid within the same calendar year. The real property assessment ratio in Virginia is 100%.

- **Assessor's Office**

5) Additional rezoning may be required as the Subject parcels are currently classified as A-1 and assumes only the developable lot is developed for data center. There will remain residual undeveloped land that is not part of the analysis.

- **Planning and Zoning (planning@hanovercounty.gov 804-365-6171)**

6) Land value assumes that developable land is reclassified to commercial/industrial upon completion. The assessor tracks two values; land use and market land value. The total 2025 land use value is $537K and the market value is $2.28M. All parcels have land use values. The taxable assessment and tax are based on these lower values. Improved land assessed values range from $59K to $90K per acre. This analysis assumes an average of $68K per acre for the buildable lot size as of 2025, with a 20% increase in 2030 to account for market factors and reassessment based on substantial improvements.

- **Assessor's Office**

7) Land value is assumed to appreciate by 2% per year. In 2030, we estimated the land value to increase by 20% and used $68K per acre as the base value. There will be additional value placed on the nonbuildable land that was not considered in this projection.

- **Assessor's Office**

8) All values and tax rates that are included in this projection are estimates (unless noted otherwise).

- **Current Real Estate Tax: $0.81 per $100 of assessed value**

9) Estimated taxes are based on total tax due without any discounts or abatements. It is assumed that the Subject will be in the I-64 InnoVAtion Corridor and will receive a special tax rate of $0.81 per $100. Reclassification may trigger rollback taxes, which have not been considered.

- **Current Real Estate Tax: $0.81 per $100 of assessed value**
- **We would need to know the parcel in question to determine if there is a possible rollback.**

10) This analysis estimates an annual tax and assumes that all subject parcels' prior year(s) property taxes are paid in full, no back taxes, penalties, or interest have accrued as a result of failure to make a payment in full or partial, and/or late payment.

- No Comment

11) There are limited comparable properties to review in this area. Most are in Henrico County, VA, and the new builds in the Henrico County area are for Meta and valued at $738 to $1,929 per square foot. This analysis assumes $1,300 per square foot.

- **Assessor's Office**

12) Virginia will assess improvements as construction is in progress and, as such, supplemental assessments may be issued during construction. This has not been considered in this analysis. There are existing improvements on one parcel.

- **Assessor's Office**
- **Supplemental assessments during construction will generate supplemental real estate tax billings.**

13) This analysis assumes one datacenter will be constructed and assessed starting in 2030, another one building in 2031, then two datacenters being assessed/added in 2032.

- No Comment

14) Laws, Regulations, practices and customs can change. This guidance is current as of May 19, 2025. EY is not responsible for any subsequent changes to these projections.

- No Comment

Real Property Tax Breakout Assumptions:

- **Finance Department**

1) Property taxes in Hanover County, Virginia flow directly into the County's general fund, along with all other revenue streams, which are then distributed to fund different entities/initiatives (see expenditure categories in the table below) based on its budget for that fiscal year, as confirmed by the Hanover County Commissioner's Office.

2) Given that property tax represents the largest source of the County's revenue (~43%), we assume that the percentage of each FY26 budget category (shown below) can be used to estimate the extent of new tax revenue by each expenditure category. To simplify this assumption, the table has combined like expenditure categories into five different funding groups.

Expenditure Categories	Allocation of FY26 Budget	Funding Groups (EY analysis)	
School Operations	34%	School	40%
School Capital Improvements Program (CIP)	2%		
School Debt Service	3%		
School Nutrition	1%		
General Fund - Public Safety & Judicial	14%	General Fund	29%
General Fund - Human Services	6%		
General Fund - Other	9%		
County Capital Improvements Program (CIP)	16%	County CIP	16%
County Debt Service	1%	Other	8%
Self-Insurance	7%		
Public Utilities	7%	Public Utilities	7%

Source: Hanover County FY26 Adopted Budget

3) This analysis remains an estimation and results may vary as the County's annual budget and percentage allocated to each expenditure category fluctuates year-to-year.

Business Personal Property (BPP) Notes and Assumptions:

This analysis assumes there will be a refresh of personal property every 5 years after the initial spend of personal property once each building has been placed in service.

- **No comment.**

2) The personal property assessment year is the first tax year for reporting data center assets.

- **Personal property assessments are based on assets located in Hanover County on Tax Day of each Tax Year (January 1)**

3) The model doesn't account for reductions in assessed value based on appeal.

- **No comment.**

4) Current costs relied upon in the model are based on a BPP ratio from information provided by Client. All values and tax rates that are included in this projection are estimates. Estimated taxes were derived without an actual asset listing; estimates could change based on a review of the actual assets. Once actual BPP asset classes and costs are known, the estimate should be further refined.

- **No Comment**

5) The model assumes that all BPP will be computer equipment and does not account for Furniture and Fixtures.

- **No Comment**

6) Hanover County's published Data Center Depreciation Table is a 6-year life. Assets are assumed to be disposed of in their 7th year of life. Business personal property tax projections only account for servers and do not include furniture & fixtures or other machinery & equipment. Also, Business Personal Property follows a depreciation schedule of: year 1 – 66%, year 2 – 55%, year 3 – 35%, year 4 – 24%, year 5 – 5%, year 6 – 1%.

- **Business Equipment and Computer Equipment depreciate on different schedules.**
- **Computer Equipment (CE)_ computer hardware, peripheral equipment and operation software**
  - **CE Year 1: 66%**
  - **CE Year 2: 55%**
  - **CE Year 3: 35%**
  - **CE Year 4: 24%**
  - **CE Year 5: 05%**

  - **CE Year 6 and older: 01%**
  - **Assets will be assessed as long as they are on site; even if not being used.**
- **Business Equipment (BE)_ furniture, fixtures, non-manufacturing tools, equipment, office machines, and signs both fixed and portable**
  - **BE Year 1: 60%**
  - **BE Year 2: 50%**
  - **BE Year 3: 40%**
  - **BE Year 4: 30%**
  - **BE Year 5: 20%**
  - **BE Year 6 and older: 10%**
  - **Assets will be assessed as long as they are on site; even if not being used.**

7) The personal property assessment ratio in Virginia is 100%.

8) The tax rate used is the 2024 Hanover County rate for the prospective location provided by Client. Estimated taxes are based on total tax due without any discounts or abatements. Hanover County has a preferential personal property tax rate for data center equipment (computer equipment and peripherals only) of $0.45 per $100 of assessed value.

- **Current Data Center Tax Rate: $0.45 per $100 of assessed value**

9) The Hanover County standard business personal property would be at a 6-year depreciation schedule and a tax rate of 3.57%.

- **Current Tax Rate Standard Personal Property: $3.57 per $100 of assessed value**

10) The SUT percentages applied to the personal property's tax base were referenced from the State of Virginia's official' website and take into account the State's Data Center SUT exemption program until the initial program sunsets in June 2035. Following that, eligibility for the Data Center SUT exemption requires creating at least 1,000 new jobs.

- **Department of Taxation**

Sales & Use Notes and Assumptions

- **Department of Taxation**

1) This analysis is based on construction costs and percentage of completion information provided by the Client.
2) All values and tax rates that are included in this projection are estimates (unless noted otherwise).
3) Total sales tax rate for this location = 6%; 4.3% goes to the state Virginia, 0.7% to the Central Virginia Region, and 1% goes to Hanover County.
4) Virginia has a Data Center Sales and Use Tax Exemption program that exempts from sales tax 1) personal property used for data centers and 2) electrical and HVAC real property necessary for the operations of a data center. The exemption sunsets in June 2035 as per Va. Code §58.1-609.3 and will be replaced by another program after June 2035. The CAPEX and job requirements under the new program are significantly higher (see next page for details), so it is assumed that the project's CAPEX post-existing program sunset will not apply.
5) To account for potential gaps in the exemptions and in lieu of more detailed project facts, these estimates assume a conservative 1% of applicable project costs may be taxable for sales and use tax purposes until June 2035, whereafter it is assumed that all personal property will be 100% taxable. This analysis assumes all personal property purchased in 2035 will occur before the sunset date.
6) Virginia's Tax Code regarding new construction projects does not charge sales and use taxes on all construction labor and some categories of building materials that become permanently affixed to real property as per Va. Admin. Code 10-210-410. Therefore, this conservative estimate assumes that only

25% of the project's building shell & fit-out building materials costs (i.e., 10% of the total real property CAPEX) will generate sales tax that would be captured in Hanover County from contractors purchasing materials to build the facility. Sales tax is not generated from any construction labor or building materials necessary to construct the data centers electrical systems and HVAC/Mechanical/Cooling systems.

tract
Accelerating Responsible Infrastructure

Erin Fosdick, AICP
Director of Entitlements
erin.fosdick@tract.com
720-552-9172
www.tract.com

Good afternoon Chairman Davis and Board Supervisors. My name is Bob Nelson. I reside in the Ashland District.

At your last meeting, I discussed Tract's failure to develop its Hickory Hill project. Today, let's look at the big picture.

Tract has 14 active data center projects in 7 states. Total acreage is over 21,000 acres. That is equal to over 31% of Hanover's suburban service area. Total megawatts is 18,700. That's 9.5 times the capacity of the North Anna Nuclear Plant. Tract has big plans, but it doesn't have an operational data center anywhere in the country. Tract is a land speculator, not a data center developer.

Last month Tract claimed that Dominion would energize Slayden Creek, a Hickory Hill substation, in the second quarter of 2029. Yet, in a report to a PJM committee dated yesterday, Dominio now shows a December 1, 2029 in service date for Slayden Creek. One month has passed. Six months of delay have been added.

Two years ago, Tract presented a slide showing $100 million dollars in county tax revenues in 2028, 2029, and 2030. In fact, Hanover County will not receive any property tax revenues from Tract data centers in those years. Zero. Gone. Vanished.

Given Tract's record, under no circumstances should the Board approve the Mountain Road project. That was my recommendation last month, and it hasn't changed.

Tract has done nothing to move the development needle. It's going backwards.

I have 10 copies of documents supporting my comments. Thank you.

Bob Nelson, Ashland District

Citizen Comments, Board of Supervisors March 11, 2026 meeting

TRACT DATA CENTER PROJECTS

STATE	PROJECT	ACRES	MEGAWATTS
Arizona	Buckeye	2,019	1,800
Illinois	Morris	344	1,000
Iowa	Altoona	468	1,000
Nevada	Peru Ridge	517	230
Nevada	Peru Shelf	686	810
Nevada	Sapphire	1,063	700
Nevada	South Valley	1,534	1,215
Nevada	Virginia Highlands	8,590	2,500
Texas	Applewhite	339	720
Texas	Caldwell Valley	2,973	4,000
Texas	Medina	265	500
Utah	Pole Canyon	844	1,700
Utah	Pony Express	225	120
Virginia	Hanover	1,211	2,400
TOTALS		21,078	18,695

Source: https://www.tract.com/projects/ - Active Project Sites

Bob Nelson, Ashland District; March 9, 2026

Dominion Supplemental Projects

Transmission Expansion Advisory Committee
March 10, 2026

Dominion Transmission Zone: Supplemental Customer Load Request

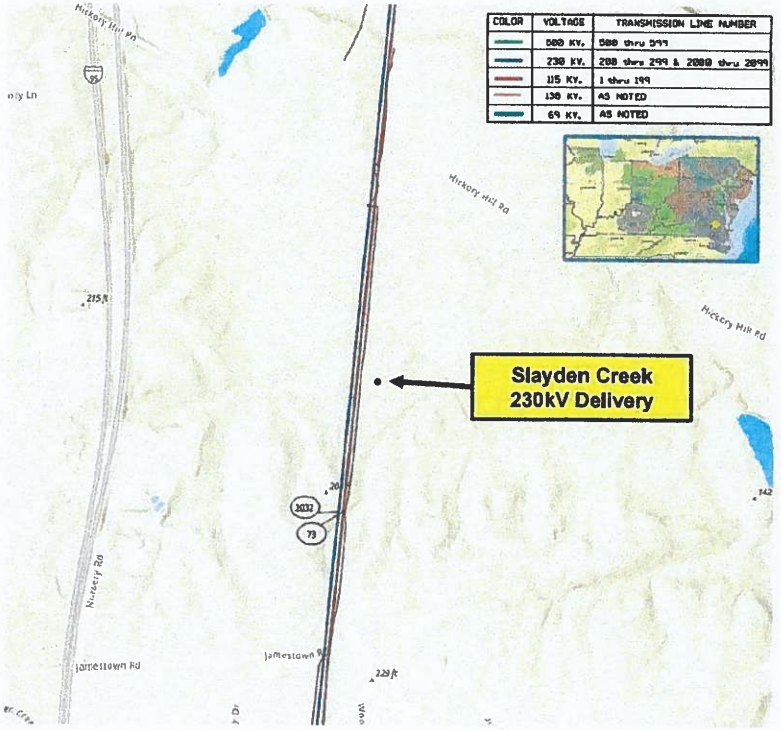
Need Number: DOM-2024-0004
Process Stage: Solution Meeting 3/10/2026
Previously Presented: Need Meeting 02/06/2024
Project Driver: Customer Service

Specific Assumption References:

Customer load request will be evaluated per Dominion's Facility Interconnection Requirements Document and Dominion's Transmission Planning Criteria.

Problem Statement:

DEV has submitted a DP request for a new 230 kV delivery point (Slayden Creek) to serve a data center customer in Ashland VA with a total load of 300 MW. Requested in-service date is 1/01/2026.



Dominion Transmission Zone: Supplemental Slayden Creek 230kV Delivery - DEV

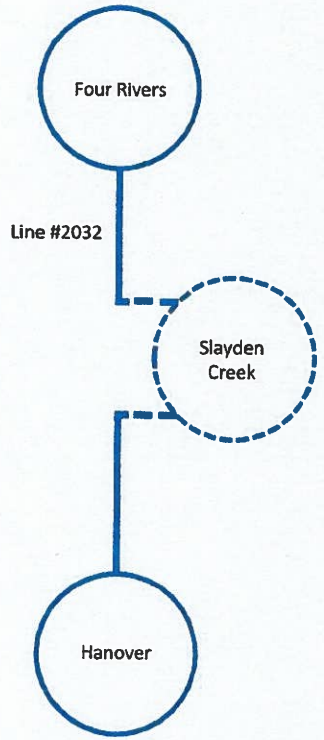
Need Number: DOM-2024-0004
Process Stage: Solution Meeting 3/10/2026

Proposed Solution:
Cut existing 230kV Line 2032 between Hanover and Four Rivers and extend a new 230kV double circuit loop, approximately .5 miles, in and out of Slayden Creek Substation. Slayden Creek Substation will be constructed with a 230 kV ring-bus, configured for an ultimate arrangement of six breakers, with four breakers installed initially.

Estimated Project Cost: $ 26M (Total)
Transmission Line – $6M
230kV Substation – $20M

Alternatives Considered:
No feasible alternatives.

Projected In-service Date: 12/1/2029
Project Status: Planning
Model: 2029 RTEP



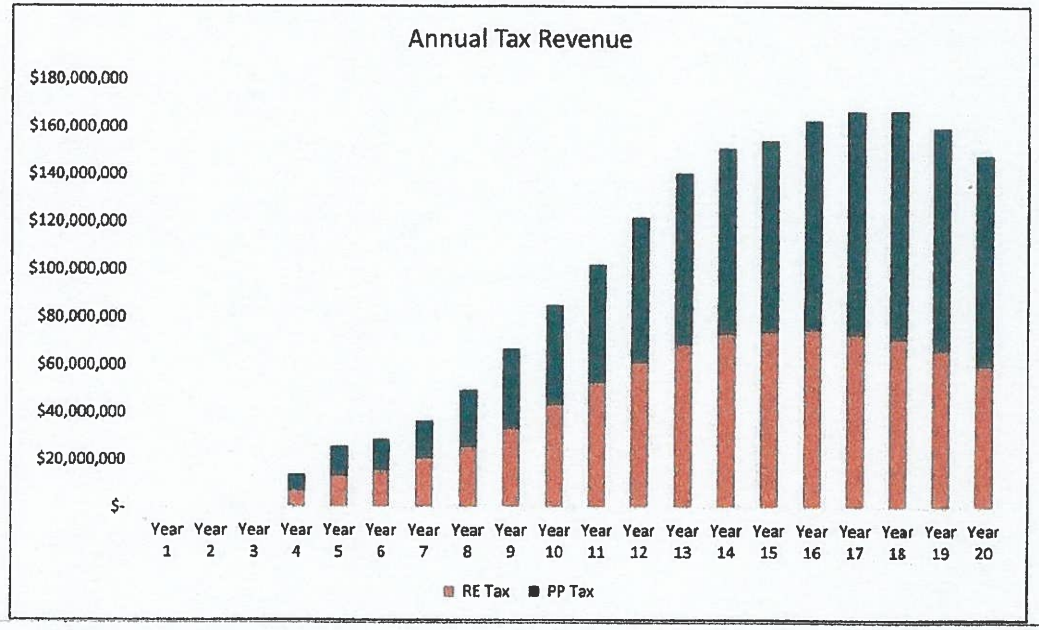
Positive Economic Impacts to Hanover County

tract

- Real Estate Tax Revenue
- Data Center Tax Revenue
- Incremental Taxes Collected
  - 2028 = $25.7M
  - 2034 = $102M
  - 2041 = $167M
- Taxes Estimated reflect full build-out of Blenheim & S. Wales properties.
- Over 20 years, an estimate of $1.78B in taxes will be collected by the County
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Total 20 Year Estimated Tax Receipts	**$ 1,781,393,321**
Average Annual Estimated Tax Receipts	**$ 89,069,666**
Max Annual Estimate Tax Receipts	**$ 167,130,737**

Tract has collaborated with the Hanover County Commissioner of Revenue to create a DIRECT fiscal impact estimate based on the expected timing of Real and Personal Property investments connected to this project



Biernot, Gretchen W.

From: Planning
Sent: Tuesday, March 10, 2026 2:29 PM
To: Biernot, Gretchen W.
Subject: Fw: No Data Center off Rte 33

Thank you,

Makayla Stepp-Davis
Planning Technician II
Planning Department
(804) 365-6362
Hanover County

From: Robert M <bobmcgary@gmail.com>
Sent: Tuesday, March 10, 2026 2:26 PM
To: Planning <planning@hanovercounty.gov>
Subject: No Data Center off Rte 33

CAUTION: This email originated from outside your organization. Exercise caution when opening attachments or clicking links, especially from unknown senders.

David Maloney and members of the Hanover County planning commission:

I write to ask that you vote "no" to the data center proposal on Route 33 near the Hanover/Henrico County line.

Please consider the impact of noise and light pollution, light trespass, and the need to preserve the land's Resource Protection Area designation. Mostly, be mindful of the citizens you serve, as well as those of neighing counties, who have overwhelmingly expressed their opposition to any more data centers in our area.

Thank you.
Robert McGary
3519 Gwynns PL
Glen Allen, Virginia 23060

Biernot, Gretchen W.

From: Stepp-Davis, Makayla L.
Sent: Monday, March 9, 2026 2:59 PM
To: Biernot, Gretchen W.
Subject: Fw: The Mountain Road Technology Park

Thank you,

Makayla Stepp-Davis
Planning Technician II
Planning Department
(804) 365-6362
Hanover County

From: Jackie Warren <warrenjackie49@gmail.com>
Sent: Monday, March 9, 2026 1:56 PM
To: Planning <planning@hanovercounty.gov>
Subject: The Mountain Road Technology Park

CAUTION: This email originated from outside your organization. Exercise caution when opening attachments or clicking links, especially from unknown senders.
Dear Hanover Planning Commission:

A massive industrial transformation is proposed for the border of our community. The Mountain Road Technology Park-Route 33 is slated as a "business park", but in reality, it is a heavy industrial utility. The environmental and visual impact will be felt in Hanover and parts of Henrico County. Our local grid will be affected by the electrical draw of 900 MW. There will be over 300 industrial diesel generators and a potential of one million gallons of water used per day. Over 40% of the site is in a Resource Protection area (RPA).

When reading about the problems neighboring residents face, the continuing thread is noise and light pollution twenty four hours a day. We will also face traffic issues with Mountain Road being two lanes feeding into Route 33. Importantly, the RPA should not be violated.

We would greatly appreciate your support in shutting down this proposal.

Thank you,
Jackie and Nick Warren

Biernot, Gretchen W.

From: Stepp-Davis, Makayla L.
Sent: Monday, March 9, 2026 2:59 PM
To: Biernot, Gretchen W.
Subject: Fw: Planning Committee Meeting 3/19

Thank you,

Makayla Stepp-Davis
Planning Technician II
Planning Department
(804) 365-6362
Hanover County

From: Shannon Todd <shannontodd26@gmail.com>
Sent: Monday, March 9, 2026 2:28 PM
To: Planning <planning@hanovercounty.gov>
Subject: Planning Committee Meeting 3/19

CAUTION: This email originated from outside your organization. Exercise caution when opening attachments or clicking links, especially from unknown senders.

Good afternoon,

I am writing in regards to the Planning Committee meeting on 3/19. Specifically for the Mountain Road Tech Park proposal. After attending the developer's balloon test today and speaking with Mr. Leadbetter, I am writing to strongly urge the planning committee to allow the same about of speakers as the previous meetings. Citizens are concerned and would like the chance for 25 Hanover residents and 5 non-Hanover residents to speak for each side.

There has been new information that we have been presented with, and more information the developer needs to disclose. This information is critical and the community deserves the opportunity to respond.

Thank you for your attention to this matter,
-Shannon Todd

Pompei, Andrew J.

From: Robert Nelson <ranelsonjr1@verizon.net>
Sent: Friday, April 10, 2026 3:31 PM
To: Davis, Sean M.; Hunter, Jo Ann M.; Pompei, Andrew J.; Biernot, Gretchen W.
Subject: Fw: Environmental and Siting Issues - Marchetti Properties, et al., REZ2025-00023 and related cases
Attachments: ENVIRONMENTAL AND SITING ISSUES - MOUNTAIN ROAD DATA CENTER PROJECT.docx

CAUTION: This email originated from outside your organization. Exercise caution when opening attachments or clicking links, especially from unknown senders.

Good afternoon,

I have briefly reviewed the staff report for the Planning Commission's April 16th meeting. Correct me if I'm wrong, but my review indicates that the email below, the position paper on Environmental and Siting Issues, and the documents attached were not included in the staff report. One of the issues was the future of the dam and pond.

In this case, the applicant discussed the future of the dam and pond in a recent letter. Up to that point, the applicant had not discussed the issue; and there were, and are, no proffers on the subject, only a designation on a concept plan sheet.

I have reason to believe that it was only because I raised the issue in a thoughtful and detailed way that it got a response. That context, and the work that went into it, is entirely lost by the deep six omission in the staff report. This is not how government should work.

Bob Nelson, Ashland District

----- Forwarded Message -----
From: Robert Nelson <ranelsonjr1@verizon.net>
To: Fredric McGhee Jr. <fimcghee@hanovercounty.gov>; Larry Leadbetter <laleadbetter@hanovercounty.gov>; Alan Abbott <acabbott@hanovercounty.gov>; Brett Heizer <bheizer@hanovercounty.gov>; Edmonia Iverson <epiverson@hanovercounty.gov>; William Martin <wemartin@hanovercounty.gov>; Cliff Parker <clparker@hanovercounty.gov>; Planning Department <planning@hanovercounty.gov>
Sent: Monday, March 2, 2026 at 11:38:07 AM EST
Subject: Environmental and Siting Issues - Marchetti Properties, et al., REZ2025-00023 and related cases

Good morning Chairman McGhee and Planning Commissioners,

Find attached a 4 page position paper discussed two issues which have not been adequately considered in this case. They are the future of the existing Holtzgraph Dam and pond and the proposed onsite and offsite 230 kV Dominion transmission lines required to serve the data centers.

A complete copy of the position paper with its two attachments was filed with the planning department earlier today. I request that the position paper and attachments be included in the record and in any staff reports in these cases.

Thank you for your consideration. Bob Nelson, Ashland District

ENVIRONMENTAL AND SITING ISSUES – MOUNTAIN ROAD DATA CENTER PROJECT

This position paper discusses two environmental and siting issues for this data center project. Marchetti Properties, et al., REZ2025-00023, et al. They are the future of the dam and pond and the onsite and offsite Dominion transmission lines for service to the data centers. Neither issue has been adequately addressed by county staff or Tract.

HOLTZGRAPH DAM AND POND

Holtzgraph Dam is a 21.5 foot high earthen dam with a length of 750 feet. It impounds a stream which drains to the Chickahominy River below the dam. The dam creates a normal pool area of 15.5 acres with a normal pool volume of 110.6 acre feet. The maximum pool area is 22.5 acres, and the maximum impounding capacity is 180.6 acre feet. 70 acre feet, the difference between normal and maximum impounding capacity, provides storage during major rainfall events.

The Virginia Department of Conservation and Recreation (DCR) sent a 6 page letter to Marchetti Properties in October 2022 informing the owner that the dam may be out of compliance with the Virginia Dam Safety Act. After studying the issue, DCR determined that the dam was subject to the act and re-classified the dam failure hazard from unknown to DCR-Low in April 2024. The DCR report is attached.

In the event of a dam break, maps in the DCR report show major inundation areas downstream along the Chickahominy River, all the way to Old Washington Highway. Dam failure would also deposit sediment and debris across the county access road to the Grassy Swamp Sewer Pump Station.[1] Because the dam has additional impounding capacity (70 acre feet), the impact of failure or removal of the dam on storm water runoff must be considered, particularly during major rain events.

The pond has been heavily impacted for decades by the Holly Farms/Tyson Farms chicken plant. Plant discharges to the stream and into the pond were not subject to DEQ water quality standards for many years. The water quality of the pond is unknown, but algae growth has been an issue and phosphorus levels have been high. Sediment and

[1] While the pump station facility has never operated, it is tested and maintained. If major development occurs, that facility would be used to pump wastewater to a county treatment plant on a regular basis.

debris built up behind the dam is likely to be significant and would need to be sampled and tested before removal.

The Virginia Department of Environmental Quality (DEQ) is responsible for water quality and stream and wetland impacts. The Chickahominy River is the primary source of drinking water for Newport News, a city with a population of over 180,000 residents.

The dam and pond was discussed at a pre-filing meeting involving Tract and county staff. The concept plan indicates that the dam and pond will be removed, and the area is designated as an "ecological restoration area."[2] Otherwise, silence and vagueness.

Unanswered questions abound, and neither county staff nor Tract answers them. When would dam removal occur? Who will do it? How will the dam and the sediment and debris behind it be addressed? What will the impact of removal be on the Chickahominy River and the water supply of Newport News? What precisely is "ecological restoration"? What are the commitments and elements of "intentionally designed and assisted" recovery? What is the "original" state, and what are "similar" ones? When and how will all this occur?[3]

This issue cannot be ignored. A proffer should be included requiring Tract to file applications for DCR and DEQ approval of dam removal and restoration of the dam and pond areas. It should also state that no construction plan, site plan, or other applications related to data center development may be filed by Tract with Hanover County prior to dam removal and compliance with DCR and DEQ orders.

DOMINION TRANSMISSION LINES ON AND OFF-SITE

While staff and Tract did not discuss the Dominion transmission lines required for this data center project, information on new transmission lines and substations for data center projects is available in Dominion reports submitted to PJM's Transmission Expansion Advisory Committee (TEAC). Dominion's TEAC need and solution submissions for this data center project are attached to this position paper.

---

[2] The concept plan defines it as an area where an "existing degraded and/or impacted ecosystem is being intentionally designed and assisted to recover to its original or similar state."

[3] It is possible that the dam may remain and "ecological restoration" may not start for a long time. Tract may have moved on, and the owners of data center parcels and buildings may claim they have no responsibility for ecological restoration of the dam and pond areas.

This project will involve Dominion's existing 230 kV transmission line (not its 500 kV line), and Dominion's new onsite and offsite transmission lines will also be 230 kV. The onsite Dominion transmission line will connect a substation (named Flamingo) and two other substations. It is generally shown running between building areas 2B and 3B on the eastern side of the project near Grassy Swamp Creek.

What this means hasn't been discussed. Based on recent filings, new Dominion overhead 230 kV transmission lines have a 160 foot easement which must be cleared; and that is assumed here. Once energized, the easement will be maintained; and large trees will not be allowed to grow in the easement. While the exact location is unclear, a cleared transmission line corridor will likely affect the proposed 300 foot buffer and impact wetlands and RPA along Grassy Swamp Creek.

A new Dominion 230 kV transmission line must connect the onsite transmission system to the existing transmission system offsite. What this means also hasn't been discussed, and the location is only hinted at. A slide in the staff presentation at the recent Planning Commission meeting merely states that an existing transmission line is "just outside the project area to the east/northeast." Video of meeting at 1:25:55-1:26:05.

Connecting the new offsite transmission line will require cutting into the existing 230 kV system, negotiating or condemning land for the assumed 160 foot easement, installing about 0.2 mile of new 230 kV transmission line, and crossing Winns Church Road. At the closest point, Dominion would also have to cross Grassy Swamp Creek (and possibly a portion of Swamp Creek Pond) and clear or disturb a stream, wetlands, or RPA. The environmental and visual impacts associated with the new, offsite 230 kV transmission line haven't been discussed. One thing for sure, another transmission line will be a negative for property values and residents along Winns Church Road.

CONCLUSIONS

A general problem with planning and zoning cases is major issues swept under the rug. That is certainly true here.

The future of the dam and pond must be addressed. A proffer should require Tract to remove the dam and the sediment/debris in the pond and address water quality and water quantity impacts in the Chickahominy River basin. An "ecological restoration area" worthy of the name must be planned and created before Tract is allowed to file applications with Hanover County to develop the parcels for industrial data centers.

Information is available on the transmission lines required for the project. The new Dominion 230 kV lines, onsite and offsite, will likely impact buffers and streams, wetlands, and RPA from Swamp Creek Pond to Grassy Swamp Creek's discharge into the Chickahominy River. The new offsite transmission line will affect property values and residents along Winns Church Road. These impacts must be specifically identified and considered.

March 2, 2026

Bob Nelson, Ashland District

Attachments: DCR Hazard Screening Analysis for Holtzgraph Dam, April 2024 (21 pages)
Excerpts from 9/13/2024 and 10/8/2025 Dominion Reports to PJM TEAC (3 pages)

Biernot, Gretchen W.

From: Stepp-Davis, Makayla L.
Sent: Friday, February 27, 2026 2:25 PM
To: Biernot, Gretchen W.
Subject: Fw: Mountain Road Tech Park Request for Follow-Up Information

Thank you,

Makayla Stepp-Davis
Planning Technician II
Planning Department
(804) 365-6362
Hanover County

From: Shannon Todd <shannontodd26@gmail.com>
Sent: Friday, February 27, 2026 12:41 PM
To: Planning <planning@hanovercounty.gov>
Subject: Mountain Road Tech Park Request for Follow-Up Information

CAUTION: This email originated from outside your organization. Exercise caution when opening attachments or clicking links, especially from unknown senders.
Good afternoon Members of the Hanover Planning Commission,

I am a Hanover County resident writing regarding the proposed Mountain Road Technology Park being developed by Tract along Mountain Road. I respectfully request that the Commission obtain and make publicly available detailed information from the applicant regarding all projected emissions and pollution from this project.

Specifically, I am requesting that Tract be required to provide, in writing:

-A list of all particulate and pollutants that will be emitted from the air from backup generators, cooling equipment, and any other on-site machines, including, but not limited to, fine particulate matter (PM2.5), coarse particulate matter (PM10), nitrogen oxides (NOx), sulfur dioxide (SO2), carbon monoxide (CO), volatile organic compounds (VOCs), greenhouse gases (carbon dioxide, methane), and any hazardous air pollutants, along with the expected emission rates and concentrations under normal operation, testing, and emergency use.

-Identification of any chemicals, refrigerants, oils, fuels, and treatment agents used in generators, cooling systems, or other equipment that could pose a risk to air, surface water, ground water, or soil, including, but not limited to, diesel fuel, lubricating oils, ethylene glycol, or propylene glycol (coolants),

industrial cleaning agents, PFAS-containing products, and refrigerants such has HFCs, along with the quantities, storage methods, spill-prevention and containment plans, and procedures for handling leaks or releases.

-Any anticipated noise and light emittance levels, both daytime and nighttime, including generator testing schedules, cooling equipment noise, substation noise and on-site lighting design (intensity, direction, and hours of operation) that may impact nearby homes, including, but not limited to, constant hums, frequency vibrations, potential skyline glow, glare, and light trespass onto adjacent properties.

-Any available health and quality-of-life impact assessments or modeling that describe how these emissions and impacts could affect nearby residents over time, including, but not limited to, potential effects on respiratory health (Asthma, COPD, and other lung conditions), cardiovascular health, sleep disruption from noise and light, outdoor use and enjoyment or property, and long-term exposure to chemical or particulate pollution.

-A clear explanation of how these projected emissions and impacts compare to applicable local, state, and federal standards, including, but not limited to, National Ambient Air Quality Standards (NAAQS), Virginia Department of Environmental Quality permits, and any relevant water-quality and noise standards, and what enforceable mitigation measures (besides 500' buffer) and monitoring will be in place to protect surrounding neighborhoods.

As a nearby resident, I need this level of detail to understand how this project may affect my family's air quality, water resources, nighttime environment, and overall quality of life, both at full build-out and during construction and routing testing.

Please include this request in the public record for the Mountain Road Technology Park case and advise how and when the requested information will be made available to the public prior to any final votes or approvals. Thank you for your attention to these concerns and for your service to Hanover County residents.

Sincerely,
Shannon Todd
Mechanicsville District

Pompei, Andrew J.

From:	Robert Nelson <ranelsonjr1@verizon.net>
Sent:	Thursday, February 26, 2026 7:39 AM
To:	Davis, Sean M.; Dibble, Susan P.; Floyd, Danielle G.; Herzberg, F. Michael; Hudson, Ryan M.; Prichard, Faye O.; Stoneman, Jeff S.
Cc:	Hunter, Jo Ann M.; Biernot, Gretchen W.; Planning
Subject:	Marchetti Properties, et al., REZ2025-0023 and related cases
Attachments:	Tract Data Centers - Citizen Comments with Attachments, BOS 2-25-2026 Mtg..pdf

CAUTION: This email originated from outside your organization. Exercise caution when opening attachments or clicking links, especially from unknown senders.

Chairman Davis and Board Supervisors,

Consistent with the Chair's request, find attached in pdf my prepared citizen comments on Tract, along with two pages of supporting documents referenced on the second page. A shortened version of the comments was presented at last night's Board of Supervisors meeting and 10 copies of the supporting documents were distributed at the meeting.

I requested that these prepared comments with the documents be included in any staff reports and the record for the Marchetti Properties rezoning case and related CUP and SE cases.

Thank you for your consideration. Please let me know if you have any questions.

Bob Nelson, Ashland District

Good evening Chairman Davis and Board Supervisors. My name is Bob Nelson. I reside in the Ashland District.

My comments concern Tract. In March 2024, the Board approved Tract's development of a 2,400 MW data center project off Hickory Hill Road. Tract has now proposed to develop a 900 MW data center project off Mountain Road.

I'll start by discussing the 1.1 million square foot Wegmans distribution center. Wegmans had an approved site plan 1 year and 7 months after it filed its zoning application and a certificate of occupancy 2 years and 2 months later. That's development with a purpose and a mission.

By contrast, Tract filed its first construction plan application for an internal loop road in August 2025, almost two years after filing its zoning applications. The 2.5 mile loop road is essential for data center construction but remains pending.

Mr. Pompei and others have identified multiple compliance issues with Board mandated buffers and natural areas. The most outrageous was a proposed construction staging area in a buffer and resource protection area just off Hickory Hill Road. But that's not all.

Tract hasn't filed a construction management plan required by a Board proffer to ensure orderly development. Tract hasn't filed executed agreements with Dominion and Virginia Natural Gas to protect Hanover utility services during construction. Tract hasn't met a half dozen requirements for loop road approval.

In addition, sewer, water, road, and fiber optic infrastructure does not exist. Energization of the first 300 megawatt substation will not occur until the second quarter of 2029. No applications to actually construct data centers have been filed.

In March 2024, Tract told the Board that Hickory Hill data centers would be generating $25.7 million dollars in real and personal property tax revenues beginning in 2028 and $1.78 billion dollars over 20 years. Tract claimed its projections were on the "low side" and "conservative."

In fact, there will be no data centers constructed and operating at Hickory Hill in December 2027. County tax revenues from Tract data centers will be zero in 2028, 2029, and likely beyond. Tract's revenue claims for Hickory Hill have become total lies.

Tract hasn't performed, honored its proffers, or told the truth. We have corporate sloth, contempt, and deceit. Given this record, under no circumstances should its applications for the Mountain Road project be approved by the Board.

I have 10 copies of Tract's tax revenue slide and a comparison of Wegmans and Tract's performance time lines. Thank you.

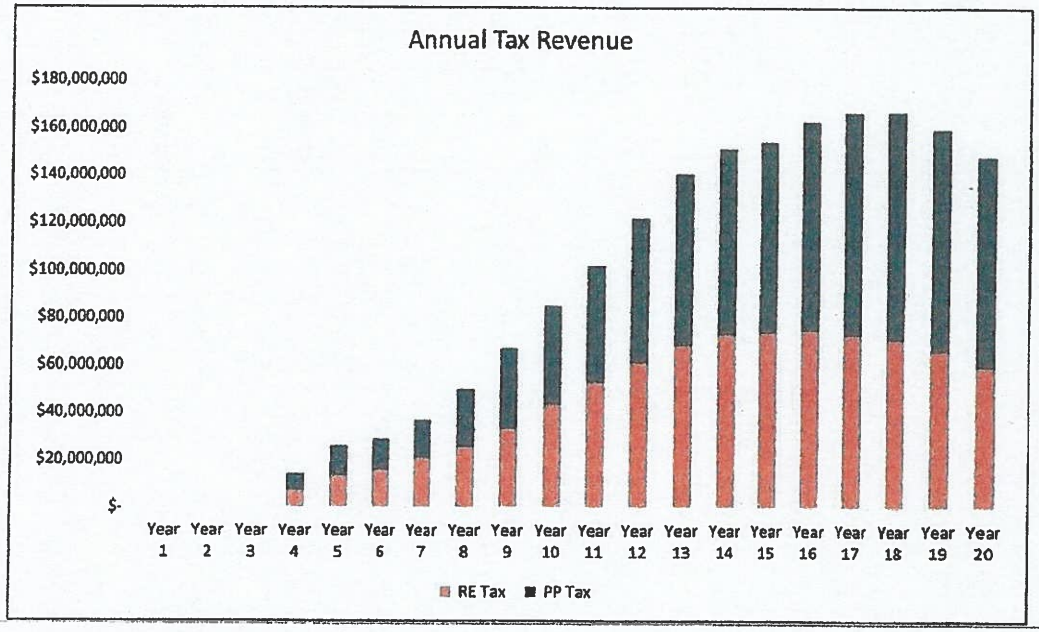
Positive Economic Impacts to Hanover County

tract

- Real Estate Tax Revenue
- Data Center Tax Revenue
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Max Annual Estimate Tax Receipts	**$ 167,130,737**

Tract has collaborated with the Hanover County Commissioner of Revenue to create a DIRECT fiscal impact estimate based on the expected timing of Real and Personal Property investments connected to this project



WEGMANS DISTRIBUTION CENTER TIME LINE

Event	Date
Zoning application	December 2, 2019
Site plan application	December 20, 2019
Board of Supervisors zoning approval	May 6, 2020
Site plan approval	July 8, 2021
Certificate of occupancy (CO)	August 25, 2023
Zoning application – site plan approval	1 year, 7 months
Site plan approval – distribution center CO	2 years, 2 months
Zoning application – distribution center CO	3 years, 9 months

TRACT HICKORY HILL DATA CENTER TIME LINE

Event	Date
Zoning applications	September 5, 2023
Board of Supervisors zoning approvals	March 27, 2024
Construction plan application – loop road	August 20, 2025
Zoning applications – construction plan approval	?
Zoning applications – data center CO	?

Bob Nelson, Ashland District

Citizen comments, February 25, 2026 Board of Supervisors meeting

Biernot, Gretchen W.

From: Stepp-Davis, Makayla L.
Sent: Thursday, February 26, 2026 1:28 PM
To: Biernot, Gretchen W.
Subject: Fw: Data Centers in Hanover County

Thank you,

Makayla Stepp-Davis
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Planning Department
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Hanover County

From: AMANDA CARLISLE <amandacarlisle123@gmail.com>
Sent: Thursday, February 26, 2026 1:13 PM
To: Planning <planning@hanovercounty.gov>
Subject: Data Centers in Hanover County

CAUTION: This email originated from outside your organization. Exercise caution when opening attachments or clicking links, especially from unknown senders.

I'm writing as your constituent to urge you to reject the rezoning of valuable agricultural land for the purpose of a massive data center build out in Hanover. As the data center capital of the world, Virginia has seen firsthand the many problems these facilities bring when built near residential areas—constant noise, heavy water usage, air pollution, expensive energy bills, and a dangerous precedent that puts corporate interests above the wellbeing of taxpaying residents. Data centers generate relentless noise, often between 55–85 decibels, from cooling systems and generators—day and night. In Northern Virginia, nearby residents have reported serious quality-of-life impacts, prompting local governments to enact new zoning restrictions. These facilities also emit low-frequency noise, which is harder to measure but can have serious health implications. Hanover currently lacks the safeguards and accountability mechanisms needed to protect nearby communities from these effects. Water consumption is another major concern. We don't have all the answers about how much water will be consumed by all of these facilities, and there has not been enough transparency about how these data center campuses will impact our water quality and access. Even small data centers consume hundreds of thousands of gallons of water per day, and AI facilities can use as much as 5,000,000. That's a huge strain on local resources and raises questions about future water access, quality, and rising utility costs for residents. Another concern is the precedent of approving these massive data center campuses next to neighborhoods and schools. Approving projects of this size and scale so close to people's homes risks lowering property values, disturbing the peace, and sending a message that invites more of the same. If you approve these projects, it signals to the industry that Hanover is willing to harm its communities in order to accommodate big tech. I want to be clear: Rezoning agricultural land to industrial use for the sole purpose of projects that so clearly harms nearby, tax-paying residents is simply unfair. Please don't change the rules because the industry doesn't like the game. Protect the people who live here. Reject the rezoning requests. Thank you for your consideration, and for your service to our county.

Sincerely,
Amanda Carlisle

March 3, 2026

Hanover County Planning Department,
Planning Commission & Board of Supervisors
7516 County Complex Road
Hanover, VA 23069

RE: Hyperscale Data Centers do not belong in "Limited Industrial" Zoning Districts – assessment considerations for applications & proffers.

Dear Members of the Planning Department, Planning Commission, and Board of Supervisors:

The attached assessment provides a critical analysis of the compatibility of hyperscale data centers—specifically the proposed **Mountain Road Technology Park**—within an Employment Center area of the Comprehensive Plan and a Limited Industrial (M-1) zoning district adjacent to residential areas.

This work represents a regional collaboration between Hanover and Henrico residents possessing subject matter expertise across several relevant fields, including: data center design, operations and security, construction, excavation, electrical grid, HEUF's, industrial engineering, finance, business ownership, technical and programmatic risk management, zoning and municipal economic development professionals, industrial lobbying, and legal.

Ultimately, the level of employment required for the operations of the Mountain Road Technology Park does not align with the definition of "employment center". In addition, while the economic appeal of hyperscale data centers is significant, their operational reality more closely resembles **heavy industrial infrastructure** than the "light" industrial tech park uses originally intended for M-1 districts. In both instances, the proposed Mountain Road Technology Park is completely misaligned with the Comprehensive Plan.

This document outlines the substantial conflicts with categorizing modern AI Hyperscale Data Centers as employment centers / limited industrial and shows that the proffers offered by Tract do not adequately address the lack of alignment with M-1 Zoning or protect residents from the offensive noise, pollution and other risks generated by proximity to an industrial facility.

We urge the recipients to consider this assessment and prioritize zoning integrity and the long-term well-being of Hanover and neighboring residents. In summary, placing a major industrial facility in an area with transitional zoning (M-1) next to existing and future residential development is not appropriate. The proffers offered by the developer do not address those concerns. We thank you in advance for your consideration of these materials.

Respectfully,
Confirmed and Submitted by:
Friends of Hanover
On behalf of a consortium of concerned neighboring citizens with relevant subject matter expertise.

HYPERSCALE DATA CENTERS DO NOT BELONG IN "LIMITED INDUSTRIAL" ZONING DISTRICTS

Assessment Considerations for Applications & Proffers

Abstract

The findings and recommendations in this document are intended to enable Planning Departments to fully analyze data center related applications and proffers; and to detail the elements that are not aligned with the Limited Industrial (M-1) requirements.

February 2026

TABLE OF CONTENTS

INTRODUCTION 1
Assessment of the Situation 1
Use of These Recommendations 1
ASSESSMENT RECOMMENDATIONS & CONSIDERATIONS 2
Land Use 2
Site Development 2
Setbacks and Site Grading 2
Perimeter Buffers 2
General Design Standards 3
Security, Perimeter Fencing, and Security Fencing 4
Lighting 4
Transportation 4
Noise Attenuation 5
Construction 5
Construction and Phasing 6
Water and Sewer 6
Generators 7
Data Centers Are Not Employment Centers 8
Battery Energy Storage Systems (BESS) Create Major Industrial Accident Risks 8
Air Quality Management Proffer Additions 9
Seismic Activity Protections 9
Property Security 10
Governance – Tax Revenue Guarantees 11
Governance – Fire and Emergency Response 11
Governance – Electricity Access Regulations 12
Governance – Non-Disclosure Agreements (NDAs) 12
Governance – Contingency Planning for Abandonment 12

INTRODUCTION

Following significant work to analyze the publicly available Data Center Applications and associated Proffer Agreements as well as statements made by developers/applicants in public hearings, it is clear that most Proffer provisions are not sufficient to approve the applications for amendments to Comprehensive Plans, re-zoning of districts, nor approvals for most special use exceptions. Specifically, these application document do not satisfactorily deliver the necessary protections for the said county nor the neighboring communities.

As a basis, the assessment of the applicability of "Limited Industrial" M-1 zoning ordinance starts with considering whether or not the proposed business is "*relatively free from offense*". In theory, special conditions, permitted uses, conditional uses, and special exceptions are used to define the allowable facilities and how such businesses are able to operate. This assessment closely examined various Proffer provisions to verify that developers are fully volunteering to submit a sufficient set of provision that would reasonably result in the data center development be considered a Limited Industrial (M-1) property.

