PLANNING COMMISSION REGULAR MEETING

Tuesday, December 20, 2022 at 7:00 PM

AGENDA

CALL TO ORDER AND ESTABLISHMENT OF A QUORUM.

ADOPTION OF MINUTES.

1. November 15, 2022 Regular Meeting Minutes

2. November 22, 2022 Regular Meeting Minutes

HEARING OF PUBLIC HEARING ITEMS.

3. **SUP 2022-03 Amazon Data Center** - This is a continuance of the November 15, 2022 and November 22, 2022 Planning Commission Public Hearings. The Applicant is requesting a Special Use Permit for a 220,200 square foot data center on Industrial zoned property designated in the New Town Character District on the Future Land Use Map located off Blackwell Road and Lee Highway. Previously there were two work sessions held by the Planning Commission. GPIN 6984-69-2419-000.

COMMENTS FROM THE COMMISSION.

COMMENTS FROM THE STAFF.

ADJOURN.

PLANNING COMMISSION REGULAR MEETING

Tuesday, November 15, 2022 at 7:00 PM

MINUTES

CALL TO ORDER AND ESTABLISHMENT OF A QUORUM.

Chairwoman Susan Helander called the meeting to order at 7:01 p.m.

PRESENT
Chairwoman Susan Helander
Vice Chair James Lawrence
Mr. Steve Ainsworth
Mr. Ali Zarabi

ABSENT
Mr. Ryan Stewart attended later in the evening.

ADOPTION OF MINUTES.

Ms. Susan Helander presents the Adoption of Minutes for:

July 19, 2022 Regular Meeting Minutes.

September 20, 2022 Regular Meeting Minutes.

October 25, 2022 Work Session Minutes.

Ms. Helander motions to approve them as one vote.

Mr. James Lawrence moved to approve all three sets of minutes and Mr. Ali Zarabi seconded. All were in favor, no discussion, vote was unanimous.

Mr. Stewart was absent.

1. July 19, 2022 Regular Meeting Minutes

   FOR
   Chairwoman Susan Helander
   Vice Chair James Lawrence
   Mr. Steve Ainsworth
   Mr. Ali Zarabi

   ABSENT
   Mr. Ryan Stewart

2. September 20, 2022 Regular Meeting Minutes

DRAFT

FOR
Chairwoman Susan Helander
Vice Chair James Lawrence
Mr. Steve Ainsworth
Mr. Ali Zarabi

ABSENT
Mr. Ryan Stewart

3. October 25, 2022 Work Session Meeting Minutes

FOR
Chairwoman Susan Helander
Vice Chair James Lawrence
Mr. Steve Ainsworth
Mr. Ali Zarabi

ABSENT
Mr. Ryan Stewart

HEARING OF PUBLIC HEARING ITEMS.

Ms. Susan Helander explains the purpose of this Public Hearing for SUP 2022-03 Amazon Data Center.

Ms. Helander explains Equipment, Speaking Times and order of the Public Hearing.

Ms. Helander states the Planning Commission has received all written comments by noon on November 15th, 2022. Approximately 410 pages.

Ms. Helander explains this meeting will be continued to another date at the discretion of the Planning Commission and request of the applicant if all the speakers do not speak.

Ms. Helander explains if the applicant requests a continuance they will have another meeting on November 22nd, 2022.

Ms. Helander explains the Public Hearing Rules and requests order and decorum for the speakers and toward the applicant.

Ms. Helander explains the Planning Commission will forgo staff presentations and comments until the end of the Public Hearing.

Ms. Helander introduces and invites the applicant Mr. John Foote to present SUP 2022-03 Amazon Data Center Special Use Permit.

4. **SUP 2022-03 Amazon Data Center** - The Applicant is requesting a Special Use Permit for a 220,200 square foot data center on Industrial zoned property designated in the New Town Character District on the Future Land Use Map located off Blackwell Road and Lee Highway. This will be the second work session held by the Planning Commission. GPIN 6984-69-2419-000.

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Mr. Foote presents an overview of Special Use Permit SUP 2022-03 for a 220,200 square foot Amazon Data Center focusing on Dominion Power, Visual and Noise Studies.

Ms. Susan Helander calls the Public Hearing for SUP 2022-03 Amazon Data Center to order at 7:23 P.M.

Legal First & Last name	**Opposed/In Favor**	**Organization Name**	**Resident**
Steven Wojcik	Opposed		Yes
Calvin Hickey	Opposed		Yes
Barbara Amster	Opposed		Yes
Charles Cross	Opposed		Yes
Bruce Alan Campbell	Opposed		Yes
Roy Francis	Opposed	Northrock Residential Association	Yes
Dirk Nyren	Opposed		Yes
Mark Smith	Opposed		Yes
Bernardine Clark	Opposed		Yes
Geraldine (Gerry) Eitner	Opposed	Communities of Peace	Yes
Richard Crow	Opposed		Yes
Karolyn Elmenhurst	Opposed		Yes
Scott Wehner	Opposed		Yes
Wendy Wheatcraft	Opposed		Yes
Christina Gagnon	Opposed		Yes
Walter Hitchcock	Opposed		Yes
Katherine Nevill	Opposed		Yes
Robin C Lohnes	Opposed	Oak Springs Homeowners Association, Inc. and property owner.	Yes
Marygay Cross	Opposed		Yes
Justin Hersh	Opposed		Yes
Justin O'Donnell	Opposed		Yes

DRAFT

Larry Kovalik	Opposed		Yes
David Fox	Opposed		Yes
David Daubert	Opposed		Yes
John W. Lyver, IV	Opposed	Homeowners Association	No
		Roundtable of PWC	
Spencer Snakard	Opposed	Protect Fauquier	No
Sandra Brannock	Opposed		No
Kevin Kask	Opposed	Piedmont Environmental Council	No
Julie Bolthouse	Opposed		No
David Dobson	Opposed		No
Denise Schefer	Opposed		No
Owen Schefer	Opposed		No
David Winn	Opposed		No
Kenneth Thomas	Opposed	SCC	No
Kevin Ramundo	Opposed	Citizens for Fauquier County	No
Juan Archilla	Opposed		No
Cynthia Burbank	Opposed		No
Michael Fultz	Opposed		No
David Gibson	Opposed	Citizens for Fauquier County	No
Albert Mudrian	Opposed		No
Rebecca Garber	Opposed		No
Elizabeth Swartz	Opposed		No
Christen Snow	Opposed		No
Tanya Perry	Opposed		No
Dale Sites	Opposed		No
Judy Lamana	Opposed		No

DRAFT

Julie Broaddus	Opposed		No
Joshua McCraw	Opposed		No
KevinO'Neill	Opposed	Fauquier Climate Change Group	No
Amy Trotto	Opposed		No
Amber McCraw	Opposed		No
Bridget Wolfe	Opposed		No
Laurey Branner	Opposed		No
Daniel Bliss	Opposed		No
Roy Stefanik	Opposed		No
William Ziegler	Opposed		No
Jean Boenish	Opposed		No

Mr. Foote thanks the Planning Commission.

Mr. Lawrence asks Mr. Foote if Amazon has intention to provide Jobs and Job Programs exclusively to the Town of Warrenton Community and Education System.

Mr. Foote explains he can discuss this with Amazon but cannot bind them to it.

Mr. Foote explains Amazon has invested in these programs in other jurisdictions.

Mr. Ali Zarabi explains concerns, the application has not been presented with clarity nor clearly and does not utilize the characteristics for what people of the Town of Warrenton have called for.

Mr. Ali Zarabi requests consideration for the people.

Ms. Helander asks if there is anyone present who has not signed up who wishes to speak tonight.

No Response.

Ms. Helander asks if there is anyone else who has not signed up who wishes to speak tonight.

Ms. Helander explains there are several people who did sign up who may have left because of the late hour. Our goal was to have any and all who wished to speak be heard tonight.

Mr. Lawrence motions to approve this meeting be adjourned to Tuesday November 22nd, 2022, at 7:00PM as a continuation of today's regular meeting.

Seconded by Mr. Ryan Stewart. All were in favor, no discussion.

DRAFT

Ayes: Ms. Susan Helander, Chair; Mr. James Lawrence, Vice Chair;

Mr. Ali Zarabi; Mr. Ryan Stewart; Mr. Steven Ainsworth.

Nays: ***None***

Absent During Vote: ***None***

Abstention: ***None***

Mr. Foote requests for the record, that the applicant does agree to an extension of this hearing to Tuesday November 22nd, 2022, at 7:00PM.

Mr. Ali Zarabi questioned the purpose of this extension. Is this for those who wanted to speak and invite additional comments.

Ms. Helander verified those who were where signed up tonight and did not speak and those who would like to speak will have an opportunity to do so.

Mr. Steven Ainsworth askes after which we will still get a presentation from the Town, correct.

Ms. Helander states that is correct.

Ms. Helander states this motion does pass. All say Aye and is adjourned until Tuesday November 22nd at 7:00 pm.

If this regular meeting is concluded on Tuesday November 22nd at 7:00 pm. we will continue and conduct our work session agenda.

Motion to adjourn Mr. Ali Zarabie, Mr. Ryan Stewart Seconds.

This meeting was adjourned at **10:36 P.M**.

DRAFT

IN-TOWN

From: Josh Schultz
To: Planning Department
Subject: Oppose Blackwell Road 230 kV Transmission Line and Substation
Date: Thursday, June 2, 2022 9:22:12 PM

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Good Evening planning commission,

I wanted to reach out to urge you to oppose the Blackwell Road 230kV Transmission Line and Substation that is being proposed to be built for an amazon datacenter. As a resident on Blackwell Road, i do not wish to have that eyesore right around my home and prominent as i enter/leave the city. Data centers are also noticeably negative for the environment. It does not need to be built that close to our homes and businesses and would negatively affect property values and the aesthetics of our community. Please oppose this project and let me know if I can do anything further to help.

https://www.dominionenergy.com/blackwellroad

Thank you,

Joshua Schultz
344 Blackwell Rd
Warrenton

Brittany Latack

From: Ann Casey <jamiescause@hotmail.com>
Sent: Monday, July 11, 2022 10:59 AM
To: citizencomment
Subject: Data Center

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Warrenton Town Council,

As stated below, the full consequences of your decision of last summer failed to acknowledge the massive impact on our community. I recommend you seriously reconsider your vote and listen to the citizens of Warrenton and Fauquier County.

Sincerely;

Ann M. Casey, resident and voting citizen of Warrrenton

- WTC (Warrenton Town Council) amended the Zoning Ordinance on short notice last summer to allow Data Centers to be within town limits. It was done quickly and with minimal community input. This is a serious breach of trust between the community and the elected Town Council, and the WTC should prioritize restoring trust with their citizens, not accommodating tech giants.
- Remington & Vint Hill are Planned Commercial Industrial Districts, and Data Centers should be kept there to protect our natural landscape and habitats.
- The HB791, bill, now law in Richmond will ties data center tax revenue for the community to property/asset depreciation, NOT commercial income. This likely means a significant reduction in expected tax revenue for our community from this initiative.
- WTC (Warrenton Town Council) does not get to decide where the high tension power lines will be placed to service the Amazon Data Center. The SCC (State Corporation Commission) will determine that. Approval of Amazon's SUP would place a great burden and battle on your constituents to contend with Dominion about the power line routing location, and above ground vs. below ground lines.
- Amazon's SUP is lacking significant required information and detail per the established Special Use Permit Requirements. WTC should not even entertain this application until a complete and detailed application has been submitted for approval.
- The SUP cites that "significant tax revenue" will be generated for the community, but provides absolutely no details or specifics on amounts
- No details have been given on the environmental impacts, and no Environmental Impact Assessment has been completed as part of the application (to include the source and usage of water for cooling needs, as well as the disposal plan for the water)
- It does not include a Load Letter, and therefore we cannot verify power need of the Data Center and are unwilling to accept Dominion's calculations (as that is a conflict of interest, given they are the sole source provider of the electricity). The Load Letter should be provided from an independent party.
- Noise calculations are lacking in the document
- Includes a height precedent, which if approved, gives Amazon an open door to build vertically--is that truly acceptable to our community?
- The SUP states that "the applicant [Amazon] will bear the cost of new infrastructure that will be needed and any upgrades to existing facilities" and yet, there is absolutely no analysis provided to determine what those infrastructure costs might be.

From: Andrea Melia
To: citizencomment
Subject: Please do not approve Amazon"s Special Use Permit for a Data Center within town limits!
Date: Monday, July 11, 2022 2:15:55 PM

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Dear Warrenton Town Council,

I am writing to let you know that as a resident of Warrenton, I am strongly opposed to the Amazon Data Center that is being discussed to put up in Warrenton. Since Remington and Vint Hill are Planned Commercial Industrial Districts, there is no reason to bring a Data Center that will necessitate high tension power lines into our town. The Special Use Permit submitted by Amazon is lacking too much significant required information and detail to be entertained. Since HB791 was passed by Governor Youngkin, the promise of “significant tax revenue” to our community seems a thin one. I cannot see any good reasons to allow this center to be built in Warrenton, and would like to see my town council working to protect the value of our natural landscape and habitats within our town. Thank you for hearing my concerns, and for your service to our community!

Andrea Melia
Warrenton, VA

From: Sean
To: citizencomment
Subject: Concerns for Warrenton DATA center
Date: Tuesday, July 12, 2022 8:37:51 AM

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Greetings,

This is Sean and Kali Hagerty of:

[redacted]

I would like the email to be an official letter of concern. Our concern is the Data center that is proposed to be built in Warrenton, VA.

On a personal note. I just moved from Loudoun County to the historic town of the Warrenton for the beautiful landscape and rural community feel. South Riding, Ashburn and the surrounding communities have been destroyed by the eye soars that are Data Centers. You have the power to stop this before it ever happens. Please act on the best interest of the community you represent and that's not big tech.

- WTC (Warrenton Town Council) amended the Zoning Ordinance on short notice last summer to allow Data Centers to be within town limits. It was done quickly and with minimal community input. This is a serious breach of trust between the community and the elected Town Council, and the WTC should prioritize restoring trust with their citizens, not accommodating tech giants.
- Remington & Vint Hill are Planned Commercial Industrial Districts, and Data Centers should be kept there to protect our natural landscape and habitats.
- The newly signed HB791 legislation in Richmond will tie data center tax revenue for the community to property/asset depreciation, NOT commercial income. This likely means a significant reduction in expected tax revenue for our community from this initiative.
- WTC (Warrenton Town Council) does not get to decide where the high tension power lines will be placed to service the Amazon Data Center. The SCC (State Corporation Commission) will determine that. Approval of Amazon's SUP would place a great burden and battle on your constituents to contend with Dominion about the power line routing location, and above ground vs. below ground lines.
- Amazon's SUP is lacking significant required information and detail per the established Special Use Permit Requirements. WTC should not even entertain this application until a complete and detailed application has been submitted for approval.
- The SUP cites that "significant tax revenue" will be generated for the community, but provides absolutely no details or specifics on amounts
- It does not include a Load Letter, and therefore we cannot verify power need of the Data

Center and are unwilling to accept Dominion's calculations (as that is a conflict of interest, given they are the sole source provider of the electricity). The Load Letter should be provided from an independent party.
- Includes a height precedent, which if approved, gives Amazon an open door to build vertically--is that truly acceptable to our community?
- The SUP states that "the applicant [Amazon] will bear the cost of new infrastructure that will be needed and any upgrades to existing facilities" and yet, there is absolutely no analysis provided to determine what those infrastructure costs might be.

Please see our list of concerns, these are not all inclusive.

Sincerely,

Sean and Kali Hagerty

Note: This email was drafted on a hand held device, please disregard any spelling errors.

From: Robin D
To: citizencomment; Land Development; Planning Department
Subject: Your legacy
Date: Thursday, July 14, 2022 11:14:41 AM

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Dear representatives:

As a Warrenton homeowner since 2001, I implore you to DENY any zoning changes that would allow data centers in our beautiful, rural community.

There are many more appropriate NoVA locations in areas already established for these types of enterprises.

Please make your legacy one that PROTECTED rather than ELIMINATED what makes Warrenton and Fauquier County so special.

Sincerely,
Robin DeMattia
515 Highland Towne Lane, Warrenton

From: Stephen Clough
To: Brittany Latack
Subject: FW: Email - Part 2
Date: Wednesday, July 27, 2022 3:50:37 PM

Stephen Clough

Town Clerk
Town of Warrenton, VA

21 Main Street
Warrenton, VA 20186
M: (540)-714-9270
warrentonva.gov

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From: Rob Walton <rwalton@warrentonva.gov>
Sent: Wednesday, July 27, 2022 10:52 AM
To: Stephen Clough <sclough@warrentonva.gov>
Cc: Denise Harris <dharris@warrentonva.gov>
Subject: FW: Email - Part 2

FYI.

From: Meade, Holly <Holly.Meade@fauquiercounty.gov>
Sent: Wednesday, July 27, 2022 10:36 AM
To: denise.schefer@gmail.com
Cc: Denise Harris <dharris@warrentonva.gov>; Rob Walton <rwalton@warrentonva.gov>
Subject: FW: Email - Part 2

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Good morning – Thank you for your e-mail, it has been shared with the Fauquier County Planning Commissioners as requested. Please be aware that the application you are referencing is an application with the Town of Warrenton, not Fauquier County Government. I suggest reaching out to the Department of Community Development for the Town of Warrenton with your concerns. I believe the project manager for the case is Denise Harris. If she is not the appropriate person, I'm sure she can direct your comments appropriately.

Holly Meade, Director
Fauquier County Community Development

From: Fauquier County Government <webmaster@fauquiercounty.gov>
Sent: Tuesday, July 26, 2022 12:45 PM
To: Meade, Holly <Holly.Meade@fauquiercounty.gov>
Subject: Email - Part 2

CAUTION: This email originated from outside of the organization. Do not follow instructions, click links, or open attachments unless you know the content is safe.

Message submitted from the <Fauquier County, VA> website.

Site Visitor Name: Denise Schefer
Site Visitor Email: denise.schefer@gmail.com

You have already received emails outlining concerns about the Amazon application from individuals and groups throughout the county, and how much information it is lacking. I hope you will take those seriously and send the application back for those gaps to be filled in:

Environment impact studies
Noise studies
Water requirement documentation
Electric requirement documentation
Physical documentation
where would the air conditioning units be located?
where would the generators be located?
where would the air chillers be located?
where would the diesel tanks be located? How can those be stored safely?
what is the added height of the equipment on the roof and how would that be screened?
where would the power lines connect?

From: Fauquier County Government <webmaster@fauquiercounty.gov>
Sent: Tuesday, July 26, 2022 12:44 PM
To: Meade, Holly <Holly.Meade@fauquiercounty.gov>
Subject: Email To Planning Commissioners - Part 1

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Site Visitor Name: Denise Schefer
Site Visitor Email: denise.schefer@gmail.com

Warrenton is at a crossroads with the decision about whether or not to approve the data center and the power lines that Dominion says it would need to install if the project is approved. Once the decision is made there is no going back, no "do overs." Warrenton needs to bring in revenue, but the revenue that the proposed data center would bring in is not worth the negative impact the data center and power lines would have on not only the town, but the entire county. The county has already designated two locations for data centers - Vint Hill/Remington - in the comprehensive plan. Data centers should not be considered outside these areas.

A few years ago, a Cube Smart was built in Warrenton near Route 29. Town officials made the Cube Smart repaint the building from red to gray because they felt the red was not in line with the aesthetics officials wanted for the town. Fast forward a few years, and the town is considering a project that, if approved, would likely bring 100-110' tall steel towers with 100' cleared path for miles within the county. I would like to know when exactly the vision for Warrenton and Fauquier changed, and why. Many of us moved to Warrenton for the open spaces and pastoral views. If we wanted power lines and industrialization we would have stayed in NOVA.

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Site Visitor Email: denise.schefer@gmail.com

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From: Fauquier County Government <webmaster@fauquiercounty.gov>
Sent: Tuesday, July 26, 2022 12:47 PM
To: Meade, Holly <Holly.Meade@fauquiercounty.gov>
Subject: Email - Part 3

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Message submitted from the <Fauquier County, VA> website.

Site Visitor Name: Denise Schefer
Site Visitor Email: denise.schefer@gmail.com

Loudoun County is in the process of reworking where they allow data centers in the county (https://datacenterfrontier.com/loudoun-county-prepares-new-rules-for-where-data-centers-should-be-built/).

Location: The county wants to limit data center growth in some areas, including several where data center development had previously been “by-right.” The TLUC recommended that this be managed through changes to place types in the county comprehensive plan, as well as a rewrite of zoning ordinances. A major goal is to avoid data center development along Route 7, where there is limited power infrastructure to support them.

Standards: Future data centers must meet new standards addressing high-quality building design, environmental sustainability, and their proximity to residential areas. The supervisors may also consider additional guidelines on loud noise from data center operations.

I hope you will meet with Loudoun officials to discuss the data centers they have allowed in their county, and what they have learned from it. Ultimately, I hope you don't let this proposal move forward. This would seriously alter the landscape of Fauquier, create environmental impacts, decrease property values, and so on. This is not the vision residents have for our county.

Thank you for your consideration,

Denise Schefer
Lake Whippoorwill Resident, Fauquier County
Highlands Townhouse Owner, Town of Warrenton

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Lake Whippoorwill Resident, Fauquier County
Highlands Townhouse Owner, Town of Warrenton

Brittany Latack

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To: Brittany Latack
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Cc: Denise Harris <dharris@warrentonva.gov>; Rob Walton <rwalton@warrentonva.gov>
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Site Visitor Name: Denise Schefer
Site Visitor Email: denise.schefer@gmail.com

You have already received emails outlining concerns about the Amazon application from individuals and groups throughout the county, and how much information it is lacking. I hope you will take those seriously and send the application back for those gaps to be filled in:

Environment impact studies
Noise studies
Water requirement documentation
Electric requirement documentation
Physical documentation
where would the air conditioning units be located?
where would the generators be located?
where would the air chillers be located?
where would the diesel tanks be located? How can those be stored safely?
what is the added height of the equipment on the roof and how would that be screened?
where would the power lines connect?

From: Denise Harris
To: Brittany Latack
Subject: FW: Amazon Data Center/Dominion Power Line Proposals
Date: Tuesday, July 26, 2022 1:58:09 PM

From: Denise Schefer <denise.schefer@gmail.com>
Sent: Tuesday, July 26, 2022 12:37 PM
To: Susan Helander <shelander@warrentonva.gov>; James Lawrence <jlawrence@warrentonva.gov>; Steve Ainsworth <sainsworth@warrentonva.gov>; gjohnston@warretonva.gov; Ali Zarabi <AZarabi@warrentonva.gov>; Ryan Stewart <rstewart@warrentonva.gov>
Cc: Denise Harris <dharris@warrentonva.gov>; Rob Walton <rwalton@warrentonva.gov>; BOS@fauquiercounty.gov
Subject: Amazon Data Center/Dominion Power Line Proposals

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Commissioners -

Warrenton is at a crossroads with the decision about whether or not to approve the data center and the power lines that Dominion says it would need to install if the project is approved. Once the decision is made there is no going back, no "do overs." Warrenton needs to bring in revenue, but the revenue that the proposed data center would bring in is not worth the negative impact the data center and power lines would have on not only the town, but the entire county. The county has already designated two locations for data centers - Vint Hill/Remington - in the comprehensive plan. Data centers should not be considered outside these areas.

A few years ago, a Cube Smart was built in Warrenton near Route 29. Town officials made the Cube Smart repaint the building from red to gray because they felt the red was not in line with the aesthetics officials wanted for the town. Fast forward a few years, and the town is considering a project that, if approved, would likely bring 100-110' tall steel towers with 100' cleared path for miles within the county. I would like to know when exactly the vision for Warrenton and Fauquier changed, and why. Many of us moved to Warrenton for the open spaces and pastoral views. If we wanted power lines and industrialization we would have stayed in NOVA.

You have already received emails outlining concerns about the Amazon application from individuals and groups throughout the county, and how much information it is lacking. I hope you will take those seriously and send the application back for those gaps to be filled in:

Environment impact studies

Noise studies
Water requirement documentation
Electric requirement documentation
Physical documentation

- where would the air conditioning units be located?
- where would the generators be located?
- where would the air chillers be located?
- where would the diesel tanks be located? How can those be stored safely?
- what is the added height of the equipment on the roof and how would that be screened?
- where would the power lines connect?

Loudoun County is in the process of reworking where they allow data centers in the county (https://datacenterfrontier.com/loudoun-county-prepares-new-rules-for-where-data-centers-should-be-built/).

- **Location:** The county wants to limit data center growth in some areas, including several where data center development had previously been "by-right." The TLUC recommended that this be managed through changes to place types in the county comprehensive plan, as well as a rewrite of zoning ordinances. A major goal is to avoid data center development along Route 7, where there is limited power infrastructure to support them.
- **Standards:** Future data centers must meet new standards addressing high-quality building design, environmental sustainability, and their proximity to residential areas. The supervisors may also consider additional guidelines on loud noise from data center operations.

I hope you will meet with Loudoun officials to discuss the data centers they have allowed in their county, and what they have learned from it. Ultimately, I hope you don't let this proposal move forward. This would seriously alter the landscape of Fauquier, create environmental impacts, decrease property values, and so on. This is not the vision residents have for our county.

Thank you for your consideration,

Denise Schefer
Lake Whippoorwill Resident, Fauquier County
Highlands Townhouse Owner, Town of Warrenton

Brittany Latack

From: Wendy Wheatcraft <wendyw1015@outlook.com>
Sent: Tuesday, July 26, 2022 2:53 PM
To: citizencomment; Planning Department
Subject: Public Comments - SUP 2022-03 Amazon

wendyw1015@outlook.com appears similar to someone who previously sent you email, but may not be that person. Learn why this could be a risk

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Re: SUP 2022-03 Amazon Data Services

Dear Madam Chair Helander and Members of the Planning Commission,

I reside at 851 Oak Leaf Court in Ward 1. I am writing to express my deep concerns regarding the above-referenced application. I feel that the proposal fails to alleviate the adverse effects on the health, safety, and welfare of the adjoining and neighboring properties and does not provide sufficient information to allow the Planning Commission to make an informed recommendation to the Town Council.

Amazon is proposing a massive warehouse-like structure at the major gateway to the Town, 37 feet in height and over 220,000 square feet. A 37 foot building is generally over three stories tall. The plat indicates a 6 foot wall around a portion of the property that appears to be added for security purposes rather than screening. The proposed landscaping would not provide adequate screening from any direction. I suspect there will not be a way to sufficiently screen a facility and parking area this size, and it will adversely and irrevocably change the character of Warrenton's gateway. The applicant should be required to provide photo and/or drawing simulations of the proposed facility from Route 29, Broadview Avenue, and Blackwell Road. They are absolutely necessary to determine visual effect.

I saw nothing proposed in the application materials that mitigates the noise emissions that would be generated by the facility. Data centers require high levels of cooling and standby power, often supplied by giant AC units and emergency generators, as well as an onsite substation. The more servers in a data center, the more cooling units needed, and it is expected that several servers would fit into this large facility. The AC units, which are generally installed on the roof, create a very loud whine that can be heard for miles. The peak of the noise is usually between 4:00 p.m. and 10:00 p.m. Considering the proximity to residential neighborhoods, proactive mitigation must be taken at this stage of the application. If the applicant cannot mitigate the noise pollution and adverse visual effects, perhaps the proposed use is not appropriate for this parcel.

The applicant has not addressed the water requirements for the project, power or load requirements, or the application's incompatibility with the Comprehensive Plan. What is the effect on the subject parcel's cultural resources? This is unknown because the applicant has not provided this information. Ask the applicant to complete a Phase I archaeological study on the parcel and identify other resources within a half-mile radius of the site.

The consequences and long-term effects of approving the application are dire. If approved, a substation would be required. A substation would require new transmission lines, and Dominion has proposed awful transmission line routes. It is irresponsible of the applicant to propose a data center use on this property, where there is currently no access to the amount of power required for the use.

The application fails to adequately address concerns that are important to me as a resident of a r neighborhood. Given all this, I ask you to table the application until the applicant can address these concerns or recommend denial of the application.

Sincerely,

Wendy Wheatcraft

851 Oak Leaf Court, Warrenton

Brittany Latack

From: Azmir Kabilovic <azmir1981@icloud.com>
Sent: Thursday, July 28, 2022 10:48 AM
To: Planning Department
Subject: Amazon Data Center

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Good morning,

I'm resident of town of Warrenton and I would like to express my support for Amazon data center project. I believe this project will bring tax revenue needed to improve town' outlook.
The town needs a lot of updates.

Thanks.

Sent from my iPhone

Brittany Latack

From: Denise Harris
Sent: Friday, July 29, 2022 1:23 PM
To: Brittany Latack
Subject: FW: Proposed Amazon Data Center Site Visit/Balloon Test

---

From: Denise Schefer <denise.schefer@gmail.com>
Sent: Friday, July 29, 2022 1:20 PM
To: Susan Helander <shelander@warrentonva.gov>; James Lawrence <jlawrence@warrentonva.gov>; Steve Ainsworth <sainsworth@warrentonva.gov>; gjohnston@warretonva.gov; Ali Zarabi <AZarabi@warrentonva.gov>; Ryan Stewart <rstewart@warrentonva.gov>
Cc: Denise Harris <dharris@warrentonva.gov>; Rob Walton <rwalton@warrentonva.gov>
Subject: Proposed Amazon Data Center Site Visit/Balloon Test

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Hi Commissioners -

I attended the Planning Commission meeting on Tuesday night and took note of the upcoming site visit and balloon test at the proposed Amazon data center site. My husband and I own a local drone company (Aerotog) and we would like to offer our services on the day(s) those are going to occur free of charge. If you provide additional information about the format of the balloon test we can brainstorm about how our aerial photos/videoes could help you further in your deliberations.

Feel free to call or email to discuss.

Denise Schefer
Realtor® at Long & Foster
Warrenton, VA
Cell: 703.217.7232
www.longandfoster.com/DeniseSchefer
Licensed In Virginia
2021 Long & Foster Executive's Club
2021 Lifestyle Magazine Fauquier Award - Best Real Estate Agent
2019 Fauquier Times Readers' Choice Award - Best Real Estate Agent

Brittany Latack

From: Jason Smolinski <jsmo2283@yahoo.com>
Sent: Monday, August 1, 2022 12:38 PM
To: Planning Department; citizencomment; Carter Nevill; Sean Polster; Heather Sutphin; William Semple; Brett Hamby; James Hartman; Kevin Carter; BOS@fauquiercounty.gov; chris.granger@fauquiercounty.gov; holder.trumbo@fauquiercounty.gov; rick.gerhardt@fauquiercounty.gov; maryleigh.mcdaniel@fauquiercounty.gov; chris.butler@fauquiercounty.gov; Renard Carlos
Cc: powerline@dominionenergy.com; district27@senate.virginia.gov; DelMWebert@house.virginia.gov; DelEGuzman@house.virginia.gov
Subject: Warrenton Data Center: Bury the lines!

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Greetings,

I am writing to express my firm opposition to the proposed power towers meant for the Amazon data center.

I have been a Town of Warrenton resident for 11 years. I commute to Fairfax daily and I have to say, we are LUCKY to live in a town that retains a feeling of being in a world all its own. Whether you come into town by Country Chevrolet, down 17 near Highland School, via 211 near Wawa, via the new interchange near Walmart, or via Meetze Rd, we can be proud that every entrance into town is inviting. Seriously, a brief drive around and you will be reminded how the beauty has been retained throughout our small town. It is a dear characteristic of our town that must be held on to.

I am a proponent of smart growth. The property behind Country Chevrolet need not be for retail since we have other sites in town that sit vacant (looking at you, Broadview Lanes...). The light industrial zoning could see much worse than a SMALL data center. However, if above ground TALL power lines are erected, it will usher in a flexibility and a willingness to erect similar structures elsewhere in town.

I live within a half mile of the site. My neighborhood backs to 17 where we are lucky to have mature trees hiding the sound wall. But I do NOT want to see tall towers from my neighborhood.

The solution is simple. Amazon and Dominion can work out how to bury the lines. By burying the lines, it will signal a willingness to address one of the major citizen concerns about this project.

Thank you for your time,

Jason Smolinski

Brittany Latack

From: Steven and Ann Rose Wojcik <wojcik8@verizon.net>
Sent: Tuesday, August 2, 2022 11:41 AM
To: Planning Department
Subject: Fw: Recent Letter from Chandler AZ Planning Manager to Protect PWC Re Negative Impact of Data Centers

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Corrected email address. Resending.

----- Forwarded Message -----
From: Steven and Ann Rose Wojcik <wojcik8@verizon.net>
To: planing@warrentonva.gov <planing@warrentonva.gov>; shelander@warrentonva.gov <shelander@warrentonva.gov>; jlawrence@warrentonva.gov <jlawrence@warrentonva.gov>; sainsworth@warrentonva.gov <sainsworth@warrentonva.gov>; gjohnston@warrentonva.gov <gjohnston@warrentonva.gov>; rstewart@warrentonva.gov <rstewart@warrentonva.gov>; azarabi@warrentonva.gov <azarabi@warrentonva.gov>
Sent: Tuesday, August 2, 2022 at 11:39:00 AM EDT
Subject: Recent Letter from Chandler AZ Planning Manager to Protect PWC Re Negative Impact of Data Centers

Dear Members of the Warrenton Planning Commission,

I attended the work session last week and am following up on a request by one of your members regarding the noise produced by data centers' cooling units (the generators are not the issue, nor is the decibel level the issue. It is the pitch and frequency of the cooling units that irritate residents nearby 24/7/365). I spoke about this before the Town Council last year when they approved adding data centers to potential uses for industrially zoned parcels. Because of the noise issue, I proposed an amendment that data centers could not be considered if the property is adjacent to residentially-zoned areas. That was rejected, unfortunately. I did however get sympathetic words afterwards from several council members regarding the concerns they would have regarding the noise and its impact on residential areas nearby.

Here is a recent letter from the Planning Manager of Chandler AZ regarding the problems with data centers in the city, particularly the noise that disturbs residential areas near data centers. Despite mitigation efforts, the noise problems persists, and as a result, the city now is banning new data centers from the city. Unfortunately, it's too late for the residents where existing data centers are grandfathered in. Not to late for Warrenton though if the Planning Commission and our Town Council act to prevent it.

I am providing the link and pasting below as well for your convenience. He leaves a contact number. If you have not already done so, I encourage you to call to ask about the noise issue directly so that you are armed with this information for the upcoming meetings. Thank you very much for the opportunity to share this critical aspect of the data center issue with you. I am happy to discuss further (540-878-2009).

https://protectpwc.org/2022/07/26/chandler-ariz-planning-mgr-letter-regarding-data-center-noise-070822/

Chandler, Ariz. Planning Mgr. – Letter regarding Data Center Noise 070822

Posted onJuly 26, 2022AuthorKaren

Jul 8, 2022, at 12:58 PM

David De La Torre <David.DeLaTorre@chandleraz.gov> wrote:
I'm providing the following information regarding data centers in the City of Chandler, Arizona:

- Data centers are not allowed by right in any zoning district
- The City discourages new data centers for the following reasons:
    - An existing data center has been the source of a low hum that has generated noise complaints from nearby residents. City staff worked with the data center to add noise mitigation, however, the noise issue has not completely gone away.
    - Data centers require a significant amount of water and/or electricity to cool the servers and to power the equipment. In return, they provide minimal benefits to the City (see next bullet point)
    - Data centers are essentially warehouses for computer servers. They do not generate significant tax revenue or high wage jobs.

I hope this information is helpful.

David de la Torre, AICP

Planning Manager

Development Services Department, Planning Division

Phone: 480-782-3059

Here is also a link to a recent local news story on the noise issue and the regrets that the city council had re data centers.

https://www.youtube.com/watch?v=J060m1ohGPM

With great concern,

Steve Wojcik
621 Old Meetze Rd
Warrenton, VA 20186

Brittany Latack

From: robincooke (null) <robincooke@aol.com>
Sent: Monday, August 8, 2022 7:25 PM
To: citizencomment
Subject: Rejects Amazons data center permit

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Please reject Amazon's special exemption permit request. Do not allow data centers to blight our landscape. Do not give in to big business with the lure of easy money. Drive down Loudoun Ave if you want to see what will become of Blackwell road and other future data center targets sure to follow— a sterile, industrial wasteland of concrete and high fences. As a Fauquier resident for 20 years and a homeowner in the Town of Warrenton, please preserve all that makes this Town a great place to live. —Robin and Jim Cooke, The Love House, 40 S 6th St, Warrenton.

Peace

Brittany Latack

From: Mark <skyrunr1@verizon.net>
Sent: Monday, August 15, 2022 9:03 AM
To: Planning Department
Subject: Amazon Data Services Comments

Follow Up Flag: Follow up
Flag Status: Flagged

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Good Morning.

Can you please explain why the Town Parks and Rec department did not have any questions/concerns regarding the SUP 2022-03 Amazon Data Services application?

Although there is 1 comment (page 5) about sidewalks adjacent Blackwell Road, there were no other pertinent questions from Town Staff regarding pedestrian access on the remainder of the property.

Thank you,

Mark Nesfeder
721 Starting Point Court
Warrenton

Brittany Latack

From: Steven and Ann Rose Wojcik <wojcik8@verizon.net>
Sent: Friday, August 19, 2022 12:20 PM
To: Planning Department; Susan Helander; James Lawrence; Steve Ainsworth; Gerald Johnston; Ryan Stewart; Ali Zarabi
Cc: Renard Carlos
Subject: Questions to Ask Regarding Cooling System at Proposed Amazon-Operated Data Center

Follow Up Flag: Follow up
Flag Status: Flagged

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Dear Members of the Planning Commission,

Thank you Mr. Zarabi for responding to my earlier email. In reading the Comment Response submitted by the attorney for your upcoming meeting on the data center, I could not find any information about how the data center will be cooled. As you know, these centers, which are basically large rooms that hold servers in an air-conditioned environment, require cooling 24/7/365. Since they have been the source of noise complaints at other centers, it is important to know the following:

1) What kind of chilling system will be used?

2) Where will it be located, particularly, what are the exterior components?

3) What are the noise estimates on the exterior components, particularly the pitch and frequency, which has been the source of the problem at other data centers, not the decibels?

4) How specifically will this data center avoid noise issues from the air cooling units that has been the source of noise complaints at other data centers?

As the cooling units will be on all the time, the answers to these questions are critical before a decision is made. While the noise from the generators has been a focus, they will only operate if the power goes out. They will not be operating constantly, like the chillers.

In my mind, the answers to these questions are critical before a decision is made. To my knowledge, the complaints about noise from data centers have come from the air cooling units, not the generators. And the complaints center around the pitch and frequency of the noise, not the decibels. It's been described as a constant, annoying hum. This occurs whether the outdoor components are placed on the ground (as in AZ) or on the roof (as in Chicago). I am not aware of any complaint about noise from generators. Thank you for considering my questions and I hope someone will ask them of the applicant.

Regards,

Steve Wojcik

621 Old Meetze Rd
Warrenton, VA 20186

-----Original Message-----
From: Steven and Ann Rose Wojcik <wojcik8@verizon.net>
To: planing@warrentonva.gov <planing@warrentonva.gov>; shelander@warrentonva.gov

<shelander@warrentonva.gov>; jlawrence@warrentonva.gov <jlawrence@warrentonva.gov>; sainsworth@warrentonva.gov <sainsworth@warrentonva.gov>; gjohnston@warrentonva.gov <gjohnston@warrentonva.gov>; rstewart@warrentonva.gov <rstewart@warrentonva.gov>; azarabi@warrentonva.gov <azarabi@warrentonva.gov>
Sent: Tue, Aug 2, 2022 11:39 am
Subject: Recent Letter from Chandler AZ Planning Manager to Protect PWC Re Negative Impact of Data Centers

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Here is a recent letter from the Planning Manager of Chandler AZ regarding the problems with data centers in the city, particularly the noise that disturbs residential areas near data centers. Despite mitigation efforts, the noise problems persists, and as a result, the city now is banning new data centers from the city. Unfortunately, it's too late for the residents where existing data centers are grandfathered in. Not to late for Warrenton though if the Planning Commission and our Town Council act to prevent it.

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Posted onJuly 26, 2022AuthorKaren

Jul 8, 2022, at 12:58 PM

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- Data centers require a significant amount of water and/or electricity to cool the servers and power the equipment. In return, they provide minimal benefits to the City (see next bullet point)
- Data centers are essentially warehouses for computer servers. They do not generate significant tax revenue or high wage jobs.

I hope this information is helpful.

David de la Torre, AICP

Planning Manager

Development Services Department, Planning Division

Phone: 480-782-3059

Here is also a link to a recent local news story on the noise issue and the regrets that the city council had re data centers.

https://www.youtube.com/watch?v=J060m1ohGPM

With great concern,

Steve Wojcik
621 Old Meetze Rd
Warrenton, VA 20186

Brittany Latack

From: Christina Gagnon <chris@jumpcode.com>
Sent: Tuesday, August 23, 2022 3:14 PM
To: Planning Department
Subject: ATTN: Ali Zarabi, Planning Commission

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

August 23, 2022

Ali Zarabi
Planning Commission
21 Main Street
Warrenton, VA 20186

Dear Mr. Zarabi:

As residents of the community you serve in Warrenton, we are writing to strongly oppose the construction of the Amazon Web Services (AWS) data center on Blackwell road.

The citizens of Fauquier county have not been adequately informed about what is happening to our town, and what the ramifications are of having an AWS data center along with the required 110-feet-tall high-voltage power line running through our community will be.

These systems draw mind-boggling amounts of power and water in order to operate and will deplete the critical resources available to Fauquier residents. It will also lead to higher energy costs due to supply and demand issues, and possible energy rationing in the future. Skeptical about future energy rationing? Berkeley County, SC gave so much water to the Google data center there that they asked the local public utility, Mount Pleasant Waterworks *"to reduce its withdrawal from the aquifer by 57% over the next four years"*[1a]—in other words—less water for the taxpaying residents of Berkeley County.

Amazon has made conflicting statements about their intended water usage. On June 8, 2022 on the FauquierNow web site they said "the facility would need to utilize public water and connect to the town's sewer system." [5a] On July 28, 2022 on the FauquierNow web site they said "the facility would not be connected to the town's water supply." [6a] As you know the Warrenton reservoir gets its water from both surface water and groundwater, so whether or not AWS would technically connect to the town water system, they will be getting water from somewhere—presumably from drilling a well that would take water away from the groundwater now made available to Fauquier residents.

Also, in the same article, they claimed that "Engineers and architects estimated that the water usage at this site will be 1,500 gallons per day …"that's effectively the equivalent of four homes." [6b] I think it is fair to require a direct statement from AWS on the actual water and power usage that will be consumed by the data center, and provide proof of such low water use in other AWS data centers. They seem to be unwilling to respond directly and are using testimony from third parties who may not know the full extent of how much water and power would be required to operate the data center.

AWS is not being transparent with the Town about the actual volume of water they will consume in order to cool the thousands of servers typically housed in one data center, and the immense amount of electricity that will also be consumed in generating the power to meet their power requirements. According to another article, *"The company [AWS] does not share any metrics on how its own data centers perform on power consumption metric."* [2a]

AWS has assumed a decision-making role in regional power allocation putting regional taxpayers at a disadvantage. *"AWS agreed to purchase services from Dominion Virginia Power (DVP) that allow it to have a greater say in the power mix that DVP purchases and provides to the regional grid that services AWS data centers."* [2b]

AWS has an poor environmental record and has been rated *"the worst environmental performer of the big three."* [3a] ," continued to berate the company for its power mix, in particular for its data centers in Virginia, *aka the Dirty North-East*." [2c]

Also, data centers offer no benefits to Fauquier residents, employing at most 10 people to operate a data center. Data centers are unsightly, unhealthy, a drain on our resources, and will destroy the beloved character of our town. Any tax revenues collected from AWS will not lead to citizens getting lower electric or water bills or reduced taxes—it will most likely be allocated toward future development projects benefiting the very few and costing the tax-paying residents dearly.

We have also been told that the town is planning to annex around 1,700 additional acres into the town, which may indicate future plans to add more data centers in our community.

We are not against development in Fauquier County as long as it's appropriate. Farm land is what we're famous for and with expected food shortages coming late 2023/24, farm land is a valuable resource to preserve. We would welcome clean, light manufacturing businesses that actually bring new jobs to Fauquier residents.

Building an Amazon Data Center at the entry of the Town of Warrenton will forever transform our community from a beautiful rolling countryside of farm land into an unsightly and unhealthy web of data farms and high power lines, giving us a view similar to the view you get driving up I-95 into Newark New Jersey— possibly lowering property values.

We have so many other questions, for example—Did AWS receive any tax incentives for this project? How is any waste water from this project going to be handled? Has a health assessment been done to assure residents that long-term exposure to low frequency EMF emissions will not harm their families' health? [4a].

We strongly urge you to study these facts surrounding this decision, and to carefully consider the long term consequences of your vote on this project.

Sincerely,
Eric and Christina Gagnon
200 Winchester Street
Warrenton, VA 20186

E-Mail: eric@jumpcode.com
PHONE: (540) 349-2438

1. (abc) Rich Miller, "Power Struggles at Amazon Web Services - Technology and Operations Management," (Technology and Operations Management, Nov 4 2016), https://digital.hbs.edu/platform-rctom/submission/power-struggles-at-amazon-web-services/

2. (ab) Nikita Sattiraju, "The Secret Cost of Google's Dta Centers:Billions of Gallons of Water," (Time.com, Apr 2020), https://time.com/5814276/google-data-centers-water/

3. (a) David Mytton, "How Much Water Do Data Centers Use," (davidmyttonblog, Jun 10 2020), https://davidmytton.blog/how-much-water-do-data-centers-use/

4. (a). Dr. Jack Kruse, "What are The Biologic Effects Of EMF," (jackkruse.com, https://jackkruse.com/emf-5-what-are-the-biologic-effects-of-emf/

5. (a) James Jarvis, "Amazon files application to build data center in Warrenton," (FauquierNow.com, Jun 8 2020), https://www.fauquiernow.com/news/business/amazon-files-application-to-build-data-center-in-warrenton/article_8117395a-e771-11ec-a09c-7fa1d3dbb3d0.html

6. (ab) James Jarvis, "Warrenton commissioners grill Amazon counsel over proposed data center, Dominion power station," (FauquierNow.com, Jul 28 2020), https://www.fauquiernow.com/news/government_politics/warrenton-commissioners-grill-amazon-counsel-over-proposed-data-center-dominion-power-station/article_2ca6c2f0-0dff-11ed-abea-6b034e820fef.html

Brittany Latack

From: Christina Gagnon <chris@jumpcode.com>
Sent: Tuesday, August 23, 2022 3:13 PM
To: Planning Department
Subject: ATTN: Ryan J. Stewart, Planning Commission

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

August 23, 2022

Ryan J. Stewart
Planning Commission
21 Main Street
Warrenton, VA 20186

Dear Mr. Stewart:

As residents of the community you serve in Warrenton, we are writing to strongly oppose the construction of the Amazon Web Services (AWS) data center on Blackwell road.

The citizens of Fauquier county have not been adequately informed about what is happening to our town, and what the ramifications are of having an AWS data center along with the required 110-feet-tall high-voltage power line running through our community will be.

These systems draw mind-boggling amounts of power and water in order to operate and will deplete the critical resources available to Fauquier residents. It will also lead to higher energy costs due to supply and demand issues, and possible energy rationing in the future. Skeptical about future energy rationing? Berkeley County, SC gave so much water to the Google data center there that they asked the local public utility, Mount Pleasant Waterworks *"to reduce its withdrawal from the aquifer by 57% over the next four years"*[1a]—in other words—less water for the taxpaying residents of Berkeley County.

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AWS has an poor environmental record and has been rated *"the worst environmental performer of the big three."* [3a] ," continued to berate the company for its power mix, in particular for its data centers in Virginia, *aka the Dirty North-East*." [2c]

Also, data centers offer no benefits to Fauquier residents, employing at most 10 people to operate a data center. Data centers are unsightly, unhealthy, a drain on our resources, and will destroy the beloved character of our town. Any tax revenues collected from AWS will not lead to citizens getting lower electric or water bills or reduced taxes—it will most likely be allocated toward future development projects benefiting the very few and costing the tax-paying residents dearly.

We have also been told that the town is planning to annex around 1,700 additional acres into the town, which may indicate future plans to add more data centers in our community.

We are not against development in Fauquier County as long as it's appropriate. Farm land is what we're famous for and with expected food shortages coming late 2023/24, farm land is a valuable resource to preserve. We would welcome clean, light manufacturing businesses that actually bring new jobs to Fauquier residents.

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We have so many other questions, for example—Did AWS receive any tax incentives for this project? How is any waste water from this project going to be handled? Has a health assessment been done to assure residents that long-term exposure to low frequency EMF emissions will not harm their families' health? [4a].

We strongly urge you to study these facts surrounding this decision, and to carefully consider the long term consequences of your vote on this project.

Sincerely,
Eric and Christina Gagnon
200 Winchester Street
Warrenton, VA 20186

E-Mail: eric@jumpcode.com
PHONE: (540) 349-2438

1. (abc) Rich Miller, "Power Struggles at Amazon Web Services - Technology and Operations Management," (Technology and Operations Management, Nov 4 2016), https://digital.hbs.edu/platform-rctom/submission/power-struggles-at-amazon-web-services/

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Brittany Latack

From: Christina Gagnon <chris@jumpcode.com>
Sent: Tuesday, August 23, 2022 3:11 PM
To: Planning Department
Subject: ATTN: Gerald Johnston, Planning Comission

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

August 23, 2022

Gerald Johnston
Planning Commission
21 Main Street
Warrenton, VA 20186

Dear Mr.Johnston:

As residents of the community you serve in Warrenton, we are writing to strongly oppose the construction of the Amazon Web Services (AWS) data center on Blackwell road.

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Brittany Latack

From: Christina Gagnon <chris@jumpcode.com>
Sent: Tuesday, August 23, 2022 3:10 PM
To: Planning Department
Subject: ATTN: Steve Ainsworth, Planning Commission

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

August 23, 2022

Steve Ainsworth
Planning Commission
21 Main Street
Warrenton, VA 20186

Dear Mr. Ainsworth:

As residents of the community you serve in Warrenton, we are writing to strongly oppose the construction of the Amazon Web Services (AWS) data center on Blackwell road.

The citizens of Fauquier county have not been adequately informed about what is happening to our town, and what the ramifications are of having an AWS data center along with the required 110-feet-tall high-voltage power line running through our community will be.

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E-Mail: eric@jumpcode.com
PHONE: (540) 349-2438

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Brittany Latack

From: Christina Gagnon <chris@jumpcode.com>
Sent: Tuesday, August 23, 2022 3:07 PM
To: Planning Department
Subject: ATTN: James Lawrence, Vice Chair, Planning Commission

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

August 23, 2022

James Lawrence
Vice Chair Planning Commission
21 Main Street
Warrenton, VA 20186

Dear Ms. Helander:

As residents of the community you serve in Warrenton, we are writing to strongly oppose the construction of the Amazon Web Services (AWS) data center on Blackwell road.

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Brittany Latack

From: Christina Gagnon <chris@jumpcode.com>
Sent: Tuesday, August 23, 2022 3:03 PM
To: Planning Department
Subject: ATTN: Susan Rae Helander, Chair Wareenton Planning Commission

Follow Up Flag: Follow up
Flag Status: Flagged

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

August 23, 2022

Susan Rae Helander
Chair, Planning Commission
21 Main Street
Warrenton, VA 20186

Dear Ms. Helander:

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E-Mail: eric@jumpcode.com
PHONE: (540) 349-2438

1. (abc) Rich Miller, "Power Struggles at Amazon Web Services - Technology and Operations Management," (Technology and Operations Management, Nov 4 2016), https://digital.hbs.edu/platform-rctom/submission/power-struggles-at-amazon-web-services/

2. (ab) Nikita Sattiraju, "The Secret Cost of Google's Dta Centers:Billions of Gallons of Water," (Time.com, Apr 2020), https://time.com/5814276/google-data-centers-water/

3. (a) David Mytton, "How Much Water Do Data Centers Use," (davidmyttonblog, Jun 10 2020), https://davidmytton.blog/how-much-water-do-data-centers-use/

4. (a). Dr. Jack Kruse, "What are The Biologic Effects Of EMF," (jackkruse.com, https://jackkruse.com/emf-5-what-are-the-biologic-effects-of-emf/

5. (a) James Jarvis, "Amazon files application to build data center in Warrenton," (FauquierNow.com, Jun 8 2020), https://www.fauquiernow.com/news/business/amazon-files-application-to-build-data-center-in-warrenton/article_8117395a-e771-11ec-a09c-7fa1d3dbb3d0.html

6. (ab) James Jarvis, "Warrenton commissioners grill Amazon counsel over proposed data center, Dominion power station," (FauquierNow.com, Jul 28 2020), https://www.fauquiernow.com/news/government_politics/warrenton-commissioners-grill-amazon-counsel-over-proposed-data-center-dominion-power-station/article_2ca6c2f0-0dff-11ed-abea-6b034e820fef.html

Brittany Latack

From: barbaraplante@verizon.net
Sent: Tuesday, August 30, 2022 9:38 AM
To: Planning Department; splante.btp@gmail.com
Subject: overhead transmission lines in Warrenton

Follow Up Flag: Follow up
Flag Status: Flagged

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Please [ ]
don't build overhead transmission lines which will ruin the landscape and charm of the town.

Barbara Plante
248 Onyx Way
Warrenton, VA 20186

Brittany Latack

From: Stephen Plante <splante.btp@gmail.com>
Sent: Tuesday, August 30, 2022 9:47 AM
To: citizencomment
Subject: Dominion Plans to Build Overhead Transmission Lines in Warrenton VA

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Please do not allow the building of overhead transmission lines in our beautiful town of Warrenton!

Steve Plante
248 Onyx Way
Warrenton VA 20186

Brittany Latack

From: Lily Fredrickson <affordablecslf@gmail.com>
Sent: Thursday, September 1, 2022 9:23 AM
To: citizencomment
Subject: Please Say NO to the Data Center Proposal

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

I just received the notice to join the town hall forum on August 10, 2022 concerning Amazon and Dominion wanting to build a data center on Blackwell Rd. My family lost a family member out of state on the ninth, and were thus unable to attend the meeting.

However, it is entirely important to us that you deny the special use permit that Amazon has requested to build their data center. We are not comfortable with the loss of property value that this would impose on us being first time home buyers in the area.

Thank you for your time and attention.

Best,
Karl and Lilian Fredrickson

Brittany Latack

From: jgm6267@comcast.net
Sent: Thursday, September 1, 2022 9:46 AM
To: citizencomment
Subject: Stop the Towers

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

As a citizen of Warrenton, since 2005, living in old town has been a source of pride and we are under restrictions as to how we maintain the town and our homes. We are happy to keep our town looking as lovely as it is now.
Now some want the gateway to Warrenton marred with the large uglyTowers that will be the first thing seen as you come into town. Bury them, literally!
If passed, this is just an OK to add more ugliness to the place we all call home. Rural, Agricultural Fauquier County.

Please do not vote for this ugly addition to our Town.

Sincerely,
Mr. & Mrs. John Mullikin
116 Mosby Circle
Warrenton, VA.

Brittany Latack

From: Mary Judkins <maryjdkns@gmail.com>
Sent: Thursday, September 8, 2022 9:50 PM
To: citizencomment
Subject: Special use permit for Dominion Energy regarding the proposed Amazon Data Center

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

I started coming to Warrenton in the mid fifties for my horse events. We were living in old town Alexandria but I'm originally from Kentucky and even at that young age I was struck by how much it reminded me of the small Kentucky towns we would visit. And then later on in my many travels to Charlottesville I was happy to see it still had that same quality.

When I moved to Hume in 2001 again I had that same feeling so that when I left the country life, moving into town was a natural progression.

There are many ways to keep up with the world's changes but it doesn't mean that we should negate the good things that we had. There are many studies on how the environment affects our brains, beauty is one of the good things. Why would we want to look at giant electric towers at our town's entrance, not to mention the additional noise the data center generators will create that would impact the surrounding areas. We have enough noise.

I have no objections to mixed use development as long as there is intelligent foresight, but this particular project is not the way to go for our charming town. Let us not make Warrenton Northern Virginia. Please vote down the special use permit requested by Dominion Energy.

Mary Judkins
209 Dover Rd
Warrenton Va

Brittany Latack

From: Mo Bakheit <mbakheit@gmail.com>
Sent: Tuesday, September 13, 2022 10:35 AM
To: citizencomment
Subject: Regarding the "No Towers" Meeting

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Dear Sir/Madam; my comment, with respect:

"I am a 33+ years career professional and Subject Matter Expert in industries that span - Data Centers (Government and Commercial), Telecom Infrastructure, Network Services, Cyber and Physical Security, and Safe Smart Cities.

Having been engaged in the - design, deployment and operation - of numerous - Data, Fusion, and C4ISR Centers around the globe my concerns are 3:

A. There is indeed no need for a Towers Infrastructure - especially in a town as small and serene as Warrenton. Sub Station expansion and subterranean cabling is absolutely a viable option to expand the "Energy" Grid; and preferably a "Smart Grid" so that Warrenton can benefit from the additional Resilience during time of inclement weather.

B. If one takes a look at Data Centers serving Federal, Commercial and Global ("SWIFT") in - Reston, Culpeper and DC - they are right across, or within the proximity of the Customer Facility. Is this not an option with the Warrenton Federal "Training" Facility - rather than a location smack dab in the middle of our beautiful Warrenton?

C. The selection of the current location for an Amazon AWS Data Center was in my opinion purely commercially versus Sustainability driven. We are now in the age of - Safe, Secure and Sustainable Smart Cities - this location does not checklist any of those factors - and is a potential disruption to the most beautiful town in America.

Thank you; and with respect.

Mo Bakheit
208 N.View Circle.
Warrenton, VA. 20186

Brittany Latack

From: Denise Schefer <denise.schefer@gmail.com>
Sent: Wednesday, November 2, 2022 1:17 PM
To: citizencomment
Subject: Fwd: Planning Commission Meeting 10/25
Attachments: Hampton Inn Parking Lot.jpg; Hampton Inn Top Floor.jpg

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

---------- Forwarded message ---------
From: **Denise Schefer** <denise.schefer@gmail.com>
Date: Wed, Nov 2, 2022 at 12:49 PM
Subject: Planning Commission Meeting 10/25
To: Susan Helander <shelander@warrentonva.gov>, <jlawrence@warrentonva.gov>, <sainsworth@warrentonva.gov>, <gjohnston@warretonva.gov>, Ali Zarabi <AZarabi@warrentonva.gov>, <Rstewart@warrentonva.gov>

Good Afternoon -

I attended the Planning Commission meeting last week, and would like to offer the following comments:

- The building elevations and renderings shown on October 25th were very different from the ones presented at the July 26th work session. At least one of the renderings shown last week from Route 17 still seems incorrect as the fence that would go around the perimeter was not included. I think it was the second rendering presented.

- Commissioner Lawrences' comments about the photos that Wetland Solutions took around town were warranted. Better photos and line of sight studies should have been provided. Obviously the views would be very different from November-April when all the leaves would be off the trees as Commissioner Johnston noted, and also very different if trees were to be cut down on the proposed data center site.

- Commissioner Stewart was asking about how many households and businesses would have line of sight to the building. A PEC viewshed study indicates that within a three mile radius, 4,094 residences and businesses would see it. 1,699 of those are outside the town limits, so I hope the Planning Commission and the Warrenton Town Council take into account comments from county residents as this project would really impact them if approved.

- A few nearby locations that were not photographed were the Hampton Inn, the Holiday Inn and the Baymont (formerly the Comfort Inn). These are the three major hotels in Warrenton and all three would have views of the proposed data center (according to both the Amazon and PEC viewshed studies), especially the Hampton Inn. See the attached photos showing the view of the proposed data center from the parking lot of the Hampton Inn and from the top floor. The Holiday Inn would also have a direct line of sight to the power lines if those were to go in from Meetze Rd to the Blackwell Road site. This is not the vision that Warrenton wants to portray to visitors coming into town, and perhaps something you have not considered yet.

- John Foote's comment about this building not being the tallest in town was inaccurate, and the comment about "if you were to go to other buildings of roughly similar height or higher you expect to

see a similar profile" was irrelevant. At 56' with the equipment on the roof, this building would be th tallest building in Warrenton (topography not being taken into account), the one with the biggest footprint; and the other larger buildings in town aren't surrounded by a security fence and they don't make significant noise 24x7. There are no buildings in Warrenton like this one.

- It seems very unlikely that Amazon could only hire town of Warrenton residents for the data center positions. I think lawyers would have a field day with that one!

- I applaud Commissioner Zarabi's comments as they are completely in line with the majority of town and county residents. A large number of town residents spent 2 1/2 years coming up with the comp plan for the town, and data centers were not included. That was on purpose, and not part of the vision of the town. New Town 2040 called for a mixed use area, not a large data center with a fence around it. Like Commissioner Zarabi, I am confident that John Foote could bring additional applications for that land that are actually consistent with the comp plan.

- The issue of a lot of cars getting in and out of that immediate area was mentioned. Has VDOT or an independent highway engineer done an in depth study to determine solutions for getting larger numbers of people in and out? It seems like we are just throwing our hands up and saying it can't be done, when maybe we just need to take a fresh look at finding an answer, or call on new experts. There is a lot of road frontage with Route 17 and the site is very close to Route 29, so it would seem that with a little creativity it can be done.

- I agree with Commissioner Ainsworth's comments that all the virtual learning and working has to be processed somewhere, however, I disagree with his comments that if we rely on it being in another county that it is "too NIMBYish" and this data center is a "reasonable use." I don't think people have taken a NIMBY approach to this, they have taken a NITWBY (Not In The Wrong Back Yard) approach. This is the wrong back yard, and I think the information presented to you by Protect Fauquier, CFFC and PEC has shown that beyond a doubt, in addition to all the comments you have received from the general public. The community is telling you that a 56' tall building on a hill as you enter Warrenton with a security fence around it that makes noise and can be seen for up to 3 miles away is not a reasonable use for the property. If data centers are going to be approved in Fauquier they need to be in the areas designated for them in the county (Vint Hill and Remington), and then revenue sharing worked out with the BOS to give some of that money to the town for their spending. I think you would have public support for this. This is the correct backyard.

- I am confused by Commissioner Ainsworth's concern that nothing has been built on this property and there seemed to be a "building something is better than doing nothing" notion. I would suggest that Warrenton is on a slippery slope and if this data center is approved more will likely follow, and there are no "redos" with this decision. "Nothing" on that property is a million times better than the wrong "something" on that property.

- The noise study that Amazon presented is inaccurate. I hope you will review the study done by Dr. John Lyver (noise specialist for the Navy/NASA) as it demonstrates that the proposed data center would be in violation of both town and county noise ordinances during most of the day/night. For this reason alone, this application should be voted against.

- Towards the end of the meeting Commissioner Lawrence seemed encouraged by the prospect of Amazon sharing the cost to bury the distribution lines from the proposed substation to the proposed data center. Burying the distribution lines is already the responsibility of the applicant, so it is not a new concession, and they would only run about 250'. With regards to transmission lines, Amazon and Dominion cannot make any promises that they will be buried. The SCC has the final say as to where the lines would be routed and whether they would be above or below ground. There are 6600 miles of transmission lines in Virginia and only 1% are buried. The Planning Commission and Warrenton Town Council would be making the decision with blinders on if they approve the data center/substation based

on Amazon/Dominion assurances that the lines would go underground. The citizens of Fauquier C deserve better than this.

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> *who will reap many millions of dollars more for their properties if data centers are built." - CFFC*

Thanks for your consideration and I welcome your comments. I'll be passing on more inforamtion about the recent Town Hall soon.

Denise Schefer
Lake Whippoorwill Resident/Fauquier County
Highlands Townhouse Owner/Town of Warrenton

Brittany Latack

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Subject: Fwd: Planning Commission Meeting 10/25
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[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Please disregard my previous email. Thank you.

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From: **Denise Schefer** <denise.schefer@gmail.com>
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Subject: Fwd: Planning Commission Meeting 10/25
To: <citizencomment@warrentonva.gov>

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To: Susan Helander <shelander@warrentonva.gov>, <jlawrence@warrentonva.gov>, <sainsworth@warrentonva.gov>, <gjohnston@warretonva.gov>, Ali Zarabi <AZarabi@warrentonva.gov>, <Rstewart@warrentonva.gov>

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Thanks for your consideration and I welcome your comments. I'll be passing on more inforamtion about the recent Town Hall soon.

Denise Schefer
Lake Whippoorwill Resident/Fauquier County
Highlands Townhouse Owner/Town of Warrenton

Brittany Latack

From: Stephen Plante <splante.btp@gmail.com>
Sent: Sunday, November 6, 2022 5:14 AM
To: citizencomment
Subject: Regarding the Amazon Data Center and Electric Towers

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

PLEASE, PLEASE, PLEASE, DON'T APPROVE AMAZON'S **SPECIAL USE PERMIT** TO BUILD A DATA CENTER IN HISTORIC WARRENTON!

MAINTAIN THE BEAUTY AND CHARACTER OF WARRENTON!

A CONCERNED CITIZEN OF WARRENTON.

Stephen Plante
248 Onyx Way, Warrenton, VA 20186

Brittany Latack

From: Josine Hitchcock <josinehitchcock@gmail.com>
Sent: Wednesday, November 9, 2022 11:58 AM
To: citizencomment
Subject: Object to Amazon Data Center

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

To whom it may concern:
As longtime citizens of the Town of Warrenton, we strongly object to the proposed Amazon Data Center and urge the Planning Commission as well as the Town Council to oppose this project.

Sincerely,

Walter A. Hitchcock, Jr.
Josine van D. Hitchcock

127 Culpeper Street
Warrenton, Virginia 20186

Brittany Latack

From: Chuck Cross <CCross@csbs.org>
Sent: Thursday, November 10, 2022 9:18 PM
To: Planning Department; Carter Nevill; Sean Polster; Renard Carlos; Heather Sutphin; William Semple; Brett Hamby; James Hartman; John B. Heroux
Cc: votes4mcguire@gmail.com; paul.w.mooney@gmail.com
Subject: Warrenton Residents Opposition to Data Centers
Attachments: Town Council Letter.pdf; Signed 1.pdf; Signed 2.pdf; Signed 3.pdf; Signed 4.pdf; Code of Ethics (PDF).pdf

Importance: High

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Internal Use Only

Dear Members of the Warrenton Town Council and Planning Commission,

We the residents of the Monroe Estates and Old Meetze Rd neighborhoods are highly concerned over the possibility of the Council approving the planned Amazon data center and a potentially larger data center at the old wire factory bordering our community.

As you know, significant questions have been raised around town management's involvement with Amazon prior to the Council's approval of code amendments allowing data centers in Warrenton. These questions, combined with the likely noise and size of these structures near neighborhoods and community areas form the basis of our concerns.

- We believe that large data centers are not compatible with residential neighborhoods or community areas designed for resident's enjoyment.
- We believe that construction and operation of large data centers within our communities is not consistent with the Town's Comprehensive Plan.
- We believe that any decisions to allow large data centers must be reconciled against existing Town code and your responsibilities under the Town Code of Ethics.
- And we believe that the noise level and unsightly appearance of these several hundred thousand square foot structures will negatively impact our quality of life and significantly lower our property values.

Please take a moment to read the details of our concerns in the attached letter and consider the following requests of Warrenton constituents:

- Pause and reconsider the actions leading to the 2021 zoning amendments in favor of data centers.

- Deny any large data center application within the town limits, beginning with the pending Amazo application.
- Adhere strictly to the requirements of the Town code, including the zoning ordinance, and your own Code of Ethics (attached).
- Respect and follow the 2040 Comprehensive Plan.
- Refrain from any decisions that will result in deleterious impacts to Warrenton residents, as required by Subsection 11-3.10.1 of the Town Code, including noise impacts, viewshed impacts, or degradation of property values.

The Residents of Monroe Estates and Old Meetze Rd Neighborhoods

Confidentiality Notice: This email, including attachments, may include non-public, proprietary, confidential or legally privileged information. If you are not an intended recipient or an authorized agent of an intended recipient, you are hereby notified that any dissemination, distribution or copying of the information contained in or transmitted with this e-mail is unauthorized and strictly prohibited. If you have received this email in error, please notify the sender by replying to this message and permanently delete this e-mail, its attachments, and any copies of it immediately. You should not retain, copy or use this e-mail or any attachment for any purpose, nor disclose all or any part of the contents to any other person. Thank you.

Monroe Estates/Old Meetz Road Residents Against the Amazon Data Center Petition

Name	Address	Signature
PETE EISELE	605 OLD MEETZ RD	
Chris Hunt	136 Meadowview Ln.	
Meghan Lugwell	156 Meadowview Ln	
Khoi Do	186 Meadowview Ln.	
MICHAEL MCCARVILLE	196 MEADOWVIEW LANE	
ALVIN COLÓN	580 PINEVIEW CT.	
Steve Wojcik	621 Old Meetze Rd.	
Elena Hanback	577 Old Meetze Rd	

Monroe Estates/Old Meetz Road Residents Against the Amazon Data Center Petition

Name	Address	Signature
Anna Dengler	616 Galina Way Warrenton 20186	
Greg Trussell	596 Galina Way, Warrenton, Va 20186	
Mary Trussell	596 Galina Way Warrenton Va 20186	
Dawn Nelson	586 Galina way, Warrenton, VA 20186	
Travis Simoes	576 Galina way Warrenton, VA 20186	
Jordyn Simoes	576 Galina Way Warrenton, VA 20186	
Lorraine Murphy	595 Galina Way "	

Monroe Estates/Old Meetz Road Residents Against the Amazon Data Center Petition

Name	Address	[redacted] Number
Kevin Robbins	215 MEADOWVIEW LN, WARRENTON, VA 20186	
BARBARA BURDEN	106 MEADOWVIEW LN	Barbara Burden
Saher Samaleddin	551 OLD Meetz Rd	

TOWN CODE OF ETHICS

The Town Council adopted the attached Code of Ethics at its meeting on August 9, 2016. The Code addresses how members will conduct themselves in an ethical manner to earn and maintain the public's full confidence for integrity.

The Code of Ethics is adopted for execution by each elected or appointed member of a Town public body, including the Mayor and Town Council Members, the Planning Commission, Board of Zoning Appeals and Architectural Review Board.

Mission: In Cooperation With and For Our Citizens ... The Mayor, Town Council and the Staff of Warrenton are dedicated to providing public safety, economic opportunity, and quality public services in an attractive, well-planned community with historic character for the benefit, enjoyment and accessibility of all.

Values: To Achieve Our Mission, We Strive To. . . Provide high level services in a cost-effective manner; display honesty, respectfulness, and fairness in all relationships; support the health and economic well-being of our citizens and businesses; preserve our historic small-town character; encourage opportunities, services and infrastructure that allow people of all means to live, work and visit here; and address public concerns and opportunities promptly and effectively.

We recognize our Mission can be achieved only by the exchange of information and that through team work we can maintain an environment in which we can maximize our potential.

CODE OF ETHICS

Preamble

The citizens and businesses of Town of Warrenton, Virginia, are entitled to have fair, ethical and accountable local government, which has earned the public's full confidence for integrity. In keeping with the Town of Warrenton's Commitment to Excellence, the effective functioning of democratic government therefore requires that public officials, both elected and appointed, comply with both the letter and spirit of the laws and policies affecting the operations of government; that public officials be independent, impartial and fair in their judgment and actions; that public office be used for the public good, not for personal gain; and that public deliberations and processes be conducted openly, unless legally confidential, in an atmosphere of respect and civility.

To this end, the Town of Warrenton Town Council has adopted this Code of Ethics for members of the Council and of the Town's boards, commissions and committees to assure public confidence in the integrity of local government and its effective and fair operation.

1. Act in the Public Interest

Recognizing that stewardship of the public interest must be their primary concern, members will work for the common good of the people of the Town of Warrenton and not for any private or personal interest, and they will assure fair and equal treatment of all persons, claims, and transactions coming before the Town of Warrenton Town Council, boards, commissions, and committees.

2. Comply with the Law

Members shall comply with the laws of the nation, the Commonwealth of Virginia and the Town of Warrenton in the performance of their public duties. These laws include, but are not limited to: the United States and Virginia constitutions; the Code of the Town of Warrenton; laws pertaining to conflicts of interest, election campaigns, financial disclosures, employer responsibilities, and open processes of government; and Town ordinances and policies.

3. Conduct of Members

The professional and personal conduct of members must be above reproach and avoid even the appearance of impropriety. Members shall refrain from abusive conduct, personal charges or verbal attacks upon the character or motives of other members of the Town Council, boards, commissions, and committees, the staff or public.

4. Respect for Process

   Members shall perform their duties in accordance with the processes and rules of order established by the Town Council and boards, committees, and commissions governing the deliberation of public policy issues, meaningful involvement of the public, and implementation of policy decisions of the Town Council by Town staff.

5. Conduct of Public Meetings

   Members shall prepare themselves for public issues; listen courteously and attentively to all public discussions before the body; and focus on the business at hand. They shall refrain from interrupting other speakers; making personal comments not germane to the business of the body; or otherwise interfering with the orderly conduct of meetings.

6. Decisions Based on Merit

   Members shall base their decisions on the merits and substance of the matter at hand, rather than on unrelated considerations.

7. Communication

   Members shall publicly share substantive information that is relevant to a matter under consideration by the Town Council or boards, committees and commissions, which they may have received from sources outside of the public decision-making process.

8. Conflict of Interest

   In order to assure their independence and impartiality on behalf of the common good, members shall not use their official positions to influence government decisions in which they have a material financial interest, or where they have an organizational responsibility or personal relationship that may give the appearance of a conflict of interest.

   In accordance with the law, members shall disclose investments, interests in real property, sources of income, and gifts; and they shall abstain from participating in deliberations and decision-making where conflicts may exist.

9. Gifts and Favors

   Members shall not take any special advantage of services or opportunities for personal gain, by virtue of their public office, which are not available to the public in general. They shall refrain from accepting any gifts, favors or promises of future benefits which might compromise their independence of judgment or action or give the appearance of being compromised.

10. Confidential Information

Members shall respect the confidentiality of information concerning the property, personnel or affairs of the Town. They shall neither disclose confidential information without proper legal authorization, nor use such information to advance their personal, financial or other private interests.

11. Use of Public Resources

Members shall not use public resources that are not available to the public in general, such as Town staff time, equipment, supplies or facilities, for private gain or personal purposes.

12. Representation of Private Interests

In keeping with their role as stewards of the public interest, members of the Council shall not appear on behalf of the private interests of third parties before the Town Council or any board, committee, commission or proceeding of the Town, nor shall members of boards, committees or commissions appear before their own bodies or before the Town Council on behalf of the private interests of third parties on matters related to the areas of service of their bodies.

13. Advocacy

Members shall represent the official policies or positions of the Town Council, boards, commissions or committees to the best of their ability when designated as delegates for this purpose. When presenting their individual opinions and positions, members shall explicitly state they do not represent their body or the Town of Warrenton, nor will they allow the inference that they do.

14. Policy Role of Members

The Town Council determines the policies of the Town with the advice, information and analysis provided by the public, boards, commissions, and committees, and Town staff. The Town Council delegates authority for the administration of the Town to the Town Manager.

Members therefore shall not interfere with the administrative functions of the Town or the professional duties of Town staff; nor shall they impair the ability of staff to implement Council policy decisions.

15. Independence of Board and Commissions

Because of the value of the independent advice of boards, committees and commissions to the public decision-making process, members of the Town Council shall refrain from using their positions to unduly influence the deliberations or outcomes of board, committee or commission proceedings.

16. Positive Work Place Environment

Members shall support the maintenance of a pos1t1ve and constructive work place environment for Town employees and for citizens and businesses dealing with the Town. Members shall recognize their special role in dealings with Town employees and in no way create the perception of inappropriate direction to staff.

17. Implementation

As an expression of the standards of conduct for members expected by the Town, the Town of Warrenton Code of Ethics is intended to be self-enforcing. It therefore becomes most effective when members are thoroughly familiar with it and embrace its provisions.

For this reason, ethical standards shall be included in the regular orientations for candidates for the Town Council, applicants to boards, committees and commissions, and newly elected and appointed officials. Members entering office shall sign a statement affirming they have read and understood the Town of Warrenton Code of Ethics. In addition, the Town Council, boards, committees and commissions, shall annually review the Code of Ethics and the Town Council shall consider recommendations from boards, committees and commissions to update it as necessary.

18. Compliance and Enforcement

The Town of Warrenton Code of Ethics expresses standards of ethical conduct expected of members of the Town Council, boards, committees and commissions. Members themselves have the primary responsibility to assure that ethical standards are understood and met, and that the public can continue to have full confidence in the integrity of government.

The chairs of boards, committees and commissions and the Mayor have the additional responsibility to intervene when actions of members that appear to be in violation of the Code of Ethics are brought to their attention.

The Town Council may impose sanctions on members whose conduct does not comply with the Town's ethical standards, such as reprimand, formal censure, loss of seniority or committee assignment, or budget restriction. Where allowed by law, the Town Council also may remove members of Town-appointed boards, committees and commissions from office.

A violation of this Code of Ethics shall not be considered a basis for challenging the validity of a Town Council, board, and committee or commission decision.

RESOLUTION

A RESOLUTION TO ADOPT UPDATED MISSION AND VALUES STATEMENTS AND CODE OF ETHICS FOR THE MEMBERS OF THE WARRENTON TOWN COUNCIL AND FOR THE MEMBERS OF ALL BOARDS, COMMITTEES AND COMMISSIONS APPOINTED BY THE TOWN COUNCIL

WHEREAS, the Town Council has determined that the adoption of a Mission and Values Statements and Code of Ethics for its members and the members of all Council-appointed boards, committees and commissions will assist in achieving these ends; and

WHEREAS, the citizens and businesses of the Town of Warrenton are entitled to have fair, ethical and accountable local government which has earned the public's full confidence; and

WHEREAS, in keeping with Town Council's commitment to excellence, all public officials, both elected and appointed, must comply with both the letter and spirit of the laws and policies affecting the operation of government; and

WHEREAS, all public officials, both elected and appointed, are required to be impartial and fair in their judgment and actions and ensure that public office is used for the public good; and; now therefore, be it

RESOLVED by the Town Council 9th day of August 2016, that the following Mission and Value Statements and Code of Ethics is hereby adopted:

Monroe Estates/Old Meetz Road Residents Against the Amazon Data Center Petition

Name	Address	Signature
Beth & Paul Tessandori	916 Meadowview Lane	
Eric & Michele Gibbons	126 MeadowView Ln	
Ryan Corder	176 Meadowview Ln	
Maria Cristina Rodriguez	206 Meadowview Ln	
Michelle Calcano	226 Meadowview Ln	
Danny Calcano	226 Meadowviews Ln	
Gary Winters	225 Meadowview Ln	
Robert Eberts	579 Pineview Ct	
Jon Long	599 Pineview Ct	
Marycay Cross/Chuck Cross	606 Galina Way	
Helen Bardis	645 Galina way	
Britney Miller Carroll	605 Galina Way	
Pat Carroll	605 Galina Way	
Larry & Vicki Miller	6976 Walnut Hill Dr Gainesville, VA	
Noelle & Lee Bacon	615 Galina way	
Spencer Burdette	615 Galina Way	
Jenny Kidd	625 Galina Way	
Mark L Burdette	615 GALINA WAY	

November 10, 2022

Re: Warrenton Residents Opposition to Data Centers

Dear Members of the Warrenton Town Council and Planning Commission,

We the residents of the Monroe Estates and Old Meetze Rd neighborhoods are highly concerned over the possibility of the Council approving the planned Amazon data center in New Town Warrenton and the likely to follow approval of a potentially larger data center[1] at the old wire factory property between Old Meetze Rd and the Warrenton Branch Greenway trail, known as the Greenway and Makers District in the town's 2040 Comprehensive Plan. Our neighborhoods are feet from the proposed data center project at the old wire factory, and residents would experience immeasurable loss of quality of life, health, and property value if the data center applications currently before the Council, and to follow, are approved.

Just today, we have come to know that the Fauquier County Board of Supervisors in a work session this afternoon (Nov. 10), with Dominion Energy, unveiled a new proposal to build a new substation on the old wire factory property. Suddenly, our fear of a possible data center literally on top of our neighborhoods is not only real, but immediate, as this would put power directly to the proposed data center site.

In our research of this matter, it has come to our attention that significant questions have been raised around town management's involvement with Amazon prior to Council zoning amendments benefitting Amazon and future data center applicants. While the Council itself may not be implicated in questionable practices, we are concerned that the zoning amendment decision in August 2021 was based on either incomplete or misleading information and that any special use permit applications using those amendments will therefore be counter to the best interests of Warrenton residents. For your reference, we have attached a copy of the Town Code of Ethics and ask you to take a moment to reflect on this code in light of your pending and future determinations related to approving data centers within the town's boundaries.

Pursuant to the Town Code of Ethics Values: *To Achieve Our Mission, We Strive To. . . Provide high level services in a cost-effective manner; display honesty, respectfulness, and fairness in all relationships; support the health and economic well-being of our citizens and businesses; preserve our historic small-town character; encourage opportunities, services and infrastructure that allow people of all means to live, work and visit here; and address public concerns and opportunities promptly and effectively.*

In consideration of the following, we ask the Council to deny the pending Amazon application:

1. Fauquier Times, July 2, 2022: The drawing for the wire factory site, at 615 Falmouth Street, depicts six data center buildings totaling more than 700,000 square feet and an additional office building of 48,000.

- The zoning amendment process related to this matter has raised serious questions and should be thoroughly investigated by an independent body. By extension, the special use permit process and Amazon's application should be suspended pending a determination of ethical conduct in 2021. Any determination of unethical or inappropriate conduct related to this matter must result in the immediate rescission of the amendments that now allow data centers inside Warrenton.
- Pursuant to Warrenton Town Code Article 11, Administration, Procedures, Enforcement - Subsection 11-3.10.1 Authorization: *Special use permits may be granted to establish or construct uses or structures which have the potential for a harmful impact upon the health, safety, and welfare of the public upon finding that the use, with conditions, will not have a deleterious impact, and will reflect the spirit and intent of the Comprehensive Plan as well as this Ordinance. In acting on a request for a special use permit, the Town Council shall consider the impact of the requested special use.*
- The Town's Comprehensive Plan is absent any reference to data centers, yet is replete with references to health, welfare, prosperity, preservation, values, noise, and viewshed that clearly run counter to any large data center proposed inside the town boundary or near any residential neighborhoods.
    - New Town District Comprehensive Plan description: *A mix of uses could be organized around an internal street network and public amenities, such as civic spaces, parks, green space, and public gathering areas.*
    - Greenway and Makers District Comprehensive Plan description: *This district could maximize use of industrial areas for maker space with a food and arts focus, create connective elements to the greenway, and enhance gateway form and function.*
    - The Town Council must reconcile the requirements of Article 11 and the vision of Warrenton's future with the reality of large data centers.
- We question whether the information provided in the pending Amazon application adequately, factually and truthfully addresses the real and obvious detrimental impacts of a large data center, as experienced by the nearby community of Manassas for example, or the existing noise levels currently impacting residents living a mile from the Warrenton Army Training Facility data center.
- While we are concerned as citizens of Warrenton about the approval of the proposed Amazon data center in the New Town area, we are especially concerned that approval of this application will be followed by other large data center applications, including a much larger one on Old Meetze Rd in the Greenway and Makers District within feet of our neighborhoods. We ask you to consider the likely impacts of this and additional data centers on our neighborhoods and the community:
    - At this close range, the noise from multiple commercial HVAC systems running simultaneously and nonstop could be unbearable, even inside our homes. According to the Center for Disease Control, continual exposure to noise can cause stress, anxiety, depression, high blood pressure, heart disease, and many other health problems. Such health risks must clearly constitute a "deleterious impact," as referenced in Article 11-3.10.1, not to mention the impact on the quality of life and welfare we enjoy in Warrenton.

- Residents of neighborhoods in and adjoining the Greenway and Makers District, or other neighborhoods near data centers, will look up to large, unattractive, industrial structures looming above the tree line, likely surrounded by powerful security lights.
- Article 11-3.10.3. Evaluation Criteria; Issues for Consideration for Special Use permits states the following factors should be considered: *The glare or light that may be generated by the proposed use in relation to uses in the immediate area.* Old Meetze Rd is a sleepy, dark, residential street bordering a quiet section of woods. Certainly, the Council cannot believe that high, bright security lighting placed alongside a quiet neighborhood is appropriate "in relation to the uses in the immediate area."
- Amazon proposes its structure to be 56 ft high so we can assume similar height for other data centers. Goal P-1 of the Comprehensive Plan states: *Preserve, enhance, and protect the environmental, scenic, and natural quality of the Town.* The Council must reconcile these towering data centers alongside neighborhoods with its own preservation goals and understand that the minimal landscaping requirements in the code will do little to screen these huge structures.
- The Warrenton Branch Greenway trail experience will be forever altered as it shares a lengthy border with the proposed 700,000 sf wire factory data center. Likewise, the experience within New Town's envisioned "*parks, green space, and public gathering areas*" is difficult to imagine with a 220,000 sf data center at its core. We note that the Comprehensive Plan approved by the Council includes the following: *Recognize that the visitor experience in open space parks is paramount, regardless of the size of the land. The Town will ensure equal consideration will be given throughout the Town for passive and active amenities.* The Council also must reconcile visitor experience in proximity to these massive, noisy, glaring structures.
- The Comprehensive Plan's reference to promoting "prosperity" of its residents, and the Code of Ethics reference to the "economic well-being of our citizens" must surely extend to a consideration of the future home values in our neighborhoods. For a moment, imagine the future value of your own home nestled beneath the bright loom and drone of a large data facility. In fact, we ask you to further visualize the future abandonment of owner-occupied dwellings in these neighborhoods that sit only one mile from the center of old town Warrenton. It takes little imagination to picture the dilapidated demise of once well-kept, prideful neighborhoods and the "deleterious impact" this will have on the community.
- Further, Warrenton zoning requirements "… prevent substantial injury to the use and value of existing surrounding development …" as stated in Article 4-614. And Articles 5-006 and 5-007 respectively state:
    - *The proposed use shall be such that it will not adversely affect the use or development of neighboring properties. It shall be in accordance with the*

applicable zoning district regulations and the applicable provisions of the adopted Comprehensive Plan.

- *Conditions and Restrictions: Sound limitations as needed to ensure peaceful enjoyment of neighbors.*
- The Greenway and Makers District description in the Comprehensive Plan states: *Industrial land use designations should be limited to light industrial uses that do not generate inordinate amounts of noise … Environmentally heavy uses that draw significant water, like data centers, are better served in locations not utilizing public water and sewer.*
- Despite these requirements and restrictions, the Town, working in concert with Amazon agreed to language and obtained Council approval to amend the zoning ordinance to include the following Special Exception Use: *Data Center not using recycled water for cooling and with all new power lines, including transmission or substation feed lines, placed underground*, which translates to HVAC cooled data centers, the very type of data center that residential neighborhoods complain about.
- Further, the Special Use Permit application includes the following submission requirement: *Noise impact and abatement studies to determine potential impact on adjoining properties and neighborhoods.* But once the amendment was obtained, Amazon submitted its Special Use Permit application (April 13, 2022) attempting to avoid this requirement by making the following statement:

> **Noise.** The design of the Applicant's data centers employs air cooling systems that do not produce significant noise. Generators are employed in emergency situations only to ensure power supplies in the event of a loss of public power are typically tested briefly every two weeks, and produce sound in the range of 50 to 55 dB, effectively the sound of the human conversation.

- Subsequently, Amazon amended its application with noise studies that experts consider invalid because Amazon used the wrong tables. As you know, Warrenton's noise ordinance (Article 9 - Supplemental - Regulations) is stricter than requirements used in other nearby communities. Obviously, Warrenton is concerned with limiting sound impacts on its residents, and the Council has an obligation to protect and enforce those limits regardless of their inconvenience now.
- Surely, the Council must realize that Amazon's statement about noise levels makes no sense. Single commercial grade HVAC systems make significant noise and Amazon's proposed 220,000 square foot facility would require dozens, all running at once. And while a single emergency generator may produce 55 dB, Amazon will need 29 commercial generators, which would be tested together, increasing the sound volume exponentially.
- It seems obvious and disingenuous that Amazon, aware of the conditions and requirements of Articles 5 and 9, intentionally misstated what must be fact to them and common knowledge to the rest of us in an attempt to obtain your approval for the proposed data center. Recent **noise studies**, based on the average noise from four

Amazon centers, show the Warrenton proposal would violate the town ordinance night and day at two frequencies, 500 and 1,000 Hz.

- Finally, consider how the Town intends to enforce the existing noise or viewshed ordinances that will most certainly be violated on a 24/7 basis. Once Amazon or other data centers have obtained approval to build facilities that are already known to violate these ordinances, enforcement will be extremely complicated and likely costly. However, our rights as residents of Warrenton to demand immediate and permanent enforcement of our own laws, is reasonable and should be expected, especially as the likelihood of these violations has been brought to the Council's attention prior to any grant of approval. In fact, it's reasonable to assume that these giant corporations may use the argument, "you knew" or "you should have known" against the Town if enforcement is attempted later. Therefore, a denial of application now is the best certainty the Council has of ensuring the restrictions and requirements in our ordinances and fulfilling the Comprehensive Plan.

Again, as residents and voters in the Town of Warrenton, we ask you to:

- Pause and reconsider the actions leading to zoning amendments in favor of data centers and rescind those amendments made by mistake, through oversight or based on incomplete information.
- Deny any large data center application within the town limits, beginning with the pending Amazon application.
- Adhere strictly to the requirements of your own Town Code of Ethics, Article 11 of the Town Code, and Articles 4, 5 and 9 of the Zoning Ordinance, or any other applicable code.
- Respect and follow the 2040 Comprehensive Plan.
- Refrain from any decisions that will result in negative impacts to your constituents' health, enjoyment of life, or economic welfare, including noise levels, unsightly structures, bright lights, de-vegetation, or degradation of home values.

The Residents of Monroe Estates and Old Meetze Rd

Brittany Latack

From: Kristin Thor <k.thordolls@icloud.com>
Sent: Thursday, November 10, 2022 2:45 PM
To: riffkhala@aol.com
Cc: citizencomment; rick.gerhardt@fauquiercounty.gov; chris.butler@fauquiercounty.gov; kevin.carter@fauquiercounty.gov; maryleigh.mcdaniel@fauquiercounty.gov; holder.trumbo@fauquiercounty.gov
Subject: Re: Amazon Special Use Permit 2022-203

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Robin thank you so much! We are so lucky to have you !

Sent from my iPad

On Nov 10, 2022, at 1:56 PM, riffkhala@aol.com wrote:

November 10, 2022

Warrenton Town Council

21 Main Street

Warrenton, VA 20186

Dear Town Council Members:

On behalf of the Oak Springs Homeowners' Association ("Association"), a property owner within the Town of Warrenton, and its Board of Directors, I am writing to request the Town Council disapprove the Special Use Permit (SUP) 2022-203 which has been requested by Amazon.

The Oak Springs subdivision is one of the closest neighborhoods in proximity to the proposed data center and is directly across from Blackwell Road where Dominion Energy plans to build a power substation, should the SUP be approved,

The Association is adamantly opposed to the SUP as it will adversely impact our neighborhood by 1) decreasing property values as much as $88,000 to $136,000 per parcel as per the National Association of Realtors; 2) generating intolerable noise levels exceeding both town and county noise ordinances and affecting our residents' health and well-being; 3) drastically changing the eastern vista of our community through heavy deforestation by removing hundreds of trees and further decimating the wildlife corridor; and 4) severely impacting ingress and egress along Blackwell Road and Oak Springs Drive during an extended construction process.

Although the Association has been monitoring this issue since April, interestingly, the Oak Springs subdivision has never been identified as a potential stakeholder. That, in of itself, is telling, along with the seemingly lack of transparency by Town officials to keep its public apprised, and its failure to seek out independent review of how such a project would impact not only our community but others. How does this

SUP fit into the Town's 2040 Comprehensive Plan? How is building a 50 foot high 5 acre data center and power substation at the entrance to the Town, visible within a 2 mile radius, consistent with the goal of "preserving, enhancing and protecting the environmental, scenic, and natural quality of the Town?" Many of our residents have moved here to get away from the urban, industrial sprawl of the counties north to us. How does building a data center at Warrenton's northern gateway ensure that our beloved Town remains the bucolic, quaint town that it is?

The residents and property owners of the Oak Springs subdivision, as represented by the Association, depend on the prudence, forethought and commitment of its elected officials to represent its constituents in a fair and honorable manner. The Town Council must vote to disapprove this SUP, if it is to keep the confidence of the residents and property owners residing in Oak Springs.

Respectfully submitted, on behalf of the Association's Board of Directors,

Robin C. Lohnes, President

Oak Springs Homeowners' Association

P.O. Box 341

Warrenton, VA 20188

Brittany Latack

From: Doug Larson <dlarson@pecva.org>
Sent: Friday, November 11, 2022 5:26 PM
To: Planning Department
Subject: Amazon SUP

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

To the Planning Commission:
I will be traveling on November 15 and unable to attend the hastily called public hearing on the incomplete Amazon SUP. I live in Ward 5 of the town and am deeply concerned about the negative impacts of Data centers within the town limits. In addition to being against the data centers for multiple reasons such as noise, visual disruption to the character of the town and the massive requirement for power, I am also concerned that this decision is precedent setting and, should it be approved, will quickly bring additional data center projects which will be hard to refuse.
Please act in the best interest of the town citizens and vote no on the SUP.
Thank you,
Douglas Larson
134 MOsby Circle
Warrenton

Sent from my iPad

Brittany Latack

From: Johnathan H MacQuilliam <jmacquilliam@gmail.com>
Sent: Saturday, November 12, 2022 9:07 AM
To: citizencomment
Subject: Amazon Blackwell Rd Data Center

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Dear Planning Commissioners:

I am writing to ask you **to not vote** on the Amazon Special Use Permit (SUP) application at your public hearing on Tuesday, November 15th.

The reason is that the application is quite incomplete as some of you and Amazon stated publicly on October 25th acknowledging information gaps on critical issues including noise/vibration, view shed impacts and power supply. A vote that would prematurely advance Amazon's incomplete application to the Town Council would further discredit the planning commission and how the town has handled the entire Amazon situation.

Based on what I know, I am opposed to this data center. It would seriously tarnish one of the main gateways into our historic town, and would be visible from many parts of the town and even the county. The noise and vibration it would generate constantly would cause physical and mental harm to hundreds of residents, and it would lead the way for more data centers and massive power towers and transmission lines.

Based on the town's own rules, approving any SUP must meet two conditions. It must first be consistent with town's comprehensive plan. Second, the development proposed under the SUP must not adversely affect surrounding homes and businesses. **The Amazon data center meets neither one.**

Thank you for the opportunity to voice my opinion.

Sincerely,

Johnathan MacQuilliam
60 Frazier Rd
Warrenton, VA 20186

Brittany Latack

From: Christina Gagnon <chris@jumpcode.com>
Sent: Sunday, November 13, 2022 11:18 AM
To: citizencomment
Subject: Opposition To The Warrenton Amazon Data Center(s)

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

November 13, 2022

Dear Planning Commissioners:

I am writing to ask you **to not vote** on the Amazon Special Use Permit (SUP) application at your public hearing on Tuesday, November 15th.

The reason is that the application is incomplete as some of you along with Amazon stated publicly on October 25th acknowledging information gaps on critical issues including noise/vibration, view shed impacts and power supply. A vote that would prematurely advance Amazon's incomplete application to the Town Council would further discredit the planning commission and how the town has handled the entire Amazon situation.

Based on what I know, I am opposed to this data center. It would seriously tarnish one of the main gateways into our historic town, and would be visible from many parts of the town and even the county. The noise and vibration it would generate constantly would cause physical and mental harm to hundreds of residents, and it would lead the way for more data centers and massive power towers and transmission lines.

Based on the town's own rules, approving any SUP must meet two conditions. It must first be consistent with town's comprehensive plan. Second, the development proposed under the SUP must not adversely affect surrounding homes and businesses. **The Amazon data center meets neither one.**

Thank you for the opportunity to voice my opinion.

Sincerely,

Christina Gagnon
200 Winchester St
Warrenton, VA 20186

Brittany Latack

From: sallyjaneburke@everyactioncustom.com on behalf of Sally Burke <sallyjaneburke@everyactioncustom.com>
Sent: Monday, November 14, 2022 7:19 PM
To: Rob Walton
Subject: Please Deny the Amazon Data Center Special Use Permit:

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Dear Director of Community Development Rob Walton,

I am writing to urge you to vote against the Special Use Permit application for an Amazon data center on Blackwell Road.

In addition to the numerous flaws of Amazon's application, including the lack of a completed noise study and the known visual impacts to the Town's gateway, Dominion has revealed plans for one of two potential offsite substations to serve the data center less than a week before the scheduled Planning Commission hearing. This recent development calls into question what new impacts the proposed data center and its associated energy infrastructure might have on Warrenton's historic downtown, property values and the rural character that draws residents and visitors both to the Town and County.

With so many unknowns, I ask that the Town please deny this application.

Thank you for hearing my concerns.

Sincerely,
Miss Sally Burke
155 N View Cir Warrenton, VA 20186-2654 sallyjaneburke@gmail.com

Brittany Latack

From: Cal Hickey <tgteer@comcast.net>
Sent: Monday, November 14, 2022 2:26 PM
To: citizencomment
Cc: Stephen Clough
Subject: Public Comment for 15 November Planning Commission
Attachments: Tinnitus Demonstration.mp4

Importance: High

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Members of the Warrenton Planning Commission,

The attached video (approximately 33 seconds in length) is a demonstration of the potential damage to human hearing (tinnitus) that can result from exposure to constant sound levels of the frequencies and intensity that originate from cooling fans on data centers. It is a close approximation to how I experience the world as someone with tinnitus.

Tinnitus is not a loss of hearing, unlike deafness, which is more easily understood and appreciated by individuals with normal hearing.
It is a constant "noise" (hum, whine, ringing, etc.) that is generated in the auditory processing centers of the brain as a result of prolonged exposure to dominating background sounds in the environment. In addition, it tends to worsen over time, often progressing to the point where it obscures a sufferer's ability to comprehend other sounds and speech. There is no surgery, medication or hearing aid that can treat or eliminate the effect of tinnitus. Progressive tinnitus further complicates sufferers' lives by inducing depression, learning dysfunction, suicidal ideation and difficulties with anger management.

Tinnitus has increasingly impacted my quality of life over the past 45 years, robbing me of simple pleasures of normal hearing that we all too often take for granted.

You, the members of the Warrenton Planning Commission, are on the cusp of making a decision that raises the risk of fellow residents of our town acquiring this debilitating disorder. These individuals occupy more than 650 residences and business located within range of the sound levels emanating from the proposed AWS data center. As officials of our town government, and thus beholden to the citizens of Warrenton, your overriding concern in making any planning recommendation must be first to do no harm.

I urge you to take a mere 33 seconds to view the attached video and, having taken to heart the potential negative environmental impact of the proposed data center, to recommend to our Town Council that this project not be allowed to proceed.

Respectfully,
Calvin W. Hickey
Colonel, United States Air Force - Retired
183 North View Circle
Warrenton, VA

Brittany Latack

From: adsutherland@everyactioncustom.com on behalf of ANITA Sutherland <adsutherland@everyactioncustom.com>
Sent: Monday, November 14, 2022 9:58 PM
To: Rob Walton
Subject: Please Deny the Amazon Data Center Special Use Permit:

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Dear Director of Community Development Rob Walton,

I am shocked and concerned that you are considering approval of the Special Use Permit application for a data center within the town limits. The citizens of the town worked long and hard on the Comprehensive plan and to allow a data center in the area designated for one of the gateways into the town is in direct conflict to what was approved.

I feel the town council has not done due diligence to assure the citizens that this application meets town noise ordinance and will not be a visual eyesore. PEC and other groups have presented information against approval, and I have heard from various people that they are "fear mongering", if so then the town council and the town planning commission should be doing its own studies to assure the residents everything is within the limits acceptable to the current town standards.

I am writing to urge you to vote against the Special Use Permit application for an Amazon data center on Blackwell Road. This will only open the door to other data centers within the town limits that will further ruin our town historic district and small town feel.

In addition to the numerous flaws of Amazon's application, including the lack of a completed noise study and the known visual impacts to the Town's gateway, Dominion has revealed plans for one of two potential offsite substations to serve the data center less than a week before the scheduled Planning Commission hearing. This recent development calls into question what new impacts the proposed data center and its associated energy infrastructure might have on Warrenton's historic downtown, property values and the rural character that draws residents and visitors both to the Town and County.

With so many unknowns, I ask that the Town please deny or delay approval of this application.

What is the hurry? I understand there is a time constraint for this issue with the state, but we have to be cognizant of what is best for the town we currently live in.
We have a new town council and planning commission coming on board in January, allow them to be the ones to take another look, review applications and studies and decide which way to go.

Thank you for hearing my concerns.

Sincerely,
ANITA Sutherland
224 Falmouth St Warrenton, VA 20186-3601 adsutherland@verizon.net

Brittany Latack

From: Jackie Whisenant <whisenant.jacqueline@gmail.com>
Sent: Monday, November 14, 2022 10:23 AM
To: citizencomment
Subject: Amazon's application needs to be removed until complete
Attachments: Final_Letter_to_PC._11.15.22_Mtg.docx.doc

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Please see attached

Sincerely ,

Jackie & Harris Yongue

Brittany Latack

From: Kathy Beaver <kathybbeaver@msn.com>
Sent: Tuesday, November 15, 2022 10:14 AM
To: citizencomment
Subject: Amazon project

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

As a citizen of the town of Warrenton I am very concerned about how the proposed Amazon industry will affect our small town. I have lived in Warrenton my whole life and greatly value the small town atmosphere and beauty. When I hear that Amazon would be more in the citizens favor, as far a the tax base, vs two hundred homes, my first thought is why do we need either. I don't understand why our planning commission feels we need to keep up in growth size of communities such as Gainesville or Loudoun county, when obviously it is not what the citizens desire. Our real estate taxes are fastly increasing and in this economy making it hard for long time citizens, who help build our town difficult to continue to live here, which is extremely sad.
Therefore, I pray that when the town council votes on Amazon coming into our beloved town, great thought is taken into long term effects on the community and quality of life in general. Maybe step back and slow the growth.
Respectfully,
Kathleen Beaver
291 Blackwell Rd.
Warrenton, Va. 20186

Get Outlook for iOS

Brittany Latack

From: kdgilliam65@everyactioncustom.com on behalf of Kelly Dotson <kdgilliam65@everyactioncustom.com>
Sent: Tuesday, November 15, 2022 4:21 AM
To: Rob Walton
Subject: Please Deny the Amazon Data Center Special Use Permit:

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Dear Director of Community Development Rob Walton,

I am writing to urge you to vote against the Special Use Permit application for an Amazon data center on Blackwell Road.

In addition to the numerous flaws of Amazon's application, including the lack of a completed noise study and the known visual impacts to the Town's gateway, Dominion has revealed plans for one of two potential offsite substations to serve the data center less than a week before the scheduled Planning Commission hearing.

I am extremely concerned about the proposed Dominion substations, one of which would be potentially built at the end of Falmouth Street, on which I own an historic home. The underground lines would be extremely disruptive to our lives due to to the work and construction involved, on an already very busy street with near constant traffic. We are very concerned as well with how this would affect our property value.

This recent development calls into question what new impacts the proposed data center and its associated energy infrastructure might have on Warrenton's historic downtown, property values and the rural character that draws residents and visitors both to the Town and County.

With so many unknowns, I ask that the Town please deny this application.

Thank you for hearing my concerns.

Sincerely,
Mrs. Kelly Dotson
284 Falmouth St Warrenton, VA 20186-3604 kdgilliam65@gmail.com

Brittany Latack

From: suseast@everyactioncustom.com on behalf of Susann Eastridge <suseast@everyactioncustom.com>
Sent: Tuesday, November 15, 2022 10:24 AM
To: Rob Walton
Subject: Please Deny the Amazon Data Center Special Use Permit:

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Dear Director of Community Development Rob Walton,

I am writing to urge you to vote against the Special Use Permit application for an Amazon data center on Blackwell Road.

I moved with my family from D.C. to Marshall in 1984. Our children attended public school, and we loved Fauquier County. Now that I am a widow I have moved to Warrenton. This town has everything I could want for my retirement. I never in my wildest dreams suspected that it would change in the direction proposed by Amazon.

In my long life I have learned about how monopolies will destroy the fabric of our communities. Their masters are money hoarders, the only goal, as we learned while playing the game of the same name, is to own everything.

That is not what we citizens want for ourselves, our children and all the generations to come. You must not let this happen!

In addition to the numerous flaws of Amazon's application, including the lack of a completed noise study and the known visual impacts to the Town's gateway, Dominion has revealed plans for one of two potential offsite substations to serve the data center less than a week before the scheduled Planning Commission hearing. This recent development calls into question what new impacts the proposed data center and its associated energy infrastructure might have on Warrenton's historic downtown, property values and the rural character that draws residents and visitors both to the Town and County.

With so many unknowns, I ask that the Town please deny this application.

Thank you for hearing my concerns.

Sincerely,
Ms. Susann Eastridge
166 Rappahannock St Warrenton, VA 20186-2339 suseast@erols.com

Brittany Latack

From: gulickdm@everyactioncustom.com on behalf of Diane Gulick <gulickdm@everyactioncustom.com>
Sent: Tuesday, November 15, 2022 8:06 AM
To: Rob Walton
Subject: Please Deny the Amazon Data Center Special Use Permit:

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Dear Director of Community Development Rob Walton,

Please do not vote for approval of Amazon's application ever, but especially tonight.

To do so would be a grievous "rush to judgement."

A trustworthy solid base of facts upon which to make a wise and fully-informed decision does not exist.

Each of you has been appointed/elected solely to represent and take best care of us here in the town of Warrenton.

It is your duty to rise above corporate greed and misrepresentation to preserve the citizenry's overall well-being.

Warrenton is at a tipping point right now as I have never seen it throughout my seventy years.

It is not a given that commercial and industrial economic growth is a necessary or desirable goal, and preservation is not a bad word.

Consider what you love about
Warrenton and Fauquier.

Please do not endanger it.

I am writing to urge you to vote against the Special Use Permit application for an Amazon data center on Blackwell Road.

In addition to the numerous flaws of Amazon's application, including the lack of a completed noise study and the known visual impacts to the Town's gateway, Dominion has revealed plans for one of two potential offsite substations to serve the data center less than a week before the scheduled Planning Commission hearing. This recent development calls into question what new impacts the proposed data center and its associated energy infrastructure might have on Warrenton's historic downtown, property values and the rural character that draws residents and visitors both to the Town and County.

With so many unknowns, I ask that the Town please deny this application.

Thank you for hearing my concerns.

Sincerely,
Diane Gulick
236 Winchester St Warrenton, VA 20186-2847 gulickdm@earthlink.net

Brittany Latack

From: blairwlawrence71@gmail.com
Sent: Tuesday, November 15, 2022 11:03 AM
To: citizencomment
Subject: Amazon public hearing 11/15/22

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

To the Warrenton Planning Comm.
Re: Amazon data center

Please postpone a decision and certainly a vote. The Town does not have enough information to make a decision. Amazon and Dominion keel changing their proposals. And most importantly, the citizens Do Not Want it. People are moving here because they want a small town life. We don't want to be Loudoun and Prince William. How many years have we said that?!

Blair Lawrence
71 Winchester Street
Warrenton

Sent from my iPhone

Brittany Latack

From: riffkhala@aol.com
Sent: Tuesday, November 15, 2022 11:08 AM
To: citizencomment
Cc: riffkhala@aol.com
Subject: Amazon Special Use Permit 2022-203

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

November 15, 2022

Dear Members of the Planning Commission,

I am a resident and property owner in the Oak Springs subdivision. In 2006 I moved to Warrenton from Alexandria away from the hustle and bustle of the suburbs, and for the past 16 years I have called Warrenton my home.

The back of my townhouse sits directly facing Blackwell Road. One of the reasons I chose this home was because I could sit quietly out on my deck and patio and enjoy the native wildlife and foliage.

If the Planning Commission, and ultimately the Town Council, approves the Amazon Special Use Permit (SUP), I will no longer be able to enjoy this amenity.

Additionally, my property value will drop substantially as studies have shown that residential areas around data centers depreciate anywhere from $88,000 to $136,000 per parcel. The quietude I once enjoyed will disappear and I will no longer be able keep my windows open during the night but for the incessant hum the data center would generate.

The wildlife corridor and the traffic along Blackwell Road and Oak Springs Drive will be severely compromised. I ask – how does this fall into line with Warrenton's 2040 Comprehensive Plan? Simply, it does not.

While I am cautiously relieved that Dominion Energy has chosen not to construct a substation along Blackwell Road, if the SUP is approved, the view from my home will still be a 220,000 square foot 50+ foot high concrete block.

Please give consideration to those of us whose lives will be severely impacted should this project move forward.

I respectfully urge the Planning Commission as well as the Town Council to disapprove the SUP and keep the bucolic town of Warrenton a place where I, and others, will be proud that our little town said a resounding 'no' to the corporate giant, Amazon.

Thank you for your time and consideration.

Respectfully,

Robin C Lohnes

731 Arbor Court

Warrenton, VA 20186

Brittany Latack

From: riffkhala@aol.com
Sent: Tuesday, November 15, 2022 11:24 AM
To: citizencomment
Cc: Robin Lohnes
Subject: Amazon Special Use 2022-203

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Dear Members of the Planning Commission,

I am a resident and property owner in the Oak Springs subdivision. In 2006 I moved to Warrenton from Alexandria away from the hustle and bustle of the suburbs, and for the past 16 years I have called Warrenton my home.

The back of my townhouse sits directly facing Blackwell Road. One of the reasons I chose this home was because I could sit quietly out on my deck and patio and enjoy the native wildlife and foliage.

If the Planning Commission, and ultimately the Town Council, approves the Amazon Special Use Permit (SUP), I will no longer be able to enjoy this amenity.

Additionally, my property value will drop substantially as studies have shown that residential areas around data centers depreciate anywhere from $88,000 to $136,000 per parcel. The quietude I once enjoyed will disappear and I will no longer be able keep my windows open during the night but for the incessant hum the data center would generate.

The wildlife corridor and the traffic along Blackwell Road and Oak Springs Drive will be severely compromised. I ask – how does this fall into line with Warrenton's 2040 Comprehensive Plan? Simply, it does not.

While I am cautiously relieved that Dominion Energy has chosen not to construct a substation along Blackwell Road, if the SUP is approved, the view from my home will still be a 220,000 square foot 50+ foot high concrete block.

Please give consideration to those of us whose lives will be severely impacted should this project move forward.

I respectfully urge the Planning Commission as well as the Town Council to disapprove the SUP and keep the bucolic town of Warrenton a place where I, and others, will be proud that our little town said a resounding 'no' to the corporate giant, Amazon.

Thank you for your time and consideration.

Respectfully,

Robin C Lohnes

731 Arbor Court

Warrenton, VA 20186

Sent from the all new AOL app for Android

Brittany Latack

From: kneville@everyactioncustom.com on behalf of Katherine Neville <kneville@everyactioncustom.com>
Sent: Tuesday, November 15, 2022 9:28 AM
To: Rob Walton
Subject: Please Deny the Amazon Data Center Special Use Permit:

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Dear Director of Community Development Rob Walton,

Dear Town Council and Planning Commission--

I am writing to urge you to vote against the Special Use Permit application for an Amazon data center on Blackwell Road.

Amazon has just announced today that they are laying off 10,000 (ten thousand) employees-the largest layoff in that company's history. If our Town of Warrenton accepts ANY offer on the part of Amazon that does not have sufficient financial guarantees attached, our Town may learn that WE have hitched our wagon to a mule, instead of a star!

It is imperative that the Town provide taxpayers with adequate information prior to granting any permits to any company without assuring taxpayers that the company will be willing AND ABLE to meet these commitments, and will not leave our taxpayers "Holding the bag."

Thank you for hearing my concerns.

Katherine Neville, 222 East St Warrenton VA

Sincerely,
Katherine Neville
222 East St Warrenton, VA 20186-3628
kneville@KatherineNeville.com

Brittany Latack

From: Richard Polizzotto <polizzottor@gmail.com>
Sent: Tuesday, November 15, 2022 8:46 AM
To: Planning Department
Subject: Amazon and Dominion Power

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

I would be attending and requesting to speak at tonight's meeting, but will be out of town. Nonetheless I would like to urge you to oppose the data center. My wife and I have lived in Warrenton for more than 25 years, and very much appreciate the atmosphere here. It seems to be an ideal balance of peaceful residential components and necessary commercial activities supporting residents' needs. It is our view that the introduction of the data center and the accompanying requirements of water and power to operate it will set the community on a path towards more of the same, which will inevitably lead to an environment much less desirable than that which all citizens enjoy now. The proposed data center site would be much better utilized to support community activities for recreation, education, and many others . Other data center locations which have been approved experienced significant problems detrimental to their communities and other localities in our area have successfully opposed them. We urge you to do so as well.