The assessment conclusion, on a point-by-point basis, is that the vast majority of hyperscale data centers are, in fact, full-scale industrial facilities that DO NOT meet the intent or requirements of Limited Industrial M-1 zoning requirements or its intent; regardless of the totality of Proffer provisions submitted. As such, all data center related applications should be denied by county governments.

Assessment of the Situation

Most developers are attempting to provide just enough concessions that would enable a county to approve the applications so they are then able to sell the properties to the highest bidder or progress with the construction of a data center without further public reviews or approvals. In the case of property sales, the ultimate buyer and data center developer is not and will not be known to the county until after all applications have been approved.

Once the buyer has completed the purchase, the property seller is no longer under any legal obligations to fulfill the Proffer Statement that will be part of the approved applications. While these Proffer commitments are assigned to the property and not the owner at any particular point in time, it is not clear that a major company such as Meta, Microsoft, Amazon, or one of their data center development subcontractors will adhere to them. There is a long history of major Information Technology companies getting exactly what they want regardless of how much time or money is required. A hyperscale data center is a multi-billion-dollar venture. Will each county have the resources to battle these organizations if they choose to do something different than what is agreed in a Proffer Statement?

Use of These Recommendations

It is anticipated that the findings and recommendations on the following pages will enable Planning Departments to fully analyze data center related applications, proposals, and proffers; and to detail the elements that are not aligned with the Limited Industrial (M-1) requirements. The Planning Departments will then be able to fully inform their Planning Commissioners and Board of Supervisors for their discussions and ultimate decision for approval or denial.

ASSESSMENT RECOMMENDATIONS & CONSIDERATIONS

Land Use

Language that includes items such as "electrical generation" point to a function and capability that is not an allowed capability within the M-1 district. A disqualifying request.

Proposed facilities will likely include massive numbers of Battery Energy Storage Systems (BESS) that are rarely identified nor are related Conditional Use Permit requested. Please note that the volume of BESS required by hyperscale data centers normally do not qualify as Light Industrial and is a disqualifying capability/feature.

Hyperscale data centers are commonly not considered "light or limited manufacturing". As such, all development plans, designs, construction and implementation activities external to the buildings should not be considered "Permitted 'By-Right' Activities". By stating as such in the Proffer will protect the county as well as residents in surrounding communities from unintended development of the property.

Site Development

Most current data center proposals identify the number of diesel generators will be required onsite and should identify the type to be installed (e.g., T4 for high pollution filtration). Yet few proposals provide the necessary details of the requirements for these generators (e.g., volumes of diesel fuel and DEF additives, storage and piping diagrams, containment designs, detailed leak/spillage mitigation plans, etc.). Would additional conditional use permitting or special use permitting be required?

Note that there is a requirement onsite storage of an estimated 350,000 – 550,000 gallons of diesel fuel and Diesel Exhaust Fluid (DEF) for each 100 MW of data center capacity being proposed. This amount of fuel storage is normally a disqualifying element for a *Limited Industrial* district.

Setbacks and Site Grading

Setbacks and property terrain are an essential design features to protect communities from the negative impacts of hyperscale data centers (e.g., low and high frequency noise, light pollution, runoff and spillages, etc.).

Perimeter Buffers

To limit their costs, developers will propose minimal perimeter buffers and insignificant supplemental plantings relative to the scale and impact of an industrial hyperscale data center facility. This is particularly true in cases of close proximity to residences and businesses. Common failings are listed as follows and therefore disqualify the facility from being located within a *Light Industrial* district.

a. Buffer widths less than 300 feet.

b. Absence of screening plantings that should be 35' native evergreens spaced such that they eliminate visual gaps along roads with scenic highway designation, boundaries to commercial businesses, and any close proximity to existing or planned residential communities, schools, places of worship, outdoor activities facilities, parks, etc.

c. Lack of screening plantings being installed prior to site preparation or construction.

d. Potential to locate supporting use buildings, storage tanks, and any mechanical elements within the Perimeter Buffers.

General Design Standards

The use of conceptual diagrams is a deceptive and misleading practice. These diagrams avoid depicting where infrastructure components will be located within the property.

By requiring fully detailed diagrams, it is then made possible to fully visualize the extent the site and whether or not it is appropriately located in a Limited Industrial district. Items to be included are generators, battery energy storage systems (BESS), cooling systems including piping and tanks, diesel & DEF storage tanks (3,000,000 to 5,000,000 gallons), water tanks, roads, parking lots, transformer stations, etc.



Many data centers are built to a height of greater than 45 feet. Is this height allowed in the zoning district? If not, is the request for a special exception appropriate given the location of the facility and the usage of the surrounding properties and the intent of the county's comprehensive plan?

Most facilities operating within Limited Industrial Use would have little need for extending the building height beyond the allowable limits (including rooftop mechanics and screening).

Designs should account for the need to screen loading docks visible from all views of the property including where high-density housing and a business are operating given the status of a *Limited Industrial* facility.

There should be detailed provisions for proper screening of water tanks, well houses, diesel fuel tanks, and other mechanical and storage facilities for such a facility.

Security, Perimeter Fencing, and Security Fencing.

The approved fencing and screening plantings as agreed in the final design should be fully installed prior to any site preparation or construction work beginning.

Lighting

As the picture below depicts, hyperscale data centers generate a lot of light into the sky; regardless of attempts to shield with downward lighting, etc. is significant. Once the required security lighting is added (even on movement sensors and timed limited devises), the scale of light pollution is massive. This is not aligned with the intent of "Limited Industrial" facility.



The inclusion of motion-activated security lighting should be included in all light restrictions and controls. Carving out security lights is a work around that should be ignored.

Any approved agreement or application should also include provisions that require a baseline light study of existing ambient light (pre-site preparation and construction) by a qualified, independent 3rd party selected by the county. Such a study would include measures for future compliance comparisons.

Transportation

The construction of a hyperscale data center is a massive long-term development and construction effort. Prior to application approvals, counties should fully understand all financial costs, the right-of-way implications, impacts on traffic, timelines for road work prerequisites, etc. Without such an understanding, the community will likely be negatively affected for an extended period. Further, the state and county may be left footing the bill for unanticipated costs that the future data center developer/operator may avoid.

Proffer should be negotiated to provide a specific level of road quality throughout the construction phases rather than a defined dollar amount. Each year, the Owner/Developer shall fully compensate the County to compensate for these costs. This requirement remains in place until all buildings are operational and all construction activity has completed.

In addition, additional bonds and bond amounts may be needed to sufficiently protect the County from unplanned costs.

Noise Attenuation

The hyperscale data centers produce significant noise, including: Industrial HVAC systems; Closed-loop cooling systems for the digital assets (e.g., servers); Power distribution equipment; Thirty-five (35) T4 3MW generators per 100 MW facility [Note: T4 generators are the size of a railcar and emit high level and low-level frequency noise]; and Construction noise that will exist for the lengthy period of data center construction and implementation.

Ongoing operational noises produced are characterized by a constant, low-frequency hum which can travel long distances and penetrate buildings. While this noise might not register a high dBA level, it can still be highly annoying, disrupt sleep, and cause health issues for nearby residents. Studies have shown that Low Frequency Noise (LFN) can be more debilitating to individuals who are submitted to LFN on a continuous basis leading to physical and mental disabilities.

Most county noise ordinances primarily use A-weighted decibel (dBA) limits which measures only high frequency noise. This is considered insufficient by experts for effectively managing all frequencies of sound—particularly low frequency noise—generated by large-scale data centers.

Additional noise requirements are necessary to protect nearby communities. These would include:

- Requiring data centers to limit noises measured using "alternative low frequency noise metrics" (like C-weighting or dBC) in addition to dBA, acknowledging the current measurement gap.
- Requiring noise studies be conducted periodically. Studies shall be required first before construction; then within 3 months of new building becoming operational; then after fully operational, and after the completion of any multi-build phase, at the conclusion of all construction, and any time requested by the County, up to four (4) times a year.
- Studies must be performed by an independent qualified 3rd party for use in ongoing monitoring efforts and must include modeling in industry standard software.
- It is critical that the machines used for measurements have certified calibration and recognized by the local municipalities as the evaluator of the noise ordinance compliance
- IMPORTANTLY: Testing shall be conducted during realistic operational scenarios and load capacities that include all noise generating mechanics including generators, cooling systems, and HVAC systems.
- Noise abatement solutions must be implemented within 2 months for each instance of nonconformance with approved noise levels.

Construction

Exterior construction that is required 7:00am to 7:00pm, six (6) days a week for ten (10) years is not appropriate or necessary for a "Limited Industrial" site and should be considered a disqualifying requirement. With the nearby residents, such long-term construction should be constrained to 8:00am to 5:30pm, Monday through Friday, and no work on Federal and Local Holidays.

For a multi-year construction period, it is reasonable for the developer to have specifically defined constraints for noise levels; lighting levels; use of well and public water; storage of fuels and chemicals; limiting visibility of machinery, tanks, and other objects when not in use; and use of final-look fencing rather than non-temporary fencing. The lack of such provisions should be considered a disqualifying requirement for proposed data centers.

The lack of specific provisions detailing the impacts, mitigating actions, monitoring and controls of construction traffic onsite and in the communities where such traffic is flowing should also be considered a disqualifying requirement.

Construction and Phasing

The "By Right" development of the property over a multi- year period without providing the county and the general public to have check points and milestones for continued approvals creates risks for all parties. A major Industrial development of hyperscale data center with multiple buildings should include a phased approach with interim milestones. Each interim milestone would include public hearings with the Planning Commission and the Board of Supervisors prior to approval to move into the next phase of work.

Water and Sewer

The claims by developer regarding water usage are varied. Some even claim that no chemicals will be used in the closed-loop cooling system and that they will only use potable water that is trucked in from outside the property. Given that claims are often disputable, counties should require specific, detailed specifications for the cooling systems to be used.

The ideal solution is to exclude the use of water-based cooling systems completely. Other options are available in the industry and these should be utilized for all future data centers to protect our limited water sources.

Well water should never be an option for a data center facility.

Key items that must be included in the Proffer:

- Prior to any construction activities, an independent, qualified organization shall conduct all necessary water quality studies to document baseline measures for the existing aquifer. The results shall be sent to all required oversight organizations without involvement or interference by the property owners or the data center developer. Such studies will be conducted in the same manner at least every 6 months once a building becomes operational (online) and will continue for 5 years following the last building becoming operational. Each study shall clearly delineate any impacts caused by the facility. Proffer must state that all impacts caused by the facility will be remedied without undue delay following industry leading practices.
- Prior to any construction activities, an independent, qualified organization shall conduct all necessary water quality studies to document baseline measures for the water bodies in watershed. The results shall be sent to all required oversight organizations without involvement or interference by the property owners or the data center developer. Such studies will be conducted in the same manner at least every 6 months once a building becomes operational (online) and will continue until the last building becoming operational. Each study shall clearly delineate any impacts caused by the facility. Proffer must state that all impacts caused by the facility will be remedied without undue delay following industry leading practices.
- The Proffer must include provisions that offer protections for each of the possible cooling systems that may be used. For example, some cooling systems are chemical based so what are the storage, maintenance, and leakage/spill requirements for such systems? Do these items meet the requirements of a M-1 zoning district?
- Some cooling systems recycle the same biocide treated water until it cannot be reused and then it needs to be purged and replaced. The Proffer should describe how this potential closed loop system would be purged and chemicals prevented from entering the water supply via evaporation, spills/leaks, drain fields, retention pond, etc.

- Property owner shall provide water study results every 6 months. The independent water study shall assess the health of both the well water aquifer and the adjacent watershed.

Generators

Highest quality generators with low emissions ratings (e.g., T4 generators) should be required by all counties. Only T4 generators provide the emission controls required; T4 "compatible", "comparable", and the like are not sufficient in their emission control capabilities and should not be considered as acceptable.

Generators require significant amounts of diesel fuel and Diesel Exhaust Fluid (DEF) to be stored onsite (e.g., 350,000 to 450,000 gallons per 100 MW data center). As such, large and numerous storage tank locations as well as associated piping should be fully disclosed along with designs and operational procedures to protect from polluting nearby water sources, wetlands, and neighboring properties.

There be a full commitment by the developer/operator that future technology improvements will be adopted as they become available in the future. For example, should generator technology improve beyond the Tier 4 standards, such generators shall be installed within two (2) years of commercial availability; regardless of existing installations (i.e., replacement is required).



The following must be added to the Proffer with regard to on-site generators:

- No generators nor diesel fuel and Diesel Exhaust Fluid (DEF) storage tanks shall be located within any buffers or setbacks
- All storage tank locations and associated piping for diesel fuel and Diesel Exhaust Fluid (DEF) treatments shall be documented in application plans and be approved during pre-construction activities as well as after site preparations but prior to installation.
- The property shall be developed to include protections against leaks and spills including, but not limited to, tank containment structures and excavated berms.
- Should generator technology improve such that Tier 4 standards are improved and implemented in available generators, such generators shall be installed within two (2) years of commercial availability; regardless of existing installations (i.e., replacement is required).

Data Centers Are Not Employment Centers

Amending a Comprehensive Plan land use designation to Employment Center establishes expectations of meaningful employment density. However, modern hyperscale data centers do not function as employment centers once construction is complete.

Data centers typically have few full-time employees relative to the size of the campus or property. Many hyperscale facilities are designed to operate with minimal onsite staff, focusing personnel on repairing, replacing, and upgrading IT equipment rather than continuous monitoring. Such monitoring and some system management functions can be performed via Advanced DCIM (Data Center Infrastructure Management) systems which reduce the need for on-site staff, particularly in modern, large-scale facilities.

Using industry standard staffing approaches, for a 10 building, 1GW data center complex, it is estimated that 145-185 full time, locally employed, staff members are needed to operate a fully operational data center facility. Additional staff for executive management, human resources, finance, etc. are excluded as they are considered off-site employees. The staffing model assumes the following:

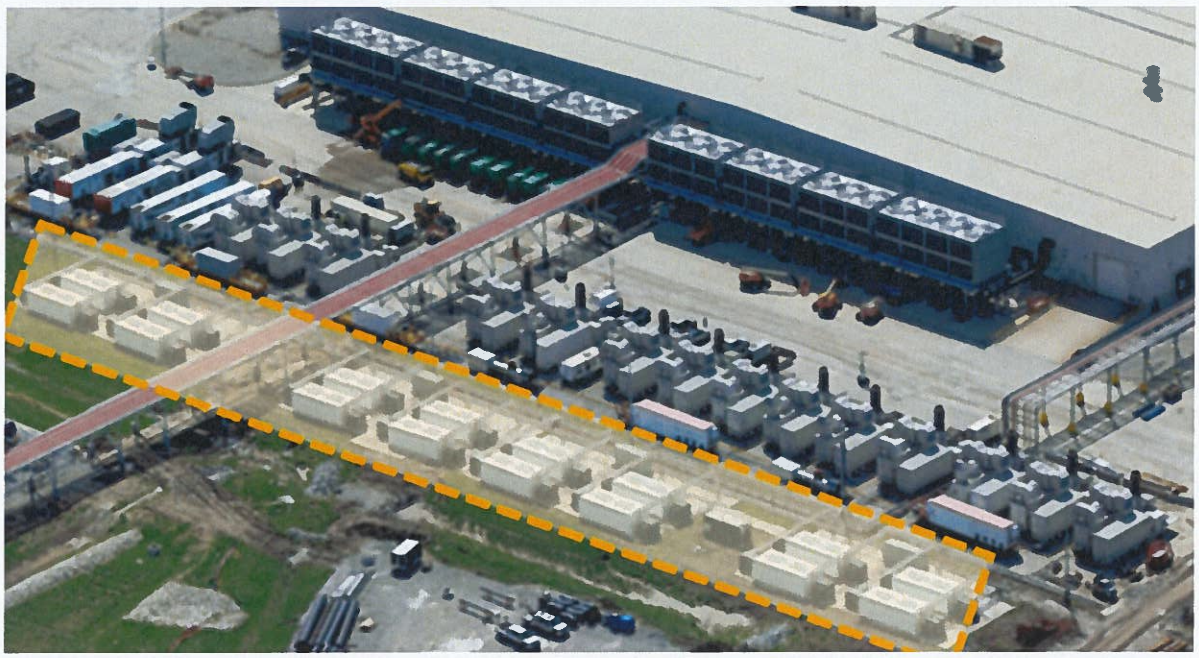
- 4 to 5 technicians per shift onsite per 100MW building – 12-15 in total for 24x7 operations per building
- 3 to 5 onsite for management and lead engineering covering all buildings – 9-15 for 24x7 operations
- 15 to 25 for onsite facilities management and maintenance – total for 24x7 operations
- Note this estimate excludes contractors that may be brought onsite periodically for specific tasks or projects since there is a reasonable likelihood that these individuals may reside outside the county.

As an example, a land developer for a 460-acre property claimed that their conceptual data center facility of nine (9) 100 MW data center buildings would require 450 people. While this number exaggerates the likely staffing requirements by over double, even this claim only equates to a hiring density of 0.27 to 0.33 people per acre. Nationally and regionally, for "employment centers" and "light/limited industrial", the range is 8 to 15 employees per acre. As such, any amendment to a Comprehensive Plan to "Employment Center" for the purpose of allowing a hyperscale data center does not meet the true definition of an Employment Center.

Battery Energy Storage Systems (BESS) Create Major Industrial Accident Risks

It is estimated that ten (10) lithium-ion Battery Energy Storage System (BESS) will be installed in each data center buildings of 100MW. Each BESS typically fits into standard 20-foot or 40-foot shipping containers. Imagine 10 of them as part of each of the data center buildings. Where are they placed on the Conceptual Map provided by the developer? Does the BESS placement properly account for the need to protect the Federal Wetlands that exist on the property?

Are the BESS of this size with the risks they carry part of what constitutes a "Limited Industrial" district and therefore, the should the applications be denied?



A major risk introduced by large scale BESS, is a thermal runaway in a data center. Such an event poses severe, immediate risks to surrounding communities, including intense, hard-to-extinguish fires, explosions, and the release of toxic gases like hydrogen fluoride. These incidents can cause significant air quality degradation, require evacuations, contaminate soil and groundwater, and cause long-term environmental hazards.

Thermal runaway in a lithium-ion battery is an uncontrollable, self-accelerating chain reaction where internal heat generation rapidly increases, leading to extreme temperatures, venting of flammable gases, smoke, fire, and potentially explosion. Thermal runaway fires can exceed 1,000°C (1,832°F).

It's a serious failure mode characterized by a violent release of stored chemical energy, making safe handling and proper charging crucial for preventing such dangerous events.

Air Quality Management Proffer Additions

Hyperscale data centers are full-scale heavy industrial operations that generate air quality issues and risks:

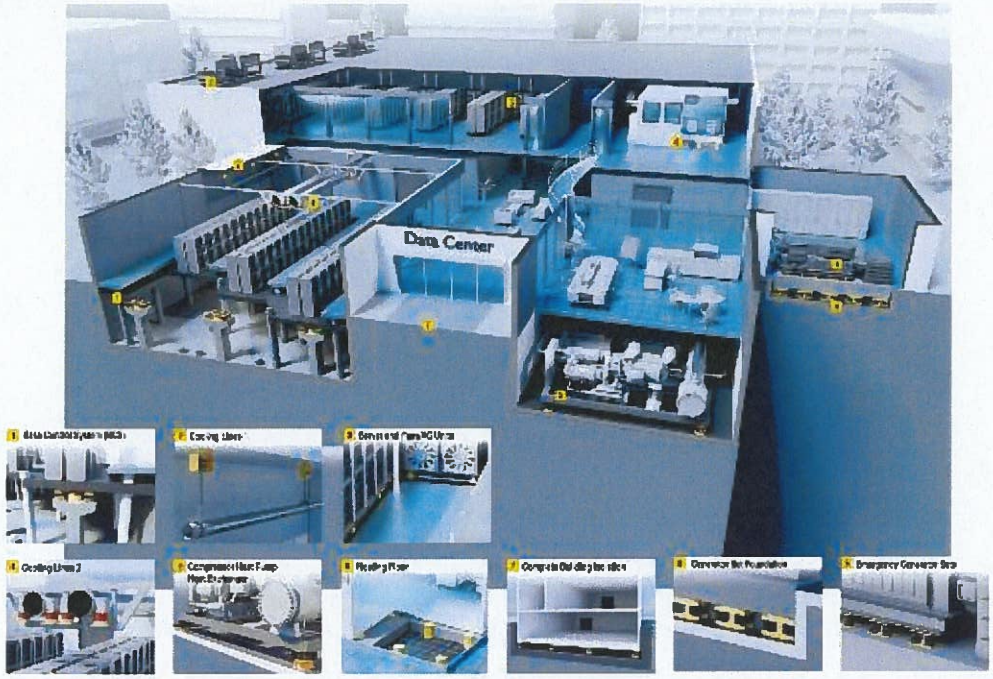
- Will the county require a baseline study by an independent, qualified organization as well as a commitment to regular monitoring of air quality starting before the project as well as the long-term commitment beyond the 10-year construction to monitor for clean air?
- Will the county require rapid remediation and future attenuation mechanisms be implemented should it rise above agreed limits to protect health of children and vulnerable populations?

Seismic Activity Protections

The proposed data center location in a region known to experience seismic activity (e.g., the 2011 Mineral 5.8 magnitude earthquake and more recently the 2.1 in 2024 and 2.8 in 2025). Since hyperscale data centers are full sized, major industrial facility, these risks should be addressed to mitigate health and safety risks to the surrounding communities. Since there are no provisions for such mitigation included in the Proffer, it is recommended that the county decline to approve the proposals since they

have not properly addressed internal construction requirements (e.g., include items such that building structures are designed and built to mitigate the risk of damage, fire, hazardous smoke, leaks, and spills due to seismic activity).

Again, the fact that such protections are necessary is further evidence that such a proposed data center facility does not belong in a "Limited Industrial (M-1)" district.



Property Security

For *Facility Security Services*, a single site security contractor will enable streamlined communications and actions in events when first responders are deployed to the site.

- Should the data center operator should be held accountable for contracting for site security services with a single service provider.
- Further, should it be required that buildings each have independent security capabilities such as separate fencing, should the county address the need for a single coordinating organization for first responder access.

For Terrorism Threat Controls, protections against terrorist attacks, foreign and domestic, may need to be accounted for as part of any data center.

- Physical security will likely need to be hardened to address such attacks
- In addition, digital protections are required to mitigate the risk of cyber-attacks that could be used to cause equipment to overheat resulting in fires and related hazardous conditions.

Governance – Tax Revenue Guarantees

The county should protect itself from unrealizable promised tax revenues by addressing questions such as:

- Will the promises of major tax revenues coming to the county be realized or will the ultimate data center developer/operator gain tax incentives, tax credits, or other subsidies that are not currently known or contemplated?
    - In Virginia, the Virginia Data Center Retail Sales and Use Tax (DCRSUT) Exemption applies to county-level taxes by exempting qualifying data center equipment from both state and local sales and use taxes on purchases or leases of hardware, software, and cooling systems. It applies directly to local sales taxes, reducing the tax burden on qualifying businesses.
    - How will the county monitor the replacement of equipment? The usable life of high-end processors is relatively short. If the initial set of processors are replaced in two years, then significant tax revenue may be left on the table. How does depreciation work into the tax revenue computations?
- Will some tax revenues be subsumed by infrastructure and services costs that otherwise not have incurred if the data center was not built (e.g., roads, equipment for first responders, first responder salary increases and training costs, etc.)?

Governance – Fire and Emergency Response

Tax revenues may or may not be sufficient to compensate the county for the new fire and other first responder equipment, facilities, and personnel needed to handle the data center industrial complex. It is essential that the county secures compensation for the entire scope of all needs and NOT simply take a lump sum of cash. The cash offered may not meet the actual costs incurred.

- Will the county mandate monthly reporting by developer/operator to county of all fire and emergency incidents that occur within any facility on property beyond those incidents requiring first responder services?
- Should the county require the operator to work with county to monitor fire/EMS calls generated before/during/after each building completion as criteria for approving additional construction phases?
- How should the county define the responsibility for 100% reimbursement for cost burdens related to emergency and first responder services including initial equipment purchases, equipment maintenance/repair, personnel acquisition/employment/training?

Governance – Electricity Access Regulations

Should the county have the ability to regulate how much electricity the data center may use during outage events in the county? Without such controls, other businesses and residents will suffer while the data center is able to conduct business as usual. Some grid operators, like **PJM Interconnection** here in Virginia, have proposed either requiring or encouraging data centers to stop using it when there is a risk of blackouts, either by powering down or switching to backup electricity supplies.

WSJ 1/7/2026: With data centers' rising power demands straining parts of the U.S. grid, operators are asking tech companies to make accommodations until new transmission lines and power plants are built to meet demand.

The WSJ also reports that **Southwest Power Pool,** which operates part of the grid stretching from the Texas Panhandle to North Dakota, plans to begin offering data-center operators the option of "conditional" service, allowing them to connect to the grid faster with the understanding that they might get cut off when supplies tighten.

Governance – Non-Disclosure Agreements (NDAs)

For transparency and good will, should the county somehow explicitly state that county supervisors and planning commission will NOT be required or allowed to sign NDAs for this project or related activities and development projects?

Separately, for each data center project in the county, should the officers and board members of the property sellers, developers, owners, and data center operators be required to sign statements that they will fully disclose all and any potential conflicts of interest they have with the then current members of the Board of Supervisors, Planning Commission, and any other county executive?

Transparency for the approval of massive data center projects has been an issue nationally. Proffer statements such as this may protect the county and its residents from concerns and risks associated with potential transparency concerns and conflicts of interest.

Governance – Contingency Planning for Abandonment

Should the county address the removal of structures and materials as well as remediation of the property if the proposed data center facilities are not completed or are otherwise abandoned, regardless of cause (e.g., requirements and bonds)?

There are technology visionaries who are anticipating the eventual downsizing of the current data centers as the AI functionality shifts from centralized processing to a distributed model where AI functionality is segmented into smaller computing resources mitigating the need for large, power hungry hyperscale data centers. This may occur while the data center facility is under development. What happens to the region if this occurs?

Should data centers become obsolete, the county may need a way to address full removal of toxic elements (tanks, computer equipment, fire suppression systems, etc.). Will these costs and remediation efforts by paid for by the property owner if the building is vacated?

Biernot, Gretchen W.

From:	Holly Manke <hmanke@yahoo.com>
Sent:	Monday, March 2, 2026 10:18 AM
To:	Davis, Sean M.; Stoneman, Jeff S.; Floyd, Danielle G.; Herzberg, F. Michael; Prichard, Faye O.; Dibble, Susan P.; Hudson, Ryan M.; McGhee, Jr, Fredric I.; Leadbetter, Larry A; Iverson, Edmonia P.; Abbott, Alan C.; Heizer, Brett; Martin, William E.; Parker IV, Clifton L.; Planning; Biernot, Gretchen W.
Subject:	Mountain Road Technology Park
Attachments:	first question about 33.pdf; 33 plan started Aug 2023.pdf

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May 5, 2023 Tract emails the Economic Director, Turner

"Hope you are well. I was looking at the Willson land behind the Marchetti land and noticed their year long effort to get that 151 acres rezoned to residential the seems to have come to a head in March of this year. The Hanover website errors when clicking into see what happened at the March meeting. Do you know what the outcome was for that project?"

May 8, 2023, Turner responds

"I hadn't heard officially so I called over to Planning and got the scoop. The property was denied rezoning at the March meeting, so unless something changes it is a done deal that it won't be developed for that use. While chatting with planning I did get some information about the landowner and am going to make a few calls to see if I can get a phone number. All I have now is a mailing address."

This was the beginning of the 33 Mountain Road Technology Park. Not in the Comprehensive Plan. No 33 Gateway Small Area plan even on the horizon. This is where the planning started.

Time passes and the FOIA does not provide the communications because of the NDA signed in May 2023 between Tract and Hanover County… but on

August 25th, 2023 Tract emails Turner

"Can you please facilitate a follow up meeting with Supervisor Dibble regarding a potential project in her district? Feels appropriate to me for you to set that up, rather than me reaching out directly. Also, this is clearly a discussion about future business deals so should be confidential via the NDA we have in place with your office."

And so the plan for the Mountain Road Technology Park advances. The Comprehensive plan proposals are set, so how can this advance? Hanover creates the 33 Gateway Small Area Plan to advance Tracts desire to put a data center on Mountain Road.

We don't know everything that happens from that point in 2023 to January 2025 because, again the NDA, But we do know The survey and meetings happen in 2025, where 68% said no to Data Centers. The summary of the feedback stated

"Preferred Economic Development: Respondents indicated that the preferred economic development in the area would fall under the categories of Professional and Business Services and Tourism, Hospitality, and Recreation. They also indicated that there was a need for neighborhood-oriented sit-down restaurants, professional offices, and shopping/retail to serve area residents. Over 80% of respondents were concerned that economic development may create traffic congestion, with potential environmental impacts and noise being other significant concerns."

Of the 578 Comments less the 1% said they would accept a Data Center in spite of Turner really trying to sell it. We know this from one of the comments…

"The present area is mostly open fields plus Tyson's plant and a few small businesses. The biggest issue is traffic from Staples Mill at the county line to Stanley's Store. The Economic Director that spoke during the meeting January 30, changed my mind regarding Data Centers. We don't need a lot more traffic for that corridor and with maybe building a three lane road with turn lanes might work. With 950 acres, the data center and a pharmaceutical manufacturer will allow more green space and less roadways. I would also recommend a beige road surface to combat heat absorption. I wish that all roads would reflect heat instead of making ground hotter.

And SOMEHOW all the comments and responses from the community turned into Recommended Industrial Uses • Light Industrial • Clean Manufacturing • Data Centers

On February 27,2026 The Planning Director emailed,

"If there were any concerns with the process or recommendations surrounding the small area plan, there was multiple opportunities during the process for those to be brought to the attention of staff, the Planning Commission, or the Board of Supervisors."

People spoke up during the process and trusted Hanover to make a plan based on those concerns. When you trust the process, you don't follow up to make sure what everyone said they wanted would be done, you trust it will. Well, clearly that did not happen and look where we are now… With a developer using the Gateway plan they influenced because the land they wanted needed to have a way to change from A1 to M1.

The people now see and know how this process in Hanover has been tainted by this developer. No one wanted a Data Center on 33 and Winns Church except the Developer and then Hanover County set out to make it happen while keeping and continuing to keep the people of Hanover in the Dark because of the NDA the County Administrator, Mr. Budesky signed that is still in effect. The Stakeholders of Hanover, the people, deserve to know how many other rural areas of Hanover Land have been promised to this Developer? Oh that's right, you can't say because of the current NDA.

I will end with Proverbs 20 Verse 17 since we are in Lent.
Stolen bread tastes sweet, but it turns to gravel in the mouth.

Sincerely,

Holly Manke
South Anna

Please make sure this is included in the record for the Planning Commission meeting.

"Don't be afraid to go where you've never gone and do what you've never done, because both are necessary to have what you've never had and be who you've never been." - The Universe

Biernot, Gretchen W.

From: Stepp-Davis, Makayla L.
Sent: Monday, March 2, 2026 8:40 AM
To: Biernot, Gretchen W.
Subject: Fw: Route 33 data center

Thank you,

Makayla Stepp-Davis
Planning Technician II
Planning Department
(804) 365-6362
Hanover County

From: Br <williambrandonhey@gmail.com>
Sent: Friday, February 27, 2026 8:29 PM
To: Planning <planning@hanovercounty.gov>; Herzberg, F. Michael <fmherzberg@hanovercounty.gov>; Davis, Sean M. <smdavis@hanovercounty.gov>; Prichard, Faye O. <foprichard@hanovercounty.gov>; Stoneman, Jeff S. <JSStoneman@hanovercounty.gov>; Floyd, Danielle G. <DGFloyd@hanovercounty.gov>; Hudson, Ryan M. <RMHudson@hanovercounty.gov>; Dibble, Susan P. <spdibble@hanovercounty.gov>; Martin, William E. <WEMartin@hanovercounty.gov>; Parker IV, Clifton L. <CLParker@hanovercounty.gov>; McGhee, Jr, Fredric I. <fimcghee@hanovercounty.gov>; Iverson, Edmonia P. <epiverson@hanovercounty.gov>; Leadbetter, Larry A <laleadbetter@hanovercounty.gov>; Heizer, Brett <BHeizer@hanovercounty.gov>; Abbott, Alan C. <acabbott@hanovercounty.gov>
Subject: Route 33 data center

CAUTION: This email originated from outside your organization. Exercise caution when opening attachments or clicking links, especially from unknown senders.
Hello Hanover Planning Commission and Board of Supervisors,

I am writing to you regarding the recent deferral of the route 33 data center along with data centers in the county in general.

After watching the PC meeting online, as I was unable to make the meeting, I wanted to address some of your comments and concerns along with some of my concerns.

I spoke on Wednesday, February 25th at the citizen session of the BOS meeting, but was unable to address all of my concerns as I wanted to be respectful of everyone's time at the meeting.

Tax revenue - I have included a few news articles on data centers and the associated tax revenue they say they provide. These facilities are part of a multiple billion dollar industry, yet we provide many tax credits. Multiple states are already feeling the burden of these tax advantages.

https://goodjobsfirst.org/virginia-tax-revenue-losses-to-data-centers-soar-to-1-6-billion-for-fy25/

I also have a quote from Buddy Rizer from Loudon county regarding the taxes generated from these data centers.

> "But these numbers are unprecedented and even a bit concerning, to the point that county staff is recommending a reduction to the general personal property tax rate, the shift of some tax revenue to one-time needs or the establishment of a separate tax for just data center computer equipment, "with specific consideration to the over-reliance of the County on this single revenue," per the staff report.
>
> The challenge being, computer taxes can just as easily be lost as they are gained. If Virginia were to end its lucrative data center tax incentives, or Loudoun were to take some action that drives data center developers away, or other locations became more desirable — the occupants could move their equipment elsewhere fairly easily.
>
> "The data center industry is growing rapidly but is also dynamic, with advances in technology driving equipment replacement every few years," Loudoun staff wrote. "The majority of the investment is in the equipment rather than the physical buildings. While Loudoun has become a premier location for data centers, as fiber becomes more abundant and more communities understand the significant tax advantages, there are more location opportunities for data centers to choose for future investment cycles."
>
> The ever-present threat of a data center exodus, even if unlikely, is one reason why Loudoun's Department of Economic Development has prioritized the diversification of the county's revenue base, said Buddy Rizer, the agency's director."

Source:
https://netchoice.org/jaw-dropping-numbers-loudouns-data-center-tax-revenue-could-top-real-estate-taxes-in-just-a-few-years/

What happens to Hanover county when a new county, or state offers higher tax incentives and these data centers close up shop and we are left with a large empty building with no redevelopment opportunity? Under the 2026 Hanover county budget plan for economic plan it states:

"Encourage strategic business investments that will support a diversified local economy, attract new capital investment and facilitate the creation of new jobs to enhance the quality of life for residents and provide a diverse and stable tax base for the County."
With the unknown taxes these data centers produce along with the unknown technology advancements, data centers do not fit into this definition.
We have to look at this as a long term investment. When you look at the first computer, the size wouldn't even fit into most residential houses. Now in the current technology world we live in, we have computers that fit in our pocket. You can now read this email anywhere due to the portability of technology on a phone. What happens when technology makes these data centers obsolete in a few years and the industry no longer needs the facilities? The tax revenue is majority coming from the equipment inside the

Biernot, Gretchen W.

From: Stepp-Davis, Makayla L.
Sent: Friday, February 27, 2026 4:02 PM
To: Biernot, Gretchen W.
Subject: Fw: Request for Detailed Responses – U.S. Route 33 EDZ Data Center Proposal

Thank you,
Makayla Stepp-Davis
Planning Technician II
Planning Department
(804) 365-6362
Hanover County

From: Am <amyherzing@gmail.com>
Sent: Friday, February 27, 2026 3:51 PM
To: Herzberg, F. Michael <fmherzberg@hanovercounty.gov>; Davis, Sean M. <smdavis@hanovercounty.gov>; Prichard, Faye O. <foprichard@hanovercounty.gov>; Stoneman, Jeff S. <JSStoneman@hanovercounty.gov>; Floyd, Danielle G. <DGFloyd@hanovercounty.gov>; Hudson, Ryan M. <RMHudson@hanovercounty.gov>; Dibble, Susan P. <spdibble@hanovercounty.gov>; Martin, William E. <WEMartin@hanovercounty.gov>; Parker IV, Clifton L. <CLParker@hanovercounty.gov>; McGhee, Jr, Fredric I. <fimcghee@hanovercounty.gov>; Iverson, Edmonia P. <epiverson@hanovercounty.gov>; Leadbetter, Larry A <laleadbetter@hanovercounty.gov>; Heizer, Brett <BHeizer@hanovercounty.gov>; Abbott, Alan C. <acabbott@hanovercounty.gov>; Planning <planning@hanovercounty.gov>
Subject: Request for Detailed Responses – U.S. Route 33 EDZ Data Center Proposal

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Dear Members of the Planning Commission and Board of Supervisors,

Following last week's PC meeting regarding the Mountain Road project deferral, I respectfully request that the Commission, BOS, and staff answer the following questions from Tract before advancing this proposal in the U.S. Route 33 Gateway Economic Development Zone (EDZ).

The adopted EDZ goal is to generate high-quality jobs and economic opportunity while minimizing negative impacts and preserving Hanover's rural character. The following questions go directly to whether this proposal satisfies that mandate.

Transparency:
Has any Hanover County employee, Planning Commissioner, or Board of Supervisors member signed a non-disclosure agreement (NDA) with Tract or any affiliated party related to this application? If so, how does that impact public transparency in this land use decision?

Job Creation – Binding Guarantees:

If this project is justified under the EDZ goal of generating "high-quality jobs," will there be a legally binding operating agreement requiring a minimum number of full-time, on-site employees per building?

Local Hiring:
Of the projected permanent employees, how many are expected to be local hires (within the Richmond MSA)?

Enforcement:
Will there be enforceable penalties if employment targets are not met, including financial penalties or revocation of approval? Without enforceable guarantees, how does this project satisfy the EDZ job creation objective?

Comprehensive Plan Consistency:
How does a 24/7 industrial-scale data center campus align with the EDZ framework's directive to preserve Hanover's rural "look and feel" and minimize negative impacts on surrounding communities?

Visual & Rural Character Impacts:
How do multiple large-scale data halls, substations, transmission infrastructure, and generator yards maintain the rural character residents value?

Water Usage – Updated Figures:
What are the updated projected peak and annual water usage numbers at full build-out? Have those numbers changed since initial submission?

Water Protections:
Will maximum water usage limits be incorporated into a binding operating agreement to prevent overuse of Hanover County utilities? What are the enforceable drought-stage reductions?

Electrical Demand:
What is the projected megawatt demand at full build-out of this campus?

Ratepayer Impact:
In a recent rate filing with the Virginia State Corporation Commission, Dominion Energy requested rate increases citing growing demand and the need for grid upgrades as key drivers. How does adding a 900-megawatt campus protect Hanover residents from rising electricity costs? What assurances exist that residential ratepayers will not subsidize grid upgrades required for this facility?

Timeline Accountability:
Is the County on track to receive tax revenues when originally projected in the 2024 application of the Hickory Hill project? If not, what is the revised timeline?

Revenue Comparison:
If the Hickory Hill project is projected to generate $1.78 billion over 20 years (approximately $89 million annually), why not allow that project to demonstrate performance before approving an additional large-scale campus? What is the fiscal urgency?

The EDZ framework was designed to balance economic growth with preservation of community character and infrastructure stability. Approval requires findings that the project maximizes economic

benefit while minimizing negative impacts.

After the Hickory Hill approval, Supervisor Faye Prichard spoke thoughtfully about the responsibility to weigh what comes next. For our Hanover citizens, this moment calls for careful restraint.

For Hanover and for the citizens you represent, it is time to say:

ONE AND DONE.

Thank you for your time, your service, and your careful consideration of these questions.

Sincerely,
Amy Hey
Ashland district

Biernot, Gretchen W.

From: Stepp-Davis, Makayla L.
Sent: Friday, February 27, 2026 2:25 PM
To: Biernot, Gretchen W.
Subject: Fw: Mountain Road Tech Park Request for Follow-Up Information

Thank you,

Makayla Stepp-Davis
Planning Technician II
Planning Department
(804) 365-6362
Hanover County

From: Shannon Todd <shannontodd26@gmail.com>
Sent: Friday, February 27, 2026 12:41 PM
To: Planning <planning@hanovercounty.gov>
Subject: Mountain Road Tech Park Request for Follow-Up Information

CAUTION: This email originated from outside your organization. Exercise caution when opening attachments or clicking links, especially from unknown senders.
Good afternoon Members of the Hanover Planning Commission,

I am a Hanover County resident writing regarding the proposed Mountain Road Technology Park being developed by Tract along Mountain Road. I respectfully request that the Commission obtain and make publicly available detailed information from the applicant regarding all projected emissions and pollution from this project.

Specifically, I am requesting that Tract be required to provide, in writing:

-A list of all particulate and pollutants that will be emitted from the air from backup generators, cooling equipment, and any other on-site machines, including, but not limited to, fine particulate matter (PM2.5), coarse particulate matter (PM10), nitrogen oxides (NOx), sulfur dioxide (SO2), carbon monoxide (CO), volatile organic compounds (VOCs), greenhouse gases (carbon dioxide, methane), and any hazardous air pollutants, along with the expected emission rates and concentrations under normal operation, testing, and emergency use.

-Identification of any chemicals, refrigerants, oils, fuels, and treatment agents used in generators, cooling systems, or other equipment that could pose a risk to air, surface water, ground water, or soil, including, but not limited to, diesel fuel, lubricating oils, ethylene glycol, or propylene glycol (coolants),

industrial cleaning agents, PFAS-containing products, and refrigerants such has HFCs, along with the quantities, storage methods, spill-prevention and containment plans, and procedures for handling leaks or releases.

-Any anticipated noise and light emittance levels, both daytime and nighttime, including generator testing schedules, cooling equipment noise, substation noise and on-site lighting design (intensity, direction, and hours of operation) that may impact nearby homes, including, but not limited to, constant hums, frequency vibrations, potential skyline glow, glare, and light trespass onto adjacent properties.

-Any available health and quality-of-life impact assessments or modeling that describe how these emissions and impacts could affect nearby residents over time, including, but not limited to, potential effects on respiratory health (Asthma, COPD, and other lung conditions), cardiovascular health, sleep disruption from noise and light, outdoor use and enjoyment or property, and long-term exposure to chemical or particulate pollution.

-A clear explanation of how these projected emissions and impacts compare to applicable local, state, and federal standards, including, but not limited to, National Ambient Air Quality Standards (NAAQS), Virginia Department of Environmental Quality permits, and any relevant water-quality and noise standards, and what enforceable mitigation measures (besides 500' buffer) and monitoring will be in place to protect surrounding neighborhoods.

As a nearby resident, I need this level of detail to understand how this project may affect my family's air quality, water resources, nighttime environment, and overall quality of life, both at full build-out and during construction and routing testing.

Please include this request in the public record for the Mountain Road Technology Park case and advise how and when the requested information will be made available to the public prior to any final votes or approvals. Thank you for your attention to these concerns and for your service to Hanover County residents.

Sincerely,
Shannon Todd
Mechanicsville District

Biernot, Gretchen W.

From: amy Mendelson Cheeley <amendesign2@gmail.com>
Sent: Friday, February 27, 2026 3:34 PM
To: Hunter, Jo Ann M.; ctyadm; Biernot, Gretchen W.; Leadbetter, Larry A; Prichard, Faye O.; Hudson, Ryan M.; Davis, Sean M.; Dibble, Susan P.; Stoneman, Jeff S.; Floyd, Danielle G.; Walter, Dennis A.; Herzberg, F. Michael; Pompei, Andrew J.; McGhee, Jr, Fredric I.
Subject: To the Board of Supervisors and the Residents of Hanover County: 2-25-26

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Good afternoon all.

Per Sean Davis's request, I'm sending in my comments since he mistakenly had us give our speeches under 3 minutes instead of the allotted 5 minutes that we signed up for online. (And, the 5 minutes written on the agenda packet that was distributed.)

I would like to again formerly request an investigation into the Comprehensive Land Use Planning Process and adoption. And, recommend denial for the 33 Tract Data Center. (See Below.)

Please let me know the next steps in the investigation process.

A press release is forthcoming.

Have a great weekend.
Amy

To the Board of Supervisors and the Residents of Hanover County:

We are often told to "trust the process." We are told that the comp plan and our zoning laws are the bedrock of a fair playing field.

But today, we are looking at a project—the proposed Tract 33 data center—that didn't just win the game;
it built the stadium,
wrote the rulebook,
and hired the referees.

Perhaps most egregious is that In 2024, months before the small area plan process kickoff was announced, before the plan was developed,

and a full year before an application was even formally filed,
Tract placed a massive down payment with Dominion Energy.

Before a single small area plan meeting, survey, or public hearing was held, Tract placed a huge $750,000 dollar down payment to Dominion Energy for a substation dubbed “Flamingo.”

Then they got to work and they embedded themselves in the small area plan process. This ensured for Tract that the area land use plan was etched into existence for one purpose —their own.

This isn't community planning; it’s corporate greed disguised as public policy. It disenfranchised the entirety of county citizens and created an illegitimate Hanover County Comprehensive Land use plan.

The developers would have you believe they are part of the process.
They point to the small area plan part of the comprehensive land use plan - to the 33 Gateway project and say,

"Look how perfectly our facility fits the landscape."

But let’s be honest about why it fits so perfectly: They drew the lines.

They will tell you this is "tailor-made" for our community's economic future.

But when a suit is tailor-made, it only fits one person.
It doesn't fit the community,
it doesn’t fit small business owners, and It doesn't fit the residents who told you they want a diverse community gateway, not a massive 24 hour, 7 day a week - polluting industrial complex.

Most importantly, It doesn't fit the spirit of transparent, community development.

By limiting things that the community asked for: restaurants, shops, and other commercial areas, Tract effectively "rigged" the site.

They created a reality where no other business—could move in, because a developer had already bought the air out of the room.

You cannot claim to follow a process when you have already bought the outcome. It is time we stop allowing developers to "tailor" our public resources to fit their private pockets.

Someone or some group is responsible for making a mockery of our comprehensive land use plan process.

I'm here tonight to call for the abandonment of the 33 Gateway small area plan due to this shocking revelatory discovery.

I would like to formally request a complete investigation into the legitimacy of the Hanover County comp plan's 33 Gateway small area plan? Where did they get the buy in? Who vouched for them to Dominion?
What really happened during "the process."

While an investigation is ongoing, I want to formally request the denial of ValcoHanover, et al/Tract's REZ, CUP, SPE

This isn't simply bad planning and bad business for Hanover County.
This could forever taint the process and those responsible.

The citizens of South Anna and all of Hanover deserve better.

Over here you can see enlargements of the agreements between Tract and Dominion Energy. They had meetings in late summer 2024. Which is presumably when they put their $750,000 down payment in?

Tract must have gotten another endorsement for the project from somewhere as engineering studies have been done and a year later in the fall of 2025 it appears as though Dominion has created a way to get power to the "Flamingo" substations by way of Elmont and Short Pump.

Why is there so much confidence in a plan that had not even had a public hearing at that time?

This is not a decision that all parties make without having some assurance from decision makers at the county level.

This is all unconscionable. There's shame in all of this. What a sad time for Hanover County.

If anyone needs copies of any of this, or wants to talk about it, please see me in the back.

Thank you for your time.

Amy Mendelson
Amendesign2@gmail.com
804-339-7266

MOUNTAIN ROAD TECHNOLOGY PARK

Questions for Tract

1) Stated in the Staff report the average daily water usage is 600,000 g. What is the estimated peak usage?

Tract has modeled average daily water usage and peak usage; we have discussed water usage with the Department of Public Utilities, and they have confirmed that the public system can accommodate requested usage. Tract will work with the County to determine water storage solutions to accommodate peak usage, which has been estimated at 2MGDgallons/day. This peak usage assumes the worst conditions and models show peak usage would be infrequent, even during peak heat in summer months. On site storage will be used to help accommodate peak usage on those days.

2) What is the anticipated timeframe of the phasing of the buildout for sites 1A, 2A, 2B, 3A.

The buildout is tied to the energization schedule from Dominion Energy. Building construction would be anticipated to begin 12 – 18 months prior to expected energization, so buildings are ready to take power when it is delivered. Currently, Dominion has confirmed that initial energization is planned for Q4 2029, with additional power to the two other substations occurring after that. Tract anticipates estimated buildout to be completed by 2035.

3) Does the TIA reflect a phasing buildout or total buildout?

The TIA analyzed both peak construction conditions and peak operating conditions once the data center is operation. The construction scenario reflects a phased build-out assuming 2 data center buildings are constructed at a time until the buildout is completed . The second scenario reflects the total buildout of the data center campus consisting of 900 Megawatts. The TIA

assumes a total of 350 employees arriving in shifts throughout the day, and is phased to align with the projected buildout schedule.

4) Do you have a commitment from Dominion Energy to provide service to each of the 4 building sites and what are the anticipated time frames?

Yes, Dominion Energy has a commitment to provide service to the four building sites The anticipated time to provide service to the first building site is Q4 2029, so the initial building would be constructed on the site prior to this date. More detailed phasing will be developed as the project progresses.

5) What is the estimated # of Employees at buildout, # of shifts per day and does the TIA account for multiple shifts?

The estimated number of employees at buildout is approximately 350 employees. The TIA did account for multiple shifts throughout the day based on the Bowman study distributions.

6) Mrs. Dibble and I visited a Data site under construction in Louisa and the Substation main structural steel poles were the rust brown color which blended in well with the surrounding buffer. We prefer that color coordination with the substations including the lower screening fence around the equipment.

Our power team has confirmed that this option is possible through Dominion Energy. The Tract team will communicate that this is the preference for this site as coordination with Dominion continues through the process.

7) What is the layout of the main substation at Winns Church road. There is a property owner right beside that substation and I am very concerned with viewshed and noise.

The final substation layout will be designed by Dominion Energy during the detailed engineering and site-planning phase, but it must comply with all County setback, height, noise, and screening standards. Dominion typically

uses standardized substation designs that are engineered for safety and to minimize visual and sound impacts on neighboring properties.
We recognize the adjacent property owner's concerns regarding viewshed and noise. The current concept plan places the substation toward the southern and western portions of the site to maximize distance from nearby homes, and that approach will continue through final design. The project is expected to include enhanced screening such as berms, evergreen landscaping, and opaque fencing to reduce visibility.

8) There is very limited information of the Revenue from the Project in the Staff report. Will Tract be giving a detailed and realistic expectation of the actual Revenue from the project?

Tract has estimates for expected property tax, business personal property tax, and sales tax revenues; we will share a high level overview for each of these during the presentation. The project has been modeled with the following assumptions:

- Expected energization in 2030 (Q4 2029)
- Property tax revenues begin being generated in 2030, with additional buildings and personal property coming on-line in subsequent years, and buildout occurring by 2035
- Personal property tax revenue being refreshed every six years
- Personal property depreciating based on the depreciation schedule for Hanover County
- Current sales tax exemption sunsetting in 2035
- Revenues modeled for 20 years (2025 – 2044)
- Revenue expected for specific budget categories based on FY2026 budget splits (see table below, Source: Hanover County FY 26 Adopted Budget)

Expenditure Categories	Allocation of FY26 Budget	Funding Groups (EY analysis)	
School Operations	34%	School	40%
School Capital Improvements Program (CIP)	2%		
School Debt Service	3%		
School Nutrition	1%		
General Fund - Public Safety & Judicial	14%	General Fund	29%
General Fund - Human Services	6%		
General Fund - Other	9%		
County Capital Improvements Program (CIP)	16%	County CIP	16%
County Debt Service	1%	Other	8%
Self-Insurance	7%		
Public Utilities	7%	Public Utilities	7%

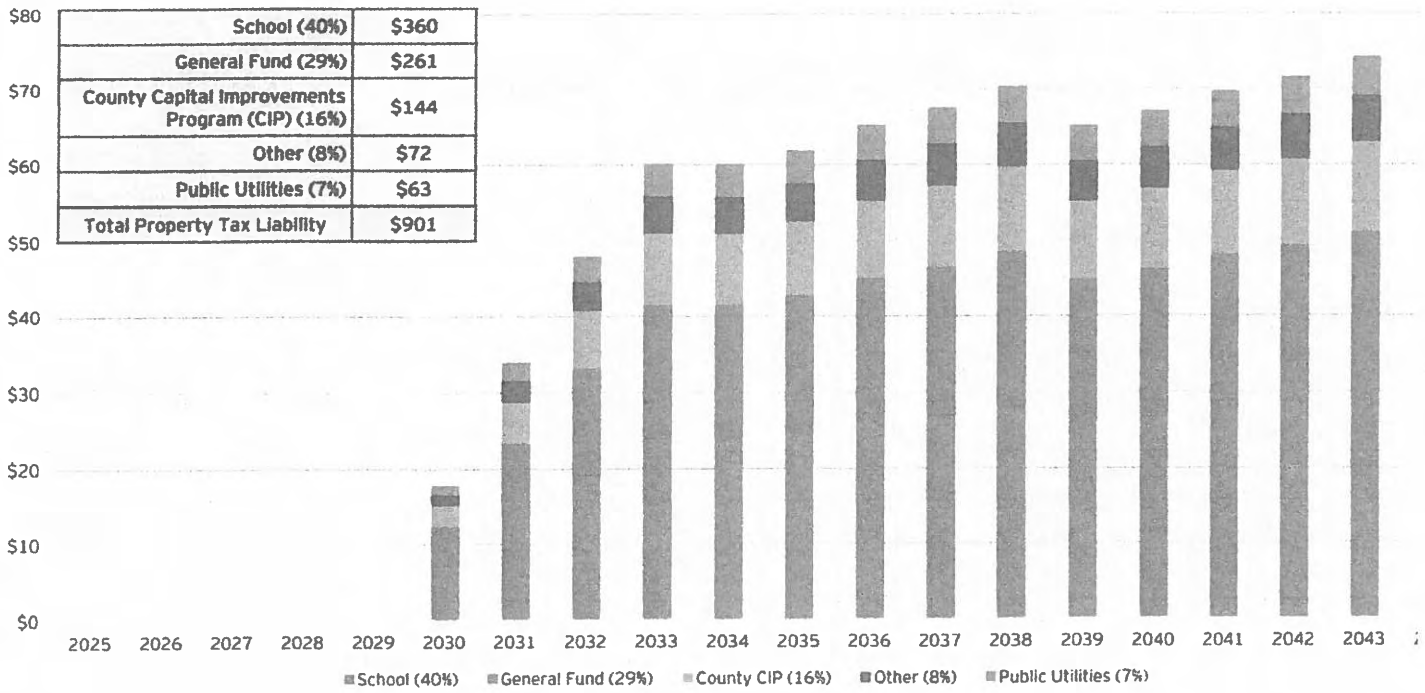
Source: Hanover County FY26 Adopted Budget

See projected revenues below

Estimated 20-yr property tax projections

Values below are expressed in millions of USD

School (40%)	$360
General Fund (29%)	$261
County Capital Improvements Program (CIP) (16%)	$144
Other (8%)	$72
Public Utilities (7%)	$63
Total Property Tax Liability	$901



property, not the facility. When these facilities are no longer needed because technology has advanced and the size isn't needed, we are stuck with a vacant property just as we are now with Tysons.

2026 FY budget shows $782M in tax revenue. Earlier the BOS approved the Beaverdam/Hickory Hill data center, which is proposing $1.78 billion in tax revenue over a 20 year span. This revenue broken down over those 20 years equals $89M a year, which is over 11% of the current annual budget. If the Hickory Hill data center is generating that much in tax revenue, why do we need additional data centers in our county when we have other sources of tax revenue to hit our budget?

Faye Prichard is on record mentioning in the Hickory Hill proposal back in March of 2024 she did not want to see our county have multiple data centers similar to Loudoun county.

Water consumption - During the meeting the proposed plan stated the data center will not use wells but instead use the county water. The demand this facility will put on our water supply (which we get from both Henrico and Richmond) can put our county and local residents at risk. From the town meeting in October of 2025, the water usage was brought into question and the applicant's response was more information regarding water usage will be added to their website. In reviewing the website there is still no data on the potential water usage. If we look at similar size data centers and their water consumption we would be looking at the equivalent of adding over 2000 residential homes with 4 residents in each property (8,000 residents). According to the 2024 census report Hanover county has 115K residents, this would be the equivalent of a 7% increase in population for the county in just this one geographical area.

Power usage - The applicant also points to no potential increase in our electrical bills. The applicant's website states the reason our electricity rate keeps going up is due to: "These factors include the cost of replacing aging infrastructure, hardening the grid to withstand increasingly severe weather, inflation, fluctuating fuel prices, and the renewable energy transition. *Additional demand from electric vehicles and home electrification is also increasing overall system costs pressure.*"

How is adding a few electrical vehicles and home electrification additions raising our electric bill but adding a 428 acre data center not going to increase our electrical bill?

Stage 4 generator - In the report the proposal discussed using "stage 4" generators. I am unfamiliar with this generator, but my concern would be not only the hours of operation, noise and environmental impacts but also what happens when these systems require more power to run their faster systems? As we are well aware technology is not slowing down unfortunately. The demands these operating systems will generate will only increase, requiring larger, stronger and potentially greater environmental and noise pollution. The generator that is proposed today can change 3 times by the time the building is built with the exponential growth technology and AI are driving. In many articles the software is changing out every three years in these facilities, with that changeover how do we know that these generators we are sold will be up to the task of the new systems?

Traffic - From this meeting many constituents and planning commissioners were worried about the impact on traffic. Currently turning onto route 33 from Winns Church road is very difficult even without the impact of this facility. Not only once completed will this be a problem, but during the construction the traffic will cause many frustrations, backups, and accidents.

Balloon test - For the balloon test I feel this needs to be advertised prior in both the county website, social media, ideally in the newspaper and local news channels. I also believe that 8:00 a.m. is late, most impacted residents and locals will already be at work at this time. Currently at the date of this email the visibility at 6:40 a.m. is bright enough to see any balloons that are deployed. Deploying the balloons at an earlier time gives residents time to witness the impact of this facility in the area. Ideally a banner of significant size (larger than the zoning signs) would be put up on route 33 to alert residents of the upcoming balloon date(s). Per the Hanover county website a prior balloon test was run in January at 6:00a.m for the Rock Quarry Project. **Why does the data center proposal request a time when residents will be at work and not by the site?**

https://www.hanovercounty.gov/DocumentCenter/View/14971/Visual-Impact-Assessment---20260115-1?bidId=

Consequences/fines - During the construction of this proposed facility and operation what consequences/fines are in place for not meeting the standards? There have been multiple cases where data centers "sell" one idea of the facility to then change the plans. Noise pollution, generators running for extended hours, excessive water usage, excessive power usage, etc. What fines will Hanover county implement along with how they will routinely check for these parameters being met? This situation reminds me of a professional athlete that makes $35 million a year and is fined $50k for not meeting the standards of their contract. It is a small drop in the bucket for the superstar and we are dealing with a multi billion dollar industry. A fee that Hanover county imposes to them for not meeting the standards will have no financial impact on their operation once they are up and running. What happens if the proposed developer sells off the operation of the facility?

As a county we need to have pride and not just take the first proposal that comes in for the former Tyson facility. I understand we need tax revenue and that this area is zoned for economic development, but we do not need to approve the first proposal that comes across. The long term tax revenue, true local employment and county development will be benefited by waiting for a retail development instead of accepting the first proposal that comes across, i.e. a data center.

Thank you for your time regarding this matter. I hope this email, the outpouring of community response to denying these data centers, and research shows why Hanover county is not the location for these data centers. Let's do the right thing and deny this request as you did with the Hunting Hawk location.

As I respected your time and service to our community in the citizen outreach by staying within the time restriction, I ask you please respond to this email stating you have read the email. I have devoted personal time, research, and time away from my young family to voice not only my concerns but my families as well.

Sincerely,
Brandon Hey
Ashland resident, lifelong Hanover county resident, father to two little girls.

Biernot, Gretchen W.

From: Stepp-Davis, Makayla L.
Sent: Friday, February 27, 2026 4:26 PM
To: Biernot, Gretchen W.
Subject: Fw: Environmental Impacts of Data Centers on Water Resources — Evidence for Consideration

Thank you,
Makayla Stepp-Davis
Planning Technician II
Planning Department
(804) 365-6362
Hanover County

From: Am <amyherzing@gmail.com>
Sent: Friday, February 27, 2026 4:18 PM
To: Parker IV, Clifton L. <CLParker@hanovercounty.gov>
Cc: Planning <planning@hanovercounty.gov>; Herzberg, F. Michael <fmherzberg@hanovercounty.gov>; Davis, Sean M. <smdavis@hanovercounty.gov>; Prichard, Faye O. <foprichard@hanovercounty.gov>; Stoneman, Jeff S. <JSStoneman@hanovercounty.gov>; Floyd, Danielle G. <DGFloyd@hanovercounty.gov>; Hudson, Ryan M. <RMHudson@hanovercounty.gov>; Dibble, Susan P. <spdibble@hanovercounty.gov>; Martin, William E. <WEMartin@hanovercounty.gov>; McGhee, Jr, Fredric I. <fimcghee@hanovercounty.gov>; Iverson, Edmonia P. <epiverson@hanovercounty.gov>; Leadbetter, Larry A <laleadbetter@hanovercounty.gov>; Heizer, Brett <BHeizer@hanovercounty.gov>; Abbott, Alan C. <acabbott@hanovercounty.gov>
Subject: Environmental Impacts of Data Centers on Water Resources — Evidence for Consideration

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Commissioner Parker,

During last week's PC meeting, I heard you mention that you do not believe data centers have environmental side effects. I appreciate your willingness to discuss the issue openly, and I am writing to share **recent documented evidence** showing that large data centers *do* have measurable impacts on local water and environmental resources which merit serious review in our planning discussions.

1. Proposed Google project in Botetourt County, VA
According to *WSLS 10*, public documents show that the proposed Google data center campus could require **between 2 million and 8 million gallons of drinking water per day** from the Carvins Cove Reservoir, a primary water source for this region. Officials have acknowledged that such demand could accelerate the need for a new water source decades earlier than planned, raising concerns about long-term sustainability and infrastructure strain.

Proposed Google project

2. Existing Google data center water use in Oklahoma
Local reporting from *The Frontier* confirmed that a major Google facility in Pryor used **more than 1.1 billion gallons**

of water in a single year for cooling, and discharged **about 253 million gallons of wastewater** back into the Neosho River basin. These are not isolated figures but illustrate real industry-scale water withdrawals from regional sources.

Oklahoma

3. National water resource strain from the AI/data center boom
An analysis in *Forbes* highlights that widespread data center construction driven by AI and cloud computing is colliding with local water systems. In the U.S., data centers consumed an estimated **17 billion gallons of water in 2023**, with projections of even higher use in coming years. A single large data center can require **hundreds of thousands of gallons of water per day** for cooling, and these demands often outpace traditional municipal planning frameworks.

Water resources

4. Case study on pollution concerns in Oregon farmland
Investigative reporting linked data center infrastructure in rural *Morrow County, Oregon* with worsening water quality concerns. In that region, where groundwater was already contaminated with nitrates, the massive volumes of water withdrawn for data center cooling were associated with **increased concentrations of nitrates in drinking water** — levels in some wells far above federal safety limits — which some experts and residents believe is contributing to health issues in the community.

Oregon pollution

Taken together, these articles show **three key patterns**:

- **Very large and ongoing water withdrawals** for cooling that compete with residential, agricultural, and environmental needs.
- **Infrastructure consequences**, including accelerated demand for new supply sources and associated costs.
- **Real local issues with water quality and long-term sustainability**, particularly where underlying resource stress already exists.

These impacts **are not hypothetical** - they have been documented across multiple states and confirmed by water authorities, investigative journalists, and independent experts. The evidence is clear: large-scale data centers place significant and lasting strain on local water resources and infrastructure.

Given this record, I respectfully urge the Commission to **reject this project** and to oppose future data center proposals that threaten Hanover's long-term water security and sustainability. Our responsibility is to protect the health, resources, and quality of life of Hanover's residents — not to accommodate corporate expansion at the expense of our community.

Now is the time to say no, to **put Hanover first**, and to safeguard our water and future generations before irreversible commitments are made.

Thank you for your time and consideration.

Sincerely,
Amy Hey
Hanover resident

CC : the other PC members, planning staff, and BOS members for full transparency and discussion.

Biernot, Gretchen W.

From: Holly Manke <hmanke@yahoo.com>
Sent: Wednesday, February 25, 2026 7:31 PM
To: Davis, Sean M.; Herzberg, F. Michael; Prichard, Faye O.; Stoneman, Jeff S.; Dibble, Susan P.; Hudson, Ryan M.; Floyd, Danielle G.; Planning; Biernot, Gretchen W.; McGhee, Jr, Fredric I.; Leadbetter, Larry A; Martin, William E.; Iverson, Edmonia P.; Heizer, Brett; Abbott, Alan C.; Parker IV, Clifton L.
Subject: Mountain Road Technology Park
Attachments: HPSCAN_20260224135017579_2026-02-24_135523106 (1).pdf

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Attached is a copy of the time line of Tract and the County that I presented today during the Board of Supervisors Meeting. The perception is that this was planned long before the 33 Gateway Area Plan was even started and public input was ignored when this plan was created. I hope that is not the case and implore you to set the record straight. Deny the Mountain Road Technology Park. It does not fit the character of the area and creates a traffic nightmare for at least the next 8 years.

Sincerely

Holly Manke
South Anna
Friends of Hanover

"Don't be afraid to go where you've never gone and do what you've never done, because both are necessary to have what you've never had and be who you've never been." - The Universe

Holly Manke, South Anna, Friends of Hanover

I will start with Mark chapter 4 Verse 22 since we are in Lent.

For Everything that is hidden will eventually be brought into the open, and every secret will be brought to light.

This time line I am going to read has been collected from Board meeting minutes, the SCC, documents collected from Dominion, and the eTRAKiT system.

April 5th 2023, Hanover holds a public meeting on proposed tax rates for 2023 and creates the Data Center Equipment rate of 45 cents per $100.00 as opposed to all other businesses, which pay a rate of $3.57 per $100.00. It was approved April 12, 2023.

There are no applications on file in Hanover County for any Data Centers, but the county created a tax rate specifically for Data Centers.

The Comprehensive Plan update was approved September 2023.

Tract submitted the first application for a data center September 2023.

The Planning commission approves the Tract requested zoning changes and conditional use permit for the Hanover Technology Park, also known as Hickory Hill, in January 2024.

Tract held its needs meeting with Dominion in January 2024, for a substation for a Data Center at Hickory Hill, named by Dominion as Slayden.

The Tract, Hanover Technology Park was approved March 2024.

Tract registers Valco Hanover County, LLC with the State Corporation Commission for qualification in Virginia on April 19th, 2024.

September 13, 2024 Tract holds a second needs meeting with Dominion for Rt. 33, a Substation for a data center, that Dominion names Flamingo.

The 33 Gateway Small Area planning process begins in January 2025 with public events.

The 33 Gateway Small Area Plan is approved August 27th, 2025.

Tract submits an application for Mountain Road Technology Park, also known as Rt. 33 / Winns Church, September 26, 2025.

At the Planning Commission meeting February 19, 2026, Tract acknowledges that they are 2 years behind on Hanover Technology Park revenue promised to Hanover County starting in 2028. Tract states the energization is now expected the 2nd Quarter of 2029. It also announces energization for Mountain Road Technology Park expected the 4th Quarter of 2029.

HANOVER COUNTY, VIRGINIA
NOTICE OF PUBLIC HEARING AND
PROPOSED 2023 TAX RATES

Notice is hereby given that the Hanover County Board of Supervisors will hold a Public Hearing on Wednesday, April 5, 2023, at 6:00 p.m. in the Board Room of the Hanover County Administration Building, 7516 County Complex Road, Hanover, Virginia, on the following:

2023 Proposed Tax Rates

	2022	2023
Real Property	$0.81	$0.81
Personal Property	$3.57	$3.57
Qualifying Volunteer Fire and Rescue Vehicle Personal Property	$1.78	$1.78
Qualifying Disabled Veterans Vehicle Personal Property	$0.00	$0.00
Machinery and Tools	$3.57	$3.57
Aircraft Personal Property	$0.50	$0.50
Merchants' Capital	$1.90	$1.90
Mobile Home	$0.81	$0.81
Generating Equipment	$0.81	$0.81
Data Center Equipment	$3.57	$0.45

All levies above are per one hundred dollars of assessed valuation.

Hanover County Recycling Service District

The County of Hanover, Virginia, proposes to levy a tax of $46.00 per residential lot located in the Hanover County Recycling Service District for the purpose of funding recycling services. The fee for the prior year was $41.00.

Atlee Manor Sewer Service District

The County of Hanover, Virginia, proposes to levy a tax of $780.00 per residential lot located in the Atlee Manor Sewer Service District for the purpose of funding sewer system improvements.

The Hanover County Board of Supervisors is not obligated to adopt the proposed tax rates but may adopt rates up to the amounts listed as it deems necessary.

Related information is available for inspection online and at the Office of the County Administrator, 7516 County Complex Road, Hanover, VA, (804) 365-6005, any regular working day between 8:30 a.m. and 5:00 p.m. The options available for providing written or oral statements are posted on the County website: www.hanovercounty.gov.

John A. Budesky, County Administrator

Customer Load Request

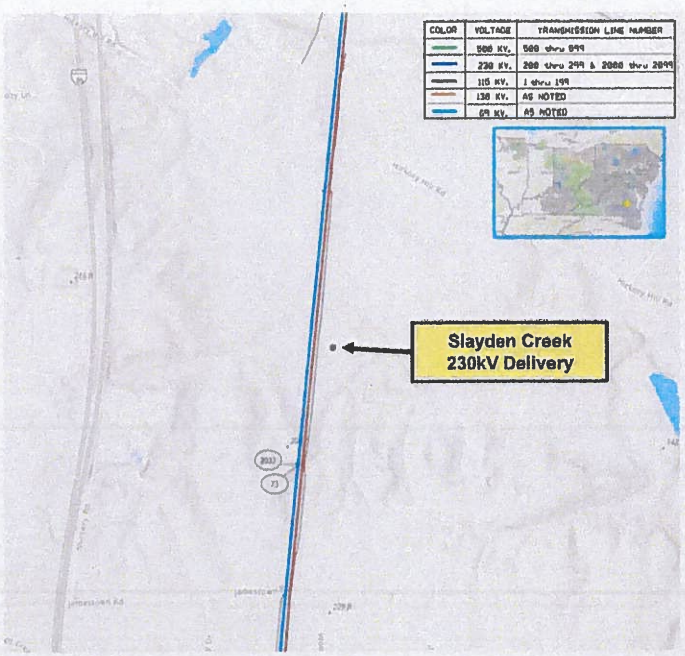
eed Number: DOM-2024-0004
rocess Stage: Need Meeting 02/06/2024
roject Driver: Customer Service

pecific Assumption References:

ustomer load request will be evaluated per Dominion's Facility Interconnection equirements Document and Dominion's Transmission Planning Criteria.

roblem Statement:

EV has submitted a DP request for a new 230 kV delivery point (Slayden reek) to serve a data center customer in Ashland VA with a total load in ‹cess of 100 MW. Requested in-service date is 1/01/2026.



itial In-Service Load	Projected 2028 Load
ummer: 0 MW /inter: 5 MW	Summer: 210 MW Winter: 150 MW

Dominion Energy

Entity Information

Entity Information

Entity Name:	VALCO Hanover County, LLC	Entity ID:	11685911
Entity Type:	Limited Liability Company	Entity Status:	**Active**
Series LLC:	No	Reason for Status:	Active
Formation Date:	11/18/2022	Status Date:	04/19/2024
VA Qualification Date:	04/19/2024	Period of Duration:	Perpetual
Industry Code:	0 - General	Annual Report Due Date:	N/A
Jurisdiction:	DE	Charter Fee:	N/A
Registration Fee Due Date:	Not Required		

Registered Agent Information

RA Type:	Entity	Locality:	RICHMOND CITY
RA Qualification:	BUSINESS ENTITY THAT IS AUTHORIZED TO TRANSACT BUSINESS IN VIRGINIA		
Name:	CORPORATION SERVICE COMPANY	Registered Office Address:	100 Shockoe Slip Fl 2, Richmond, VA, 23219 - 4100, USA

Principal Office Address

Address: 3300 E 1st Ave Ste 600, Denver, CO, 80206 - 5809, USA

Filing History | RA History | Name History | Previous Registrations | Protected Series | Garnishment Designees | Image Request

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Customer Load Request

ɔed Number: DOM-2024-0058

·ocess Stage: Need Meeting 9/13/2024

·oject Driver: Customer Service

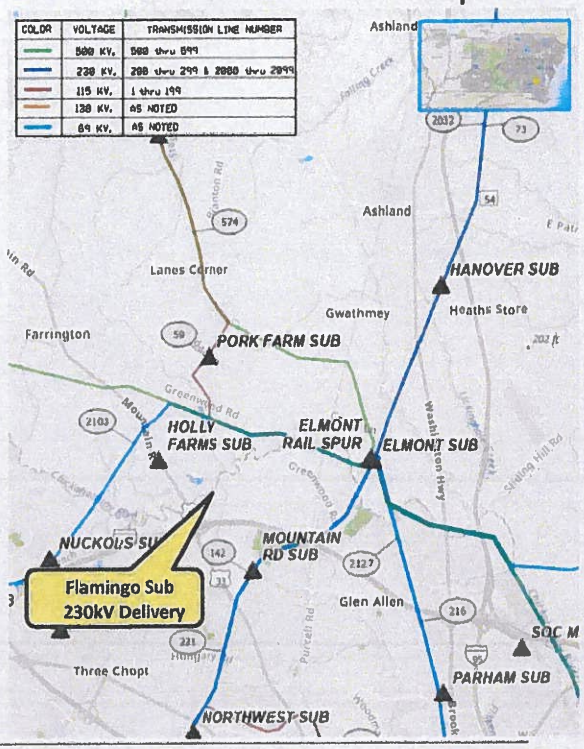
ɔecific Assumption References:

ɹstomer load request will be evaluated per Dominion's Facility Interconnection ɘquirements Document and Dominion's Transmission Planning Criteria.

·oblem Statement:

ΞV Distribution has submitted a DP Request for a new substation (Flamingo) to serve data center in Hanover County with a total load in excess of 100MW. The requested ·service date is 01/01/2029.

ɪtial In-Service Load	Projected 2029 Load
ɪmmer: 47.0 MW ɪnter: 42.5 MW	Summer: 47.0 MW Winter: 42.5 MW



Pompei, Andrew J.

From: Erin Fosdick <erin.fosdick@tract.com>
Sent: Thursday, February 5, 2026 4:12 PM
To: Pompei, Andrew J.
Cc: Brandon Smith; Aric Crable; Trey Thomasson
Subject: Fw: [EXTERNAL]Tract Projects - Batch Numbers / Target Energization Dates

Follow Up Flag: Follow up
Flag Status: Flagged

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Andrew,

Please see the information below to demonstrate Tract's position in Dominion's queue. Let me know if this is adequate. Thanks!

tract

Erin Fosdick, AICP
Director of Entitlements
erin.fosdick@tract.com
720-552-9172
www.tract.com

From: Brandon Smith <brandon.smith@tract.com>
Sent: Thursday, February 5, 2026 12:34 PM
To: Erin Fosdick <erin.fosdick@tract.com>; Trey Thomasson <Trey.Thomasson@tract.com>; Aric Crable <aric.crable@tract.com>
Subject: FW: [EXTERNAL]Tract Projects - Batch Numbers / Target Energization Dates

Erin,

Dominion said we can use the communication below as verification of our queue position.

Regards,

tract

Brandon Smith
Vice President – Utility Development
brandon.smith@tract.com
434.409.1915
www.tract.com

From: andrew.b.molinares@dominionenergy.com <andrew.b.molinares@dominionenergy.com>
Sent: Thursday, February 5, 2026 2:02 PM
To: Brandon Smith <brandon.smith@tract.com>
Cc: dominic.j.minor@dominionenergy.com; jacob.r.wiseman@dominionenergy.com
Subject: [EXTERNAL]Tract Projects - Batch Numbers / Target Energization Dates

Good afternoon,

Below are the current batch positions/ target energization dates for project sites in Hanover.

Marchetti
Flamingo DP – Q4 2029
Pelican DP – Batch 13

Hanover Technology Park
Slayden Creek DP – Q2 2029
Falling Creek DP – Batch 1

Thank you,

Andrew B. Molinares
Key Account Manager
Customer Service & Strategic Partnerships

Dominion Energy Virginia
3072 Centreville Rd. Herndon, VA 20171
C: 571-485-0887
To Report An Outage Call: 866-591-0157



Dominion Energy®

Actions Speak Louder

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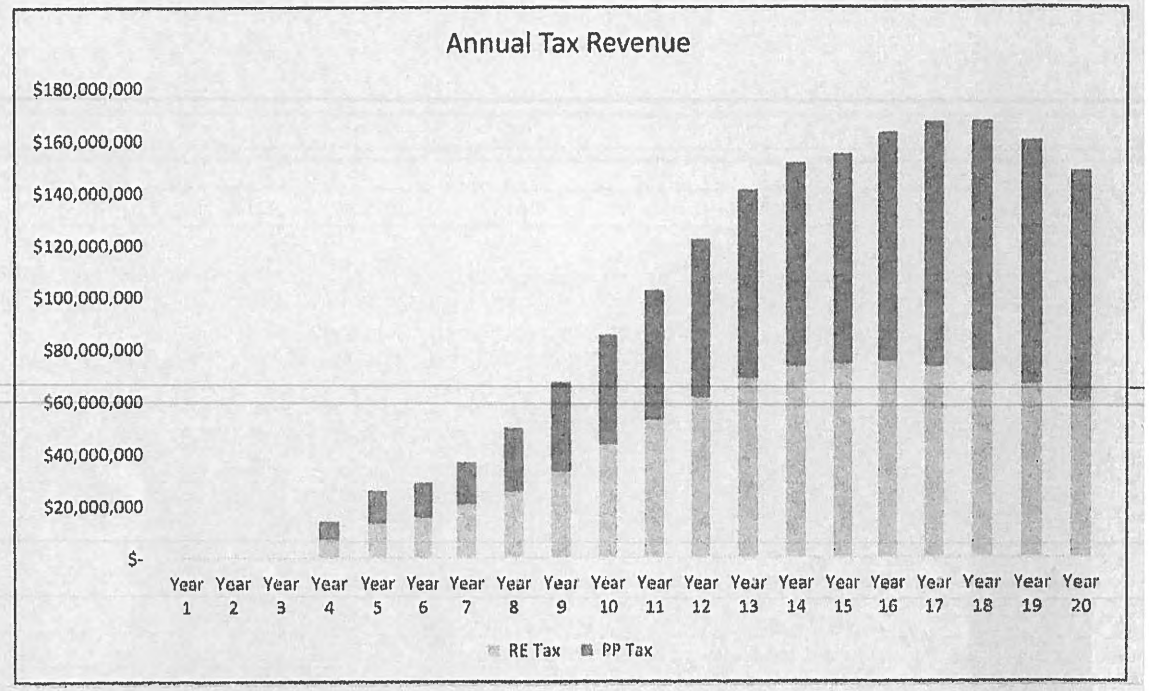
Positive Economic Impacts to Hanover County

tract

- Real Estate Tax Revenue
- Data Center Tax Revenue
- Incremental Taxes Collected
  - 2028 = $25.7M
  - 2034 = $102M
  - 2041 = $167M
- Taxes Estimated reflect full build-out of Blenheim & S. Wales properties.
- Over 20 years, an estimate of $1.78B in taxes will be collected by the County
- Well-paying jobs

Total 20 Year Estimated Tax Receipts	**$ 1,781,393,321**
Average Annual Estimated Tax Receipts	**$ 89,069,666**
Max Annual Estimate Tax Receipts	**$ 167,130,737**

Tract has collaborated with the Hanover County Commissioner of Revenue to create a DIRECT fiscal impact estimate based on the expected timing of Real and Personal Property investments connected to this project



Biernot, Gretchen W.

From: Robert Nelson <ranelsonjr1@verizon.net>
Sent: Thursday, February 26, 2026 7:39 AM
To: Davis, Sean M.; Dibble, Susan P.; Floyd, Danielle G.; Herzberg, F. Michael; Hudson, Ryan M.; Prichard, Faye O.; Stoneman, Jeff S.
Cc: Hunter, Jo Ann M.; Biernot, Gretchen W.; Planning
Subject: Marchetti Properties, et al., REZ2025-0023 and related cases
Attachments: Tract Data Centers - Citizen Comments with Attachments, BOS 2-25-2026 Mtg..pdf

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Chairman Davis and Board Supervisors,

Consistent with the Chair's request, find attached in pdf my prepared citizen comments on Tract, along with two pages of supporting documents referenced on the second page. A shortened version of the comments was presented at last night's Board of Supervisors meeting and 10 copies of the supporting documents were distributed at the meeting.

I requested that these prepared comments with the documents be included in any staff reports and the record for the Marchetti Properties rezoning case and related CUP and SE cases.

Thank you for your consideration. Please let me know if you have any questions.

Bob Nelson, Ashland District

Good evening Chairman Davis and Board Supervisors. My name is Bob Nelson. I reside in the Ashland District.

My comments concern Tract. In March 2024, the Board approved Tract's development of a 2,400 MW data center project off Hickory Hill Road. Tract has now proposed to develop a 900 MW data center project off Mountain Road.

I'll start by discussing the 1.1 million square foot Wegmans distribution center. Wegmans had an approved site plan 1 year and 7 months after it filed its zoning application and a certificate of occupancy 2 years and 2 months later. That's development with a purpose and a mission.

By contrast, Tract filed its first construction plan application for an internal loop road in August 2025, almost two years after filing its zoning applications. The 2.5 mile loop road is essential for data center construction but remains pending.

Mr. Pompei and others have identified multiple compliance issues with Board mandated buffers and natural areas. The most outrageous was a proposed construction staging area in a buffer and resource protection area just off Hickory Hill Road. But that's not all.

Tract hasn't filed a construction management plan required by a Board proffer to ensure orderly development. Tract hasn't filed executed agreements with Dominion and Virginia Natural Gas to protect Hanover utility services during construction. Tract hasn't met a half dozen requirements for loop road approval.

In addition, sewer, water, road, and fiber optic infrastructure does not exist. Energization of the first 300 megawatt substation will not occur until the second quarter of 2029. No applications to actually construct data centers have been filed.

In March 2024, Tract told the Board that Hickory Hill data centers would be generating $25.7 million dollars in real and personal property tax revenues beginning in 2028 and $1.78 billion dollars over 20 years. Tract claimed its projections were on the "low side" and "conservative."

In fact, there will be no data centers constructed and operating at Hickory Hill in December 2027. County tax revenues from Tract data centers will be zero in 2028, 2029, and likely beyond. Tract's revenue claims for Hickory Hill have become total lies.

Tract hasn't performed, honored its proffers, or told the truth. We have corporate sloth, contempt, and deceit. Given this record, under no circumstances should its applications for the Mountain Road project be approved by the Board.

I have 10 copies of Tract's tax revenue slide and a comparison of Wegmans and Tract's performance time lines. Thank you.

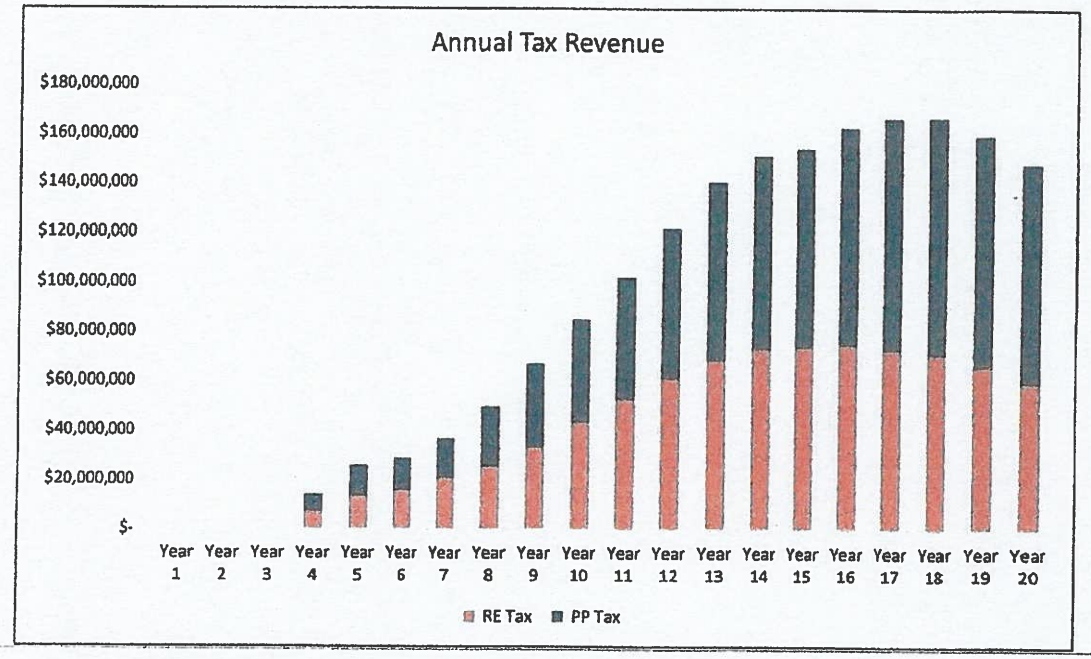
Positive Economic Impacts to Hanover County

tract

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WEGMANS DISTRIBUTION CENTER TIME LINE

Event	Date
Zoning application	December 2, 2019
Site plan application	December 20, 2019
Board of Supervisors zoning approval	May 6, 2020
Site plan approval	July 8, 2021
Certificate of occupancy (CO)	August 25, 2023
Zoning application – site plan approval	1 year, 7 months
Site plan approval – distribution center CO	2 years, 2 months
Zoning application – distribution center CO	3 years, 9 months

TRACT HICKORY HILL DATA CENTER TIME LINE

Event	Date
Zoning applications	September 5, 2023
Board of Supervisors zoning approvals	March 27, 2024
Construction plan application – loop road	August 20, 2025
Zoning applications – construction plan approval	?
Zoning applications – data center CO	?

Bob Nelson, Ashland District

Citizen comments, February 25, 2026 Board of Supervisors meeting

Biernot, Gretchen W.

From: Hunter, Jo Ann M.
Sent: Tuesday, February 24, 2026 11:28 AM
To: Biernot, Gretchen W.; Pompei, Andrew J.
Subject: FW: REZ2025-00023 and CUP2025-00016
Attachments: 2.19.26 Hanover PC re Tract2.docx

From: Mark Bruner <boxdriver@comcast.net>
Sent: Tuesday, February 24, 2026 10:55 AM
To: Martin, William E. <WEMartin@hanovercounty.gov>; Parker IV, Clifton L. <CLParker@hanovercounty.gov>; McGhee, Jr, Fredric I. <fimcghee@hanovercounty.gov>; Iverson, Edmonia P. <epiverson@hanovercounty.gov>; Leadbetter, Larry A <laleadbetter@hanovercounty.gov>; Heizer, Brett <BHeizer@hanovercounty.gov>; Abbott, Alan C. <acabbott@hanovercounty.gov>
Cc: Hunter, Jo Ann M. <JMHunter@hanovercounty.gov>; Davis, Sean M. <smdavis@hanovercounty.gov>; Stoneman, Jeff S. <JSStoneman@hanovercounty.gov>; Prichard, Faye O. <foprichard@hanovercounty.gov>; Floyd, Danielle G. <DGFloyd@hanovercounty.gov>; Herzberg, F. Michael <fmherzberg@hanovercounty.gov>; Hudson, Ryan M. <RMHudson@hanovercounty.gov>; Dibble, Susan P. <spdibble@hanovercounty.gov>
Subject: REZ2025-00023 and CUP2025-00016

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Dear Commissioners,
In follow up to my 3-minute talk at the February 19 hearing regarding the above referenced ***tract*** applications, please see the attached. I urge you to recommend denial on these applications and further, urge you and the Board of Supervisors to put in place a moratorium on all data centers in Hanover County. ***tract*** Hickory Hill is enough to substantially increase tax revenue for a generation. Also, you have no evidence that tract will be a good neighbor nor do you have evidence they can complete this massive development on time or even close to the promised time line. The citizens are not accepting of a plan to continue data center growth in Hanover. Currently both Iron Horse and ***tract*** Route 33 should be stopped dead by denial with a formal moratorium announced until more evidence is in on Hickory Hill.

I thank you for your consideration.

Mark Bruner

Good evening. My name is Mark Bruner and I live in the Beaverdam district. Thank you for the time this evening to comment on various concerns regarding this application.

I have attended all community meetings, Planning Commission hearings and Board of Supervisors sessions regarding proposed Tract - Hickory Hill and Iron Horse data centers. I have spoken in opposition to both and addressed many concerns that neighbors have. In the case of Hickory Hill, I do not feel that Hanover responsible parties listened to the citizen concerns. That plan was presented to the public on September 19, 2023, approved by the Planning commission in January 2024, and approved by the BOS March 27, 2024. It was obviously fast tracked, but we all know an NDA had been signed and discussions had been ongoing almost 2 years before the public was made aware. Not a good case for transparency. On March 27 the BOS vote was for approval, but I remember distinctly, one Supervisor said yes, but this should be the only one. With the revenue this will bring to Hanover, we will not need another. Other supervisors agreed then or in public statements since.

Iron Horse is still active although my feeling is that few if any Supervisors feel that it is a good project. Maybe because West Dulles seems to be making up their plans as they go, change their story often, and have never developed a complex as proposed. I will be at that hearing in April if it happens.

Now, as to the current application by Tract 2 if I may call it that. I guess my first statement would be "how can Hanover even consider another Tract data center complex when you have little evidence as to how the first one will go?" Are they on schedule? I think not being that not a single spade of dirt has been turned over in 2 years since approval. Do they have all their tenants under contract? If so, how many? Do they have enough to guarantee Hanover the $1.8B in taxes promised? Do they have firm "date-certain" contracts with Dominion Power for their 2400 Mega Watts of electricity needed? I think not, because Dominion does not have the juice to support it. Have you all been reading the power supply issues in Virginia, in the paper, in various studies, or maybe even Dominion's own formal policies to supply large new users. The supply of electricity will get worse, not better. Governor Spanberger and the legislature re-upped on the green energy program, even though everyone knows wind and solar cannot supply the growing needs, especially at reasonable costs. That gets worse when the President and team will no longer subsidize these losing sources of power.

I feel that a true moratorium on data centers in Hanover should be put in place until I you know how the first one goes. Make sure you work with and support Tract Hickory Hill to ensure its success and get the tax income flow started. Hanover has invested in Tract, focus on making it a good investment. Tell the applicant to concentrate on that project and get it done as promised. Defer any further applications (including Iron Horse) indefinitely. Thank you.

Biernot, Gretchen W.

From: Hunter, Jo Ann M.
Sent: Monday, February 23, 2026 4:53 PM
To: lorenthomasslp@gmail.com
Cc: Biernot, Gretchen W.; Pompei, Andrew J.
Subject: RE: Request for Economic & Infrastructure Transparency - Proposed Data Center
Attachments: 20260219 Mountain Road Tech Park Planning Commission.pptx

Loren – please find responses to your questions in red.

As a county resident, I am requesting clear economic and infrastructure projections related to the proposed data center development. Before decisions are finalized, I would appreciate public access to the following:

Projected annual water usage, especially during peak demand, drought and power outage conditions
The applicant has modeled the average daily water usage and peak usage. Average daily water usage is 600,0000 g. which can be accommodated by the current system. Peak Usage has been estimated at 2MGD gallons/day. The peak usage assumes worst conditions which would be infrequent. On site storage will be used to help accommodate peak usage.

Estimated number of permanent local jobs (separate from temporary construction positions)
Applicant has projected 300-350 direct jobs.

Full breakdown of tax incentive packages and abatements offered
None

Projected net tax revenue after incentives, including timeline to positive return
See page 17 of Tract Power Point for tax revenue information - attached

Any planned infrastructure subsidies (road expansion, grid upgrades, water/sewer expansion) and whether these costs will impact taxpayers
Independent cost-benefit analysis documentation evaluating long-term fiscal impact
None

Assessment of potential property value effects in surrounding residential areas
There was a study done by GWU that a previous data center project provided regarding property value impacts:
https://schar.gmu.edu/news/2025-11/study-home-prices-are-higher-when-house-near-data-center

Analysis of opportunity cost of land use, including comparison to alternative development models that may diversify the tax base
The Economic Development Office partnered with VA Tech on a Industry Cluster Analysis. Page 39-41 compares development models
https://www.hanovervirginia.com/wp-content/uploads/HanoverIndustryCluster_SummaryFINAL.pdf

Given the scale of this project, transparent data is essential to ensure that long-term economic benefits genuinely outweigh long-term public costs.