Richard and Brenda Polizzotto

Brittany Latack

From: cj.rogers7@everyactioncustom.com on behalf of C.J.Rogers <cj.rogers7@everyactioncustom.com>
Sent: Tuesday, November 15, 2022 10:54 AM
To: Rob Walton
Subject: Please Deny the Amazon Data Center Special Use Permit:

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Dear Director of Community Development Rob Walton,

I am writing to urge you to vote against the Special Use Permit application for an Amazon data center on Blackwell Road. To agree to a data center at this location is absolutely the wrong decision for Warrenton and its residents. It is hard to believe that the current mayor, and former town manager and others wanted and voted for this special use permit. There is most definitely some conflict of interest here. The town residents are not in agreement with this data center. The signs against it are everywhere and there are none in favor.

In addition to the numerous flaws of Amazon's application, including the lack of a completed noise study and the known visual impacts to the Town's gateway, Dominion has revealed plans for one of two potential offsite substations to serve the data center less than a week before the scheduled Planning Commission hearing. This recent development calls into question what new impacts the proposed data center and its associated energy infrastructure might have on Warrenton's historic downtown, property values and the rural character that draws residents and visitors both to the Town and County.

With so many unknowns, I ask that the Town please deny this application.

Thank you for hearing my concerns.

Sincerely,
C. J. Rogers
19 Brookshire Dr Warrenton, VA 20186-3032 cj.rogers7@verizon.net

Brittany Latack

From: so.rogers@everyactioncustom.com on behalf of Steven Rogers <so.rogers@everyactioncustom.com>
Sent: Tuesday, November 15, 2022 5:50 AM
To: Rob Walton
Subject: Please Deny the Amazon Data Center Special Use Permit:

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Dear Director of Community Development Rob Walton,

I am writing to urge you to vote against the Special Use Permit application for an Amazon data center on Blackwell Road.

In addition to the numerous flaws of Amazon's application, including the lack of a completed noise study and the known visual impacts to the Town's gateway, Dominion has revealed plans for one of two potential offsite substations to serve the data center less than a week before the scheduled Planning Commission hearing. This recent development calls into question what new impacts the proposed data center and its associated energy infrastructure might have on Warrenton's historic downtown, property values and the rural character that draws residents and visitors both to the Town and County.

With so many unknowns, I ask that the Town please deny this application.

Thank you for hearing my concerns.

Sincerely,
Steven Rogers
19 Brookshire Dr Warrenton, VA 20186-3032 so.rogers@verizon.net

Brittany Latack

From: adsutherland@verizon.net
Sent: Tuesday, November 15, 2022 11:58 AM
To: citizencomment
Subject: Special-use Permit for Amazon Data Center

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

To the Warrenton Planning Commission and the Town Council

I am dismayed that our town planning commission and council are in such a hurry to vote on the special-use permit to allow Amazon to build a data center within the town limit.
The citizens of the town worked long and hard on the current Comprehensive Plan and to allow a data center in this area designated as one of the gateways into the town is in direct conflict to what was approved.

I feel the town council has not done due diligence to assure the citizens this application meets the town noise ordinance and will not be a visual eyesore. PEC and other citizen organizations have presented information against approval, and I have heard from people that they are “fear mongering”, if so then the town council and the planning commission need to do their due diligence to present noise studies to assure residents everything is in compliance with the current town standards.

What is the hurry? We have a new town council and planning commission coming on in January, allow them to review and make the decision.

Please deny or delay the application.

Thank you,
Anita Sutherland
Ward 3
224 Falmouth Street
Warrenton, Va

Brittany Latack

From: Patricia Tucker <ptuck917@gmail.com>
Sent: Tuesday, November 15, 2022 10:33 AM
To: citizencomment
Subject: Amazon
Attachments: Amazon.docx

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Citizen letter in opposition to the Amazon application.

Patricia Tucker
281 Falmouth Street
Warrenton, Virginia 20186

November 14,2022

Dear Planning Commission members,

I urge you to vote NO to the Amazon data center request. There are a number of issues.

- It is not in keeping with the Comprehensive Plan that we all worked for so long to provide the best use possible of the gateway land. Approving the plan negates the Comprehensive Plan which provides housing, recreation, retail, and employment which are all issues that are long standing with the town. The unused remaining land which loses the attraction to those uses. Who wants to hike, picnic, take their children to a park next to a data center?
- Approving this plan opens the door to more data centers / electric providers with seeming lack of consideration for the historic district and "preserving a quality of life".
- A thoughtful examination of health impacts consideration for those living within the impact areas. We, the citizens and our children deserve a thorough understanding of the impact of these facilities. If those in opposition are fear mongers, then provide independent researched facts.
- I have a strong sense that we are falling prey to the old "but Mom/Dad everyone else is doing it" ploy. Why is this such a great idea for Warrenton and ultimately Fauquier County? Why do we have to follow our neighboring counties?
- Approval of this data center will open the gates for all those applications to follow.

Please do not sell us out.

Sincerely,

Patricia Tucker

281 Falmouth Street

Warrenton, VA 20186

Brittany Latack

From: scott.wehner.55@everyactioncustom.com on behalf of Scott Wehner <scott.wehner.55@everyactioncustom.com>
Sent: Monday, November 14, 2022 10:12 PM
To: Rob Walton
Subject: Please Deny the Amazon Data Center Special Use Permit:

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Dear Director of Community Development Rob Walton,

I am writing to urge you to vote against the Special Use Permit application for an Amazon data center on Blackwell Road.

In addition to the numerous flaws of Amazon's application, including the lack of a completed noise study and the known visual impacts to the Town's gateway, Dominion has revealed plans for one of two potential offsite substations to serve the data center less than a week before the scheduled Planning Commission hearing. This recent development calls into question what new impacts the proposed data center and its associated energy infrastructure might have on Warrenton's historic downtown, property values and the rural character that draws residents and visitors both to the Town and County.

With so many unknowns, I ask that the Town please deny this application.

Thank you for hearing my concerns.

Sincerely,
Mr. Scott Wehner
281 Falmouth St Warrenton, VA 20186-3627 scott.wehner.55@gmail.com

Brittany Latack

From: Melissa Wiedenfeld <melissa@dwiedenfeld.org>
Sent: Tuesday, November 15, 2022 8:44 AM
To: citizencomment
Subject: Warrenton Planning Commission Meeting Tonight

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Dear Planning Commissioners,

Please do not vote on the Amazon Special Use Permit (SUP) application at your public hearing tonight, Tuesday November 15. As some commissioners have noted, the application is incomplete and does not address noise, view shed impacts, and water usage. If the application advances without this critical information, it will further discredit the planning commission and the Town's handling of the data center application.

The proposed data center would seriously impact the quality of life for many Warrenton and Fauquier County citizens. The data center and accompanying noise, water, view shed, and power issues would change Warrenton forever and would probably lead to the intrusion of more data centers and massive power lines.

Based on the town's own rules, approving any SUP must meet two conditions. First, it must be consistent with town's comprehensive plan. Secondl the development proposed under the SUP must not adversely affect surrounding homes and businesses. **The Amazon data center meets neither condition.**

Respectfully,

Melissa Wiedenfeld
12 Fishback Court
Warrenton, VA 20186

OUT OF TOWN

From: citizencomment
To: Denise Harris; Brittany Latack
Subject: FW: Amazon data center & transmission lines
Date: Wednesday, May 4, 2022 7:09:53 AM

Saw this come through in the "CitizenComment" email.

-----Original Message-----
From: Linda Gozelanski <lindagoz@comcast.net>
Sent: Tuesday, May 3, 2022 9:08 PM
To: citizencomment <citizencomment@warrentonva.gov>
Subject: Amazon data center & transmission lines

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

I am writing to urge the Town Council not to approve the data center that Amazon is planning on building on Blackwell Rd.
I don't want to see a transmission line and substation built in that area. However, if it does get built Amazon should pay these costs, not Dominion customers.

Sincerely,
Linda Gozelanski

Sent from my iPhone

Brittany Latack

From: Suzan Fultz <suzan.fultz@gmail.com>
Sent: Friday, May 27, 2022 7:06 AM
To: Planning Department
Subject: Proposed Data Center

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Dear Planning Commissioners - Chair Helander, Vice-Chair Lawrence, Commissioner Ainsworth, Commissioner Johnston, Commissioner Stewart and Commissioner Zarabi:

Speaking as a native of the Commonwealth, Warrenton is by far one of the most beautiful and friendliest towns in which I have lived, and I thank you for all that you have personally done to help create this haven and heart within Fauquier County. As you are no doubt aware, Dominion has proposed overhead 230kV transmission lines in support of a new substation and Amazon data center, all of which will industrialize our historic and picturesque town and county, forever changing the landscape of Warrenton.

In light of this, I believe we, as the Town of Warrenton and Fauquier County residents, have a considerable opportunity and responsibility ahead of us, to preserve our "Sense of Place" as noted in the Town's Comprehensive Plan adopted April 13, 2021, by saying "No" to grant requests for any special use building permits for the substation and data center, that are apparently driving the proposal for the overhead 230kV transmission lines. These unsightly power lines will criss-cross throughout the heart of much of Fauquier County, including the ever-important gateway to the beautiful and historic Town of Warrenton and beyond.

I believe both the Town of Warrenton and Fauquier County Residents will suffer irreversible economic, cultural, natural and aesthetic loss, should these plans be approved and allowed to proceed. The resultant loss of community spirit within, will ultimately be reflected outward, sacrificing not only our community's "Sense of Place", but also the very vision laid forth by the Town Council in Plan Warrenton 2040, which notes that we "…live here because we have great pride in our community character, a healthy community and quality of life, and are economically strong and resilient." Through strong leadership, the past two years have revealed such tremendous resiliency and ingenuity in our community. I fear there will be no path to recover from the permanent losses that will be born from the above projects. May I say, on the rare occasions that I leave the county, as soon as I cross back into Fauquier County, I always say with a sigh of relief, 'Ahhh, I am home', and I wholeheartedly believe that I am one of many that share this feeling - an intangible in today's world that is worth preserving.

Having grown up in Northern Virginia, my husband and I fled the industrialized corridors to the north of us, and embraced Warrenton and Fauquier as our new home-town. I hope you agree that it would be unconscionable to let this beautiful countryside follow their lead. The hundreds of Fauquier families that would be impacted by Dominion and Amazon's plans, have so much at stake. To name a few - their quality of life, aesthetics of their surroundings, economic value of their homes, and their abilities to enjoy the nature and use of their land, if these power lines and requisite 1000 foot clear-cut buffer are rained upon them.

Knowing that you look to your citizens to share our opinions with you about proposals, and how they will impact the future of our beautiful homeland, I am writing to you today to ask that you please cast a "No" to Amazon and "No" to Dominion on the aforementioned projects when their special use permits are brought before the Town's Planning Commission. I look forward to hearing from you, and hope that you will also share your thoughts and concerns with me regarding this important and imminent matter.

Thank you for your time and kind consideration of my request.

Sincerely,

Suzan Fultz
703 772-0292 Suzan.fultz@gmail.com
7020 Beaconsfield Lane
Warrenton, Va 20187

Sent from my iPad

Brittany Latack

From: Suzan Fultz <suzan.fultz@gmail.com>
Sent: Monday, June 13, 2022 9:43 AM
To: citizencomment
Subject: Citizen Comment for June 14 Town Council Meeting

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Dear Council Members,

I am a Fauquier resident and Town business patron. There is a growing voice throughout the community to ask that Amazon's Blackwell Rd. Data Center SUP, if approved, be contingent upon their agreement to pay in full for the under grounding of any and all transmission lines that will provide power to Dominion's Blackwell substation, which is an accompanying part of the project. Dominion has stated in several meetings that for every new Data Center, Dominion requires a new substation and transmission lines, so although Amazon's *Data Center* SUP does not address the impact of the *substation*, the two are one in the same project.

The Community Development Monthly Report in the Town Council's online agenda for June 14, notes an administrative line item "...to discuss current SUP's". When the Amazon SUP is brought before the Town Council, please consider the community's voice as mentioned above. Because cost is a known driving factor in the SCC's decision on transmission line routes, Amazon's funding of the under grounding, will assist all of us in preserving the Town, County, and our private citizens' homes.

Thank you for your time and for hearing our concerns. We are on Protect Fauquier facebook.

Thank you,
Suzan Fultz
7020 Beaconsfield Ln
Warrenton, Va 20187

Sent from my iPad

From: Kim
To: Planning Department
Subject: Please do not approve the amazon data center
Date: Wednesday, June 22, 2022 8:25:22 PM

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Dear planning commission,

Please do not approve the Amazon data center and destroy our town. A data center would be a blight on the town and severely damage its character. I sincerely hope with all my heart that this will not be approved.

I don’t think there is support at all for this in the town, there are so many people and families organizing against it.

Best,

Kim Cohn

From: Kim C
To: powerline@dominionenergy.com
Cc: DelMWebert@house.virginia.gov; district27@senate.virginia.gov; citizencomment; holder.trumbo@fauquiercounty.gov; good.officeva05@mail.house.gov; Calvert - Kimberlee
Subject: OBJECTION TO BLACKWELL ROAD POWER LINE PROJECT – FAUQUIER COUNTY, VA
Date: Thursday, June 23, 2022 8:04:28 AM

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

All,

Last night, we attended the Dominion Energy-sponsored “Community Engagement” activity at Kettle Run High School to voice our concerns about and objection to the overhead power lines proposed for our neighborhood. Believing the event was to be a question-answer forum, we were frustrated to arrive and see that the event was nothing more than a Dominion Energy sales pitch that appeared to intentionally create more confusion among attendees and allowed for very little in the way of successfully voicing concerns or getting answers to important questions.

Instead, we were directed to fill out a form voicing our concerns and leave it for collection by the Dominion Energy reps, or alternatively, to have our concerns recorded by the court reporter on site who had been hired by Dominion Energy to take verbal comments—and again, provide them only to Dominion Energy and nobody else—no Town of Warrenton or Fauquier County government officials who have been notably absent from this issue. I might also add that there was not a single mention of Amazon on any of the posters or literature provided at the event. In utter disgust, several of us were discussing the rapidity with which this issue has been shuffled through to this point and without the transparency, time, or civic feedback that should absolutely be germane to a matter of this magnitude that will adversely impact thousands of tax paying members of the community, our children, and the dwindling natural habitat.

Many present at last night’s event are long-time land owners and residents of this lovely community, others of us moved to Fauquier County to escape the chaotic, noisy, and increasingly dangerous urban infrastructure sprawl of busier and more heavily populated communities east and north of us, so that we could afford some space, peace, civility, and safe harbor for our kids.

We are extremely concerned about and vehemently object to the installation of above-ground high voltage power lines through our community for the following reasons:
Proven health hazards including cancer; noise pollution; certain destruction of nature and animal habitat on a massive scale; wholesale drop in property values that will never be recouped; guaranteed increase in road traffic; and a slow crawl toward ugly infrastructure that will impose upon treasured historical areas—all at the hands of arguably one of the most powerful and wealthy companies on Earth—that can well afford to build these lines elsewhere in more appropriate locations or foot the cost of building underground power, which is safer, more reliable, and does substantially less harm to the environment.

It was not lost on anyone at last night’s event that the severe weather storm caused a power outage at the venue, which is fed by above-ground power lines. However, when we

returned to our Brookside home, just a mile away and with underground power, we had full electricity. Irony.

In addition to our wholesale rejection of the building of these power lines, we demand there be legislation introduced to address this matter in a proper, transparent, and legally sound way. As is, this issue has all the hallmarks of big corporations quietly buying their way while government officials turn a blind eye, ignore constituent concerns, and permit greed and avarice to supplant the very real concerns of the citizens who pay their salaries and with no regard for the community writ large.

PLEASE STOP THIS PURSUIT!!

Kimberlee & Daniel Calvert
4954 Pebble Run Road
Warrenton, VA 20187
k.mudflap@gmail.com // 703-203-5795
dcwarrenton@aol.com // 540-878-8378

Brittany Latack

From: Dana Wright <danakristinewright@gmail.com>
Sent: Saturday, July 9, 2022 12:05 PM
To: Carter Nevill; Renard Carlos; Sean Polster; Brett Hamby; chris.granger@fauquiercounty.gov; district27@senate.virginia.gov; Michael J Webert; powerline@dominionenergy.com
Cc: rick.gerhardt@fauquiercounty.gov; Heather Sutphin; William Semple; James Hartman; Kevin Carter; Adam.Shellenberger@fauquiercounty.gov; Planning Department; kkask@pecva.org; mkane@pecva.org; cmiller@pecva.org; jmccarthy@pecva.org; jbolthouse@pecva.org
Subject: Opposed to power towers for Amazon data center in Warrenton

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Dear Warrenton Town Council, Supervisor Granger, Delegate Webert, Senator Vogel, and Dominion Energy,

I own property in the Town of Warrenton (Ward 3) and I also own a home and reside in Fauquier County (Center District - Millwood subdivision). I am a lifelong resident of Fauquier; I was born and raised in The Plains and have a deep connection to this County and have watched it grow and change significantly over the last few decades. I have always been impressed with how the Town and County have been able to preserve the rural characteristics and small town feel of this special place, despite the rapid growth occurring in neighboring Loudoun and Prince William. The Town has added much needed and appreciated amenities such as the WARF, and the Town and County have allowed smart growth and improved trails and other recreational opportunities significantly. I can say with certainty that Warrenton and Fauquier are better places to live today than they were in the 80 and 90s due to the good planning choices that have been made thus far.

The proposed Amazon data center and the associated overhead power transmission lines that have been proposed threaten the tranquility, unique rural characteristics, and recreational opportunities in the place that we call home and have worked so hard to preserve. The benefits of the data center clearly do not outweigh the overall impact of the overhead transmission lines on the Town and County residents. **I ask that: 1) the Town Council deny the permit for the Amazon data center,** and **2) if the data center must go forward, that you all do everything in your power to ensure that the electrical transmission lines are run underground. Additionally, should the power lines be constructed, Amazon (the wealthiest company on the planet) should be required to cover the costs rather than Dominion rate payers.**

I quote from Chapter 1 and Chapter 6 of the the Fauquier Comprehensive Plan:

> **"Vision Statement**
> "Fauquier County is a thriving community that honors its natural and cultural resources, agricultural heritage and rural landscape while building a sustainable economy and promoting outstanding services and growth within defined service districts."
>
> **Guiding Principle A**: The County's natural and cultural heritage are intrinsic to the County's character.
> **Policy 1:** Preserve the County's cultural, ecological and environmental resources to ensure the continued quality of life within the County for its residents and visitors.
>
> **Areas Needing Special Focus**
> Warrenton is living on a largely inherited inventory of public facilities and utilities. Recent growth within the Town and Service District area is placing strains on this inventory, resulting in school expansion demands, inadequately

sized parks, congested roads and discontinuous sidewalks and paths. While the community once had a bala people and local employment, it no longer does and many of the resident community must commute to work. Additionally, Warrenton faces the same development pressures operating in the Washington metropolitan area. 'Going with the flow' would generate an anonymous, car dependent 'big-box' and franchise dominated suburban dormitory – with insolvable traffic jams, overcrowded schools and inefficient delivery of public services. Such a scenario would represent a break with Fauquier County's historic character.

Opportunities
The County and the Town have the opportunity to define an urban/county boundary, to complement and improve the available commercial and public services, parks, neighborhood street and pathway linkages and to preserve a historic pedestrian scale. These characteristics are highly valued within Warrenton and Fauquier County."

Option 1, Overhead Routes 1 and 2 and Option 2, Overhead Routes 1 and 2 will have a significant negative impact on the Town and County and specifically the property owners in and around their paths. Both will ruin the viewshed, reduce property values, reduce the recreational value of nearby trails and facilities, and be a general nuisance to landowners and wildlife due to the large size of the easement, clear cutting of the right of way, the construction and maintenance needs, and the humming sound that the lines may make. Overhead transmission lines in our comparatively rural area and along our recreational facilities and trails will bring us closer to the threat of the "big-box and franchise dominated suburban dormitory" described in the comprehensive plan.

Option 1, Overhead Routes 1 and 2 run directly through the Fauquier Swim Club, a unique gem of a recreation facility established in 1957 and serving 333 families in the Center District and surrounding areas. Adding unsightly and noisy power transmission lines about 100 feet from the pool and over the sport court that children play on all summer long will ruin this important recreational facility and degrade the quality of life for those of us that spend much of their summers there. This option also negatively impacts the greenway trails near White's Mill and Warrenton Chase in the Cedar Run floodplain, which were newly finished and are much enjoyed by wildlife and residents in both the Town and the Center and Cedar Run Districts of the County. Additionally, this option runs along the south side of the existing Millwood subdivision (where I live) and the new Cedar Mill subdivision that is currently under construction between Frytown Road and Millwood, reducing the value of both the existing and future homes and altering the viewshed for those of us that frequently walk, run, and bike in the neighborhood. My understanding is that the new Cedar Mill subdivision will have trails that connect with the Cedar Run/White's Mill greenway, allowing connectivity of the Millwood/Whisperwood/Atlee Road areas to the Town of Warrenton by bike for the first time; an extraordinary improvement and allow for greater access to the farmer's market and the many events that occur in the historic district. Having transmission lines run along this new subdivision and over this future trail connection would be a huge disappointment. This option also runs through the historic Frytown area. **This option is clearly contrary to the statements above from the comprehensive plan about honoring the County's natural and cultural resources, agricultural heritage and rural landscape; preserving Fauquier's historic character; and improving parks and pathway linkages.**

Option 2, Overhead Routes 1 and 2 would cross by Chestnut Forks, another treasured community recreational facility with a pool and tennis courts, and run along 29 just north of Town. This is the gateway to Warrenton, and transmission lines in this area would be the first thing seen by anyone coming into town from the north. This option would cross the entrance to the Cedar Run and Millwood neighborhoods, altering their look and feel and reducing property values. This option is also extremely long and has a huge negative impact on hundreds of property owners from Warrenton to/through the New Baltimore area.

Again, I urge you to seriously consider the effects of permitting the Amazon data center on our landscape and community and to do everything possible to ensure that the transmission lines are run underground in the event that the permit is approved.

Thank you for your public service and consideration of my comments,

Dana Wright
6250 Brighton Court
Warrenton, VA 20187
540-729-4221

From: Erin Beauchamp
To: citizencomment
Subject: WTC 7/12 comment submission
Date: Monday, July 11, 2022 11:41:19 PM

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

To The Warrenton Town Council Members,

I wish to unite with my fellow citizens in expressing deep concern over the proposed Amazon data center in Warrenton.

An industrial building such as a data center simply does not belong in the proposed location on the edge of our historic district. Without a building height limit, Amazon could construct to any vertical dimension they wish. A high rise, or even a midline building is not in keeping with the character of Warrenton. The required high voltage power lines and 130 foot towers to supply the center would destroy the beauty of the area. There is no legal way to force Amazon to pay to bury the lines and Dominion will refuse to do so every step of the way on their dime.

Existing infrastructure is not designed to support an industrial model. Roads in the crucial juncture of the northern 29 business and 29 bypass interchange will become bogged down with impassable traffic coming and going from the Amazon facility, causing massive issues for residents going about our daily lives.

There is not sufficient information available on the impact of a data center on the water and sewer system. Our county has experienced on-going challenges meeting the water demands of our existing business and residents due to damage to the deep wells during the 2011 earthquake, putting some of them out of commission and others at reduced capacity. We already face occassional water system back flow issues from the Pepsi plant on 29 so it is hard to imagine that the massive water cooling demands of an industry titan like Amazon could be met without undue strain on our small community.

Under the new data center tax regulations signed into law by the Govenor, potential revenue generated by allowing this data center to be built here is going to be far less than earlier estimates under the old regulations. You can rest assured that Amazon employs the very finest accountants who know how to nickel and dime their way out of paying taxes better than anyone. They will write off and depreciate the value of their data center on paper as much as possible so what is left for the town to collect will be a pittance when held up against the sacrifice of property values and quality of life.

Is a mess of industry, a twisted mass of metal and wire, a dystopia urban landscape what you want visitors to see as their first glimpse of our town? As a long time resident, that is the opposite of what I think of when I picture our award-winning "most beautiful" town.

Let's turn, instead in support of small business in Warrenton to build tax revenue. Let's not ruin our town to serve a massive corporation, which stands to give nothing and take everything. Deny the data center.

Respectfully,
Erin Beauchamp
Warrenton, Va

From: Andrew Hirsch
To: citizencomment
Subject: NO to Amazon Data Center
Date: Monday, July 11, 2022 1:29:24 AM

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Hello,

As a resident of Fauquier County, I would like to voice my strong opposition to the proposed Amazon data center. The data center would likely result in high voltage power lines running directly in front of my property [redacted] thereby destroying the natural scenery of the property and exposing my family of 5 to harmful electromagnetic field.

Families and environment are more important than dollars and data. Make the right decision!

Further, below are points raised by a fellow community member, which I believe are all items that the Town Council should take into consideration:

- WTC (Warrenton Town Council) amended the Zoning Ordinance on short notice last summer to allow Data Centers to be within town limits. It was done quickly and with minimal community input. This is a serious breach of trust between the community and the elected Town Council, and the WTC should prioritize restoring trust with their citizens, not accommodating tech giants.
- Remington & Vint Hill are Planned Commercial Industrial Districts, and Data Centers should be kept there to protect our natural landscape and habitats.
- The proposed HB791 legislation in Richmond will tie data center tax revenue for the community to property/asset depreciation, NOT commercial income. This likely means a significant reduction in expected tax revenue for our community from this initiative.
- WTC (Warrenton Town Council) does not get to decide where the high tension power lines will be placed to service the Amazon Data Center. The SCC (State Corporation Commission) will determine that. Approval of Amazon's SUP would place a great burden and battle on your constituents to contend with Dominion about the power line routing location, and above ground vs. below ground lines.
- Amazon's SUP is lacking significant required information and detail per the established Special Use Permit Requirements. WTC should not even entertain this application until a complete and detailed application has been submitted for approval.
- The SUP cites that "significant tax revenue" will be generated for the community, but provides absolutely no details or specifics on amounts
- No details have been given on the environmental impacts, and no Environmental Impact Assessment has been completed as part of the application (to include the source and usage of water for cooling needs, as well as the disposal plan for the water)
- It does not include a Load Letter, and therefore we cannot verify power need of the Data Center and are unwilling to accept Dominion's calculations (as that is a conflict of interest, given they are the sole source provider of the electricity). The Load Letter should be provided from an independent party.
- Noise calculations are lacking in the document

- Includes a height precedent, which if approved, gives Amazon an open door to build vertically--is that truly acceptable to our community?
- The SUP states that "the applicant [Amazon] will bear the cost of new infrastructure that will be needed and any upgrades to existing facilities" and yet, there is absolutely no analysis provided to determine what those infrastructure costs might be.

Thank you,
Andrew S. Hirsch, Esq.
[redacted]

Sent with Proton Mail secure email.

From: Andrea Melia
To: citizencomment
Subject: Please do not approve Amazon"s Special Use Permit for a Data Center within town limits!
Date: Monday, July 11, 2022 2:15:55 PM

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Dear Warrenton Town Council,

I am writing to let you know that as a resident of Warrenton, I am strongly opposed to the Amazon Data Center that is being discussed to put up in Warrenton. Since Remington and Vint Hill are Planned Commercial Industrial Districts, there is no reason to bring a Data Center that will necessitate high tension power lines into our town. The Special Use Permit submitted by Amazon is lacking too much significant required information and detail to be entertained. Since HB791 was passed by Governor Youngkin, the promise of “significant tax revenue” to our community seems a thin one. I cannot see any good reasons to allow this center to be built in Warrenton, and would like to see my town council working to protect the value of our natural landscape and habitats within our town. Thank you for hearing my concerns, and for your service to our community!

Andrea Melia
Warrenton, VA

From: Elisia Milrod
To: citizencomment
Subject: Amazon data centers
Date: Tuesday, July 12, 2022 11:52:50 AM

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Good Morning,

As a Fauquier county resident, for many years now, the proposed data center is very concerning and something I would like to not see come to our community. I do understand that growth and additional tax revenue can be good, but would like to see that come to the county in different ways and not through data centers.

- The proposed HB791 legislation in Richmond will tie data center tax revenue for the community to property/asset depreciation, NOT commercial income. This likely means a significant reduction in expected tax revenue for our community from this initiative.

- Approval of Amazon's SUP would place a great burden and battle on your constituents to contend with Dominion about the power line routing location, and above ground vs. below ground lines.

- Amazon's SUP is lacking significant required information and detail per the established Special Use Permit Requirements. WTC should not even entertain this application until a complete and detailed application has been submitted for approval.

- The SUP cites that "significant tax revenue" will be generated for the community, but provides absolutely no details or specifics on amounts.

- No details have been given on the environmental impacts, and no Environmental Impact Assessment has been completed as part of the application (to include the source and usage of water for cooling needs, as well as the disposal plan for the water).

- It does not include a Load Letter, and therefore we cannot verify power need of the Data Center and are unwilling to accept Dominion's calculations (as that is a conflict of interest, given they are the sole source provider of the electricity). The Load Letter should be provided from an independent party. Also, are there other lower sleepy impact options like solar that could be looked at?

- Noise calculations are lacking in the document

- Includes a height precedent, which if approved, gives Amazon an open door to build vertically--is that truly acceptable to our community?

- The SUP states that "the applicant [Amazon] will bear the cost of new infrastructure that will be needed and any upgrades to existing facilities" and yet, there is absolutely no analysis provided to determine what those infrastructure costs might be.

Thank you,
Elisia Tindle

Sent from my iPhone

From: Liza Phillips
To: citizencomment
Subject: Amazon data center and power lines
Date: Monday, July 11, 2022 7:13:23 AM

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

I live in Fauquier County outside the town limits.
I am opposed to above ground power lines. And question the location of the data center.
I hear Amazon says they will cover the cost of infrastructure but Dominion states they will have to put that infrastructure cost onto all customers.
Have Amazon pay and add internet to our county. A data center and people in Fauquier still don't have reliable internet.
Environmental issues with cooling water into and out of this data center is also very concerning.
There are just too many unanswered questions.
Thank you your time.
Liza Phillips

Sent from my iPhone

From: Nancy B. Premen
To: citizencomment
Subject: DENY approval of Amazon SUP
Date: Monday, July 11, 2022 4:47:28 PM

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

To the members of Warrenton Town Council:

I am writing this email to state my opposition to the approval of the SUP for an Amazon Data Center, to be located on Blackwell Road in Warrenton. From the reading & research that I have done, in addition to meeting with the Dominion representatives at their 'open house'-style session, I have come to the conclusion that an Amazon Data Center at that location in our town would be the 'beginning of the end' to Warrenton as we know it.

Understanding that the key driver of the desire to approve this endeavor stems from the lure of sizable revenue in the form of taxes, it is my concern that the 'benefit' of those dollars is hardly worth the probable destruction of our beautiful community….in addition to the fact that it appears that the estimation of tax revenue will be negatively impacted by the recent passage of HB791. That item will tie data center revenue to property/asset depreciation … not commercial income. Has the Council evaluated the expected significant reduction in revenue caused by this??

Has the Council reviewed the impact of other costs….source/usage/disposal of water used for cooling (and the proximity to our reservoir); possible noise impacts to neighbors; possible impacts to electronic devices in the area; possible health impacts due to proximity to high-powered electrical lines?

What was the reasoning behind amending our zoning to allow data centers within our town limits? Haven't we designated specific areas in our county, such as Vint Hill, as Planned Commercial Industrial Districts? In this particular instance, wouldn't a location at Vint Hill be "IDEAL" for Amazon ??? It would have immediate access to the substation and lines from Wheeler Road.

Already, we have learned of two additional parcels being 'offered up' as data center sites off Blackwell Road. So we want massive destruction of our woods in that area, in addition to the power lines that would be the obvious and inevitable ugly result of further data center growth??

The power lines being proposed for this data center are hideous….to put it mildly. Not only will they destroy the view of our homeowners, but also the view and impression of Warrenton as visitors drive by on RT. 29. Do you really believe weekend visitors , intent on getting away from development, are going to be thrilled to spend their time in plain view of high tension power lines??? Sounds like a relaxing scenic time to me……

There are so many aspects of this Amazon proposal that seem to be ringing the 'death knell' to Warrenton and our surrounding countryside. Do we truly want to ruin the beauty and peace and quiet that make Warrenton and Fauquier so special? Have you envisioned what those towers would look like coming across from Meetz Road or down Rt. 29 to New Baltimore and over to Wheeler? That is NOT what Fauquier residents want to see.

The known 'warning to residents' is 'without this, your taxes will go up'. Really? Why? Maybe the residents of Fauquier do not want the growth and development that is being pushed down our throats. Maybe we need to look at ways to keep Warrenton and Fauquier as the 'sanctuary' from DC that it is right now. Allowing a monstrosity such as an Amazon Data Center right on top of our town, in addition to the power towers that support it, is not something that I can support.

Please rethink your opinion on whether an Amazon Data Center at Blackwell Road is really in the best interest of the people of Warrenton and Fauquier.

From: Kate Reidenbaugh
To: citizencomment
Subject: Comment for WTC meeting
Date: Monday, July 11, 2022 6:47:16 AM

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Hi, I have just purchased a new home in Warrenton. I am very concerned about the proposed Amazon data center. I am specifically concerned with the power lines that will be associated with this project and the lack of say the town will have as to where these unsightly lines will be placed and the fight that the citizens will be up against with dominion to get the lines buried. In my opinion, this project should not be approved for a multitude of reasons. Thank you for your time.
-Kate Heasly

Sent from my iPhone

From: David Roddy
To: citizencomment
Subject: Comment for July 12 meeting
Date: Monday, July 11, 2022 8:14:02 AM

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

As of now, 1,345 residents have signed a petition I started that opposes the above ground lines, and the Data center all-together. As someone heavily involved in the opposition of the Data Center and its power lines, I believe we're both very familiar with the project at this point.

My question today is, how can we help you? I do not think the WTC actually wants Amazon and the power lines to be here either. Of the thousands of people I've spoken to, not one was in favor. Therefore, you all must be on our side as well. Which begs the question - What else can we do?

I also understand that most Northern Virginia counties are covered with these data centers and the towers required to power them. We would end up being the first to say no. With even more land being purchased by Amazon, it seems inevitable. However, I must ask the question - if it's possible at all, how?

For example, do we need 10,000 signatures, 5,000 comments, 2,000 letters, legislation, etc. Who do we need to get in touch with?

We've put together an incredible team to help stop Amazon, and have already been on the news. Share with us how it's possible to stop them. Then, we can battle this together.

From: Christen Snow
To: citizencomment
Cc: [redacted]
Subject: Oppose the Amazon Data Center SUP
Date: Monday, July 11, 2022 9:57:21 PM

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Dear Warrenton Town Council,

It is increasingly brought to the attention of your public that you quickly amended the town Zoning Ordinance last summer/early fall, to allow for the presence of Data Centers within Warrenton Town limits. This type of maneuvering is a serious breach of trust between your position and the people whom you serve. Please take a step back and reconsider, as this type of political manipulation is not well-received.

We urge you to deny the Amazon Data Center SUP for the following reasons:

- Amazon's SUP is lacking significant required information and detail per the established Special Use Permit Requirements. WTC should not even entertain this application until a complete and detailed application has been submitted for approval.
- The SUP cites that "significant tax revenue" will be generated for the community, but provides absolutely no details or specifics on amounts. Furthermore, the Virginia state government just signed HB791 into law, after much lobbying by a coalition of data centers. This law allows the data centers to be taxed based on property/asset value (and ties the taxation to depreciation), rather than corporate income. This shady legislation allows data centers to bypass the commercial industry standard of being taxed on income, and that translates to much lower tax revenue for the communities that house these data centers.
- No details have been given in the SUP on the environmental impacts, and no Environmental Impact Assessment has been completed as part of the application (to include the source and usage of water for cooling needs, as well as the disposal plan for the water, etc.)
- The SUP does not include a Load Letter, and therefore we cannot verify power needs of the Data Center and are unwilling to accept Dominion's calculations (as that is a conflict of interest, given they are the sole source provider of the electricity). The Load Letter should be provided from an independent party.
- Noise calculations are lacking in the document
- The SUP includes a height precedent, which if approved, gives Amazon an open door to build vertically--is that truly acceptable to our community?
- The SUP states that "the applicant [Amazon] will bear the cost of new infrastructure that will be needed and any upgrades to existing facilities" and yet, there is absolutely no analysis provided to determine what those infrastructure costs might be, which also gives absolutely no assurance that these costs will not burden the county taxpayer.
- Furthermore, WTC (Warrenton Town Council) does not get to decide where the high tension power lines will be placed to service the Amazon Data Center. The SCC

(State Corporation Commission) will determine that. Approval of Amazon's SUP would place a great burden and battle on your constituents to contend with Dominion about the power line routing location, and above ground vs. below ground lines. To pass this responsibility and STRESS onto your constituents during a time of extreme economic challenge nationwide demonstrates a serious disconnect from the people you serve.

For these reasons, and so many more, we urge you to categorically and unequivocally DENY the Special Use Permit for the Amazon Data Center. Please contact us if you are interested in further information or if you'd like to discuss any of the above.

Best Regards,
Christen & Jonathan Snow
[redacted]

From: Kami Whitney
To: citizencomment
Subject: Amazon Data Center Special Use Permit
Date: Monday, July 11, 2022 10:09:19 AM

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Warrenton Town Council,

I am writing regarding the Town Council's upcoming vote on the Amazon Data center's special use permit. As a concerned citizen of Fauquier County that spends a significant amount of time and money enjoying the idyllic small-town atmosphere that currently permeates the Town of Warrenton, I am deeply concerned about the impact of accepting this special use permit and urge you not to approve it. Not only will the acceptance of this permit bring monstrously hideous power towers through our beautiful county and the backyards of my neighbors, they will possibly travel along the recently completed Cedar Run Greenway trail and associated wetlands ruining the beauty of this area and well certainly cast an ominous shadow across the main corridors leading into the Town of Warrenton depreciating the beauty and overall feel of the entire town (let us not forget the value of first impressions). I would like to remind the Council of the Town's stated mission, published prominently on your website to provide "…quality public services in an attractive, well-planned community for the benefit and enjoyment of all." I believe we can all agree that the addition of these towers directly contradicts this mission.

The community would be better served by rejecting this special use permit which is not needed in an area so close to two other planned commercial industrial districts including Vint Hill and Remington that would be more appropriate sites for this type of building.

While the special use permit states that it will bring significant tax revenue to the community, it does not provide any details on actual value, and transfers the responsibility for supplying the data center's gluttonous need for energy to not only Warrenton citizens, but also the surrounding area without bringing any jobs.

Thank you,

Kami Whitney

[redacted]

[redacted]

Kami Whitney, PA-C

From: Rich Whitney
To: citizencomment
Subject: Warrenton Amazon Data Center and Associated High Voltage Lines
Date: Monday, July 11, 2022 12:59:30 PM

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Council Members,

It seems our collective community has some real concerns about the potential approval of the SUP for the proposed Amazon data center and associated high voltage lines; I share the same concerns. The look and feel of our little historical town is precious to myself and other residents. As representatives of town residents I hope that you'll take into consideration the following points and choose the *deny* the Amazon SUP:

• WTC (Warrenton Town Council) amended the Zoning Ordinance on short notice last summer to allow Data Centers to be within town limits. It was done quickly and with minimal community input. This is a serious breach of trust between the community and the elected Town Council, and the WTC should prioritize restoring trust with their citizens, not accommodating tech giants.

• Remington & Vint Hill are Planned Commercial Industrial Districts, and Data Centers should be kept there to protect our natural landscape and habitats.

• WTC (Warrenton Town Council) does not get to decide where the high tension power lines will be placed to service the Amazon Data Center. The SCC (State Corporation Commission) will determine that. Approval of Amazon's SUP would place a great burden and battle on your constituents to contend with Dominion about the power line routing location, and above ground vs. below ground lines.

• Amazon's SUP is lacking significant required information and detail per the established Special Use Permit Requirements. WTC should not even entertain this application until a complete and detailed application has been submitted for approval.

• The SUP cites that "significant tax revenue" will be generated for the community, but provides absolutely no details or specifics on amounts

• No details have been given on the environmental impacts, and no Environmental Impact Assessment has been completed as part of the application (to include the source and usage of water for cooling needs, as well as the disposal plan for the water)

• It does not include a Load Letter, and therefore we cannot verify power needs of the Data Center and are unwilling to accept Dominion's calculations (as that is a conflict of interest, given they are the sole source provider of the electricity). The Load Letter should be provided from an independent party.

• Noise calculations are lacking in the document

• Includes a height precedent, which if approved, gives Amazon an open door to build vertically.

• The SUP states that "the applicant [Amazon] will bear the cost of new infrastructure that will be needed and any upgrades to existing facilities" and yet, there is absolutely no analysis provided to determine what those infrastructure costs might be.

I thank you for your time and serious consideration of this matter.

Richard Whitney
[redacted]

From: Samantha Wingo
To: citizencomment
Subject: Amazon Proposed Data Center
Date: Monday, July 11, 2022 11:17:50 AM

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Good Morning,

I have some concerns that I would like to be noted as part of the proposed Amazon Data Center.

Amazon's SUP is lacking significant required information and detail per the established Special Use Permit Requirements. The application should not be considered until a complete and detailed application has been submitted for approval. In addition, no details have been given on the environmental impact and no Environmental Impact Assessment was completed as part of the application.

The Dominion power lines that are being proposed to run through the county, as we are being told, are directly related to the data center. The amount of concern from county citizens around these powerlines is substantial. Warrenton Town Council does not get to decide where the high tension power lines will be placed to service the Data Center (two of the proposed options run directly through my neighborhood). The SCC will determine where the lines run and approval of the Amazon Data Center places a huge burden and battle on Fauquier constituents to contend with Dominion and SCC about power line routing locations as well as above ground vs. underground.

To summarize, I am highly opposed to the proposed Amazon Data Center, as well as the power lines that would be required along with it and would like the town council to take their constituents' concerns into consideration and deny the Amazon SUP.

Thank you,

Samantha Handlin

From: A Z
To: citizencomment
Subject: Data center
Date: Monday, July 11, 2022 3:45:27 PM

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

To all concerned:

Let me add my name to the list of local people who do not wish to see the data center built with the (no doubt) huge, ugly power towers required to support it. Fauquier county is an exceptional place with quiet, rural beauty that does not deserve to be defaced by this hideous monstrosity. I believe it would then open the door for more of the same.

I feel that this 'deal' has been rushed through the back door without due diligence and concern for the population. Most residents have no clue what this project entails. So many questions are completely unanswered or vague at best. I am not an engineer or someone well studied in this field, but even I can see this building does not belong in the town.

I understand that there are areas set aside for industrial use out of town, which are very close to substations to provide the required power. Why is this sort of project not being directed to those areas in Vint Hill and Remington?

Why should the people who have made Fauquier their home have to look at ugly power towers every day? Why should they lose property to tower right of way and lose property value because they are forced to host this behemoth? Why should Dominion customers have to see an increase in their bills to pay for this horror - adding more injury to the insult. I realize the town wants to make money, but is it fair to make money at out expense? WE are the town, WE are the county, WE should come first.

My understanding is that Loudon did not get all the money they were expecting with their data farms. I read there was a $60 million deficit, for reasons over my head.

Perhaps the most unsettling thing to me is the amount of fuel that is stored in these data centers to run generators should power be lost. I shudder to think of a giant bomb next to Giant Food, where I shop at least once a week. An accident waiting to happen, right next to the highway that I drive upon almost every day. What happens to our water if there is a fuel leak, or if there is an accident or a terrorist attack on this huge building ? This is such a bad idea.

Please deny the application for the data center. Suggest Amazon use it for an office park, a warehouse or a distribution center that would provide lots of jobs for local residents. A little more traffic would be a lot less painful that everything this project represents.

Thank you for your attention,

Anne Ziegler
[redacted]

Sent from my iPad

From: William Ziegler
To: citizencomment
Subject: Comment for the Warrenton Town Council Meeting, 12 July 2022
Date: Monday, July 11, 2022 10:07:14 PM
Importance: High

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

I want to strongly express my 100% opposition to both the proposed Amazon data center in Warrenton and the disastrous high voltage power lines that would slash through our county to provide electricity for the data center. I request that the town council disapprove the Amazon proposal (SUP). There are so many reasons why the data center and power lines are a bad idea, too many to put in one public comment. Here are a few that I hope will resonate with the town council.

Most importantly, the data center and power lines that will certainly come with it will cause huge and irreversible damage to what makes our county and the town of Warrenton special. The scenic, rural, agricultural, and small-town appeal of Warrenton and the eastern part of the county will be significantly degraded forever by unsightly 130-foot tall power lines and the 100-foot clear-cut easement that comes with them. This is not just a problem for county residents but also for town residents who will also be impacted by these monstrosities. Warrenton will be a far less inviting and attractive place to visit or live. Property values will certainly suffer over a wide area of the county and town. You will be turning part of Warrenton and much of the eastern part of Fauquier County into an industrial zone.

If you think that you can approve the SUP and the power lines will be magically buried, think again! It is highly unlikely that they would be buried, given the State Corporation Commission's consistent opposition to burying power lines for cost reasons. If you approve the Amazon SUP, you are almost certainly signing up for 130-foot tall power lines with huge clear-cuts going along US-29, by or through housing developments, farms, businesses, churches, forests, and right into Warrenton.

If you approve the Amazon SUP, you are signing up everyone for these horrible above-ground power lines, and not only that, you are transferring the burden directly to your constituents to fight, as best they can, the routing of the power lines, the battle for above-ground vis-a-vis buried, fighting against big corporations' attempts at seizing private property in the abuse of eminent domain, and all aspects of this battle, for battle there will certainly be. Talk about serving your constituents and having their best interests in mind!

Furthermore, the Amazon SUP is woefully lacking in so many details that it should dismissed out-of-hand. There are no details on supposed tax revenue to be generated, no information

on environmental impacts, no noise calculations, no load letter, and the list goes on and on.

In summary, if you approve this SUP, you are going to help turn Warrenton and adjacent parts of Fauquier County into Gainesville and Prince William County. Is that what you want for this town or for this county? Is that what your constituents want? I implore you to do the right thing and vote against the Amazon SUP. You have it in your power to do the right thing and help preserve and protect what makes Warrenton and Fauquier County special. Please do the right thing and vote NO.

Respectfully,
William Ziegler

SUP

Luis Albisu <lfa@icloud.com>

Tue 7/12/2022 3:37 PM

To: citizencomment <citizencomment@warrentonva.gov>

Cc: Staci Albisu <wdwlover@yahoo.com>;David Roddy <David.relish.ink@gmail.com>;Ibrahim Donderici <ibrahimdonderici@hotmail.com>;Baffour Anim <baffouranims@gmail.com>

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Please do not approve the SUP. As others have pointed out it's not in the interest of the town and the larger community. This opens the door to many more data-centers that will impact our quality of life and the value of homes.

If the SUP is approved the power lines required will most likely not be buried. The Virginia State Corporation Commission (SCC) will likely rule to avoid the cost. Even if they agreed to bury the lines the rates we all pay will go up. It's a lose lose proposition that can be nipped in the bud by denying the SUP.

Thank you,

Luis and Staci Albisu
6544 Bob White Dr
Warrenton VA 20187

Sent from my iPhone

we object to all aspects of the amazon data center and dominion blackwell project

LuLu Baer <luluschool7826@gmail.com>

Tue 7/12/2022 4:25 PM

To: citizencomment <citizencomment@warrentonva.gov>

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

dear town of warrenton administration and council members,

our family lives on the border of the town of warrenton limits. our address is in the county, but within a vote or two, we may be annexed to the town. we are that close.

we moved here to warrenton 25 years ago to enjoy its proximity to work, culture, and shopping, while maintaining its small town/rural flavor.

with that in mind, we vehemently object to all the proposed aspects of the amazon data center, its location, and the associated dominion power plans to plant 150 foot power lines in my next door neighbor's yard.

we live at the top of meetze road, and the huge towers that amazon needs to power its data center will go directly in my 2 neighbors' yards, literally a couple hundred feet from my back door.

objection #1: the data center proposed by amazon will not benefit our community. it's a noisy eyesore, and no amount of trees and cement buffers will dispel the bad effects. if mt bozos wants a data center he should build it in an appropriate location!

objection #2: the only reason dominion power needs permission from the town of warrenton and fauquier county to dump power lines in our communities is singularly for this customer, mr bozos, and his data center. the power lines are not urgently needed by your constituents, or this community you were elected to serve.

objection #3: IF --a big IF--- the town and county are so blind to the needs and wishes of their constituents and approve the data center, and IF---that project gets underway, amazon and mr bozos should cover the cost of burying the disfiguring power lines underground. amazon is the only beneficiary of the project and should cover the costs of its construction.

i pray that your ears will be open to the cry of your community and vote against all aspects of this boondoggle.

with great respect to you and the service to our community,

as ever,
Lorraine "LuLu" Baer
Leon R Baer
7826 Bethany Lane
Warenton, VA 20187
540-222-4498

--

> "When the people fear the government there is tyranny, when the government fears the people there is liberty."~John Basil Barnhill

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Virus-free. www.avg.com

To: The Warrenton Town Council
Re: AMAZON DATA CENTER/DOMINION TRANSMISSION LINES

1. **PLEASE CONSIDER CAREFULLY THE 7/13/22 "OPEN LETTER" ASKING YOU, THE WARRENTON TOWN COUNCIL, TO DENY THE AMAZON SUP:** Nearly 100 people signed the Open Letter to the Council, asking you to deny the Amazon SUP. Many of these people are Warrenton Town residents. One person gathered these signatures in less than 48 hours. Residents inside and outside the Town are growing alarmed about 110-130 foot tall transmission lines forever changing the look and feel of small town Warrenton and rural Fauquier. We are united in the high value we place on the rural, small town character of this beautiful area. Please do not let the data center and the transmission towers destroy that and tear us apart.

2. **DO NOT HURRY THE PROCESS – MANY RESIDENTS JUST WAKING UP**: PEOPLE IN WARRENTON AND NEARBY NEIGHBORHOODS ARE JUST BEGINNING TO AWAKE TO THIS ISSUE. They lead busy lives and it is hard to stay on top of everything. But the awareness and concern are building to anger and are attracting much wider attention. **Please do not hurry your process** of considering the SUP, at the risk of significant blowback and loss of credibility and trust in the small town of Warrenton.

3. **BURYING THE LINES IS EXTREMELY UNLIKELY:** The SCC has a long record of adamantly opposing burial of transmission lines, because of high costs. In Haymarket's case, after a protracted citizen battle, and expensive litigation, it took the state legislature to override the SCC and require 3 miles to be buried -- and ante up VA state appropriations to pay for it. Thinking the SCC will approve burying Warrenton's lines is wishful thinking.

4. **AMAZON CAN'T BE MADE TO PAY FOR BURYING THE LINE:** Localities do not have the authority to require an entity like Amazon to pay for burying a transmission line off their site. Some familiar with this issue even say it is not valid for Amazon to pay for burying the lines, under state law. (It is unclear if this is true, but it bears careful legal analysis.)

5. **AMAZON'S SUP APPLICATION IS INADEQUATE**: The SUP application submitted by Amazon is weak and incomplete. Town staff have pointed this out in Town comments to Amazon -- but we believe there are many more required SUP issues that are either not addressed at all or incomplete and inadequate. We are putting the application under the microscope and will be submitting additional comments on this. Please do not hurry the process and gloss over these issues.

6. **TAX REVENUES MAY BE MISLEADING:** We understand the Town's attraction to additional taxes the data center might bring. But beware: In 2022 the VA legislature passed and the Governor signed a bill that limits how localities can tax data center equipment and property. This bill was sought by data centers, and we believe it will provide ample opportunities for data centers to lower the taxes paid to localities. You are at risk of bringing miles of transmission lines through the county and along the gateways into Warrenton for a much smaller tax benefit that you are expecting.

7. **COMP PLANNING PROCESS:** Both the Town and the County have gone through careful Comprehensive Planning processes, seeking public input and working very hard to adopt a plan that represents your vision and values, as well as those of citizens. The county plan provides for two industrial zones where uses like data centers should be channeled, and to avoid historic and scenic areas and neighborhoods and properties. Approving a data center for the Blackwell Road site is a contradiction -- a slap in the face -- for the plan and the planning process of both the Town and the County. Please stick to the carefully developed plans. Data Centers have no place in the historic Town of Warrenton.

Respectfully submitted by
Cynthia J. Burbank

[redacted]

July 12, 2022

Town Council Meeting - Amazon SUP

Tom Daily <tomrdee@comcast.net>

Tue 7/12/2022 7:57 PM

To: citizencomment <citizencomment@warrentonva.gov>

Cc: Carter Nevill <cnevill@warrentonva.gov>;Renard Carlos <rcarlos@warrentonva.gov>;Sean Polster <spolster@warrentonva.gov>;Heather Sutphin <hsutphin@warrentonva.gov>;William Semple <wsemple@warrentonva.gov>;Brett Hamby <bhamby@warrentonva.gov>;James Hartman <jhartman@warrentonva.gov>;Kevin Carter <kcarter@warrentonva.gov>

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Town Council Members:
My name is Tom Daily and I am a resident of Vint Hill in Fauquier County. I am the President of the HOA for Vint Hill Manor, which is a 100 home 55+ development. Having gone through a somewhat similar experience a couple of years ago, as concerns the threat of overhead power lines, I feel confident that I speak on behalf of our members and trust my comments in the attached will be included with others, on the subject concerning the Amazon SUP, for this evening's Town Council Meeting.

I had planned to attend; but, my concerns about the relatively close quarters and the increasing infection rates resulting from the latest omicron offshoot, i.e., the BA.5 variant, have caused me to reconsider even though I am totally vaxxed and boosted. Thus, the last minute need to put my comments in writing.
Respectfully submitted,
Tom Daily

From: KATHY DOVE
To: citizencomment
Subject: Amazon SUP
Date: Tuesday, July 12, 2022 9:55:06 AM

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Good morning,

My name is Kathleen Dove and I have been a homeowner in Fauquier County, specifically New Baltimore, since June 1992. I am writing to you concerning the Amazon Data Center and subsequently the Dominion Transmission Lines.

If approved, those of us that live here will see our property values decline, in turn being less tax revenue for the county. There was new legislation passed this year that would decrease the amount of tax revenue you would receive from these centers. There are two industrial zones in our county for these types of things. Why is the WTC even considering this since the data center will not be in the correct space nor will it bring in tax revenue as expected? We haven't approached the subject of environmental impacts or health impacts.

We, the citizens of Fauquier, pride ourselves on being small town America – people buy homes here for that reason. Please do not destroy this by allowing data centers and the awful towers to dot our beautiful, rural landscape. We do not want tech giants in our county. We see the cancer this becomes in our neighboring counties.

Please deny the Amazon SUP.

Thank you.

Kathleen Dove
[redacted]

Sent from my iPhone

Comment for Town Council - Blackwell Project

Jim Fortune <jimf@fidk.com>

Tue 7/12/2022 8:20 PM

To: citizencomment <citizencomment@warrentonva.gov>

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

As a resident of New Baltimore, I was surprised to learn of plans to construct high tension powerlines through our area to support an upcoming data center. This would have power lines coming from either the south or east mostly above ground on 130' towers. Imagine towers twice as tall as the larger trees in the area coming down 29, Vint Hill Rd, Meetze, Rd. and across seemingly random farms and neighborhoods. One of the routes would clear cut 100-200' wide to or maybe across my property line.

Dominion claims overhead lines do not significantly reduce land values. They also met with Van Metre privately and chose to reject a route due to property values and sell-ability of that new housing. I'm with Van Metre, power towers lower land value – I don't want a house next to a power line, either.

Let's look at what the stated benefits are for the Amazon site. As Amazon has stated, this will add 50 jobs to Warrenton. According to the Fauquier Times, Warrenton has calculated $4.6 million of revenue over 5 years and Fauquier County $10.6 million over 5 years. The town should ponder the cost of ruining the beautiful landscape we have vs the extra (less than) $1M yearly revenues. I guess the other benefit is bragging rights that we have Amazon.

Make no mistake. This is just the beginning. There are other landowners who will sell out and make a windfall profit if data centers are to be allowed in Warrenton and Fauquier. Dominion is just putting in the infrastructure for now but it has a large capacity; and if the current routes cannot provide the capacity, alternate routes will likely be filed with SCC now to grease the skids for later.

How long will the data centers be viable? Some say 10-15 years, some say longer. It depends a lot of the size of buildings needed to do computing. Compute power has required smaller and smaller space since the 60's. Analog computing is on the horizon and may drastically reduce space requirements. In the future, data centers may consolidate far from populated areas with their own renewable energy. As more functions are automated, the requirement for staff will decrease. The point is that it is very uncertain how long data centers as we know them will be viable. Computing has always meant rapid change.

Warrenton Town Council: please weigh the small benefits against the permanent desecration of many acres of Fauquier and Warrenton. If you want to see your future with a data center, take a spin down Glouster Parkway in Ashburn to view the large, monolithic concrete buildings with fences and no windows. Or take a tour of Manassas to the east of 234 Bypass. Then ask yourself if this is what you want Warrenton and Fauquier to look like.

Remember, if we go forward with this this data center -- we can't go back. Please keep Warrenton and Fauquier County rural – it's the right decision.

Respectfully,

James Fortune

New Baltimore

From: Sean
To: citizencomment
Subject: Concerns for Warrenton DATA center
Date: Tuesday, July 12, 2022 8:37:51 AM

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Greetings,

This is Sean and Kali Hagerty of:

6565 Bob White Dr
Warrenton, VA 20187
C: 401.837.5854

I would like the email to be an official letter of concern. Our concern is the Data center that is proposed to be built in Warrenton, VA.

On a personal note. I just moved from Loudoun County to the historic town of the Warrenton for the beautiful landscape and rural community feel. South Riding, Ashburn and the surrounding communities have been destroyed by the eye soars that are Data Centers. You have the power to stop this before it ever happens. Please act on the best interest of the community you represent and that's not big tech.

- WTC (Warrenton Town Council) amended the Zoning Ordinance on short notice last summer to allow Data Centers to be within town limits. It was done quickly and with minimal community input. This is a serious breach of trust between the community and the elected Town Council, and the WTC should prioritize restoring trust with their citizens, not accommodating tech giants.
- Remington & Vint Hill are Planned Commercial Industrial Districts, and Data Centers should be kept there to protect our natural landscape and habitats.
- The newly signed HB791 legislation in Richmond will tie data center tax revenue for the community to property/asset depreciation, NOT commercial income. This likely means a significant reduction in expected tax revenue for our community from this initiative.
- WTC (Warrenton Town Council) does not get to decide where the high tension power lines will be placed to service the Amazon Data Center. The SCC (State Corporation Commission) will determine that. Approval of Amazon's SUP would place a great burden and battle on your constituents to contend with Dominion about the power line routing location, and above ground vs. below ground lines.
- Amazon's SUP is lacking significant required information and detail per the established Special Use Permit Requirements. WTC should not even entertain this application until a complete and detailed application has been submitted for approval.
- The SUP cites that "significant tax revenue" will be generated for the community, but provides absolutely no details or specifics on amounts
- It does not include a Load Letter, and therefore we cannot verify power need of the Data

Center and are unwilling to accept Dominion's calculations (as that is a conflict of interest, given they are the sole source provider of the electricity). The Load Letter should be provided from an independent party.
- Includes a height precedent, which if approved, gives Amazon an open door to build vertically--is that truly acceptable to our community?
- The SUP states that "the applicant [Amazon] will bear the cost of new infrastructure that will be needed and any upgrades to existing facilities" and yet, there is absolutely no analysis provided to determine what those infrastructure costs might be.

Please see our list of concerns, these are not all inclusive.

Sincerely,

Sean and Kali Hagerty

Note: This email was drafted on a hand held device, please disregard any spelling errors.

From: Sallyalahm
To: citizencomment
Subject: Comment for official record of the Town Council meeting, 12 July 2022
Date: Monday, July 11, 2022 4:23:08 PM

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

12 July 2022

Dear Members of the Warrenton Town Council,

As a citizen of Fauquier County for 13 years, I am writing to you today to express my grave concern and opposition to the approval of a Special Use Permit (SUP) for a Data Center within town limits of Warrenton. I moved to this county from
Manassas in 2013 to escape intolerable noise, pollution, deforestation, crime, increasingly hot climate, and rapid development.

Warrenton is MY town which I share with many others who cherish the aesthetic quality, peace, expanses of forest, safety and security, historic preservation, and high quality of life provided by living in Warrenton and its environs. There is so much development in counties to the north and south of Fauquier County. A large data center will not only destroy the character of Warrenton, but will result in construction of power substations and mega power lines for miles in the county. Below is a list of reasons for my opposition to granting the SUP for the Amazon Data Center.

- WTC (Warrenton Town Council) amended the Zoning Ordinance on short notice last summer to allow Data Centers to be within town limits. It was done quickly and with minimal community input. This is a serious breach of trust between the community and the elected Town Council, and the WTC should prioritize restoring trust with their citizens, not accommodating tech giants.
- Remington & Vint Hill are Planned Commercial Industrial Districts, and Data Centers should be kept there to protect our natural landscape and habitats.
- The proposed HB791 legislation in Richmond will tie data center tax revenue for the community to property/asset depreciation, NOT commercial income. This likely means a significant reduction in expected tax revenue for our community from this initiative.
- WTC (Warrenton Town Council) does not get to decide where the high-tension power lines will be placed to service the Amazon Data Center. The SCC (State Corporation Commission) will determine that. Approval of Amazon's SUP would place a great burden and battle on your constituents to contend with Dominion about the power line routing location, and above ground vs. below ground lines.
- Amazon's SUP is lacking significant required information and detail per the established Special Use Permit Requirements. WTC should not even entertain this application until a complete and detailed application has been submitted for approval.
- The SUP cites that "significant tax revenue" will be generated for the community, but provides absolutely no details or specifics on amounts.
- No details have been given on the environmental impacts, and no Environmental Impact

Assessment has been completed as part of the application (to include the source and usage of water for cooling needs, as well as the disposal plan for the water)

- It does not include a Load Letter, and therefore we cannot verify power need of the Data Center and are unwilling to accept Dominion's calculations (as that is a conflict of interest, given they are the sole source provider of the electricity). The Load Letter should be provided from an independent party.
- Noise calculations are lacking in the document.
- Includes a height precedent, which if approved, gives Amazon an open door to build vertically--is that truly acceptable to our community?
- The SUP states that "the applicant [Amazon] will bear the cost of new infrastructure that will be needed and any upgrades to existing facilities" and yet, there is absolutely no analysis provided to determine what those infrastructure costs might be.

Sincerely yours,
Dr. Sally A. Lahm

Sally A. LAHM, Ph.D.
"Con paciencia y saliva, un elefante se puede meter dentro de una hormiga"

"With patience and saliva, the elephant can be put inside the ant" "

Avec de la patience et de la salive, l'elephant peut etre mis dans la fourmi"

Data centers and High Tention Wires

hskotowska@aol.com <hskotowska@aol.com>

Tue 7/12/2022 3:57 PM

To: citizencomment <citizencomment@warrentonva.gov>

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Hello,
I'm the owner of a house at Settlers Ridge Rd in Warrenton, and I strongly oppose this plan of putting Data Centers and High Power Lines in my neighborhood. It's bad for the environment and bad for people who live in the area. Please, do not vote for it.
Sincerely,
Helena Skotowska

Sent from the all new AOL app for Android

From: John K Terry
To: citizencomment
Subject: PLEASE DO NOT APPROVE DATA CENTERS OR WIRES
Date: Tuesday, July 12, 2022 10:47:05 AM

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Dear Warrenton Town Council,

I am a resident of Settlers Ridge Road writing to plead with you NOT to approve the proposed data centers, high tension wires, and other tech industry development. I moved to this beautiful area fleeing the rampant crime and congestion of Tyson's Corner Virginia. If you allow these data centers to be built in Warrenton you will be doing catastrophic and irreparable damage to both the community and the environment. The natural resources of Warrenton Virginia have already been pushed to their limits with local wildlife having no place to raise their young and coexist in a functional ecosystem. The proposed data centers will only magnify this problem exponentially. In addition to this the community will surely suffer irreparable damage of quality of life. Warrenton is a vibrant economical investment because of its picturesque landscape in comparison to surrounding areas. Property values and taxable assets would plummet with implementation of these data centers and wires.Crime and congestion would skyrocket with the added infrastructure required to support these developments as it has in nearby areas. As a resident and taxpayer I move that Warrenton should impose a tax on residents to fulfill their budget needs rather than accepting a pittance from tech giants in exchange for destroying our community. I believe even your standing as council members would be threatened as the people brought to this area by the centers would vote very differently than the people who currently live here. I implore you once more. PLEASE DO NOT APPROVE THESE DATA CENTERS OR WIRES. The future of this beautiful community is at your mercy. Please, make the right decision.

Sincerely your fellow citizen,

John

Amazon data centers

Elisia Milrod <elisia.tindle@gmail.com>

Tue 7/12/2022 3:52 PM

To: citizencomment <citizencomment@warrentonva.gov>

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Good Morning,

As a Fauquier county resident, for many years now, the proposed data center is very concerning and something I would like to not see come to our community. I do understand that growth and additional tax revenue can be good, but would like to see that come to the county in different ways and not through data centers.

- The proposed HB791 legislation in Richmond will tie data center tax revenue for the community to property/asset depreciation, NOT commercial income. This likely means a significant reduction in expected tax revenue for our community from this initiative.

- Approval of Amazon's SUP would place a great burden and battle on your constituents to contend with Dominion about the power line routing location, and above ground vs. below ground lines.

- Amazon's SUP is lacking significant required information and detail per the established Special Use Permit Requirements. WTC should not even entertain this application until a complete and detailed application has been submitted for approval.

- The SUP cites that "significant tax revenue" will be generated for the community, but provides absolutely no details or specifics on amounts.

- No details have been given on the environmental impacts, and no Environmental Impact Assessment has been completed as part of the application (to include the source and usage of water for cooling needs, as well as the disposal plan for the water).

- It does not include a Load Letter, and therefore we cannot verify power need of the Data Center and are unwilling to accept Dominion's calculations (as that is a conflict of interest, given they are the sole source provider of the electricity). The Load Letter should be provided from an independent party. Also, are there other lower sleepy impact options like solar that could be looked at?

- Noise calculations are lacking in the document

- Includes a height precedent, which if approved, gives Amazon an open door to build vertically--is that truly acceptable to our community?

- The SUP states that "the applicant [Amazon] will bear the cost of new infrastructure that will be needed and any upgrades to existing facilities" and yet, there is absolutely no analysis provided to determine what those infrastructure costs might be.

Thank you,
Elisia Tindle

Sent from my iPhone

From: Susan Whiteis
To: citizencomment
Subject: Opposed to Amazon Data Center
Date: Tuesday, July 12, 2022 11:17:28 AM

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Please preserve Warrenton from so much infrastructure!
Thank you.

-Susan Whiteis
Concerned Citizin

From: Ellen Zagrobelny
To: citizencomment
Subject: Oppose approval of Amazon Data Center SUP
Date: Tuesday, July 12, 2022 10:18:48 AM

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Dear WTC, I oppose approval of the SUP for the proposed Amazon Data Center. Data centers are not big job providers, they are resource-depleting structures (the cooling water, electricity, space, property value). We all see what happened in Loudoun County with the data centers allowed... Poor planning at best. I am a resident in Fauquier County, just outside Town of Warrenton. The county has two Planned Commercial Industrial Districts, and any data centers should only be allowed there, if permitted at all. It's hard to see any direct or long-term benefit to our town and county by providing special use for the Amazon tech giant site, especially with HB791 on the horizon in Richmond.

Ellen Zagrobelny

From: Renee Kitt
To: Rob Walton; Denise Harris; Susan Helander; James Lawrence; Steve Ainsworth; gjohnston@warretonva.gov; Ali Zarabi; Ryan Stewart
Subject: AWS SUP Citizen Comment - Renee D. Kitt
Date: Thursday, July 14, 2022 11:46:19 AM

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Dear Warrenton/Fauquier Planning Commission,

Planning manager - dharris@warrentonva.gov

Director Community development - Rwalton@warrentonva.gov
Chair planning commission - shelander@warrentonva.gov
Vice-chair planning commission - jlawrence@warrentonva.gov

Commissioners:
sainsworth@warrentonva.gov
gjohnston@warretonva.gov
AZarabi@warrentonva.gov
Rstewart@warrentonva.gov

As a resident of Warrenton since 2003 I am writing to offer my comment on the AWS SUP proposal. The special use permit should be denied. As someone who works on the business operations side of data centers I have a limited familiarity of just how all consuming these facilities are. I do understand the need for these facilities, however I am concerned that opening the door to data centers in Fauquier County is a very big mistake, where there in one there will be many more. This is not the right use of Fauquier County land. It has been pointed out that the SUP proposal submitted by AWS is lacking the details that are required to make an informed decision. Such delinquencies include but are not limited to the following:

- Noise calculations are lacking
- Height precedent, if approved, gives Amazon an open door to build vertically
- Environmental impacts, including lack of any Environmental Impact Assessment. Identification of quantity of water to be used daily for cooling, as well as source and disposal of cooling water
- Application says it is preliminary and all subject to change with final engineering (which includes expansion of size and scale)
- Since there is no load letter, we cannot verify power need and are not willing to accept Dominion's calculation
- Missing items 17-32 on submission checklist
- Land parcel has potential soil issues for bearing weight of data center and fuel tanks

Thank you for your service to our beautiful community. Let's keep it that way.

Renee Kitt
--

Reneé D. Kitt
Ahimsa Garden - A Virginia Native Plant Residential Teaching Garden
www.ahimsanativeplants.com

Master Naturalist as of 2013 - Old Rag Chapter

ASNV - Audubon at Home
co-chair Fauquier and Rappahannock Counties

From: Kim C
To: [redacted]
Subject: OBJECTION TO BLACKWELL ROAD POWER LINE PROJECT – FAUQUIER COUNTY, VA
Date: Thursday, June 23, 2022 8:04:28 AM

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

All,

Last night, we attended the Dominion Energy-sponsored "Community Engagement" activity at Kettle Run High School to voice our concerns about and objection to the overhead power lines proposed for our neighborhood. Believing the event was to be a question-answer forum, we were frustrated to arrive and see that the event was nothing more than a Dominion Energy sales pitch that appeared to intentionally create more confusion among attendees and allowed for very little in the way of successfully voicing concerns or getting answers to important questions.

Instead, we were directed to fill out a form voicing our concerns and leave it for collection by the Dominion Energy reps, or alternatively, to have our concerns recorded by the court reporter on site who had been hired by Dominion Energy to take verbal comments—and again, provide them only to Dominion Energy and nobody else—no Town of Warrenton or Fauquier County government officials who have been notably absent from this issue. I might also add that there was not a single mention of Amazon on any of the posters or literature provided at the event. In utter disgust, several of us were discussing the rapidity with which this issue has been shuffled through to this point and without the transparency, time, or civic feedback that should absolutely be germane to a matter of this magnitude that will adversely impact thousands of tax paying members of the community, our children, and the dwindling natural habitat.

Many present at last night's event are long-time land owners and residents of this lovely community, others of us moved to Fauquier County to escape the chaotic, noisy, and increasingly dangerous urban infrastructure sprawl of busier and more heavily populated communities east and north of us, so that we could afford some space, peace, civility, and safe harbor for our kids.

We are extremely concerned about and vehemently object to the installation of above-ground high voltage power lines through our community for the following reasons:
Proven health hazards including cancer; noise pollution; certain destruction of nature and animal habitat on a massive scale; wholesale drop in property values that will never be recouped; guaranteed increase in road traffic; and a slow crawl toward ugly infrastructure that will impose upon treasured historical areas—all at the hands of arguably one of the most powerful and wealthy companies on Earth—that can well afford to build these lines elsewhere in more appropriate locations or foot the cost of building underground power, which is safer, more reliable, and does substantially less harm to the environment.

It was not lost on anyone at last night's event that the severe weather storm caused a power outage at the venue, which is fed by above-ground power lines. However, when we

returned to our Brookside home, just a mile away and with underground power, we had full electricity. Irony.

In addition to our wholesale rejection of the building of these power lines, we demand there be legislation introduced to address this matter in a proper, transparent, and legally sound way. As is, this issue has all the hallmarks of big corporations quietly buying their way while government officials turn a blind eye, ignore constituent concerns, and permit greed and avarice to supplant the very real concerns of the citizens who pay their salaries and with no regard for the community writ large.

PLEASE STOP THIS PURSUIT!!

Kimberlee & Daniel Calvert
[redacted]

From: Corinne Thomas
To: Renard Carlos; Carter Nevill; Sean Polster; Heather Sutphin; William Semple; Brett Hamby; James Hartman; Kevin Carter; Planning Department
Cc: Corinne Thomas; Cindy Burbank
Subject: Amazon/Dominion: Is this what we want to see?
Date: Sunday, July 24, 2022 11:19:03 AM
Attachments: image001.png

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Warrenton Town Council and Planning Commission members,

Is this what we want to see on the gateway entrance to historic old town Warrenton?



This is a picture of the existing Dominion electric substation on Old Auburn Rd, next to the Fairgrounds. A substation like this could be installed at Blackwell Rd & Route 29, at the gateway entrance to Town from the north, to power the Amazon data center.

Please do NOT to let this happen to Warrenton and the beautiful rural county that we all treasure.

The proposed Amazon data center at that location is unacceptable for many reasons (especially because it is a contradiction of Warrenton's 2021 Comprehensive Plan for that site), but a substation like this would destroy the country look that Warrenton is all about. It is odd and uncomfortable to feel that our county and our town is not respecting its citizens. There is no way you're looking out for all of us if you are actually considering this data center and its requirements!
IT IS VERY SAD.

If the Warrenton Town Council approves the Amazon data center, it will change the look and feel of the Town of Warrenton and the County, forever. "Experience Old Town Warrenton" would be replaced with:
"Welcome to Industrial Warrenton….Experience all of this as you drive in or out…..

- ***110-130 foot metal towers! High power electric lines!***
- ***100-foot cleared rights of way!***
- ***An electrical substation!***
- ***An enormous 37-foot tall data center, 220,000 square feet, on a 500 foot elevation dominating the entrance to town!"***

Warrenton can grow in other ways. Do the right thing, say NO now to the Amazon data center!

Very sincerely,

Corinne Thomas
Warrenton, VA

From: Ken Thomas
To: Renard Carlos; Carter Nevill; Sean Polster; Heather Sutphin; William Semple; Brett Hamby; James Hartman; Kevin Carter; Planning Department
Cc: Ken Thomas
Subject: Is this what we want to see?
Date: Sunday, July 24, 2022 2:47:18 PM
Attachments: image001.png

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Warrenton Town Council and Planning Commission members,

Is this what we want to see on the gateway entrance to historic old town Warrenton?



This is a picture of the existing Dominion electric substation on Old Auburn Rd, next to the Fairgrounds. A substation like this could be installed at Blackwell Rd & Route 29, at the gateway entrance to Town from the north, to power the Amazon data center.

Please do NOT to let this happen to Warrenton and the beautiful rural county that we all treasure.

The proposed Amazon data center at that location is unacceptable for many reasons (especially because it is a contradiction of Warrenton's 2021 Comprehensive Plan for that site), but a substation like this would destroy the country look that Warrenton is all about. It is odd and uncomfortable to feel that our county and our town is not respecting its citizens. There is no way you're looking out for all of us if you are actually considering this data center and its requirements!
IT IS VERY SAD.

If the Warrenton Town Council approves the Amazon data center, it will change the look and feel of the Town of Warrenton and the County, forever. "Experience Old Town Warrenton" would be replaced with:

"Welcome to Industrial Warrenton….Experience ALL of this as you drive in or out of Warrenton -

- ***110-130 foot metal towers! High power electric lines! 100-foot cleared rights of way!***
- ***An electrical substation!***
- ***Enormous 37-foot tall data center, 220,000 square feet, on a 500 foot elevation dominating the entrance to town!"***

Warrenton can generate tax revenues in many other ways. Say NO right now to the Amazon data center!

Regards,
,
Ken Thomas
Warrenton, VA

From: Susan Helander
To: Denise Harris
Subject: Fwd: Feedback on Amazon's SUP Responses
Date: Monday, July 25, 2022 9:16:29 AM
Attachments: SUP Comments.pdf

Sent from my iPad

Begin forwarded message:

From: Suzan Fultz <suzan.fultz@gmail.com>
Date: July 24, 2022 at 5:20:41 PM EDT
To: Susan Helander <shelander@warrentonva.gov>
Cc: Mike Fultz <mike.j.fultz@gmail.com>
Subject: Feedback on Amazon's SUP Responses

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Dear Chairwoman Helander,

As community citizens, we appreciate the hard work you are about to undertake in reviewing and discussing the Amazon Data Center application for Blackwell Rd.

Please accept our attached comments and analysis of the data center SUP application; Town Agencies' comments; and Amazon's responses, for your review and consideration during the process ahead.

Kindest Regards,

Suzan and Mike Fultz
7020 Beaconsfield Lane
Warrenton, Va 20187

Sent from my iPad



For the best experience, open this PDF portfolio in Acrobat X or Adobe Reader X, or later.

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Get Adobe Reader Now!

RE: Warrenton/Amazon Data Center

Melissa Washer <melissa.washer@icsfinancial.com>

Tue 7/26/2022 5:44 PM

To: citizencomment <citizencomment@warrentonva.gov>

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Hello- good afternoon,

I ask you to please, ardently, contemplate the potentially very detrimental repercussions of approving the data center. Once the flood gates have opened, it will be pretty much impossible to control the flow… we know this, and we don't have to look far to see what the damage can look like- just look at Prince William and Loudon County.

For most of us out here in our beautiful, rural county- you couldn't pay us enough money to EVER consider living in one of those other counties, we are here in Fauquier because we have chosen to be.

PLEASE, for all of us- and those in our future generations, continue to fight (and a fight it is!), to keep Fauquier County a BEAUTIFUL and RURAL place for us all to live, thrive and be grateful.

Thank you for your time and consideration.

Have a good day!

Most sincerely,



Melissa Washer
Managing Partner

ICS Financial
6479 Main St. P.O. Box 366 The Plains, VA 20198
Tel. (703) 378-2900 x101 | Melissa.Washer@icsfinancial.com

www.icsfinancial.com

ICS Financial
SINCE 1997

Warrenton Amazon Data Center

Michael Washer <Mike.Washer@icsfinancial.com>

Tue 7/26/2022 4:40 PM

To: citizencomment <citizencomment@warrentonva.gov>

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Please do NOT allow the Amazon Data Center to move forward. This will kill the charm of Fauquier County that so many of us have strived to maintain for decades.

Thank you!



Michael Washer
Managing Partner

ICS Financial
6479 Main St, PO Box 366, The Plains, VA 20198
Tel. (703) 378-2900 x100 | Mike.Washer@icsfinancial.com

www.icsfinancial.com

Mike Washer offers products and services using the following business names: ICS Financial, Inc. – insurance and financial services, Ameritas Investment Company, LLC (AIC), Member FINRA/SIPC – securities and investments. AIC is not affiliated with ICS Financial, Inc.

Warrenton Amazon Data Center

Regan Washer <reegwash@live.com>

Tue 7/26/2022 4:22 PM

To: citizencomment <citizencomment@warrentonva.gov>

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

I would like to make a public comment on this topic for the scheduled work session on July 26, 2022.

I strongly urge the committee to consider killing this project. The approval of this project will have devastating impacts on the future of our beautiful town and county. I ask you to take a look at what has happened to Loudon and Prince William county. Those counties have completely sold out the last bit of their raw land to Big Tech and allowed data centers at every corner. And for what? The promise of more tax revenue, but at what cost? Once Amazon is allowed into our town and county, they will stop at nothing to turn it into the aforementioned counties and we will all be forced to move even further west to get away from the dreaded urban sprawl.

Please kill this project dead in its tracks.

Regan Washer, Marshall/Orlean
703-975-4350

Brittany Latack

From: Greg B <toos@earthlink.net>
Sent: Sunday, July 31, 2022 7:59 AM
To: Planning Department
Subject: Dominion Power lines and Amazon

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

We are residents of Fauquier County living not far from the proposed overhead corridor that Dominion Electric and Amazon wants Virginians to pay for. The 60MW load for this facility will impact regional electrical reliability, adding additional load without any regard to base generation in Virginia. The sight of 150 foot towers littering the gateway to Fauquier is unacceptable, as are the plans for further destruction of Fauquier CXounty's viewshed by additional data centers in this area. Adding insult to injury, we are expected to dig into our pockets to help enrich Amazon and Dominion at our cost, while little is given in return. No real job improvement in the area and increasing electrical rates to help feed what we do not need. Once the first data center is installed, one only has to look at PW and Loudon counties to see how these facilities end up destroying the land around them.

We are opposed to the Dominion and Amazon plan and hope you will protect our county from the disaster it will create.

Gregory and Catharina Brown

6108 Browning Ln

Broad Run, VA 20137

Brittany Latack

From: John Buursink <john@buursink.org>
Sent: Sunday, July 31, 2022 3:20 PM
To: Planning Department
Subject: Power Crunch for New Ashburn Data Centers
Attachments: Dominion Warns of Power Crunch for New Ashburn Data Centers - Loudoun Now.webloc

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Do we also want black-outs in Warrenton as they already have in Ashburn?

Success in your decision process!
John Buursink

Brittany Latack

From: Winny Buursink <winny@buursink.org>
Sent: Sunday, July 31, 2022 3:24 PM
To: Planning Department
Subject: Amazon's Datacenter on Blackwell Road

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Members of the Warrenton Planning Commission,

Amazon's Datacenter on Blackwell Road appears to on a fast-track for approval and that would be completely irresponsible on the part of the town of Warrenton.

We are deeply concerned about the following issues:

- Amazon's proposed data center will visually impact the gateway into historic Warrenton affecting the town's small-town character; mar the countryside; require miles of high-voltage electrical transmission lines; and, strain scarce water resources.
- The information about the facility is incomplete including such basics as how much electricity will be required and why the reported water requirements are so low.
- Warrenton did not follow its own processes for accepting and reviewing the application.
- The data center is inconsistent with Warrenton's Comprehensive Plan.
- The town, Dominion Power and Amazon have not been transparent about the project.

We recommend:

The Warrenton Town Council should

(1) deny the special-use permit for the proposed Amazon data center on Blackwell Road;

(2) send the application back to town staff for proper reviews;

(3) hold a series of public meetings on the project;

(4) survey the town's residents on the project; and

(5) postpone any action on the facility until all questions are answered including how electricity would be provided to the site.

Respectfully submitted by

Dr. John Buursink and Winny Buursink

Concerned Fauquier County Residents

Brittany Latack

From: Lynn <lynnreita@gmail.com>
Sent: Sunday, July 31, 2022 4:21 PM
To: Planning Department
Subject: Amazon Data Center

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

We fully support the position of CFFC which has been presented to you all.

Lynn & Reita Caraway
6727 Holly Farm Lane
Warrenton 20187

Brittany Latack

From: stacie dcindigos.com <stacie@dcindigos.com>
Sent: Sunday, July 31, 2022 12:38 PM
To: Planning Department
Subject: Amazon Data Center

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

I am resident of Fauquier County with a Warrenton zip code. The data center will bring virtually no jobs to Fauquier while seriously impacting its rural character. Any benefit to Warrenton that this facility may bring is far outweighed by it's negative impact. Deny the special use permit.

Thank you,
Stacie Clark
8431 The Mountain Rd,
Warrenton, Va 20186

Brittany Latack

From: Brian Smith <briantsmith99@gmail.com>
Sent: Sunday, July 31, 2022 8:22 AM
To: Planning Department
Subject: Please vote no on the Amazon data center

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Dear Sirs,

I live in New Baltimore. I am not on the route of the power transmission lines, but I hate the thought of the incredible scars Dominion would place across the county and *I* get to pay for it. The data center itself would provide basically no jobs and is another scar. We can do better than that. We do not need to be another Prince William. Please reject their application.

Brian Smith
5152 Albrecht Ln
Warrenton, VA 20187

Brittany Latack

From: melanie dixon <melanieldixon@hotmail.com>
Sent: Monday, August 1, 2022 7:10 AM
To: Planning Department
Subject: Amazon center

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

I am a resident of Fauquier Co and have recently been informed of the Amazon project. I adamantly oppose this project ! It will open our beautiful county to future continued extreme production of mega industries and destroy our bucolic county to the point of no return ! Not to mention the strain on local resources ! We need to continue to preserve Fauquier ! It is the last frontier of the metro area - let's keep it that way ! Melanie Dixon

Sent from my iPhone

Brittany Latack

From: Trisha Juerling <trisha.juerling@yahoo.com>
Sent: Tuesday, August 9, 2022 11:47 AM
To: citizencomment
Subject: Public comment data center and power networks

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

To the Town Council and Planning Commission, I am writing to you as a resident of Faquier County and I live near warrenton. I am writing to you to oppose the data center of Amazon. Do not let them take resources and destroy our community. This is rural which should not mean you can take what you please and damn any consequences. Vote no to the center and no to the power networks. Respectfully Trisha juerling county and local resident

Sent from my iPhone

Brittany Latack

From: Taryn Meeks <tarynmeeks@gmail.com>
Sent: Tuesday, August 9, 2022 10:09 AM
To: citizencomment
Subject: Submission for public comment

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

To Town Council and Planning Commission:

I am writing to oppose the Amazon Data Centers proposed for the Warrenton area. I am a local resident and do not want this beautiful area to be blighted by another data center and its supporting Dominion power lines. Like many area residents, I moved here to escape the feel of a "city" and enjoy the peaceful surroundings that belong to Fauquier county. Please keep this area green and natural - please do not ruin it with these centers. Vote NO to data centers and its supporting power networks.

Thank you.

Taryn Meeks

Brittany Latack

From: Angela Tang <angela.j.tang@gmail.com>
Sent: Tuesday, August 9, 2022 10:30 AM
To: citizencomment
Subject: NO on Amazon data centers

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Please vote NO on Amazon data centers in Warrenton. I just moved here from DC to escape the ugliness and industrial sprawl. People want to keep our green areas clean, beautiful, and Rural. Please do not destroy our landscape and environment with energy sucking buildings that use extraordinary amounts of water, do not create jobs, and blight our landscape. What is gone will be lost forever.

Thank you,

A new rural resident, Angela

Sent from my iPhone

Brittany Latack

From: Jonathan Renuart <jlrenuart@gmail.com>
Sent: Thursday, August 11, 2022 7:28 PM
To: Planning Department; citizencomment; Carter Nevill; Sean Polster; Renard Carlos; Heather Sutphin; William Semple; Brett Hamby; James Hartman; Kevin Carter; BOS@fauquiercounty.gov
Cc: DelMWebert@house.virginia.gov; delEguzman@house.virginia.gov; jillvogel@senate27.com
Subject: OBJECTION to Dominion Overhead Lines in Fauquier County

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Hello,

My name is Jonathan Renuart and I'm a resident of the Brookside community in Warrenton, Fauquier County. I'm writing to express my objection to Dominion's desire to install power towers in our community to support an Amazon datacenter in Warrenton. My family decided to build our home in this community due to the beautiful aesthetics of the area, free of the industrialized look that has taken over many communities in Prince William and Loudoun counties from which we moved from. The installation of these towers will ruin the beautiful landscape that brought many of us to Fauquier County. Please do right by the residents of Warrenton and Fauquier and vote **NO** to Dominions requests. NoVa has enough datacenters and failure to vote **NO** will open the gates for our area to look like Ashburn (those red dots are all datacenters, and as someone who works in that area, it's not a good look... Concrete walls and bars/fences and never the number of "new" jobs these companies promise)



Respectfully,
Jonathan Renuart
Fauquier County & Concerned Resident

Brittany Latack

From: Regan Washer <reegwash@live.com>
Sent: Tuesday, August 23, 2022 11:55 AM
To: citizencomment
Subject: Data center/Dominion lines

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

We need to band together and STOP this. Our county is ripe for the picking in the eyes of these data center giants. Once we allow this project, the flood gates will open and our county will rapidly turn into PWC or Loudon. Please put a stop to this.

Regan Washer
Orlean, VA
703-975-4350

Brittany Latack

From: Charles Grammick <cgrammick@gmail.com>
Sent: Thursday, August 25, 2022 2:34 PM
To: Planning Department
Subject: Amazon and Power Lines

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Dear Ms. Helander, Mr. Lawrence, Mr. Ainsworth, Mr. Johnston, Mr. Stewart, and Mr. Zarabi:

First of all, we would like to thank you all for working so diligently for our most charming and lovely town and community. Between the two of us, we have lived in New York City; Yonkers, Latham, and Long Island, New York; Boonton, NJ; Arlington, Vienna and Nokesville, VA; and Jacksonville, FL., and Laredo, TX, and we can honestly say that this is one of the most beautiful places to live in the United States. It is with great pride that we tell people that we live in Warrenton in Fauquier County. We along, with thousands of others love its rolling hills, its unique beauty, its quiet, its serenity.

You are all tasked with the unenviable and most onerous task of deciding on the Amazon Special Use Permit and the ensuing Dominion "Debacle." We ask that you all please, please carefully consider how this one decision can and will affect the future of our beautiful piece of heaven forever and for many generations to come.

Technology is an amazing thing, and we love the conveniences it affords us. There is no turning back from using technology and that's the frightening thing about it. If the decision is made to allow Amazon to build their data center and then the transmission towers, it will irrevocably change our community. There will be no turning back, that is a certainty. What will happen when, with the speed at which technology changes, newer, and most likely much smaller ways of storing data are invented? What will happen to the data center(s) and huge, ugly monstrous transmission towers that will march across and blight this land? What about the health effects of the electromagnetic energy fields? Cancer? Birth defects? What about the constant hum and noise? What about the lights and the overall eyesore? What if public water is contaminated? There are just too many "ifs" not to mention the many lives it will definitely financially ruin if the towers are to be built on their land.

We ask you one question do you want this to be your legacy?

We apologize for making this letter so long, but we did want to include something we had previously written about our little neighborhood in New Baltimore:

RE: Overhead Transmissions Line through Glenambler Neighborhood, Ambler Drive, Warrenton, VA 20187

We are very much against any overhead power lines in Fauquier County, especially Option 2, Overhead Route 2. This line would completely devastate and ruin our neighborhood, an absolutely gorgeous gem of land on Baldwin Ridge. The views from our deck offer a spectacular eastern vista of Vint Hill, Bristow, Gainesville, Haymarket, Nokesville, Manassas and beyond. On a clear day, you can even see Dulles Airport. The fireworks display on July 4th are a sight to behold. To ruin and destroy this land with 110' tall power lines would devastate the natural beauty of this land. Below are just three examples of property that will be greatly affected.

Edith Hagedorn, 5209 Ambler Drive, will have her property split in half. She is the widow of LCDR Edwin Hagedorn who served in the United States Navy for nearly 30 years and was Commanding Officer of the USS Iredell County (1966-1968)

and the USS Lorain County (1970-1972). Her property value will plummet drastically. She has children, grandchildr
great grandchildren.

Charles Grammick, Jr., 5290 Ambler Drive, 1st Lieutenant United States Airforce, was a pilot who flew C130s during the Vietnam War. He bravely served his country for years and it wasn't to have his property and golden years ruined like this. We bought this property as part of our retirement. This particular route will cut through the northeastern end of our 10 acres. These power lines would cause our family to lose tremendous value in our home and everything we have worked for as our retirement and our children's and grandchildren's inheritance will be decimated. The power lines will be in sight at all times.

Larry Peccatellio, 5298 Ambler Drive, purchased his property over 40 years ago. He was a football coach for over thirty years and was a former Defensive Coordinator for the (then named) Washington Redskins from 1981-1993 under the legendary football Coach, Joe Gibbs. Larry has been in four Hall of Fames. He also coached the Houston Oilers, Seattle Seahawks, Cincinnati Bengals and Detroit Lions. He owned houses in all those places and could have chosen to retire anywhere, but he chose to come back to bucolic, serene and absolutely beautiful Fauquier County. His property would also be greatly impacted.

Per a WebEx seminar we attended on 6/15, a Dominion Power representative stated that studies have shown that power lines DO NOT affect property values. We find this particularly difficult to believe as our research points to the exact opposite. To even state that there will be no effect is insulting. To think that Dominion Power can just come in and build 110' tall towers literally through our neighborhood and backyard is simply egregious and wrong. Please note that we will fight this to the very end as will all our neighbors. We will never give up and we will never give in. We will not let this happen.

We ask you, would anyone of you want these towers to be built on your land, your property, your neighborhood? If the decision is made to go through with the Amazon proposal, all transmission lines should be put underground. Period.

Respectfully,

Charles and Meryem Grammick

Sent from Mail for Windows

Brittany Latack

From: Redmond Manierre <rlmanierre@gmail.com>
Sent: Saturday, August 27, 2022 3:26 PM
To: citizencomment
Subject: Amazon/Dominion

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

PLEASE do not approve the Amazon/Dominion. That would be the end of the Fauquier that we all love. DON'T APPROVE IT!!!

Sent from my iPhone

Brittany Latack

From: Elaine Shea <eshea13@gmail.com>
Sent: Saturday, August 27, 2022 3:29 PM
To: Planning Department
Subject: Data Support

Follow Up Flag: Follow up
Flag Status: Flagged

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Please add our names to those who oppose: Amazon's data center in Warrenton; towering electrical power lines across the county; Warrenton's desire to acquire 1,700 acres of county land for development; and encroachment of utility-scale solar facilities onto agricultural lands.

Best Regards.
Elaine Shea
Daniel Blymyer
8001 Springhope Drive
Catlett, VA 20119

Sent from my iPhone

From: Suzan Fultz
To: Susan Helander; James Lawrence; Steve Ainsworth; Gerald Johnston; Ryan Stewart; Ali Zarabi; townmanager; Denise Harris
Subject: Local noise ordinances ineffective in regulating data center noise
Date: Sunday, August 28, 2022 10:25:30 AM

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Please see article below. Your thoughts on how to best study Data Center noise at the proposed Blackwell Rd location, prior to a vote?

https://www.princewilliamtimes.com/news/manassas-neighborhood-battles-noise-from-data-centers/article_84b9f0ea-1ef1-11ed-a8a1-9307028db1fd.html

Sent from my iPhone

Brittany Latack

From: David Winn <winngroup@msn.com>
Sent: Wednesday, August 31, 2022 2:54 PM
To: Renard Carlos; William Semple; Heather Sutphin; Sean Polster; Brett Hamby; James Hartman; Carter Nevill
Cc: Planning Department
Subject: Amazon SUP and noise nuisance
Attachments: noise article.pdf

Follow Up Flag: Follow up
Flag Status: Flagged

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Dear Town Council Members, Mayor, and Planning Commission,

Please see the attached article above.

I live near the Warrenton Training Facility (WTF) on Bear Wallow Road, and have been disturbed by the noise coming from the two data center buildings built there in 2015. The Federal Government is in the process adding two more buildings at this facility.

My wife and I can no longer sleep with our windows open since this installation was completed due to the noise coming from it even though it is over a mile from my house, and the distance between it and me is fully forested.

Having spent thousands of dollars on an outdoor patio and entertainment area backing to once quiet woods, we are disturbed by the noise coming from the Amazon data center at the WTF. My neighbors are also disturbed by the noise. It is especially annoying at night up until dawn, as that is when the noise is most notable.

When the Army Corps of Engineers announced they would be adding two more data buildings to the WTF, I reviewed the Corps sound and environmental studies provided the public. These studies were totally inadequate, comparing the noise to a single, residential AC unit. Data Centers employ between 4 and 8 dozen industrial sized AC units, all running simultaneously. Often, the noise studies concentrate on the diesel generator noise, which is a misdirection, since these are rarely used in power outages and periodically for short periods for testing, etc.

The applicant needs to provide a comprehensive sound study, as well as a detailed description of the air-conditioning units, number, placement, and sound emitted over the full range of use, including all units.

As someone who was a member of a town planning commission in my early years in college, and as one who graduated with a degree in Real Estate and Urban Development from GMU, including land planning, and has spent nearly 40 years in the work related to the development industry, I was disheartened to learn that the Planning Commission recommended, and the Town Council approved, the SUP allowing data centers in the I zone. The Town simply does not possess any space within its limits for such industrial applications. The chosen site is a prominent, hilltop, "Gateway" site to the Town. It is also anathema to the recently adopted Comprehensive Land Use Plan. After more than five decades of preservation and protection by this community, this PC and Council did a grave disservice to the Town of Warrenton that will forevermore stain the community.

I plan on working tirelessly to alert and inform the town citizens on this matter.

Dave Winn
Warrenton, VA

Manassas neighborhood battles noise from data centers

By Jill Palermo/Prince William Times Staff Writer
Aug 24, 2022



Dale Browne, president of the Great Oak homeowners' association, has been pleading with Amazon Web Services and Prince William County officials to do something about the annoying buzz emanating from four data centers built next to his neighborhood near Manassas.

Photo by Doug Stroud

Other data center-related stories

3 groups that oppose Amazon data center hold public meeting to bolster support

Prince William could steal Loudoun's title of Data Center Alley. But land use battles are raging.

Prince William planning commission greenlights 'Devlin Technology Park,' a plan to bring 7 to 11 new data centers to Bristow

Haymarket transmission line route decision has parallels in Fauquier

Dominion plans new infrastructure in and around Warrenton, seeks public input

Data center dread spreads to Nokesville

Some say it sounds like a low roar combined with a tinny, high-pitched whir. Others say it's like sitting beside a fan that never stops spinning. However they describe it, residents of Great Oak, a subdivision of 291 homes outside Manassas, say they've had enough of the annoying and constant buzz emanating from four Amazon Web Service data centers recently constructed between Prince William Parkway and Godwin Drive.

Lori Haskell and her husband moved to Great Oak from New Hampshire three years ago without any idea that they'd soon be living beside data centers. Their first clue came in 2020 when loud explosions that seemingly came out of nowhere repeatedly shook the ground beneath their home, leaving cracks in their foundation, patio and even in an interior wall.

"My husband called me one day at work and said, 'I don't know what's happening, but the house just shook,'" she recalled. "And this went on and on and on."

Haskell said she finally called the fire department and found out the blasting was the result of the Amazon data centers being built next door. The construction required blasting to break through hard rock beneath the soil. Now that the building is complete, Haskell said, they are left with something almost as bad: the constant noise.

Public transmission line meeting leaves some participants feeling unheard, frustrated

Amazon data center could bring in $3 million in annual taxes for county, town

Amazon Web Services proposes 1,000-foot-long data center in Warrenton

“If I’m outside, it’s a constant humming. It sounds like I’m next to a highway,” she said. “I wish it wasn’t brought to my attention because now it’s driving me crazy.”

“It’s like sitting next to a huge blowing fan,” said John Biess, who lives about a block away from the Haskells on Winged Elm Circle. “And you can hear a buzzing whir; like there’s a separate, smaller fan as well. It’s a lower pitch and a higher pitch.”

Biess and his wife, Gloria Capriotti, have lived in their home for 30 years and have put a lot of work into their lawn and gardens, even installing a few koi ponds. But they say they no longer spend much time outside.

“Going outside isn’t pleasant. … It can’t be enjoyed at all,” Biess said. “The only escape I have is if I have the TV turned up.”

Capriotti said the noise has left her feeling stressed out and constantly on edge.

“My personality has changed. I have become a snapping turtle with my husband,” she said. “Noise does that to human beings. … What’s upsetting is that there’s no escape from this noise. I can’t imagine spending my remaining years listening to this dreadful noise. We feel victimized.”

Dale Browne, the president of the Great Oak Homeowners Association, is a U.S. Navy submarine veteran and retired computer science engineer of 40 years who has helped oversee the construction of data centers in his professional career. He said he had no idea the data centers were being built so close to his neighborhood until he heard the blasting two years ago. Complaints about the noise started in April.

At first, Browne said, he couldn’t hear the noise from his own home, which is also on Winged Elm Circle but further away from the data centers. When he drove closer to the neighborhood’s entrance on Godwin Drive, where the homes are only about 600 feet from the Amazon buildings, he heard it loud and clear.

“When I came over to hear it, I was alarmed,” he said.

Browne describes the sound as a mechanical buzz of a varying pitch on top of a low roar. The neighborhood is close to other sources of noise, including traffic on Prince William Parkway and the Manassas Airport. But the data center noise is different, Browne said.

“This is just a constant thing, and it’s at an annoying frequency,” he said. “People say it’s irritating. … People say it bothers them physically.” Once you hear it, he adds: “You can’t unhear it.”

Amazon: Data center noise below county limits

Browne says he and his neighbors were initially nervous about going public with their data center noise woes. They are concerned about their home values and hoped they could work quietly with Prince William County and Amazon officials to rectify the problem. But after waiting two months for the first meeting, Browne shared his concerns during citizens' time at a Prince William Board of County Supervisors meeting in July.

Since then, Prince William Board of County Supervisors Chair Ann Wheeler, D-At Large, has asked county staff to look into possible changes to the county's noise ordinance. For residential areas, the county's ordinance limits noise to 60 decibels during the daytime (defined as 7 a.m. to 10 p.m. on weekdays, and 9 a.m. to 10 p.m. on weekends and holidays) and to 55 decibels at night. In industrial areas, however, noise of up to 79 decibels is allowed in the daytime and up to 72 decibels at night.

Here's what that means in common terms: A "normal conversation" generally registers at about 60 decibels, while sound from a washing machine or a dishwasher is about 70 decibels. A reading of 79 decibels is akin to the sound of a gas-powered lawn mower, which can register up to 85 decibels. Anything over 70 decibels is generally annoying, and anything over 80 can cause hearing loss, according to the U.S. Centers for Disease Control and Prevention.

Small differences in decibel readings can mean big differences in the intensity of sound, however. Perceived sound about doubles with every three additional decibel points.

Although Great Oak abuts an industrial area, the county's residential noise limits apply. But the county's noise ordinance exempts air conditioning units from having to meet the lower nighttime limit. That's an issue because the Great Oak residents say the bothersome noise is coming from the data centers' cooling fans, which they say are situated behind louvered openings at the top of the buildings, which both circulate air to cool the computer servers and emit the noise.

"Data center cooling equipment is significantly larger and louder than residential human comfort systems," Browne said. "Removing industrial AC from the Prince William County ordinance exemption is a three-word change."

Still more challenging for the residents, however, is that Amazon conducted a 48-hour sound study at Great Oak last month that showed that the average noise level detected from the data centers was within the county's noise limits for residential areas. Amazon shared those results with the residents during their last meeting on Aug. 5, Browne said.

The study computed an “average” sound level based on measurements taken at 15-minute intervals in three areas of Great Oak. The noise measured the highest where homes are closest to the data center buildings – about 600 feet away. The average measures were 59.1 decibels during the day and 52.3 decibels at night, both of which are below the county’s limits.

Browne detailed the results in notes he shared with *The Prince William Times*. Amazon declined to answer specific questions about the sound study but released a statement saying, in part: “We engage our neighbors to invite their feedback, and recently participated in meetings with the local community where we relayed findings of a third-party study confirming we are operating below local noise limits.”

An Amazon spokesperson, who declined to be named, wouldn’t say what is causing the noise at the data centers or how many of the four data center buildings it is constructing next to Great Oak are fully operational. The statement, however, said: “AWS is committed to being a good member of the community, so we design and engineer our data centers to minimize the impact on our neighbors and the environment.”

News of the sound study frustrated Great Oak residents who say they never saw sound-monitoring equipment in the neighborhood and doubt the study was ever conducted. Instead, they point to a May 16 Prince William Police Department sound reading that measured the data center hum at 60.1 decibels from a resident’s yard. That measure is more than 5 decibels above the county’s nighttime limit.

Browne notes that the county ordinance pertains to instantaneous noise. “Using averages hides the issue,” he said.

The noise has been even worse in recent days, Browne said. On Friday, Aug. 12, a resident whose home is close to the Amazon campus measured the noise on his deck after 10 p.m. at 72 decibels, which Browne relayed to both Amazon and county officials in a heated email.

“That is 17 [decibels] OVER the [county’s] nighttime ordinance level and is ABSOLUTELY INTOLERABLE (Yes, ALL CAPS IS SCREAMING!),” he wrote. “For your reference, 72 [decibels] is like standing in the median strip of I-66 or almost as bad as a hair dryer 1 foot from your ear.”

Again, the resident reported the noise to police, Browne said.

Since the Aug. 5 meeting, Browne is trying to get a written report of the sound study as well as a meeting with Amazon engineers to better understand what is making the noise and how it can be attenuated. Browne says he’s frustrated with both Amazon and the county for not acting more quickly to address

the noise. He wants Amazon to erect a barrier around the tops of the data centers to block the noise, and he wants county officials to amend the noise ordinance to regulate air-conditioning noise from commercial facilities – at the very least.

“What I want is for my neighbors to enjoy the peace they had before,” Browne said. “For 30 years, we had a neighborhood where you could sit on your back deck and enjoy your coffee. That has been taken away from us.”

Regarding the noise ordinance, Deputy County Executive and acting Planning Director Rebecca Horner said Tuesday that the county attorney is still researching what the county can regulate in terms of noise. It’s possible, she said, that the supervisors might have to pursue a new state law to allow them to specifically regulate data center noise.

“Once we know what we’re enabled to do, we will address the noise issue,” she said, noting that she hopes to have more answers by the time the county board meets again in September.

Wheeler did not answer an email seeking comment.

Predicting future data center noise

Data centers have become a source of major controversy in Prince William County within the last year, mostly in response to a much bigger data center complex proposed near the Manassas National Battlefield Park. That project, known as the Prince William Digital Gateway, aims to open about 2,100 acres in the county’s protected “rural crescent” to up to a maximum 27.6 million square feet of data centers -- enough to fill dozens of individual data center buildings, according to some calculations. (The actual number of buildings the proposal would allow, if approved, has not yet been publicly discussed.)

The Amazon data center complex behind Great Oak has four buildings, and four more are planned for an adjacent 62 acres also owned by a data center developer, according to county records.

The data centers behind Great Oak were approved by the previous board of county supervisors in October 2017. The rezoning application and resolution approving the data centers say nothing about noise. The approval was not controversial at the time.

For those who oppose the PW Digital Gateway – as well as the general creep of data centers closer to residential areas – the Great Oak noise complaints are a kind of canary in the coal mine.

The county currently has 38 operating data center buildings, but the Amazon data centers near Great Oak are some of the closest to existing homes. If the county approves the Devlin Technology Park, dozens of homes near Linton Hall and Devlin roads will also end up with data centers nearby. Data centers already underway in Gainesville along I-66 could also impact residential areas and schools.

John Lyver IV, a retired NASA nuclear safety program manager who has a doctorate degree in computational data science and informatics, has used sound measurements from Great Oak to estimate the noise levels that could be endured by several residential neighborhoods and public and private schools around the county in the near future if planned data centers come online.

According to his analysis, which he recently shared with county officials, Great Oak homes could see noise levels rise to the high-60s in decibel range when all eight planned data centers are operational. Likewise, areas around Gainesville, including his own subdivision, Heritage Hunt, could see noise levels in the high-60s and low 70s range by 2040, if the PW Digital Gateway is approved, he says.

Lyver's analysis also notes that 20 public and private schools are less than a half-mile from planned data centers, and at least six of them – Bristow Run, Chris Yung and Piney Branch elementary schools; Gainesville Middle School; Gainesville High School and Pace West – could face data center noise in the mid to high 70 decibels in the coming years. Lyver's analysis has not been independently verified.

"Noise is a medical issue," Lyver said when asked about his analysis. "Noise causes a lot of stress-related illnesses. … The county is knowingly putting these residents at risk by approving all of these data centers without putting noise restrictions on them."

Reach Jill Palermo at jpalermo@fauquier.com

Brittany Latack

From: umbrells@gmail.com
Sent: Thursday, September 8, 2022 8:54 AM
To: powerline@domionenergy.com
Cc: citizencomment; DelMWeber@house.virginia.gov; DelEGuzman@house.virginia.gov; jillvogel@senate27.gov
Subject: Amazon Data Center in Warrenton

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

According to several travel publications, Warrenton is said to be one of the 10 most beautiful small towns in Virginia.

I would like to voice that I am against the construction of an Amazon Data Center in Warrenton, Va. I most certainly oppose the unsightly 230-kV transmission lines to be constructed by Dominion Energy which sole purpose is to power the proposed substation at the data center.

I urge the Warrenton Town Council members not to approve a data center in Warrenton.

Michelle Umbrell
Concerned Resident of Warrenton, Va

Sent from my iPad

Brittany Latack

From: Joe Lowe <lowe.joseph7@gmail.com>
Sent: Tuesday, September 13, 2022 9:21 PM
To: citizencomment
Subject: Amazon data center

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Dear Members of the Warrenton Town Council,

As a citizen of Fauquier County for 10 years, I am writing to express my grave concern and opposition to the approval of a Special Use Permit (SUP) for a Data Center within Warrenton's town limits. I relocated to Warrenton in 2012 in large part because of its rural and scenic qualities, as well as its high quality of life. .

Warrenton is home for me, my wife, and two small children.We share it with many others who cherish the aesthetic quality, peace, expanses of forest, safety and security, and historic preservation.

There is so much development in counties to the north and south of Fauquier County. A large data center will not only destroy the character of Warrenton, but will result in construction of power substations and mega power lines for miles in the county.

Below is a list of reasons for my opposition to granting the SUP for the Amazon Data Center.

WTC (Warrenton Town Council) amended the Zoning Ordinance on short notice last summer to allow Data Centers to be within town limits. It was done quickly and with minimal community input. This is a serious breach of trust between the community and the elected Town Council, and the WTC should prioritize restoring trust with their citizens, not accommodating tech giants.

Remington & Vint Hill are Planned Commercial Industrial Districts, and Data Centers should be kept there to protect our natural landscape and habitats.

The proposed HB791 legislation in Richmond will tie data center tax revenue for the community to property/asset depreciation, NOT commercial income. This likely means a significant reduction in expected tax revenue for our community from this initiative.
WTC (Warrenton Town Council) does not get to decide where the high-tension power lines will be placed to service the Amazon Data Center. The SCC (State Corporation Commission) will determine that. Approval of Amazon's SUP would place a great burden and battle on your constituents to contend with Dominion about the power line routing location, and above ground vs. below ground lines.

Amazon's SUP is lacking significant required information and detail per the established Special Use Permit Requirements. WTC should not even entertain this application until a complete and detailed application has been submitted for approval.

The SUP cites that "significant tax revenue" will be generated for the community, but provides absolutely no details or specifics on amounts.

No details have been given on the environmental impacts, and no Environmental Impact Assessment has been

completed as part of the application (to include the source and usage of water for cooling needs, as well as the dis plan for the water)
It does not include a Load Letter, and therefore we cannot verify power need of the Data Center and are unwilling to accept Dominion's calculations (as that is a conflict of interest, given they are the sole source provider of the electricity). The Load Letter should be provided from an independent party.

Noise calculations are lacking in the document.

Includes a height precedent, which if approved, gives Amazon an open door to build vertically--is that truly acceptable to our community?

The SUP states that "the applicant [Amazon] will bear the cost of new infrastructure that will be needed and any upgrades to existing facilities" and yet, there is absolutely no analysis provided to determine what those infrastructure costs might be.

Thank you for your consideration,
Joe Lowe

Brittany Latack

From: CHARLES CARROLL <ccarrolliv@gmail.com>
Sent: Friday, October 21, 2022 5:26 PM
To: citizencomment
Subject: Amazon site

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

As a resident of Fauquier County, I oppose the Amazon proposal in Warrenton next to Country Chevrolet. It will ruin the eastern entrance to a country town. The electricity and water consumption from the aquifer are an issue. Where will the power come from as we try to make our grid secure with green energy? The power lines should be built only to help people and not Amazon. The substation for them is not needed for our present needs.

Say no to Amazon and their proposals. The taxpayers of Virginia should not subsidize Amazon.

I am hoping to see that project due much like Disney in Manassas.

Our lovely area can survive without helping Amazon and the insatiable need for data .

Keep it country. We have maintained our open space since 1999.

Charles and Geraldine Carroll
Delaplane, VA.
540.592.9092

Cell 312 316 0401.

Brittany Latack

From: Stephen <kodiak25@live.com>
Sent: Friday, October 21, 2022 4:12 PM
To: citizencomment
Subject: Amazon

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Please vote No against Amazons new data center.

Steve Jablonski
Brandywine Valley Civil War Roundtable

Brittany Latack

From: Stephen <kodiak25@live.com>
Sent: Friday, October 21, 2022 4:12 PM
To: citizencomment
Subject: Amazon

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Please vote No against Amazons new data center.

Steve Jablonski
Brandywine Valley Civil War Roundtable



For the best experience, open this PDF portfolio in Acrobat X or Adobe Reader X, or later.

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Brittany Latack

From: Tanina Linden <tanina@thelindens.org>
Sent: Sunday, October 23, 2022 12:49 PM
To: citizencomment
Subject: Big threat to the invaluable landscape of the Heritage Area

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Dear Town of Warrenton,

Please do not grant Amazon permission to build a 220,000 square-foot data center on the 42-acre tract where Route 17 and Routes 15 & 29 converge. In addition to the data center, project approval would likely lead to the addition of large electrical transmission lines across Fauquier County, as well as a new 8-acre substation. All of this construction will create a gruesome eyesore!

Approval of this proposal will permanently change Warrenton's small-town appeal and Fauquier County's rural character. The significant noise and negative visual impacts will affect citizens and visitors alike, who will be greeted by a fifty-foot-high building on an elevated site at the eastern entry to Warrenton. The data center and power lines will be visible from many parts of both Warrenton itself and the surrounding countryside.

Please help protect the Virginia Piedmont Heritage Area's scenic landscape by turning down this inappropriate proposal. Let Amazon put this monstrosity in an area that has already been ruined by over development. Please protect the beauty that still remains in Virginia!

Thank you!