From: Biernot, Gretchen W. <gwbiernot@hanovercounty.gov>
Sent: Friday, February 20, 2026 5:09 PM
To: Hunter, Jo Ann M. <JMHunter@hanovercounty.gov>; Pompei, Andrew J. <AJPompei@hanovercounty.gov>
Subject: FW: Request for Economic & Infrastructure Transparency - Proposed Data Center

From: Loren Thomas <lorenthomasslp@gmail.com>
Sent: Thursday, February 19, 2026 5:37 PM
To: Planning <planning@hanovercounty.gov>
Subject: Request for Economic & Infrastructure Transparency - Proposed Data Center

CAUTION: This email originated from outside your organization. Exercise caution when opening attachments or clicking links, especially from unknown senders.

As a county resident, I am requesting clear economic and infrastructure projections related to the proposed data center development. Before decisions are finalized, I would appreciate public access to the following:

Projected annual water usage, especially during peak demand, drought and power outage conditions

Estimated number of permanent local jobs (separate from temporary construction positions)

Full breakdown of tax incentive packages and abatements offered

Projected net tax revenue after incentives, including timeline to positive return

Any planned infrastructure subsidies (road expansion, grid upgrades, water/sewer expansion) and whether these costs will impact taxpayers
Independent cost-benefit analysis documentation evaluating long-term fiscal impact

Assessment of potential property value effects in surrounding residential areas

Analysis of opportunity cost of land use, including comparison to alternative development models that may diversify the tax base

Given the scale of this project, transparent data is essential to ensure that long-term economic benefits genuinely outweigh long-term public costs.

Thank you for your time and consideration.

Loren Thomas

Biernot, Gretchen W.

From:	Holly Manke <hmanke@yahoo.com>
Sent:	Friday, February 20, 2026 9:43 AM
To:	Leadbetter, Larry A; Abbott, Alan C.; Iverson, Edmonia P.; McGhee, Jr, Fredric I.; Heizer, Brett; Martin, William E.; Parker IV, Clifton L.; Biernot, Gretchen W.; Planning
Cc:	Dibble, Susan P.; Stoneman, Jeff S.; Herzberg, F. Michael; Prichard, Faye O.; Hudson, Ryan M.; Davis, Sean M.; Floyd, Danielle G.
Subject:	Mountain Road Technology Park

CAUTION: This email originated from outside your organization. Exercise caution when opening attachments or clicking links, especially from unknown senders.

Good Morning,

Thank you so much for your thoughtful consideration last night about the Mountain Road Technology Park. I do have a few additional questions I was hoping you could obtain answers to before the next meeting March 19, 2026 and correct some misinformation I heard last night about sales taxes and types of taxes in Hanover County.

Since power is expected to available to this site Quarter 4 of 2029 and they need to start construction 18 to 24 months prior to that, shouldn't they have actual plans and not conceptional plans. I mean this should start construction by Quarter 4 on 2027 and that is the same time as the Hickory Hill Project. Since we learned Hickory Hill has been delayed already by 2 years from providing revenue and no plans have been filed for that yet either. I think these timelines will not be able to be met for revenue estimates for either sites again.

Additionally, I know that all Data Centers are Sales Tax Exempt for the State of Virginia. Sales Tax is a State of Virginia collection and not a county collection. Hanover does not receive any Sales Tax Revenue from Data Center purchases period. If you feel I am mistaken please explain this to me. Tract also said the products will be purchased out of state so no Hanover Businesses will make any money from this equipment.

The real estate tax will be generated on these properties and when buildings are finished. The building improvements will generate Revenue on the Real Estate assessment increases. The Business Tangible property is not collected until material items are purchased and every business in Hanover pays $3.57 per every $100 of property while Data Centers only pay $.045 for every $100. The County offers a very generous depreciation rate for Business Tangible property each year and only takes a percentage of the purchase price starting the year it is purchased. I am sure the Commissioner of the Revenue's office can explain it better than I do and certainly much better than Tract did.

I saw no comments from the Commissioner of the Revenue's Office about the revenues that Tract says Hanover County will receive. There were comments from their office on the Hunting Hawk proposal revenues so why not on this one? If I missed it in all the numerous pages of documents, please direct me to it.

Sincerely,

Holly Manke

South Anna

"Don't be afraid to go where you've never gone and do what you've never done, because both are necessary to have what you've never had and be who you've never been." - The Universe

Biernot, Gretchen W.

From: Stepp-Davis, Makayla L.
Sent: Friday, February 20, 2026 8:30 AM
To: Biernot, Gretchen W.
Subject: Fw: Request for Economic & Infrastructure Transparency - Proposed Data Center

Thank you,
Makayla Stepp-Davis
Planning Technician II
Planning Department
(804) 365-6362
Hanover County

From: Loren Thomas <lorenthomasslp@gmail.com>
Sent: Thursday, February 19, 2026 5:37 PM
To: Planning <planning@hanovercounty.gov>
Subject: Request for Economic & Infrastructure Transparency - Proposed Data Center

CAUTION: This email originated from outside your organization. Exercise caution when opening attachments or clicking links, especially from unknown senders.

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Estimated number of permanent local jobs (separate from temporary construction positions)

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Any planned infrastructure subsidies (road expansion, grid upgrades, water/sewer expansion) and whether these costs will impact taxpayers
Independent cost-benefit analysis documentation evaluating long-term fiscal impact

Assessment of potential property value effects in surrounding residential areas

Analysis of opportunity cost of land use, including comparison to alternative development models that may diversify the tax base

Given the scale of this project, transparent data is essential to ensure that long-term economic benefits genuinely outweigh long-term public costs.

Thank you for your time and consideration.

Loren Thomas

TIMMONS GROUP

April 12, 2019

Mr. E. Linwood Thomas IV
Director of Economic Development
Hanover County
8200 Center Path Lane, Suite E
Mechanicsville, VA 23116

Re: Preliminary Data Center Site Identification and Ranking
Hanover County, Virginia

Dear Linwood:

Thank you for the opportunity to work with Hanover County Economic Development on the Preliminary Data Center Site Identification and Ranking.

After an extensive review of the available GIS information and understanding the key components that make a site attractive to a data center user, Timmons Group is pleased to present the results of its research and evaluation. Timmons, with the help of Hanover County Economic Development and Dominion Energy, has identified six (6) site clusters within Hanover County that are recommended for data center development and have further identified three (3) site clusters that we believe are areas of high potential. All sites / site clusters are over 20 acres and are positioned to quickly obtain ample power, fiber, water, and sewer capacities to support potential data center demands. A summary matrix as well as site basemaps have been provided for each of the six (6) sites.

We recommend that Hanover County proceed with advancing Areas 2, 4 and 10 for data center development with Area 2 as the first priority. A list of more specific recommendations regarding Area 2 is included in the Executive Summary.

Thank you again for the opportunity to work with Hanover County Economic Development on this study. Should you have any questions or need any additional information, please don't hesitate to contact me at your earliest convenience.

Sincerely,

Tim Davey, PE
Principal-in-Charge

Joseph C. Hines, PE, MBA
Principal

Garland "Mac" McKenzie, PE
Sr. Project Manager

partial copy

HANOVER DATA CENTER SEARCH REPORT & MAPBOOK





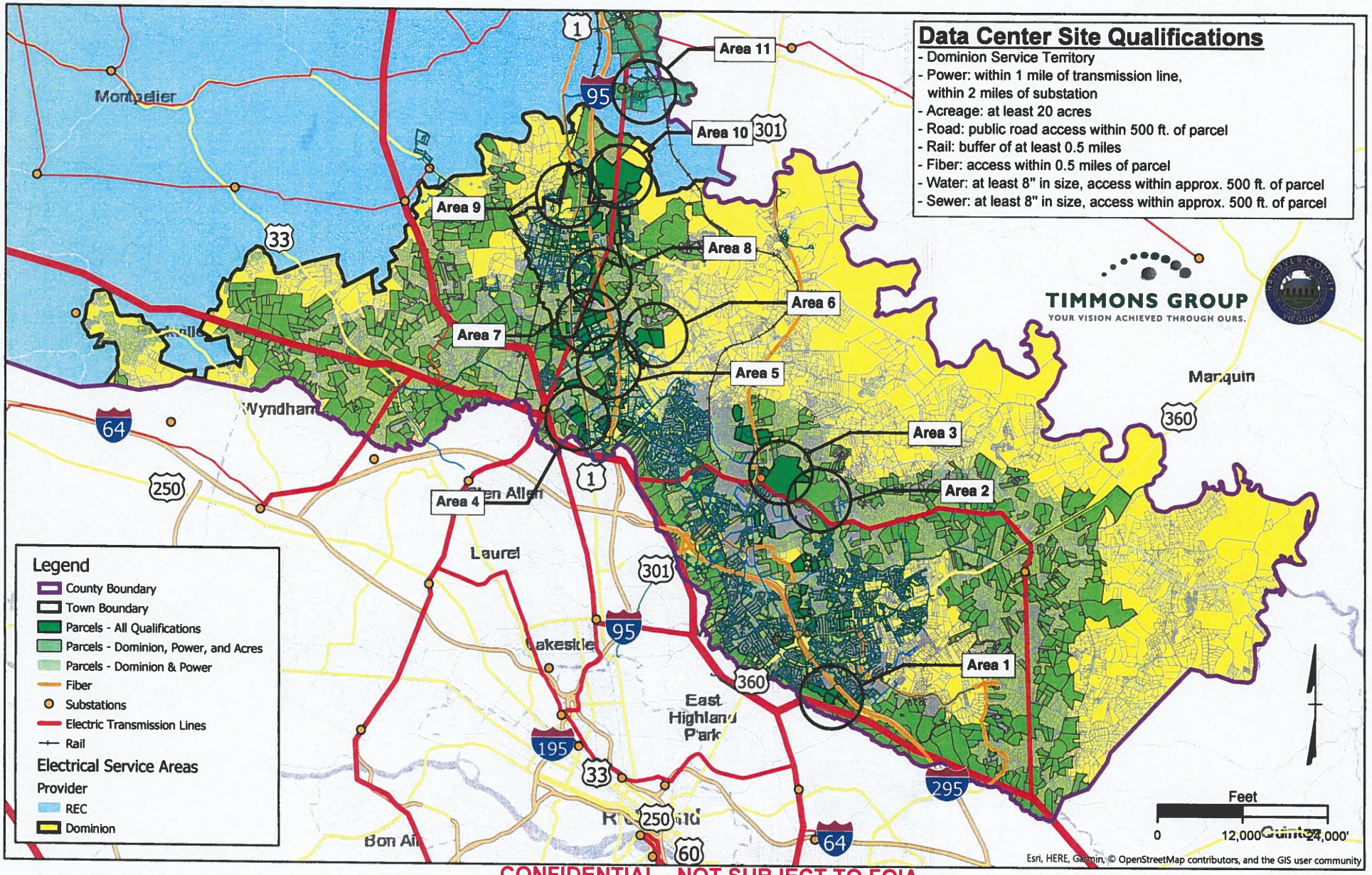
Maps & Assessment
April 2019

CONFIDENTIAL - NOT SUBJECT TO FOIA

TIMMONS GROUP
ENGINEERING | DESIGN | TECHNOLOGY

Contents

Data Center Site Assessments & Recommendations	
Cover Letter/Executive Summary	1
Top Sites Narrative	2-3
County Overview Map	4
Six Recommended Sites Spreadsheet	5
Six Recommended Sites Maps	6-17
Appendix A - Dominion Energy Supplement	
Dominion Summary	19-22
Appendix B - VCRIS Overviews	
Six Recommended Sites - VCRIS Overviews	24-29
Appendix C - Hanover County Marketed Sites	
Hanover County Marketed Sites Spreadsheet	31
Appendix D - Additional Sites	
Additional Sites Spreadsheet	33
Additional Sites Maps	34-43



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TIMMONS GROUP

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Mr. E. Linwood Thomas IV
Director of Economic Development
Hanover County
8200 Center Path Lane, Suite E
Mechanicsville, VA 23116

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Sincerely,

Tim Davey, PE
Principal-in-Charge

Joseph C. Hines, PE, MBA
Principal

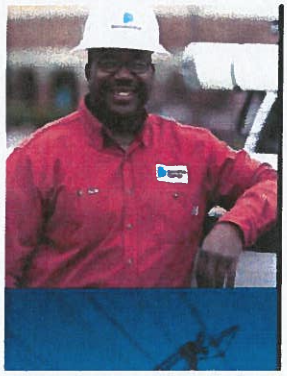
Garland "Mac" McKenzie, PE
Sr. Project Manager



Dominion Energy Supplement to Hanover Data Center Search performed by Timmons Group

April 17th 2019

Dominion Energy



Virginia's Dynamic Data Center Market

Trends and Performance

- Virginia is #1 Market in the World
- Over 13 million square feet of operational data center space with 4.5 million more under development
  - Land prices rising over $1.5 million per acre in Northern VA
  - Load growing at 100-200 MWs per year
  - In the first half of 2018, Virginia Data Centers absorbed more load than the next 9 markets combined
- Sub-Sea fiber makes Virginia a hub for international data centers: Currently 70% of the world's internet traffic routes through Virginia. Sub-sea will add additional traffic through the region: Mid Atlantic Network Access Point Launched by QTS in Henrico driving more connectivity to the region
- Less than 5% vacancy rate in Northern Virginia in 2018

2

2

Economic Impact

- Since 2009, statewide capital investment has averaged $1.6 billion/year
- In 2016 alone, data centers made $2.6 billion in capital investment and created 4,617 jobs
- Based on data from Loudoun and Prince William Counties, data centers provide a 8-to-1 benefit to cost ration which reduces taxes and provides more tax revenue for public services
- In 2016, data centers paid a state-wide average weekly wage of over $2,300 compared to the state average of $1,044 across all other private sector employers

*Source: The Economic and Fiscal Contribution that Data Centers Make to Virginia -Executive Summary: Mangum Economics

3

Site Selection Criteria

Migration out of Northern Virginia

- Sites of 100 acres or greater for Enterprise Users
- Access to abundant power, fiber, and water
  - Adjacent to 230kV transmission strongly preferred
- Favorable county tax structure for data centers (see Henrico and Chesterfield)
- Fast track permitting and entitlements
- County support

4

Area Analysis

Area 2 of Timmons Group Study (as of April 2019)

- Distribution
  - 10-20MW of distribution power available from Pearson Substation (west of site) in near term
  - Delivery voltage at 34.5kV (or secondary voltage)
  - Capacity available in 12 months or less
- Transmission
  - 230kV Transmission lines border the area
  - Dominion Energy can construct new substation to serve large loads of 100MWs or more
  - Substation timing is 18-28 months depending on regulatory and permitting constraints

*Above information based on current conditions and subject to change

5

Area Analysis

Area 4 of Timmons Group Study (as of April 2019)

- Distribution
  - 10-20MW of distribution power available from Elmont Substation (west of site) in near term
  - Delivery voltage at 34.5kV (or secondary voltage)
  - Capacity available in 12 months or less
- Transmission
  - 230kV Transmission lines +/- 0.7 miles from site
  - Dominion Energy can construct new substation to serve large loads of 100MWs or more
  - Substation timing is 18-28 months depending on regulatory and permitting constraints

*Above information based on current conditions and subject to change

6

Area Analysis

Area 10 of Timmons Group Study (as of April 2019)

- Distribution
  - 10-20MW of distribution power available from Hanover Substation (south of site) in near term
  - Delivery voltage at 34.5kV (or secondary voltage)
  - Capacity available in 12 months or less
- Transmission
  - 230kV Transmission lines adjacent to area
  - Dominion Energy can construct new substation to serve large loads of 100MWs or more
  - Substation timing is 18-28 months depending on regulatory and permitting constraints

*Above information based on current conditions and subject to change

7

Biernot, Gretchen W.

From: Stepp-Davis, Makayla L.
Sent: Thursday, February 19, 2026 3:41 PM
To: Biernot, Gretchen W.
Subject: Fw: NO to Data Centers - please add to tonight's meeting!!!!!

Thank you,

Makayla Stepp-Davis
Planning Technician II
Planning Department
(804) 365-6362
Hanover County

From: Jane Spann <janemspann@gmail.com>
Sent: Thursday, February 19, 2026 3:11 PM
To: Planning <planning@hanovercounty.gov>
Subject: Fwd: NO to Data Centers - please add to tonight's meeting!!!!!

CAUTION: This email originated from outside your organization. Exercise caution when opening attachments or clicking links, especially from unknown senders.

Please add this to the public records for tonight's meeting.

---------- Forwarded message ---------
From: **Jane Spann** <janemspann@gmail.com>
Date: Mon, Jan 12, 2026 at 12:40 PM
Subject: NO to Data Centers
To: <planning@hanovercounty.gov>, <fmherzberg@hanovercounty.gov>, <smdavis@hanovercounty.gov>, <foprichard@hanovercounty.gov>, <jsstoneman@hanovercounty.gov>, <dgfloyd@hanovercounty.gov>, <rmhudson@hanovercounty.gov>, <spdibble@hanovercounty.gov>, <wemartin@hanovercounty.gov>, <clparker@hanovercounty.gov>, <fimcghee@hanovercounty.gov>, <epiverson@hanovercounty.gov>, <laleadbetter@hanovercounty.gov>, <bheizer@hanovercounty.gov>, <acabbott@hanovercounty.gov>

Dear Members of the Hanover County Board of Supervisors and Planning Commissioners,

I respectfully urge you to oppose the proposed data center developments in Hanover County due to well-documented environmental, infrastructure, and community impacts.

Data centers are extremely water- and energy-intensive; research shows that these facilities consume massive amounts of electricity and freshwater for cooling and power, placing long-term strain on local water supplies and electrical grids. A Ceres analysis found that 32% of U.S. data

centers are already located in areas of high or extreme water stress, and that water use tied to electricity generation further exacerbates shortages shared by residents, agriculture, and businesses (

https://www.ceres.org/resources/news/water-impacts-from-data-centers-may-expose-companies-to-more-risk-than-acknowledged-a-new-analysis-shows). This data is alarming for the portions of Hanover county that rely on wells, as the data centers wells will threaten the water resources for residential and business properties of our citizens. Our friends and family will be put at a disadvantage because of this!

National environmental organizations and policy analysts have warned that unchecked data center growth contributes to higher electricity demand, rising utility costs, and increased greenhouse gas emissions, leading more than 230 organizations to call for a moratorium on new data center construction until impacts are fully evaluated (https://www.foodandwaterwatch.org/national-data-center-moratorium;
https://www.theverge.com/news/840883/data-center-moratorium-letter-congress).
We must think of Hanover County citizens first, not developers. Across the country, local governments have paused or rejected data center proposals after residents raised concerns about water depletion, noise, diesel generator pollution, infrastructure strain, and limited long-term community benefit (https://www.bigrapidsnews.com/news/article/green-charter-township-approves-yearlong-data-21239592.php; https://www.politico.com/news/2025/12/12/arizona-city-rejects-data-center-after-ai-lobbying-push-00688543).
Scientific research further shows that data centers already account for a significant share of U.S. electricity consumption and can worsen emissions and public health impacts when powered by fossil-fuel-heavy grids (https://arxiv.org/abs/2411.09786).

I respectfully ask the Board and Planning Commission to prioritize the health, resources, and quality of life of Hanover County residents and halt advancement of these proposals until a comprehensive, independent assessment of long-term impacts is completed.

Slowing the approval process is not a rejection of the innovation or economic development of these projects. But rather it is a prudent step to ensure that decision decisions made today do not create an intimate consequences for decades to come for Hanover and its citizens.

Say NO to more data centers in Hanover!

Respectfully,
Jane Spann

Biernot, Gretchen W.

From: Stepp-Davis, Makayla L.
Sent: Thursday, February 19, 2026 4:12 PM
To: Biernot, Gretchen W.
Subject: Fw: Hanover County resident opposed to the Marchetti Properties, et al & VALCO Hanover County Four, L.L.C. Data Center proposal

Thank you,

Makayla Stepp-Davis
Planning Technician II
Planning Department
(804) 365-6362
Hanover County

From: Jane Kirchner <janekirch@msn.com>
Sent: Thursday, February 19, 2026 4:04 PM
To: Leadbetter, Larry A <laleadbetter@hanovercounty.gov>; McGhee, Jr, Fredric I. <fimcghee@hanovercounty.gov>
Cc: Planning <planning@hanovercounty.gov>
Subject: Hanover County resident opposed to the Marchetti Properties, et al & VALCO Hanover County Four, L.L.C. Data Center proposal

CAUTION: This email originated from outside your organization. Exercise caution when opening attachments or clicking links, especially from unknown senders.
Dear Chair McGhee and Commissioner Leadbetter,

I am a resident of the South Anna District, and am opposed to the proposed Marchetti Properties Data Center complex the commission is reviewing.

I greatly value the rural nature of Hanover County, the healthy air, conservation of undisturbed natural landscapes and the quiet, community-oriented surroundings. I moved to a home here on 5 wooded acres in November; after living for more than 26 years in Loudoun County where I also served 2 four-year terms on the Loudoun County Planning Commission. I considered and voted on recommendations for hundreds and hundreds of land use applications of all types during my time on the commission in addition to work developing and revising the county Comprehensive Plan and Zoning Ordinance. I reviewed and considered countless applications related to industrial uses during those 8 years, with many of those being significant data center complex application proposals. I am urging you to not allow data centers to become a problem here as I saw it unfold first-hand in Loudoun County.

The proposed Marchetti Properties Data Center complex will permanently damage and impact the 400+ acre site with a significant industrial footprint that will reach well beyond its borders. The character of the county called for in the Comprehensive Plan will be eroded and compromised with more than a hundred acres of impervious surface, massive and tall data center buildings encircling and irreversibly compromising natural areas and RPAs, air and noise pollution from generators, power transmission lines, and substations. There

most certainly will be destruction of and harm to wildlife habitats on the site and the natural wetland and water areas will be harmed. The proposed mitigations and proffers will not make this application appropriate for approval; it is too intense and destructive to the lands and waters of the site. Even with any type of proposed conditions that could be attached to the proposal, compliance will be almost impossible to ensure while being costly with little chance of being effective. There will most likely be future harmful impacts to Hanover residents and the county that can't be envisioned today, including energy demands, major transmission lines and pollution.

Thank you for the opportunity to address you regarding this proposal and I ask you to recommend denial of this rezoning and all components of the Marchetti Properties, et al & VALCO Hanover County Four, L.L.C. Data Center application.

Sincerely,

Jane Kirchner
15149 Johns Trace Circle
Montpelier, Virginia 23192

Biernot, Gretchen W.

From: Stepp-Davis, Makayla L.
Sent: Thursday, February 19, 2026 4:56 PM
To: Biernot, Gretchen W.
Subject: Fw: Data Center

Makayla Stepp-Davis
Planning Technician II
Planning Department
(804) 365-6362
Hanover County

From: Myra Hey <myrahey@me.com>
Sent: Thursday, February 19, 2026 4:44 PM
To: Planning <planning@hanovercounty.gov>
Subject: Data Center

CAUTION: This email originated from outside your organization. Exercise caution when opening attachments or clicking links, especially from unknown senders.

Dear Members of the Hanover County Board of Supervisors and Planning Commissioners,

Please add this email to the public record for tonight's meeting. Thank you!

As a citizen of Hanover County, I respectfully urge you to oppose the proposed data center developments in Hanover County due to well-documented environmental, infrastructure, and community impacts.

Data centers are extremely water- and energy-intensive; research shows that these facilities consume massive amounts of electricity and freshwater for cooling and power, placing long-term strain on local water supplies and electrical grids. A Ceres analysis found that 32% of U.S. data centers are already located in areas of high or extreme water stress, and that water use tied to electricity generation further exacerbates shortages shared by residents, agriculture, and businesses (https://www.ceres.org/resources/news/water-impacts-from-data-centers-may-expose-companies-to-more-risk-than-acknowledged-a-new-analysis-shows). This data is alarming for the portions of Hanover county that rely on wells, as the data centers wells will threaten the water resources for residential and business properties of our citizens. Our friends and family will be put at a disadvantage because of this!

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Scientific research further shows that data centers already account for a significant share of U.S. electricity consumption and can worsen emissions and public health impacts when powered by fossil-fuel-heavy grids (https://arxiv.org/abs/2411.09786).

I respectfully ask the Board and Planning Commission to prioritize the health, resources, and quality of life of Hanover County residents and halt advancement of these proposals until a comprehensive, independent assessment of long-term impacts is completed.

Slowing the approval process is not a rejection of the innovation or economic development of these projects. But rather it is a prudent step to ensure that decisions made today do not create intimate consequences for decades to come for Hanover and its citizens.

Say NO to more data centers in Hanover!

Sincerely,

Myra Hey
Resident, homeowner, and property owner in Hanover County



Sent from my iPhone

Biernot, Gretchen W.

From: Stepp-Davis, Makayla L.
Sent: Thursday, February 19, 2026 1:16 PM
To: Biernot, Gretchen W.
Subject: Fw: No Hanover county data centers!

Thank you,

Makayla Stepp-Davis
Planning Technician II
Planning Department
(804) 365-6362
Hanover County

From: Br <williambrandonhey@gmail.com>
Sent: Thursday, February 19, 2026 1:07 PM
To: Planning <planning@hanovercounty.gov>
Subject: No Hanover county data centers!

CAUTION: This email originated from outside your organization. Exercise caution when opening attachments or clicking links, especially from unknown senders.
Please add this to public record for my opposition of data centers for tonight's meeting as I'm unable to attend in person.

Dear Hanover County Planning Commissioners,
As a member of Ashland and Hanover County, I respectfully urge you to oppose the proposed data center developments in Hanover County due to well-documented environmental, infrastructure, and community impacts.
As a lifelong Hanover county resident, I decided to stay in the county after college to start and raise my family in this county. As a father to two young girls, I am greatly concerned over the multiple data center proposals throughout Hanover County.
The environmental and economic impact of these facilities puts Hanover county at risk and there has not been enough longterm research to show the health impacts of these facilities operating nearby our residents.
As a concerned resident regarding these data center proposals, I would be highly disappointed in approving any further and future data centers in our county. If any future or further development of data centers takes place, we would look to move out of Hanover county due to the unknown health and environmental risk these facilities output.
I respectfully ask the Board and Planning Commission to prioritize the health, resources, and quality of life of Hanover County residents and halt advancement of these proposals until a comprehensive, independent assessment of long-term impacts is completed.

Slowing the approval process is not a rejection of the innovation or economic development of these projects. But rather it is a prudent step to ensure that decision decisions made today do not create an intimate consequences for decades to come for Hanover and its citizens.
Say NO to more data centers in Hanover!

Sincerely,
Brandon Hey
Father, Resident, homeowner, and property owner in Hanover County

Biernot, Gretchen W.

From: Stepp-Davis, Makayla L.
Sent: Thursday, February 19, 2026 1:45 PM
To: Biernot, Gretchen W.
Subject: Fw: Opposition for the data center on Mountain Road

Thank you,

Makayla Stepp-Davis
Planning Technician II
Planning Department
(804) 365-6362
Hanover County

From: Rebecca Mallory <grneye53@aol.com>
Sent: Thursday, February 19, 2026 1:39 PM
To: Planning <planning@hanovercounty.gov>
Subject: Opposition for the data center on Mountain Road

CAUTION: This email originated from outside your organization. Exercise caution when opening attachments or clicking links, especially from unknown senders.

This email is being sent for my opposition for the data center that is being proposed for Mountain Road Data Center in Hanover County
I did not feel it is good for the County. I do not feel it is good for the people of Hanover County
I think it will cost the people of Hanover more money than it is worth, and it will not be a good project to be considered!
Please show this as public record against it and send to the commissioners on our behalf
Thank you
Rebecca And Hillory Mallory
121 Swannee Dr
Ashland ,Va 23005

Sent from my iPhone

MOUNTAIN ROAD TECHNOLOGY PARK

Questions for Tract

1) Stated in the Staff report the average daily water usage is 600,000 g. What is the estimated peak usage?

Tract has modeled average daily water usage and peak usage; we have discussed water usage with the Department of Public Utilities, and they have confirmed that the public system can accommodate requested usage. Tract will work with the County to determine water storage solutions to accommodate peak usage, which has been estimated at 2MGDgallons/day. This peak usage assumes the worst conditions and models show peak usage would be infrequent, even during peak heat in summer months. On site storage will be used to help accommodate peak usage on those days.

2) What is the anticipated timeframe of the phasing of the buildout for sites 1A, 2A, 2B, 3A.

The buildout is tied to the energization schedule from Dominion Energy. Building construction would be anticipated to begin 12 – 18 months prior to expected energization, so buildings are ready to take power when it is delivered. Currently, Dominion has confirmed that initial energization is planned for Q4 2029, with additional power to the two other substations occurring after that. Tract anticipates estimated buildout to be completed by 2035.

3) Does the TIA reflect a phasing buildout or total buildout?

The TIA analyzed both peak construction conditions and peak operating conditions once the data center is operation. The construction scenario reflects a phased build-out assuming 2 data center buildings are constructed at a time until the buildout is completed . The second scenario reflects the total buildout of the data center campus consisting of 900 Megawatts. The TIA

assumes a total of 350 employees arriving in shifts throughout the day, and is phased to align with the projected buildout schedule.

4) Do you have a commitment from Dominion Energy to provide service to each of the 4 building sites and what are the anticipated time frames?

Yes, Dominion Energy has a commitment to provide service to the four building sites The anticipated time to provide service to the first building site is Q4 2029, so the initial building would be constructed on the site prior to this date. More detailed phasing will be developed as the project progresses.

5) What is the estimated # of Employees at buildout, # of shifts per day and does the TIA account for multiple shifts?

The estimated number of employees at buildout is approximately 350 employees. The TIA did account for multiple shifts throughout the day based on the Bowman study distributions.

6) Mrs. Dibble and I visited a Data site under construction in Louisa and the Substation main structural steel poles were the rust brown color which blended in well with the surrounding buffer. We prefer that color coordination with the substations including the lower screening fence around the equipment.

Our power team has confirmed that this option is possible through Dominion Energy. The Tract team will communicate that this is the preference for this site as coordination with Dominion continues through the process.

7) What is the layout of the main substation at Winns Church road. There is a property owner right beside that substation and I am very concerned with viewshed and noise.

The final substation layout will be designed by Dominion Energy during the detailed engineering and site-planning phase, but it must comply with all County setback, height, noise, and screening standards. Dominion typically

uses standardized substation designs that are engineered for safety and to minimize visual and sound impacts on neighboring properties.
We recognize the adjacent property owner's concerns regarding viewshed and noise. The current concept plan places the substation toward the southern and western portions of the site to maximize distance from nearby homes, and that approach will continue through final design. The project is expected to include enhanced screening such as berms, evergreen landscaping, and opaque fencing to reduce visibility.

8) There is very limited information of the Revenue from the Project in the Staff report. Will Tract be giving a detailed and realistic expectation of the actual Revenue from the project?

Tract has estimates for expected property tax, business personal property tax, and sales tax revenues; we will share a high level overview for each of these during the presentation. The project has been modeled with the following assumptions:

- Expected energization in 2030 (Q4 2029)
- Property tax revenues begin being generated in 2030, with additional buildings and personal property coming on-line in subsequent years, and buildout occurring by 2035
- Personal property tax revenue being refreshed every six years
- Personal property depreciating based on the depreciation schedule for Hanover County
- Current sales tax exemption sunsetting in 2035
- Revenues modeled for 20 years (2025 – 2044)
- Revenue expected for specific budget categories based on FY2026 budget splits (see table below, Source: Hanover County FY 26 Adopted Budget)

Expenditure Categories	Allocation of FY26 Budget	Funding Groups (EY analysis)	
School Operations	34%	School	40%
School Capital Improvements Program (CIP)	2%		
School Debt Service	3%		
School Nutrition	1%		
General Fund - Public Safety & Judicial	14%	General Fund	29%
General Fund - Human Services	6%		
General Fund - Other	9%		
County Capital Improvements Program (CIP)	16%	County CIP	16%
County Debt Service	1%	Other	8%
Self-Insurance	7%		
Public Utilities	7%	Public Utilities	7%

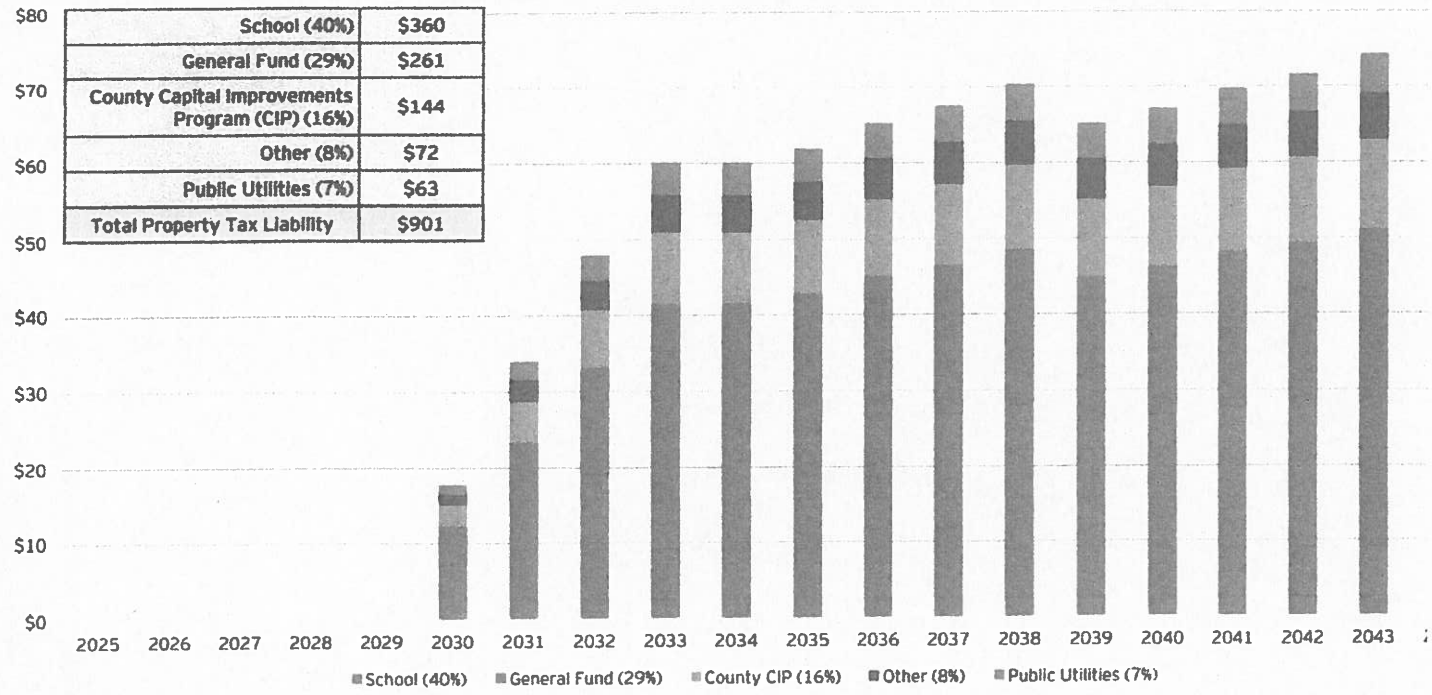
Source: Hanover County FY26 Adopted Budget

See projected revenues below

Estimated 20-yr property tax projections

Values below are expressed in millions of USD

School (40%)	$360
General Fund (29%)	$261
County Capital Improvements Program (CIP) (16%)	$144
Other (8%)	$72
Public Utilities (7%)	$63
Total Property Tax Liability	$901



Biernot, Gretchen W.

From: Stepp-Davis, Makayla L.
Sent: Thursday, February 19, 2026 12:55 PM
To: Biernot, Gretchen W.
Subject: Fw: No to data centers! Protect Hanover!

Thank you,

Makayla Stepp-Davis
Planning Technician II
Planning Department
(804) 365-6362
Hanover County

From: Am <amyherzing@gmail.com>
Sent: Thursday, February 19, 2026 12:52 PM
To: Planning <planning@hanovercounty.gov>
Subject: No to data centers! Protect Hanover!

CAUTION: This email originated from outside your organization. Exercise caution when opening attachments or clicking links, especially from unknown senders.
Please add this to public record for my opposition of data centers for tonight's meeting as I'm unable to attend in person.

Dear Hanover County Planning Commissioners,
As a member of the Ashland Planning Commission, I respectfully urge you to oppose the proposed data center developments in Hanover County due to well-documented environmental, infrastructure, and community impacts.
ABC news just shared a video today about the painful effects of data centers on residents' electricity bills - https://m.youtube.com/watch?v=fqQsExCEEZc . It's about 7 minutes but very imformative on the terrible effects of data centers. When residents are already struggling financially to keep up, let's not allow data centers to make it worse.
Data centers are extremely water- and energy-intensive; research shows that these facilities consume massive amounts of electricity and freshwater for cooling and power, placing long-term strain on local water supplies and electrical grids. A Ceres analysis found that 32% of U.S. data centers are already located in areas of high or extreme water stress, and that water use tied to electricity generation further exacerbates shortages shared by residents, agriculture, and businesses (https://www.ceres.org/resources/news/water-impacts-from-data-centers-may-expose-companies-to-more-risk-than-acknowledged-a-new-analysis-shows). This data is alarming for the portions of Hanover

county that rely on wells, as the data centers wells will threaten the water resources for residential and business properties of our citizens. Our friends and family will be put at a disadvantage because of this!

National environmental organizations and policy analysts have warned that unchecked data center growth contributes to higher electricity demand, rising utility costs, and increased greenhouse gas emissions, leading more than 230 organizations to call for a moratorium on new data center construction until impacts are fully evaluated (https://www.foodandwaterwatch.org/national-data-center-moratorium; https://www.theverge.com/news/840883/data-center-moratorium-letter-congress).

We must think of Hanover County citizens first, not developers. Across the country, local governments have paused or rejected data center proposals after residents raised concerns about water depletion, noise, diesel generator pollution, infrastructure strain, and limited long-term community benefit (https://www.bigrapidsnews.com/news/article/green-charter-township-approves-yearlong-data-21239592.php; https://www.politico.com/news/2025/12/12/arizona-city-rejects-data-center-after-ai-lobbying-push-00688543).

Scientific research further shows that data centers already account for a significant share of U.S. electricity consumption and can worsen emissions and public health impacts when powered by fossil-fuel-heavy grids (https://arxiv.org/abs/2411.09786).

I respectfully ask the Board and Planning Commission to prioritize the health, resources, and quality of life of Hanover County residents and halt advancement of these proposals until a comprehensive, independent assessment of long-term impacts is completed.

Slowing the approval process is not a rejection of the innovation or economic development of these projects. But rather it is a prudent step to ensure that decision decisions made today do not create an intimate consequences for decades to come for Hanover and its citizens.

Say NO to more data centers in Hanover!

Sincerely,
Amy Hey
Resident, homeowner, and property owner in Hanover County
Ashland Planning Commission member

Biernot, Gretchen W.

From: Stepp-Davis, Makayla L.
Sent: Thursday, February 19, 2026 8:31 AM
To: Biernot, Gretchen W.
Subject: Fw: Urgent Opposition to the Proposed Mountain Road Data Center

Thank you,

Makayla Stepp-Davis
Planning Technician II
Planning Department
(804) 365-6362
Hanover County

From: Betsy Yakim <betsy.yakim@gmail.com>
Sent: Wednesday, February 18, 2026 7:40 PM
To: Planning <planning@hanovercounty.gov>
Subject: Urgent Opposition to the Proposed Mountain Road Data Center

CAUTION: This email originated from outside your organization. Exercise caution when opening attachments or clicking links, especially from unknown senders.
Dear Planning Commission Members,
I am writing to voice my strong opposition to the proposed Mountain Road data center. As a Henrico resident whose neighborhood will border this development, I have serious concerns about the impact such a large-scale facility would have on our community, including:

- Excessive water consumption
- Strain on our power infrastructure as the added load could exceed the capacity of our existing grid, leading to reliability issues,
- Persistent noise from nearby generators and power systems that will generate continuous sound that disrupts daily life
- Environmental impact that will threaten local ecosystems and contribute to visual blight
- Declining property values. Multiple studies show that proximity to data centers can depress real-estate prices.

Residents of Hanover, Henrico, and surrounding counties have already reported problems such as constant generator-testing noise, unsightly structures, and uncertainty about long-term infrastructure burdens. These warning signs cannot be ignored. Hanover residents have made it clear with your last data center proposal that they are NOT in support of these developments.

Across Virginia and nationwide communities are raising serious concerns about current data centers. We must protect what makes our neighborhoods desirable places to live. Allowing this project (and potentially others that may follow) to proceed would jeopardize the very qualities that attract families, businesses, and visitors to our area.

Virginia already hosts over 600 data centers, putting us well above the national average. Power usage is rising faster than our infrastructure can accommodate, and water resources are being depleted for commercial purposes rather than serving residents. Moreover, the rapid expansion of AI and data-center workloads raises questions about long-term sustainability; a future collapse could leave irreversible damage in its wake. Just last week, VCU published an alarming study on data-center impacts in our state (https://news.vcu.edu/article/northern-virginia-data-center-air-pollution-rivals-power-plant-emissions). The findings underscore the urgent need for prudent, community-focused planning.

Please do the right thing for Hanover, Henrico, and all affected counties by halting this development and keeping data centers out of our communities.

Sincerely,
Betsy Yakim
Resident of Rock Springs Estates
Henrico County, Virginia

Biernot, Gretchen W.

From:	fcwillson@icloud.com
Sent:	Wednesday, February 18, 2026 6:13 PM
To:	Leadbetter, Larry A
Cc:	Pompei, Andrew J.; Biernot, Gretchen W.; Heizer, Brett; Abbott, Alan C.; Martin, William E.; Parker IV, Clifton L.; McGhee, Jr, Fredric I.; Iverson, Edmonia P.; Dibble, Susan P.; Travis C Willson; George Willson; Hunter, Jo Ann M.; 'fwillson'
Subject:	RE: Mountain Road Technology Park Hearing

CAUTION: This email originated from outside your organization. Exercise caution when opening attachments or clicking links, especially from unknown senders.

Mr. Leadbetter and fellow Planning Commissioners and Staff,

I am requesting you add these comments to my original project submission sent to you Monday Feb 16 as it pertains to the Balloon Testing and Utilities Easements. I opened an email from Tract Tuesday Feb 17th outlining balloon testing dates of this Friday Feb 20 for two hours (8am-10am)and 3 sites identified. The rain date is Monday Feb 23.

Disregarding the short notice and duration of testing the Willson Family would request a 4th site be added either now or at a later date. Building 3A and 2B are the two buildings requesting an 85-foot height variance. As we stated in our earlier submission bldg. 3A is a visual concern(in addition to others) at a height of 85 feet and its proximity to our property line on Grassy Creek and future residential development . Bldg 3A is the largest building in the project.

Currently the most northern balloon test site is on the west side of the proposed bldg. 3A or the rear farthest away from our property on Grassy Swamp Creek. This site is over 2,000 feet from our property line where as the front or eastern side of Bldg. 3A is approx. 500 feet in some places from our property line.

A 4th Balloon Site is requested on the eastern side/Grassy Swamp Creek side of bldg. 3A and that my family is given a reasonable about of lead time before testing . We would also request the GPS coordinates for the equipment location selected.

Lastly, I could not locate on any current engineering documents reference to the two existing deeded utility easements on the Marchetti property providing the Willson Family access/connection to the County Pumping Station.

I appreciate the Commissions assistance and consideration on all our family's comments

Respectfully,

Frank Willson
Willson Family
757-478-2222

From: fcwillson@icloud.com <fcwillson@icloud.com>
Sent: Monday, February 16, 2026 2:09 PM
To: 'laleadbetter@hanovercounty.gov' <laleadbetter@hanovercounty.gov>
Cc: 'Pompei, Andrew J.' <AJPompei@hanovercounty.gov>; 'gwbiernot@hanovercounty.gov' <gwbiernot@hanovercounty.gov>; 'bheizer@hanovercounty.gov' <bheizer@hanovercounty.gov>; 'acabbott@hanovercounty.gov' <acabbott@hanovercounty.gov>; 'wemartin@hanovercounty.gov' <wemartin@hanovercounty.gov>; 'clparker@hanovercounty.gov' <clparker@hanovercounty.gov>; 'fimcghee@hanovercounty.gov' <fimcghee@hanovercounty.gov>; 'epiverson@hanovercounty.gov' <epiverson@hanovercounty.gov>; 'spdibble@hanovercounty.gov' <spdibble@hanovercounty.gov>; Travis C Willson (travis.c.willson@gmail.com) <travis.c.willson@gmail.com>; George Willson (willsongm@gmail.com) <willsongm@gmail.com>; 'Hunter, Jo Ann M.' <JMHunter@hanovercounty.gov>; 'fwillson' <fwillson@cox.net>
Subject: Mountain Road Technology Park Hearing

Mr. Leadbetter and fellow Planning Commissioners and Staff,

Please find attached my family's comments and requests as it pertains to the Mountain Road Technology Park Project. We appreciate your consideration and assistance in protecting our interests and others in the immediate area. I have attached slides 11 and 14 from conceptual slide deck of project for easier reference at the bottom of word document if you scroll down.

Respectfully ,
Frank Willson

Biernot, Gretchen W.

From: quailfield@aol.com
Sent: Wednesday, February 18, 2026 5:05 PM
To: Planning; Iverson, Edmonia P.; Biernot, Gretchen W.
Subject: Opposition to Route 33 data center proposal

Categories: Red Category

CAUTION: This email originated from outside your organization. Exercise caution when opening attachments or clicking links, especially from unknown senders.