Sincerely,
Tanina Linden

Tanina Frouge Linden, CFP®

Brittany Latack

From: Azmir Kabilovic <azmir1981@icloud.com>
Sent: Monday, October 24, 2022 5:18 PM
To: Planning Department
Subject: Support for Amazon Data Center

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Good evening,

How to submit a public comment to show my support for Amazon Data Center project. Only people opposing it are getting publicity. I'm sure there is more people supporting this project the opposing.

Thanks.

Sent from my iPhone

Brittany Latack

From: Regan Washer <reegwash@live.com>
Sent: Tuesday, October 25, 2022 10:00 AM
To: citizencomment
Subject: Amazon Data Center work session

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

I have sent previous emails and will continue to do so on this topic. We MUST NOT approve this amazon data center project. The promise of tax revenue does not justify the demolition of our small town/ rural county. One we open the flood gates to big tech companies, we will see an influx of special exemption allowances, zoning request changes, etc.

Regan Washer
Residence in Orlean, VA
703-975-4350

Brittany Latack

From: Catherine Johns <cajfromdctova@gmail.com>
Sent: Wednesday, October 26, 2022 10:11 AM
To: citizencomment
Subject: Amazon Data Center - A Voting Citizen's Concern

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Dear Sirs,

I am extremely concerned that Amazon is seeking the Warrenton Town Council's permission to build a 220,000 square-foot data center on a 42-acre tract adjacent to Country Chevrolet where Route 17 and Routes 15 & 29 converge.

Approval of this proposal will permanently change Warrenton's small-town appeal and Fauquier County's rural character, and significant noise and visual impacts will affect citizens and visitors alike. Citizens and visitors will be greeted by a fifty-foot-high building on an elevated site, right at the eastern entry to Warrenton. The data center and power lines will be visible from many parts of both Warrenton itself and the surrounding countryside.

This data center is a threat to our incredible historic scenic landscape. It is not what the town, the residents, the visitors and the general public at large want. Please don't be short sighted and blinded by Amazon's attempt to destroy our neighborhoods for profit.

Best regards,

Catherine Johns

Brittany Latack

From: Karen Belle <d17574@verizon.net>
Sent: Thursday, October 27, 2022 8:58 PM
To: citizencomment
Subject: Please - do not allow data centers

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Good Evening - I am a 37 year resident of Loudoun County. I have experienced the changing of our rural, peaceful, almost idyllic area into a fast paced, overcrowded, & unsightly example of greed. Please please please do not do the same to Fauquier County.
The mega centers/ Data centers requested are unsightly. Take a drive on Rt 28 in Sterling, or anywhere in Ashburn, & you will see. And what is to happen when these gigantic gray buildings are deemed to be obsolete in a few years time? What then?
Please do not make the mistakes made in Loudoun. Protect the beauty & history of your county. Say 'no' to data centers.
Karen Belle
Hamilton

Sent from the all new AOL app for iOS

Brittany Latack

From: Florence Keenan <keenanlori@gmail.com>
Sent: Wednesday, November 2, 2022 3:40 PM
To: citizencomment
Cc: Holder Trumbo; Gerhardt,Rick; maryleigh.mcdaniel@fauquiercounty.gov; kevin.carter@fauquiercounty.gov; Butler, Chris
Subject: Amazon Data Center Application

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Dear Planning Commissioners and Town Council Members:

I am a resident of Fauquier County and live near Rectortown in the Marshall District on a farm. I am also Chair for Fauquier of the Goose Creek Association, Vice Chair of the Virginia League of Conservation Voters, and a board member of the Citizens for Fauquier County. However, I submit this comment only as a resident and tax payer.

Please delay any vote this year on Amazon's application to build a data center in Warrenton. What's the rush? Why has this Planning Commission meeting been scheduled so close to year-end before newly appointed and elected members of the Planning Commission (PC) and Town Council TC), as well as the public, have an opportunity to analyze a complete SUP application? If the PC votes on November 15th, the TC likely will have the opportunity to vote in December on the application, regardless of the outcome of the PC vote.

Think about it—is that really appropriate and in the interests of the public that you serve? Will that pass the "smell" test given all that we have learned about the process leading up to this application?

Warrenton is not only the town residents' home, it is our county seat. The residents of this county have worked for over half a century to preserve and protect this county from the environmental depredation and degradation that has occurred in nearby counties. The public and the PC have revealed many flaws in Amazon's application and the process that led to it. To approve such an application now would only breed public mistrust for our elected officials and other irreparable consequences for the town and county.

Do not vote prematurely on this Amazon application. Give this application its due and delay any vote until the application is complete and town staff, officials and the public have had an opportunity to evaluate it fully, fairly and impartially.

Sincerely yours,

Florence/Lori Keenan

Brittany Latack

From: Jennifer Gray <jengailgray@gmail.com>
Sent: Friday, November 4, 2022 11:03 AM
To: citizencomment
Subject: Amazon data centers special use permit, concerned resident opposition

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Dear Warrenton Town Officials,

I am writing to express my concern for allowing Amazon the requested Special Use Permit (SUP) 2022-03 Amazon Data Center. I strongly oppose you approving this special use permit.

I was born and raised in Fauquier County and returned to live here again six years ago to raise my own family because of what an agriculturally friendly community it is. We live here to enjoy the countryside and do not want to lose what we hold most dear to us by this kind of harmful development.

This special use permit should not be approved because:

1. It does not meet SUP criteria consistent with the town's comprehensive plan.
2. The electrical transmission towers will litter our county and scenic views and lower property values.
3. It will create major noise and viewshed impacts.
4. It will open the door for even more data centers to come and ruin our way of life here.
5. This will not bring the right kind of economic development that we need or long-term job creation.

I urge you to deny Amazon Data Services, Inc. request for this special use permit and protect our way of life in Fauquier County.

Thank you for your time and attention.

Jennifer Gray
Fauquier County resident

Brittany Latack

From: John Buursink <john@buursink.org>
Sent: Wednesday, November 9, 2022 11:05 AM
To: citizencomment
Subject: Amazon Data Center

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

I am against the Amazon Data Center in Warrenton
I say NO to Amazon and Dominion.

I ask the town to postpone any action until:

1. **Amazon submits a complete application.**
2. **New planning commission and new town council are in place;**
3. **A comprehensive and impartial review is conducted to understand how Amazon, and possibly others, exerted inappropriate influence on the process, and;**
4. **Town residents are properly informed about the proposed facility and the town's long-term data center plans.**

And if the town decides to vote without taking these four actions, they should <u>deny the proposal.</u>

Dr, John Buursink
8495 Meadows Road
Warrenton 20186

Brittany Latack

From: Tom <tomrcor@aol.com>
Sent: Wednesday, November 9, 2022 10:13 AM
To: citizencomment
Subject: Amazon Data Center/ Warrenton

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Having been born in Fauquier County and having lived and taught there for several years, I still have a deep affection for and interest in that area.

I have followed the plans for construction of "data centers" in Warrenton and Prince William County with interest.

I encouraged the Planning Council and the Town Council to consider all aspects of this planned addition carefully and thoroughly before making any final decision.

Its location, size, noise, and likely congestion will seriously and permanently impact the special quality of the Warrenton area and its surrounding landscape.

I know that we cannot prohibit "progress" all together, but the special beauty and community of Warrenton deserve protection and careful planning to maintain its special qualities.

Thomas R. Corbin
4624 34th ST S
Arlington, VA 22206

Brittany Latack

From: K McCullough <ktkcmcc@gmail.com>
Sent: Wednesday, November 9, 2022 7:01 PM
To: citizencomment
Subject: Amazon Data Center opposition

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

I am categorically opposed to any Amazon data center in Fauquier county. For years and years, this county has fought to remain small and rural, while adjacent counties have exploded with all-too-well-known signs of urban sprawl, most notably the huge power lines that mar the landscapes to the east. Is it possible that the planning commission members prefer to see power lines when they look out over Warrenton and Fauquier County. If they do, then they are the only ones.
In a mountainous region of Indonesia, those officials chosen to maintain the water quality of the downhill streams are required to live at the bottom of the stream. In that way the villagers are assured the officials will closely monitor the water quality……or be forced to drink water polluted by their own mismanagement.
Perhaps, we could insist that those on the planning commission live directly under the power lines that Amazon requires for its purposes.
There is absolutely no reason for Amazon to put their data center in Warrenton! The natural beauty of which Prince William County could boast in the past has already been irretrievably ruined. For Gods sake, don't allow the planning commission or Amazon or anyone else to destroy our little corner of paradise.
Local resident

Sent from my iPhone

Brittany Latack

From: Brian Smith <briantsmith99@gmail.com>
Sent: Wednesday, November 9, 2022 10:30 AM
To: citizencomment
Subject: PLEASE vote against the Amazon Data Center

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Dear sirs,

Data centers don't belong adjacent to residential areas. They do not belong within town boundaries. This is the worst thing you could do for/to Warrenton.

Brian Smith

Brittany Latack

From: floyd thompson <floydt51@gmail.com>
Sent: Wednesday, November 9, 2022 11:45 AM
To: citizencomment
Subject: Opposition to Amazon approved w/o more info

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

I register my opposition to Amazon being approved on 11/15/22 before Amazon fully addresses all requests for more data and proof no additional overhead power lines needed for this data center.
Floyd A Thompson III.
6697 Suffield Lane
20187.
/s/

Sent from my iPhone

Brittany Latack

From: Dawn M. Barclift <dawn_barclift@hotmail.com>
Sent: Thursday, November 10, 2022 5:06 PM
To: citizencomment
Subject: NO to the Amazon Data Center

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

I am strongly against the proposed data center and supporting infrastructure.

V/r,

Dawn M. Barclift

Sent from my iPhone

Brittany Latack

From: tom.black <tom.black@mac.com>
Sent: Thursday, November 10, 2022 8:08 AM
To: citizencomment
Subject: Opposition to the Warrenton Planning Commission Public Hearing for Amazon SUP Application

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

My family would like to voice our opposition to the horrific conversion of the town of Warrenton, from an idyllic small town to an ugly congested town devoid of any character or soul.

We would like you to postpone any action until the following steps are taken:
- Amazon submits a complete application
- The new planning commission and town council are in place
- A comprehensive and impartial review is conducted to understand how Amazon and possibly others
exerted inappropriate influence on the process
- Town residents are properly informed about the proposed facility and the town's long term data
plans.

The proposal should be denied if the town decides to vote without taking the above four actions.

Please stop pushing through important decisions that only benefit a select few without any oversight from
the people that actually live in Warrenton.

Thank you,

David Briggs
tom.black@mac.com

Brittany Latack

From: Denise Harris
Sent: Thursday, November 10, 2022 10:09 AM
To: Brittany Latack
Subject: Fwd: Please Say No to Amazon

Denise M. Harris, AICP
Planning Manager
Town of Warrenton

Begin forwarded message:

> **From:** Meryem Grammick <mhgrammick@gmail.com>
> **Date:** November 10, 2022 at 9:54:35 AM EST
> **To:** Susan Helander <shelander@warrentonva.gov>, James Lawrence <jlawrence@warrentonva.gov>, Steve Ainsworth <sainsworth@warrentonva.gov>, Gerald Johnston <gjohnston@warrentonva.gov>, Ali Zarabi <AZarabi@warrentonva.gov>, Ryan Stewart <rstewart@warrentonva.gov>, Denise Harris <dharris@warrentonva.gov>, Rob Walton <rwalton@warrentonva.gov>
> **Subject: Please Say No to Amazon**

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Dear Planning Commission Members:

Please vote to deny Amazon's data center application. You have heard all the reasons before so we will not belabour you with them at this point. Fauquier County is a precious jewel, a unique flower surrounded by weeds. Please do not "Loudoun and Prince William" this beautiful, beloved place we call home.

We are counting on you to make the right decision. Thank you.

Sincerely,

Meryem and Charles Grammick
5290 Ambler Drive
Warrenton, VA 20187

Brittany Latack

From: Christopher Jenkins <tchrisjenkins@gmail.com>
Sent: Thursday, November 10, 2022 5:05 PM
To: citizencomment
Subject: Amazon

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

How can you hold a hearing when the Amazon application is incomplete and Dom Elec is changing the power supply route?
What is the hurry? Amazon isn't going anywhere. You owe transparency to us Town residents.
T Christopher Jenkins
Sent from my iPhone

Brittany Latack

From: Karen Chaffraix Waller <kchaffraix@aol.com>
Sent: Thursday, November 10, 2022 11:50 AM
To: citizencomment
Subject: Data center - My husband and I vote NO

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

I don't think we can make the meeting, but we do not trust AMAZON to do the right thing for our county, and even if its intentions were good, we will experience noise and other pollution and problems down the road if we allow this encroachment. Please stick to the development plan the town/county has in place.

Thank you.

Karen and Bill Waller
11600 Hume Road
Hume, VA 22639
kchaffraix@aol.com

KC Waller
Hume, VA

Brittany Latack

From: Amanda Warren <amanda@glorymorning.com>
Sent: Thursday, November 10, 2022 1:45 PM
To: citizencomment
Subject: opposition to Amazon data center

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Dear Sirs and Madames,

I plead with you to deny the permit to build an Amazon data center at Routes 17, 15 and 29. This would create such an insult to the character and beauty of your town and surroundings.

I am not a resident of Virginia, but a frequent visitor. My daughter attends college in your state, and as a history buff I regularly travel there. My sister lived for years in Warrenton and I have visited the historical sites of your city and vicinity numerous times, and plan to continue to do so in the future.

The beauty and history of your locale are a major draw for many people like me. Please do not ruin it! Don't let Amazon eat up a county that is closest to Heaven on Earth. Vote no!

Thank you,
Amanda Warren
Flowery Branch, GA

Brittany Latack

From: Jack V Scherer <jack.scherer@earthlink.net>
Sent: Friday, November 11, 2022 9:20 AM
To: Planning Department
Subject: Amazon Data Center

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

I attended the meeting conducted by Protect Fauquier, Citizens for Fauquier County and Piedmont Environmental Council concerning the Amazon data center and associated Dominion Electric transmission line. My interest initially was the transmission line, but I became even more concerned about the data center when I heard the presentations made. I strongly recommend that you watch and listen to the presentations before you make a decision on Amazon's Special Use Permit application.

This is what concerned me and I believe should concern you:

- The number of homes and businesses within half a mile of this site and the effect that the noise this data center will produce in this area.
- The distance that this building- a distinct and ugly box, 57ft tall, on a ridgeline- will be visible.
- The impact that the required transmission line will have on rural Fauquier County.
- Finally, the way that Amazon has demanded officials from the Town of Warrenton deal with this matter and the fact that those officials agreed to deal with Amazon that way. Amazon was able to hide behind Non-Disclosure Agreements in its on-going discussions with Town officials. Amazon was also able to skirt public meetings laws by limiting the number of Town officials in order to avoid creating a public record of what was under discussion. Finally, Amazon was able to convince planning staff to suggest a change to the zoning on certain parcels of land without disclosing who was really requesting the change. It might be legal for town officials to sign NDA's, but was it proper? Similar question for avoiding public record requirements.

Approving this Special Use Permit clears the way for additional data centers on the other parcels that you re-zoned in April 2021. How will the Town Council be able to turn down a second data center after the first is approved? Dominion's transmission line proposal provides enough power for 20 similar sized data centers. What is the impact of building transmission lines from the Amazon site to other data centers inside the Town?

It will be easy for you to gather enough information to support your decision-making. First, those three organizations have presentations already prepared- you should watch, listen and ask questions. You should work to resolve any differences between what Amazon has told the Town and what is in those presentations. Second, there are existing data centers in Loudon and Prince William Counties. Take the opportunity to visit. A tour isn't necessary- stand outside and listen. Finally, ask yourself this: are you proud of the way the Town government has dealt with this matter, and with the possible exception of tax revenue and a handful of jobs (which aren't guaranteed to go to Town residents), what benefit does this data center provide the people of the Town of Warrenton?

Sincerely,

Jack Scherer
4405 Bill Ct
Warrenton, VA 20187

Brittany Latack

From: Winny Buursink <winny@buursink.org>
Sent: Saturday, November 12, 2022 9:05 AM
To: citizencomment
Subject: Amazon Blackwell Road Data Center

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

To: The Warrenton Planning Commission
Date: November 12, 2022

Dear Planning Commissioners:

I am writing to ask you **to not vote** on the Amazon Special Use Permit (SUP) application at your public hearing on Tuesday, November 15th.

The reason is that the application is quite incomplete as some of you and Amazon stated publicly on October 25th, acknowledging information gaps on critical issues including noise/vibration, view shed impacts and power supply. A vote that would prematurely advance Amazon's incomplete application to the Town Council would further discredit the planning commission and how the town has handled the entire Amazon situation.

I attended several meetings related to this issue and based on what I know, I am vehemently opposed to this data center. It would seriously tarnish one of the main gateways into our historic town, and would be visible from many parts of the town and even the county. The noise and vibration it would generate constantly would cause physical and mental harm to hundreds of residents, and it would lead the way for more data centers and massive power towers and transmission lines.

Based on the town's own rules, approving any SUP must meet two conditions. It must first be consistent with the town's comprehensive plan. Second, the development proposed under the SUP must not adversely affect surrounding homes and businesses. **The Amazon data center meets neither one.**

If this SUP is approved it will raise serious suspicion who will benefit financially from this decision. It most likely will also tarnish your reputation.
I sincerely hope you come to your senses and if you really love this town and this county, and you have a conscience, you vote NO.

Thank you for the opportunity to voice my opinion.

Sincerely,

Willemina Buursink
8495 Meadows Rd
Warrenton, VA 20186

Brittany Latack

From: Hazle Edens <hay1936@gmail.com>
Sent: Saturday, November 12, 2022 8:47 AM
To: citizencomment
Subject: AMAZON DATA CENTER

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Fauquier County is one of Virginia's most beautiful Counties; it is rural and should remain so.
If Amazon Data Center is built in Fauquier County it will only be the start, a foot in the door.
Then more large businesses will be asking for building approval/zoning change and like dominoes our county will lose it's rural-ness.
Amazon Data Center should be built next to cities, areas that are already zoned for businesses such as the Data Center.
Why come here and try to change a zoning that has been put in place for a very good reason; to keep Fauquier Rural.

Brittany Latack

From: Jessica Mathews <jmathews@ceip.org>
Sent: Saturday, November 12, 2022 9:49 AM
To: citizencomment
Subject: Nov 15 meeting

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

TO – members of the planning commission
Amazon's proposal is critically incomplete and changing almost by the day. So is Dominion power's. it would be a travesty for the Commission to proceed to a vote in such a situation. Powerful forces are obviously trying to stampede Town and County gov'ts to move forward in the face of unsettled facts. That must be resisted. Please use your meeting to pin down all the issues that need to be fully disclosed and settled.
Thank you
Jessica Mathews

Sent from Mail for Windows

Jessica T. Mathews
Distinguished Fellow
Carnegie Endowment for International Peace
T 1 202 939 2210 | **M** 1 202 550 3814 | jmathews@ceip.org

CarnegieEndowment.org

*Get **Carnegie This Week** for the latest from our experts around the world.*

Brittany Latack

From: Michael Morency <broadhollow@mac.com>
Sent: Saturday, November 12, 2022 10:06 AM
To: citizencomment
Subject: Amazon Data Center

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

To the Planning Commission:

I have been following the story of the data center from its genesis. It appears to me to be one of back-room dealings, from John Foote helping to write the ordinance which would allow a data center in town in the first place, to Brandi Schaeffer guiding the ordinance through the adoption process and then going to work for Amazon. It also appears that the application is incomplete and therefore there is not a complete picture of both the benefits and the negative impacts. Why rush this thing through? Approving a data center on that property will have effects far more reaching than just there; not only will precedent be set for more of them in the town, but the power lines associated with this one and other future data centers are still unknown and will have great effect on residents and business owners alike.

Please postpone any decision on the application until all information is complete and a fully informed decision can be made.

I am a lifelong resident of Fauquier County and care deeply about the town as well as the county.

Sincerely,

Michael Morency
The Plains

Brittany Latack

From: Duval Carter <dansby911@yahoo.com>
Sent: Sunday, November 13, 2022 6:14 PM
To: citizencomment
Subject: Amazon Data Center

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Please Do Not OK the Amazon Data Center in Warrenton. Please protect the heritage area.

Duval Carter

Brittany Latack

From: stacie dcindigos.com <stacie@dcindigos.com>
Sent: Sunday, November 13, 2022 6:09 PM
To: citizencomment
Subject: Do Not Vote on an incomplete submissiont

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

To: The Warrenton Planning Commission
Subject: Amazon Blackwell Road Data Center

Email: citizencomment@warrentonva.gov
Date:

Dear Planning Commissioners:

I am writing to ask you to not vote on the Amazon Special Use Permit (SUP) application at your public hearing on Tuesday, November 15th.

The reason is that the application is quite incomplete as some of you and Amazon stated publicly on October 25th acknowledging information gaps on critical issues including noise/vibration, view shed impacts and power supply. A vote that would prematurely advance Amazon's incomplete application to the Town Council would further discredit the planning commission and how the town has handled the entire Amazon situation.

Based on what I know, I am opposed to this data center. It would seriously tarnish one of the main gateways into our historic town, and would be visible from many parts of the town and even the county. The noise and vibration it would generate constantly would cause physical and mental harm to hundreds of residents, and it would lead the way for more data centers and massive power towers and transmission lines.

Based on the town's own rules, approving any SUP must meet two conditions. It must first be consistent with town's comprehensive plan. Second, the development proposed under the SUP must not adversely affect surrounding homes and businesses. The Amazon data center meets neither one.

Thank you for the opportunity to voice my opinion.

Sincerely,

Stacie And Kenneth Clark
8431 The Mountain Rd
Warrenton, Va 20186

Brittany Latack

From: BD <bd12dev@gmail.com>
Sent: Sunday, November 13, 2022 12:03 PM
To: citizencomment
Subject: AMZN SUP

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

To: The Warrenton Planning Commission
Subject: Amazon Blackwell Road Data Center

Email: citizencomment@warrentonva.gov
Date: 13 Nov 22

Dear Planning Commissioners:

I am writing to ask you **to not vote** on the Amazon Special Use Permit (SUP) application at your public hearing on Tuesday, November 15th.

The reason is that the application is quite incomplete as some of you and Amazon stated publicly on October 25th acknowledging information gaps on critical issues including noise/vibration, view shed impacts and power supply. A vote that would prematurely advance Amazon's incomplete application to the Town Council would further discredit the planning commission and how the town has handled the entire Amazon situation.

Based on what I know, I am opposed to this data center. It would seriously tarnish one of the main gateways into our historic town, and would be visible from many parts of the town and even the county. The noise and vibration it would generate constantly would cause physical and mental harm to hundreds of residents, and it would lead the way for more data centers and massive power towers and transmission lines.

Based on the town's own rules, approving any SUP must meet two conditions. It must first be consistent with town's comprehensive plan. Second, the development proposed under the SUP must not adversely affect surrounding homes and businesses. **The Amazon data center meets neither one.**

Thank you for the opportunity to voice my opinion.

Sincerely,

R. A. Devanney
6573 Timothy Ln

Warrenton

Brittany Latack

From: LORA JENKINS <leetonhill@aol.com>
Sent: Sunday, November 13, 2022 6:01 AM
To: citizencomment
Subject: Amazon Date Center

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Dear Members of the Planning Commission,

This Amazon Data Center should never have been allowed where it is proposed to be, and the whole process has bypassed an open and fair discussion.(Closed door meetings) Please note the former Town manager quit and within a month went to work for Amazon! Now you have before you a proposal that has not even been completed. I urge you to turn this incomplete application down for the best future of Warrenton.

Sincerely,

Lora H. Jenkins

Brittany Latack

From: K Lisbeth <klisbeth@aol.com>
Sent: Sunday, November 13, 2022 10:54 AM
To: citizencomment
Subject: Please OPPOSE Amazon Data Center SUP

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Members of our Warrenton Town Council,

***Please* OPPOSE an SUP for Amazon's Data Center.**

Warrenton is a *community* (people sharing in-common interests.)
An IN-TOWN Data Center is **WRONG - antithetical to our community's common interests and our common character.**

NO Data Centers were in our Comprehensive Plan for future quality-of-life improvements.
A Data Center (concrete bunker) does not serve people, nor is it compatible with our living environment.

A Data Center does not expand our commerce base, residential capacity, or accessible aesthetic/recreational space. It would be a fenced, guarded, secured, confined compound adjacent a major retail center, large townhouse complex, and memory care facility. A highly-visible Data Center would be a horrendous, over-illuminated scab at our Town's gateway.

Moreover, **Amazon does not exhibit caring, or good neighbor qualities** - no regard for our citizenry or our bucolic Town.
- Amazon is deceptive; Amazon is entirely *self-serving.*
- Amazon is *intentionally* not fully compliant (...Does "getting played" not INSULT you?)

- Amazon **will never cooperate, *never* be forthcoming under the veil of "*proprietary info*."**

Amazon purports noise compliance here when their Data Centers in PW are "earaches."
Amazon claims noise here will be compliant except for a "rural parcel." ...*Where* are current, or future "rural" spaces in our small Town limits?

Amazon's **secretive, *money-buys-approval* deportment is a RED FLAG nightmare relationship**.
There is **nothing compatible, or complementary about Amazon's business model -** nothing our resident's will ever pride in...gain any betterment from...or get cooperation, caring, interacting from Amazon with our better-deserving community.

Please do not SELL us OUT

***Please* do not SELL OUT** the generations of past, present, future families that have striven to make

Warrenton an accessible, *people-first* Town to grow-up and live in.

- klisbeth

Brittany Latack

From: K Lisbeth <croix000@aol.com>
Sent: Sunday, November 13, 2022 5:41 PM
To: citizencomment
Subject: VOTE NO - Amazon Data Center

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Town Council:

We beg you... VOTE NO on the SUP application for Amazon's Data Center.

A Data Center contributes *nothing* to our citizenry...
does not bring one iota of use or enjoyment of that prime IN-TOWN parcel.

***Nothing* about a Data Center will make us pleased, or proud, or ever make our Warrenton "EXPERIENCE" the least bit better.**

- Croix Otem

Brittany Latack

From: Cindy Rohls <cindyrohls3@hotmail.com>
Sent: Sunday, November 13, 2022 11:41 AM
To: citizencomment
Subject: Data Center

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

I wish to oppose the placement of the Data Center in Warrenton, Va. Also the substation should not be placed in the area that has been chosen. These monster facilities are not compatible with the areas landscape. Just because big money comes around knocking doesn't mean we as a town, need to take a knee to their wants. This complete complex, Data Center and Substation are too close to the everyday life of the residents. I say "NO" to the Data Center.

Cindy Rohls
Sent from my iPad

Brittany Latack

From: Fred Smith <fredaprl@infionline.net>
Sent: Sunday, November 13, 2022 3:15 PM
To: citizencomment
Cc: Planning Department
Subject: Comments for the Proposed Amazon Data Center SUP Public Hearing of 15 November 2022

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

To Whom It May Concern,

I continue to believe this data center opportunity is inappropriate at the proposed Amazon location on Blackwell.

Should you believe, the opportunity should go ahead, I strongly request that you defer any action by the Planning Commission until open issues with the supply of electrical power, noise related to the data center, and lighting are resolved.

Open Issues

1.) Electrical Service/Substation. The new VEPCO/DOM study (interesting timing!) calls for a new substation either in the Town of Warrenton (off Falmouth St.) or in Section 2 of the proposed boundary adjustment. The substations are designed to support up to a 300MW load. This is about eight times the projected Amazon load. Both sites will impact residential streets such as Falmouth, Old Meetze and Walker Drive along with the Greenway recreational area.

> The ability of the Town of Warrenton to influence the design of this electrical infrastructure will be severely hampered if it approves the data center before the design is fixed and agreed.

Recommendation. Delay approval until the electrical service issues are resolved.

2.) Burial of the Distribution Lines. The town zoning code requires the burial of the electrical lines that supply the data center. The proposed draft conditions, prepared by Mr. Foote's team, of the Special Use Permit changes the obligation to a conditional one of a request. This language can allow the data center to go ahead even if the electrical supply is not buried.

Recommendation. Replace the term “shall request” to “will cause” in the conditions associated with the SUP. This removes the conditional language and ensures full conformance with the Zoning Ordinance.

3.) Noise Ordinance. Item 16 of the SUP conditions document states “the Applicant shall conduct a separate sound study one month after commencement of business operations to ensure compliance”. The language is perfect for a normal retail establishment such as Joe’s Pizza shop or Warrenton Foreign Car. The language is certainly inappropriate for a complex facility such as the Amazon Data Center.

The issue is when does the “commencement of operations” happen? Is it when Amazon:

- Accepts the facility in its Data Center Infrastructure Management system
- Executes its first production computational function
- Has the facility is in a full production status (maybe 2 years out)
- Or some point in between?

Additionally, the noise study should take place when the Amazon facility can be operated in its noisiest configuration or manner authorized under the Special Use Permit - all generators and air chillers operating concurrently at a minimum 50 percent loading. Some of the sample commencement of operations points will happen before the facility can meet this condition.

Note: Mr. Foote stated the facility can commence production activities on ‘bridging power’ and the build out incomplete.

Recommendation: Require Amazon to conduct the noise study within three months after the facility is sufficiently built out to be configured in the specified manner (all generators, air chillers, etc.) **and,** to ensure public confidence in the overall approach to noise management, cause Amazon to fund a system that provides continuous noise measurements of the facility from the date it starts generator installations for a period of three years. This system will provide the town with near real-time sound level measurements.

4.) Perimeter Fence Lighting. Item 17 of the conditions for the SUP does not address lighting of the perimeter fence. Mr. Foote stated that Amazon will illuminate fence that

runs around the perimeter of the facility. This is a normal practice for high security facilities.

By being located on the edge of the property, it will be close to adjacent properties and roadways. (See yellow dotted line of Mr. Foote's presentation to the Planning Commission for the location of the perimeter fence and walkway. See also Amazon's letter of 9 September 2022 where it states The Applicant has no need to illuminate anything but *its secure perimeter* and internal areas.)

Recommendation: Modify Item 17 of the SUP conditions document to include the statement that "Where not accomplished by building mounted lighting, the lighting of the perimeter fence will meet the same standards as exterior building mounted lighting (time of day dimming, LED technology, etc.) and individual lights cannot be higher than 3 feet above the fence.

Should the town desire to go ahead with the SUP, I believe it is more important to get it done correctly and completely than getting it done quickly. The incomplete request from Amazon certainly releases the town from any timelines. Getting it the SUP approved in this quarter or next quarter will not change Amazon's ability to meet its customer contractual obligations. They always have option 2.

I hope you find this email of use. Thank you for your time.

Regards,

Fred

--
Fred M. Smith
6343 Old Bust Head Road
Broad Run, VA 20137
Cell +1 540 905 5463

Brittany Latack

From: anvermr@everyactioncustom.com on behalf of Miriam Anver <anvermr@everyactioncustom.com>
Sent: Monday, November 14, 2022 7:56 PM
To: Rob Walton
Subject: Please Deny the Amazon Data Center Special Use Permit:

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Dear Director of Community Development Rob Walton,

I am writing to urge you to vote against the Special Use Permit application for an Amazon data center on Blackwell Road.

In addition to the numerous flaws of Amazon's application, including the lack of a completed noise study and the known visual impacts to the Town's gateway, Dominion has revealed plans for one of two potential offsite substations to serve the data center less than a week before the scheduled Planning Commission hearing. This recent development calls into question what new impacts the proposed data center and its associated energy infrastructure might have on Warrenton's historic downtown, property values and the rural character that draws residents and visitors both to the Town and County.

Approval of this application could also lead to an onslaught of data centers with miles of above ground 110 ft power towers destroying our county and homes.

With so many unknowns, I ask that the Town please deny this application.

Thank you for hearing my concerns.

Sincerely,
Dr. Miriam Anver
2789 Crenshaw Rd Marshall, VA 20115
anvermr@gmail.com

Brittany Latack

From: Cindy Burbank <cindy.burbank@comcast.net>
Sent: Monday, November 14, 2022 9:42 AM
To: citizencomment
Subject: Amazon Data Center -- Issues re Technological and Economic Obsolescence

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Below are comments I submitted earlier, on an important issue that has not been raised at all in the Planning Commission work sessions on Amazon, nor in any of Amazon's submissions.

The Planning Commission would be neglecting its responsibilities if it did not consider these concerns and require Amazon to make a commitment to how many years it will operate the facility, and make provision for what happens to the massive building, fuel storage tanks, mechanical equipment, prison type fencing, and aged computer equipment at end of life.

------- Original Message ----------
From: Cindy Burbank <cindy.burbank@comcast.net>
To: "jlawrence@warrentonva.gov" <jlawrence@warrentonva.gov>,
"AZarabi@warrentonva.gov" <AZarabi@warrentonva.gov>,
"gjohnston@warrentonva.gov" <gjohnston@warrentonva.gov>,
"sainsworth@warrentonva.gov" <sainsworth@warrentonva.gov>,
"shelander@warrentonva.gov" <shelander@warrentonva.gov>,
"rstewart@warrentonva.gov" <rstewart@warrentonva.gov>,
"planning@warrentonva.gov" <planning@warrentonva.gov>
Date: 10/22/2022 1:53 AM
Subject: Amazon Data Center -- Obsolescence and Provisions for End of Life

To the Warrenton Planning Commission -
As you review the proposed Amazon Data Center, please consider potential data center obsolescence and the need for protective provisions for end-of-life disposal of the warehouse, security fencing, generators, massive diesel tanks, etc.

Below are two commentaries by individuals with deep experience in data centers, suggesting high likelihood of data center obsolescence, even within less than 10 years, and particularly questioning the economic life expectancy of the Amazon proposed facility on Blackwell Road.

If the Amazon data center on Blackwell ceases operation in 10 years or less:
(a) Warrenton risks being left with a hulking vacant warehouse, substation, prison type fencing encircling the site, and other problematic detritus, on a prime location in Town; and

(b) tax revenues will be far less than expected, especially given Town and County tax incentive provisions that will allow Amazon to claim a 100% business property tax rebate for the first three years, after which the depreciated value of equipment will be a fraction of original taxable value.

NOTE: It seems to be the PC's practice to rely only on the applicant's information on issues like this. Given the high monetary self-interest of the applicant, and its tendency to make broad assertions without specific, quantified and independently sourced evidence, I believe it would be a failure of your duty to citizens to rely only on the applicant for this and all other key issues -- and I question whether Town staff have the time and expertise to provide reliable information and advice.

****

FRED SMITH'S COMMENTS:

In an email to the PC on 9/5/22, Fred Smith made these comments:

"The proposed data center will be 30 to 35 Megawatts (MW) in size. The campus is a single 220,000 square foot building. When compared to other Amazon facilities, the proposed Warrenton facility is small. It represents about 5 percent of the Amazon data center space within 23 miles of Warrenton. It will also be the smallest facility. ***The small size means the Warrenton data center will - the day it opens - be an expensive data center for Amazon to operate. In the hyper competitive IT cloud services market, expensive infrastructure does not last long.****"*

Fred Smith is local (Old Busthead Road) and he has nearly 40 years' experience in the IT/Telecommunications industry including the construction, moving, acquisition and outsourcing of data centers. I urge you to meet with him or invite him to your Work Session so that you can hear more than just the self-interested views of the applicant.

****

AL ALBORN'S COMMENTS ON DATA CENTER OBSOLESCENCE:

Mr. Alborn is an IT journalist and resident of PWC. He sent these comments to the PWC Board of Supervisors, and they apply equally to the proposed data center on Blackwell Road. Note especially the text which I highlighted below :

From: Alan Alborn <alalbornmewa.com>
Sent: Tuesday, October 11, 2022 9:55 AM
To: BOCS Email Group <BOCS@pwcgov.org>
Cc: bocs-cos@pwcgov.org; Bill Wright <wawright4@comcast.net>
Subject: We need visionaries defining Prince William County's future.

Chair Wheeler and members of the PWC BOCS,

While I appreciate the cultural, environmental, historical, power (Dominion) and other issues surrounding data centers. I believe the real issue is the technology upon which their architecture is based. It is a very temporary solution to a real business problem. *The decision to support broad expansion of data center zoning should be based in a future technology vision, not a short term, discounted revenue stream.*

The replacement for current data centers is already in the pipeline. The people pitching them are probably quietly planning for the transition to "what's next" behind the curtain. The business market demands "what's now". The technology to watch regarding data centers and storage replacement in general is DNA.

I predict (based on MIT and Harvard's research) *the capacity of some of today's data centers will be available on a DNA thumb drive in the not too distant future*. It is an incredibly robust and stable solution (see: https://wyss.harvard.edu/news/save-it-in-dna/?fbclid=IwAR23AuP8_XbrnSkS-4-e3NkMsGXRBxsMr51pjXWJPLO0qhrZ2aq3yMgSbjs).

Vision creation demands that you look in the right places to see what that future might look like. Here is one of many references on DNA for efficient data storage in the future. There are many more (see: https://www.microsoft.com/en-us/research/project/dna-storage/news-and-awards/).

I have always followed Gartner Group. This assessment is interesting in many areas. Check their prediction re DNA storage.

"By 2024, 30% of digital businesses will mandate DNA storage trials, addressing the exponential growth of data poised to overwhelm existing storage technology." See: https://www.gartner.com/en/newsroom/press-releases/2020-10-21-gartner-unveils-top-predictions-for-it-organizations-and-users-in-2021-and-beyond

The actual solution might not even be under public discussion at the moment. Rather, it is the musing of some physicist in a University lab somewhere as he or she continues the tradition of thinking "out of the box" for solutions to storing business data.

In the world of technology, the only thing constant is change. The change is always faster, smaller, cheaper, and often surprising. For business and competitive reasons, "what's next" is often created in secret and eventually surprises us. We shall see.

These monoliths proposed to dot Prince William County are temporary solutions to a real business problem. They are not a long term solution to the world's appetite for massive amounts of data. *To the businesses proposing these data centers, our community is an expendable and temporary resource.*

Don't sell out citizens for a few additional tax dollars. The price we might pay in the future just isn't worth it.

Feel free to check my LinkedIn resume to confirm my bona fides in this area. “Big data” is my profession. This is an informed opinion.

Regards,
Al
Alan P. ("Al") Alborn LinkedIn/Al Alborn

Brittany Latack

From: lisa cansiani <lisacox99@verizon.net>
Sent: Monday, November 14, 2022 9:59 PM
To: citizencomment
Subject: Opposed to Data Centers

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

I will attend the meeting tomorrow. I am a Fauquier county resident and opposed to the data center on Blackwell, and I will continue to “Protect Fauquier" from going down the road of neighboring counties that want to ruin the natural beauty and resources with useless, temporary data centers. If you decide to take the step and approve data centers/power lines, you will have changed our county forever - and it will not be a good change.
Lisa Cansiani
6544 Tapps Ford Rd, 20106

Brittany Latack

From: CHARLES CARROLL <ccarrolliv@gmail.com>
Sent: Monday, November 14, 2022 6:45 AM
To: citizencomment
Subject: No to Amazon

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

We do not support the Data Center next to Country Chevrolet.

The loss of open space, power needs and water needs are excessive and not in the interest of the residents.

Please do not approve this venture

Charlie and Bean Carroll
Delaplane, VA.

Brittany Latack

From: jvd3001@everyactioncustom.com on behalf of John Davidson <jvd3001@everyactioncustom.com>
Sent: Monday, November 14, 2022 8:31 PM
To: Rob Walton
Subject: Please Deny the Amazon Data Center Special Use Permit:

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Dear Director of Community Development Rob Walton,

I am writing to urge you to vote against the Special Use Permit application for an Amazon data center on Blackwell Road.

It seems that this planning, review, and approval process is spinning out of control and descendng into the darkness of subterfuge by the applicants even before stable draft proposals can be fully assessed. The various interlocked proposals are a late-breaking moving target that cannot be evaluated individually and must be understood as a whole. Why the rush? I urge the Town to instead fully consider the implications (e.g., impacts to historical downtown and energy infrastructure) of Amazon's and Dominion's poorly understood and fluid plans to the valued appearance and character of Warrenton and the surrounding lands of Fauquier County (e.g., incomplete noise study and the known visual impacts to the Town's gateway). I also urge the Town to conduct the entire process transparently and reach beyond just the letter of the law to embrace the spirit of truly open democratic governance.

With so many unknowns, I ask that the Town please deny this application.

Thank you for hearing my concerns.

Sincerely,
Mr. John Davidson
8259 Rockingham Rd Warrenton, VA 20186-7322 jvd3001@gmail.com

Brittany Latack

From: jafox4975@everyactioncustom.com on behalf of James Fox <jafox4975@everyactioncustom.com>
Sent: Monday, November 14, 2022 9:58 PM
To: Rob Walton
Subject: Please Deny the Amazon Data Center Special Use Permit:

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Dear Director of Community Development Rob Walton,

I am writing to urge you to vote against the Special Use Permit application for an Amazon data center on Blackwell Road.

This SUP and Dominion Energy's recent verbal changes and new maps reminds me of the old Abbot and Costello comedy routine of "Whos on First". They are trying to just throw some words and drawings out and see if they will stick with a majority. In addition to the numerous flaws of Amazon's application, including the lack of a completed noise study and the known visual impacts to the Town's gateway, Dominion has revealed plans for one of two potential offsite substations to serve the data center less than a week before the scheduled Planning Commission hearing. This recent development calls into question what new impacts the proposed data center and its associated energy infrastructure might have on Warrenton's historic downtown, property values and the rural character that draws residents and visitors both to the Town and County.

With so many unknowns, I ask that the Town please deny this application.

Thank you for hearing my concerns.

Sincerely,
Mr. James Fox
5665 Pignut Mountain Dr Warrenton, VA 20187-7165 jafox4975@gmail.com

Brittany Latack

From: Suzan Fultz <suzan.fultz@gmail.com>
Sent: Monday, November 14, 2022 11:51 AM
To: citizencomment
Cc: Susan Helander; Ali Zarabi; James Lawrence; Ryan Stewart; Steve Ainsworth; Denise Harris; Tommy Cureton; townmanager; Rob Walton
Subject: Fultz, Suzan Public Comment for Public Hearing 11-15-22 Amazon Data Center
Attachments: Fultz, Suzan Public Comment for Public Hearing 11-15-22 Amazon Data Center SUP.pdf

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Hello Planning Commissioners, Town Manager, and Town Staff,

Attached please find my public comment for the Public Hearing tomorrow night, submitted to the email address on your website, with copy to you. I am unable to attend in person, and greatly appreciate your time in reading my comments.

Thank you in advance to all, for all of the time and consideration you will be extending to the public tomorrow evening and beyond in listening to their concerns.

Kindly,
Suzan Fultz
7020 Beaconsfield Lane
Warrenton, Va 20187

Sent from my iPad

Good Evening,

My name is Suzan Fultz; I live on Beaconsfield Lane, Warrenton, Va. I ask the Planning Commission to postpone their vote, keep the Public Hearing open on the Amazon data center SUP, and if unable to postpone, vote 'No' for these reasons:

Town has relied solely on the applicant for information on detrimental noise effects to Town residents in proximity to the structure. For months Town requested noise data from the applicant; still today, the information Amazon provided is flawed and inadequate.

Town has relied solely on the applicant to provide crucial balloon test information on permanent destruction of view shed to our region. Amazon's contractor's test failed to depict the breadth of impact of the imposing structure, and the clear-cutting of mature trees that will take place.

Dominion, tasked with powering the data center in response to Amazon's load letter, has been absent from Town public work sessions. The applicant repeatedly distances themselves from the electrical infrastructure needed for their data center both in their statements, and by failure to divulge their load letter to the Town and public.

Dominion's proposal last Thursday is set to destroy the serenity of the Greenway with a new substation and overhead power towers. Is this the future for the Town of Warrenton, with more to come? Will this welcome visitors to linger in and enjoy all that Warrenton has to offer? Now that Dominion's proposed infrastructure to energize the Amazon data center is within Town boundaries, the energization of the data center can no longer be divorced from Amazon's application in the Town's consideration of the SUP.

In summary, relying solely on an applicant to provide critical noise and view shed data in the Town's SUP decision making process, and allowing the applicant to steer the Town away from reviewing Dominion's plans, lacks sound reasoning; is a disservice to constituents, Town Staff and Comprehensive Plan; and does Not live up to Mayor's promises on the night the data center text amendment was passed. Mayor Nevill said in response to Mr. Wojcik's noise concerns, "…Council took a great length to try to address and make sure of that, to point out as you point out, you know it's not feasible or not ideal for data centers to choose to locate during [near] residential neighborhoods …". Clearly this should mean a data center on Blackwell Road adjacent to Oak Springs and Poet's Walk is a non-starter. Mayor Nevill spoke of "noise impact studies being a part of the [SUP] condition", yet credible studies with a documented verifiable solution have not taken place. Let us not be so naive as to think these studies will take place after the Commission's vote. History has shown us that after Commission recommended the text amendment in 2021, Council at its very next meeting, held its work session, public hearing, and vote, all on the same day.

Planning Commission's recommendation to approve or deny will be very impactful. One of your fellow Commissioners recently voted a resounding 'No' by selling his home adjacent to the data center site, moving his family out of Warrenton. Please Hold your vote and keep the Public Hearing open, but if you must vote, vote 'No' for the public welfare of your Citizens; Vote 'No' for the preservation of the Town of Warrenton.

Thank you for your time.

Sincerely,
Suzan Fultz
7020 Beaconsfield Lane
Warrenton, Va 20187

Brittany Latack

From: cab.grayson@everyactioncustom.com on behalf of William Grayson Jr. <cab.grayson@everyactioncustom.com>
Sent: Monday, November 14, 2022 8:39 PM
To: Rob Walton
Subject: Please Deny the Amazon Data Center Special Use Permit:

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Dear Director of Community Development Rob Walton,

I am writing to urge you to vote against the Special Use Permit application for an Amazon data center on Blackwell Road.

In addition to the numerous flaws of Amazon's application, including the lack of a completed noise study and the known visual impacts to the Town's gateway, Dominion has revealed plans for one of two potential offsite substations to serve the data center less than a week before the scheduled Planning Commission hearing. This recent development calls into question what new impacts the proposed data center and its associated energy infrastructure might have on Warrenton's historic downtown, property values and the rural character that draws residents and visitors both to the Town and County.

With so many unknowns, I ask that the Town please deny this application.

Thank you for hearing my concerns.

Sincerely,
Mr. William Grayson Jr.
1864 Blue Ridge Farm Rd Upperville, VA 20184-1906 cab.grayson@gmail.com

Brittany Latack

From: Todd Hathaway <hathawayt@gmail.com>
Sent: Monday, November 14, 2022 9:23 AM
To: citizencomment
Subject: Amazon data center

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Dear Town Council,

As both a resident and business owner in Fauquier County, I am concerned that there is a hearing planned related to an Amazon data center when Amazon's application is incomplete. Fauquier County should not allow large corporations skirt local ordnances and laws, and should comply with all appropriate work before hearings happen, let alone approvals.

Thank you.

Todd Hathaway

Brittany Latack

From: fbhigginson@everyactioncustom.com on behalf of Feroline Higginson <fbhigginson@everyactioncustom.com>
Sent: Monday, November 14, 2022 7:57 PM
To: Rob Walton
Subject: Please Deny the Amazon Data Center Special Use Permit:

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Dear Director of Community Development Rob Walton,

I am writing to urge you to vote against the Special Use Permit application for an Amazon data center on Blackwell Road.

In addition to the numerous flaws of Amazon's application, including the lack of a completed noise study and the known visual impacts to the Town's gateway, Dominion has revealed plans for one of two potential offsite substations to serve the data center less than a week before the scheduled Planning Commission hearing. This recent development calls into question what new impacts the proposed data center and its associated energy infrastructure might have on Warrenton's historic downtown, property values and the rural character that draws residents and visitors both to the Town and County.

With so many unknowns, I ask that the Town please deny this application.

Thank you for hearing my concerns.

Sincerely,
Feroline Higginson
3209 Lost Corner Rd Delaplane, VA 20144-2237 fbhigginson@gmail.com

Brittany Latack

From: peter@everyactioncustom.com on behalf of Peter Hoagland <peter@everyactioncustom.com>
Sent: Monday, November 14, 2022 6:30 PM
To: Rob Walton
Subject: Please Deny the Amazon Data Center Special Use Permit:

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Dear Director of Community Development Rob Walton,

I am writing to urge you to vote against the Special Use Permit application for an Amazon data center on Blackwell Road.

In addition to the numerous flaws of Amazon's application, including the lack of a completed noise study and the known visual impacts to the Town's gateway, Dominion has revealed plans for one of two potential offsite substations to serve the data center less than a week before the scheduled Planning Commission hearing. This recent development calls into question what new impacts the proposed data center and its associated energy infrastructure might have on Warrenton's historic downtown, property values and the rural character that draws residents and visitors both to the Town and County.

With so many unknowns, I ask that the Town please deny this application.

Thank you for hearing my concerns.

Sincerely,
Mr. Peter Hoagland
5863 Old Dominion Ct Warrenton, VA 20187-9325 peter@hoagland.us

Brittany Latack

From: shaholmes55@everyactioncustom.com on behalf of Sharon Holmes <shaholmes55@everyactioncustom.com>
Sent: Monday, November 14, 2022 6:28 PM
To: Rob Walton
Subject: Please Deny the Amazon Data Center Special Use Permit:

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Dear Director of Community Development Rob Walton,

I am writing to urge you to vote against the Special Use Permit application for an Amazon data center on Blackwell Road.

In addition to the numerous flaws of Amazon's application, including the lack of a completed noise study and the known visual impacts to the Town's gateway, Dominion has revealed plans for one of two potential offsite substations to serve the data center less than a week before the scheduled Planning Commission hearing. This recent development calls into question what new impacts the proposed data center and its associated energy infrastructure might have on Warrenton's historic downtown, property values and the rural character that draws residents and visitors both to the Town and County.

With so many unknowns, I ask that the Town please deny this application.

Thank you for hearing my concerns.

Sincerely,
Sharon Holmes
7402 Huntsmans Dr Warrenton, VA 20186-6113 shaholmes55@gmail.com

Brittany Latack

From: patrealtornva@everyactioncustom.com on behalf of Patricia Hupp <patrealtornva@everyactioncustom.com>
Sent: Monday, November 14, 2022 6:28 PM
To: Rob Walton
Subject: Please Deny the Amazon Data Center Special Use Permit:

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Dear Director of Community Development Rob Walton,

I am writing to urge you to vote against the Special Use Permit application for an Amazon data center on Blackwell Road.

In addition to the numerous flaws of Amazon's application, including the lack of a completed noise study and the known visual impacts to the Town's gateway, Dominion has revealed plans for one of two potential offsite substations to serve the data center less than a week before the scheduled Planning Commission hearing. This recent development calls into question what new impacts the proposed data center and its associated energy infrastructure might have on Warrenton's historic downtown, property values and the rural character that draws residents and visitors both to the Town and County.

With so many unknowns, I ask that the Town please deny this application.

Thank you for hearing my concerns.

Sincerely,
Patricia Hupp
1498 Aquia Rd Midland, VA 22728-9621
patrealtornva@gmail.com

Brittany Latack

From: nancy.kolodner@everyactioncustom.com on behalf of Nancy Kolodner <nancy.kolodner@everyactioncustom.com>
Sent: Monday, November 14, 2022 8:00 PM
To: Rob Walton
Subject: Please Deny the Amazon Data Center Special Use Permit:

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Dear Director of Community Development Rob Walton,

I am writing to urge you to vote against the Special Use Permit application for an Amazon data center on Blackwell Road. Adding this type of structure to what has been a shopping and housing area seems like a tremendous mismatch of land uses for the county and city to endorse.

In addition to the numerous flaws of Amazon's application, including the lack of a completed noise study and the known visual impacts to the Town's gateway, Dominion has revealed plans for one of two potential offsite substations to serve the data center less than a week before the scheduled Planning Commission hearing. This recent development calls into question what new impacts the proposed data center and its associated energy infrastructure might have on Warrenton's historic downtown, property values and the rural character that draws residents and visitors both to the Town and County. Particularly at the gateway to the town, this structure seems like a tremendous eyesore and potential noise pollutant.

With so many unknowns, I ask that the Town please deny this application.

Thank you for hearing my concerns.

Sincerely,
Nancy Kolodner
7122 Bethel Dr E Warrenton, VA 20187-7118 nancy.kolodner@gmail.com

Brittany Latack

From: John W. Lyver, IV <JLyver4@comcast.net>
Sent: Monday, November 14, 2022 2:54 PM
To: citizencomment
Subject: Presentation for ToW Planning Commission for Nov 15, 2022
Attachments: 221115 Warrenton Planning Commish.pdf; Untitled attachment 00022.htm

Friends,

I will be speaking at the Nov 15, 2022 ToW Planning Commission Meeting. I have registered to speak: John W. Lyver, IV, Ph.D. (Resident of Prince William County.

Attached is my presentation for the meeting. Please provide copies to the Planning Commissioners and also to the PC Clerk for the official record. If possible, I would like to be able to show these slides during my presentation of comments.

THANK YOU!!
r/
John

Noise from the Proposed Warrenton AWS Data Center

By John W. Lyver, IV, Ph.D.
JLyver4@Comcast.NET

11/15/2022

Note:
All materials, images, and data in this file are protected under US Copyright and may not be used or reproduced without written permission from J.Lyver.

Warrenton SUP Submission

- Town of Warrenton Zoning Ordinance **REQUIRES** in:

  Section: 11-3.10 Special Use Permits and Waivers

  Sub-Section: 11-3.10.2 Application.

  Item #8: "***Noise impact and abatement studies to determine potential impact on adjoining properties and neighborhoods.***"

- Noise Analysis presented in:

  '*Walsh, Collucci, Lubeley & Walsh letter dated 9/9/2022 Exhibits 4 & 5*'

  "6) Noise generation.

  A summary of the very extensive noise study that was performed is attached to this letter together with the entire study, which contains the technical background, are attached to this letter as Exhibits 4 and 5."

- Noise Analysis WITHDRAWN in:

  '*Walsh, Collucci, Lubeley & Walsh letter dated 10/28/2022 – Table Item #3*'

  "The Applicant is aware of the concerns over noise, and legitimate response to the "noise study" initially submitted. As we advised the Planning Commission, that "study" was only a preliminary draft that did not include descriptive information or complete data. Unfortunately, neither the Applicant nor this firm were told this, and thought it to be the "report."

© J.Lyve

Engineering Review of AWS' Noise Study

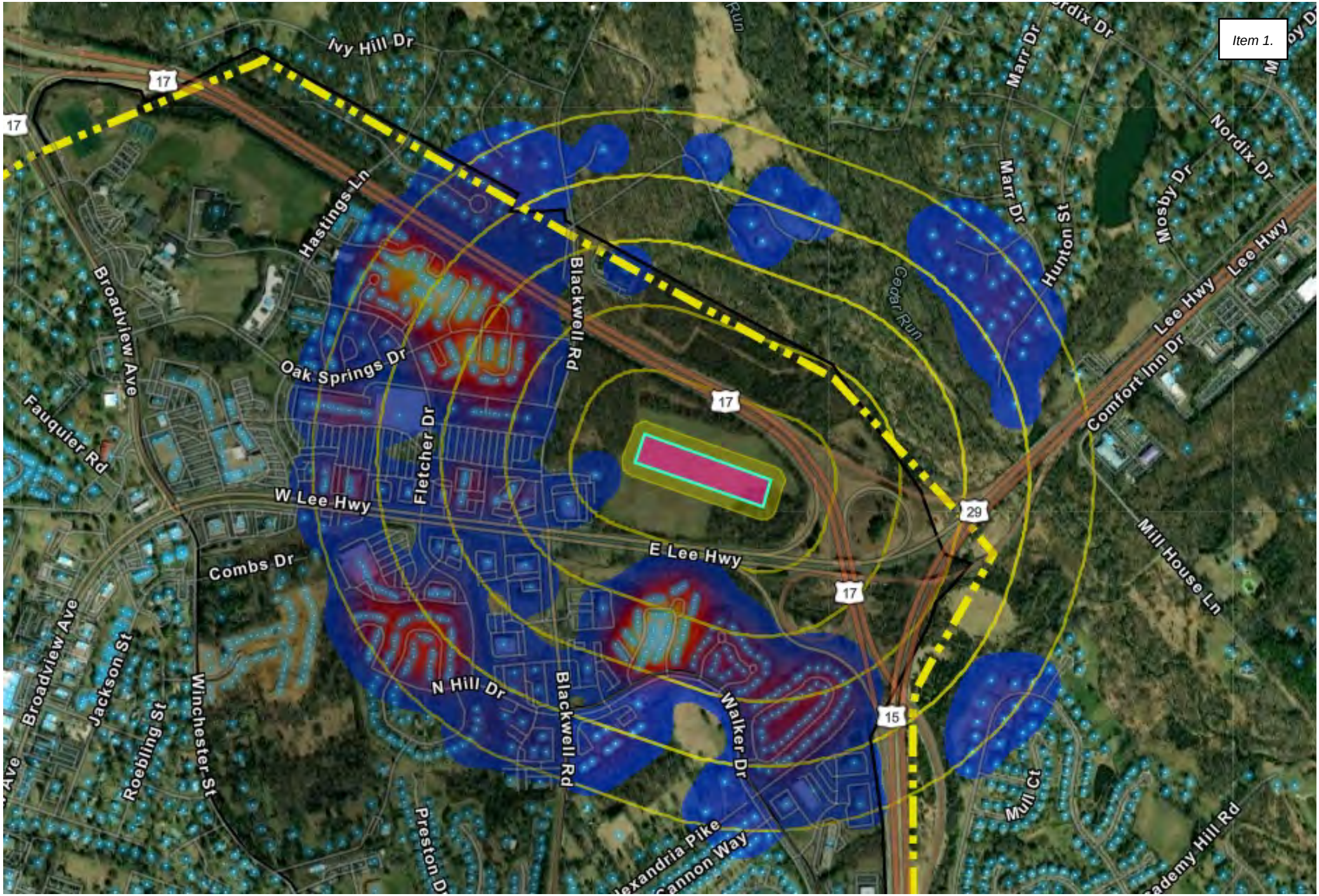
Noise Analysis presented in:

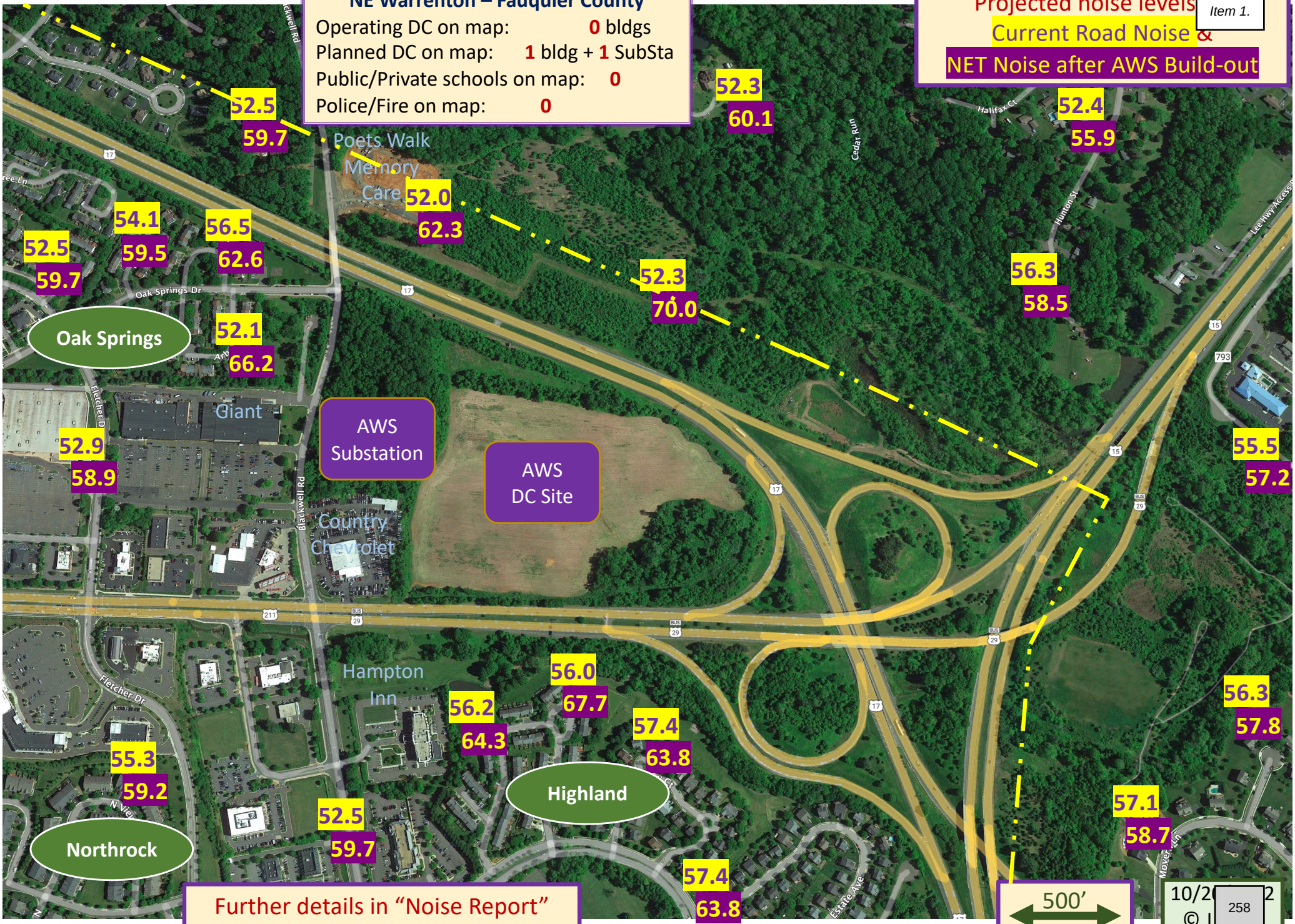
'*Walsh, Collucci, Lubeley & Walsh letter dated 9/9/2002 Exhibits 4 & 5*'

- Improperly interpreted tabular results in charts.
- Improperly cited Warrenton Town Noise Ordinance.
- Fauquier County Noise Ordinance not cited or analyzed for.
- Noise Isopleth Charts (Daytime, Nighttime, and Generator):
  - ✓ Basically, does not match basic physics.
  - ✓ Higher frequency plots are different shape than the lower frequency noises.
  - ✓ Did not analyze the noise in the residential areas to the south, northwest, north or eastern sides of the proposed site.
  - ✓ Misinterpreted the topography.
  - ✓ Misinterpreted day vs night noises knowing that data center noise is 24/7.
- Included a page for a site in Gainesville area. Unknown reason for inclusion.

Basically, report is NOT credible and should be rejected by the Town!

© J.Lyve


Ivy Hill Dr
17
Hastings Ln
Broadview Ave
Fauquier Rd
Oak Springs Dr
Blackwell Rd
Fletcher Dr
W Lee Hwy
Combs Dr
Broadview Ave
Jackson St
Roebling St
Winchester St
N Hill Dr
Blackwell Rd
Preston Dr
Alexandria Pike
Cannon Way
Walker Dr
15
Cedar Run
Marr Dr
Hunton St
Marr Dr
Nordix Dr
Mosby Dr
Lee Hwy
Lee Hwy
Comfort Inn Dr
29
E Lee Hwy
Mill House Ln
Mull Ct
Academy Hill Rd


NE Warrenton – Fauquier County
Operating DC on map: 0 bldgs
Planned DC on map: 1 bldg + 1 SubSta
Public/Private schools on map: 0
Police/Fire on map: 0
Projected noise levels
Current Road Noise &
NET Noise after AWS Build-out
52.5
59.7
Poets Walk
Memory
Care
52.0
62.3
52.3
60.1
52.4
55.9
54.1
59.5
56.5
62.6
52.5
59.7
52.3
70.0
56.3
58.5
Oak Springs
52.1
66.2
Giant
AWS
Substation
AWS
DC Site
52.9
58.9
Country
Chevrolet
55.5
57.2
Hampton
Inn
56.0
67.7
56.2
64.3
57.4
63.8
56.3
57.8
55.3
59.2
Highland
Northrock
52.5
59.7
57.1
58.7
57.4
63.8
Blackwell Rd
Fletcher Dr
Oak Springs Dr
Cedar Run
Halifax Ct
Humon St
Estate Ave
500’
10/2 2
© J
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Further details in “Noise Report”


NE Warrenton – Fauquier County
Operating DC on map: 0 bldgs
Planned DC on map: 1 bldg + 1 SubSta
Public/Private schools on map: 0
Police/Fire on map: 0
Projected noise levels
Current Road Noise &
NET Noise after AWS Build-out
52.5
59.7
52.3
60.1
52.4
55.9
Poets Walk
Memory
Care
52.0
62.3
54.1
59.5
56.5
62.6
52.5
59.7
52.3
70.0
56.3
58.5
Oak Springs
52.1
66.2
AWS
Substation
AWS
DC Site
63-66 dBA
60-63 dBA
>66 dBA
52.9
58.9
55.5
57.2
Giant
Country
Chevrolet
Hampton
Inn
56.0
67.7
56.2
64.3
57.4
63.8
56.3
57.8
55.3
59.2
Highland
52.5
59.7
57.1
58.7
Northrock
57.4
63.8
500’
10/2
© J
259

List of Noise Ordinance Violations for mapped locations after DC is b

	Daytime Violations							
Location	63 Hz	125 Hz	250 Hz	500 Hz	1,000 Hz	2,000 Hz	4,000 Hz	8,000 Hz
1		V	V	V	V	V	V	V
2				V	V	V	V	V
3				V	V	V	V	V
4				V	V	V	V	
5				V	V	V	V	
6				V	V	V	V	
7				V	V	V	V	V
8				V	V	V	V	
9			V	V	V	V	V	V
10		V	V	V	V	V	V	V
11				V	V	V	V	V
12				V	V	V	V	V
13				V	V	V	V	V
14				V	V	V	V	V
15				V	V	V	V	V
16				V	V	V	V	V
17				V	V	V	V	
18				V	V	V	V	
19	V	V	V	V	V	V	V	V
20				V	V	V	V	
21				V	V	V	V	

	Nighttime Violations							
Location	63 Hz	125 Hz	250 Hz	500 Hz	1,000 Hz	2,000 Hz	4,000 Hz	8,000 Hz
1	V	V	V	V	V	V	V	V
2		V	V	V	V	V	V	V
3			V	V	V	V	V	V
4	V		V	V	V	V	V	V
5				V	V	V	V	V
6			V	V	V	V	V	V
7				V	V	V	V	V
8		V	V	V	V	V	V	V
9		V	V	V	V	V	V	V
10	V	V	V	V	V	V	V	V
11				V	V	V	V	V
12	V			V	V	V	V	V
13				V	V	V	V	V
14	V			V	V	V	V	V
15				V	V	V	V	V
16	V			V	V	V	V	V
17				V	V	V	V	V
18	V		V	V	V	V	V	V
19	V	V	V	V	V	V	V	V
20	V	V	V	V	V	V	V	V
21	V		V	V	V	V	V	V

- Above results are compared to Warrenton Noise Ordinance limits for each noise frequency octave
- "V" indicates **violation**, blank is within limits

© J.L

BACKUP: Results of analysis

Resulting Noise Levels in
dBA and dBZ by Frequency Octave

Locations of sites to analyse		Road dBA	DC dBA	Total dBA	Total 63 dBZ	Total 125 dBZ	Total 250 dBZ	Total 500 dBZ	Total 1,000 dBZ	Total 2,000 dBZ	Total 4,000 dBZ	Total 8,000 dBZ
1	725 Arbor Ct	52.1	54.5	66.2	61.5	61.1	57.1	55.3	56.5	52.0	45.3	31.9
2	21 Pepper Tree Ct	56.5	59.3	62.6	56.8	56.5	52.7	52.5	55.5	51.4	43.5	33.2
3	751 Cherry Tree Ln	54.1	56.7	59.5	53.5	53.2	49.5	49.7	52.8	48.8	40.8	30.7
4	721 Acron Ct	52.5	55.0	59.7	54.3	53.9	50.1	49.5	52.1	47.9	40.3	29.5
5	761 Gen Wallace Ct	52.5	55.3	58.0	52.1	51.8	48.0	48.2	51.3	47.2	39.2	29.1
6	141 W. Lee Hwy	52.9	55.7	58.9	53.2	52.9	49.1	48.9	51.8	47.8	39.9	29.5
7	222 North View Circle	55.3	54.4	59.2	52.4	52.2	48.6	49.8	53.4	49.5	41.2	31.6
8	492 Blackwell Rd	52.6	55.4	61.0	55.8	55.4	51.5	50.5	52.8	48.6	41.1	29.8
9	530 Highland Towne Ln	56.2	56.3	64.3	59.1	58.7	54.8	53.9	56.2	52.0	44.5	33.3
10	102 Dorsett Ln	56.0	59.0	67.7	62.9	62.5	58.5	56.9	58.4	54.0	47.1	34.5
11	514 Camden Cir	57.4	57.5	63.8	58.1	57.8	53.9	53.7	56.6	52.5	44.6	34.2
12	534 Estate Ave	53.8	56.2	58.5	52.3	52.0	48.3	48.8	52.2	48.2	40.1	30.2
13	7648 Moven Dr	57.1	57.4	58.7	49.4	49.4	46.7	50.2	54.6	50.7	42.1	33.2
14	7482 Argyll Ct	56.3	55.4	57.8	48.1	48.2	45.6	49.3	53.7	49.9	41.3	32.3
15	7379 Comfort Inn Dr	55.5	53.5	57.2	48.0	48.0	45.2	48.7	53.0	49.2	40.6	31.6
16	7350 Hunton St	56.3	56.1	58.5	50.1	50.0	46.9	49.7	53.9	50.1	41.5	32.4
17	7320 Marr Dr	52.4	54.9	55.9	48.7	48.5	45.1	46.6	50.4	46.5	38.1	28.7
18	6539 Hidden Hollow Ln	52.3	55.0	60.1	54.8	54.4	50.5	49.7	52.2	48.0	40.4	29.4
19	Parcel 6985-60-5718-500	52.3	54.9	70.0	65.3	64.9	60.9	58.9	59.8	55.2	48.7	34.6
20	33 Woodlands Way	52.0	54.7	62.3	57.3	56.9	52.9	51.6	53.4	49.1	41.9	29.9
21	800 Blackwell Rd	52.5	55.0	59.7	54.3	53.9	50.0	49.5	52.1	47.9	40.2	29.5

© J.Lyver

Brittany Latack

From: rickgmiller3@everyactioncustom.com on behalf of Richard Miller <rickgmiller3@everyactioncustom.com>
Sent: Monday, November 14, 2022 7:30 PM
To: Rob Walton
Subject: Please Deny the Amazon Data Center Special Use Permit:

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Dear Director of Community Development Rob Walton,

I am writing to urge you to vote against the Special Use Permit application for an Amazon data center on Blackwell Road.

In addition to the numerous flaws of Amazon's application, including the lack of a completed noise study and the known visual impacts to the Town's gateway, Dominion has revealed plans for one of two potential offsite substations to serve the data center less than a week before the scheduled Planning Commission hearing. This recent development calls into question what new impacts the proposed data center and its associated energy infrastructure might have on Warrenton's historic downtown, property values and the rural character that draws residents and visitors both to the Town and County.

With so many unknowns, I ask that the Town please deny this application.

Thank you for hearing my concerns.

Sincerely,
Mr. Richard Miller
8680 Lees Ridge Rd Warrenton, VA 20186-8656 rickgmiller3@gmail.com

Brittany Latack

From: edmoore3@everyactioncustom.com on behalf of edward moore <edmoore3@everyactioncustom.com>
Sent: Monday, November 14, 2022 6:29 PM
To: Rob Walton
Subject: Please Deny the Amazon Data Center Special Use Permit:

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Dear Director of Community Development Rob Walton,

I am writing to urge you to vote against the Special Use Permit application for an Amazon data center on Blackwell Road.

In addition to the numerous flaws of Amazon's application, including the lack of a completed noise study and the known visual impacts to the Town's gateway, Dominion has revealed plans for one of two potential offsite substations to serve the data center less than a week before the scheduled Planning Commission hearing. This recent development calls into question what new impacts the proposed data center and its associated energy infrastructure might have on Warrenton's historic downtown, property values and the rural character that draws residents and visitors both to the Town and County.

With so many unknowns, I ask that the Town please deny this application.

Thank you for hearing my concerns.

Sincerely,
III edward moore
5133 Dumfries Rd Warrenton, VA 20187-8928 edmoore3@gmail.com

Brittany Latack

From: zinkitty@earthlink.net
Sent: Monday, November 14, 2022 1:28 PM
To: citizencomment
Subject: Data Center

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Dear Planning Commission members,

In the initial moments of learning of the proposed Data Center for the Blackwell Road site, I was all for it. I thought it would not be very visible and would bring in clean industry tax benefits and would impact traffic marginally. Since then further reading and listening to these and more aspects of allowing a Data Center to be built in Warrenton or elsewhere in Fauquier County, I have come to the conclusion that it is a very bad idea.

First, how can the town or county allow one Data Center and deny others or many more. Second, the building will be 55 feet high and clearly visible to much of the community and to all those traveling into Warrenton or by the town. It is not architecturally interesting or aesthetically pleasing in the least and any landscaping, shrubbery and small trees, to address the plain box shape would only be visible to the few employees and that"s not mentioning the ugly power plant that must be built there. Third, as I understand it, (I'm not an economist by any stretch) the tax benefits for the long term are questionable. The building, however, will be there for a very long time. Fourth, for many years the problem of water has been an issue in Fauquier County. Development of industry and housing has been impacted by our lack of water reserves. This new Data center would need lots of water to help cool the operations. That would be a drain on our already precious supply. Which brings me to the fifth reason the Data Center idea is a bad one, NOISE. The constant drone of the cooling system and the power production would be audible for miles all around the Data Center. What is around the Data Center site, a car dealership and the stripe mall style shopping center containing Giant grocery. But equally close or closer is the Poets Walk Memory Care facility, townhouse developments, housing developments, all personal living spaces. The noise from the data centers is a constant and never ending drone of sound. That takes a physical and mental toll on human health. As for the traffic issue well there is the plus. Sixth, the Data Center would employee only about 80 people and many of those would be commuting from elsewhere. But the low rate of employment for locals is a negative. Seventh, the use of the land is not what the long range plan for the town designated, far from the multi-use plan citizens designed. Eighth, the acquisition of enough power to support the needs of the Data Center must come from out of the county and it must get here somehow. The likelyhood of underground transmission lines is slim and none as that is not cost-effective for taxpayers. So there will be a march of massive power towers some place in the county from Prince William County or farther away. Whether it's down RT. 29 or off the beaten track a bit more , it will still come across rural holdings of the citizens of Fauquier County. That is a prime example of "not in my backyard" feelings and rightfully so. Who wants their property scalded by huge power transmission towers and the value of their property to go down. In essence the Data Center effects Fauquier County not just the town of Warrenton.

I have heard very little from those in favor of allowing the Data Center except on the tax issue and many seem to think that is a never ending source of income. Not allowing commercial use of the land for something like CostCo is another argument for visual beauty vs. tax rewards but that also does not address the long range plan that has already been developed for the town of Warrenton. There has been no rise of a group supporting the Data Center with facts to back their argument. I have heard very little or read very little about the benefits except taxes for the Town of Warrenton or Fauquier County. Supporters are very quiet or very few.

It has been revealed that Amazon and its legal team have not been forthcoming with all requests from the Planning Commission. The rush to settle the issue before all studies are complete leaves a bad taste in my thoughts about the

virtues of the project and its supporters. It feels like there is money to be made for some that is not so clean. I cert hope that feeling is incorrect!

As a resident and public school teacher in Fauquier County for all of my adult life, I have watched and held my breath many a time on critical decisions made by the governing bodies. Many of those decisions have looked to protect and maintain the rural beauty and small town feel of Fauquier and Warrenton and I have been relieved. Often I have wished we could find a way to attract clean industry to help relieve the tax burden on home owners. Often I have wished the housing developments would not happen as they don”t pay for themselves in regard to use of police, fire and rescue, schools and road ways, more tax dollars needed. But such is the way of growth and movement from Northern VA and Washington DC. Thankfully it is not as bad in Fauquier and Warrenton as it is in counties and towns to our north and east.

Stay the course prescribed in the Comprehensive Plan and vote down the Data Center. It is not a good fit for us.

Sincerely,

Janie Mosby
zinkitty@earthlink.net. 9205 Harts Mill Rd, Warrenton VA, 20186 540-272-8847

Brittany Latack

From: drpenni@everyactioncustom.com on behalf of Darrell Pennington <drpenni@everyactioncustom.com>
Sent: Monday, November 14, 2022 6:36 PM
To: Rob Walton
Subject: Please Deny the Amazon Data Center Special Use Permit:

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Dear Director of Community Development Rob Walton,

I am writing to urge you to vote against the Special Use Permit application for an Amazon data center on Blackwell Road.

In addition to the numerous flaws of Amazon's application, including the lack of a completed noise study and the known visual impacts to the Town's gateway, Dominion has revealed plans for one of two potential offsite substations to serve the data center less than a week before the scheduled Planning Commission hearing. This recent development calls into question what new impacts the proposed data center and its associated energy infrastructure might have on Warrenton's historic downtown, property values and the rural character that draws residents and visitors both to the Town and County.

Frankly there is no resounding benefit for this, or any other data center, to be located in Fauquier County. Once you've approved one, the rest will automatically follow. Amazon will find its way around paying taxes as all large corporations do and the people of Fauquier County and the town of Warrenton will be left with nothing but a giant, noise-producing, power-consuming monolith that serves only those outside the county and city lines.

With so many unknowns, I strongly urge that the Town please deny this application.

Thank you for hearing my concerns.

Sincerely,
Darrell Pennington
3108 Lake Wesley Ct Warrenton, VA 20187-5833 drpenni@gmail.com

Brittany Latack

From: hopewaskins@everyactioncustom.com on behalf of Hope Porter <hopewaskins@everyactioncustom.com>
Sent: Monday, November 14, 2022 8:08 PM
To: Rob Walton
Subject: Please Deny the Amazon Data Center Special Use Permit:

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Dear Director of Community Development Rob Walton,

I am writing to urge you to vote against the Special Use Permit application for an Amazon data center on Blackwell Road.

In addition to the numerous flaws of Amazon's application, including the lack of a completed noise study and the known visual impacts to the Town's gateway, Dominion has revealed plans for one of two potential offsite substations to serve the data center less than a week before the scheduled Planning Commission hearing. This recent development calls into question what new impacts the proposed data center and its associated energy infrastructure might have on Warrenton's historic downtown, property values and the rural character that draws residents and visitors both to the Town and County.

With so many unknowns, I ask that the Town please deny this application.

Thank you for hearing my concerns.

Sincerely,
Hope Porter
6763 Airlie Rd Warrenton, VA 20187
hopewaskins@gmail.com

Brittany Latack

From: Trevor Potter <tpotter@capdale.com>
Sent: Monday, November 14, 2022 1:09 PM
To: citizencomment
Subject: Proposed Amazon building

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

I urge the town to delay any action on the application by Amazon until there is further information on its affect on the town and county.
Trevor Potter
Whiting Road , Marshall

Sent from my iPhone

This message is for the use of the intended recipient only. It is from a law firm and may contain information that is privileged and confidential. If you are not the intended recipient any disclosure, copying, future distribution, or use of this communication is prohibited. If you have received this communication in error, please advise us by return e-mail, or if you have received this communication by fax advise us by telephone and delete/destroy the document.

Brittany Latack

From: pohickfarm@everyactioncustom.com on behalf of Vanessa Sandin <pohickfarm@everyactioncustom.com>
Sent: Monday, November 14, 2022 6:32 PM
To: Rob Walton
Subject: Please Deny the Amazon Data Center Special Use Permit:

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Dear Director of Community Development Rob Walton,

I am writing to urge you to vote against the Special Use Permit application for an Amazon data center on Blackwell Road.

In addition to the numerous flaws of Amazon's application, including the lack of a completed noise study and the known visual impacts to the Town's gateway, Dominion has revealed plans for one of two potential offsite substations to serve the data center less than a week before the scheduled Planning Commission hearing. This recent development calls into question what new impacts the proposed data center and its associated energy infrastructure might have on Warrenton's historic downtown, property values and the rural character that draws residents and visitors both to the Town and County.

With so many unknowns, I ask that the Town please deny this application.

Thank you for hearing my concerns.

Sincerely,
Vanessa Sandin
3744 Carrington Rd Delaplane, VA 20144-2008 pohickfarm@gmail.com

Brittany Latack

From: Kimberly Siciliano <atrain5253@yahoo.com>
Sent: Monday, November 14, 2022 4:32 PM
To: citizencomment
Subject: Warrenton Planning Commission ref: Amazon Data Center

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Warrenton Planning Commission

Reference: Amazon Data Center

As a 27 year resident of Fauquier County I have witnessed the growth and Development. Most of it in a positive manner because we have been represented by people who have stepped up to protect our beautiful county and continued to share the mission and vision that states to preserve the physical beauty, historical heritage and environmental quality of the county while ensuring that population growth and development is a positive force on the general welfare of our community.

Fauquier County stands for agriculture, farm land, equine, winery's, history and most of all good suburban living. We have it all and we the people need to protect it at all cost. I am nauseated and extremely opposed to any thought of a 220,000 sq ft Data Center landing in Warrenton. A sightly concrete box is not physical beauty. There must be other alternatives. Our neighboring counties are already becoming concrete jungles. A Prince William County study found that an overlay district where most of its data centers are concentrated was running out of land considered to be marketable to data center developers who might prefer to build elsewhere — a finding bolstered by a separate study. If you give them an inch they will take miles. Don't turn us into a concrete jungle. The fight is not over, you have a job to do the right thing.
Represent this county for the people. Search out more options, speak up and protect our county.

Oppose the "Amazon Special Permit Application".

Sincerely,
Kimberly Siciliano

Sent from my iPad

Brittany Latack

From: awsmithjr@everyactioncustom.com on behalf of Alan Smith Jr. <awsmithjr@everyactioncustom.com>
Sent: Monday, November 14, 2022 6:29 PM
To: Rob Walton
Subject: Please Deny the Amazon Data Center Special Use Permit:

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Dear Director of Community Development Rob Walton,

I am writing to urge you to vote against the Special Use Permit application for an Amazon data center on Blackwell Road.

For many reasons, my wife Marcia and I are totally against the approval of the Amazon data center. We recognize the income this could produce for the town, but we are well aware of the damage that has been done to many surrounding communities through data center expansion, and we recognize that Amazon's shifting promises and plans as well as incomplete evaluations of the proposal make it very difficult to assess the risks of approving this permit.

According, we urge you to deny this application.

Sincerely,
Mr. Alan Smith Jr.
9255 Harts Mill Rd Warrenton, VA 20186-8531 awsmithjr@gmail.com

Brittany Latack

From: Don Smith <biscuitmt@aol.com>
Sent: Monday, November 14, 2022 1:22 PM
To: citizencomment
Subject: Amazon data center

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Sirs,

Gaining tax revenue is good if there is a need for it. Fauquier County is agriculture based, not industrial. Destroying the beauty and character of Fauquier would be a crime.

Don Smith
Broad Run VA

Brittany Latack

From: seafoxrun22@everyactioncustom.com on behalf of Elizabeth Smith <seafoxrun22@everyactioncustom.com>
Sent: Monday, November 14, 2022 6:29 PM
To: Rob Walton
Subject: Please Deny the Amazon Data Center Special Use Permit:

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Dear Director of Community Development Rob Walton,

I am writing to urge you to vote against the Special Use Permit application for an Amazon data center on Blackwell Road.

In addition to the numerous flaws of Amazon's application, including the lack of a completed noise study and the known visual impacts to the Town's gateway, Dominion has revealed plans for one of two potential offsite substations to serve the data center less than a week before the scheduled Planning Commission hearing. This recent development calls into question what new impacts the proposed data center and its associated energy infrastructure might have on Warrenton's historic downtown, property values and the rural character that draws residents and visitors both to the Town and County.

With so many unknowns, I ask that the Town please deny this application.

Thank you for hearing my concerns.

Sincerely,
Ms Elizabeth Smith
7237 Leeds Manor Rd Marshall, VA 20115-2255 seafoxrun22@gmail.com

Brittany Latack

From: Fred Smith <fredaprl@infionline.net>
Sent: Monday, November 14, 2022 12:29 PM
To: Planning Department
Cc: Ali Zarabi; Susan Helander; Steve Ainsworth; James Lawrence; Ryan Stewart
Subject: UPDATE - Sound Monitoring Service - Comments on the Draft Conditions of the Special Use Permit for Amazon Data Services
Attachments: Liveable Cities - Brochure.pdf; LRL-SUP0110-04 SmartLinx SLX-NOISE Spec-EN.pdf; Quotation # QUO-01408-X2Q5C9 - 0.pdf; Support and Service Agreement.pdf

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

To the members of the Town of Warrenton Planning Commission

As noted in my original message, I have received (and attached) information from a vendor of constant environmental monitoring solutions, Liveable Cities. The Liveable Cities solution for sound monitoring is one portion of their larger approach to monitoring conditions in a metropolitan environment.

As shown in the quotation, The Town of Warrenton can monitor the sound coming from the proposed Amazon data center for about $4,000 a year. In the context of the data center, this is a trivial cost for Amazon to fund.

The noise solution includes four noise sensors that the town can install on its light poles surrounding the data center, the collection of data in a central repository and the use of the Liveable Cities cloud based systems to display and alarm on the data.

I feel the use of an independent and ongoing noise monitoring solution is the best way to manage the variables in the data center environment and alleviate the concerns or fears of many citizens.

Thank you.

Fred

On 11/7/2022 6:22 PM, Fred Smith wrote:

> To the members of the Town of Warrenton Planning Commission
>
> I am writing to express my continued opposition to the proposed Amazon Data Center on Blackwell Road. My opposition is based on the following issues:
>
> - Incompatibility with a semi-rural community
> - Terrible long term economic viability of the facility as it is driven by a single end user and otherwise uneconomic
> - Ventilation and generator related noise in adjacent residential and commercial areas.

I have nearly 40 years' experience in the IT/Telecommunications industry including the construction, moving, acquisition and outsourcing of data centers. There is no doubt they are sterile facilities. And as such, they do not add to the social fabric of the local community.

Should the Commission decide a data center is appropriate or beneficial to the Town of Warrenton, I believe it is imperative that the Draft Conditions for the Special Use Permit for Amazon Data Services be modified in several key areas. They are:

1. **Electrical Substation**.

    a. While Amazon will no longer have a Dominion/VEPCO substation on its property, the SUP does not have language that ensures a new substation is not built inside Warrenton in support of Amazon's needs. Should the data center be approved prior to the resolution of the substation issue, the Town of Warrenton will have an extremely hard time stopping a new substation within the town limits. (for example, there is land across Lee Highway or the US 17 spur from the facility.) It is hard to say no to a new substation after the town has approved a data center that has a large power requirement.
    b. Distribution lines can run well over 10 miles. Amazon has operated data centers in the Warrenton Training center and Haymarket (initial facility) without substations closely aligned o the facility. As one the largest customers of Dominion/VEPCO, Amazon can strongly influence the selection of the substation used by the Blackwell facility.
    c. I recommend that the language in the Draft Conditions be modified to say "Amazon will only use the substation at Linden and Madison in Warrenton or an existing substation outside the town."
    d. The recommended language also effectively closes the issue of new 230Kv transmission lines and a possible disconnect with the county government.

2. **Undergrounding of Power Lines.**

    a. The Draft Conditions say "The Applicant shall request and pay for the undergrounding" of the power lines. Amazon has used buried distribution lines at the Warrenton Training Center and its initial center in Haymarket. The current language **does not require** a level of diligence by Amazon to ensure the distribution lines will be underground and has the potential to let Amazon out of the existing zoning requirements for them to be buried.
    b. I recommend adjusting the language in Item 4 be changed from "request" be changed to "will cause the distribution lines be placed underground and pay for the associated expenses".

3. **Noise Measurement and Compliance with the Zoning Ordinance.**

    a. The proposed language establishes dates where conformance is to be measured. It does not establish what activities are to take place while the measurement is being conducted. Amazon can meet the criteria of the proposed language with the data center operating at a reduced capacity. I recommend that the proposed language be modified to require Amazon to operate the data center in the noisiest configuration permitted under the SUP. This configuration is one with all generators and roof top air chillers running and loaded at least 50 percent of the rated capacity. (FYI The town noise ordinance does not have an exclusion for "emergencies" therefore the all-generator configuration is a valid configuration for measurement.)

b. The Draft Conditions document does not contain the noise clarifications Amazon requested of the town. Therefore, we do not know what Amazon is actually committing to.

In addition to the above, the noise measurement methodology outlined in the Draft Conditions is appropriate for a typical retail establishment such as a dry cleaner or a food store. From a noise perspective these are a steady state environment. Data center operations are very dynamic with widely varying service configurations. The facility reacts to the size of computational workloads, local weather conditions and the availability of primary electrical power. I am talking to a vendor who can provide a continuous calibrated noise measurement system with centralized reporting using a few sound sensors on light poles around the data center.

The continuous measurement approach is impartial, prohibits gaming of spot tests, and results can be made available to all interested parties on a real-time basis. The open availability of this information will go a long way towards resolving excessive noise concerns. I hope to provide you more information about this system by the end of the week.

In closing, I do not think Amazon wants to go away, It certainly looks like it is reacting to a customer driven timeline. Please consider using your unique leverage to get the best deal possible for the residents of the town.

Thank you for your time.

Regards,

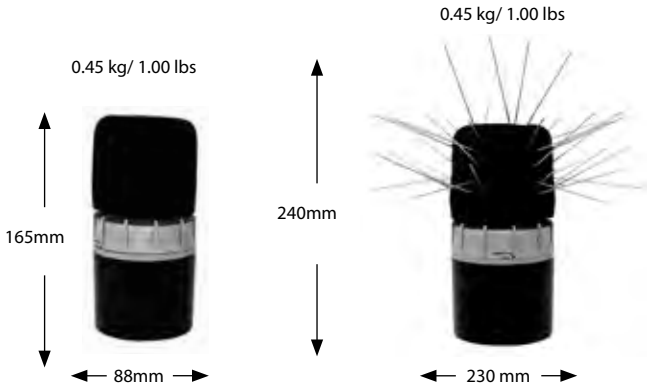
Fred

6343 Old Bust Head Road
Broad Run, VA 20137
Cell +1 540 905 5463

--
Fred M. Smith
6343 Old Bust Head Road
Broad Run, VA 20137
Cell +1 540 905 5463

SLX-NOISE

ACOUSTIC ANALYTICS HARDWARE SPECIFICATIONS



MEASUREMENT DATA	
Peak Noise Measurement (Leq Peak)	Reporting of peak noise level recorded in 15 minute monitoring increments as default, reporting periods are configurable.
Average Noise Level (Leq Avg)	Reporting of average noise level recorded in 15 minute monitoring increments as default, reporting periods are configurable.
Minimum Noise Level (Leq Min)	Reporting of minimum noise level recorded in 15 minute monitoring increments as default, reporting periods are configurable
Calculation Method	Edge computing of data with cellular backhaul to SmartLinx Data Visualization Platform.
Communication	Cellular (LTE-M) back-haul of data from the device
Reporting Frequency	Automatic Reporting in 15 or 60 minute increments. Shorter increments available upon request
Configuration	Over the air (OTA) configurable for modification parameters, firmware upgrades, etc.

CERTIFICATIONS	
Product Safety Certification	UL, CE
Cellular Certifications	PTCRB, FCC, IC

ELECTRICAL/MECHANICAL/ENVIRONMENTAL	
Voltage	See SLX-Controller Spec Sheet for more information on available voltages, ANSI C136.10 and C136.41 compliant
Power Consumption	2W Avg @120V
Vandal Resistance	IK-08 rated
Temperature Rating	-40°C to +60°C (-40°F to +140°F)

All information provided is subject to change without notice.

Liveable Cities

84 Chain Lake Drive, Halifax,
Nova Scotia, Canada, B3S 1A2

T: +1.902.450.2222
F: +1.902.450.0675

liveablecities.com
info@liveablecities.com

SMARTLINX

SOFTWARE SPECIFICATIONS

REPEAT O

☐ YES ☐ NO





ORDERING AND SETUP INFORMATION	
Quantity	
Customer Name	
Project Name	
Approved By	
Date	
Comments	
SmartLinx Site Admin	Name
	Phone
	Email

GRAPHICAL USER INTERFACE
Intuitive easy to use, secure, 100% web based GUI.
Displays devices in both a table and map view.
Displays different devices with individual icons.
Allows users to create and save logical groups of devices as Bookmarks.
Mobile friendly utilizing single touch design.

ASSET MANAGEMENT
Auto discovery & commisioning + GPS locations of new devices.
Stores asset information for all device types (traffic, pollution, noise, lighting).
Enables users to group devices by region (Municipal District).
Enable users to add, move and modify devices.
Flexible user customizable inventory lists utilizing a built-in query language.
Flexible user customizable data export and import.

REPORTING AND ALERTS
Flexible user configurable reports based on user defined inventory lists.
Reports can be filtered by region (Municipal District).
Displays alerts by region, user definable alert levels.
Data History of any device can be displayed in a graphical view and exported as a PDF or CSV. Data History can display different sensors at the same time. For example: Displaying traffic volume and pollution levels.
Multiple devices (traffic, pollution, and noise) can be displayed in Data History to assist with analysis.
All reports can be scheduled at recurring times utilizing the Automation Center or run on-demand by the user.

AUTOMATIONS AND ANALYTICS
Automation Center to allow users to define custom business logic specific to their needs.
Automation Center includes building blocks for Events, Notification Action, Ticket Actions, Analytics, Command Actions and Active Period.
Automations allows for the generation of alarms or alerts to an individual users or groups of users via email or SMS.
Automations can be filtered by Region (Municipal Districts).
Automation allows for the generation of alarms or alerts at the expiration of a timer or scheduled on a specific time and date.
Automation allows for the generation of alarms or alerts based on the analysis of incoming data.
Automation supports user generated one-time or recurring reports.
Supports heat maps analytics.

USER MANAGEMENT, ROLES & PERMISSIONS
User Management to limit users to specific Role and Group Permission.
User Roles to limit user to specific Applications and Devices.
User Permissions to limit user to Create, Update and Delete devices.
Supports Active Directory, SAML 2.0
Extensive audit trail by user, time stamp and activities.

SMART CITY
Supports TALQ2 Protocol for Smart Cities.
Supports Open Smart City Protocol (OSCP).
Extensive robust API for data exchange.

All information provided is subject to change without notice.

Liveable Cities

84 Chain Lake Drive, Halifax,
Nova Scotia, Canada, B3S 1A2

T: +1.902.450.2222
F: +1.902.450.0675

liveablecities.com
info@liveablecities.com

To: Town of Warrenton
21 Main Street, Warrenton, VA 20186

Quotation # QUO-01408-X2Q5C9 - 0
Date 2022-11-14

Attn: Fred Smith

Ref: Warrenton Noise Micro-Sensor RFQ 20221110

In accordance with our Standard Terms and Conditions of Sale and the notes below, I am pleased to provide a quotation for our Smart City Noise Micro-Sensor as per your request.

HARDWARE FEES:

Qty	Part Number	Description	Unit Price	Extended Price
4	SLX-NOISE	SLX-Noise Sensor and Host Controller	$569.00	$2,276.00

RECURRING FEES:

Qty	Part Number	Description	Unit Price	Extended Price
4	SLX-NOISE	SLX-Noise 1-Year Service Plan (Includes Software w/ Ambient Noise Monitoring Analytics, Cellular Data Plan and Technical Support)	$419.00	$1,676.00
			Total For One Year	$3,952.00

NOTES:

Pricing based on receiving total qty. quoted and non-cancelable PO
Incoterms: EXW Factory. Please enquire for freight costs
All prices are in USD
Please enquire for lead times
Pricing is based on Standard User Profile on 10mb of data per month per sensor
Sensors include an onboarding training package
Installation and Maintenance excluded.
Subscription will auto-renew on an annual basis at the end of the minimum term.
Warranty valid as long as subscription active
Refer to Support Services Agreement for more details on software maintenance & technical support.
Refer to End User Licensing Agreement for licensing terms.
Refer to Subscription Agreement for General Terms and Conditions
Pricing is valid for 30 days

Should you have any questions please feel free to contact me at any time.

Regards,

Brandon Faubert
Technical Product Specialist, International
Tel.: 902-450-2222, 455

84 Chain Lake Drive, Unit 403
Halifax, Nova Scotia
Canada, B3S 1A2
Fax: +1 (888) 533-5755

Email: bfaubert@ledroadwaylighting.com http://www.ledroadwaylighting.com

Support and Service Agreement



Liveable Cities

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Support Services Agreement

This Support Services Agreement and the attached Exhibits (as the same may be amended, modified or supplemented from time to time with mutual agreement from both Parties, this "Support Services Agreement") is made and entered into as of the __ day of _____ , 20__ (the "Effective Date"), by and between LED Roadway Lighting Ltd. ("LRL"), a corporation formed under the laws of the province of Nova Scotia, Canada, with its registered office at 115 Chain Lake Drive, Halifax, Nova Scotia, B2S 1B3, Canada

-and -

► (the"Customer"), whose address is _____.

LRL and Customer are each referred to herein as a "Party" and collectively, as the "Parties."

WITNESSETH:

WHEREAS, LRL and Customer wish to enter into a Support Services Agreement dated as of effective date, and

WHEREAS, Customer desires to purchase from LRL, and LRL is willing to provide, certain Support Services in accordance with the terms and conditions below;

NOW, THEREFORE, in consideration of the premises hereinafter stated, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties agree as follows:

1 DEFINITIONS

1.1. Definitions. In addition to other terms defined elsewhere in this Support Services Agreement, the following terms, as used herein, shall have the following meanings:

1.1.1. Annual Support Services Fee" is as defined at Exhibit 1.

1.1.2. "Current Release" means the most recent software version of the Supported Product that has been released by LRL to its customers.

1.1.3. "CMS Software" means the Central Management Software which LRL provides upon payment of applicable fees and acceptance of End User License. The CMS Software may be an Enterprise or SaaS hosted instance.

1.1.4. "Documentation" means the user, operating, and installation manuals or guides, and other printed or electronically stored or displayed materials relating to the use and operation of the Supported Product as may be made commercially available by LRL from time to time.

1.1.5. "Enterprise" means an instance of the CMS Software that is hosted on the Customers business premises under a separate license agreement.

1.1.6. "Hot Fix" means a critical/urgent Temporary Fix which is used to restore the relevant functionality. A Hot Fix shall only be used where it is the only way to achieve Incident

Recovery and is provided without any significant testing other than a limited amount of developer testing (if any) in the time available. A Hot Fix is delivered "As Is" with no warranties whatsoever.

1.1.7. "Incident" means any event which is not part of the standard operation of the Supported Product and which causes, or will cause, an interruption to, or a reduction in, the quality of its service. It is possible to address an Incident without Resolving an underlying Problem.

1.1.8. "Incident Recovery" means to return to a working state or normal business operations as quickly as possible with minimal impact on either the business or the user. After Incident Recovery further steps may be needed to Resolve the underlying Problem, in which case the Incident ticket is closed and a new Problem ticket opened for purposes of tracking Service Levels.

1.1.9. "Intellectual Property Rights" means any and all registered and unregistered rights granted, applied for or otherwise now or hereafter in existence under or related to any patent, copyright, trademark, trade secret, database protection or other intellectual property rights laws, and all similar or equivalent rights or forms of protection, in any part of the world.

1.1.10. "New Version" means any new software version of the Supported Product that LRL may from time to time introduce and market generally as a distinct product (as may indicated by LRL's designation of a new version number) and which LRL may make available to Customer at an additional cost under a separate written agreement.

1.1.11. "Normal Working Hours" or "NWH" means the hours between 8:00am to 5:00pm Atlantic Standard Time), Monday through Friday, except for observed Canadian National holidays.

1.1.12. "Optional Services" means services that are not within the scope of this Support Services Agreement and are not covered by the Annual Support Services Fee, including, without limitation, those services identified in Sections 2.2 and 2.3 of this Support Services Agreement, and training, field support and services performed outside of Normal Working Hours. Optional Services may be offered by LRL at its sole discretion and subject to such fees for time and materials as the Parties shall mutually agree in writing.

1.1.13. "Patch" means an urgent release which addresses an Incident or a Problem and is required to implement a repair prior to the next regularly scheduled Service Pack. A Patch is provided with only limited QA functional testing and without any regression testing. For Enterprise instances of the CMS Software, the Patch to be applied by LRL or the Customer under the direction of LRL. The Customer to apply operating system Patches once approved by LRL.

1.1.14. "Permanent Fix" means an action that will permanently Resolve an Incident or Problem.

1.1.15. "Previous Sequential Release" means at any time the release of Supported Product which has been replaced by the then "Current Release" of such Supported Product. Notwithstanding anything to the contrary herein, a Previous Sequential Release will be supported by LRL only for a period of eighteen (18) months after release of the then-Current Release. For the calculation of release schedules and intervals, it is assumed a Service Pack will be issued at a minimum of once per year.

1.1.16. "Problem" means the underlying cause or the investigation required to address one or more Incidents. The cause is often not known at the time a ticket is created and may be determined to be a Service Exception.

1.1.17. "Problem Resolution" or "Resolve" means the action taken to achieve a Permanent Fix for the underlying cause of an Incident.

1.1.18. SaaS: means a LRL cloud hosted instance of the CMS Software that he Customer is granted access under a separate license agreement.

1.1.19. "Service Exception" has the meaning set forth at Section 2.4.

1.1.20. "Service Level" means the anticipated time to Resolve an Incident starting with Customer's creation of the ticket in LRL's on-line ticketing system as further defined in Section 4 (Service Levels) and Exhibit 2.

1.1.21. "Service Pack" means a periodically released update to the Supported Product, including minor enhancements, fixes for known bugs and configuration fixes. A Service Pack does not provide materially new functionality and does not constitute a New Version. A Service Pack is made generally available to LRL's supported Customers. Designation of a release as a "Service Pack" is solely at the discretion of the LRL.

1.1.22. "Services" has the meaning set forth in Section 2.1.

1.1.23. "Severity Level" means the ranking system used to categorize an Incident or a Problem in accordance with the definitions provided at Exhibit 2.

1.1.24. "Supported Product" means the network components, software and firmware listed as Supported Products in Exhibit 1 to this Support Services Agreement. For clarity, products that are not Supported Products may be licensed pursuant to the License Agreement.

1.1.25. "Temporary Fix" means an action that will achieve Incident Recovery, including a Hot Fix or a Work Around.

1.1.26. "Term" has the meaning provided in Section 8.1.

1.1.27. "Tier 1 Support (T1)" means the provision by LRL of reviewing the initial Customer logging and reporting of an Incident through LRL's on-line ticketing system. The primary job of a T1 specialist is to verify the Customer's information and documentation of the facts about the Incident. Tier 1 may or may not provide a basic level of trouble shooting support. Prior to initiating an incident report, LRL expects the Customer to have tried some basic trouble shooting, such as ensuring the device is commissioned and power is connected.

1.1.28. "Tier 2 Support (T2)" means the provision by LRL of more in-depth technical support than T1 by a technician or engineer who is experienced, trained and knowledgeable on a product set or service. T2 provides basic to advanced technical troubleshooting, analytical methods and procedures. T2 support personnel assist the Customer T1 personnel in solving basic

technical problems and investigating more complicated issues by confirming the validity of the problem and seeking solution sets related to more complex issues.

1.1.29. "Tier 3 Support (T3)" means the provision by LRL of services addressing the most difficult or advanced Problems including factory support requiring expert-level troubleshooting and analysis methods. Where T1 and T2 are unable to achieve Incident Recovery, LRL's T3 support staff will assist with required research and development of solutions to new or unknown Problems. Once the solution is verified, it is delivered to the Customer for installation or deployment and is made available for future troubleshooting and analysis.

1.1.30. "Work Around" means a Temporary Fix deployed to achieve Incident Recovery by using either other system functions or established manual procedures.

2 SCOPE OF SERVICES

2.1. Services. During the Term and subject to the terms and conditions of this Support Services Agreement, LRL shall render the following T1, T2, and T3 Services of the Supported Product and one Previous Sequential Release (if any), during Normal Working Hours. The Customer may purchase Optional Services separately at LRL's then-current rates.

2.1.1. Web Support. LRL shall maintain an on-line ticketing system that allows Customer to report Incidents, Problems or other concerns respecting the Supported Product. This will include a listing of all Customer's tickets, status, recovery and resolution, as appropriate.

2.1.2. LRL shall make available qualified analysts to provide, at Customers request, Support Services for the Supported Product, including:

2.1.2.1. Incident and Problem Management (further described below) including troubleshooting and diagnosing Incidents to achieve Incident Recovery and Problem Resolution, provided that it is understood that LRL's ability to provide this Service is dependent on Customer's provision of secure access to all components of the solution as further described below, including (as applicable) device connectivity, network access, and server(s) hosting the CMS Software (if applicable);

2.1.2.2. Interpreting error messages in the Supported Product; and

2.1.2.3. Answering questions regarding Documentation and operations of the Supported Product.

2.1.3. Incident Management. The Parties shall implement and observe the following process for Incident Management:

2.1.3.1. The Incident shall be entered and described in LRL's on-line ticketing system ("Incident Record") and a Severity rating assigned per the definitions in Exhibit 2;

2.1.3.2. LRL will manage and update the Incident Record in accord with the Service Levels in Exhibit 2, Table 1 but does not guarantee that it will be able to respond within that specific time period in all cases. LRL is not responsible or liable for any delay or failure of performance caused in whole or in part by Customer's delay or failure to perform any of Customer's obligations under this Support Services Agreement (each, a "Customer Failure");

2.1.3.3. The Severity of the Incident may be changed during its lifetime due to a change in circumstances or additional information becoming available; and

2.1.3.4. Incidents will be closed when a Temporary Fix (a Hot Fix or Work Around) has achieved Incident Recovery or it has been established that a Service Exception applies (i.e., the cause of the Incident is not related to the Supported Product). If follow up activities are required, a Problem Record will be created at the appropriate Severity Level to track progress towards resolution.

2.1.4. Problem Management. The Problem Management process is designed to prevent repeat Incidents by identifying trends, similarities, root cause and Permanent Fixes when and where appropriate and includes the following:

2.1.4.1. Problem Records will be created in on-line ticketing system upon the closure of an Incident for the purpose of tracking additional analysis activities and delivery of a Permanent Fix as appropriate;

2.1.4.2. A Severity Level will be assigned according to the definitions in Exhibit 2 and LRL will manage and update the Problem Record in accord with the Service Levels in Exhibit 2, Table 1, but does not guarantee that it will be able to respond within that specific time period in all cases. LRL is not responsible or liable for any delay or failure of performance caused in whole or in part by Customer Failure; and

2.1.4.3. Problems will be closed when a Permanent Fix has been identified and delivered to the Customer for installation or implementation or it is determined that a Service Exception applies.

2.1.5. Proactive Management Activities. LRL will notify the Customer from time to time as it becomes aware of issues that could have a detrimental impact on the performance of the Supported Product. Examples include third-party software configuration or patch fixes to correct potential issues (e.g. security vulnerability or support for updated third-party software); and the discovery of fixes to functionality necessary to avoid potential issues (previously unknown). The notification will include, as applicable and relevant: the potential issue which has been identified; any adverse effects of not correcting the issue; any potential adverse effects of correcting the issue; and information concerning LRL's plans for addressing the issue, such as opening a Problem ticket, delivering a Temporary and/or Permanent Fix and so forth.

2.1.6. Additional Services as identified in Exhibit 1.

2.2. Exclusions from scope of Support Services Agreement. The following activities are not within the scope of this Support Services Agreement but may be requested from Customer as Optional Services:

2.2.1. No Field Support. Field support is not within the scope of Services provided under this Support Services Agreement or covered by the Annual Support Services Fee. If the Customer requests and LRL agrees to provide field support, the Parties will separately agree to the scope, fees and other terms for such services, including if applicable reimbursement of travel and accommodation expenses.

2.2.2. Custom Enhancements. Custom Enhancements will not be provided pursuant to this Support Services Agreement. If mutually agreed by LRL and Customer, LRL shall develop Custom Enhancements in accordance with a separately negotiated agreement.

2.2.3. New Versions. New Versions are not within the scope of this Support Services Agreement as they represent delivery of new functionality beyond the scope of the initial project.

2.2.4. Training. Training of Customer personnel, contractors and consultants is not within the scope of this Support Services Agreement.

2.3. Other limitations. The Services provided under this Support Services Agreement for an Enterprise instance are subject to the following additional conditions and limitations:

2.3.1. LRL will only support the Supported Product on platforms for which all components are supported by their respective vendors, under standard conditions, as of the date the support request is made by Customer to LRL.

2.3.2. The list of platforms on which each version of the Supported Product is qualified is decided solely by LRL as listed in the Documentation. If LRL receives notice from the supplier of any such supported platform that the supplier intends to change, discontinue or declare end-of-life for the platform, LRL shall promptly notify Customer and work with Customer to minimize disruption resulting from any such change but does not guarantee that disruption will not occur.

2.3.3. LRL will promptly advise Customer of any proposed changes to settings and configurations for third-party software and hardware that would reasonably be expected to affect the Supported Product, and LRL will work with Customer to minimize disruption resulting from such change but does not guarantee that disruption will not occur.

2.3.4. While LRL will make reasonable commercial efforts to provide Problem Resolutions with the same third-party software versions as the production system, it is understood that some Problem Resolutions may require upgrades to third-party software. In these cases, LRL will notify Customer of this requirement, and Customer will make arrangements for such upgrades.

2.3.5. Upgraded versions of the Supported Product may require upgrades to third-party software and hardware. LRL will advise Customer of these requirements. Customer will make arrangements for such third-party upgrades at its own cost.

2.4. Service Exceptions. LRL has no obligation to provide Services relating to Incidents that arise out of or result from any of the following (each a "Service Exception"):

2.4.1. any Customer or third-party modification, operation or use of, or other activity relating to, the Supported Product or the media on which it is provided, other than as specified in the Documentation, including any incorporation in the Supported Product of, or combination, operation or use of the Supported Product in or with, any product (including any software, hardware, firmware, system or network) or service not specified for Customer's use in the Documentation, unless otherwise expressly agreed in writing by LRL;

2.4.2. the combination of the Supported Product with another product or use of the Supported Product with hardware or in operating environments which have not been approved by LRL in writing in advance of the event;

2.4.3. any negligence, abuse, misapplication or misuse of the Supported Product;

2.4.4. any Customer Failure, including Customer's failure to promptly install any Patch or Service Pack that LRL has previously made available to Customer;

2.4.5. the operation of, or access to, Customer's or a third-party's system or network;

2.4.6. third-party software or hardware except for platforms that LRL has identified in the Documentation as supported;

2.4.7. any breach of or noncompliance with any material provision of this Support Services Agreement by Customer or any of its representatives;

2.4.8. any Force Majeure Event (including abnormal physical or electrical stress) as defined in Article 9.11.

3 CUSTOMER OBLIGATIONS.

3.1. Notification. Customer shall promptly notify LRL of any Incident and provide LRL with reasonable detail of the nature and circumstances of the Incident.

3.2. Environment. Customer shall set up, maintain and operate in good repair and in accordance with the Documentation all environmental conditions and components, including all networks, systems and hardware, in or through which: (a) the Supported Product operates; and/or (b) the Customer accesses or uses any of the Services.

3.3. Access. In connection with the performance of the Services, Customer shall provide LRL personnel with all such cooperation and assistance as they may reasonably request, or otherwise may reasonably be required, to enable LRL to perform its obligations (including the provision of the Services), and exercise its rights, under and in accordance with the terms and conditions of this Agreement, including:

3.3.1. VPN. Subject to compliance with Customer’s security requirements, the Customer will provide LRL with reasonable access to the Supported Product including VPN accounts and Secure IDs (or other mutually negotiated security and remote access tolls) to enable two concurrent users to remotely access the Customer’s production environment. Subject to

compliance with Customer's security requirements, Customer will provide LRL with reasonable, uninterrupted access to the Supported Product including VPN accounts and Secure IDs (or other mutually negotiated security and remote access tools) to enable two concurrent users to remotely access both the Customer's sandbox and production environments. It is understood that unavailability of remote access will result in degraded support levels from LRL. Should problems arise with accessing the systems remotely, Customer will provide access to support personnel to resolve them; and

3.3.2. Third party support and access. Customer will facilitate at its own cost all contacts with and access to third-party support (including without limitation help desk and after-business hours support) as reasonably requested by LRL to enable performance of its obligations under this Support Services Agreement. If such third-party support is unavailable or not available on a timely basis, LRL will be relieved of the applicable Service Level.

3.4. Current Release. Except as otherwise specified in this Agreement, Customer must run only the Current Release level of the Supported Product that LRL has made available to its Customers. Customer shall install all Service Packs as soon as reasonably possible from the date they are made available by LRL.

3.5. Customer acknowledges and agrees that use of a Temporary or Permanent Fix may require Customer to install earlier Service Packs, if those were not implemented by Customer at the time they were made available by LRL. Further, LRL is not responsible for any issues arising in connection with the use of a Temporary or Permanent Fix if the Customer has declined to install a Service Pack which is older than the two preceding Service Packs offered to the Customer.