Dear Ms. Iverson and esteemed members of the planning commission—
I again write you as a 25 year resident of the Beaverdam district to oppose the current proposal for a data center on Route 33 and to what I know to be other upcoming proposals as well. As I have previously stated, we will have to endure the Hickory Hill data center, but as I'm sure you're all perfectly aware through social media and other outlets, Governments and the public have become aware of the horrible technology that is associated with these proposals as well as the massive loss of rural land in a very short period of time. The resources consumed are staggering, with costs passed along to residents. You are doubtless aware of the nationwide pushback by residents and politicians against future construction of these centers, and moratoria are being implemented. Moreover, as you are doubtless aware, the recently published VCU study clearly documents how dirty this technology is.
These proposals, including the current one, run antithetical to any sort of rural preservation for the county and in no way shape or form do any of these "fit ". The "Envision Hanover" document proposes to maintain the majority of the County as Agricultutral/rural.. Therefore, in no way would this data center fit into the plan. Moreover, other proposals which lie in areas potentially designated for future development, lie within areas that quite frankly were expanded before we had any idea what data center technology meant. Particularly the areas of the I-95 corridor (Including that within which the Hickory Hill proposal lies) were added nearly 20 years ago, and no one knew what the implication of data centers were.
As you all know, localities, states, and even the federal government have proposals in front of them for a complete moratorium or ban on data centers. There is no way that Hanover should proceed in any which way with adding any more of these. The responsibility of the county is the current residents not to Corporations, especially those outside of the county or the state, including Tract from Colorado who have already inflicted the Hickory Hill project on us. I have been informed that indeed a former County employee is a Tract employee. That is certainly interesting for sure. One wonders what her role has been...
The residents of the county, your constituents need to be protected.
Therefore, please include me with the group of residents in staunch opposition to the current Route 33 proposal as well to any future proposals for the county. Sadly, the Hickory Hill 1200 acre debacle is enough.
Thank you in advance for your consideration.

Doug Boardman,
Old Ridge Rd.,
Beaverdam District.

Kristine Craig
8408 Wheeling Road
Mechanicsville, VA 23116
2/10/2026

RECEIVED
FEB 18 2026
HANOVER COUNTY
PLANNING DEPARTMENT

Hanover County Planning Office
PO Box 470
Hanover, VA 23069

Subject: Formal Objection to Proposed Amendment of CUP-15-04 – Hanover Center for Trades and Technology Expansion

To Whom It May Concern:

I am writing to formally object to the proposed amendment of CUP-15-04 that would allow for the expansion of the Hanover Center for Trades and Technology. When I purchased my home, it was my clear understanding that this area was zoned for residential use. That understanding was a significant factor in my decision to invest in this community, and I relied on the stability and character of the surrounding neighborhood.

There are already several schools and educational facilities serving this region, and I do not believe an expansion of this scale is necessary or appropriate within a residential setting. Increasing the footprint and activity level of this facility raises serious concerns about the long-term impact on the neighborhood.

I am particularly worried about the potential decline in my property value should this amendment be approved. The introduction of additional noise, increased traffic, and higher daily activity levels will inevitably alter the quiet residential environment that current homeowners reasonably expect. These changes would negatively affect the quality of life for residents and undermine the character of the community.

For these reasons, I respectfully request that the Planning Department and the Board of Supervisors deny the proposed amendment to CUP-15-04. I appreciate your consideration of the concerns of homeowners who are directly affected by this proposal.

Sincerely,

Kristine Craig

Biernot, Gretchen W.

From: Erin Fosdick <erin.fosdick@tract.com>
Sent: Tuesday, February 17, 2026 5:25 PM
To: Biernot, Gretchen W.
Cc: Hunter, Jo Ann M.; Pompei, Andrew J.
Subject: Re: [EXTERNAL]FW: Hanover Data Center: Mountain Rd

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See below for the responses to these questions - in italics. Please let me know if you would like me to forward on to Supervisor Dibble and Commissioner Leadbetter. Thanks!

Erin Fosdick, AICP
Director of Entitlements
erin.fosdick@tract.com
720-552-9172
www.tract.com

From: Biernot, Gretchen W. <gwbiernot@hanovercounty.gov>
Sent: Thursday, February 12, 2026 8:27 AM
To: Erin Fosdick <erin.fosdick@tract.com>
Cc: Hunter, Jo Ann M. <JMHunter@hanovercounty.gov>; Pompei, Andrew J. <AJPompei@hanovercounty.gov>
Subject: [EXTERNAL]FW: Hanover Data Center: Mountain Rd

Hi Erin!
Would you mind reviewing these questions and providing a response by early next week?
Thanks!

Gretchen W. Biernot, AICP
Current Planning Manager
Hanover County Planning Department
Direct Line:(804) 365-6369
Main Line: (804) 365-6171
Hanover County VA

From: Caroline Fahed <crfahed@gmail.com>
Sent: Thursday, February 12, 2026 5:39 AM
To: Dibble, Susan P. <spdibble@hanovercounty.gov>
Cc: Leadbetter, Larry A <laleadbetter@hanovercounty.gov>; Biernot, Gretchen W. <gwbiernot@hanovercounty.gov>
Subject: Re: Hanover Data Center: Mountain Rd

CAUTION: This email originated from outside your organization. Exercise caution when opening attachments or clicking links, especially from unknown senders.

Ms Dibble
Thank you for your quick reply. I dont wish to argue the format of the meeting, but I will say that the community members I spoke with also found it suspect and that some were getting different answers to the same question.

Thank you for asking for my questions. Here is a list that I don't think Tract has answered on its website.

1.Does the host agreement include a 'curtailment clause' that prioritizes residential drinking water over data center cooling during a declared drought?

This is not something that has been discussed with the County. Tract has had initial conversations with Hanover County's Public Utilities Department to confirm that adequate water capacity exists. Tract and their consultant, Kimley Horn, is engaged in more detailed water modeling to understand how infrastructure will be constructed as the site develops. If the Board of Supervisors approves a rezoning, more detailed agreements on providing water service will be put into place between Hanover County and the Developer. The development will follow all regulations and use restrictions outlined in the County's water supply plan.

2. Has the utility provider issued a formal Impact Study confirming that the X megawatts required for this facility will not trigger rate hikes for residents or necessitate the construction of new high-voltage transmission lines through existing neighborhoods?

Tract is responsible for the costs associated with this project and it is not expected to trigger rate hikes for residents. A 2024 Virginia legislative study found that data centers are currently paying their full cost of service, and the State Corporation Commission approved December 2025 additional safeguards to protect residential customers. Regarding transmission, this site was selected because it is near existing electric infrastructure to minimize the need for new high-voltage lines. Any new transmission outside the site would require a separate public review and regulatory approval process before construction.

3. Will the board mandate continuous, real-time sound monitoring at the property line, and what specific decibel limits—including low-frequency 'hum'—will be written into the zoning permit as enforceable violations?

The proffers contain conditions that all buildings must be tested to ensure compliance with the County's Noise Ordinance (the County's Noise Ordinance measures dB levels); this required noise study is required to be completed by a certified professional and must include recommendations for any necessary mitigation to ensure conformity with the sound ordinance; there are also conditions limiting

the testing for back-up generators. Any violations to the County's noise ordinance will be handled consistent with how the County enforces their codes and issues violations.

4. What is the estimated tax revenue for hanover county for this project over the next 5 years? Is Hanover providing any incentives for this project?

The project will not start generating tax revenue on real and personal property until the project is constructed. Based on the anticipated energization date of Q4 2029, buildings and equipment will not likely be present on the site and available for assessment until closer to this date. There will be increases in revenue generated from changes to land values if the property is rezoned from A to M1.

Incentives are not being sought for this project.

5. Does the project include a binding commitment to 24/7 carbon-free energy matching, or will the facility rely on the current grid mix, which may increase the local carbon footprint?

The project does not include a binding 24/7 carbon-free energy matching requirement.

This individual facility will not change the Dominion Energy's overall generation mix. Power is supplied through the regional electric grid that serves all customers, and generation resources are planned and approved at the state and regional level, not on a project-by-project basis.

6. Has the Fire Marshal approved a specific Hazard Mitigation Plan for the on-site backup generators and fuel storage, and who is financially liable for environmental cleanup in the event of a storage tank leak?

Tract is currently requesting a rezoning. If the Board approves the rezoning, additional site planning, consistent with approved concept plans will need to be undertaken. This would be the stage in the development process that buildings, backup generators, fuel storage, etc. would be evaluated. This project, like all projects in the County, will be required to meet building and fire codes in place at the time of construction. In addition, the Developer and any operator are required to comply with all local, state, and federal environmental regulations.

7. Beyond the temporary construction phase, how many permanent, full-time equivalent (FTE) jobs will be created locally, and what is the guaranteed minimum percentage of those roles that must be filled by county residents?

Tract estimates that between 300-350 permanent jobs will be created with this project. There is not a guaranteed minimum percentage of jobs that must be filled by county residents.

8. If the data center becomes obsolete due to shifts in cloud technology or AI hardware, what decommissioning bond or 'proffers' are in place to ensure the county isn't left with a multi-million square foot 'gray box' shell?

There are not currently proffers in place for decommissioning. This project is not going to be owned by the County, but rather will be owned by a private property owner. Any future redevelopment or adaptive reuse would be undertaken by the property owner and would need to go through an appropriate development review process to ensure compliance with current county plans and regulations in place at the time (similar to all other projects in the County).

9.Will the county establish an Independent Oversight Committee with access to the facility's actual energy and water meters to ensure compliance with the performance standards promised during this approval process?

This is not something that the County has discussed with Tract. The County and Dominion can likely speak to what mechanisms are in place to track energy and water usage. Final agreements, as well as any monitoring or restrictions, would be determined and finalized at a later stage in the development process.

Hoping for a reply to these questions before the next meeting.

Sincerely
Caroline Fahed

On Mon, Feb 9, 2026, 5:14 PM Dibble, Susan P. <spdibble@hanovercounty.gov> wrote:

> Thank you for reaching out to share your thoughts and concerns. With regard to the format of the meeting, as I said at the meeting, the purpose of that gathering was for the developer and their team to offer additional information and details regarding their proposed project. (It was not a Public Hearing) The 'open house' format is actually one that is used quite often by architects and engineers in group settings and is usually very effective in delivering information and receiving detailed feedback. Many individuals sincerely appreciated the one-on-one time with members of the Project Team as they were able to discuss their specific questions and concerns instead of the more general comments and questions that took place at the previous community meeting for this proposed project. Also, it is my understanding that the Project Team is collectively reviewing the conversations that were had at each 'station,' and will be adding those comments, questions and additional information to their website by the end of the week so that the information is shared with all. (the website is: mountainroadtechpark.com)
>
> However, most importantly, I want to be sure that your specific questions and concerns are heard and responded to as well! I have copied Ms. Gretchen Biernot, Hanover County Planning Office. Please email your specific questions/concerns to her. If her office is unable to answer, she will get responses from the developer.
>
> As always, if I can assist further, just let me know!
>
> Best,
>
> Susan P. 'Sue' Dibble
>
> Hanover County Board of Supervisors
>
> South Anna District Representative

From: Caroline Fahed <crfahed@gmail.com>
Sent: Saturday, February 7, 2026 7:35 AM
To: Dibble, Susan P. <spdibble@hanovercounty.gov>
Cc: Leadbetter, Larry A <laleadbetter@hanovercounty.gov>
Subject: Hanover Data Center: Mountain Rd

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Dear Ms. Dibble,

Initially, I was not opposed to the proposed data center. As it aligned somewhat with the comprehensive plan, I believed it deserved a fair assessment provided the process remained transparent.

However, I was deeply disappointed by the recent information meeting. Trak's lack of transparency and refusal to answer questions in a public forum were telling. Actively avoiding public questioning appeared to be a deliberate attempt to subvert discovery. This behavior leaves the people of Hanover to conclude that the company is obscuring its true intentions. Given this lack of clarity and the conflicting information provided, I feel compelled to oppose this project.

Furthermore, I believe making any decision before the end of the current State legislative session would be a significant mistake. Pending state-level data center bills may offer essential protections for Hanover County that should be considered.

Thank you for your time and consideration.

Sincerely,

Caroline Fahed
16014 Greenwood Church Rd

Mountain Road Technology Park Hearing

February 19 Planning Commission Submission

Mr. Leadbetter and Members of the Planning Commission

Re: Mountain Road Technology Park

The Willson family owns approximately 220 acres directly adjoining the proposed project along the majority of the Grassy Swamp Creek boundary, forming the eastern side of the project. We are identified as Property Owner #18 GPIN 7767-39-7416 in the application materials. Our family has owned this property for approximately 200 years.

Our property is designated under the County's Comprehensive Land Use Plan as Suburban Neighborhood Residential, with access to both water and sewer services. The Planning Department is aware of our family's interest in developing portions of our property, particularly the area bordering Grassy Swamp Creek and connecting to the Chickahominy River. Our property is the largest Hanover County non-RT33 Small Area Plan property bordering the proposed project with the Suburban Neighborhood designation.

While our family supported the County's vision and approval of the RT33 Small Area Plan, we can only support the current proposal if certain modifications are made to the existing proffers to protect current and future residential interests on our property and others.

The family's request for proffer modifications covers the areas impacting visual, sound, lighting, peaceful enjoyment and the fact currently as written it only protects existing residential uses or dwellings with no reference to adjoining properties with residential land use designation. The Willson property could represent an increase of residents many fold larger than what currently exists and we feel we should be equally protected.

Requested Proffer Modifications

Proffer #5 – General Design Standards

- Primary building facades for Buildings 3A and 2B should face Grassy Swamp Creek.

- Loading docks and service areas should not be located on building fronts facing Grassy Swamp Creek.

- **Building height should be limited to 62 feet**, consistent with prior Board of Supervisors approval of Aug 2025. We feel they had it right then for a rural balance.

An 85-foot height represents approximately a 37% increase over 62 feet. Given our property's elevations and sightlines across Grassy Swamp Creek, this increase would exceed much of the surrounding tree canopy and result in additional equipment to be cooled, requiring more generators, more potential noise, and visual impact. Building 3A, as the largest structure in the project, presents the greatest concern and impact to us.

Proffer #6 – Screening of Mechanical Equipment

The current proffer protects views from RT33 (Mountain Road), Winns Church Road, and existing residential dwellings. We request that this protection also extend to our property and the entire eastern boundary along Grassy Swamp Creek.

Proffer #9 – Lighting

We request clarification that the eastern boundary along Grassy Swamp Creek is included within lighting protections, as the current reference to 'primary external boundary line' is unclear and not used elsewhere in proffer document.

Proffer #12 – Noise Attenuation

Current language references protection only for existing residential uses. We request that the eastern property boundary along Grassy Swamp Creek be included based on its residential land use designation.

We request that **generator runtime be limited to Monday through Friday, 8:00 AM – 5:00** PM. Current and future residents are entitled to reasonable peace and quiet, particularly during evenings and weekends. Extended generator runtimes/ noise would conflict with the County's stated goal of maintaining a rural character for local resident's current and future. Lets not forget there will still be 24/7 traffic noise on the site.

At a minimum Run Times and Days for Bldg. 3A and 2B are requested as stated above. Ask the developer or a consultant why this request is not attainable based on current/future generator technology and less stringent maintenance requirements.

All generators and/or chillers should be placed to the rear, or internal to a 3A and 2B Building and should not be positioned along the side facing Grassy Swamp Creek. If placed on the side facing Grassy Swamp Creek they should be enclosed within a building structure.

We also request clarification regarding the design intent and request an elevation of Building 3A, including whether Generator/Chiller facilities labeled #4 will be fully enclosed building structures as depicted in the most recent Site Layout for Building Area 3A. In a recent conversation with Planning Staff, they relayed some ambiguity in their discussions with Tract if Building 3A would have generators and Chillers in a building as they have depicted in their recent submittal. As mentioned above we request they are in buildings as shown. Type 4 Buildings are only depicted in the site layout for Building 3A .

Proffer #15 – Generators

• The current specification for Tier IV or equivalent generators for reduced emissions is a definite positive however:

• Additional noise mitigation measures—including acoustic enclosures, enhanced exhaust mufflers, and optimized cooling fan design—should be implemented, particularly for Buildings 3A and 2B. While Tier IV addresses emissions, additional steps can and should be taken to further reduce noise. Similar to what is done at hospitals and other noise sensitive installations.

As long-time property owners in Hanover County, we respectfully request that the County and Planning Commission protect both the existing families and future residential development interests surrounding the project. We feel you would most likely request the similar proffer changes and consideration if a Data Center was being proposed adjoining your residential property.

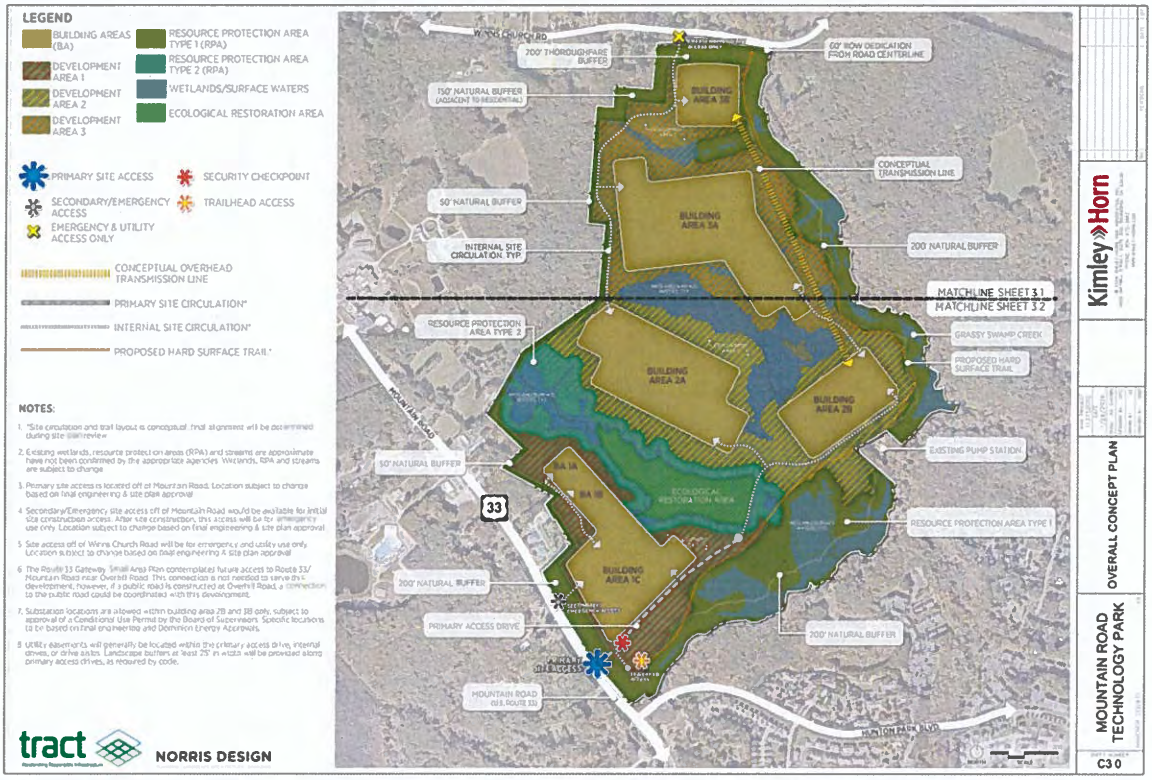
Accordingly, we request postponement of the projects approval by planning scheduled on February 19 until the requested information is received and the proposed proffer modifications can be added and discussed.

Respectfully submitted,

Frank Willson

757-478-2222

SEE BELOW SLIDES FOR REFERENCE



CONCEPT PLAN NOTES

DEFINITIONS

BUILDING AREAS: Areas within the site where the majority of vertical development will occur.

BUILDING COVERAGE: The total area within a Development Area improved with buildings, represented as a percentage arrived at by dividing building footprints (i.e. first floor gross square footage) by the total area (s.f.) of the Development Area.

DEVELOPMENT AREAS: Areas within the site that contain building areas and other supporting uses.

DATA CENTERS: Data equipment, data storage, other technological services, and research related to the foregoing, together with other supporting uses and associated equipment such as, but not limited to, computer systems, servers, networking and telecommunications equipment and associated components, as well as related infrastructure such as power transmission lines, power supplies, cooling systems, environmental controls, security devices, and staff.

ANCILLARY BUILDINGS: Facilities that support the primary data center use of the site including, but not limited to equipment, operations, utilities, security, and other related uses.

UTILITIES: Above- and below-ground infrastructure needed to serve the development. This includes all wet- and dry-utilities, including, but not limited to water, sewer, storm, electric, fiber, cable, phone, and natural gas.

ECOLOGICAL RESTORATION AREA: The area where an existing degraded and/or impacted ecosystem is being intentionally designed and assisted to recover to its original or similar state.

USE STANDARDS*

Specific uses are permitted within Development Areas and Building Areas. These are described below. Some uses may have additional requirements or standards, which are described in the Notes section below.
The following uses are permitted within all Development Areas, as identified on the approved concept plan:

- Security Fencing
- Project Signage
- Wayfinding Signage
- Roadways
- Utilities
- Emergency & Utility Access
- Drive Aisles & Pedestrian Access
- Parking Lots
- Ancillary Building, such as equipment storage, security sheds, and other similar structures.
- Lighting
- Stormwater Facilities
- Trails
- Landscaped Areas
- Passive Recreation Amenities

The following uses are permitted within all Buildings Areas, as identified on the approved concept plan:

- Data processing, ISPs, search portals and related services, which includes data centers, data equipment, data storage, other technological services, and research related to the forgoing
- Substations
- Other supporting uses

ADDITIONAL NOTES ON PERMITTED USES

1. Project signage is not permitted along Winns Church Road.
2. Substations are only permitted within Building Area 2b and Building Area 3b, subject to approval of a Conditional Use Permit by the Board of Supervisors.
3. Areas outside Development Areas and Building Areas will generally remain undeveloped; however, limited crossings for utilities, infrastructure, and access facilities will be allowed as permitted by appropriate agencies.
4. Additional uses can be considered and permitted by the Planning Department.

DEVELOPMENT & DESIGN STANDARDS

The following standards apply to all development areas and building areas unless otherwise noted.

DIMENSIONAL STANDARDS

1. Building Setbacks shall be consistent with setbacks established for the M-1 District, except as follows:
   - L1 Buildings located along Route 33/Mountain Road shall be setback 250 feet from the right-of-way.
   - L2 Buildings located along Winns Church Road shall be setback 200 feet from the right-of-way.
   - L3 Buildings located along the southern and eastern perimeter boundary line shall be setback a minimum of two hundred feet (200') from the property line.
   - L4 Buildings located along the existing commercial shall be setback a minimum of fifty (50') from the shared boundary line of the project and the Existing Commercial.
   - L5 Buildings along the Portion of the Perimeter identified as 50' "Natural Buffer" on the Conceptual Plan shall be setback fifty (50') from the boundary line.
2. Building Coverage within development areas shall not exceed 50% of any development area.
3. Building height is measured to the top of the building and includes parapet walls that are used to screen equipment.

BUILDING HEIGHT SHALL BE LIMITED TO THE FOLLOWING IN EACH BUILDING AREA:
5.1. Building Area 1A, 1B, 1C, and 2B - 62 Feet
5.2. Building Area 2A, and 3A: 85 Feet
5.3. Building Area 3B: 35' within 350' of Winns Church Road, otherwise 62'

BUILDING AREA

DEVELOPMENT AREA

1. SECURITY/GATED ACCESS
2. DATA CENTER BUILDING
3. SUPPORTING USES
4. GENERATOR/CHILLER/MECHANICAL BLDG
5. CHILLER YARD
6. GENERATOR YARD
7. ROOF MOUNTED CHILLER
8. DETENTION
9. PRIMARY ENTRANCE
10. PARKING



ILLUSTRATIVE SITE LAYOUT - BUILDING AREA 1



ILLUSTRATIVE SITE LAYOUT - BUILDING AREA 2



ILLUSTRATIVE SITE LAYOUT - BUILDING AREA 3

tract
NORRIS DESIGN

*Any permitted use requiring a Conditional Use Permit or Special Exception must obtain approval from the Board of Supervisors of the required Conditional Use Permit or Special Exception, as applicable.

Kimley»Horn
CONCEPT PLAN NOTES
MOUNTAIN ROAD TECHNOLOGY PARK
C3.3

Tract Announces Acquisition of 1,200 Acres in Hanover County, VA

- May 8, 2024



Land approved for development of hyperscale data center campuses

Tract, the trusted partner for planning responsible technology infrastructure, today announced the acquisition of 1,200 acres in Hanover County, VA. Zoning and entitlements for the site were approved unanimously by both the Hanover County Planning Commission and Board of Supervisors earlier this year. At full build, Tract's Hanover Technology Park will support up to 2.4 GW of power capacity with Tract targeting site energization in 2028.

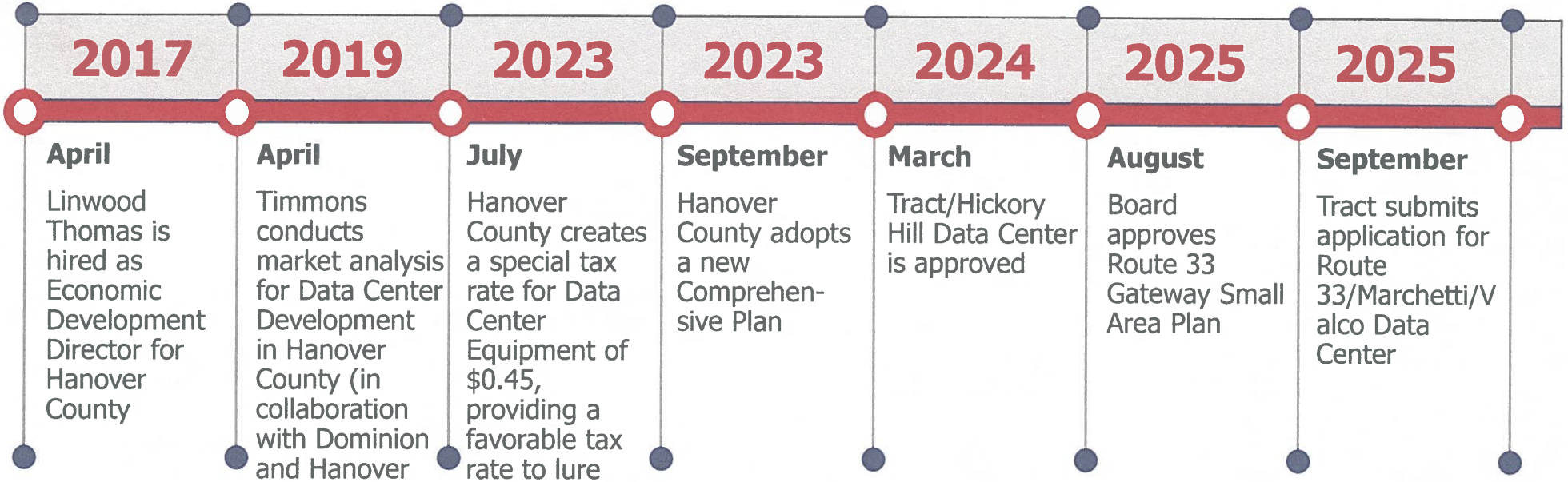
"The US economy's demand for services provided from data centers continues to grow. We worked with the Commonwealth of Virginia and Hanover County to responsibly site this project in an area planned for light industrial uses to maximize community benefits and minimize impacts to neighbors," said Grant van Rooyen, CEO of Tract. "The public process made our application better, enabling a thoughtful investment that will bring tax revenue, hundreds of high-paying jobs for Hanover County and attract other technology businesses to the region."

Tract is headquartered in Denver, CO, and works with communities across the U.S.

Tract. Accelerating Responsible Infrastructure

Data Centers in Hanover

A timeline of Data Center Development in Hanover County

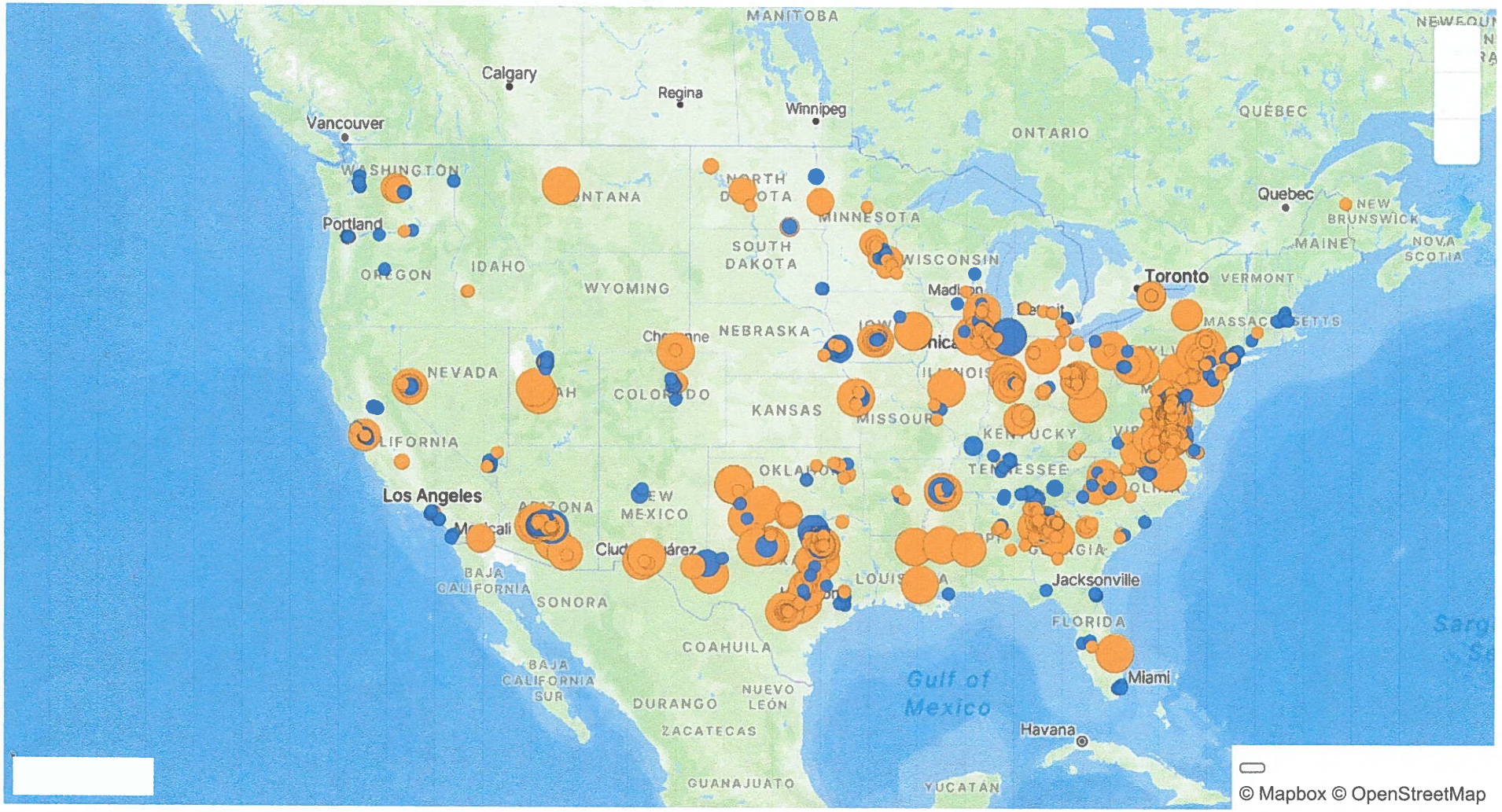


Data centers have a thirst for water, and their rapid expansion threatens freshwater supplies. Only 3% of Earth's water is freshwater, and only 0.5% of all water is accessible and safe for human consumption. Freshwater is critical for survival. On average, a human being can live without water for only three days. Increasing drought and water shortages are reducing water availability. Meanwhile, data center developers are increasingly tapping into surface and underground aquifers to cool their facilities.

Map of data centers in the US

Here is a map of all data centers in the US. Blue markers indicate operating data centers, while orange markers show planned facilities.

Operating Planned



FEB. 12, 2026

Northern Virginia data center air pollution rivals power plant emissions, VCU research finds

Diesel-powered backup generators already have significant impact, which could dramatically expand within currently permitted levels.



Data centers, like these facilities in Sterling, are equipped with backup generators that release potent emissions into nearby neighborhoods. (Getty Images)

By Madeline Reinsel

Northern Virginia has the highest concentration of data centers in the world, and residents and environmentalists throughout the state have criticized the land use impacts and energy usage of the massive server farms. But the backup generators that occasionally power those data centers also threaten local air quality, according to new Virginia Commonwealth University research, and in some cases even exceed emissions from nearby power plants.

Data centers are generally equipped with diesel-powered backup generators, which can power the entire facility in the event of planned and unplanned power outages. When running, the generators release air pollutants that are harmful to human health, including carbon monoxide, nitrous oxides and particulate matter.

"Something that we were surprised to learn through this process is you'd rather be living next to a natural gas power plant than living next to a whole bunch of data centers, in terms of the total amount of air pollution they put out per year," said Damian Pitt, Ph.D., an associate professor in VCU's L. Douglas Wilder School of Government and Public Affairs, who conducted the study alongside colleague I-Shian (Ivan) Suen, Ph.D., and graduate student Ellie Plisko.

Virginia's Department of Environmental Quality issues air pollution permits for each data center with backup generators. In this study, the researchers spatially mapped air pollution from 138 Northern Virginia

data centers located in Arlington, Fairfax, Loudon and Prince William counties, as well as five independent cities within those counties, using the agency's measurements of both permitted and actual air pollution.

The team found that emissions from data centers' generators increased substantially in the region between 2015 and 2023: Carbon monoxide emissions increased by 196%, nitrous oxide emissions rose by 111%, and dangerous particulate matter emissions jumped by 139%.

Currently, those data center emissions in Northern Virginia make up 3% of carbon monoxide, 11% of nitrous oxide and 3% of particulate matter pollution from the region's point sources, which include stationary facilities like power plants.

However, those numbers only make up around 4% to 7% of the total tons per year of emissions that the region's data centers are permitted to release. If they reached their maximum allowable emissions, data centers would make up 33% of the region's total nitrous oxide emissions and 40%, 74% and 50% of point source emissions for carbon monoxide, nitrous oxide and particulate matter pollution, respectively.

"When you look at the total emissions under the permits, this kind of worst-case scenario, it's just leagues beyond anything that is associated with any other existing facilities in the region," Pitt said.

And while most data centers run their backup generators infrequently — about 5% of the time, including scheduled test runs — some facilities are already releasing 30% or more of their permitted emissions. If meeting their permitted limits, data centers in the region could emit 10 to 20 times more pollution than they do currently.

That's not an impossible scenario, the researchers said: In January, the U.S. Department of Energy allowed a regional grid operator to ask data centers to run their generators in order to provide additional power to the grid during winter storm Fern, and future similar events could push data centers toward the upper limits of their pollution permits.

Additionally, some clusters of data centers are emitting pollutants at levels that exceed emissions from facilities like Dominion's Possum Point Power Station. Those clusters mean that some neighborhoods and counties are more affected than others: For instance, while densely populated Arlington County does not contain any data centers, Prince William and Loudon counties contain the 10 most affected neighborhoods.

To find out whether pollutants from data center generators are unevenly affecting different demographics, the researchers overlayed regional census maps on top of their air pollution maps. Areas with lower household incomes, lower education levels and higher proportions of renters to homeowners tended to be polluted with higher levels of carbon monoxide and nitrous oxide pollution from data centers.

"The big picture here is basically that places that have high emission levels or exposure are correlated with less advantaged or vulnerable populations overall," Suen said.

The researchers also noted that while data center emissions in Northern Virginia are currently dwarfed by those from cars, trucks and other motor vehicles, they are an increasingly significant source of pollution.

"Our takeaway is that there is already a concerning amount of

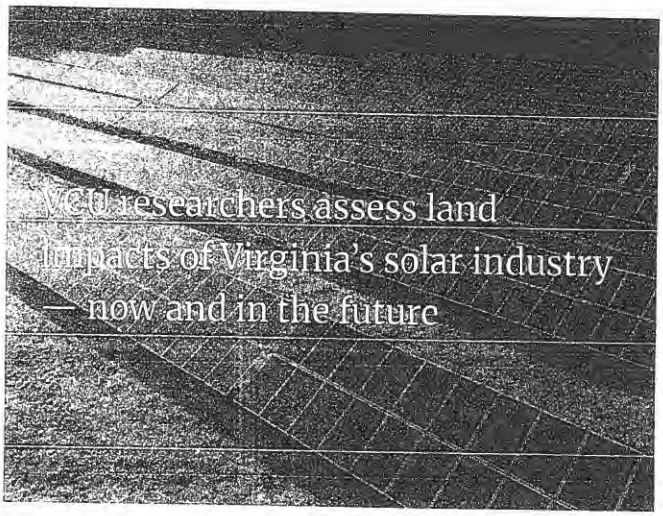
emissions, just based on what's going on now," Pitt said. "But were it to approach anywhere near those permitted amounts, it would be a whole different ballgame."

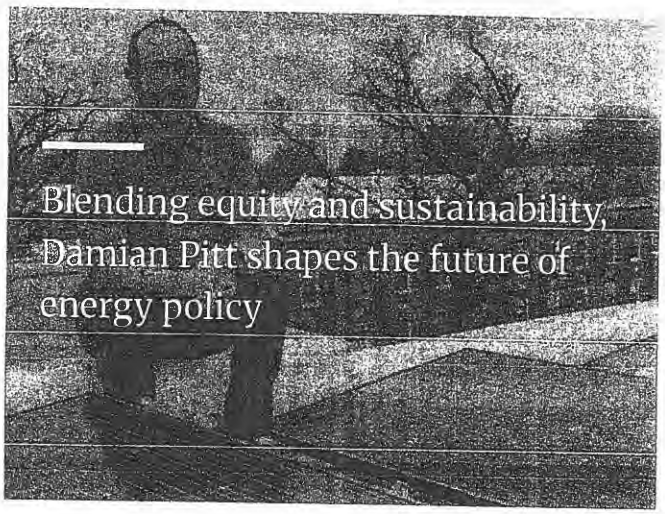
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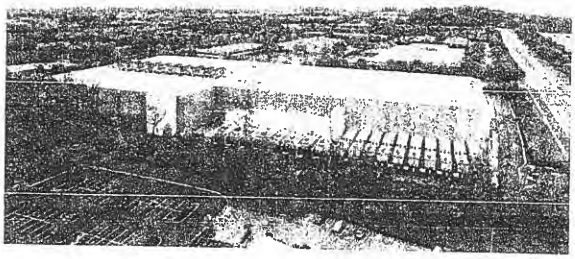


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Feb. 9, 2026

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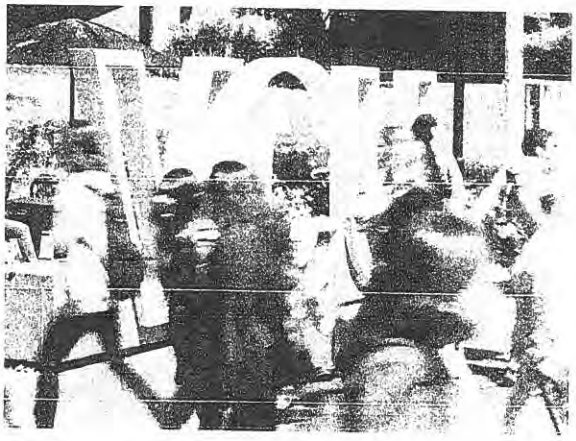
Feb. 12, 2026

Northern Virginia data center air pollution rivals power plant emissions, VCU research finds



Feb. 5, 2026

Taylor Mitchell pursues a career in veterinary pharmacy and promotes the unsung field



Feb. 12, 2026

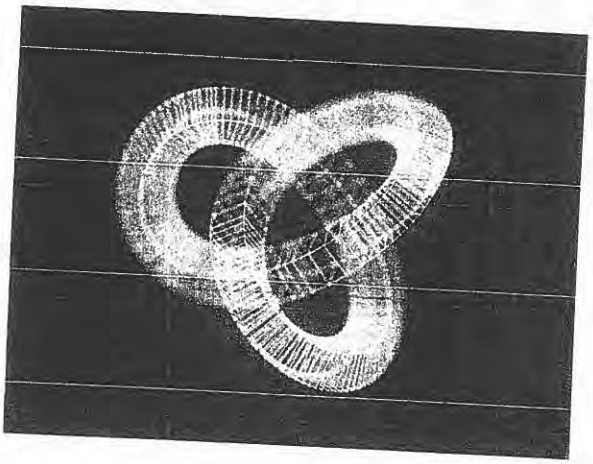
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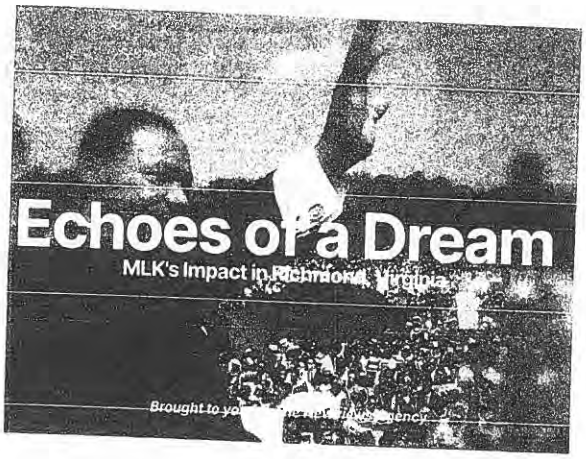
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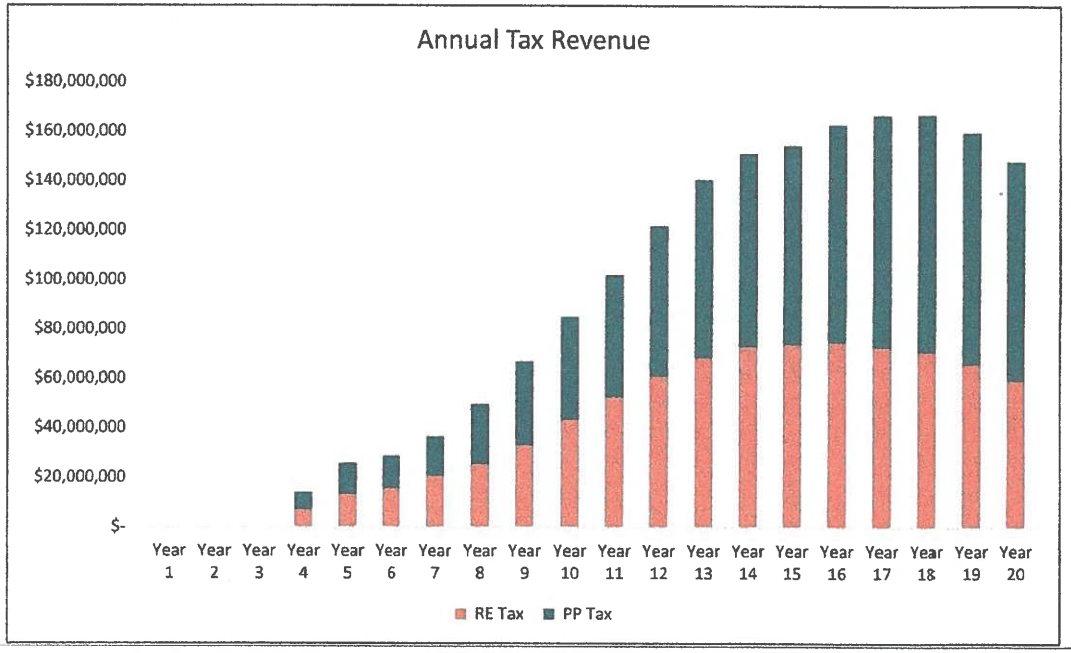
Positive Economic Impacts to Hanover County

tract

- Real Estate Tax Revenue
- Data Center Tax Revenue
- Incremental Taxes Collected
  - 2028 = $25.7M
  - 2034 = $102M
  - 2041 = $167M
- Taxes Estimated reflect full build-out of Blenheim & S. Wales properties.
- Over 20 years, an estimate of $1.78B in taxes will be collected by the County
- Well-paying jobs

Total 20 Year Estimated Tax Receipts	**$ 1,781,393,321**
Average Annual Estimated Tax Receipts	**$ 89,069,666**
Max Annual Estimate Tax Receipts	**$ 167,130,737**

Tract has collaborated with the Hanover County Commissioner of Revenue to create a DIRECT fiscal impact estimate based on the expected timing of Real and Personal Property investments connected to this project



Biernot, Gretchen W.

From: Caroline Fahed <crfahed@gmail.com>
Sent: Thursday, February 12, 2026 5:39 AM
To: Dibble, Susan P.
Cc: Leadbetter, Larry A; Biernot, Gretchen W.
Subject: Re: Hanover Data Center: Mountain Rd

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Ms Dibble
Thank you for your quick reply. I dont wish to argue the format of the meeting, but I will say that the community members I spoke with also found it suspect and that some were getting different answers to the same question.

Thank you for asking for my questions. Here is a list that I don't think Tract has answered on its website.

1.Does the host agreement include a 'curtailment clause' that prioritizes residential drinking water over data center cooling during a declared drought?

2. Has the utility provider issued a formal Impact Study confirming that the X megawatts required for this facility will not trigger rate hikes for residents or necessitate the construction of new high-voltage transmission lines through existing neighborhoods?

3. Will the board mandate continuous, real-time sound monitoring at the property line, and what specific decibel limits—including low-frequency 'hum'—will be written into the zoning permit as enforceable violations?

4. What is the estimated tax revenue for hanover county for this project over the next 5 years? Is Hanover providing any incentives for this project?

5. Does the project include a binding commitment to 24/7 carbon-free energy matching, or will the facility rely on the current grid mix, which may increase the local carbon footprint?

6. Has the Fire Marshal approved a specific Hazard Mitigation Plan for the on-site backup generators and fuel storage, and who is financially liable for environmental cleanup in the event of a storage tank leak?

7. Beyond the temporary construction phase, how many permanent, full-time equivalent (FTE) jobs will be created locally, and what is the guaranteed minimum percentage of those roles that must be filled by county residents?

8. If the data center becomes obsolete due to shifts in cloud technology or AI hardware, what decommissioning bond or 'proffers' are in place to ensure the county isn't left with a multi-million square foot 'gray box' shell?

9.Will the county establish an Independent Oversight Committee with access to the facility's actual energy and water meters to ensure compliance with the performance standards promised during this approval process?

Hoping for a reply to these questions before the next meeting.