3.6. Authorized Contacts. Customer and LRL shall designate (and update as needed) on Exhibit 3 not more than four (4) contacts who are authorized to request the Services provided hereunder (collectively, the "Authorized Contacts"). To reduce redundant contacts and inconsistent instructions (but only to the extent reasonably feasible) only one (1) Authorized Contact should be designated per Service requested.

3.7. Training. Customer shall retain personnel trained to use the Current Release of the Supported Product for the duration of this Support Services Agreement.

3.8. Escalation. Customer shall use commercially reasonable efforts to ensure that the Incidents escalated to LRL are Incidents attributed to the operation of the Supported Product and acknowledges that LRL is not obligated under this Support Services Agreement to provide support or where the Incident is not attributable to the Supported Product. In the event that LRL does provide support in response to an Incident that, after investigation, is determined not to be attributable to the Supported Product, LRL retains the right to invoice Customer for the reasonable costs of such support at LRL's customary time and materials rates, which can be found in Exhibit 1.

3.9. Responsibility for Representatives. Each Party shall remain responsible and liable for: (a) the supervision, coordination and performance of their employees, contractors and consultants in connection with this Agreement; and (b) all acts and omissions of their employees, contractors and consultants, each of which shall be ascribed to the respective Party to the same extent as if such acts or omissions were by the Party itself.

3.10. Non-Solicitation. During the Term and for one (1) year after expiration or termination of Support Services Agreement, Customer shall not, and shall not assist any other person to, directly or indirectly recruit or solicit (other than by general advertisement not directed specifically to any person or persons)

for employment or engagement as an independent contractor any LRL personnel who then or within the prior twelve (12) months was involved in any respect with the Services or the performance of this Agreement. In the event of a violation of this Section 3.10, LRL will be entitled to liquidated damages equal to the compensation (base pay and any incentive or bonus) paid by LRL to the applicable employee or contractor during the prior twelve (12) months. The Parties intend that the liquidated damages constitute compensation, and not a penalty. The Parties acknowledge and agree that the LRL's harm caused by a Customer breach would be impossible or very difficult to accurately estimate, and that the liquidated damages are a reasonable estimate of the anticipated or actual harm that might arise from the breach. Customer's payment of the liquidated damages is the Customer's sole liability and entire obligation and the LRL's exclusive remedy for breach of this Section 3.10.

4 SERVICE LEVELS

4.1 Service Levels

Subject to the exclusions below, Service Levels will only apply to Provisioned Networked Lighting Controllers and only when those Provisioned Networked Lighting Controllers are fully powered and actively communicating (e.g., at night). For any Service Level to be in effect, the customer must have a Support Services Agreement for a minimum of one thousand (1,000) Provisioned Network Lighting Controllers. For the avoidance of doubt, all Service Levels are measured on a Customer specific basis.

a. CMS Software Availability. CMS will be available and accessible by Customer and functioning normally ninety-nine percent (99%) of the time. A determination of availability will be based on 24x7 accessibility excluding time for maintenance events, identified a minimum 24 hours ahead of outage.

b. CMS Software Issue Reporting. Upon identification of a CMS Software issue, the Customer must create an on-line ticket at LRL's on-line ticketing system at https://ledroadwaylighting.zendesk.com and identify the dates and times that the Service Level in question was not met. The Service Level will be confirmed and reported by LRL at the end of each calendar month or as requested by the Customer.

4.2 Exclusions.

CMS Software interruptions caused by or associated with the following will not be included in the monthly Service Level reporting:

a. Force Majeure event;
b. Scheduled maintenance and emergency maintenance and upgrades to the CMS Software. LRL will give Customer advance notice of maintenance requiring portions of the Network to be taken off-line whenever possible;
c. False reports that the CMS Software is not available as a result of outages or errors of any LRL measurement system;
d. An act or omission of Customer, Customer's third party suppliers or contractors(other than LRL's subcontractors or suppliers);
e. Any problems related to unexpected RF interference from another RF transmitter or system;
f. For Enterprise instances, the Customer has not installed the latest version of CMS Software, patches or updates; or
g. Failures of any of the following: Customer or third-party equipment, hardware, software or services not provided as Services, including but not limited to any Customer VPN, computers, services, servers, etc. used to access or host any The CMS Software

Customer Support Business Hours and Contact Information

Customer Location	Customer Support	On-Line Ticketing System Address
Global	8 a.m.– 5 p.m. (AST)	https://ledroadwaylighting.zendesk.com

4.4 Service Levels. Service Levels, including time frames for Incident Recovery and Problem Resolution, are described in Exhibit 2, and each is predicated on the assumption that the reported Problem is reproducible within LRL's systems environment, and that the Problem is not due to a Service Exception. Severity 1 Incidents will remain in active investigation mode until Incident Recovery. In other cases, the following shall apply:

4.4.1 It may not be possible to identify and Resolve a Problem where Incident Recovery has occurred but the Incident cannot be reproduced by either Customer or LRL. If the Incident does reoccur, Incident and Problem Management will be reactivated.

4.4.2 For Incidents that (after Recovery) are reproducible only in Customer's environment, but not in LRL's, LRL shall actively engage with Customer to isolate the Problem in Customer's environment and Service Levels will be extended accordingly.

4.4.3 Depending upon the Incident or Problem, LRL may propose to add instrumentation to the Supported Product to assist in determining the nature of the event and to facilitate Incident Recovery and/or Problem Resolution. Customer acknowledges that in the event that such instrumentation is required as part of the analysis, any delays in approving their deployment will delay Incident Recovery and/or Problem Resolution.

4.4.4 Installation or implementation of a Temporary or Permanent Fix into Customer's sandbox and production system and/or operations is not within the scope of this Support Services Agreement. Customer shall be solely responsible for installation of the Temporary or Permanent Fix into its environments unless otherwise agreed in writing by LRL.

4.5 Escalation Path. The Parties will make a good faith attempt to resolve any disputes relative to Incident Recovery or Problem Resolution at the operational level of their respective organizations. If any dispute is not resolved, either Party may escalate the issue as follows:

LED ROADWAY LIGHTING	CUSTOMER
Main Tech Support Line techsupport@ledroadwaylighting.com 1 (877) 533-5755 ext 550 1 (902) 450-2222 ext 550	

5 FEES, PAYMENT TERMS AND CHARGES

5.1 Fees and Charges. Fees and charges for the Services covered by this Support Services are set forth on Exhibit 1 ("Annual Support Services Fee"). Any services requested by Customer outside of the Scope of this Support Services Agreement will be subject to a separate agreement by the Parties. LRL reserves the right to adjust the Annual Support Services Fee one time per calendar year beginning as of the first day of January of the year immediately following the effective date of this Support Services Agreement. Such adjustment will be effective not less than sixty (60) calendar days after written notice of the change has been provided to Customer and Exhibit 1 will be deemed amended accordingly.

5.2 Invoices. LRL shall invoice Customer for the Annual Support Services Fee upon the Effective Date. The billing period under this Service Support Agreement is the first day of January to the last day of December. The Customer shall pay to LRL any fees owed under this Service Support Agreement within thirty (30) days of receipt of invoice. The initial payment of any annual fee hereunder will be pro-rated from month of the Effective Date to the first day of January of the subsequent year thereafter, the Annual Support Services Fee will be invoiced annually as of the first day of January.

5.3 Other Charges. Time and materials charges for Optional Services and Service Exceptions and any other reimbursable expenses incurred by LRL and agreed to by both Parties, will be billed monthly.

5.4 Payment. Payment of the Annual Support Services Fee and for any other charges that may be incurred is due in full within thirty (30) days of the date of the invoice.

5.5 Taxes. All Fees and other amounts payable by Customer under this Agreement are exclusive of taxes and similar assessments. Without limiting the foregoing, Customer is responsible for all sales, service, use and excise taxes, and any other similar taxes, duties and charges of any kind imposed by any federal, provincial, or local governmental or regulatory authority on any amounts payable by Customer hereunder.

5.6 Late Payment. If Customer fails to make any payment when due then, in addition to all other remedies that may be available to LRL, LRL may charge interest on the past due amount at the rate of 1.5% calculated daily and compounded monthly or, if lower, the highest rate permitted under applicable law.

5.7 No Deductions or Setoffs. All amounts payable to LRL under this Agreement shall be paid by Customer in full without any setoff, recoupment, counterclaim, deduction, debit or withholding for any reason (other than any deduction or withholding of tax as may be required by applicable Law or the agreed upon Service Level remedies setforth in this agreement).

6 INTELLECTUAL PROPERTY RIGHTS AND CONFIDENTIALITY

6.1 Limitations on Use. To the extent that LRL provides Customer with any Temporary or Permanent Fix, or other software or new or revised Documentation (collectively "Support Services Deliverables") in the performance of this Support Services Agreement, such Support Services Deliverables are licensed, not sold, pursuant to the terms of the License Agreement.

6.2 Ownership. As between LRL and Customer, all Support Services Deliverables including any associated Intellectual Property Rights, are and shall remain the sole property of LRL, regardless of whether Customer, its employees, or contractors may have contributed to the conception or of such, or paid LRL for the use of the Support Services Deliverables, and Customer hereby sells, releases, quitclaims, and assigns to LRL all rights, title, interest, claim, or demand that Customer has, or may have, in such Support Services Deliverables and any associated intellectual property rights. Customer shall from time to time take any further action and execute and deliver any further instruments, including documents of assignment or acknowledgment that LRL may reasonably request to establish and perfect its ownership rights in such Support Services Deliverables, including any associated intellectual property rights.

6.3 Confidential Information. In meeting LRL's obligations pursuant to this Support Services Agreement, LRL may provide Customer with access to certain confidential and/or proprietary information of LRL ("Confidential Information"). Confidential Information includes the Supported Technology including all information concerning or embedded in the Supported Product, the Documentation and such other information as is clearly identified or labeled as such by LRL at the time of disclosure or which should be understood to be Confidential Information by its nature. Customer and its Representatives will protect the confidentiality of the Confidential Information in the same manner as it protects its own proprietary information of like kind, but in no event, with less than reasonable care. If requested by LRL upon termination or expiration of this Support Services Agreement, Customer shall return all Confidential Information. The obligations with respect to items of Confidential Information shall expire five years after termination or expiration of this Agreement.

6.4 Equitable Relief. Customer acknowledges: (a) any use of Supported Product, the Documentation, or other Confidential Information in a manner inconsistent with this Support Services Agreement or (b) any other misuse of Confidential Information will cause immediate irreparable harm to LRL for which there is no adequate remedy at law. Customer agrees that LRL shall be entitled to immediate and permanent injunctive relief from a court of competent jurisdiction in the event of any such misuse or threatened misuse by Customer. The Parties agree and stipulate that LRL shall be entitled to such injunctive relief without posting of a bond or other security; provided, however, that if the posting of a bond is a prerequisite to obtaining injunctive relief, then a bond in an amount equivalent to C.A.D. $1,500 shall be sufficient. Nothing contained herein shall limit LRL's right to any remedies at law, including the recovery of damages.

6.5 Exclusions. Customer shall not reproduce, disclose, or use any Confidential Information except as required to receive the benefits or perform the obligation of this Support Services Agreement unless expressly permitted in writing by LRL. The limitations on reproduction, disclosure, or use of Confidential Information shall not apply to, and Customer shall not be liable for, reproduction, disclosure, or use of Confidential Information of LRL if (a) prior to the receipt under this Agreement, the information was developed independently by Customer or was lawfully received

from other sources without an obligation of confidence; or (b) subsequent to the receipt under this Agreement: (i) the information is published or otherwise disclosed to others by LRL without restriction, (ii) it has been lawfully obtained by Customer from other sources, provided that such information is not known by Customer to be subject to an obligation of confidentiality or other obligation of secrecy to LRL, (iii) it otherwise comes within the public knowledge or becomes generally known to the public without breach of this Support Services Agreement, or (iv) it is independently developed by Customer without breach of this Support Services Agreement.

7 LIMITED WARRANTY; LIMITATION OF LIABLITY; NO CONSEQUENTIAL DAMAGES

7.1 Mutual representations and warranties. Each Party represents, warrants and covenants to the other Party that:

7.1.1 it is duly organized, validly existing and in good standing as a corporation or other entity under the laws of the jurisdiction of its incorporation or other organization;

7.1.2 it has the full right, power and authority to enter into and perform its obligations and grant the rights, licenses and authorizations it grants and is required to grant under this Support Services Agreement;

7.1.3 the execution of this Agreement by its representative whose signature is set forth at the end of this Agreement has been duly authorized by all necessary corporate or organizational action of such Party; and

7.1.4 when executed and delivered by both Parties, this Support Services Agreement will constitute the legal, valid and binding obligation of such Party, enforceable against such Party in accordance with its terms.

7.2 Additional LRL representations and warranties. LRL represents, warrants and covenants to Customer that during the Term, LRL will perform the Services using personnel of required skill, experience and qualifications and in a professional and workmanlike manner in accordance with generally recognized industry standards for similar services and will devote adequate resources to meet its obligations under this Support Services Agreement.

7.3 **DISCLAIMER OF WARRANTIES. EXCEPT FOR THE EXPRESS LIMITED WARRANTIES SET FORTH IN THIS SECTION 7, THE SERVICES AND SUPPORT SERVICES DELIVERABLES ARE PROVIDED "AS IS." LRL HEREBY DISCLAIMS ALL WARRANTIES, WHETHER EXPRESS, IMPLIED, STATUTORY OR OTHER (INCLUDING ALL WARRANTIES ARISING FROM COURSE OF DEALING, USAGE OR TRADE PRACTICE), AND SPECIFICALLY DISCLAIMS ALL IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, TITLE AND NON-INFRINGEMENT. WITHOUT LIMITING THE FOREGOING, LRL MAKES NO WARRANTY OF ANY KIND THAT THE SUPPORTED PRODUCT OR THE SUPPORT SERVICES DELIVERABLES, (INCLUDING ANY SOFTWARE, HARDWARE, FIRMWARE, SYSTEM OR NETWORK), OR ANY PRODUCTS OR RESULTS OF THE USE OF ANY OF THEM, WILL OPERATE WITHOUT INTERRUPTION, BE COMPATIBLE OR WORK WITH ANY OTHER GOODS, SERVICES, TECHNOLOGIES, INFORMATION, MATERIALS OR OTHER MATTER (INCLUDING ANY SOFTWARE, HARDWARE, FIRMWARE, SYSTEM OR NETWORK) EXCEPT IF AND TO THE EXTENT EXPRESSLY SET FORTH IN THE**

DOCUMENTATION. THIS SUPPORT SERVICES AGREEMENT DOES NOT AMEND, AUGMENT OR OTHERWISE MODIFY THE LRL'S WARRANTIES UNDER THE SOFTWARE LICENSE AGREEMENT OR THE PROJECT AGREEMENT OR ANY CONDITIONS, LIMITATIONS OR RESTRICTIONS THEREOF.

7.4 **LIMITATION OF LIABILITY. IN NO EVENT SHALL LRL'S CUMULATIVE LIABILITY FOR ANY CLAIM ARISING IN CONNECTION WITH THIS SUPPORT SERVICES AGREEMENT EXCEED FIFTY PERCENT (50%) OF THE ANNUAL SUPPORT SERVICES FEE PAID FOR THE YEAR IN WHICH THE CLAIM AROSE.**

7.5 **NO CONSEQUENTIAL DAMAGES. IN NO EVENT SHALL LRL OR CUSTOMER BE LIABLE FOR ANY INDIRECT, CONSEQUENTIAL, SPECIAL, EXEMPLARY, OR INCIDENTAL DAMAGES OF WHATEVER KIND, INCLUDING BUT NOT LIMITED TO LOST PROFITS, LOST REVENUES, LOST BUSINESS OPPORTUNITIES OR HARM TO REPUTATION, HOWEVER CAUSED, EVEN IF PARTIES KNEW OR SHOULD HAVE KNOWN OF THE POSSIBILITY OF SUCH DAMAGES.**

8 TERM AND TERMINATION

8.1 Term. The initial term of this Agreement commences as of the Effective Date, will continue until the next occurring first day of January and will automatically renew as of that date and as of each following first day of January unless terminated earlier pursuant to any of the express provisions of Section 8.3 or either Party gives written notice of non-renewal at least sixty (60) days prior to the expiration of the then-current Term.

8.2 Termination. This Support Services Agreement may be terminated:

8.2.1 by LRL at any time, effective on written notice to Customer if Customer fails to pay any amount when due under this Support Services Agreement where such failure continues more than thirty (30) days after LRL delivers written notice ("Payment Failure");

8.2.2 by either Party, effective on written notice to the other Party, if the other Party materially breaches this Agreement or the Software License Agreement and such breach: (i) is incapable of cure; or (ii) being capable of cure, remains uncured more than thirty (30) days after the non-breaching Party provides the breaching Party with written notice of such breach;

8.2.3 automatically, effective immediately, on the expiration or termination of the Software License Agreement; or

8.2.4 by either Party, effective immediately, if the other Party: (i) is dissolved or liquidated or takes any corporate action for such purpose; (ii) becomes insolvent or is generally unable to pay its debts as they become due; (iii) becomes the subject of any voluntary or involuntary bankruptcy proceeding under any domestic or foreign bankruptcy or

insolvency Law; (iv) makes or seeks to make a general assignment for the benefit of its creditors; or (v) applies for, or consents to, the appointment of a trustee, receiver or custodian for a substantial part of its property.

8.3 Post-Termination Activities. Following termination of this Support Services Agreement, LRL shall promptly invoice Customer for all accrued fees and charges and all reimbursable expenses, and Customer shall pay the invoiced amount within thirty (30) days of invoice date. Customer may continue to use any work and Support Services Deliverables delivered during the Term to Customer by LRL for the remaining term of the License Agreement.

8.4 Lapse in Support Services. In the event that Customer permits this Support Services Agreement to lapse through non-renewal, nonpayment of the Annual Support Fee or otherwise, Customer may request and LRL may provide a new quote for Support Services. Customer acknowledges that Support Services may not be available for the Supported Products that have been declared at end-of-life or end-of-service, and that additional fees, licenses and other charges may be required to provide new CMS Software, Support Services Deliverables, and/or to bring the Supported Product to the Current Version that LRL supports.

9 MISCELLANEOUS

9.1 Notices. Any notice, waiver or other communication required or permitted to be given by either Party to the other hereunder shall be in writing and shall be deemed to have been given on the date received if delivered by hand, or sent by registered or certified mail, postage prepaid, addressed as indicated below. Any Party may designate a changed address for itself by notice hereunder to the other Party.

If to Customer:

►Attn:

If to LRL:

LED Roadway Lighting Ltd.
119 Chain Lake Drive,
Halifax, Nova Scotia, Canada B3S 1B3

9.2 Headings. The various headings in this Support Services Agreement are inserted for convenience only and shall not affect the meaning or interpretation of this Support Services Agreement or any of its paragraphs or provisions. Unless otherwise stated, references in this Support Services Agreement to any Article or Section are to the applicable Article or Section of this Support Services Agreement.

9.3 Governing Law. This Support Services Agreement is made pursuant to and will be construed and enforced in accordance with the laws of Province of Nova Scotia, without regard to its choice of law and/or conflict of laws principles. Except as provided in section 6.4 (Equitable Remedies) any legal suit, action or proceeding arising out of or related to this Support Services Agreement, the Services or the Support Services Deliverables or any transactions contemplated by this Agreement, shall be instituted exclusively in the federal courts of Canada or the courts of Province of Nova Scotia in each case located in the Halifax Regional Municipality, and each Party

irrevocably submits to the exclusive jurisdiction of such courts in any such suit, action or proceeding. Service of process, summons, notice or other document by mail to such Party's address set forth herein will be effective service of process for any suit, action or other proceeding brought in any such court.

9.4 Successors; Prohibited Transfers. All covenants, stipulations and promises in this Support Services Agreement shall be binding upon and inure to the benefit of the Parties and their respective permitted successors and legal representatives. Customer may not assign, sublicense or transfer its rights or obligations under this Support Services Agreement except with the prior written consent of LRL.

9.5 Counterparts and Additional Documents. This Support Services Agreement may be executed in any number of counterparts and by facsimile or email, each of which shall be deemed to be an original and all of which shall constitute together one and the same agreement. The Parties agree to execute such additional documents as may be necessary or desirable for the other Party to enforce its rights hereunder or otherwise to effectuate the purposes of this Support Services Agreement.

9.6 Severability. In the event any provision of this Support Services Agreement is held by a court or other tribunal of competent jurisdiction to be void, unenforceable and/or otherwise unlawful, that provision will be enforced to the maximum extent permissible under applicable law, and the other provisions of this Support Services Agreement will remain in full force and effect. The Parties further agree that in the event such provision is an essential part of this Support Services Agreement, they will negotiate in good faith with the aim of agreeing to a suitable replacement provision. Where agreement, approval, consent, or similar action by either Party is required under this Support Services Agreement, such action will not be unreasonably delayed or withheld.

9.7 No Waiver. No failure on the part of either Party to exercise any right, power or privilege under this Support Services Agreement, or under any instrument executed pursuant hereto, shall operate as a waiver. No single or partial exercise of any right, power or privilege shall preclude any other or further exercise of any other right, power or privilege. All rights and remedies granted herein shall be in addition to other rights and remedies to which the Parties may be entitled at law or in equity. No waiver of any of the provisions of this Support Services Agreement shall be effective unless in writing and signed by the Party charged with such waiver. No waiver shall be deemed a continuing waiver, or a waiver in respect of any breach or default whether similar or different in nature unless expressly so stated in writing.

9.8 Amendment. This Support Services Agreement cannot be, and shall not be deemed or construed to have been modified or amended, in whole or in part, except by a written instrument signed by both Parties. Electronic Mail will in no way be considered a “writing” sufficient to change, modify, extend or otherwise affect the terms of the Support Services Agreement.

9.9 Entire Agreement. This Agreement, together with its schedules, represents the entire Agreement between the Parties with respect to the Network Maintenance and Support and supersedes all other quotations, proposals, prior agreements or representations, oral or written, and all other communications between the Parties related to such subject matter.

9.10 No Third Party Beneficiary. This Agreement is solely for the benefit of the Parties and their successors and permitted assigns, and, except as expressly provided herein does not confer any rights or remedies on any other person or entity.

9.11 Force Majeure. In no event will either Party be liable or responsible to the other Party, or be deemed to have defaulted under or breached this Support Services Agreement, for any failure or delay in fulfilling or performing any term of this Support Services Agreement, when and to the extent such failure or delay is caused by any circumstances beyond such Party's reasonable control (a "Force Majeure Event"), including acts of God, flood, fire, earthquake, lightening, or explosion, war, terrorism, invasion, riot or other civil unrest, embargoes or blockades in effect on or after the date of this Agreement, national or regional emergency, strikes, labor stoppages or slowdowns or other industrial disturbances, passage of law or any action taken by a governmental or public authority, including imposing an embargo, export or import restriction, quota or other restriction or prohibition or any complete or partial government shutdown. Either Party may terminate this Agreement if a Force Majeure Event affecting the other Party continues substantially uninterrupted for a period of ninety (90) days or more. In the event of any failure or delay caused by a Force Majeure Event, the affected Party shall give prompt written notice to the other Party stating the period of time the occurrence is expected to continue and use commercially reasonable efforts to end the failure or delay and minimize the effects of such Force Majeure Event.

9.12 Acknowledgment by Parties. The Parties acknowledge they have read this Support Services Agreement, understand it, and agree to be bound by its terms and conditions.

LED ROADWAY LIGHTING LTD.	►**CUSTOMER:**
Signature: _____	Signature:_____
Name: _____	Name: _____
Title: _____	Title: _____
Date:_____	Date: _____

EXHIBIT 1

Support Services Annual Fees

Support Services Agreement Fees	**Support Services Hours Included**	**Product Code Reference**	**Support Agreement Cost**	**Discounted Rate for Support Services Agreement Subscribers exceeding allotted hours**
LEVEL 1 < 1,000 Controllers ***Eligible Services*** ***+ CMS general support (relocating controllers, etc)*** ***+ Inventory Reconciliation Support*** ***+ System Troubleshooting*** ***+ Issue Identification*** ***+ Failure notification analysis*** ***+ Overall system performance analysis*** ***+ Partner network head end system data exchange analysis*** ***+ Network Issue Diagnosis (LRLMesh)*** ***+ Network Design Support Services Post Sign Off (LRLMesh)*** ***+ Any other Tier 1, 2, and 3 remote trouble shooting support*** ***+ Discounts on hourly rate for any services required once allotted hours have been utilized***	***50***	SLX-SSAG-1	$4,000.00USD	25%
LEVEL 2 < 5,000 Controllers ***+ Same***	***100***	SLX-SSAG-2	$8,000.00USD	25%
LEVEL 3 < 25,000 Controllers ***+ Same***	***200***	SLX-SSAG-3	$15,000.00USD	25%
LEVEL 4 < 75,000 Controllers ***+ Same***	***500***	SLX-SSAG-4	$35,000.00USD	25%
LEVEL 5 < 150,000 Controllers ***+ Same***	***750***	SLX-SSAG-5	$52,500.00USD	25%
LEVEL 6 < 300,000 Controllers ***+ Same***	***1000***	SLX-SSAG-6	$70,000.00USD	25%
LEVEL 7 > 300,000 Controllers ***+ Same***	***1250***	SLX-SSAG-7	$87,500.00USD	25%

Support Services Listings	**Product Code Reference**	**Service Price Per Hour**	**Service Price Per Hour *(Discounted Rate for Support Services Agreement Subscribers exceeding allotted hours)***
Inventory Reconciliation Support	SLX-SS-Tier1	$120.00 USD	$90.00 USD
System Troubleshooting / Issue Identification	SLX-SS-Tier1	$120.00 USD	$90.00 USD
General CMS Work (could be done by customer but they request LRL to perform)	SLX-SS-Tier1	$120.00 USD	$90.00 USD
Failure Notification Analysis	SLX-SS-Tier1	$120.00 USD	$90.00 USD
Overall System Performance analysis and troubleshooting	SLX-SS-Tier1	$120.00 USD	$90.00 USD
Partner Network Head End to CMS data exchange analysis	SLX-SS-Tier2	$140.00 USD	$105.00 USD
Custom Report Requestor Report Frequency Customization	SLX-SS-Tier2	$140.00 USD	$105.00 USD
System Customization Request (accepted by LRL)	SLX-SS-Tier2	$140.00 USD	$105.00 USD
Network Issue Diagnosis (LRLMesh)	SLX-SS-Tier2	$140.00 USD	$105.00 USD
On-going Network Design Support Services (LRLMesh) ***- changes outside of scope*** ***- new neighborhoods/new installs*** ***- moved access point*** ***- construction service disruption planning/evaluation***	SLX-SS-Tier2	$140.00 USD	$105.00 USD
CMS or Network Tier 1 Support for issue not identified above	SLX-NWTier-1	$120.00 USD	$90.00 USD
CMS or Network Tier 2 Support for issue not identified above	SLX-NWTier-2	$140.00 USD	$105.00 USD
CMS or Network Tier 3 Support for issue not identified above	SLX-NWTier-3	$150.00 USD	$112.50 USD

EXHIBIT 2

Service Levels and Support Modes

Initiating a Ticket. Customer will be provided access to and instructions for use of LRL's automated customer support database. When an Incident or other support issue arises, Customer will enter relevant data points into LRL's on-line ticketing system, which will thereafter be the primary means of information exchange with LRL's support services group. Among other things, Customer will enter its evaluation of Severity Levels of the event per the definitions below (and as prompted by automated customer support database). LRL will evaluate the ticket, ask for additional information as needed, and may reassign the Severity Levels after consultation with Customer. Action on the ticket and service level will be guided by that evaluation.

Note that if Customer believes an Urgent issue has arisen, Customer will contact LRL by telephone (1-902-450-2222 ext 550) to begin troubleshooting with LRL, as well as entering a ticket into LRL's on-line ticketing system at https://ledroadwaylighting.zendesk.com

Additional Definitions:

"Urgent": The Supported Product does not operate and its loss has a critical impact on Customer's business operations. There is no business work around possible; high visibility and impact to Customer; may include complete loss of CMS Software visibility; more than thirty (30) percent of Supported Product are not performing consistently and/or are off-line/out-of service in a 48-hour period.

"High": High, with no business Work Around possible; High functionality broken that results in material degradation of significant aspects of Customer's business operations. Up to twenty (20) percent of CMS Software system functions are not performing consistently and/or are offline or out-of-service. Normal operations may be degraded but can continue.

"Normal": Normal and impairs the performance of the Supported Product but it does not substantially affect Customer's business operations, or the failed operations are not critical and a reasonable business Work Around is possible. Normal operations may be degraded but can continue, and service response may be delayed until a mutually established future time. Issue is informational in nature, a request, suggestion, or report – no immediate remedial action is expected.

"Low": Low is a maintenance request, data request, non-critical process enhancements.

TABLE 1 – INCIDENT MANAGEMENT

The table below describes Service Levels for Incident Recovery, subject to the terms and conditions of this Support Services Agreement. Note that Incident Recovery is not applicable to Severity 4 issues.

Possible delivery modes (typically Hot Fix or Work Around) are identified. If, however, the Incident is not related to the Supported Product (e.g., data not collected because telephone system of an unrelated supplier is off line), the delivery mode may be to refer Customer to the supplier of the problem system. The actual delivery mode will be decided in LRL's reasonable discretion, taking all relevant factors into account including the goal of returning the system to business operation as quickly as possible and with minimal impact on business or users; account the type, severity and business impact of the Incident; and the risks inherent in installing Temporary Fixes which have not been subjected to a full battery of quality assurance testing, including regression analysis.

Severity Level	Definition	Response time during Normal Business Hours	Response Time during Non-Normal Business Hours	Target Restoration times
1 Urgent	The Supported Product does not operate and its loss has a critical impact on Customer's business operations. There is no business work around possible; high visibility and impact to Customer; may include complete loss of CMS Software visibility; more than thirty (30) percent of the Supported Product are not performing consistently and/or are off-line/out-of service in a 48-hour period	4 hours	12 hours	24 hours
2 High	High, with no business Work Around possible; High functionality broken that results in material degradation of significant aspects of Customer's business operations. Up to twenty (20) percent of CMS Software system functions are not performing consistently and/or are offline or out-of-service. Normal operations may be degraded but can continue	12 hours	24 hours	72 hours
3 Normal	Normal, impairs the performance of the Supported Product but it does not substantially affect Customer's business operations or the failed operations are not critical and a reasonable business Work Around is possible. Normal operations may be degraded but can continue, and service response may be delayed until a mutually established future time. Issue is informational in nature, a request, suggestion, or report – no immediate remedial action is expected.	48 hours	48 hours	As Necessary
4 Low	Low is a maintenance request, data request, non-critical process enhancements.	72 hours	72 hours	As Necessary

EXHIBIT 3

Customer's Authorized Contacts

Contact

Name: _____

Phone: _____

Mobile: _____

Email: _____

Contact

Name: _____

Phone: _____

Mobile: _____

Email: _____

Contact

Name: _____

Phone: _____

Mobile: _____

Email: _____

Contact

Name: _____

Phone: _____

Mobile: _____

Email: _____

Liveable Cities

Smart City Micro-Sensing Solutions for today and tomorrow.



About Us

Liveable Cities is a division of LED Roadway Lighting Ltd. that specializes in smart city technology, including luminaires, controls, software and smart city micro-sensors. Our smart street lighting and connected products are operating worldwide in over 65 countries, and we have begun deploying pilot projects of our newly developed smart city technologies while continuing to broaden our offering of smart city/grid sensor solutions. Our advanced electronics manufacturing, sensor networks and data analytics solutions help to make communities more sustainable, efficient, and resilient.

Our Products

LED Streetlights: We believe that LED streetlights should be designed with the future in mind, ready to adapt to advances in LED, network, and smart city technology. Our products' modular designs make them easy to update with technological improvements or to add smart city features in the future and are well-known throughout the world for their long life, low maintenance costs, and ability to withstand tough environments.

SmartLinx Micro-Sensing Solution: The SmartLinx Micro-Sensing Solution (SLX) is an innovative technology that can easily launch a smart city with low cost and low risk on existing public streetlights that have a NEMA receptacle. SLX network controllers are modular and "smart ready", allowing for tool-less installation of various smart city sensors such as motion sensors, environmental sensors, ambient noise, and other smart city/grid solutions. The Liveable Cities' speed sensing solution can provide vehicle speed mapping, traffic flow analysis and traffic counting.



Speed Air Noise Particle Video Counter

Controls: Liveable Cities smart city solutions connect streetlights to their owners and the smart city. The streetlights' location above the street and its access to constant power creates a unique opportunity to deploy smart sensors with a wireless connected system throughout the city. Our wireless network control provides a range of benefits, including real-time lighting controls for dimming, automatic failure alerts, billing-grade energy measurement, and asset management. Depending on the clients' needs, we can provide either a stand-alone lighting and sensor network or a variety of products that are compatible with major global smart grid network providers

Software

Our SmartLinx Smart City Platform provides users with a tool to manage their smart city applications. The software is user-friendly, scalable, and highly configurable, providing the user with intuitive control of a powerful solution to collect data and create reports.





Manufacturing

LED Roadway Lighting Ltd. and Liveable Cities are ISO 9001 certified and employ lean manufacturing techniques, enabling us to ensure efficient production, provide on-time delivery, and increase customer value. With our state-of-the-art 55,000 ft2 (5,100 m2) manufacturing facility, we oversee every step of the supply chain– from the moment of product conception to the day orders are shipped to buyers – allowing us to ensure that every phase is performed with complete excellence.

84 Chain Lake Drive, Halifax, Suite 403
Nova Scotia, Canada, B3S 1A2

T: +1.902.450.2222

www.liveablecities.com
info@liveablecities.com

Liveable Cities

Smart City Micro-Sensing Solutions for today and tomorrow.

Our LED Luminaires

Drawing on decades of combined experience, we have continued to innovate and deliver new products to the market, including the NXT™ and NXT-Lite™ series of luminaires, and a full suite of networked and non-networked lighting controls.

NXT™

NXT gives the right amount of light right where you need it. Available in a number of distributions with low glare, and high color contrast. NXT provides high-end street lighting at lower energy costs.

NXT-C
- 12 LEDS
- Compact sized luminaire body
- 525 - 1250 mA drive currents
- 4000K CCT (Standard)
- 3000K & 5000K CCT (Optional)



NXT-S
- 12, 24, 36 LEDS
- Small sized luminaire body
- 350 - 700 mA drive currents
- 4000K CCT (Standard)
- 3000K & 5000K CCT (Optional)



NXT-M
- 48, 60, 72 LEDS
- Medium sized luminaire body
- 350 - 700 mA drive currents
- 4000K CCT (Standard)
- 3000K & 5000K CCT (Optional)



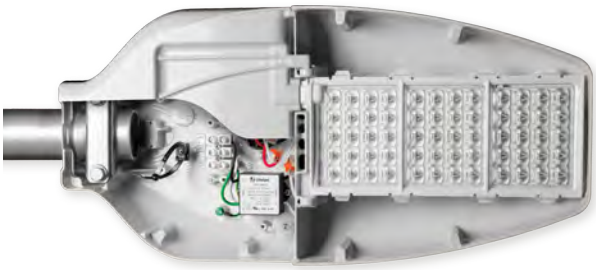
NXT LITE

NXT-Lite incorporates award-winning performance, reliability, and future-proof in features that utilities and municipalities have come to expect. NXT-Lite is utility-friendly and designed for roadway applications requiring up to a 400W high pressure sodium replacement.

NXT-LITE-S
- 8, 16 LEDS
- Small sized luminaire body
- 175 - 1050 mA drive currents
- 4000K CCT (Standard)
- 3000K CCT (Optional)
- Small form factor design for ease of installation



NXT-LITE-M
- 60 LEDS
- Medium sized luminaire body
- 200 - 950 mA Drive Currents
- 4000K CCT (Standard)
- 3000K CCT (Optional)
- Small form factor design for ease of installation



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Smart City Micro-Sensing Solutions for today and tomorrow.

SMARTLINX

SmartLinx Smart City Platform provides users with a tool to manage their smart city applications. The software is user-friendly and highly configurable, providing intuitive control of a powerful solution. SmartLinx is used to manage inventories of streetlights, sensors, cameras and other smart city end points.



Wireless Streetlight Control System

The deployment of a wireless control system on public streetlights offers several immediate and long-term benefits, including:

1. Carbon emission reduction & energy savings.
2. Reduce maintenance costs & enable better asset management.
3. Collect useful data and insights about grid performance & energy usage.
4. Create a foundation for additional smart city applications.

- **Flexible, scalable platform**
- **Best total cost of ownership**
- **Easy to install and maintain**
- **nteroperable with other systems**

Why Consider Wireless Controls?

Reduce Carbon Emissions & Save Energy

Substantial savings can be made when you have complete control of your lighting assets. Energy savings is achieved by adjusting light output during the night and tailored to peaks and drops of traffic, trimming on/off times based daily sunset/sunrise schedules, and/or tuning the luminaire power to deliver constant light output over the life of the luminaire.

Improved Maintenance Costs & Asset Management

Remove the need for maintenance patrols and use the Central Management Software (CMS) to track/monitor assets and enable enhanced service levels through efficient management and maintenance of the public streetlighting infrastructure.

Collect Useful Data about Grid Performance & Energy Usage

Connected streetlights collect and report data from the grid 24/7/365. Use the data and insights generated from streetlights to provide an enhanced level of service to your customers and increase efficiencies throughout

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info@liveablecities.com

the grid. Data from the streetlights and the Central Management Software (CMS) can be ported to other software systems to provide useful insights for grid management and operations.



A Foundation for Additional Smart City Applications

The network for connected streetlights can be used to deploy smart grid and smart city applications. These smart grid/city applications can be used to provide internal benefits to the utility (sub-station security monitoring) or provide new technology solutions to your customers (high accuracy vehicle, pedestrian, and bicycle counting and classification, post-incident video retrieval).



Controller

Similar to LED streetlights manufactured by LED Roadway Lighting, our smart streetlight controllers are designed for a variety of harsh environments. We understand the unique environmental challenges of the region and we have designed a robust/resilient controller with unique technical features (like the cool cap design) to provide best total cost of ownership and performance. The tool-less sensor platform provides for ease of sensor deployment to enable future smart city applications for your utility and your customers.

Liveable Cities

Smart City Micro-Sensing Solutions for today and tomorrow.

Micro-Sensor Suite

Our SmartLinx micro-sensors are an innovative technology that can easily launch a smart city with low cost and low risk on existing public streetlights that have a NEMA receptacle. The micro-sensors allow for tool-less installation of various smart city sensors.



SLX-SPEED MICRO-SENSOR
Speed Sensing
The speed sensor provides traditional speed metrics such as:
- Average speed
- 85th percentile
- Peak Speed
- Over speeding



SLX-NOISE MICRO-SENSOR
Noise Sensing (Acoustic)
The noise sensor provides sensing and reporting of the following noise levels:
- Average LEQ
- Min and Max LEQ



SLX-AIR MICRO-SENSOR
Air Quality (Gas)
The gas sensors can detect either:
- Nitrogen Dioxide (NO2)
- Sulphur Dioxide (SO2)
- Ozone (O3)



SLX-PARTICLE MICRO-SENSOR
Air Quality (Particulates)
The particulate matter sensor provides measurement of airborne particulates in the following sizes:
- PM2.5
- PM10



SLX-VIDEO MICRO-SENSOR
Video Recording
The video sensor records up to 14 days of continuous video locally on the device, which can be retrieved on demand in the event of an accident or incident. Signage is also available for preventative programs



SLX-COUNTER MICRO-SENSOR
Video Counter
The video counter allows for video retrieval paired with video analysis services for traffic studies. Over The Air (OTA) upgrade in the future will allow for detection at the edge, with no video upload required

Plug & Play Design

Streetlights have a global, standardized NEMA socket. Our micro-sensors fit on this standard socket, which allows the sensors to connect on any streetlight globally.







84 Chain Lake Drive, Halifax, Suite 403
Nova Scotia, Canada, B3S 1A2

T: +1.902.450.2222

www.liveablecities.com
info@liveablecities.com

Brittany Latack

From: Richard Spece <richspece@gmail.com>
Sent: Monday, November 14, 2022 12:49 PM
To: citizencomment
Subject: Letter submitted for 15nov22 planning meeting
Attachments: Letter of opposition to Amazon Data center 14Nov22.pdf

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Attached is a .pdf version of same letter.

To: The Warrenton Planning Commission
Subject: Amazon Blackwell Road Data Center

Email: citizencomment@warrentonva.gov
Date: November 14, 2022

Dear Planning Commissioners:

I am writing to ask you **to not vote** on the Amazon Special Use Permit (SUP) application at your public hearing on Tuesday, November 15th.

The application is incomplete as some of you and Amazon stated publicly on October 25th acknowledging information gaps on critical issues including noise/vibration, view shed impacts and power supply. This would be a premature vote in advance of Amazon's incomplete application.

There are concerning and unknown possible impacts upon our community that need to be addressed publicly and with transparency. A few known and possible negative impacts are:

- Noise pollution effecting untold numbers of residents—noise is an insidious problem that effects emotional, psychological, and physical health
- Air pollution from diesel generators and increased truck and auto traffic
- Water consumption. This may be the most horrific consequence of permitting data centers currently being discussed. It has been established that E$}tmgep$hexe$girxiv${ lmgl$q e}$lsywi$ wizivep$xlsywerh$wivziwwgerywi$**between 300,000 and 680,000 gallons of water per day**, equivalent to what a city of 30,000 to 50,000 people uses
- Devastated property values to those who live within five and perhaps more miles from the site
- Increased population stressing resources that are currently in balance. It is also known that residents of Warrenton live here because they do not want to live in developed and industrialized communities

- Taxes will increase. Contrary to what people commonly believe, taxes increase with industry. No industrial city has lower taxes than any rural community.

I am opposed to this data center. It would be devastating to the quality of life and standard of living we so appreciate in Warrenton. We cannot allow this or any other data center to be located in or around Warrenton; one of the main reasons I left Seattle was because of the devastating effects Amazon had on the city, I didn't anticipate such an horrific prospect to be possible in Warrenton.

Based on the town's own rules, approving any SUP must meet two conditions. It must first be consistent with the town comprehensive plan. Secondly, the development proposed under the SUP must not adversely effect surrounding homes and businesses. **The Amazon data center meets neither one of these two conditions.**

Sincerely,

Dr. Richard Spece
7603 Cannonball Gate Rd
Warrenton, VA 20186
richspece@gmail.com

To: The Warrenton Planning Commission
Subject: Amazon Blackwell Road Data Center

Email: citizencomment@warrentonva.gov
Date: November 14, 2022

Dear Planning Commissioners:

I am writing to ask you **to not vote** on the Amazon Special Use Permit (SUP) application at your public hearing on Tuesday, November 15th.

The application is incomplete as some of you and Amazon stated publicly on October 25th acknowledging information gaps on critical issues including noise/vibration, view shed impacts and power supply. This would be a premature vote in advance of Amazon's incomplete application.

There are concerning and unknown possible impacts upon our community that need to be addressed publicly and with transparency. A few known and possible negative impacts are:

- Noise pollution effecting untold numbers of residents—noise is an insidious problem that effects emotional, psychological, and physical health
- Air pollution from diesel generators and increased truck and auto traffic
- Water consumption. This may be the most horrific consequence of permitting data centers currently being discussed. It has been established that A typical data center which may house several thousand servers, can use **between 300,000 and 680,000 gallons of water per day**, equivalent to what a city of 30,000 to 50,000 people uses
- Devastated property values to those who live within five and perhaps more miles from the site
- Increased population stressing resources that are currently in balance. It is also known that residents of Warrenton live here because they do not want to live in developed and industrialized communities
- Taxes will increase. Contrary to what people commonly believe, taxes increase with industry. No industrial city has lower taxes than any rural community.

I am opposed to this data center. It would be devastating to the quality of life and standard of living we so appreciate in Warrenton. We cannot allow this or any other

data center to be located in or around Warrenton; one of the main reasons I left Seattle was because of the devastating effects Amazon had on the city, I didn't anticipate such an horrific prospect to be possible in Warrenton.

Based on the town's own rules, approving any SUP must meet two conditions. It must first be consistent with the town comprehensive plan. Secondly, the development proposed under the SUP must not adversely effect surrounding homes and businesses. **The Amazon data center meets neither one of these two conditions.**

Sincerely,

Dr. Richard Spece
7603 Cannonball Gate Rd
Warrenton, VA 20186
richspece@gmail.com

Brittany Latack

From: Rosanne.Woodroof@everyactioncustom.com on behalf of Rosanne Woodroof <Rosanne.Woodroof@everyactioncustom.com>
Sent: Monday, November 14, 2022 7:40 PM
To: Rob Walton
Subject: Please Deny the Amazon Data Center Special Use Permit:

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Dear Director of Community Development Rob Walton,

Please deny the Special Use Permit application for an Amazon data center on Blackwell Road because it is an eyesore which will harm the citizens of Warrenton and Fauquier County in many ways, including visual and noise pollution, an undetermined, but certain negative impact on our utilities and water and dramatic, tragic shift from out current image and way of life to an industrial "no man's land."

Is there an upside here? How will we, the citizens of Fauquier County benefit from this? What is our future if we yield to the industrialization of our town and county?

With such an obviously negative impact on our town, county and way of life, I again request that the Town please deny this application for the Amazon data.

Sincerely,
Rosanne Woodroof
PO Box 3050 Warrenton, VA 20188-1750
Rosanne.Woodroof@gmail.com

Brittany Latack

From: ravzie@everyactioncustom.com on behalf of Anne Ziegler <ravzie@everyactioncustom.com>
Sent: Monday, November 14, 2022 8:49 PM
To: Rob Walton
Subject: Please Deny the Amazon Data Center Special Use Permit:

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Dear Director of Community Development Rob Walton,

Fauquier County is beautiful and unique. Warrenton is a little jewel. Please vote to keep it that way. We don't want to live in an industrial zone of humming behemoths and criss crossing lines strung between giant towers. I can't tell you how many times I have thought how wonderful it is to leave Prince William County and come home. They seem intent on paving every square inch and obviously have no regard for the welfare of the residents.

I am writing to urge you to vote against the Special Use Permit application for an Amazon data center on Blackwell Road.

In addition to the numerous flaws of Amazon's application, including the lack of a completed noise study and the known visual impacts to the Town's gateway, Dominion has revealed plans for one of two potential offsite substations to serve the data center less than a week before the scheduled Planning Commission hearing. This recent development calls into question what new impacts the proposed data center and its associated energy infrastructure might have on Warrenton's historic downtown, property values and the rural character that draws residents and visitors both to the Town and County.

With so many unknowns, I ask that the Town please deny this application.

Thank you for hearing my concerns.

Sincerely,
Anne Ziegler
5577 Old Bust Head Rd Broad Run, VA 20137-1926 ravzie@yahoo.com

Brittany Latack

From: Amy Zwirko <frame4u@gmail.com>
Sent: Monday, November 14, 2022 6:38 PM
To: citizencomment
Subject: Data Center

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

To: The Warrenton Planning Commission
Subject: Amazon Blackwell Road Data Center

Email: citizencomment@warrentonva.gov
Date:

Dear Planning Commissioners:

I am writing to ask you to not vote on the Amazon Special Use Permit (SUP) application at your public hearing on Tuesday, November 15th.

The reason is that the application is quite incomplete as some of you and Amazon stated publicly on October 25th acknowledging information gaps on critical issues including noise/vibration, view shed impacts and power supply. A vote that would prematurely advance Amazon's incomplete application to the Town Council would further discredit the planning commission and how the town has handled the entire Amazon situation.

Based on what I know, I am opposed to this data center. It would seriously tarnish one of the main gateways into our historic town, and would be visible from many parts of the town and even the county. The noise and vibration it would generate constantly would cause physical and mental harm to hundreds of residents, and it would lead the way for more data centers and massive power towers and transmission lines.

Based on the town's own rules, approving any SUP must meet two conditions. It must first be consistent with town's comprehensive plan. Second, the development proposed under the SUP must not adversely affect surrounding homes and businesses. The Amazon data center meets neither one.

Thank you for the opportunity to voice my opinion.

Sincerely,
Amy and Andrew Zwirko
7156 Manor House Dr
Warrenton VA 20187

--
Amy Ayres Zwirko

Brittany Latack

From: tea@everyactioncustom.com on behalf of Katherine Adams <tea@everyactioncustom.com>
Sent: Tuesday, November 15, 2022 11:45 AM
To: Rob Walton
Subject: Please Deny the Amazon Data Center Special Use Permit:

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Dear Director of Community Development Rob Walton,

I am writing to urge you to vote against the Special Use Permit application for an Amazon data center on Blackwell Road.

In addition to the numerous flaws of Amazon's application, including the lack of a completed noise study and the known visual impacts to the Town's gateway, Dominion has revealed plans for one of two potential offsite substations to serve the data center less than a week before the scheduled Planning Commission hearing. This recent development calls into question what new impacts the proposed data center and its associated energy infrastructure might have on Warrenton's historic downtown, property values and the rural character that draws residents and visitors both to the Town and County.

With so many unknowns, I ask that the Town please deny this application.

Thank you for hearing my concerns.

Sincerely,
Ms Katherine Adams
2300 N Scenic Hwy Lake Wales, FL 33898-6626 tea@terrapredictions.org

Brittany Latack

From: jpspeyer@everyactioncustom.com on behalf of jacques paul Speyer <jpspeyer@everyactioncustom.com>
Sent: Tuesday, November 15, 2022 9:05 AM
To: Rob Walton
Subject: Please Deny the Amazon Data Center Special Use Permit:

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Dear Director of Community Development Rob Walton,

I am writing to urge you to vote against the Special Use Permit application for an Amazon data center on Blackwell Road.

In addition to the numerous flaws of Amazon's application, including the lack of a completed noise study and the known visual impacts to the Town's gateway, Dominion has revealed plans for one of two potential offsite substations to serve the data center less than a week before the scheduled Planning Commission hearing. This recent development calls into question what new impacts the proposed data center and its associated energy infrastructure might have on Warrenton's historic downtown, property values and the rural character that draws residents and visitors both to the Town and County.

With so many unknowns, I ask that the Town please deny this application.

Thank you for hearing my concerns.

Sincerely,
Mr. jacques paul Speyer
PO Box 10 Orlean, VA 20128-0010
jpspeyer@mac.com

Brittany Latack

From: karensuebooks@everyactioncustom.com on behalf of Karen Bausch <karensuebooks@everyactioncustom.com>
Sent: Tuesday, November 15, 2022 10:29 AM
To: Rob Walton
Subject: Please Deny the Amazon Data Center Special Use Permit:

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Dear Director of Community Development Rob Walton,

I am writing to urge you to vote against the Special Use Permit application for an Amazon data center on Blackwell Road!!!

We live in one of the most beautiful counties in the US. Why trust a company like Amazon that pushes its business agenda wherever it wants without thought to the harm it may do?
In addition to the numerous flaws of Amazon's application, including the lack of a completed noise study and the known visual impacts to the Town's gateway, Dominion has revealed plans for one of two potential offsite substations to serve the data center less than a week before the scheduled Planning Commission hearing. This recent development calls into question what new impacts the proposed data center and its associated energy infrastructure might have on Warrenton's historic downtown, property values and the rural character that draws residents and visitors both to the Town and County.

With so many unknowns, I ask that the Town please deny this application. How could you possibly believe that Amazon will be truthful in any dealings with the Town of Warrenton, when they aren't even upfront with their plans to begin with.

Thank you for hearing my concerns.

Sincerely,
Ms Karen Bausch
5555 Old Bust Head Rd Broad Run, VA 20137-1926 karensuebooks@gmail.com

Brittany Latack

From: Julie Broaddus <julie@oldbusthead.com>
Sent: Tuesday, November 15, 2022 11:42 AM
To: citizencomment
Subject: Old Bust Head Brewing Company opposed to Transmission Lines

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Hello,

As owner of Old Bust Head Brewing Company, and 20+ acres of redeveloped historic retail, industrial, and commercial buildings in Vint Hill, I want to voice my strong opposition to any new overhead power lines in Fauquier County that might come as part of the Amazon data center submission. Our brewery is the anchor that makes the success of all our tenant's businesses possible, and the brewery is dependent on customers who visit our county for its rural and unique character. As we have seen time and time again, power lines destroy communities and are a serious detriment to tourism-dependent businesses like ours. This is why the county voted to underground power lines in Marshall Va, and the business owners and residents agreed to put up with the interim pain for the long term benefit. As a resident of Broad Run, 3.5 miles outside the Warrenton town limits, power lines at the gateway to town would cause destruction to my feelings about Warrenton as a community and seriously impact my motivation for investing in its future.

Please do not be the commission that is responsible for such a blight on what is now a rural and historic treasure.

Sincerely,
Julie Broaddus

Julie Broaddus
OLD BUST HEAD BREWING COMPANY
Owner
EMAIL Julie@oldbusthead.com
CELL 703-887-0115
BUSINESS 540.347.4777
WEB www.oldbusthead.com

Brittany Latack

From: robin.ann.cross@everyactioncustom.com on behalf of Robin Cross <robin.ann.cross@everyactioncustom.com>
Sent: Tuesday, November 15, 2022 8:36 AM
To: Rob Walton
Subject: Please Deny the Amazon Data Center Special Use Permit:

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Dear Director of Community Development Rob Walton,

While a resident of Fauquier County, I consider Warrenton my home town. I am writing to urge you to vote against the Special Use Permit application for an Amazon data center on Blackwell Road.

In addition to the numerous flaws of Amazon's application, including the lack of a completed noise study and the known visual impacts to the Town's gateway, Dominion has revealed plans for one of two potential offsite substations to serve the data center less than a week before the scheduled Planning Commission hearing. This recent development calls into question what new impacts the proposed data center and its associated energy infrastructure might have on Warrenton's historic downtown, property values and the rural character that draws residents and visitors both to the Town and County.

With so many unknowns, I ask that the Town please deny this application.

Thank you for hearing my concerns.

Sincerely,
Robin Cross
10216 Oakridge Ln Midland, VA 22728-9761 robin.ann.cross@gmail.com

Brittany Latack

From: Tom Daily <tomrdee@comcast.net>
Sent: Tuesday, November 15, 2022 11:22 AM
To: citizencomment
Subject: Public Hearing on Amazon Special Use Permit Request...
Attachments: Comments to Warrenton Planning Commission - Nov 22.docx

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Good Morning,
I have not submitted comments before to the Planning Commission; thus, I was unsure if my comments should be part of the body of the email or attached. Therefore, I have done both. Below are my comments for this evening's Public Hearing and attached is a copy.
Respectfully,
Tom Daily

==========

November 15, 2022

Planning Commission

Town of Warrenton, VA

Re: Public Hearing to discuss the Special Use Permit requested by Amazon

Attention Commission Members:

As you are aware, there are a considerable number of concerns about various aspects of this issue and significant opposition, as will be demonstrated by the petition to be presented, the many speakers and others in attendance at the Hearing. The purpose of my comments is to support the call to not approve the Special Use Permit requested by Amazon in that it has been demonstrated, thus far, that it is incomplete and full of unverified and bad information.

Given the concerns raised by the many speakers at the Hearing, as well as the concerns/reservations expressed by the members of the Commission, themselves, at the recent

Work Session, it would seem inconceivable that approval of the Amazon request would be made. If not an outright denial of the request, at least action should be taken to keep the meeting open, or continued, or whatever the technical term is that would allow more time for the various concerns to be more thoroughly examined/ explored.

There is too much at stake to make a hasty decision and/or ignore what appear to be legitimate concerns, some of which I will mention below. It also should be recognized, and agreed to by the members of the Commission, that the legitimacy of any concerns/issues raised should be based on the merits of the issues themselves versus a consideration of where the people live who present/raise them or by the number of instances they are mentioned.

Any proposed 'changes' offered by Amazon and/or Dominion, also need to be thoroughly examined. What, on the surface, may appear to be an accommodation may, in the long run, present and/or add to other problems, such as setting up the Town of Warrenton for multiple Data Centers and their associated problems.

Careful attention must be paid to the language used, such as the terms Distribution lines vs Transmission lines. For example, instead of an offer by Amazon to pay for the undergrounding of 'all' electrical/power lines (which would include Transmission lines), an offer by Amazon stipulating only Distribution lines is relatively meaningless in that, it is understood, under Dominion's policy, Amazon would be required to pay for that anyway.

There may not be anything new presented at the Hearing. You have probably been exposed, in one way or another, to all of them by now. So I will not go into detail discussing them. Rather, I will just list some of the more prominent concerns that have been identified, thus far, that I am aware of.

One concern calls into question the whole administrative process that allowed this to come about in the first place. That may not weigh in on the direct consideration of the Permit; but, it is out there and, in a way, overshadows the whole process.

Continuing weak, shifting, information from both Amazon and Dominion is another. It almost seems as though it was considered, by them, to be a 'done deal' from the beginning; so that more thoughtful, detailed, professional input by them wasn't that necessary.