Sincerely
Caroline Fahed

On Mon, Feb 9, 2026, 5:14 PM Dibble, Susan P. <spdibble@hanovercounty.gov> wrote:

Thank you for reaching out to share your thoughts and concerns. With regard to the format of the meeting, as I said at the meeting, the purpose of that gathering was for the developer and their team to offer additional information and details regarding their proposed project. (It was not a Public Hearing) The 'open house' format is actually one that is used quite often by architects and engineers in group settings and is usually very effective in delivering information and receiving detailed feedback. Many individuals sincerely appreciated the one-on-one time with members of the Project Team as they were able to discuss their specific questions and concerns instead of the more general comments and questions that took place at the previous community meeting for this proposed project. Also, it is my understanding that the Project Team is collectively reviewing the conversations that were had at each 'station,' and will be adding those comments, questions and additional information to their website by the end of the week so that the information is shared with all. (the website is: mountainroadtechpark.com)

However, most importantly, I want to be sure that your specific questions and concerns are heard and responded to as well! I have copied Ms. Gretchen Biernot, Hanover County Planning Office. Please email your specific questions/concerns to her. If her office is unable to answer, she will get responses from the developer.

As always, if I can assist further, just let me know!

Best,

Susan P. 'Sue' Dibble

Hanover County Board of Supervisors

South Anna District Representative

From: Caroline Fahed <crfahed@gmail.com>
Sent: Saturday, February 7, 2026 7:35 AM
To: Dibble, Susan P. <spdibble@hanovercounty.gov>
Cc: Leadbetter, Larry A <laleadbetter@hanovercounty.gov>
Subject: Hanover Data Center: Mountain Rd

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Dear Ms. Dibble,

Initially, I was not opposed to the proposed data center. As it aligned somewhat with the comprehensive plan, I believed it deserved a fair assessment provided the process remained transparent.

However, I was deeply disappointed by the recent information meeting. Trak's lack of transparency and refusal to answer questions in a public forum were telling. Actively avoiding public questioning appeared to be a deliberate attempt to subvert discovery. This behavior leaves the people of Hanover to conclude that the company is obscuring its true intentions. Given this lack of clarity and the conflicting information provided, I feel compelled to oppose this project.

Furthermore, I believe making any decision before the end of the current State legislative session would be a significant mistake. Pending state-level data center bills may offer essential protections for Hanover County that should be considered.

Thank you for your time and consideration.

Sincerely,

Caroline Fahed
16014 Greenwood Church Rd

Biernot, Gretchen W.

From: Holly Manke <hmanke@yahoo.com>
Sent: Thursday, February 5, 2026 7:58 AM
To: Planning; Davis, Sean M.; Stoneman, Jeff S.; Prichard, Faye O.; Herzberg, F. Michael; Hudson, Ryan M.; Dibble, Susan P.; Floyd, Danielle G.; Abbott, Alan C.; Leadbetter, Larry A; Martin, William E.; Iverson, Edmonia P.; Parker IV, Clifton L.; Heizer, Brett; McGhee, Jr, Fredric I.; Biernot, Gretchen W.
Subject: Mountain Road Technology park

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Good Morning,

After attending the community open house last night about the Mountain Road Technology Park, I have more questions than before I attended. The format created an environment where, depending on to whom you spoke, you received a different answer, which is not conducive to being transparent about the process. I will provide an example (there are too many for an email), the water guy said the water would come from the same supplier as the Chicken plant, Henrico/Richmond, while another presenter said it would come from Doswell?? If the meeting was conducted where everyone could hear the same answer and hear others questions, then there would be much less confusion.

I learned there could be 4 different cooling systems and they could not say which one would be used. That is concerning. I was also told no chemicals were added to the water, only the chlorine that comes from the original water, with maybe some inhibitors, which could not be named? The closed loop system might contain a form of Glycol, but not the kind that is poisonous? So what kind is that?

Additionally, the number of buildings could not be confirmed and the track for the path along the river shows it would have some places behind the secured area which I'm sure cannot happen for security reasons.

The open house style format is a disservice to the community. It does not allow information to be given by the applicant and puts the onus on the community members to try and determine the plans with different answers provided to similar questions. I hope you take this into consideration for future community meetings and make the applicant present all the plans, and take questions from the community members.

As I am sure you know, planning cannot be based on these speculations from the applicant. Please make them commit to a plan and enforce that plan. Saying we cannot know until we get a tenant is not acceptable. Please tell them to reapply when they can answer basic questions completely about the number of buildings, how the center will be cooled, etc., or better yet, tell them Hanover is closed for business to Data Centers.

Sincerely,

Holly Manke

Western Hanover

"Don't be afraid to go where you've never gone and do what you've never done, because both are necessary to have what you've never had and be who you've never been." - The Universe

Biernot, Gretchen W.

From: Holly Manke <hmanke@yahoo.com>
Sent: Saturday, January 31, 2026 8:56 AM
To: Davis, Sean M.; Dibble, Susan P.; Stoneman, Jeff S.; Herzberg, F. Michael; Prichard, Faye O.; Hudson, Ryan M.; Floyd, Danielle G.; Planning; Biernot, Gretchen W.; McGhee, Jr, Fredric I.; Iverson, Edmonia P.; Abbott, Alan C.; Parker IV, Clifton L.; Heizer, Brett; Martin, William E.; Leadbetter, Larry A
Subject: Mountain Road Technology Center

CAUTION: This email originated from outside your organization. Exercise caution when opening attachments or clicking links, especially from unknown senders.

Hello and thank you for taking the time to read my email about the Mountain Road Technology Center. I live and work in Hanover. I had no idea there was even a 33 Gateway Small Area Plan. I decided to read the actual survey responses in this document, https://publicinput.com/Customer/File/Full/8e649283-c70f-4cfb-9b19-b7c95f92500c , for myself. I encourage you to read the comments from the people. Most said leave this area alone, keep it rural, if you won't keep it rural then have shopping or sit down restaurants. A lot wanted a Recreational Area. I ask you to look at page 16 for the percentage responses when the survey participants were told this area had been identified as an economic development area and had to choose what types.

The comments throughout the survey are enlightening as to what the people really want. They say traffic is already bad regardless of any new additions to the area. I encourage you to not take my word for it, but read the actual results yourself.

We, as a community feel cheated by this area plan. A data center is not wanted and will disrupt the area completely. I refer to the traffic study done and the results for the buildout.

The results of the Build 2034 (Construction Peak) traffic operational analysis indicate that all signalized intersections and all unsignalized approaches are projected to operate with delays equivalent to LOS D or better, with the exception of the westbound approach at the intersection of US-33 and Project Driveway #1 during the PM peak hour, which is projected to operate with delays equivalent to LOS F. Note that these results are typical where a low volume, stop-controlled, road intersects a high-volume, free-flow road. On occasions where vehicles are unable to exit the site, or excessive queues are observed on-site, it is expected that the contractor will deploy flaggers to maintain the safety and operations of the intersection.

This is what is happening right now on Ashland Road in Goochland for the Amazon buildout. Flaggers impeding the already backed up traffic all day to benefit the construction traffic and not the people trying to get to 64 or home from work. This shows you what will actually happen to 33 if a data center is approved.

This area is still A-1 and should stay A-1 back to Winns Church. The frontage on 33 could be great shopping and not a massive warehouse for Data. The exception to have 85' buildings is completely

unprecedented in the South Anna area. 85' is the height of the Rebel Yell for us old timers or the Racer 75 for the younger people. Imagine seeing that from 33 and Winns Church.

The Chickahominy needs to be protected from industrial development. Stormwater run off will go into the Chickahominy per the developers plans. This is unacceptable as the stormwater run off will contain the secret fluid they use to cool the buildings and can create a fish kill the size we have not seen in the Chickahominy.

The power is also in question. PJM sent out an alert during this latest winter storm that it did not have sufficient power to keep the grid going in several areas of Virginia. REC let its customers know about this possibility of a black out. I did not see any notification from Dominion Energy. This is happening now and shows the current grid strain. Gone are the days of the Grid will provide because it cannot, it will not, and the people will be the ones to suffer.

Please, Please, listen to the people or Hanover and deny the zoning request changes to the 33 – Winns Church area and deny the special exemptions requests.

Sincerely,

Holly Manke

"Don't be afraid to go where you've never gone and do what you've never done, because both are necessary to have what you've never had and be who you've never been." - The Universe

Biernot, Gretchen W.

From:	Holly Manke <hmanke@yahoo.com>
Sent:	Friday, February 6, 2026 9:58 AM
To:	Planning; Davis, Sean M.; Stoneman, Jeff S.; Herzberg, F. Michael; Prichard, Faye O.; Hudson, Ryan M.; Dibble, Susan P.; Floyd, Danielle G.; Biernot, Gretchen W.; ctyadm; Walter, Dennis A.; Economic Development
Subject:	Mountain Road Technology Park and the 33 Gateway Plan

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When I first learned about the proposed data center closest to my home, I advocated that the people of Hanover could make a difference. So many people told me that it was a done deal and we had no say. I always said the same thing, I think the Board listens and will do what is best for us. I truly believed that. The planning commission reassured that during their last meeting. I was told over and over, how proud Hanover was about the 33 Gateway plan and all the community input that designed it. I decided to read it. This has changed my mind about this process and how it operates.

https://engage.hanovercounty.gov/33plan?fbclid=IwY2xjawPq3o9leHRuA2FlbQIxMABicmlkETFWdFg2alplampWd0VST2hkc3J0YwZhcHBfaWQQMjIyMDM5MTc4ODIwMDg5MgABHvZUYuUsYmq3d5ZL_4bBQdIV9oQH-2G9sTz8nbhSFb0-XKxKm-hOZKkvAP0V_aem_movpZotAohwNHgNcLvt1ZA

Please read the surveys. Please read the comments and then explain to the people of Hanover how a data center was the best choice or even wanted for this area. This plan was pushed and designed from the start for a data center. I cannot see how Hanover would think the community was on board for a data center when the respondents said it would be nice to… shop on my way home, eat dinner on my way home, or stop and have some recreation on my way home. Not a data center with a walk that destroys the wetlands around the Chickahominy.

We have been sold on a false plan that the residents do not believe in and do not want. I would like to believe that you are still here to listen and do the best thing for the residents. I do not believe it blindly any longer. I do not trust the process after this survey and plan came to light. I do not trust the process after the community open house this week. I think Hanover County Government has to do better for the residents and so does the Board. Once trust is lost, it is hard to earn back. These Data centers have brought all this to light for the residents and now the Board and Hanover County Government have to stand for the people and not for big Money promises.

Sincerely,
Holly Manke
South Anna District

"Don't be afraid to go where you've never gone and do what you've never done, because both are necessary to have what you've never had and be who you've never been." - The Universe

Biernot, Gretchen W.

From: Stepp-Davis, Makayla L.
Sent: Thursday, January 15, 2026 1:09 PM
To: Biernot, Gretchen W.
Subject: Fw: Marchetti Properties, et al, REZ2025-00023
Attachments: Data Centers and Electric Capacity - BOS 1-14-2026 Mtg..docx

Thank you,

Makayla Stepp-Davis
Planning Technician II
Planning Department
(804) 365-6362
Hanover County

From: Robert Nelson <ranelsonjr1@verizon.net>
Sent: Thursday, January 15, 2026 10:27 AM
To: Planning <planning@hanovercounty.gov>
Subject: Marchetti Properties, et al, REZ2025-00023

CAUTION: This email originated from outside your organization. Exercise caution when opening attachments or clicking links, especially from unknown senders.
Good morning,

Please find attached my citizen comments on Hanover data center cases. They were presented at yesterday's Board of Supervisors meeting. This rezoning involves 900 megawatts of electric capacity and is referenced in the 2,700 megawatt total for pending cases in the citizen comments.

I request that these comments be included in the record and in any future planning staff reports for this rezoning. Thank you.

Bob Nelson, Ashland District

Good afternoon Chairman Herzberg and Board Supervisors. My name is Bob Nelson. I reside in the Ashland District.

I started working on energy issues in 1973. For almost 30 years, I litigated a broad range of electric and natural gas cases before the Federal Energy Regulatory Commission and on appeal, including cases involving regional transmission organizations.

PJM is a regional transmission organization. Virginia is one of 13 states within PJM.

So imagine my surprise two years ago, when I was literally grabbed by the arm and lectured on Tract data center electric needs. The message. The PJM grid will provide.

The "grid will provide" is a dangerous and irresponsible mantra. Tract requires 2,400 megawatts – more than the North Anna nuclear plant and double the capacity of the Doswell energy center. With other pending projects, Hanover data centers would need 5,100 megawatts, enough to serve 30 times the county's population.

Dominion experienced record peak demands last January, in the winter no less. The federal EIA has reported that Virginia relies on out of state resources to meet 30 to 40% of its annual electricity needs. These are huge red flags.

A capacity auction was recently held to meet PJM's forecasted electrical demand. Despite a record maximum price, the resources bid in the auction were inadequate to meet PJM's reliability requirements by 6,500 megawatts. The capacity auction was a wakeup call to the market and regulators.

PJM's growing reliability problem is a top FERC concern. Last month, the FERC issued a 120 page order requiring PJM to make fundamental changes to its electric tariff because of data centers.

Major problems have been confirmed by data center consultants. Cushman and Wakefield stated and I quote: "Power constraints remain a critical challenge. Across many markets in the Americas, utility power queues are swelling, delivery timelines are lengthening, and interconnection requests are rising." Cushman and Wakefield doesn't need to be grabbed and told what to think. Its assessment is spot on. I'm not alone.

The grid is not providing. PJM is in crisis mode, increasingly unplanned and unreliable. This Board cannot ignore data center electricity issues in Virginia, Dominion's service territory, and Hanover County.

Citizen Comments, Board of Supervisors Meeting, January 14, 2026

Biernot, Gretchen W.

From: Stepp-Davis, Makayla L.
Sent: Thursday, November 6, 2025 8:32 AM
To: Biernot, Gretchen W.
Subject: Fw: Proposed Mountain Road Technology Park

Thank you,

Makayla Stepp-Davis
Planning Technician II
Planning Department
(804) 365-6362
Hanover County

From: Tandy Goodwin <goodwin.tlg@gmail.com>
Sent: Wednesday, November 5, 2025 4:55 PM
To: Dibble, Susan P. <spdibble@hanovercounty.gov>
Cc: Planning <planning@hanovercounty.gov>
Subject: Proposed Mountain Road Technology Park

CAUTION: This email originated from outside your organization. Exercise caution when opening attachments or clicking links, especially from unknown senders.

spdibble@hanovercounty.gov
Dear Ms.Dibble,

I appreciated the meeting with Tract Developers October 30. I have many questions and hope there will be an additional meeting with Hanover citizens when more details are available. Not being an expert, it is hard to know what questions to even ask. The obvious concerns
have to do with how it will affect this rural community, including noise, traffic, environmental concerns and water and energy

consumption. It seems much of the infrastructure needs to be in place first.
Although the tax revenue is enticing, my concerns have to do with our quality of life.

The noise generated is a problem as they are asking for quite a tall variance. Hanover County has a noise ordinance. I hope there would not be an exception. The building's heights preclude any type of sound loop mitigating vegetation in the near future.

I believe traffic is estimated at over 1000 vehicles per day. Already, there is a long wait to enter Rte 33 from Winn's Church Road. A traffic light is already needed in that area. The county should do their own unbiased traffic study, especially during peak hours.

Environmental concerns are also unsettling. This property abuts Grassy Swamp Creek and includes a pond. What type of runoff will be going into that area? Where does the "diluted water (???)" spoken about at the meeting go?
What IS diluted water? This area is part of the Chesapeake Bay watershed. Also, many shallow residential wells are in proximity to the project in question. How will they be affected?

Water consumption for cooling...what are the actual numbers once the data center is fully operational? Is the pond/creek area being considered as an alternate (or secondary) source in case of excess need?

Energy consumption....what does this mean for our county? Will their consumption cause the citizens' rates to increase? When power goes out, are generators to be used(which are also noisy)? Have any alternate energy sources been explored to decrease Dominion Energy reliance? I am not an engineer, but some data centers install solar panels on the roof or contract with existing solar banks to decrease their consumption. Perhaps more expensive initially, but it may allow for better neighborhood relations

I was especially concerned with the answers Tract provided. When a simple search states that annually,

" AI Overview

A 900 MW power plant can power approximately 700,000 to 1 million homes annually, though the exact number varies significantly based on factors like average household energy consumption, climate, and location. A common estimate is that 1 MW can power about 670 homes on average over a year, making

the calculation for 900 MW approximately 603,300 homes. Other estimates show 1 MW can power between 200 and 1000 homes, depending on the usage. "

but the Tract representative says 50,000, I have a hard time with credibility of any of the answers.
We were told to go see White Oak for a comparison. I found the information below (Update) on datacenterdynamics.com concerning White Oak after Iron Mountain purchased land.
NOTE that it says 1,000,000 sq ft for a 200MW capacity. Just how many square feet are we talking?

***Update*:** Iron Mountain has since confirmed the land purchase. The land will support more than 200MW of capacity. The campus will reportedly total four data center buildings covering more than 1 million square feet. Timelines for development haven't been shared.

I know many corporations stand to profit massively from the AI boom. Surely they could listen to the neighbors whose community and daily lives are being upended. If people lose money on their real estate, it may represent their life savings. If this proposal continues to be considered, the citizens deserve another meeting with factual answers.

Sincerely, Tandy Goodwin
12357 Doe Crossing Lane
804-380-2753

Proffers

VOLUNTARY PROFFER STATEMENT

Mountain Road Technology Park Project

Owners:	Marchetti Properties III, LLC, a Virginia limited liability company; Marchetti Properties II, LLC, a Virginia limited liability company; Staples Mill Square Holding LLC, a Virginia limited liability company; G.M. Tribble, Jr., and Brenda R. Tribble; and Tyson Farms, Inc., a North Carolina corporation, f/k/a Holly Farms Foods, Incorporated, f/k/a Holly Farms Poultry Industries, Inc.
Project Name:	Mountain Road Technology Park (the "Project")
Property:	Hanover County (the "County") Tax Parcels 7757-98-4106, 7767-08-0569, 7767-17-2423, 7757-97-5013, 7768-00-5491, 7757-96-5577, and 7757-96-1157 consisting of approximately 427 acres, all as generally depicted in the Concept Plan (collectively, the "Property")
Concept Plan:	That certain plan entitled "Mountain Road Technology Park Concept Plan and Conditional Use Permit, Hanover County, Virginia", prepared by Kimley Horn, dated April 30, 2026 (as amended, the "Concept Plan"), which is attached hereto as **Exhibit A**
Re-Zoning Request:	Rezoning from Agriculture District (A-1) to Limited Industrial District (M-1)
Date:	April 30, 2026

The undersigned, Marchetti Properties III, LLC, a Virginia limited liability company, Marchetti Properties II, LLC, a Virginia limited liability company, Staples Mill Square Holding LLC, a Virginia limited liability company, G.M. Tribble, Jr., and Brenda R. Tribble; and Tyson Farms, Inc., a North Carolina corporation, f/k/a Holly Farms Foods, Incorporated, f/k/a Holly Farms Poultry Industries, Inc. owners of parcels designated as GPINs 7757-98-4106, 7767-08-0569, 7767-17-2423, 7757-97-5013, 7768-00-5491, 7757-96-5577, and 7757-96,1157 (the "Property"), voluntarily agree for themselves, their agents, and their personal representatives, successors and assigns (collectively, the "Applicant") that, in the event the Property is rezoned from A-1 to M-1, and the accompanying Conditional Use Permit and Special Exception request for the Property is approved by the Board of Supervisors, the development and use of the Property must be subject to the below conditions.

1. **Land Use.**

(a) Permitted Use. The use of the Property shall be limited to data processing, ISPs, search portals and related services, which includes data centers, data equipment, data storage, other technological services, and research related to the foregoing, together with other supporting uses (collectively referred to herein as "Data Center").

(b) Supporting Uses. Uses in support of the above permitted use may be constructed on the Property, including the following:

(i) Buildings for support offices and security;

(ii) Buildings for maintenance and maintenance offices;

(iii) All electric generation, distribution, transmission and substation facilities;

(iv) Enclosed energy and fuel storage facilities;

(v) Office, general office and storage;

(vi) Logistics and maintenance facilities;

(vii) Water and sewer facilities;

(viii) Water treatment facilities;

(ix) Water storage facilities and associated water pumps;

(x) Communication, broadband, fiber optic utilities; and

(xi) Other private utilities, all public utilities, and other supporting uses that relate to and support the permitted primary uses described herein.

Any of the uses listed above that require approval of a Conditional Use Permit (CUP) or Special Exception (SE) within the M-1 zoning district must obtain a CUP or SE from the Hanover County Board of Supervisors and, if approved, the supporting use will be subject to the conditions set forth in the accompanying Conditional Use Permit and/or Concept Plan, as applicable.

2. **Concept Plan**. The Property will be developed in substantial conformance with the layout illustrated on sheets C3.0-C3.3 of the Concept Plan, which is attached hereto, incorporated herein by reference and marked as Exhibit A and subject to the requirements and adjustments permitted in the conditions and notes stated therein and these proffered conditions. All parcel lines, private road locations, access points and entrances, boundaries of buildable areas, accessory use locations, utility locations (including substations), stormwater management facilities, and dimensions of undeveloped areas, all as illustrated on sheet C3.0 of the Concept Plan, may be adjusted for purposes of final engineering of site or subdivision plans (for multiple phases) and to further allow for compliance with the requirements of state and federal agency regulations including but not limited to, Virginia Department of Historical Resources ("DHR"), Virginia Department of Transportation ("VDOT"), Virginia Department of Environmental Quality ("VDEQ"), Virginia Department of Conservation and Recreation ("DCR"), U.S. Army Corps. of Engineers, and the County's Zoning Ordinance, Subdivision Ordinance, and other applicable design standards. The determination as to whether adjustments are in substantial conformance with the layout illustrated on sheet C3.0 of the Concept Plan shall be made by the Director

of Planning. Improvements placed within the boundaries of the buildable areas shall be determined to be in substantial conformance with the Concept Plan.

3. **Natural Perimeter Buffers.**

(a) Natural Perimeter Buffers: Natural perimeter buffers shall be provided as follows:

(i) The portion of Property adjacent to Route 33/Mountain Road shall have a natural buffer with a minimum width of 200' (the "Route 33 Buffer").

(ii) The portion of Property fronting on Winns Church Road shall have a natural buffer with a minimum width of 300' (the "Winns Church Buffer").

(iii) The northwest portion of the Property shall have a natural buffer with a minimum width of 150' as and to extent shown on the Conceptual Plan (the "Northwest Buffer").

(iv) The portion of the Property's boundary line shared with a boundary line for an existing commercial use fronting on Route 33, as of the date hereof (the "Existing Commercial"), shall have a natural buffer with a minimum width of 50' along the shared boundary line as generally illustrated shown on the Conceptual Plan (the "Existing Commercial Buffer").

(v) The western portion of the Property's boundary, adjacent to "Future Industrial" as identified in the Route 33 Gateway Small Area Plan, as of the date hereof, shall have a natural buffer with a minimum width of 75' as shown on the Conceptual Plan (the "Western Buffer").

(vi) The Property's eastern boundary line, along Grassy Swamp Creek, shall have a natural buffer, a minimum of 200' in width. The remaining width of this natural buffer shall increase by aligning this required buffer with the portions of the eastern boundary lines of Development Area 2 and Development Area 3 in the locations identified on the Conceptual Plan as "Variable Width Buffer" (the "Eastern Buffer"). The wider portions of the Eastern Buffer line may adjust only for the construction of the public walking trail referenced in Proffered Condition 4 identified on the Concept Plan.

(vii) The Property's southern boundary line along Chickahominy River shall have a natural buffer with a minimum width of 200' (the "Southern Buffer").

(b) Inventory of Existing Vegetation: The existing vegetation within a required natural perimeter buffer specified above shall be inventoried and submitted to the Planning Department no later than as specified below, unless the Director of Planning approves a later time frame:

(i) For the Route 33 Buffer, site plan submittal for Building Area 1C.

(ii) For the Winns Church Buffer, site plan submittal for Building Area 3B.

(iii) For the Northwest Buffer, site plan submittal for Building Area 3B.

(iv) For the Existing Commercial Buffer, the earlier of site plan submittal for Building Area 1A or Building Area 1B.

(v) For the Eastern Buffer, if an inventory is required by the Planning Department, landscape plan approval as a part of site plan approval for the earlier of Building Area 2B or Building Area 3A.

(vi) For the Western Buffer, the earlier of site plan submittal for Building Area 2A or Building Area 3A.

(vii) For the Southern Buffer, if an inventory is required by the Planning Department, landscape plan approval as a part of site plan approval for the earlier of Building Area 1C or Building Area 2B.

(c) Maintenance of Existing Vegetation and Allowable Disturbance: Existing vegetation within natural buffers shall be undisturbed, except for the limited purposes specifically set forth in this paragraph. Dead or diseased trees may be removed. Entrance improvements, including access roads, signage and other similar and associated improvements, may be installed within these buffer areas. Other improvements having minimal impact on the existing trees within these buffer areas (i.e. handholes, junction boxes, utility pedestals), but not stormwater basins or other improvements requiring mass grading and/or the removal of a significant number of trees, may be requested by the owner and approved by the Planning Director at the time of site plan review and approval. Security fencing will not be located within natural buffers. Utility easements may pass through these buffer areas in a generally perpendicular manner (may not exceed 45 degrees), unless currently existing. Notwithstanding the foregoing, any resource protection areas (RPAs) and wetlands within these natural buffer area shall be included in the required natural buffer area and shall not be impacted, other than for access roads into the Property as identified on the Concept Plan or as may be required to comply with these proffered conditions. These natural buffers shall be included within any required setback along the perimeter of the Property.

(d) Supplemental Plantings:

(i) Existing vegetation will not need to be supplemented if the existing vegetation meets the following conditions:

(A) The buffer area is covered with at least 75% of naturally-established vegetation;

(B) The existing plant material is mature and in healthy condition;

(C) The existing plant material consists of a mix of evergreen and deciduous trees which satisfy the following:

(a) Existing deciduous trees having a minimum 4 inch caliper measured two feet from the ground;

(b) Evergreen trees that are a minimum of ten feet in height; and

(c) Hardy shrubs that are a minimum of two feet in height and width with a full growth habit;

(d) Any existing trees which are used to satisfy this requirement must have the entirety of their canopies located within the buffer area; and

(e) There is an established understory of small trees and shrubs, both evergreen and deciduous, to provide significant buffering at the lower forested area.

(ii) Existing vegetation that does not meet the requirements above shall be supplemented, with preference given to the tree types of valley forge elm, white oak, red maple, sweetgum (seedless), blackgum, in accordance with the following standards:

(A) Existing vegetation with no understory as required in subsection 4.a.iii.1.c.v. above must be improved as follows:

(a) 3 small deciduous understory trees per 100 feet of buffer length;

(b) 3 small evergreen trees per 100 feet of buffer length;

(c) 5 large shrubs per 100 feet of buffer length; and

(d) 10 small to medium shrubs per 100 feet of buffer length.

(B) Existing vegetation with no evergreen tree component as required in subsection 4.a.iii.1.c.iii. above must have the following, located along the inside or outside buffer line in a staggered pattern:

(a) 4 large evergreen trees per 100 feet of buffer length; and

(b) 6 small evergreen trees per 100 feet of buffer length.

(C) Existing vegetation with no deciduous tree component as required in subsection 4.a.iii.1.c.iii. above will not qualify and the existing vegetation must be modified and replanted in accordance with subsection 4.a.iii.1.d. below. Existing evergreen trees can be used to meet the requirements related to evergreen trees.

(D) Where existing vegetation does not comply with subsection iii. above due to immature, inadequate or unhealthy trees and shrubs, the owner shall plant a staggered pattern and placement in accordance with the following standards:

(a) Plantings may be clustered within the buffer as long as there are no vegetative gaps of ten (10) or more linear feet or the existing stand of trees have no branches or understory growth lower than six feet from the ground.

(b) Clusters to be of no more than 50' in width consisting of:

(i) 2 Large Deciduous Trees;

(ii) 4 Small Deciduous Trees;

(iii)6 Large Evergreen Trees;

(iv)8 Small Evergreen Trees;

(v) 7 large shrubs; and

(vi)15 Small to medium shrubs.

1. Unless otherwise specified, references to the size of required trees and the characteristics of required trees and shrubs are in accordance with Section 26-265. Shrub sizes are as follows: small shrubs are those that do not exceed 4 feet at maturity without pruning, medium shrubs are those that reach 4 to 8 feet at maturity without pruning, and large shrubs are those that reach greater than 8 feet at maturity. Maturity for shrubs is 7 years of age.

(iii) The determination of whether existing vegetation needs supplementing shall be made at the time of site plan submittal for building construction and the determination shall be made for the portion of the Natural Buffer shown within or adjacent to the area encompassed within the requested site plan approval. At the time of site plan review and approval the planting standards contained in this Section 4.a.iii may be reasonably modified based on soil and plant growth needs as approved by the Planning Director.

(e) Mandatory Supplemental Plantings:

(i) A double row of large evergreen trees (i.e. Leyland Cypress or Arborvitae) shall be planted and maintained behind the 300' wide natural buffer along Winns Church Road, for the length of the buffer not located within utility easements, and no deeper into the project than the northern boundary of

Building Area 3B, to screen the substation from Winns Church Road. In addition, a double row of large evergreen trees (i.e. Leyland Cypress or Arborvitae) shall be planted and maintained between the Building Area 2B eastern boundary and the Natural Buffer along Grassy Swamp Creek to screen the substation from Grassy Swamp Creek. No more than fifty percent (50%) of plantings will be of the same species, unless otherwise approved by the Planning Director at the time of plans review.

(ii) A planting strip, a minimum of ten (10) feet wide, shall be provided between the internal circulation road and Building Area 3A. This strip shall be planted with a row of evergreen trees spaced fifty (50) on center for the length of the strip.

(f) Natural Buffer Protection Measures: If any construction activity or other land disturbance on the interior of the Project comes within 20' of the interior edge of any portion of the Natural Buffer, then in order to protect that portion of the Natural Buffer, a temporary construction fence, with a minimum height of four (4) feet, shall be installed along the interior edge of that portion of the Natural Buffer (i.e. where the Natural Buffer is 200' as set forth above, the temporary construction fence will be installed 220' in from the property boundary line to protect that portion of the Natural Buffer). The temporary fence may be removed upon completion of the applicable construction or other land disturbance activity or to facilitate the planting of supplemental plantings.

(g) Extension of Buffers Through RPA: The buffers around the Property will be wider than the 50', 150', or 200', or 300' set forth above, as applicable, where resource protection areas ("RPA"s) are contiguous to the interior side of the Natural Buffer, as applicable, in the areas noted on the Concept Plan, subject to permitted crossings of roads, trails, and utilities, and the construction of a sanitary sewer lift station and appurtenances, all in compliance with applicable laws.

4. **Walking Trails.** Applicant shall dedicate a public easement for use and maintenance of a walking trail along the Chickahominy River and Grassy Swamp Creek in the general location illustrated on the Conceptual Plan, with the final location to be determined by site plan submittals. Within this easement, the Applicant will construct and dedicate to the County for maintenance a walking trail constructed in accordance with the following:

(a) Easement Location: The location of the easement and the trail shall generally follow the currently cleared path to minimize tree removal and disturbance for the trail, however, minor boardwalks and crossings may be added, at water crossings, as needed.

(b) Trail Surface: The trail shall be constructed from a durable, hard surface material, unless otherwise required at plan review to meet governmental requirements.

(c) Trailhead Improvements: A trailhead aera to include a minimum of eight (8) paved parking spaces and one bicycle parking area.

(d) Access to County Pump Station: The Developer shall provide vehicular access to the Department of Public Utilities to the County pump station through the site via a new access easement. The location and width of the easement shall be approved by the Department of Public Utilities during the site plan review process. The easement will be located in vehicle drives approved on site plans to the maximum extent possible. The existing access to the pump station along the Chickahominy River may be converted to a walking trail once alternative access to the pump station is established.

(e) Phasing of Trail Construction: The trail shall be completed in phases based on the submittal of site plans for Building Areas 1C, 2B, 3A and 3B. Each site plan for these Building Areas must contain a portion of the trail with no gaps between each section of the trail. Each portion of the trail must be completed prior to the issuance of the first certificate of occupancy for a building within the Building Area for the applicable site plan. The construction of the trail must be completed no later than the issuance of the last certificate of occupancy issued for a building within these Building Areas.

(f) Trail Maintenance Contribution Fund: A monetary contribution of $30,000 per Building Area must be provided to Hanover County to support ongoing maintenance of the walking trail and associated trailhead. Such contribution shall be made prior to building permit approval of the first data center building within each building area (Building Area 1, Building Area 2 and Building Area 3), for a total contribution of $90,000 for the entire project.

5. **General Design Standards**

(a) Definitions.

(i) *Building Area(s)*: Areas within the site where the majority of vertical development will occur.

(ii) *Building Coverage*: The total area within a Development Area improved with buildings, represented as a percentage arrived at by dividing building footprints (i.e. first floor gross square footage) by the total area (s.f.) of the Development Area.

(iii) *Development Area(s)*: Areas within the site that contain Building Areas and other supporting uses.

(iv) *Data Centers*: As defined above and with associated equipment such as, but not limited to, computer systems, servers, networking and telecommunications equipment and associated components, as well as related infrastructure such as power transmission lines, power supplies, cooling systems, environmental controls, security devices, and staff.

(v) *Ancillary Buildings*: Facilities that support the primary Data Center use of the site including, but not limited to logistics and operations, utilities, office, security, and other related uses.

(vi) *Utilities*: Above-and below-ground infrastructure needed to serve the development. This includes all wet-and dry-utilities, including, but not limited to water, sewer, storm, electric, fiber, cable, phone, and natural gas.

(vii) *Ecological Restoration Area*: The area where an existing degraded and/or impacted ecosystem is being intentionally designed and assisted to recover to its original or similar state. For example, this may include restoring a stream and/or wetlands impacted by manmade ponds and water features.

(b) Landscaping.

(i) Native Species: At least thirty (30%) of the plantings shown on each site plan or landscape plan submitted to the Planning Department for a Development Area (or portion thereof) shall use species native to Hanover County or adjacent localities.

(ii) Parking Lot Landscaping: Landscaping within a parking area shall be provided on the basis of ten (10) square feet per parking space. This required landscaping may be provided within landscaped islands with the parking area or at the perimeter of the parking area.

(c) Pedestrian Circulation.

(i) Sidewalks: Sidewalks shall be provided on at least one side of primary site vehicular circulation areas and internal site vehicular circulation areas, as such circulation areas are illustrated on the Concept Plan. Interior site vehicular circulation areas do not include drive-aisles.

(ii) Pedestrian Connections from Parking Areas to Building Entrances: Pedestrian walkways at least five feet in width will be provided through parking areas to provide connections from parking lots to the primary building entrance, with such walkways separated from parking spaces and drive aisles by curbing and/or landscaping.

(iii) Pedestrian Walkways to Secondary Entrances: Any secondary entrance(s) shall be connected by a pedestrian walkway to building parking.

(d) Perimeter Setbacks for Buildings: All buildings shall be setback from perimeter property lines as follows:

(i) From Route 33/Mountain Road (east of Route 33/Mountain Road): Minimum of two hundred fifty feet (250') from the right-of-way (ROW).

(ii) From Winns Church Road (south of Winns Church Road): Minimum of three hundred feet (300') from the right-of-way (ROW).

(iii) Along the southern and eastern perimeter boundary line: Minimum of two hundred feet (200') from the boundary line, with such setback being as generally illustrated on the Conceptual Plan.

(iv) Along Existing Commercial: Minimum of fifty feet (50') from the shared boundary line of the project and the Existing Commercial.

(v) Along the western portion of the Property's boundary adjacent to "Future Industrial" as identified in the Route 33 Gateway Small Area Plan, as of the date hereof: Minimum of seventy-five feet (75') from the boundary line, for the length as and to extent shown on the Conceptual Plan.

(vi) M-1 Zoning District Yard Requirements: These perimeter building setbacks are in addition to yard requirements in the M-1 Zoning District and do not modify the yard requirements in the M-1 Zoning District, but may be collocated with other yards and required buffers.

(e) Use Locations.

(i) Specific uses are permitted within Development Areas and Building Areas. These are described below. Some uses may have additional requirements or standards, which are described in the Additional Notes section below.

(ii) The following uses are permitted within all Development Areas, as identified on the approved concept plan and subject to any conditions in any approved Conditional Use Permit or Special Exception applicable to one or more of the uses below:

(A) Security Fencing (10' or as specified in an approved Special Exception)
(B) Project Signage
(C) Wayfinding Signage
(D) Roadways
(E) Utilities
(F) Emergency & Utility Access
(G) Drive Aisles & Pedestrian Access
(H) Parking Lots
(I) Ancillary Building, such as equipment storage, security sheds and other similar structures
(J) Lighting
(K) Stormwater Facilities
(L) Trails
(M) Landscaped Areas
(N) Passive Recreation Amenities

(iii) The following uses are permitted within all Buildings Areas, as identified on the approved concept plan, subject to any applicable and approved Conditional Use Permit and Special Exception:

(A) Data processing, ISPs, search portals and related services, which includes data centers, data equipment, data storage, other technological services, and research related to the forgoing (continuing to be a part of the defined term Data Center as used herein).

(B) Substations

(C) Other supporting uses

(iv) Additional Notes on Permitted Uses.

(A) CUP/SE Uses: Any permitted use requiring a Conditional Use Permit or Special Exception must obtain approval from the Board of Supervisors of the required Conditional Use Permit or Special Exception, as applicable.

(B) Sign Prohibition on Winns Church Road: No Project Signage is permitted along Winns Church Road.

(C) Substations: Only substations, and their accessory buildings, equipment and installations, are permitted within Building Area 2B and Building Area 3B, as identified on the Concept Plan, subject to approval of a Conditional Use Permit by the Board of Supervisors and all approved conditions in the CUP.

(D) Transmission Infrastructure: Transmission infrastructure serving the site will be weathering steel or a similar earth-tone color to blend with adjacent natural buffer or another color approved by the Planning Director in accordance with the colors offered by Dominion Energy or approved by Dominion Energy at the time of construction, provided that the Planning Director finds that such colors help support structures blend with nearby trees and landscaping to minimize visual impacts. To minimize buffer impacts, where perimeter buffers are required per the proffered conditions and/or concept plan are crossed by transmission infrastructure, such crossings must be designed and constructed to be generally perpendicular to those buffers

(E) Outside Development Areas: Areas outside Development Areas and Building Areas will generally remain undeveloped; however, crossings for utilities, infrastructure, and access facilities are permitted.

(F) Other Uses: The Planning Director may permit similar uses, not specified above, within each Development Area or a Building Area upon the Director finding that the unspecified uses are generally in keeping with the spirit and type of uses listed above for each of a Development Area or a Building Area, provided however the permitted principal uses listed in Proffer 1(a) above shall not be expanded under this paragraph.

(f) Dimensional Standards.

(i) Setbacks: Buildings shall comply with the yard requirements in the M-1 District, in addition to the perimeter setbacks above, where applicable.

(ii) Maximum Building Coverage: Building coverage within a Development Area shall not exceed 50%.

(g) Buildings.

(i) Building Code Requirements: In all instances, the data center buildings, and any energy storage standalone structures, on the Property will be constructed to NFPA code sections 75, 76 and 855, as applicable, as well as all other applicable code, including the applicable provisions of the Virginia Uniform Statewide Building Code in effect at the time of building permit application.

(ii) Building Orientation: Primary building facades and entrances should face internal streets, drive aisles or campus circulation areas and be clearly visible and accessible. Entryways should be emphasized using changes in material, overhangs, or signage to distinguish them from loading and service areas.

(iii) Windows and Transparency (Administrative/Office Areas): Administrative or office portions of buildings visible from roads should include windows and transparent elements to break up massing.

(iv) Loading and Service Areas: If loading docks or service entries located on the side or rear of buildings are visible from public roadways, Grassy Swamp Creek, or from perimeter project boundary lines, then they shall be screened using other buildings, and/or in accordance with standards set forth in Sec. 26-263 (Screening and planting standards). Loading areas shall not be located on the front side of a building.

(v) Roof Design: Roof design shall be predominantly flat to accommodate mechanical systems and rooftop infrastructure. Rooftop mechanical equipment shall be screened by parapets or architectural detailing to create a finished appearance from public view as required per Proffer #6.

(vi) Principal Building Façade Requirements: Principal Building Facades will meet the following standards:

(A) Definition/Applicability: For the purposes of this subsection, the term "principal building facades" shall include all building facades substantially visible to abutting public roads or to perimeter project boundary lines.

(B) Façade Features: Principal building facades shall avoid the use of undifferentiated surfaces by including at least four (4) of the following design elements:

(a) change in building height
(b) building step-backs, projections or recesses
(c) fenestration
(d) changes in building material, pattern, texture, color
(e) use of accent material
(f) overhangs
(g) canopies or porticos
(h) arcades
(i) variations in the roof line

(C) Building Colors: Principal building facades shall use earthtone color palettes (such as tans, grays, warm browns, or muted greens) with accent colors to complement the dominant building color. High-gloss finishes and white tones should be avoided.

(D) Consistency on Multiple Facades: When a building has more than one principal facade, such facades shall be consistent in their design, materials, details, and treatments.

(E) Exhibit: Samples of architectural form are attached hereto as **Exhibit B**.

(F) Elevation Review: Building elevations must be submitted with the site plan application for each data center building. In the event a building's architectural style is not in accordance with the foregoing, deviations may be approved by the Planning Director, upon the Planning Director's finding that the deviations are generally in keeping with the spirit and concept of the illustrations.

(vii) Design of Security Shed: Security Shed design will meet the following standards:

(A) Exterior Colors: The security shed shall use earthtone color palettes (such as tans, grays, warm browns, or muted greens) with accent

colors to provide visual appeal. High-gloss finishes and white tones should be avoided.

(B) Roof Design: Roofs shall be pitched or sloped and will generally be consistent with regional forms and materials.

(C) Elevation Review: Security shed elevations must be submitted with the initial site plan for the campus and shall be approved by the Planning Director for compliance with these requirements.

(viii) Building Materials:

(A) Primary Materials: Acceptable building materials include brick, stone, pre-cast concrete, cast-in-place concrete, architectural metal paneling, and similar finishes that support long-term performance, unless different architectural treatments and/or materials are specifically approved by the Planning Director, with respect to the exposed portion of any such wall, at the time of Site Plan review.

(B) Accent Materials: Accent materials such as architectural concrete, metal paneling, or high-performance siding may be used if applied consistently and limited in surface area to no more than 20% of a single façade.

(ix) Applicability: Subsections (vi) and (viii) shall only apply to Data Center buildings and structures and not to any supporting uses, provided such facilities or buildings are buffered by other uses which mitigate the visual impacts to public roads or abutting properties.

(x) Building Height: Building Height is measured to the top of the building and includes parapet walls that are used to screen equipment. Building height shall be limited to the following in each building area, subject to the approval of a Special Exception by the Board of Supervisors:

(A) Building Area 1A, 1B, 1C, and 2B: 62 feet.

(B) Building 2A, and 3A: 62 feet.

(C) Building 3B: 35 feet within 350 feet of Winns Church Road, otherwise 62'.

(D) Ancillary buildings located outside of Building Areas, but within Development Areas: 35 feet.

6. Screening of Mechanical Equipment: Exterior mechanical equipment, including HVAC equipment, permanent electrical generators, refrigeration equipment and ductwork, backflow prevention devices, and similar features, must be screened from view from U.S.

Route 33 (Mountain Road), Winns Church Road, Grassy Swamp Creek, and perimeter project boundary lines, as follows:

(a) Roof-mounted mechanical equipment: Mechanical equipment mounted on the roof of a building must be screened by a parapet wall, roof screen, or similar device that is integrated into the building's building form and of a height equal to or greater than the height of the mechanical equipment being screened.

(b) Ground-mounted and wall-mounted mechanical equipment: Mechanical equipment mounted on or near ground-level, or otherwise mounted on the building wall, must be screened by any combination of principal buildings, sight-obscuring dense evergreen vegetation or decorative walls or fences that incorporates at least one of the primary materials or colors of the nearest wall of the primary structure on the lot. The height of the vegetation, wall, or fence shall equal or exceed that of the mechanical equipment being screened.

(c) Director's Review: The method of screening will be provided and reviewed with the Director's review of the building elevations.

7. Signage. All freestanding signs installed at the Project, excluding directional signs, will comply with the following requirements:

(a) Sign Prohibition on Winns Church Road: No project signage is permitted along Winns Church Road.

(b) Master Sign Plan: Prior to approval of the first sign permit within a Development Area, a Master Sign Plan shall be submitted and approved by the Planning Director for compliance with the requirements of this Proffered Condition 7. The Master Sign Plan will provide additional details on sign design, materials, and placement to ensure consistency throughout the project area. The Master Sign Plan will include the following:

(i) Freestanding Signs

(A) Style: Monument-style with a solid masonry base (i.e. brick or stone or architectural masonry materials) at least 18" tall. Other materials used shall compliment the materials used on the principal building(s).

(B) Design Consistency: A shared design motif shall be used throughout the project area. The exterior portions of the sign shall employ rectangular proportions and the top shall be flat or gently curved tops or employ height articulation.

(C) Maximum Height and Width: Freestanding signs shall not exceed six (6) feet in height and shall not exceed ten (10) feet in width.

(D) Maximum Sign Face Area: The sign face area on a freestanding sign shall not exceed forty (40) square feet (total area).

(E) Road Setback: Freestanding signs shall be setback a minimum of ten (10) feet from the nearest right-of-way line.

(F) Illumination: Illumination will be permitted for freestanding signs. Lighting must be shielded and downward-directed to minimize glare and preserve the nighttime character of the area.

(ii) Building Primary Wall Signs.

(A) Location: The building's primary (largest) wall-mounted sign shall be located near one of the building's primary entrance.

(B) Design: The building's primary (largest) wall-mounted sign shall be designed as an architectural element for the building with font styles, colors, and materials that are visually compatible with the building's overall design.

(iii) Multi-User Sites. Multi-user areas within the project should establish a coordinated signage plan to ensure consistency in tenant panel size, font, and placement on both monument and wall signs.

(iv) User Prototypical Design. All users shall be allowed to incorporate their prototypical sign design and materials into all signage.

8. Security, Perimeter Fencing and Security Fencing. Perimeter fencing, security gates, and guard buildings shall be located outside of the Natural Buffer. The perimeter fencing must be installed on the interior of the Natural Buffer, so that it is screened from the ground level view of adjacent property owners at buffer maturity. This perimeter fencing may be installed around the perimeter of the Project or around each "Building Area" shown on sheet C3.0 of the Concept Plan or a combination for these two options, or as otherwise approved by the Planning Director at the time of site plan review and approval. Fencing immediately adjacent to public or private streets shall not be chain-link, with or without slated inserts, and shall not include barbed wire or other similarly visibly intrusive deterrence device, unless required by Dominion Energy. The design and final location for the perimeter fencing and security fencing shall be approved by the Planning Director for consistency with sheet C-5.0 in the Concept Plan at the time of site plan review and approval.

9. Lighting. All exterior lighting fixtures, including pole-mounted exterior lighting and building-mounted exterior lighting, shall be fully shielded with house side shields, louvers or similar devices installed. Lighting shall not exceed .50 foot-candles at the interior edge of the Natural Buffer. The following proffers apply to specific lighting on the property:

(a) Pole-Mounted Exterior Lighting:

(i) The maximum height shall be eighteen feet (18').

(ii) Fixtures will be consistent with the fixtures shown on the page 28 of the U.S. Route 33 Gateway Small Area Plan and described in Section E.1 (as of the date hereof), as determined by the Planning Director at the time of site plan review.

(b) Building-Mounted Exterior Lighting:

(i) The maximum height shall be 35 feet in height.

(ii) The uplighting of buildings is prohibited.

(c) Additional Building Lighting: Although data centers have minimal windows generally, the Applicant further proffers that interior lighting will be minimized from being emitted externally at night (using window coverings or other shading mechanisms) where the windows face Route 33/Mountain Road, Winns Church Road, the Chickahominy River, Grassy Swamp Creek, or the perimeter project boundary lines of the Property.

(d) Exemptions: Lighting that is exempt from these requirements includes temporary lighting and lighting provided for emergency or safety and security purposes as required by Federal, state, or local regulations.

10. Transportation. Subject to VDOT and County approvals, as applicable, the Applicant proffers the transportation improvements set forth below. Any modifications to the alignment, design and length shall be approved by VDOT. If any of the road improvements identified below are provided by others, then the specific road improvement shall no longer be required. The transportation improvements listed below shall be constructed prior to the issuance of the first building permit for the first data center building

(a) Entrances: A maximum of 2 entrances will be provided to Route 33/Mountain Road. Entrances will generally be at the locations shown on the Concept Plan. The final locations and design of the entrances will be completed during the site plan review and approval process and reviewed and approved by the Planning Director for general conformance with the Concept Plan, subject to VDOT entrance approvals.

(b) Restricted Access: Access to Winns Church Road will be permitted only for emergency access and limited permanent utility access once the project is constructed. No construction traffic or regular data center access will be allowed on Winns Church Road.

(c) Turn Lanes at Southern Project Entrance: The Applicant shall design and construct a right turn lane (with a minimum 100' of taper and 200' of storage, unless greater lengths are required or approved by VDOT) into the primary entrance off of Route 33/Mountain Road in accordance with VDOT construction standards and specifications. The applicant will also design and construct a right turn lane (with

a minimum 200' of taper and 200' of storage, unless greater lengths are required or approved by VDOT) into the secondary access entrance off of Mountain Road in accordance with VDOT construction standards and specifications.

(d) Median U-Turn along Route 33/Mountain Road North of the Primary Entrance: The Applicant shall design and construct improvements necessary to create a Median U-Turn north of the primary entrance on Route 33/Mountain Road in accordance with VDOT construction standards and specifications. This will include widening Route 33/Mountain Road to provide a left turn lane to accommodate vehicle stacking and any necessary improvements to existing median openings or alternatively, the construction of a new median opening along Route 33/Mountain Road to accommodate U-turn movements.

11. Construction Road Damage. Pavement damage to Route 33/Mountain Road from I-295 (beginning of entrance ramp from southbound Route 33/Mountain Road to eastbound I-295) to the northernmost entrance to the Property off Route 33/Mountain Road, including shoulders and aprons, attributable to construction of the Project, as reasonably determined by the County Transportation Planner or VDOT staff, as applicable, must be repaired by the Developer / Owner identified by the County Transportation Planner or VDOT staff, as applicable, to have caused such damage, within 120 days of issuance of the final certificate of occupancy for the last building that is subject to each site plan approval, which repair shall be at the Developer / Owner's sole expense. Developer / Owner shall be required to post a bond of $50,000 prior to site plan approval of the first site plan, not to be released until 120 days after the issuance of the final certificate of occupancy for the final building. This bond may be replaced by different owners within the project depending on the development schedule. Should the County's Transportation Planner or VDOT staff, as applicable, determine that the damage has made the road unsafe, the Developer / Owner identified as causing such unsafe condition will initiate the process of said repairs within forty-eight (48) hours after receiving notice from the County's Transportation Planner or VDOT staff that the damage has made a road unsafe. The applicable Developer / Owner will diligently conduct all repairs required herein in a timely manner.

12. Dedication of Right of Way. For the portion of the Property running along Winns Church Road, adjacent to the northern boundary of the project, the Applicant agrees to dedicate 60 feet of right-of-way for future road widening, free of cost to the County, upon request of the County or VDOT. Off-site dedications shall not be required by this obligation.

13. Noise. Noise attenuation will be required for buildings and related infrastructure. The Applicant agrees to the following:

(a) Permitted sound levels. The project shall not exceed a maximum dBA level of 57 in the daytime and 52 at nighttime at the exterior boundary lines of the project. Additionally, the project shall not exceed a maximum dBC level of 73 in the daytime and 68 at nighttime at the exterior boundary lines of the project. Daytime and nighttime hours shall comply with the hours defined in Hanover County's Noise Ordinance.

(b) Noise study. Within 30 days after the "ready for service" date for each data center building constructed at the Project (i.e. the date on which all exterior equipment is installed and operational), the Applicant shall provide a noise study that is specific to such data center building to ensure that the noise generated from the data center building and the building's associated infrastructure, together with the other noise generated as of that date from the Project, conforms to the permitted sound restrictions in Proffered Condition 13(a). This noise study shall be completed by a certified professional and include recommendations for any necessary mitigation measures required to ensure conformity with the permitted sound restrictions in Proffered Condition 13(a)and the Applicant shall implement such mitigation measures within 60 days after the date of the noise study, unless a particular mitigation measure requires a longer time to implement and that particular mitigation measure shall be implemented within that longer period time as approved by the Planning Director. Any required mitigation measures may be noted on the approved plans as an administrative amendment.

(c) Additional Noise Study. After the Noise Study is conducted in connection with the "ready for service" date for each data center building constructed at the Project, the Planning Director may require the owner, at the owner's expense, to conduct an additional sound study, in accordance with this Proffered Condition 13, once (1) per calendar year after the last "ready for service" sound test.

(d) Physical Sound Attenuation. Physical sound attenuation will be installed on any mechanical equipment_(including but not limited to ground supported barriers, earthen berms, mechanical screening or other attenuation techniques as specifically called out in subsequent sound studies) that is installed at a data center building located within 1,200 feet of any perimeter project boundary line and that is either (i) installed on the rooftop of such building or (ii) that is installed on the exterior side of such data center building and directly facing such adjacent residential uses, in each case unless a noise study demonstrates that there is no incremental noise from such mechanical equipment as a result of the foregoing installation locations.

(e) Generator Testing. The testing of any back-up generators at the Project shall be limited to between the hours of 8:00 a.m. and 4:00 p.m., Monday through Friday, unless otherwise required by applicable state or federal law or regulation. All generators shall be enclosed with manufacturer approved sound attenuation enclosures that are architecturally compatible with the color of the primary building façade, as approved by the Planning Director at the time of plans review.

14. Generators. Only Tier IV (or better) generators shall be used.

15. Construction. A construction management plan, shall be submitted to the County at the time of grading permit for the initial site improvements and for each individual parcel where a building permit has been or is in the process of being approved, which construction management plan shall document the proper administration of construction activities at the applicable portion of the Project. The hours of exterior construction, including operation of bulldozers and other earthmoving equipment, shall only be between 7:00 a.m. and 7:00

p.m., Monday through Saturday, except as provided in Section 16-4 of the Hanover County Code. There shall be no exterior construction activities on Sunday.

(a) The construction management plan shall also specify that construction traffic may only enter and exit the Project at the access points off of Route 33/Mountain Road and shall require the posting of "No Construction Traffic" (or similar) signage at any other access points entering the property.

(b) The construction management plan will identify measures that will be taken to minimize congestion, delays, and queuing on Route 33/Mountain Road. This shall include, at a minimum, the following measures:

(i) A restriction on commercial construction vehicles exiting during the AM peak and entering and exiting the property during the PM peak hours. Monday through Friday, which shall be defined as 8:00 a.m. - 9:00 a.m. and 4:00 p.m. - 6:00 p.m. respectively,

(ii) The implementation of traffic control measures designed to ensure construction traffic complies with approved exiting movements, and

(iii) In consultation with the Sheriff's office, off duty Sheriff's officers, or other appropriate personnel approved by the Sheriff's office, shall be used, at the owners/developers expense, for traffic control on Mountain Road during peak construction vehicle trip hours to and from the Property and peak hours of construction worker shift changes, as determined in coordination with the Sheriff's office or other County Administration official(s).

(c) The construction management plan shall address measures to reduce dirt, dust and rocks on Mountain Road.

(d) No Construction Access shall be permitted from Winns Church Road.

(e) At least one public liaison must be identified by the applicant/owner in the construction management plan. The applicant/owner must provide a phone number and email address during periods of active construction of the project. At a minimum, the information must be provided to Hanover County's Public Information Officer for publication on the County's website, social media, and/or other public platforms. The liaison must act as a point of contact between members of the public and construction crews. The liaison must be available (either by phone or email) or have a means for voicemail or messages to be received during active construction hours and will respond to questions related to the project or property within a specified timeframe to be defined in the construction management plan. The liaison role must commence upon issuance of the first land disturbance permit issued for the project or property and must remain a minimum of six (6) months following the County's issuance of the final certificate of occupancy for the project.

16. Water and Sewer. Applicant agrees that the Project shall be connected to the County's water and wastewater infrastructure. In addition, the Applicant agrees to the following:

(a) Design and Construction Costs: The development shall be responsible for the design and construction cost of any on-site accessory water storage improvement required by the Department of Public Utilities to meet peak demand.

(b) Private Wells for Cooling Prohibited: The use of private well water is strictly prohibited.

(c) Data Center Cooling: The Project shall use air cooling systems or recirculating evaporative cooling systems for all data center buildings on the Property, or other new technology, as evidenced by manufacturer printed material, and will use water provided by the municipal system. Single pass cooling shall not be used. The Project shall not withdraw onsite groundwater or surface water for cooling purposes associated with data center uses.

(d) Cash Proffer Payment for Public Water Infrastructure: To address peak water demands and necessary fire flow for the development of a data center use, the owner/developer shall make the following payments to Hanover County for use by the Department of Public Utilities for the specified purposes:

(i) At the time of the first plat or plan submission to a state agency or department or to Hanover County in connection with a data center use, this submission shall include a $1,500,000 payment to Hanover County for the design of a 15MGD booster pump station with two 1 MG water storage tanks ("First Payment) (unless a later time is approved by the Director of Public Utilities based on the time the Department of Public Utilities needs to design the 15MGD booster pump station with two 1 MG water storage tanks); and

(ii) After payment of the First Payment and no later than 30 days after the Department of Utilities notifies the owner/developer that bids were received for the award of a contract for the installation of the 1MG water storage tank and a booster pump station, $13,500,000 shall be paid to Hanover County for the construction of the 1 MG water storage tank and the booster pump station with initial pumping capacity of 5 to 7.5 MGD, with the ability for future expansion ("Second Payment").

(e) Land Dedication: The owner shall dedicate up to two acres for the construction of two 1 MG water storage tanks and associated infrastructure to support the recommendations of the County's Water Supply Resiliency Study. The final location of the water storage tank shall be located outside of any Building Area designated on the Conceptual Plan and shall be approved by the Director of the Department of Public Utilities at the time of plans review. This dedication shall occur prior to approval of the first site plan but no later than the Second Payment.

17. Gateway Entrance Feature. A project gateway entrance feature will be constructed in the general location of the primary site access on Route 33/Mountain Road, as generally illustrated on the Concept Plan. The design and materials to be used for this gateway entrance feature shall be submitted with, or prior to, the first site plan application for Building Area 1 for review and approval by the Planning Director for compliance with the requirements in this Proffered Condition.

(a) The gateway entrance feature shall include:

(i) A design that emphasizes arrival to the Industrial Zone for the Route 33/Mountain Road Corridor, which design is typified on page 27 of the U.S. Route 33 Gateway Small Area Plan (as of the date hereof).

(ii) Use of monument signage in accordance with Proffered Condition 7(b)(i) above, except that materials used shall compliment the materials allowed to be used for buildings.

(iii) Landscaping around the monument signage to include layered plantings with a mix of plant types and sizes without obstructing views.

(b) Also, the gateway entrance feature shall include one of the following improvements incorporated into the entrance feature or at a secondary location near the primary site access on Route 33/Mountain Road and between the security shed and Route 33/Mountain Road:

(i) Plaza or other hardscape feature,

(ii) Public Art,

(iii) Water Feature, or

(iv) Other similar entrance improvement approved by the Planning Director.

[REMAINDER OF PAGE LEFT INTENTIONALLY BLANK; AUTHORIZED SIGNATURES TO FOLLOW]

WITNESS the following signature:

OWNERS:

Marchetti Properties III, LLC, a Virginia limited liability company; Marchetti Properties II, LLC, a Virginia limited liability company; Staples Mill Square Holding LLC, a Virginia limited liability company; G.M. Tribble, Jr., and Brenda R. Tribble; and Tyson Farms, Inc., a North Carolina corporation, f/k/a Holly Farms Foods, Incorporated, f/k/a Holly Farms Poultry Industries, Inc.

By:_____

Jeffrey P. Geiger, Attorney-in-Fact for all Owners

Date: May 5, 2026

COMMONWEALTH OF VIRGINIA

CITY OF RICHMOND, to-wit:

I, Brenda M. Holmes, a Notary Public for the Commonwealth of Virginia, at-large, do certify that Jeffrey P. Geiger, whose name is signed to the above, bearing date on the 5th day of May, 2026, has acknowledged the same before me in my State aforesaid.

Given under my hand this 5th day of May, 2026.

Brenda M Holmes

[SEAL]

My commission expires: 9-30-2027

Brenda M. Holmes
Commonwealth of Virginia
Notary Public
Commission No. 224930
My Commission Expires 9/30/2027

Exhibit A

Concept Plan

See that certain plan entitled "Mountain Road Technology Park Concept Plan and Conditional Use Permit, Hanover County, Virginia", prepared by Norris Design and Kimley Horn, dated April 30, 2026.

Exhibit B

Elevations – Illustrative Examples









Conceptual Plan

MOUNTAIN ROAD TECHNOLOGY PARK
CONCEPT PLAN AND CONDITIONAL USE PERMIT

HANOVER COUNTY, VIRGINIA

SOUTH ANNA DISTRICT

4/30/2026

PARCEL OWNERSHIP

OWNER - PARCEL 1

MARCHETTI PROPERTIES II, LLC
2503-C WACO STREET
HENRICO, VA 23294

OWNER - PARCELS 2, 4, AND 5

MARCHETTI PROPERTIES III, LLC
STAPLES MILL SQUARE ASSOCIATES, LLC
2503-C WACO STREET
HENRICO, VA 23294

OWNER - PARCEL 3

STAPLES MILL SQUARE HOLDINGS, LLC
2503-C WACO STREET
HENRICO, VA 23294

OWNER - PARCEL 6

G. M TRIBBLE, JR. & BRENDA R. TRIBBLE
12517 WINNS CHURCH ROAD
GLEN ALLEN, VA 23059

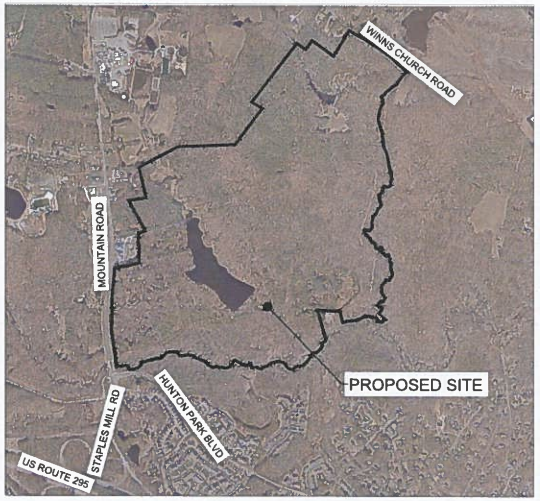
OWNER - PARCEL 7

TYSON FARMS, INC.
PO BOX 2020 TAX DEPT
SPRINGDALE, AR 72765

CIVIL ENGINEER - PLAN PREPARER

KIMLEY-HORN AND ASSOCIATES, INC.
2035 MAYWILL STREET, SUITE 200
RICHMOND, VA 23230
TEL: (804) 673-4703
CONTACT: RYAN PERKINS
EMAIL: RYAN.PERKINS@KIMLEY-HORN.COM

VICINITY MAP



VICINITY MAP
SCALE: 1" = 1000'

NORTH

SHEET INDEX

Sheet List Table

Sheet Number	Sheet Title
C-0.0	COVER SHEET
C-1.0	OVERALL PARCEL OWNERSHIP & ZONING
C-1.1	PARCEL OWNERSHIP & ZONING
C-1.2	PARCEL OWNERSHIP & ZONING
C-2.0	OVERALL EXISTING CONDITIONS
C-2.1	EXISTING CONDITIONS
C-2.2	EXISTING CONDITIONS
C-2.3	EXISTING CONDITIONS
C-2.4	EXISTING CONDITIONS
C-2.5	EXISTING CONDITIONS
C-3.0	OVERALL CONCEPT PLAN
C-3.1	OVERALL CONCEPT PLAN
C-3.2	OVERALL CONCEPT PLAN
C-3.3	CONCEPT PLAN NOTES
C-3.4	OVERALL CONCEPT PLAN DEVELOPMENT ZONES & GATEWAY
C-4.0	CONCEPTUAL SUBSTATION LAYOUT
C-5.0	FENCING

PROJECT DATA

SITE STATISTICS

PARCEL ID	PARCEL 1: 7757-96-1157 PARCEL 2: 7767-17-2423 PARCEL 3: 7757-96-5577 PARCEL 4: 7757-98-4106 PARCEL 5: 7767-08-0569 PARCEL 6: 7768-00-5491 PARCEL 7: 7757-97-5013
TOTAL PARCEL AREA	±428 AC
SITE ADDRESS	13074 MOUNTAIN ROAD
EXISTING ZONING	A-1 - AGRICULTURAL
PROPOSED ZONING	M-1 - LIMITED INDUSTRIAL
HYDROLOGIC UNIT CODE	020802060401-CHICKAHOMINY RIVER - GRASSY SWAMP CREEK
WATER	PUBLIC
SEWER	PUBLIC
ESTIMATED VPD	1,488
WETLANDS ON SITE	YES
RPA ON SITE	YES
FLOODPLAIN ON SITE	THIS PROPERTY LIES IN ZONE 'X' AND 'AE' OF THE FEMA DEFINED FLOOD HAZARD AREA AS SHOWN ON FLOOD INSURANCE RATE MAP NUMBER 51085C0285C, EFFECTIVE DATE JUNE 20, 2024.

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Printed By:Patricia Jones Sheet Set Date: 4/30/2026 10:01:05pm n:\kpc_civil\13793002 - kimley-horn\CAD\E-Sheet\C-0.0 COVER SHEET.dwg
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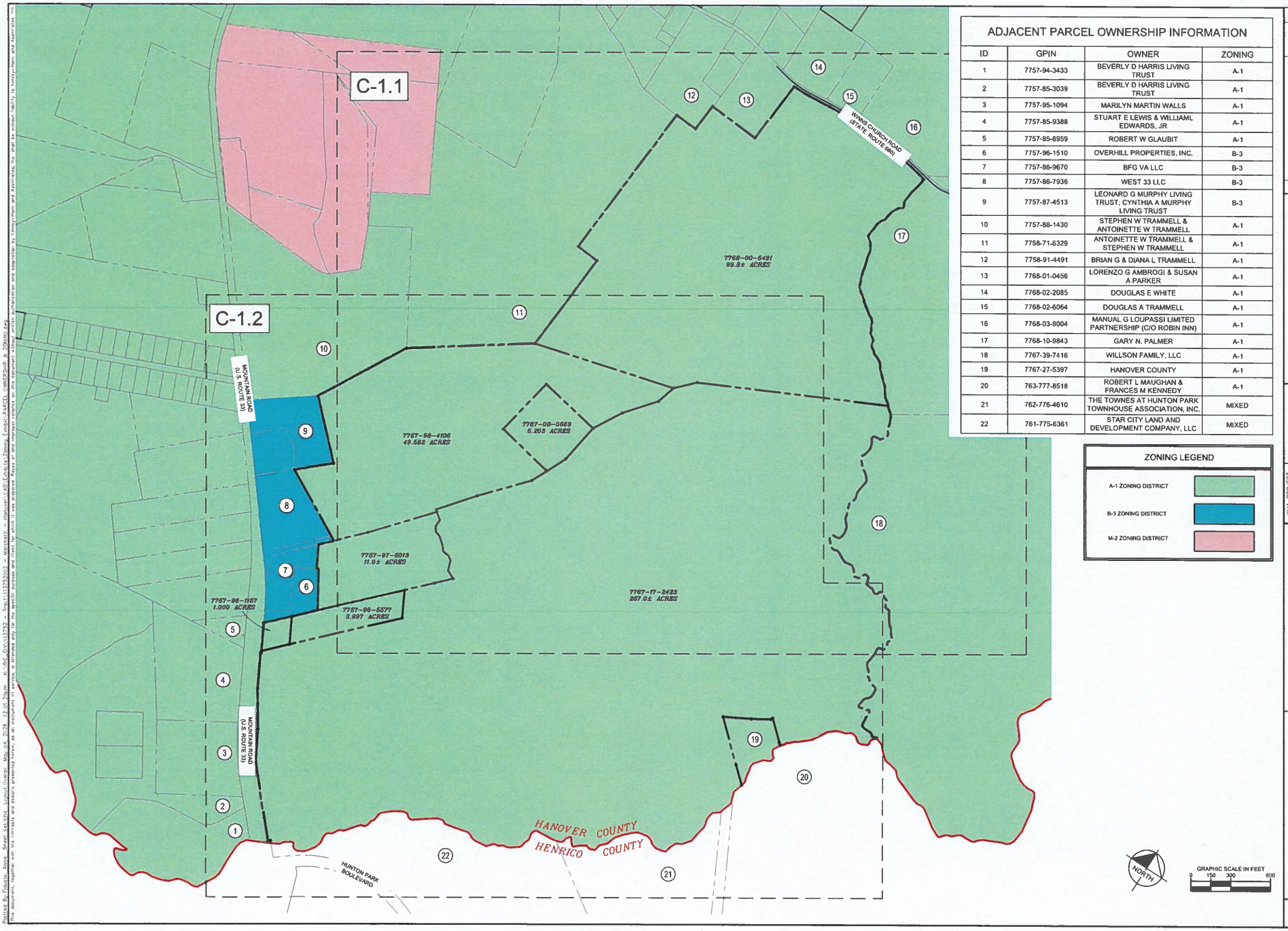
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2035 MAYWILL STREET, SUITE 200, RICHMOND, VA 23230
PHONE: 804-673-3882
WWW.KIMLEY-HORN.COM

KHA PROJECT 113793002
DATE 4/30/2026
SCALE AS SHOWN
DESIGNED BY KPC
DRAWN BY AF
CHECKED BY RRP

COVER SHEET

MOUNTAIN ROAD TECHNOLOGY PARK
HANOVER COUNTY, VA

SHEET NUMBER
C-0.0



ADJACENT PARCEL OWNERSHIP INFORMATION

ID	GPIN	OWNER	ZONING
1	7757-94-3433	BEVERLY D HARRIS LIVING TRUST	A-1
2	7757-85-3039	BEVERLY D HARRIS LIVING TRUST	A-1
3	7757-95-1094	MARILYN MARTIN WALLS	A-1
4	7757-85-9388	STUART E LEWIS & WILLIAML EDWARDS, JR	A-1
5	7757-85-8959	ROBERT W GLAUBIT	A-1
6	7757-96-1510	OVERHILL PROPERTIES, INC.	B-3
7	7757-86-9670	BFG VA LLC	B-3
8	7757-86-7936	WEST 33 LLC	B-3
9	7757-87-4513	LEONARD G MURPHY LIVING TRUST; CYNTHIA A MURPHY LIVING TRUST	B-3
10	7757-88-1430	STEPHEN W TRAMMELL & ANTOINETTE W TRAMMELL	A-1
11	7758-71-6329	ANTOINETTE W TRAMMELL & STEPHEN W TRAMMELL	A-1
12	7758-91-4491	BRIAN G & DIANA L TRAMMELL	A-1
13	7768-01-0456	LORENZO G AMBROGI & SUSAN A PARKER	A-1
14	7768-02-2085	DOUGLAS E WHITE	A-1
15	7768-02-6064	DOUGLAS A TRAMMELL	A-1
16	7768-03-9004	MANUAL G LOUPASSI LIMITED PARTNERSHIP (C/O ROBIN INN)	A-1
17	7768-10-9843	GARY N. PALMER	A-1
18	7767-39-7416	WILLSON FAMILY, LLC	A-1
19	7767-27-5397	HANOVER COUNTY	A-1
20	763-777-8518	ROBERT L MAUGHAN & FRANCES M KENNEDY	A-1
21	762-776-4610	THE TOWNES AT HUNTON PARK TOWNHOUSE ASSOCIATION, INC.	MIXED
22	761-775-6361	STAR CITY LAND AND DEVELOPMENT COMPANY, LLC	MIXED

ZONING LEGEND

- A-1 ZONING DISTRICT
- B-3 ZONING DISTRICT
- M-2 ZONING DISTRICT

No.	REVISIONS	DATE	BY

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PHONE: 804-673-3882
WWW.KIMLEY-HORN.COM

KHA PROJECT	113752002
DATE	4/30/2026
SCALE	AS SHOWN
DESIGNED BY	KPC
DRAWN BY	AF
CHECKED BY	RRP

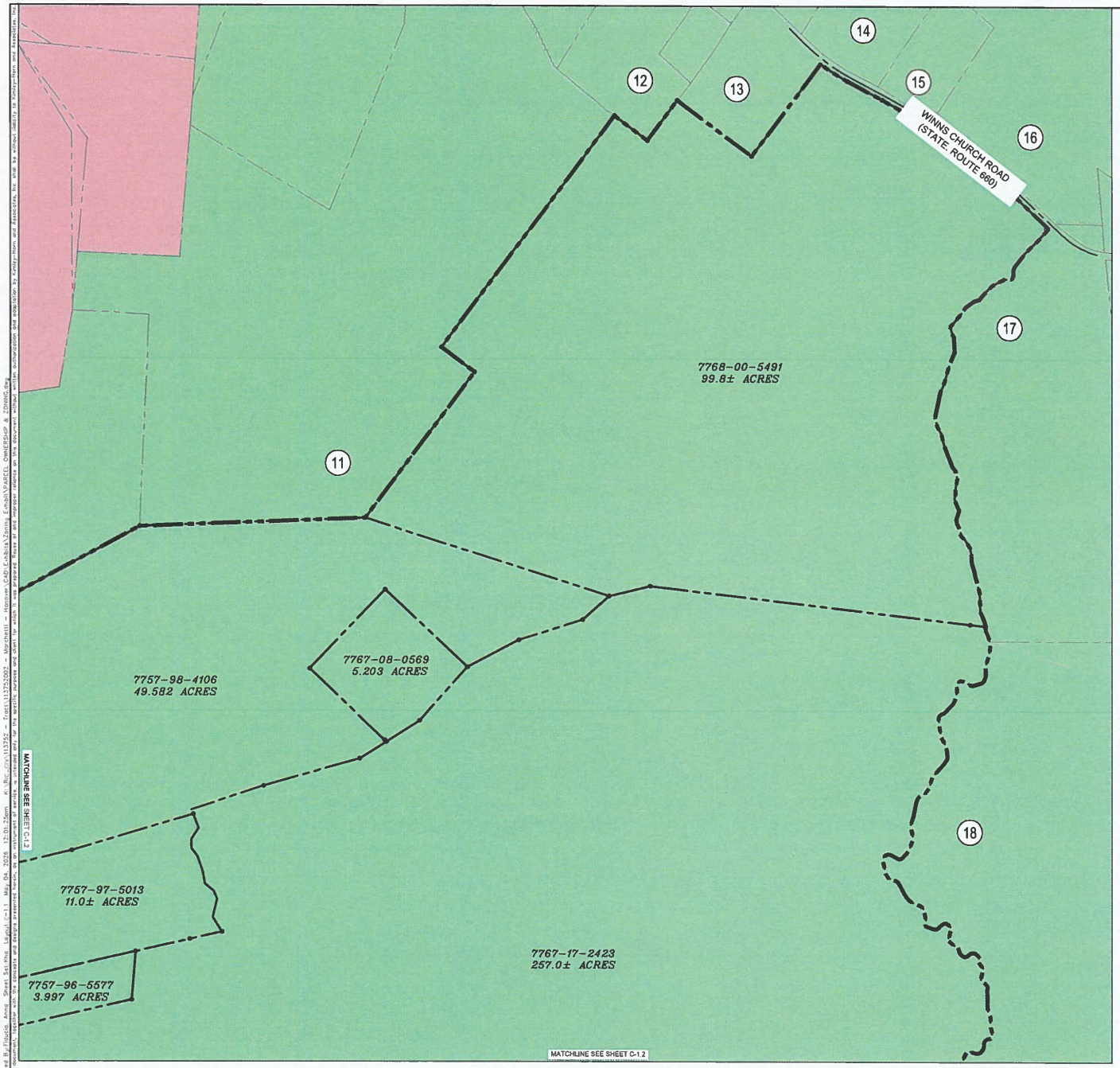
OVERALL PARCEL OWNERSHIP & ZONING

MOUNTAIN ROAD TECHNOLOGY PARK

HANOVER COUNTY VA

SHEET NUMBER
C-1.0

Plotted By: Francis Arena Sheet Set Info: Layout: overall May 04, 2026 - 12:01:29pm K:\RIC_Civil\113752002 - Marshall - Hanover\400_Exhibits\Zoning_Exhibit\PARCEL OWNERSHIP & ZONING.dwg
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15	7768-02-6064	DOUGLAS A TRAMMELL	A-1
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17	7768-10-9843	GARY N. PALMER	A-1
18	7767-39-7416	WILLSON FAMILY, LLC	A-1
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22	761-775-6361	STAR CITY LAND AND DEVELOPMENT COMPANY, LLC	MIXED

ZONING LEGEND

- A-1 ZONING DISTRICT
- B-3 ZONING DISTRICT
- M-2 ZONING DISTRICT

NORTH

GRAPHIC SCALE IN FEET
0 100 200 400

No.	REVISIONS	DATE	BY

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PHONE: 804-673-3882
WWW.KIMLEY-HORN.COM

KHA PROJECT 113752002
DATE 4/30/2026
SCALE AS SHOWN
DESIGNED BY KPC
DRAWN BY AF
CHECKED BY RRP

PARCEL OWNERSHIP & ZONING

MOUNTAIN ROAD TECHNOLOGY PARK
HANOVER COUNTY VA

SHEET NUMBER
C-1.1

Plotted By: Florida, Anna Street Set-Wide Legend (v4.1 - May 04, 2026 - 12:01:26pm - K:\Ric_proj\113752002 - Mechtell - Hanover CAD Exhibits\Zoning Exhibit\PARCEL OWNERSHIP & ZONING.dwg
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MOUNTAIN ROAD TECHNOLOGY PARK
CONCEPT PLAN AND CONDITIONAL USE PERMIT

HANOVER COUNTY, VIRGINIA

SOUTH ANNA DISTRICT

4/30/2026

PARCEL OWNERSHIP

OWNER - PARCEL 1

MARCHETTI PROPERTIES II, LLC
2503-C WACO STREET
HENRICO, VA 23294

OWNER - PARCELS 2, 4, AND 5

MARCHETTI PROPERTIES III, LLC
STAPLES MILL SQUARE ASSOCIATES, LLC
2503-C WACO STREET
HENRICO, VA 23294

OWNER - PARCEL 3

STAPLES MILL SQUARE HOLDINGS, LLC
2503-C WACO STREET
HENRICO, VA 23294

OWNER - PARCEL 6

G. M TRIBBLE, JR. & BRENDA R. TRIBBLE
12517 WINNS CHURCH ROAD
GLEN ALLEN, VA 23059

OWNER - PARCEL 7

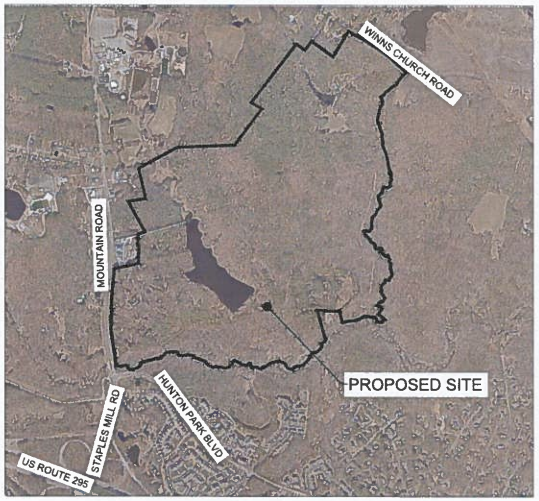
TYSON FARMS, INC.
PO BOX 2020 TAX DEPT
SPRINGDALE, AR 72765

CIVIL ENGINEER - PLAN PREPARER

Kimley»Horn

KIMLEY-HORN AND ASSOCIATES, INC.
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RICHMOND, VA 23230
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CONTACT: RYAN PERKINS
EMAIL: RYAN.PERKINS@KIMLEY-HORN.COM

VICINITY MAP



VICINITY MAP
SCALE: 1" = 1000'

NORTH

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WATER	PUBLIC
SEWER	PUBLIC
ESTIMATED VPD	1,488
WETLANDS ON SITE	YES
RPA ON SITE	YES
FLOODPLAIN ON SITE	THIS PROPERTY LIES IN ZONE 'X' AND 'AE' OF THE FEMA DEFINED FLOOD HAZARD AREA AS SHOWN ON FLOOD INSURANCE RATE MAP NUMBER 51085C0285C, EFFECTIVE DATE JUNE 20, 2024.

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PHONE: 804-673-3882
WWW.KIMLEY-HORN.COM

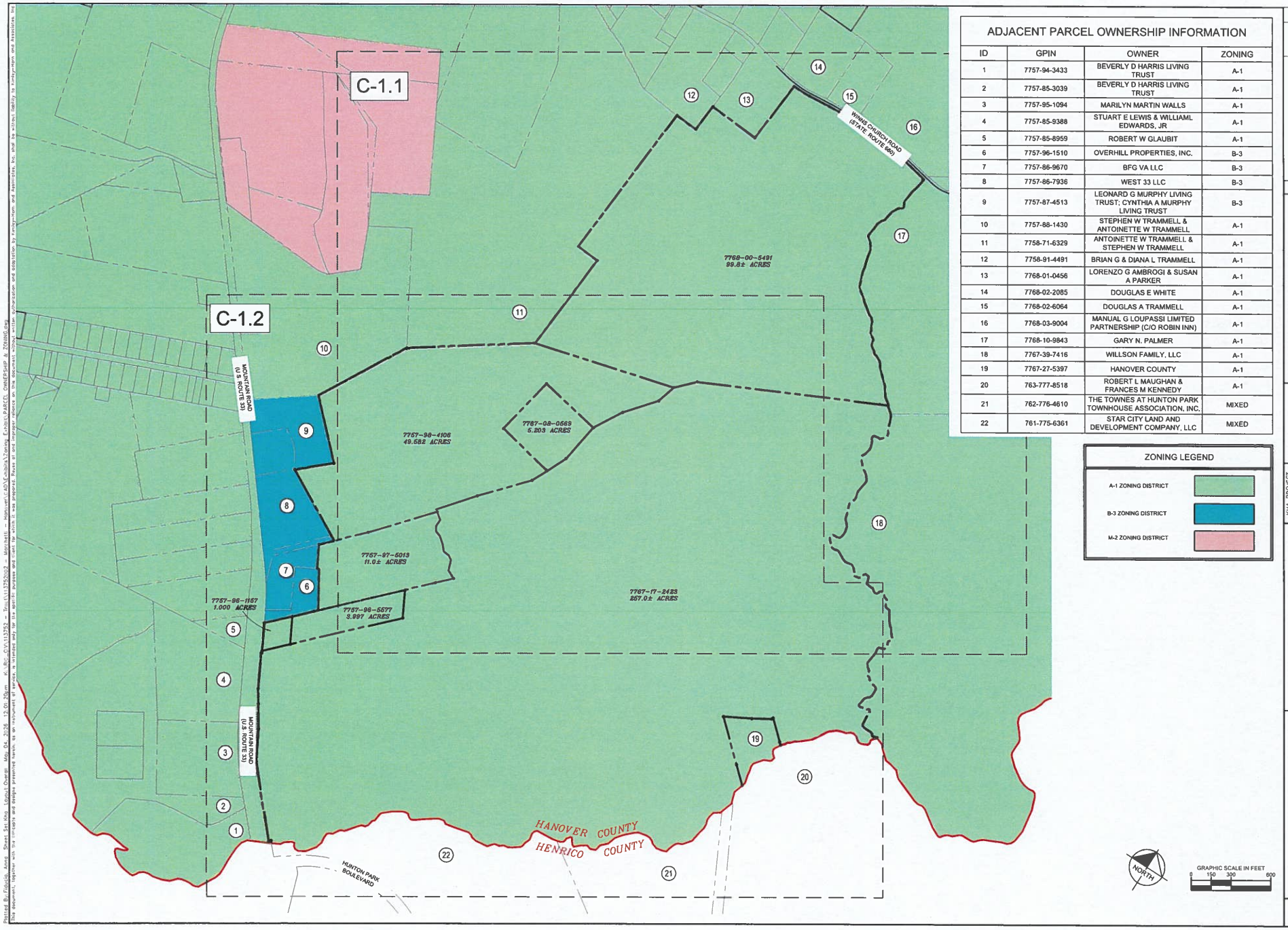
No.	REVISIONS	DATE	BY

KHA PROJECT 113752002
DATE 4/30/2026
SCALE AS SHOWN
DESIGNED BY KPC
DRAWN BY AF
CHECKED BY RRP

COVER SHEET

MOUNTAIN ROAD TECHNOLOGY PARK
HANOVER COUNTY VA

SHEET NUMBER
C-0.0



ADJACENT PARCEL OWNERSHIP INFORMATION

ID	GPIN	OWNER	ZONING
1	7757-94-3433	BEVERLY D HARRIS LIVING TRUST	A-1
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3	7757-95-1094	MARILYN MARTIN WALLS	A-1
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12	7758-91-4491	BRIAN G & DIANA L TRAMMELL	A-1
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15	7768-02-6064	DOUGLAS A TRAMMELL	A-1
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18	7767-39-7416	WILLSON FAMILY, LLC	A-1
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22	761-775-6361	STAR CITY LAND AND DEVELOPMENT COMPANY, LLC	MIXED

ZONING LEGEND

- A-1 ZONING DISTRICT
- B-3 ZONING DISTRICT
- M-2 ZONING DISTRICT

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2135 STAPLES MILL ROAD, RICHMOND, VA 23230
PHONE: 804-673-3882
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No.	REVISIONS	DATE	BY

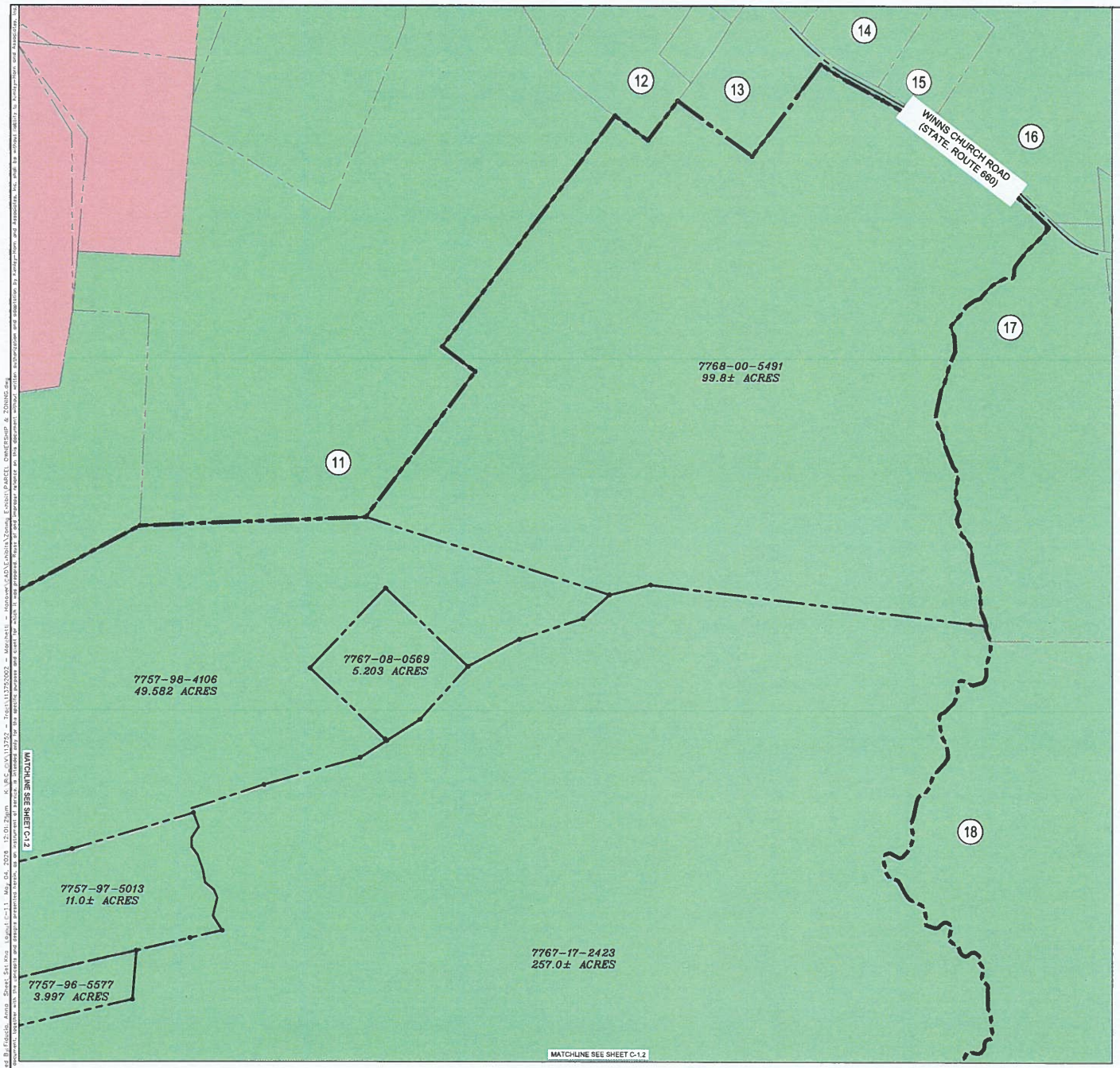
KHA PROJECT 113752002
DATE 4/30/2026
SCALE AS SHOWN
DESIGNED BY KPC
DRAWN BY AF
CHECKED BY RRP

OVERALL PARCEL OWNERSHIP & ZONING

MOUNTAIN ROAD TECHNOLOGY PARK

HANOVER COUNTY VA

SHEET NUMBER C-1.0



ADJACENT PARCEL OWNERSHIP INFORMATION

ID	GPIN	OWNER	ZONING
1	7757-94-3433	BEVERLY D HARRIS LIVING TRUST	A-1
2	7757-85-3039	BEVERLY D HARRIS LIVING TRUST	A-1
3	7757-95-1094	MARILYN MARTIN WALLS	A-1
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ZONING LEGEND

- A-1 ZONING DISTRICT
- B-3 ZONING DISTRICT
- M-2 ZONING DISTRICT

NORTH

GRAPHIC SCALE IN FEET
0 100 200 400

No.	REVISIONS	DATE	BY

Kimley»Horn
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2035 MAITLAND CENTER PARKWAY, SUITE 200, MAITLAND, FL 32751
PHONE: 804-673-3882
WWW.KIMLEY-HORN.COM

KHA PROJECT 113752002
DATE 4/30/2026
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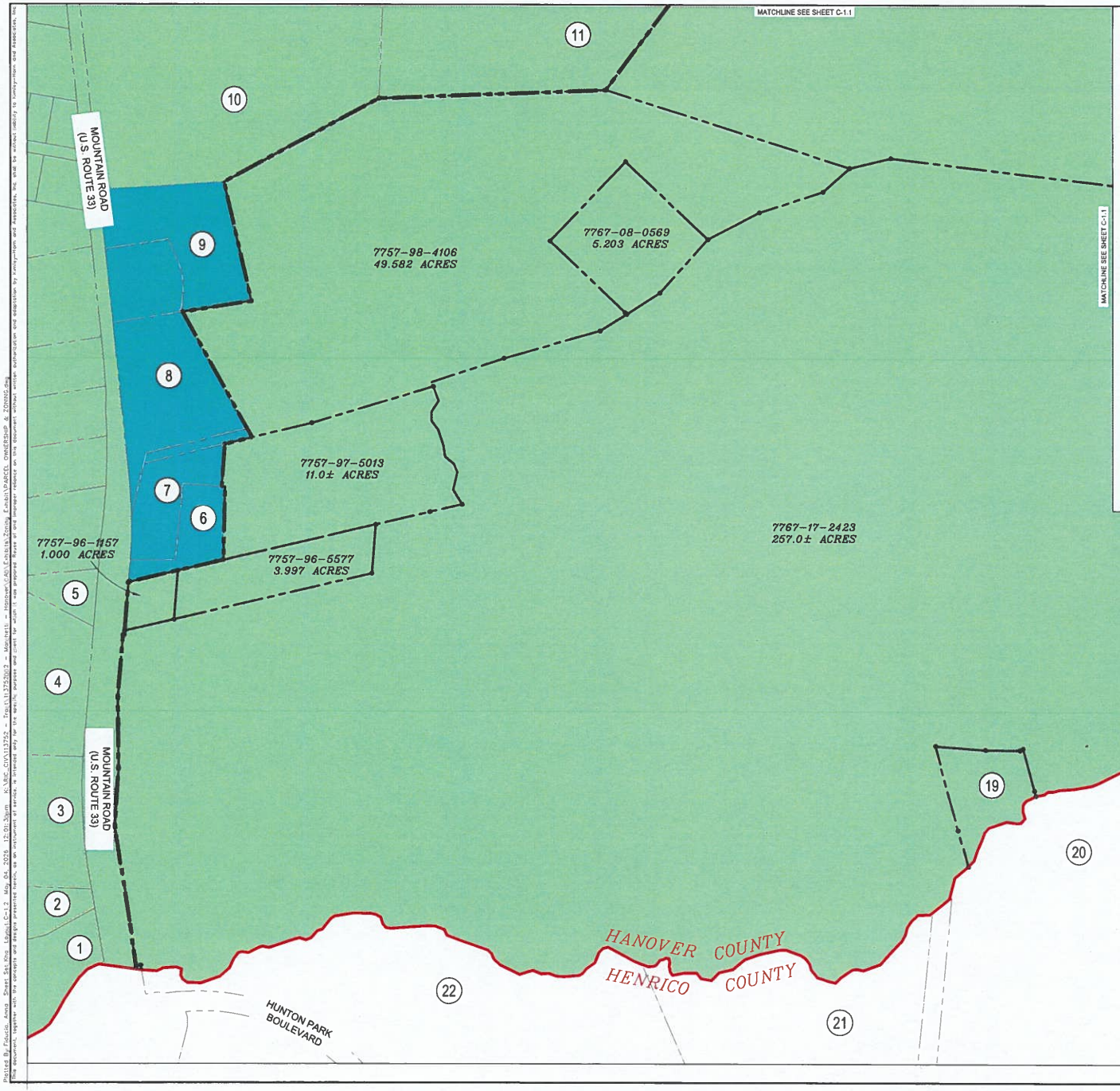
PARCEL OWNERSHIP & ZONING

MOUNTAIN ROAD TECHNOLOGY PARK

HANOVER COUNTY VA

SHEET NUMBER
C-1.1

Plotted By: Kristin Anne Sant Ana | Last Plot: May 04, 2026 - 12:01:29pm K:\RIC_work\113752002 - Mechanicsville\Civil\Exhibits\Zoning Exhibits\PARCEL OWNERSHIP & ZONING.dwg
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14	7768-02-2085	DOUGLAS E WHITE	A-1
15	7768-02-6064	DOUGLAS A TRAMMELL	A-1
16	7768-03-9004	MANUAL G LOUPASSI LIMITED PARTNERSHIP (C/O ROBIN INN)	A-1
17	7768-10-9843	GARY N. PALMER	A-1
18	7767-39-7416	WILLSON FAMILY, LLC	A-1
19	7767-27-5397	HANOVER COUNTY	A-1
20	763-777-8518	ROBERT L MAUGHAN & FRANCES M KENNEDY	A-1
21	762-776-4610	THE TOWNES AT HUNTON PARK TOWNHOUSE ASSOCIATION, INC.	MIXED
22	761-775-6361	STAR CITY LAND AND DEVELOPMENT COMPANY, LLC	MIXED

ZONING LEGEND

- A-1 ZONING DISTRICT
- B-3 ZONING DISTRICT
- M-2 ZONING DISTRICT

NORTH

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0 100 200 400

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PARCEL OWNERSHIP & ZONING

MOUNTAIN ROAD TECHNOLOGY PARK

HANOVER COUNTY VA

SHEET NUMBER C-1.2

Plotted By: Priscilla Arroyo Date: Sat, 04 Apr 2026 - 12:01:39pm K:\RIC_Civil\113752... Projects\113752002 - Mechanicsville - Hanover Mixed Use\Civil\Zoning Exhibit\PARCEL OWNERSHIP & ZONING.dwg
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PARCEL INFORMATION			
PARCEL NUMBER	GPIN	OWNER	ZONING
PARCEL 1	7757-95-1157	MARCHETTI PROPERTIES II, LLC	A-1 - AGRICULTURAL
PARCEL 2	7767-17-2423	MARCHETTI PROPERTIES III, LLC STAPLES MILL SQUARE ASSOCIATES, LLC	A-1 - AGRICULTURAL
PARCEL 3	7757-96-5577	STAPLES MILL SQUARE HOLDINGS, LLC	A-1 - AGRICULTURAL
PARCEL 4	7757-98-4106	MARCHETTI PROPERTIES III, LLC STAPLES MILL SQUARE ASSOCIATES, LLC	A-1 - AGRICULTURAL
PARCEL 5	7767-08-0569	MARCHETTI PROPERTIES III, LLC STAPLES MILL SQUARE ASSOCIATES, LLC	A-1 - AGRICULTURAL
PARCEL 6	7768-00-5491	G M JR & BRENDA R R/S TRIBBLE	A-1 - AGRICULTURAL
PARCEL 7	7757-97-5013	TYSON FARMS, INC.	A-1 - AGRICULTURAL

LEGEND

- PROPERTY LINE
- APPROX. LOCATION OF FEMA FLOOD ZONE — 100Y-FLD
- LIMITS OF STREAM
- EXISTING POND
- WETLANDS/SURFACE WATERS
- RESOURCE PROTECTION AREA

NOTES

1. ALL WETLANDS, SURFACE WATERS, AND RPA BUFFER BOUNDARIES SHOWN ARE BASED ON A COMBINATION OF DESKTOP DATA AND FIELD DELINEATED BOUNDARIES. ALL BOUNDARIES ARE PRELIMINARY AND SUBJECT TO FINAL DELINEATION AND CONFIRMATION WITH THE AHJ. FINAL BOUNDARIES MAY VARY FROM THE BOUNDARY SHOWN.
2. PROPERTY INFORMATION FOR PARCELS 1-5 PROVIDED BY JENNINGSTEPHENSON P.C. FIELD WORK WAS COMPLETED ON JANUARY 24, 2025. PROPERTY INFORMATION FOR PARCEL 6 PROVIDED BY JENNINGSTEPHENSON P.C. FIELD WORK WAS COMPLETED ON SEPTEMBER 09, 2025. PROPERTY INFORMATION FOR PARCEL 7 PROVIDED BY JENNINGSTEPHENSON P.C. FIELD WORK WAS COMPLETED ON SEPTEMBER 09, 2025.

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OVERALL EXISTING CONDITIONS

MOUNTAIN ROAD TECHNOLOGY PARK

HANOVER COUNTY VA

SHEET NUMBER C-2.0

Plotted By: Fabian Arroyo, Space Solutions | Date/Layout: May 04, 2026 - 12:01:47pm | xx:\PRC_DVA\113792002 - Marchetti - Hanover\VA\Civil\Working Files\Layout\C-2.0 Overall Existing Conditions.dwg
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MOUNTAIN ROAD TECHNOLOGY PARK
HANOVER COUNTY VA

EXISTING CONDITIONS

SHEET NUMBER C-2.1

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Plotted By Fidum Amna Date/Time: May 04, 2026 - 12:09pm R:\RC Civil\137300 - Mountain Technology Park\Civil\Sheets\Existing Conditions.dwg
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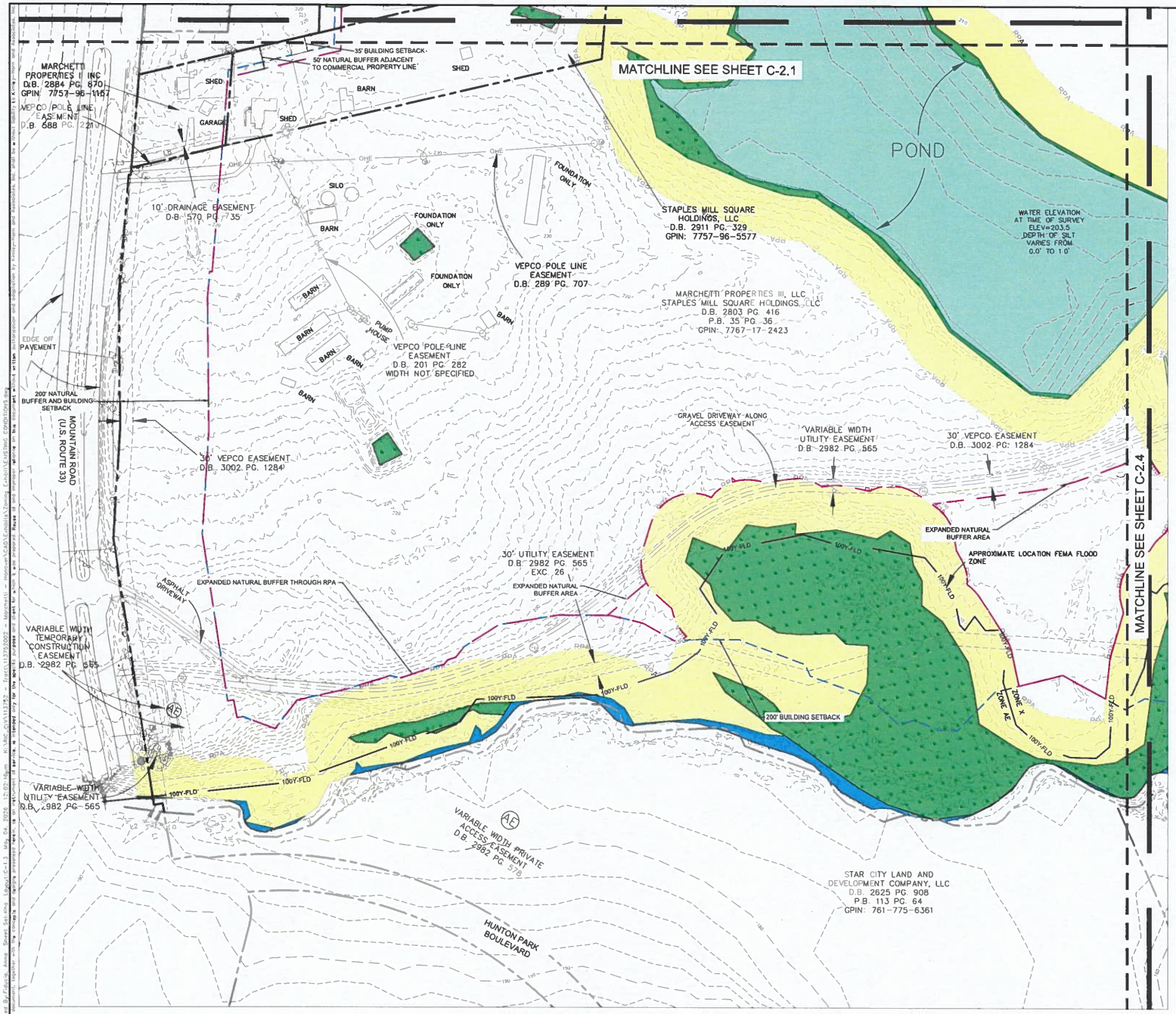
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113732002
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4/30/2026
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EXISTING CONDITIONS

MOUNTAIN ROAD TECHNOLOGY PARK

HANOVER COUNTY VA

SHEET NUMBER C-2.2



LEGEND

- PROPERTY LINE
- APPROX. LOCATION OF FEMA FLOOD ZONE — 100Y-FLD
- LIMITS OF STREAM
- EXISTING POND
- WETLANDS/SURFACE WATERS
- RESOURCE PROTECTION AREA
- VARIABLE WIDTH BUILDING SETBACK
- VARIABLE WIDTH ADJACENT PARCEL NATURAL BUFFER

NOTES

1. ALL WETLANDS, SURFACE WATERS, AND RPA BUFFER BOUNDARIES SHOWN ARE BASED ON A COMBINATION OF DESKTOP DATA AND FIELD DELINEATED BOUNDARIES. ALL BOUNDARIES ARE PRELIMINARY AND SUBJECT TO FINAL DELINEATION AND CONFIRMATION WITH THE ANI. FINAL BOUNDARIES MAY VARY FROM THE BOUNDARY SHOWN.
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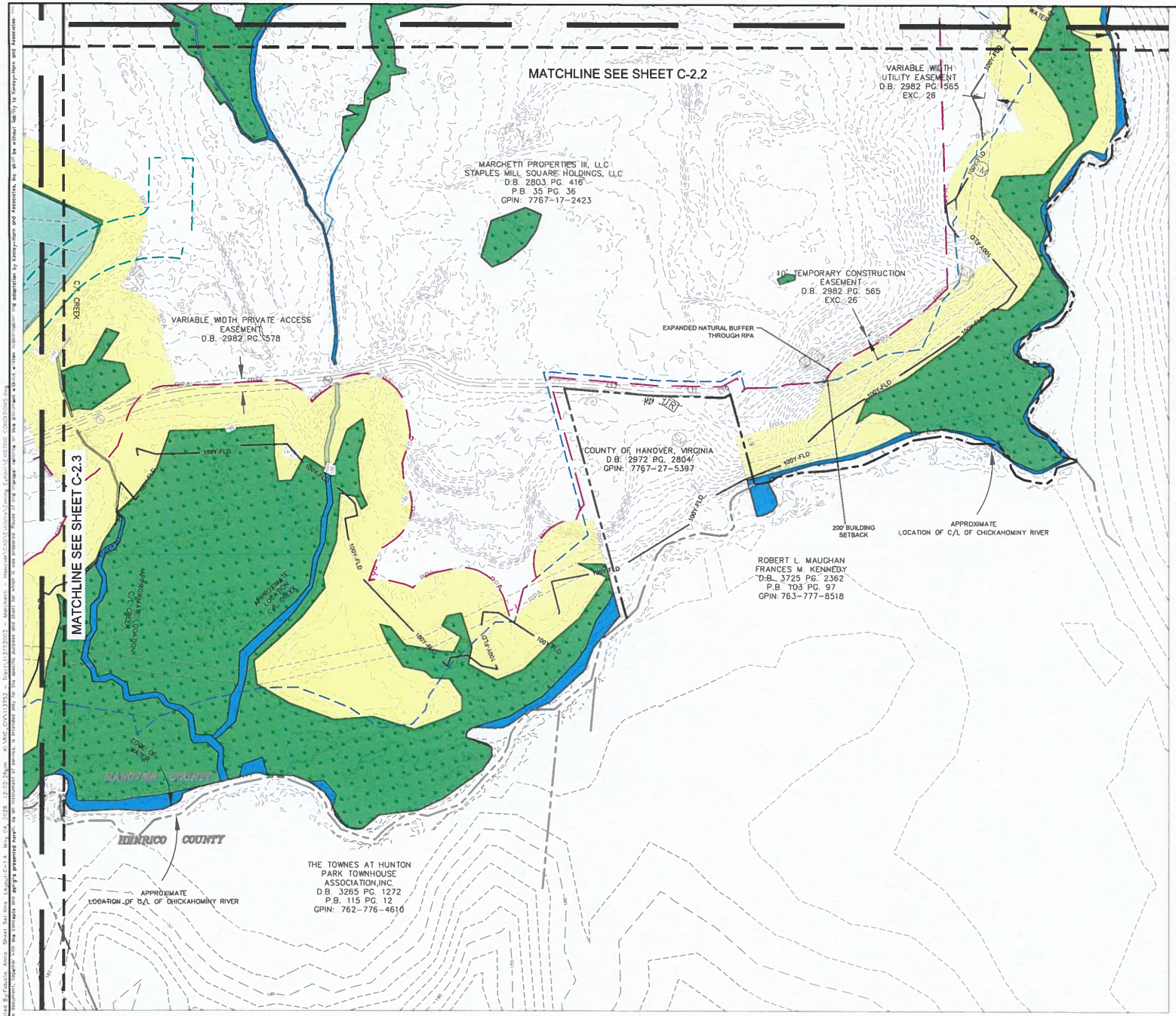
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EXISTING CONDITIONS

MOUNTAIN ROAD TECHNOLOGY PARK
HANOVER COUNTY VA

SHEET NUMBER C-2.3



LEGEND

- PROPERTY LINE
- APPROX. LOCATION OF FEMA FLOOD ZONE — 100Y-FLD
- LIMITS OF STREAM
- EXISTING POND
- WETLANDS/SURFACE WATERS
- RESOURCE PROTECTION AREA
- VARIABLE WIDTH BUILDING SETBACK
- VARIABLE WIDTH ADJACENT PARCEL NATURAL BUFFER

NOTES

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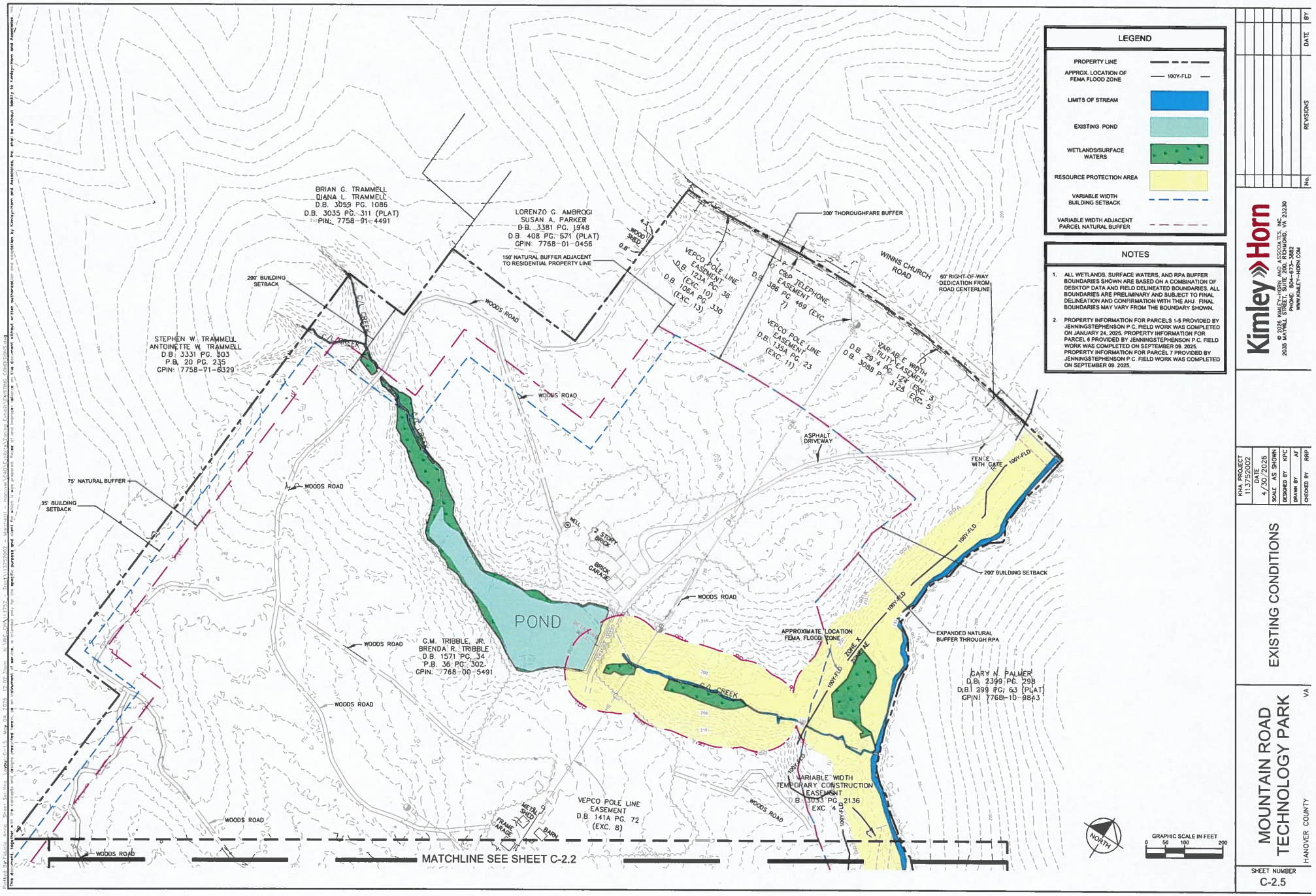
MOUNTAIN ROAD TECHNOLOGY PARK

HANOVER COUNTY VA

EXISTING CONDITIONS

SHEET NUMBER C-2.4

Plotted By: Florida, Anna Sheet Set: Site Layout Cur: Lt. May 04, 2026 - 12:03:26pm K:\RIC_CIV\113752002 - Marchetti - Hanover\CIVIL\plans\Zoning Exhibit\EXISTING CONDITIONS.dwg
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EXISTING CONDITIONS

MOUNTAIN ROAD TECHNOLOGY PARK

HANOVER COUNTY VA

SHEET NUMBER C-2.5

LEGEND

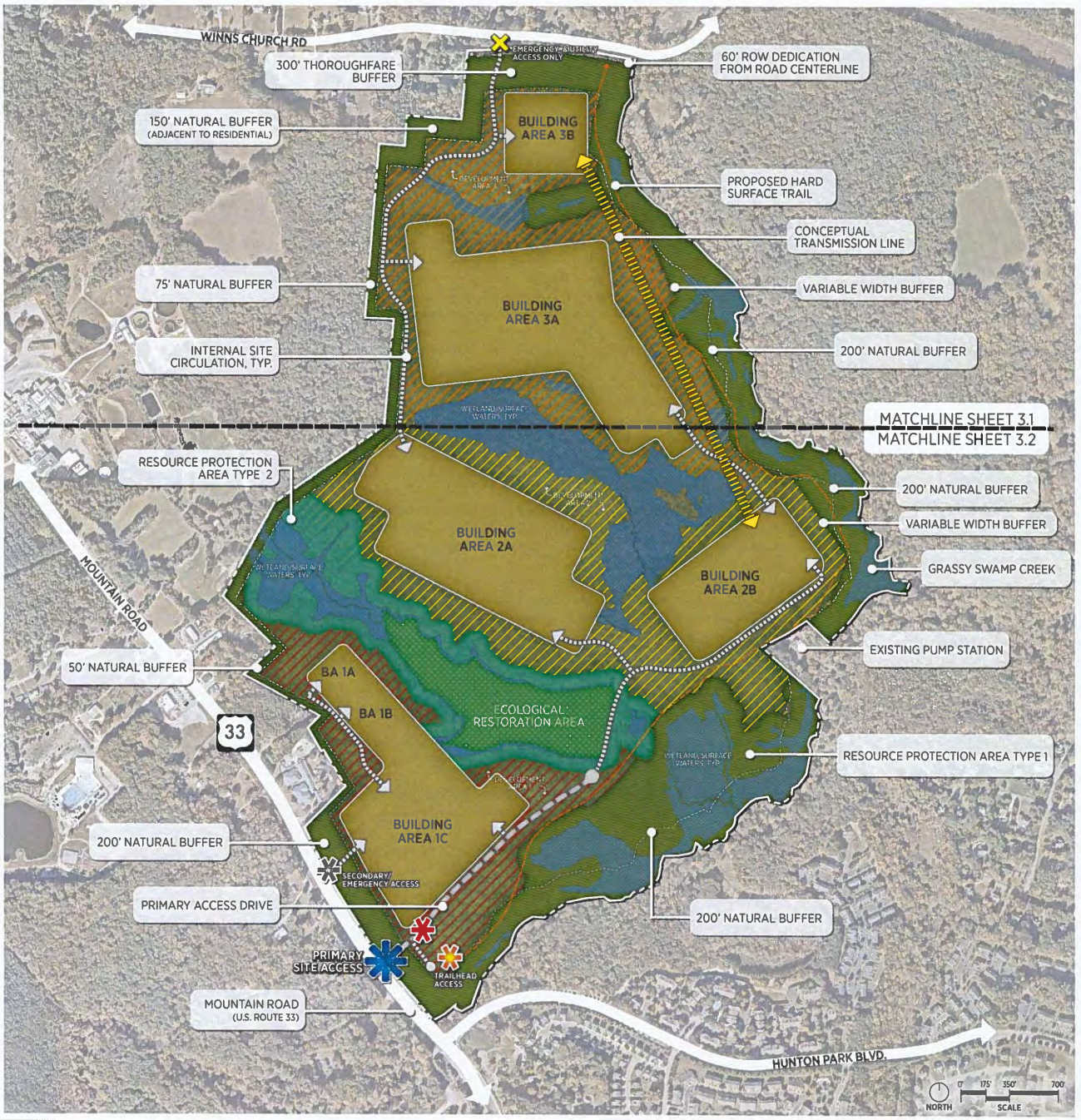
- BUILDING AREAS (BA)
- DEVELOPMENT AREA 1
- DEVELOPMENT AREA 2
- DEVELOPMENT AREA 3
- RESOURCE PROTECTION AREA TYPE 1 (RPA)
- RESOURCE PROTECTION AREA TYPE 2 (RPA)
- WETLANDS/SURFACE WATERS
- ECOLOGICAL RESTORATION AREA

- PRIMARY SITE ACCESS
- SECURITY CHECKPOINT
- SECONDARY/EMERGENCY ACCESS
- TRAILHEAD ACCESS
- EMERGENCY & UTILITY ACCESS ONLY

- CONCEPTUAL OVERHEAD TRANSMISSION LINE
- PRIMARY SITE CIRCULATION*
- INTERNAL SITE CIRCULATION*
- PROPOSED HARD SURFACE TRAIL*

NOTES:

1. *Site circulation and trail layout is conceptual, final alignment will be determined during site plan review.
2. Existing wetlands, resource protection areas (RPA) and streams are approximate have not been confirmed by the appropriate agencies. Wetlands, RPA and streams are subject to change.
3. Primary site access is located off of Mountain Road. Location subject to change based on final engineering & site plan approval.
4. Secondary/Emergency site access off of Mountain Road would be available for initial site construction access. After site construction, this access will be for emergency use only. Location subject to change based on final engineering & site plan approval.
5. Site access off of Winns Church Road will be for emergency and utility use only. Location subject to change based on final engineering & site plan approval.
6. The Route 33 Gateway Small Area Plan contemplates future access to Route 33/ Mountain Road near Overhill Road. This connection is not needed to serve this development; however, if a public road is constructed at Overhill Road, a connection to the public road could be coordinated with this development.
7. Substation locations are allowed within building area 2B and 3B only, subject to approval of a Conditional Use Permit by the Board of Supervisors. Specific locations to be based on final engineering and Dominion Energy Approvals.
8. Utility easements will generally be located within the primary access drive, internal drives, or drive aisles. Landscape buffers at least 25' in width will be provided along primary access drives, as required by code.



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Accelerating Responsible Infrastructure

NORRIS DESIGN
PLANNING | LANDSCAPE ARCHITECTURE | BRANDING

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OVERALL CONCEPT PLAN

MOUNTAIN ROAD TECHNOLOGY PARK
HANOVER COUNTY VA

SHEET NUMBER C3.0

LEGEND

- BUILDING AREAS (BA)
- DEVELOPMENT AREAS
- RESOURCE PROTECTION AREA TYPE 1 (RPA)
- RESOURCE PROTECTION AREA TYPE 2 (RPA)
- WETLANDS/SURFACE WATERS
- ECOLOGICAL RESTORATION AREA
- EMERGENCY & UTILITY ACCESS ONLY
- CONCEPTUAL OVERHEAD TRANSMISSION LINE
- INTERNAL SITE CIRCULATION*
- PROPOSED HARD SURFACE TRAIL*



NOTES:

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NORRIS DESIGN
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OVERALL CONCEPT PLAN

MOUNTAIN ROAD TECHNOLOGY PARK
HANOVER COUNTY VA

SHEET NUMBER C3.1

LEGEND

- BUILDING AREAS (BA)
- DEVELOPMENT AREAS
- RESOURCE PROTECTION AREA TYPE 1 (RPA)
- RESOURCE PROTECTION AREA TYPE 2 (RPA)
- WETLANDS/SURFACE WATERS
- ECOLOGICAL RESTORATION AREA
- PRIMARY SITE ACCESS
- SECONDARY/EMERGENCY ACCESS
- SECURITY CHECKPOINT
- TRAILHEAD ACCESS
- CONCEPTUAL OVERHEAD TRANSMISSION LINE
- PRIMARY SITE CIRCULATION*
- INTERNAL SITE CIRCULATION*
- PROPOSED HARD SURFACE TRAIL*

NOTES:

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OVERALL CONCEPT PLAN

MOUNTAIN ROAD TECHNOLOGY PARK

HANOVER COUNTY, VA.

SHEET NUMBER C3.2

CONCEPT PLAN NOTES

DEFINITIONS

BUILDING AREAS: Areas within the site where the majority of vertical development will occur.

BUILDING COVERAGE: The total area within a Development Area improved with buildings, represented as a percentage arrived at by dividing building footprints (i.e. first floor gross square footage) by the total area (s.f.) of the Development Area.

DEVELOPMENT AREAS: Areas within the site that contain building areas and other supporting uses.

DATA CENTERS: Data equipment, data storage, other technological services, and research related to the foregoing, together with other supporting uses and associated equipment such as, but not limited to, computer systems, servers, networking and telecommunications equipment and associated components, as well as related infrastructure such as power transmission lines, power supplies, cooling systems, environmental controls, security devices, and staff.

ANCILLARY BUILDINGS: Facilities that support the primary data center use of the site including, but not limited to equipment, operations, utilities, security, and other related uses.

UTILITIES: Above- and below-ground infrastructure needed to serve the development. This includes all wet- and dry-utilities, including, but not limited to water, sewer, storm, electric, fiber, cable, phone, and natural gas.

ECOLOGICAL RESTORATION AREA: The area where an existing degraded and/or impacted ecosystem is being intentionally designed and assisted to recover to its original or similar state.

USE STANDARDS

Specific uses are permitted within Development Areas and Building Areas. These are described below. Some uses may have additional requirements or standards, which area described in the Notes section below:

The following uses are permitted within all Development Areas, as identified on the approved concept plan:

- Security Fencing
- Project Signage[1]
- Wayfinding Signage
- Roadways
- Utilities
- Emergency & Utility Access
- Drive Aisles & Pedestrian Access
- Parking Lots
- Ancillary Building, such as equipment storage, security sheds, and other similar structures.
- Lighting
- Stormwater Facilities
- Trails
- Landscaped Areas
- Passive Recreation Amenities

The following uses are permitted within all Buildings Areas, as identified on the approved concept plan:

- Uses permitted within Development Areas
- Data Centers
- Substations[2]
- Battery Storage

ADDITIONAL NOTES ON PERMITTED USES

1. Project signage is not permitted along Winns Church Road.
2. Only substations, and their accessory buildings, equipment and installations, are permitted within Building Area 2b and Building Area 3b, as identified on the Concept Plan, subject to approval of a Conditional Use Permit by the Board of Supervisors.
3. Areas outside Development Areas and Building Areas will generally remain undeveloped; however, limited crossings for utilities, infrastructure, and access facilities will be allowed as permitted by appropriate agencies.
4. Additional uses can be considered and permitted by the Planning Department.
5. Additional standards apply to Building Areas 2b and 3b. Reference Voluntary Proffer Statement for the full list of standards.

DEVELOPMENT & DESIGN STANDARDS

The following standards apply to all development areas and building areas unless otherwise noted.

DIMENSIONAL STANDARDS

1. Building Setbacks shall be consistent with setbacks established for the M-1 District, except as follows:
   - 1.1. Buildings located along Route 33/Mountain Road shall be setback 250 feet from the right-of way.
   - 1.2. Buildings located along Winns Church Road shall be setback 300 feet from the right-of way
   - 1.3 Buildings located along the southern and eastern perimeter boundary line shall be setback a minimum of two hundred feet (200') from the property line
   - 1.4 Buildings located along the existing commercial shall be setback a minimum of fifty (50') from the shared boundary line of the project and the Existing Commercial.
   - 1.5 Buildings along the Portion of the Perimeter Identified as 75' "Natural Buffer" on the Conceptual Plan shall be setback seventy-five (75') from the boundary line.
2. Building Coverage within development areas shall not exceed 50% of any development area.
3. Building height is measured to the top of the building and includes parapet walls that are used to screen equipment.

BUILDING HEIGHT SHALL BE LIMITED TO THE FOLLOWING IN EACH BUILDING AREA:

3.1. Building Area 1A, 1B, 1C, and 2B : 62 Feet
3.2. Building Area 2A, and 3A: 62 Feet
3.3. Building Area 3B: 35' within 350' of Winns Church Road, otherwise 62'

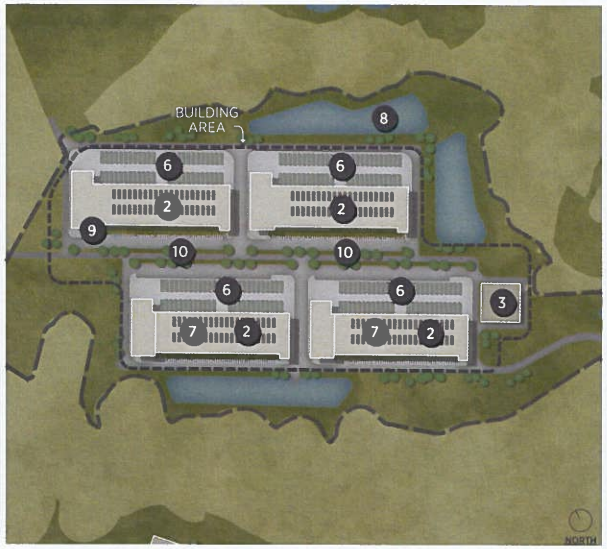
BUILDING AREA

DEVELOPMENT AREA

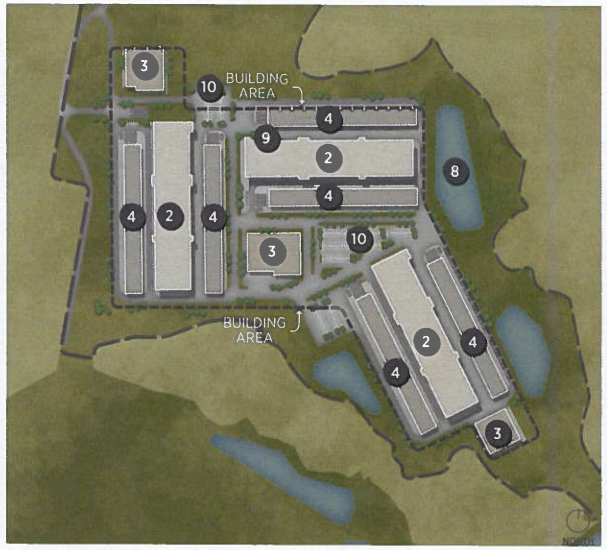
1. SECURITY/GATED ACCESS
2. DATA CENTER BUILDING
3. SUPPORTING USES
4. GENERATOR/CHILLER/MECHANICAL BLDG.
5. CHILLER YARD
6. GENERATOR YARD
7. ROOF MOUNTED CHILLER
8. DETENTION
9. PRIMARY ENTRANCE
10. PARKING



ILLUSTRATIVE SITE LAYOUT - BUILDING AREA 1



ILLUSTRATIVE SITE LAYOUT - BUILDING AREA 2



ILLUSTRATIVE SITE LAYOUT - BUILDING AREA 3

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***Any permitted use requiring a Conditional Use Permit or Special Exception must obtain approval from the Board of Supervisors of the required Conditional Use Permit or Special Exception, as applicable. The illustrative site layouts included for each Building Area are conceptual and illustrative only; site plan details will be determined and approved during the site plan process.**

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DATE 4/30/2026
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DRAWN BY AF
CHECKED BY RRP

CONCEPT PLAN NOTES

MOUNTAIN ROAD TECHNOLOGY PARK
HANOVER COUNTY, VA

SHEET NUMBER C3.3

LEGEND

- PRIMARY SITE ACCESS
- SECURITY CHECKPOINT
- SECONDARY/EMERGENCY ACCESS
- TRAILHEAD ACCESS
- EMERGENCY & UTILITY ACCESS ONLY
- PRIMARY SITE CIRCULATION*
- INTERNAL SITE CIRCULATION*
- PROPOSED HARD SURFACE TRAIL*

PROPERTY SUMMARY		
AREA	**ACREAGE**	**PERCENT**
BUILDING AREAS	**129.2**	**30.1**
BUILDING AREA 1 (1A,1B,1C)	29.9	6.9
BUILDING AREA 2 (2A,2B)	50.2	11.7
BUILDING AREA 3 (3A, 3B)	49.1	11.4
DEVELOPMENT AREA	**123.3**	**28.6**
DEVELOPMENT AREA 1	27.6	6.4
DEVELOPMENT AREA 2	48.2	11.2
DEVELOPMENT AREA 3	47.5	11.0
RPA & SETBACK BUFFER	**106.3**	**24.7**
RPA & SETBACK BUFFER 1	54	12.5
RPA & SETBACK BUFFER 2	31.1	7.2
RPA & SETBACK BUFFER 3	14.7	3.4
RPA & SETBACK BUFFER 4	6.5	1.5
NATURAL AREA	**70.1**	**16.3**
NATURAL AREA 1	49	11.3
NATURAL AREA 2	21.1	5
TOTAL	**428.9**	

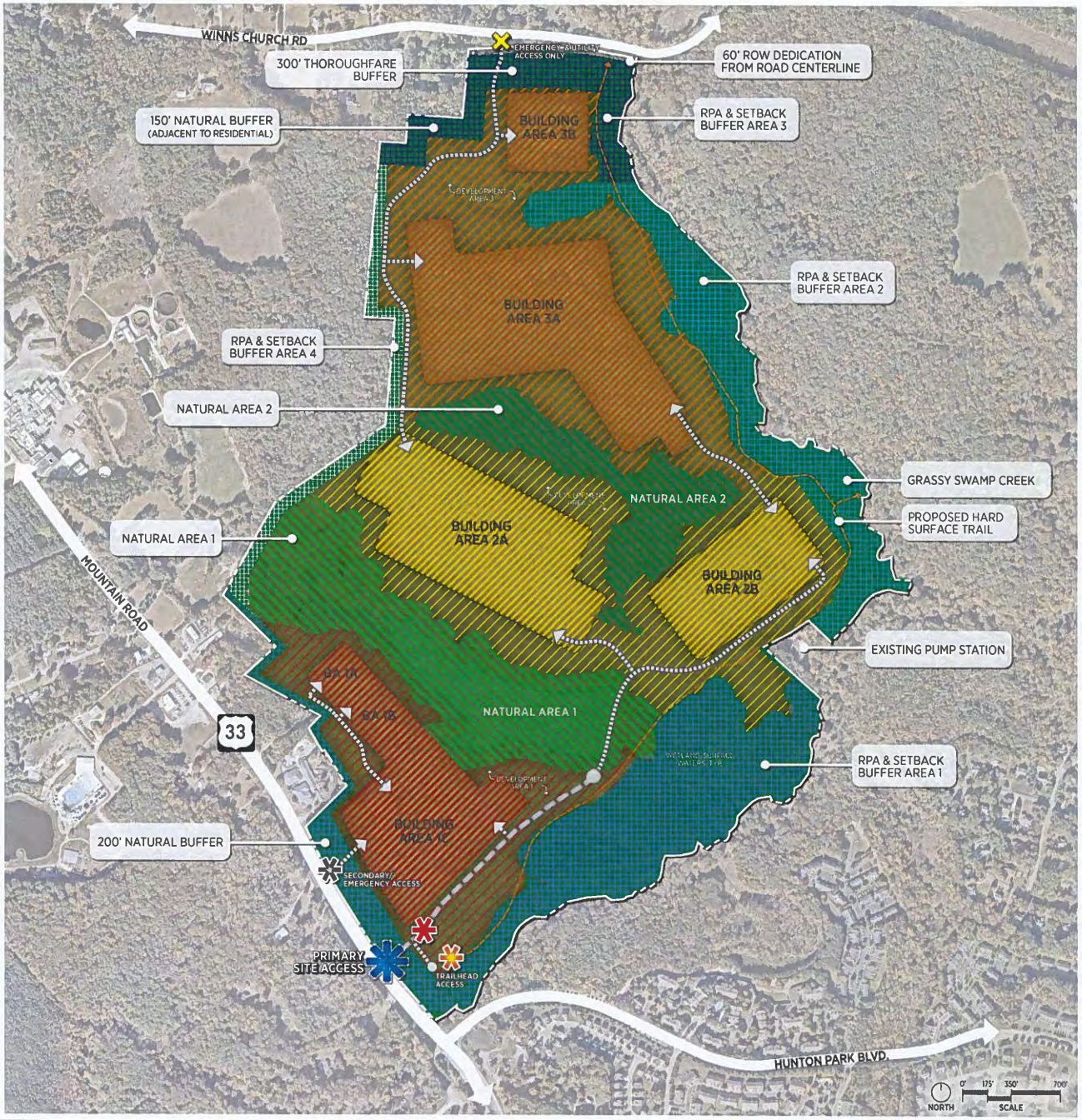
PRIMARY ACCESS DRIVE - GATEWAY



*RENDERING IS CONCEPTUAL

tract
Accelerating Responsible Infrastructure

NORRIS DESIGN
PLANNING | LANDSCAPE ARCHITECTURE | BRANDING



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2016 GAYWILL STREET, SUITE 300, RICHMOND, VA 23230
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WWW.KIMLEY-HORN.COM

NO.	REVISIONS	DATE	BY

KHA PROJECT 117252002
DATE 4/30/2026
SCALE AS SHOWN
DESIGNED BY KFC
DRAWN BY AF
CHECKED BY RRP

OVERALL CONCEPT PLAN DEVELOPMENT ZONES & GATEWAY

MOUNTAIN ROAD TECHNOLOGY PARK

HANOVER COUNTY, VA

SHEET NUMBER
C3.4

NOTE:
1. SUBSTATION LAYOUTS ARE SUBJECT TO CHANGE BASED ON FINAL DESIGN PROVIDED BY DOMINION ENERGY
2. THE SUBSTATION USE SHALL BE DEVELOPED IN SUBSTANTIAL CONFORMANCE WITH THE LAYOUT ILLUSTRATED ON THIS SHEET SUBJECT TO THE REQUIREMENTS AND ADJUSTMENTS SET FORTH IN THESE LU CONDITIONS AND IN THE PROFFERED CONDITIONS.

MOUNTAIN ROAD TECHNOLOGY PARK
HANOVER COUNTY VA

CONCEPTUAL SUBSTATION LAYOUT

KHA PROJECT
113752002
DATE
4/30/2026
SCALE AS SHOWN
DESIGNED BY KPC
DRAWN BY AF
CHECKED BY RRP

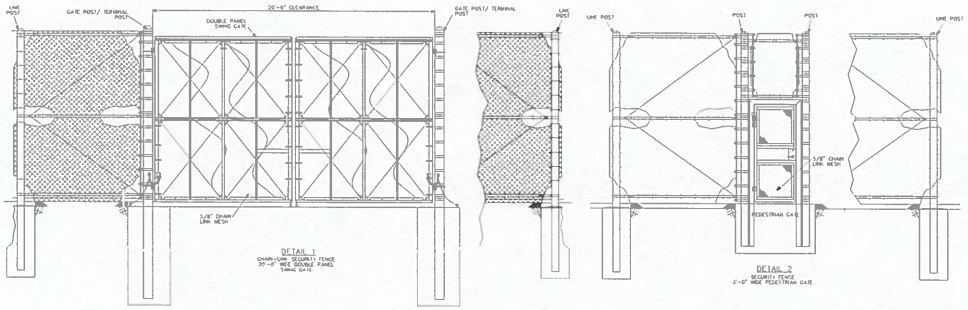
SHEET NUMBER C-4.0

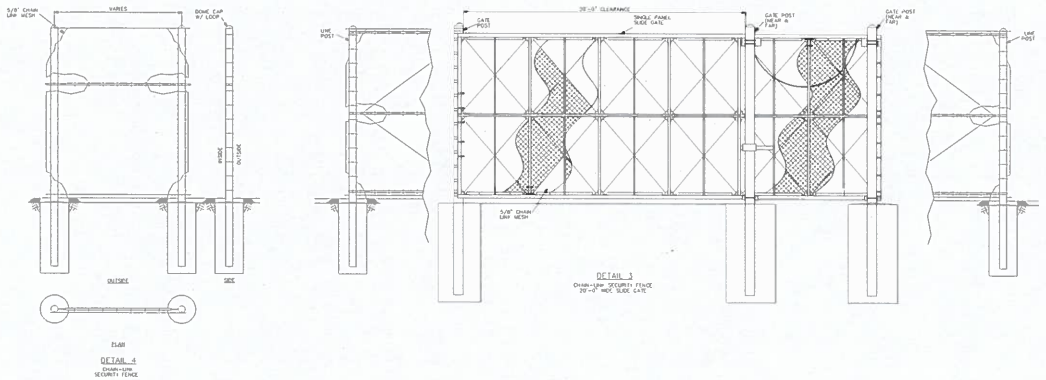
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No.	REVISIONS	DATE	BY

Plotted By:Rucio, Aaron Street Set:King Layout:SUBSTATION LAYOUT May 04, 2026 12:03:11pm K:\Ric_CIV\113752002 - Tha\\113752002 - Marshall - Hanover\CAD\Exhibits\Zoning Exhibit\SUBSTATION LAYOUT.dwg
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EXAMPLE SECURITY AND PERIMETER FENCING











NOTE:
1. FENCING SHOWN ON THIS SHEET ARE REPRESENTATIVE FENCING OPTIONS THAT MAY BE USED AS PERIMETER AND SECURITY FENCING THROUGHOUT THE PROJECT SITE
2. PERIMETER FENCING MAY BE INSTALLED AROUND THE PERIMETER OF THE PROJECT OR AROUND EACH BUILDING AND/OR DEVELOPMENT AREA AS SHOWN ON THE CONCEPT PLAN.
3. PERIMETER AND SECURITY FENCING SURROUNDING THE DATA CENTER CAMPUS WILL BE BLACK.
4. SECURITY FENCING SHALL BE APPROVED BY THE PLANNING DIRECTOR AT THE TIME OF SITE PLAN REVIEW AND APPROVAL.
5. FENCING WILL BE A MINIMUM OF 7 FEET IN HEIGHT AND A MAXIMUM OF 10 FEET.

GRAPHIC SCALE IN FEET
0 25 50 100

No.	REVISIONS	DATE	BY

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KHA PROJECT 113752002
DATE 4/30/2026
SCALE AS SHOWN
DESIGNED BY KPC
DRAWN BY AF
CHECKED BY RRP

FENCING

MOUNTAIN ROAD TECHNOLOGY PARK
HANOVER COUNTY VA

SHEET NUMBER C-5.0

Plotted By: Fabiola Arana - Sheet Set: Plan Layout: Fencing LAYOUT - May 04, 2026 - 12:02:31pm - N:\RIC_CIVIL\113752002 - Projects\113752002 - Mechanicsville - Hanover\CAD\Civil\Zoning Exhibit\FENCE LAYOUT.dwg
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