The whole setting of the proposed Data Center, aka known as the 'viewshed', has been called into question. Is the proposed site one of those that has/had been identified as appropriate for that kind of development? I think the term 'industrialized' has been used to describe such sites/areas. I will not even bring up the ludicrous 'balloon test' results offered by Amazon at the Work Session.

Also, the issue of the noise that will be generated has been raised. It is understood that, as a result, some changes have been offered by Amazon; but, again, these need to be looked at in detail and in context. For example, noise measurement may be one thing at a relatively early

stage of development; but, an entirely different matter once the Data Center would be in full operation.

The impact on nearby property values needs to be seriously considered. Speaking of 'value', the proposed tax revenue needs to be carefully examined, as well. In the end, it may not turn out to be what is being speculated/projected. Have the experiences, relative to tax revenue from Data Centers, in other locations/counties been explored? Especially, as concerns what was projected and what actual revenue was received!

Finally, another thing to consider is the projected advancement in technology. Already, there is talk of a time in, perhaps, the not too distant future that will call into question the need for so many Data Centers or even any at all! What happens then to all those structures and the related investments?!

There are many things to consider and, given the importance of this decision relative to the precedent it will set for further/future applications, it is imperative, in the discharge of your duties, to get it right the first time.

Respectfully submitted,

Tom Daily

Thomas R. Daily
Chair BOD/President Vint Hill Manor HOA
3596 Sutherland Ct, Warrenton, VA
Email address – tomrdee@comcast.net

November 15, 2022

Planning Commission

Town of Warrenton, VA

Re: Public Hearing to discuss the Special Use Permit requested by Amazon

Attention Commission Members:

As you are aware, there are a considerable number of concerns about various aspects of this issue and significant opposition, as will be demonstrated by the petition to be presented, the many speakers and others in attendance at the Hearing. The purpose of my comments is to support the call to not approve the Special Use Permit requested by Amazon in that it has been demonstrated, thus far, that it is incomplete and full of unverified and bad information.

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There is too much at stake to make a hasty decision and/or ignore what appear to be legitimate concerns, some of which I will mention below. It also should be recognized, and agreed to by the members of the Commission, that the legitimacy of any concerns/issues raised should be based on the merits of the issues themselves versus a consideration of where the people live who present/raise them or by the number of instances they are mentioned.

Any proposed ‘changes’ offered by Amazon and/or Dominion, also need to be thoroughly examined. What, on the surface, may appear to be an accommodation may, in the long run, present and/or add to other problems, such as setting up the Town of Warrenton for multiple Data Centers and their associated problems.

Careful attention must be paid to the language used, such as the terms Distribution lines vs Transmission lines. For example, instead of an offer by Amazon to pay for

the undergrounding of ‘all’ electrical/power lines (which would include Transmission lines), an offer by Amazon stipulating only Distribution lines is relatively meaningless in that, it is understood, under Dominion’s policy, Amazon would be required to pay for that anyway.

There may not be anything new presented at the Hearing. You have probably been exposed, in one way or another, to all of them by now. So I will not go into detail discussing them. Rather, I will just list some of the more prominent concerns that have been identified, thus far, that I am aware of.

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Also, the issue of the noise that will be generated has been raised. It is understood that, as a result, some changes have been offered by Amazon; but, again, these need to be looked at in detail and in context. For example, noise measurement may be one thing at a relatively early stage of development; but, an entirely different matter once the Data Center would be in full operation.

The impact on nearby property values needs to be seriously considered. Speaking of ‘value’, the proposed tax revenue needs to be carefully examined, as well. In the end, it may not turn out to be what is being speculated/projected. Have the experiences, relative to tax revenue from Data Centers, in other locations/counties been explored? Especially, as concerns what was projected and what actual revenue was received!

Finally, another thing to consider is the projected advancement in technology. Already, there is talk of a time in, perhaps, the not too distant future that will call into question the need for so many Data Centers or even any at all! What happens then to all those structures and the related investments?!

There are many things to consider and, given the importance of this decision relative to the precedent it will set for further/future applications, it is imperative, in the discharge of your duties, to get it right the first time.

Respectfully submitted,

Tom Daily

Thomas R. Daily

Chair BOD/President Vint Hill Manor HOA

3596 Sutherland Ct, Warrenton, VA

Email address – tomrdee@comcast.net

Brittany Latack

From: leakypondfarm@everyactioncustom.com on behalf of Robert Dart <leakypondfarm@everyactioncustom.com>
Sent: Tuesday, November 15, 2022 7:47 AM
To: Rob Walton
Subject: Please Deny the Amazon Data Center Special Use Permit:

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Dear Director of Community Development Rob Walton,

I am writing to urge you to vote against the Special Use Permit application for an Amazon data center on Blackwell Road. As a physician who began practicing in Warrenton in 1983, I have witnessed many changes in this county and town. We have grown, but in a sustainable way. I have listened to all sides of this debate. Allowing Amazon to set up shop will turn us into Prince William County. Does anyone go to PW for a day in the "country", for the vistas, for the small town atmosphere, for the shops? We all know the answer to those questions. One data center will be the origin of several. Please do not ruin the special place we all call home.

Sincerely,
Dr. Robert Dart
9174 Harts Mill Rd Warrenton, VA 20186-8536 leakypondfarm@gmail.com

Brittany Latack

From: joduncan70@everyactioncustom.com on behalf of Joanne Duncan <joduncan70@everyactioncustom.com>
Sent: Tuesday, November 15, 2022 8:31 AM
To: Rob Walton
Subject: Please Deny the Amazon Data Center Special Use Permit:

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Dear Director of Community Development Rob Walton,

I am writing to urge you to vote against the Special Use Permit application for an Amazon data center on Blackwell Road.

In addition to the numerous flaws of Amazon's application, including the lack of a completed noise study and the known visual impacts to the Town's gateway, Dominion has revealed plans for one of two potential offsite substations to serve the data center less than a week before the scheduled Planning Commission hearing. This recent development calls into question what new impacts the proposed data center and its associated energy infrastructure might have on Warrenton's historic downtown, property values and the rural character that draws residents and visitors both to the Town and County.

With so many unknowns, I ask that the Town please deny this application.

Thank you for hearing my concerns.

Sincerely,
Joanne Duncan
6319 Jordan Dr Warrenton, VA 20187-7752 joduncan70@yahoo.com

Brittany Latack

From: karissa.k.epley@everyactioncustom.com on behalf of Karissa Epley <karissa.k.epley@everyactioncustom.com>
Sent: Tuesday, November 15, 2022 6:33 AM
To: Rob Walton
Subject: Please Deny the Amazon Data Center Special Use Permit:

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Dear Director of Community Development Rob Walton,

I am writing to urge you to vote against the Special Use Permit application for an Amazon data center on Blackwell Road.

In addition to the numerous flaws of Amazon's application, including the lack of a completed noise study and the known visual impacts to the Town's gateway, Dominion has revealed plans for one of two potential offsite substations to serve the data center less than a week before the scheduled Planning Commission hearing. This recent development calls into question what new impacts the proposed data center and its associated energy infrastructure might have on Warrenton's historic downtown, property values and the rural character that draws residents and visitors both to the Town and County.

With so many unknowns, I ask that the Town please deny this application.

Thank you for hearing my concerns.

Sincerely,
Karissa Epley
8139 Rockingham Rd Warrenton, VA 20186-7323 karissa.k.epley@gmail.com

Brittany Latack

From: Patricia Ewing <ewing.pat210@gmail.com>
Sent: Tuesday, November 15, 2022 11:45 AM
To: citizencomment
Subject: Amazon data center

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

I am writing in opposition to approving the data center proposed by Amazon in the Town of Warrenton. The Planning Commission does not have sufficient information from Amazon to make an informed decision to recommend approval of Amazon's application for a Special Use Permit.

On a procedural point, there seems to be some confusion over the 100-day rule. That rule, which only applies to zoning applications, deems applications as "approved" after 100 days from an initial meeting if the application is not acted upon. That provision for a "deemed approval" appears nowhere in the code section governing Special Use Permits.

Patricia Ewing

Brittany Latack

From: Dave Gibson <davegibson3@gmail.com>
Sent: Tuesday, November 15, 2022 2:28 AM
To: citizencomment
Subject: Comments for 11-15-22 Planning Commission Work Session for Amazon SUP
Attachments: PC Ltter for 11.15.22_Mtg.docx

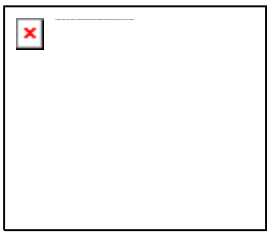
[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Please find attached a letter for your consideration. I offer my assistance to help the Planning Commission in any way possible. "There is always time to get it right"

Thank you sincerely for your consideration and I will present this material at the Hearing.

Very best regards,

Dave



Sent to citizencomment@warrentonva.gov on November 14, 2022

To: The Warrenton Planning Commission
Subject: Amazon Blackwell Road Data Center

Dear Planning Commissioners:

Please **withhold your vote** on the Amazon Special Use Permit (SUP) application at your public hearing on Tuesday, November 15th.

This application still needs to be completed and should not have been accepted by Town Staff earlier. According to the Zoning Ordinance, Special Use Permit applications "*must contain the same information as required for zoning amendment applications established in Section 11-3.9*. Unless the Zoning Administrator waived them, Amazon should have completed all the 11 requirements in the Ordinance "*needed to allow the Planning Commission and Town Council, to reach conclusive evaluations*." This has not been the case. Let me drill down into four areas worthy of your attention:

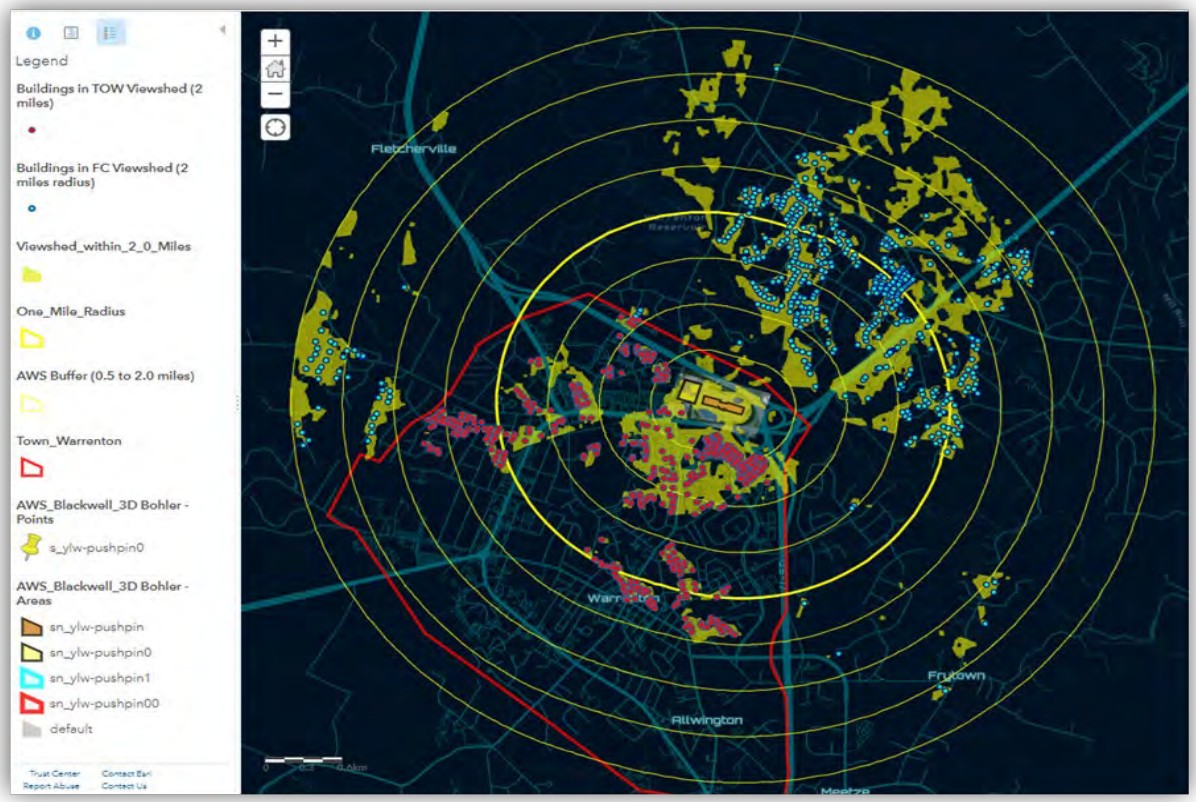
11-3.10.1 The Statement of Justification failed to ***"explain the compatibility of the proposed use with the existing and proposed land uses adjacent to and in the vicinity of the site and any potential impacts on the environment and on the neighborhood address."*** AWS failed to inventory or enumerate the potential visual, noise, and lighting impacts on the neighborhoods, communities, and commercial businesses. The application did not describe neighboring uses, nor did it mention the medical facilities, Poets Walk Brookside Rehabilitation Center, or education facilities within the "earshed," including CM Bradley Elementary School or Highland.



Perhaps most significantly, the Justification failed to consider the devastating consequences of building a massive and noisy data center on top of the vaunted New

Town Character District. Discarding this 40-acre gateway parcel as a blighted vestige property, while lauding the compatibility of Waterloo Junction with the Warrenton 2040 Comprehensive Plan, cannot be lost on everybody. The impacts on New Town, and the viability of Warrenton 2040, were never considered in the AWS application. Another glaring gap.

11-3.10.3. The preliminary site plan failed to show the metal louvers and screening critical to attenuate AWS' noise. The building height of 37 feet is irrelevant, given AWS acknowledged the need for another 20 feet to hide the air chillers. The visualization impacts of just the base elevation were improperly left to a poorly organized "balloon test,". This included improper sampling procedures, inaccurate balloon locations, and a lack of consultation with the potentially impacted residents or businesses. Beyond the arcane balloons, AWS failed to use the technology they helped pioneer and refused to update the ten year- old Lidar imagery to identify where the facility would be (probably a $25K investment). This GIS technology, which Town and County Staff have at their disposition, was never employed. Using ArcGIS On-Line, our analysis indicates that there are 1,071 dwellings and business locations from which AWS may be visible depending on vegetation and buildings constructed since the last Lidar imagery was produced in 2012.



This breaks down into 604 in the Town of Warrenton and 467 in Fauquier County. Using ArcGIS' Line-of-Site app allows additional accuracy refinement but depends on obsolete Lidar imagery. Regardless, either laptop-deployed technology provides far more robust results and useful visualizations than a botched balloon test. Surely not the way to start a long-term, billion-dollar relationship with a new partner.

11-3.10.5. The analysis of the impact on the Town's community facilities ("*including estimates of costs and means of providing the additional community facilities which will be needed to serve the proposed special use…sewage disposal facilities and systems, solid waste disposal facilities"*) were not described nor were quantities of solid or hazardous waste identified. The entire construction phase, including enormous civil works, a year-long undertaking with AWS' exclusive and preferred contractors, was dismissed without a single paragraph. There was no discussion about how it would be managed, whether they would use an EPC or local contractors, or how the excavation material and solid waste would be handled. This was stunning omission by Staff to anybody who does this type of work. The good old "trust us" and "we know best" attitude is another bad omen for a partnership. All dependence on local infrastructure and services must be identified and disposition described.

11-3.10.8 Most distressing was the disregard for the most significant impact on our community – noise and vibration. The Zoning Ordinance and SUP requirement clearly state that *"noise impact and abatement studies to determine potential impact on adjoining properties and neighborhoods*" is required. Yet, AWS only provided an incomplete and profoundly flawed summary that was misrepresented by the council. These essential gaps should have rendered this application "unacceptable." Yet, the unprofessional quality and nonchalance of the work products are arguably even worse than incompleteness. One would have hoped that this project, beset with transparency and conflict of interest difficulties from the outset, would have been compensated with World-Class analytics and first-rate consultative practices. Indeed one of America's largest corporations and titan of technology, with a headquarters in Virginia, would have brought their best to the game. But what we have seen has been far from it.

It is profoundly concerning, and vibration impacts have not been treated with the diligence they deserve. Beyond the technical flaws and inappropriate disclosures, the work has ignored AMS's growing noise problems, its ignorance of basic acoustics, and the severe impact they have on adjacent communities, as learned,d in PWC and elsewhere. Factually, they have not come close to proving they can operate Blackwell within the Town or County Ordinances. Recent updates to Dr. John Lyver's seminal work indicate that 2,641 residences and businesses within a one-mile radius of Blackwell will experience at least intermittent violations of the Warrenton and Fauquier

County legal standards. Over half of these locations are likely to receive from 56 dBA to 65 dBA on a routine, if not continuous, basis. The Oak Springs, Highland, and North Rock neighborhoods will be particularly affected. We now believe that the AWS Blackwell site will be felt or heard for up to two miles away, depending on atmospheric and meteorological conditions. AWS suggests these requirements be kicked down the road to site planning and eventual violations are cured within 180 days. We have learned from AWS' problems in Prince William that they must demonstrate they can and will meet the noise requirements – now – during the SUP review. It would be negligent in doing otherwise.

List of Noise Ordinance Violations of mapped location after the data center is completed (courtesy of Dr. John Lyver)

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3				V	V	V	V	V
4				V	V	V	V	
5				V	V	V	V	
6				V	V	V	V	
7				V	V	V	V	V
8				V	V	V	V	
9			V	V	V	V	V	V
10		V	V	V	V	V	V	V
11				V	V	V	V	V
12				V	V	V	V	V
13				V	V	V	V	V
14				V	V	V	V	V
15				V	V	V	V	V
16				V	V	V	V	V
17				V	V	V	V	
18				V	V	V	V	
19	V	V	V	V	V	V	V	V
20				V	V	V	V	
21				V	V	V	V	

	Nighttime Violations							
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1	V	V	V	V	V	V	V	V
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3			V	V	V	V	V	V
4	V		V	V	V	V	V	V
5				V	V	V	V	V
6			V	V	V	V	V	V
7				V	V	V	V	V
8		V	V	V	V	V	V	V
9		V	V	V	V	V	V	V
10	V	V	V	V	V	V	V	V
11				V	V	V	V	V
12	V			V	V	V	V	V
13				V	V	V	V	V
14	V			V	V	V	V	V
15				V	V	V	V	V
16	V			V	V	V	V	V
17				V	V	V	V	V
18	V		V	V	V	V	V	V
19	V	V	V	V	V	V	V	V
20	V	V	V	V	V	V	V	V
21	V		V	V	V	V	V	V

This application must be completed without a complete noise and vibration study showing earnest and successful efforts to attenuate, muffle, or suppress noise and vibration. Public health and the well-being of Warrenton and Fauquier residents and businesses hang in the balance

Understanding that noise regulation and public health information for data centers is nearly nonexistent is crucial. The EPA's Office of Noise Abatement and Control was dismantled in 1981 and has never been re-established. The young data center industry growth has eclipsed non-existent funding and forced oversight onto local government.

Sent to citizencomment@warrentonva.gov on November 14, 2022

The only proven mitigation is to locate data centers away from peri-urban populations. Due to its location on an elevated promontory sloping downward into densely populated neighborhoods, the Blackwell site is the wrong place.

Based on the town's rules, approving any SUP must meet two conditions. It must first be consistent with the town's comprehensive plan. Second, the development proposed under the SUP must not adversely affect surrounding homes and businesses. **The Amazon data center meets neither one.**

Thank you for the opportunity to voice my opinion, and please refrain from voting on this application until it has been completed next year.

Sincerely,

David Gibson
7548 Foxview Dr
Warrenton VA 20186

"I just want to echo my colleague's opinions on that. Back when we first voted on the [text amendment] wording for the zoning for industrial. We had our eyes on another property in the industrial South. That's where we thought it was going to go. And now they're looking at this major gateway in the town. And I want to say that this will be my last meeting. We have decided to move. And one of the reasons was that we did not want to live beside the data center. And now we're moving South and have a nice mountain view. And since we're up. On high ground. There's nothing that's going to get in the way" Gerald Johnston, ex-Warrenton Planning Commissioner (now resides in Culpepper),

Brittany Latack

From: aleksandra.croft@everyactioncustom.com on behalf of Aleksandra Johnson <aleksandra.croft@everyactioncustom.com>
Sent: Tuesday, November 15, 2022 8:43 AM
To: Rob Walton
Subject: Please Deny the Amazon Data Center Special Use Permit:

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Dear Director of Community Development Rob Walton,

I am writing to urge you to vote against the Special Use Permit application for an Amazon data center on Blackwell Road.

In addition to the numerous flaws of Amazon's application, including the lack of a completed noise study and the known visual impacts to the Town's gateway, Dominion has revealed plans for one of two potential offsite substations to serve the data center less than a week before the scheduled Planning Commission hearing. This recent development calls into question what new impacts the proposed data center and its associated energy infrastructure might have on Warrenton's historic downtown, property values and the rural character that draws residents and visitors both to the Town and County.

With so many unknowns, I ask that the Town please deny this application.

Thank you for hearing my concerns.

Sincerely,
Aleksandra Johnson
23529 Melmore Pl Middleburg, VA 20117-2815 aleksandra.croft@gmail.com

Brittany Latack

From: lori lloyd <lorireedlloyd@gmail.com>
Sent: Tuesday, November 15, 2022 10:28 AM
To: citizencomment
Subject: Opposing data center / power towers

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

To whom it may concern,

My name is Lori Lloyd and I've been a Fauquier County resident for forty years.
The last thing I want to see is Fauquier to become the new Loundon County . Bigger and more is NOT better and I vehemently oppose the coming of data center(s) and the power towers currently being proposed .

Lori Lloyd

Brittany Latack

From: Sam Lloyd <sam.sjl333@gmail.com>
Sent: Tuesday, November 15, 2022 11:21 AM
To: citizencomment
Subject: Oppose the proposed data center and power lines.

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

To whom it may concern,

As a resident of Fauquier County, I oppose the proposed data center and power towers.

Concerned Citizen
Sam Lloyd

Sam Lloyd
Sent from my iPhone

Brittany Latack

From: John W. Lyver, IV <jlyver4@comcast.net>
Sent: Tuesday, November 15, 2022 9:18 AM
To: Dave Gibson
Cc: citizencomment
Subject: Re: Comments for 11-15-22 Planning Commission Work Session for Amazon SUP
Attachments: PC Ltter for 11.15.22_Mtg.docx

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Dave

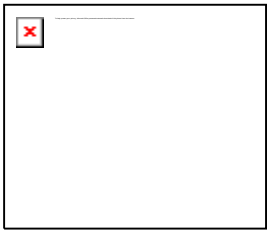
The letter is SUPERB! It is obvious from your logical argument and substantiated facts that the ToW really has not met the criteria to take a vote. After rereading the letter, it is even more obvious that the PC should return the submitted application back to AMAZON as incomplete and requesting that they complete the application before a future resubmission.

Very well put. This letter needs wide distribution and careful consideration by the Planning Commissioners and the Planning Office Staff.

Bravo!
John

Sent from my iPad

> On Nov 15, 2022, at 2:28 AM, Dave Gibson <davegibson3@gmail.com> wrote:
>
> Please find attached a letter for your consideration. I offer my assistance to help the Planning Commission in any way possible. "There is always time to get it right"
>
> Thank you sincerely for your consideration and I will present this material at the Hearing.
>
> Very best regards,
>
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Sent to citizencomment@warrentonva.gov on November 14, 2022

To: The Warrenton Planning Commission
Subject: Amazon Blackwell Road Data Center

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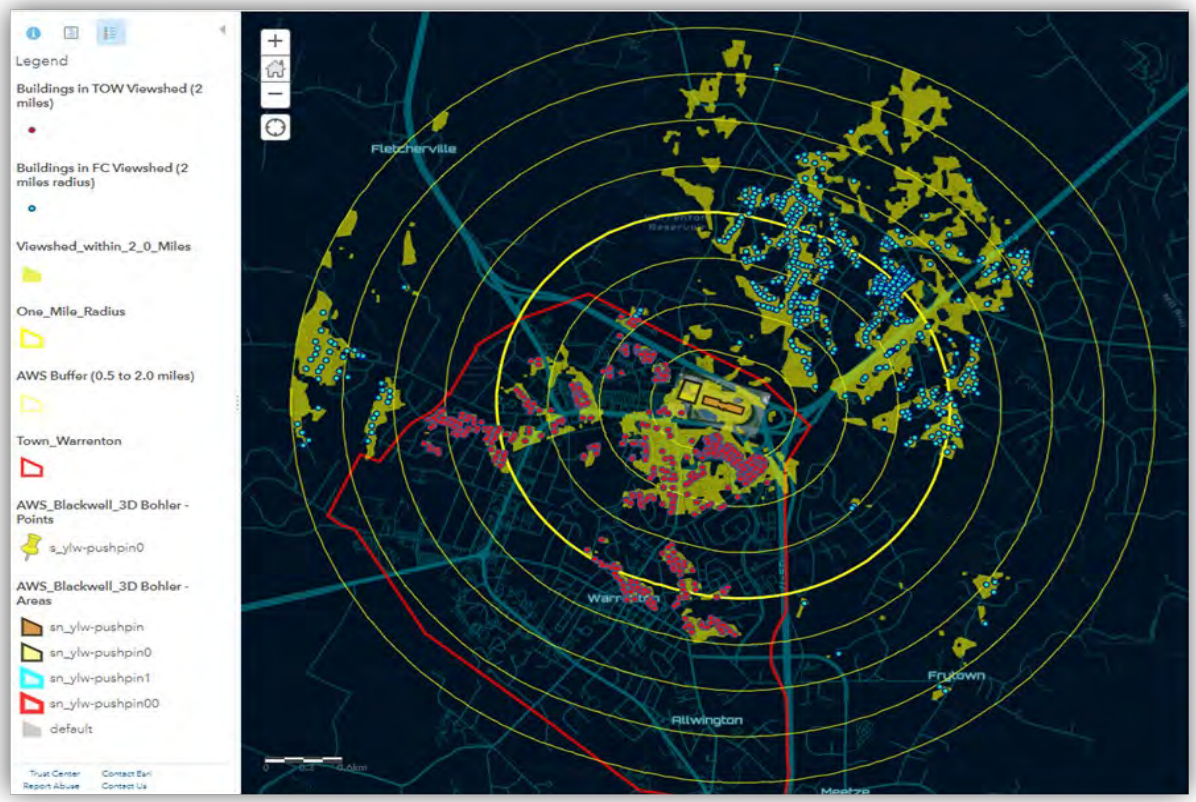
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7				V	V	V	V	V
8				V	V	V	V	
9			V	V	V	V	V	V
10		V	V	V	V	V	V	V
11				V	V	V	V	V
12				V	V	V	V	V
13				V	V	V	V	V
14				V	V	V	V	V
15				V	V	V	V	V
16				V	V	V	V	V
17				V	V	V	V	
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8		V	V	V	V	V	V	V
9		V	V	V	V	V	V	V
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17				V	V	V	V	V
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Sent to citizencomment@warrentonva.gov on November 14, 2022

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Warrenton VA 20186

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Brittany Latack

From: rlmanierre@everyactioncustom.com on behalf of Redmond Manierrr <rlmanierre@everyactioncustom.com>
Sent: Tuesday, November 15, 2022 7:57 AM
To: Rob Walton
Subject: Please Deny the Amazon Data Center Special Use Permit:

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Dear Director of Community Development Rob Walton,

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With so many unknowns, I ask that the Town please deny this application.

Thank you for hearing my concerns.

Sincerely,
Redmond Manierrr
3489 Landmark Rd The Plains, VA 20198-1724 rlmanierre@gmail.com

Brittany Latack

From: willardby@everyactioncustom.com on behalf of Katherine McLeod <willardby@everyactioncustom.com>
Sent: Tuesday, November 15, 2022 11:47 AM
To: Rob Walton
Subject: Please Deny the Amazon Data Center Special Use Permit:

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Dear Director of Community Development Rob Walton,

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With so many unknowns, I ask that the Town please deny this application.

Thank you for hearing my concerns.

Sincerely,
Ms Katherine McLeod
7434 Oak Grove Rd Marshall, VA 20115-3614 willardby@gmail.com

Brittany Latack

From: dulanym@everyactioncustom.com on behalf of Dulany Morison <dulanym@everyactioncustom.com>
Sent: Tuesday, November 15, 2022 7:53 AM
To: Rob Walton
Subject: Please Deny the Amazon Data Center Special Use Permit:

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

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With so many unknowns, I ask that the Town please deny this application.

Thank you for hearing my concerns.

Sincerely,
Mr. Dulany Morison
23587 Stoke Farm Ln Aldie, VA 20105
dulanym@gmail.com

Brittany Latack

From: Victoria Packer <vpacker14@gmail.com>
Sent: Tuesday, November 15, 2022 6:41 AM
To: citizencomment
Subject: Amazon Data Center

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

To whom it may concern,

I am opposed to the Amazon Data Center (emphatically so). It is the first step toward destroying the wonderful small town feel of Warrenton.

Thank you,

Victoria Packer

Brittany Latack

From: Mary Page <maryschmidt1@icloud.com>
Sent: Tuesday, November 15, 2022 11:38 AM
To: citizencomment
Subject: Amazon

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

PLEASE do the right thing. Use the protection that the SUP affords you, and deny this application.

The gateway to historic Old Town is the wrong place for a data center.

Respectfully,
Mary Page
4318 Buckminster Lane
Warrenton VA 20187
Scott District
(540) 229-7609

Sent from my iPhone

Brittany Latack

From: pecbetz@aol.com
Sent: Tuesday, November 15, 2022 9:27 AM
To: citizencomment
Subject: Amazon

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

I would like to remind the city council, responsible for Amazon approval, your vote also carries the consequences of the potential future of Fauquier Co. and the miles of unsightly power lines that will be part of the package. Larry Peccatiello

Brittany Latack

From: merryweatherfarm@everyactioncustom.com on behalf of Linda Reynolds <merryweatherfarm@everyactioncustom.com>
Sent: Tuesday, November 15, 2022 7:14 AM
To: Rob Walton
Subject: Please Deny the Amazon Data Center Special Use Permit:

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Dear Director of Community Development Rob Walton,

I am writing to urge you to vote against the Special Use Permit application for an Amazon data center on Blackwell Road.

In addition to the numerous flaws of Amazon's application, including the lack of a completed noise study and the known visual impacts to the Town's gateway, Dominion has revealed plans for one of two potential offsite substations to serve the data center less than a week before the scheduled Planning Commission hearing. This recent development calls into question what new impacts the proposed data center and its associated energy infrastructure might have on Warrenton's historic downtown, property values and the rural character that draws residents and visitors both to the Town and County.

With so many unknowns, I ask that the Town please deny this application.

Thank you for hearing my concerns.

Sincerely,
Linda Reynolds
6783 Leeds Manor Rd Marshall, VA 20115-2221 merryweatherfarm@gmail.com

Gmail

Susan Russell <suwaru47@gmail.com>

Amazon/Dominion
2 messages

Susan Russell <suwaru47@gmail.com>
To: citizenscomment@warrentonva.gov

Tue, Nov 15, 2022 at 10:44 AM

Hello ~

I am writing to express my opposition to the approval of the SUP for Amazon to put a data center behind Country Chevrolet and for the most recent proposed substations and the new power lines proposal by Dominion. As for Amazon, they have not even submitted a completed application. Dominion has stated that more power lines and substations are needed for "future development." Of what, I ask. More data centers? I have lived in Fauquier County for over 46 years and there has rarely been any development proposal that could have such an egregious effect on the town and the county. The growth I have seen has managed to keep the unique character of a small town and a rural county while continuing to progress.

Thank you for your consideration.
Susan Russell

-- Susan Russell
Warrenton

Create your own email signature

Brittany Latack

From: lorencmstarr@everyactioncustom.com on behalf of Loren Starr <lorencmstarr@everyactioncustom.com>
Sent: Tuesday, November 15, 2022 8:33 AM
To: Rob Walton
Subject: Please Deny the Amazon Data Center Special Use Permit:

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Dear Director of Community Development Rob Walton,

I am writing to urge you to vote against the Special Use Permit application for an Amazon data center on Blackwell Road.

In addition to the numerous flaws of Amazon's application, including the lack of a completed noise study and the known visual impacts to the Town's gateway, Dominion has revealed plans for one of two potential offsite substations to serve the data center less than a week before the scheduled Planning Commission hearing. This recent development calls into question what new impacts the proposed data center and its associated energy infrastructure might have on Warrenton's historic downtown, property values and the rural character that draws residents and visitors both to the Town and County.

With so many unknowns, I ask that the Town please deny this application.

Thank you for hearing my concerns.

Sincerely,
Loren Starr
4101 Dumfries Rd Catlett, VA 20119-1836 lorencmstarr@gmail.com

Brittany Latack

From: tufts4@everyactioncustom.com on behalf of Maria Tufts <tufts4@everyactioncustom.com>
Sent: Tuesday, November 15, 2022 9:13 AM
To: Rob Walton
Subject: Please Deny the Amazon Data Center Special Use Permit:

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Dear Director of Community Development Rob Walton,

I am writing to urge you to vote against the Special Use Permit application for an Amazon data center on Blackwell Road.

In addition to the numerous flaws of Amazon's application, including the lack of a completed noise study and the known visual impacts to the Town's gateway, Dominion has revealed plans for one of two potential offsite substations to serve the data center less than a week before the scheduled Planning Commission hearing. This recent development calls into question what new impacts the proposed data center and its associated energy infrastructure might have on Warrenton's historic downtown, property values and the rural character that draws residents and visitors both to the Town and County.

With so many unknowns, I ask that the Town please deny this application.

Thank you for hearing my concerns.

Sincerely,
Maria Tufts
8718 Springs Rd Warrenton, VA 20186
tufts4@earthlink.net

Brittany Latack

From: mandm.tufts@everyactioncustom.com on behalf of Maximilian Tufts JR <mandm.tufts@everyactioncustom.com>
Sent: Tuesday, November 15, 2022 9:15 AM
To: Rob Walton
Subject: Please Deny the Amazon Data Center Special Use Permit:

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Dear Director of Community Development Rob Walton,

I am writing to urge you to vote against the Special Use Permit application for an Amazon data center on Blackwell Road.

In addition to the numerous flaws of Amazon's application, including the lack of a completed noise study and the known visual impacts to the Town's gateway, Dominion has revealed plans for one of two potential offsite substations to serve the data center less than a week before the scheduled Planning Commission hearing. This recent development calls into question what new impacts the proposed data center and its associated energy infrastructure might have on Warrenton's historic downtown, property values and the rural character that draws residents and visitors both to the Town and County.

With so many unknowns, I ask that the Town please deny this application.

Thank you for hearing my concerns.

Sincerely,
Mr. Maximilian Tufts JR
8718 Springs Rd Warrenton, VA 20186
mandm.tufts@gmail.com

Brittany Latack

From: kellysells@everyactioncustom.com on behalf of Kelly Williams <kellysells@everyactioncustom.com>
Sent: Tuesday, November 15, 2022 7:07 AM
To: Rob Walton
Subject: Please Deny the Amazon Data Center Special Use Permit:

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Dear Director of Community Development Rob Walton,

I am writing to urge you to vote against the Special Use Permit application for an Amazon data center on Blackwell Road.

In addition to the numerous flaws of Amazon's application, including the lack of a completed noise study and the known visual impacts to the Town's gateway, Dominion has revealed plans for one of two potential offsite substations to serve the data center less than a week before the scheduled Planning Commission hearing. This recent development calls into question what new impacts the proposed data center and its associated energy infrastructure might have on Warrenton's historic downtown, property values and the rural character that draws residents and visitors both to the Town and County.

With so many unknowns, I ask that the Town please deny this application.

Thank you for hearing my concerns.

Sincerely,
Kelly Williams
8189 Lee Hwy Warrenton, VA 20186-9745
kellysells@aol.com

Brittany Latack

From: janet_zaso@everyactioncustom.com on behalf of Janet Zaso <janet_zaso@everyactioncustom.com>
Sent: Tuesday, November 15, 2022 6:08 AM
To: Rob Walton
Subject: Please Deny the Amazon Data Center Special Use Permit:

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Dear Director of Community Development Rob Walton,

Please vote NO on the Special Use Permit application for an Amazon data center on Blackwell Road.

It's obvious from both Amazon and Dominion that we are not being given all the information. Too many VERY important things continue to change in this application.

The short and long term impacts to the region are just too enormous. I believe we'd be making a grave mistake by moving on this now.

Thank you.

Sincerely,
Mrs Janet Zaso
8065 Tinsley Pl Culpeper, VA 22701-9752 janet_zaso@ymail.com

ORGANIZATIONS

From: Brandie Schaeffer
To: Martian Crim; Rob Walton; Denise Harris; Frank Cassidy
Subject: Fwd: Amazon Project Would Force New Transmission Line to Warrenton
Date: Friday, April 29, 2022 8:20:26 PM

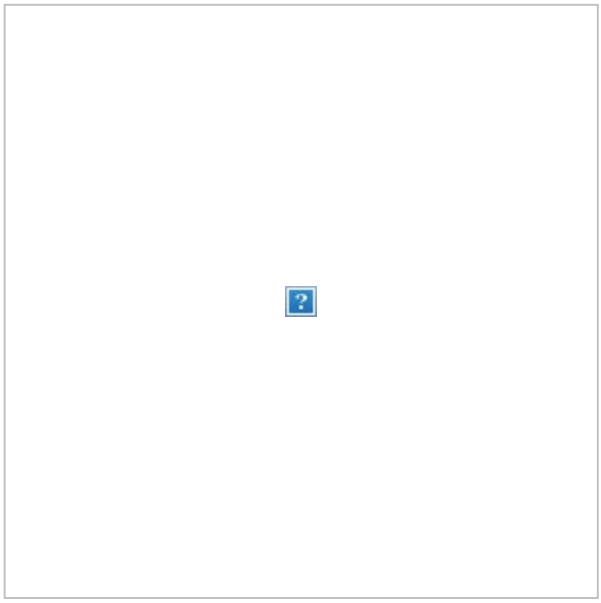
Sent from Brandie's iPhone
703-300-0107

Begin forwarded message:

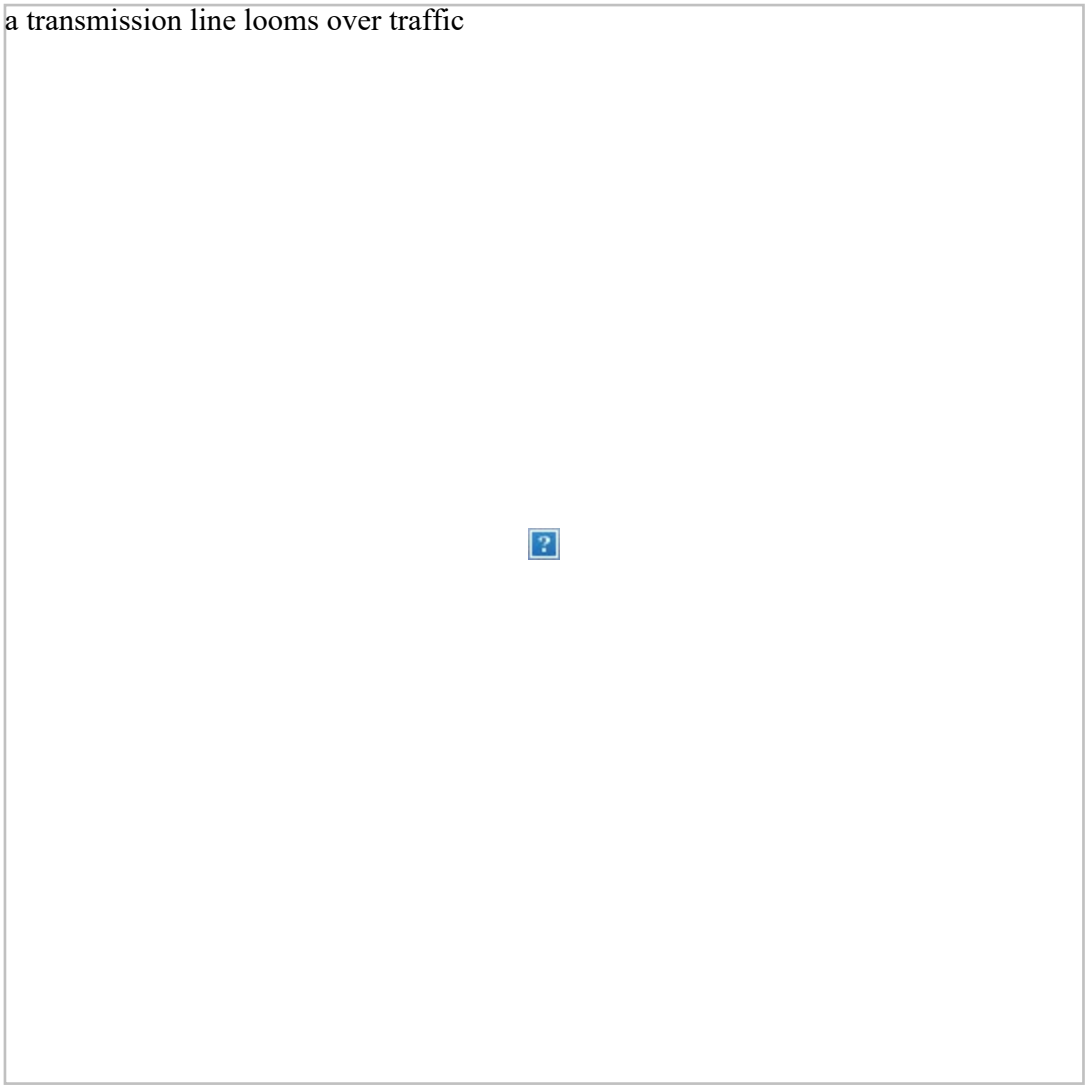
---------- Forwarded message ---------

From: **Julie Bolthouse, PEC** <pecnews@pecva.org>
Date: Fri, Apr 29, 2022 at 4:35 PM
Subject: Amazon Project Would Force New Transmission Line to Warrenton

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Dominion and Amazon Set Sights on Warrenton



Transmission lines along Rt. 7 in Loudoun County, VA. *Photo by Hugh Kenny/PEC*

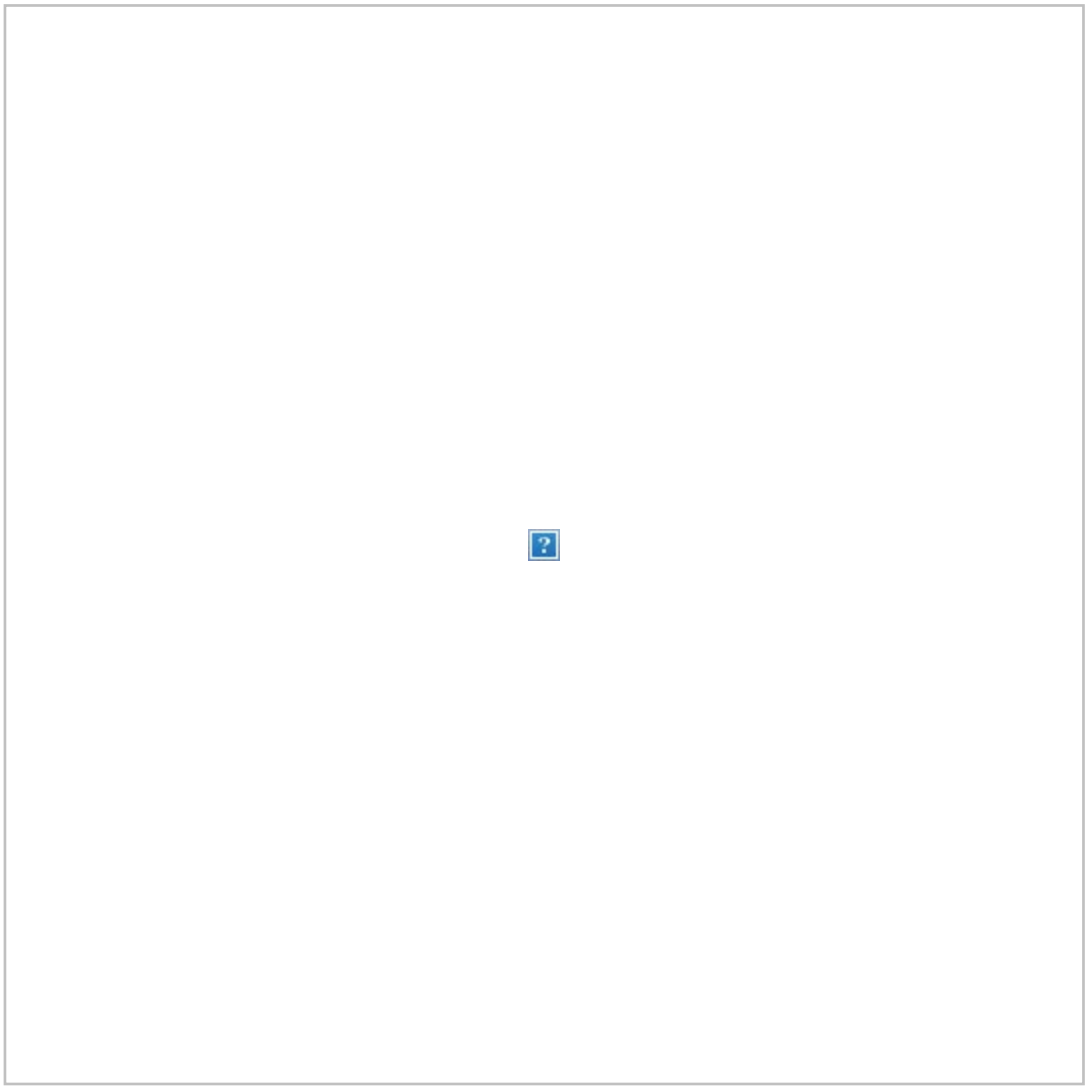
Dear Carter,

You may have seen articles referencing Amazon's recent purchase of a 41-acre parcel in Warrenton as the potential site for a new data center. The property in question is located on Blackwell Road, behind Country Chevrolet (near the Sheetz and Giant) on the northeast side of Warrenton.

Amazon has not yet submitted an application to the Town, or provided any information as to the size, scale or scope of the project. However, they have apparently sent a "load letter" to Dominion Energy, which is now moving quickly to plan a new substation and 230-kV transmission line to serve the potential data center.

On April 14, Dominion presented several possible routes to the Fauquier

County Board of Supervisors that would link into either of the two closest substations—Warrenton (off of Meetze Rd, next to the Central Sports Complex) or Wheeler (in Prince William County near Vint Hill).



For presentation purposes only. Overhead and underground preliminary routing options sourced from "Blackwell Road 230 kV Transmission Line and Substation Project" presentation by Dominion Energy on April 14, 2022 – Slides 8 & 9, Public Feedback Pending. *Map by Watsun Randolph/PEC*

Dominion has begun to post project information at DominionEnergy.com/blackwellroad.

A lot of unanswered questions

This Tuesday, we participated in a Dominion-facilitated stakeholder meeting to learn more about the potential transmission line routes and provide feedback. The Dominion reps were very clear that **the Amazon data center is the only reason the utility would be required to build a transmission line** to the other side of Town. Dominion's community input process includes stakeholder

meetings running through August, with community open house events planned for the evenings of June 22 and June 23 (locations to be determined), and a plan to file an application with the State Corporation Commission by fall 2022.

But stepping back, **we have a number of concerns** we hope will be addressed relatively soon by Amazon and the Town of Warrenton, or during the transmission line siting process in front of the State Corporation Commission. These include:

- What exactly is Amazon going to propose at the site? It's hard to evaluate a project when nothing has been submitted yet. How big will it be? What is the site layout? What are the water impacts? Are they offering anything to mitigate the impacts of the project?
- The data center would require Town of Warrenton approval. What happens if the Town denies Amazon's special use permit?
  If the town approves a smaller data center project, how would that impact Dominion's proposal?
- What load projections are being used to determine the need for a 230-kV line?
- If the data center was located elsewhere, would there be a less intrusive transmission option? For instance, there is land planned and zoned for a data center in the Remington Service District next to an existing substation.
- Who pays? This would be a multi-million dollar project. Would that cost be paid for by Dominion customers alone or could Amazon be made to underwrite a portion of the project? Our understanding from Dominion is that the entire project would be rate-based, meaning paid for by Dominion customers in their monthly utility bills.
- Would the State Corporation Commission truly consider underground routes, given price is typically one of its primary considerations when making routing decisions?

Not too late to change course

With an average height of around 110-ft tall, an overhead 230-kV transmission line to Amazon's Blackwell Road site would have the effect of industrializing any corridor it runs through. And from our initial look, all of the possible routes to the proposed Amazon site would have a detrimental impact on the gateway(s) into the Town of Warrenton, on historic and cultural resources

along the route, and to the residential neighborhoods of New Baltimore, Vint Hill, and/or Frytown (a historic African American community).

Rather than accept that this Amazon project is a done deal, **we hope community members will urge the Town Council to reconsider approving a data center at the proposed location.** Again, Amazon has yet to even submit an application, and it's abundantly clear this project merits further evaluation given the additional transmission infrastructure required.

If the Town approves a data center at the Blackwell site, it should be conditioned upon both the associated on-site and offsite transmission lines being underground, which would help maintain the character of the area. Furthermore, we believe that Amazon, a company with a current market value of over $1.5 trillion and net income in 2021 of over $33 billion, rather than Dominion ratepayers, should bear the costs here.

As for the state process, if it moves forward, local residents and groups like PEC will need to weigh in with Dominion and the State Corporation Commission to ensure any resulting transmission line project is sized, designed and sited appropriately; that our natural, historic and cultural resources are protected as best as possible; and that the local community is heard throughout the process. Dominion plans to collect community input through August, and **we strongly encourage you to make your voice heard.**

I've summarized as shortly as I can the basics of Amazon and Dominion's proposals here and on our website, although more information will be forthcoming through our channels. Right now, the most important thing you can do is call on members of the Town Council to seek answers to the questions we outlined above. Another opportunity to provide feedback will be Dominion's open houses in June. We will share the locations and times once they are announced.

Thanks again for staying engaged.

Sincerely,

Julie Bolthouse, AICP
Director of Land Use
jbolthouse@pecva.org

(540) 347-2334 x7042







The Piedmont Environmental Council
45 Horner Street
Warrenton, VA 20186
United States

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--
Carter & Spence, Ltd.
41 Main Street
Warrenton, Virginia 20186

ph: (540) 347-9189
fx: (540) 347-4621

Brittany Latack

From: Kevin Kask <kkask@pecva.org>
Sent: Tuesday, August 16, 2022 4:54 PM
To: Planning Department; Susan Helander; James Lawrence; Ali Zarabi; Steve Ainsworth; Gerald Johnston; Ryan Stewart; Rob Walton
Cc: John McCarthy; Chris Miller
Subject: PEC Comments on SUP 2022-03
Attachments: SUP 2022-03 Letter to Warrenton Planning Commission.pdf

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Good Afternoon,

Please find comments from the Piedmont Environmental Council on SUP 2022-03 for the Amazon Data Center on Blackwell Road. We would be happy to discuss or answer any questions you may have.

Thank you,

--

Kevin Kask, AICP
Fauquier County Field Representative

Piedmont Environmental Council
www.pecva.org
45 Horner St.
Warrenton, VA 20186
Office: 540-347-2334 ext. 7046
Cell 703-863-2663

Piedmont Environmental Council

Promoting and protecting the natural resources, rural economy, history and beauty of the Virginia Piedmont

August 16, 2022

Town of Warrenton Planning Commissioners; Susan Rae Helander, Chair

c/o Town of Warrenton Community Development Department, 21 Main Street, Warrenton, VA 20186

Re: SUP 2022-03 Amazon Data Services

Dear Planning Commissioners,

As the review of SUP 2022-03 for an Amazon Data Center on Blackwell Road gets underway, the Piedmont Environmental Council would like to offer some considerations for the Planning Commission in the ongoing review of the special use permit application. We attended the prior Planning Commission work session on July 26th and were encouraged to hear that several members of the Commission share the concerns regarding the data center that we have expressed alongside the community. We hope the Planning Commission continues to ask the necessary questions and that it will holistically review the SUP application with regard to broader implications for County and Town residents.

As such, we would like to draw the Commission's attention to the following elements of the application:

The proposed substation and transmission line. This SUP application fails to incorporate any information about the substation or transmission line impacts. The Commission should continue to challenge the premise asserted by the Applicant that the substation application is a separate proposal from that of the data center. Regardless of who's purview electrical infrastructure falls under, the Applicant has stated on the record that, if not for the load demands of the fully-operational data center, both the transmission line and substation would not be required. Like any land use application, the SUP application should be evaluated on the final buildout of the facility and its impacts both on and off-site.

- **Visual Impacts.** A full viewshed analysis and visualizations demonstrating the visual impact of the proposal are still needed. We ask that the Commission consider the potential visual impacts that could result directly or indirectly from the proposal including, the full height of the structure inclusive of mechanical equipment, the potential for requests for increased height (as we have seen in other proposals in the region), and the on-site substation on which the proposed data center depends.

- **Prior recommendations for bicycle and pedestrian improvements.** The 2009 Fauquier-Warrenton Destinations Plan provided detailed recommendations for pedestrian, bicycle and equestrian routes to connect important destinations throughout the Town of Warrenton and its surrounding vicinity. This plan had a number of recommendations for the subject site including, a side/multi-use path around the site's perimeter and a bicycle/pedestrian connection between Blackwell Road and Lee Highway along the northern boundary of Country Chevrolet through the center of the site. Other than an acknowledgment of the sidewalk on the western side of Blackwell Road in staff comments, neither the Applicant nor staff has spoken to any of these recommendations in the application review thus far. We ask that the Planning Commission reconcile the Applicant's current proposal with these prior recommendations.

- **Noise.** The noise study that the Applicant has promised to provide will likely not include periodic generator testing procedures or the continuous buzzing of the substation. We ask that the Commission consider these associated noise impacts that are very much tied to the SUP application, even if the Applicant or provided studies do not account for them.

- **Historic Resources.** 1937 aerials provided by the County show a historic home located directly to the south of the project site on land that is currently encompassed by the Lee Highway right of way. We ask that a chain of title and a Phase I archeological study be investigated to improve the Commission's understanding of what resources might remain on the site.

- **Inconsistency with the Comprehensive Plan.** The Town's comprehensive plan identifies this parcel as a part of the "New Town District," an area described as having a mix of uses including office, residential, green space, and public amenities. A data center seems outside of that vision. While the comprehensive plan is written with some flexibility, such a blatant deviation from the vision of New Town Character District on approximately 1/3 of the District's land area must be sufficiently justified. We ask that the Planning Commission, in fulfilling their obligation to determine the SUP's consistency with the comprehensive plan, seek such a justification for this deviation and determine whether a data center is the highest and best use of an industrially-zoned, mixed-use designated parcel.

- **Lighting.** The Applicant has indicated that there will be lighting both on the proposed data center building and around the fencing perimeter. Because the site is on a higher elevation than the surrounding area, lighting on the building's perimeter fencing could be very visible along roadways and could impact adjacent properties. We ask that a comprehensive study of these light impacts, especially on nearby residential communities, be conducted to address this issue.

- **Diesel Generators.** The data center includes a number of diesel generators and onsite storage tanks, each with up to 50,000 gallons of diesel fuel. These backup generators are usually cycled regularly, which can result in noise impacts and the release of air pollutants. The SUP does not include any insights into how Amazon will mitigate these impacts. Although the storage tanks would be double walled and up-to-standard, information about spill containment has not yet been shared. Protective measures to ensure fuel tanks do not leak can be proffered or conditioned, as was the case with True North Data Center in Loudoun County, which proffered a provision that required *"The Owner install protective material and/or a catch-basin to be used where fuel generators are filled."* We ask that the Planning Commission investigate such actions and carefully evaluate engineering plans for the potential impacts of fuel tank spillage on nearby water resources.

We urge the Planning Commission to adopt a conservative approach in considering the proposal's direct and indirect impacts, seek out expertise where necessary and avoid deferring the examination of important details to site plan review. While some of the issues discussed above may be solved with information provided by the Applicant, staff, the Planning Commission and the Town Council all have discretion in determining how issues are addressed. We hope the Planning Commission exercises its full discretion when determining how to best mitigate the impacts of the data center, including the denial of the special use application if its impacts cannot be mitigated.

The impacts of this proposal on the community are broad. We hope the Planning Commission sets a precedent for the comprehensive review of data center applications in the Town with a thorough understanding of the community's concerns, the land use implications of associated infrastructure, and the public benefit. With a proposal this large and a site this prominent in the Warrenton community, we hope the Planning Commission continues to be mindful of the gravity of their recommendation and its influence on the ultimate decision of the Town Council.

Sincerely,

Kevin Kask, AICP
Fauquier County Field Representative
Piedmont Environmental Council
kkask@pecva.org
540-347-2334 ext. 7046

August 22, 2022

Kevin T. O'Neill, Director
Fauquier Climate Change Group
kevintoneill@yahoo.com
(540) 454-8827

To the Warrenton Town Council –

My name is Kevin O'Neill, Director, Fauquier Climate Change Group. While several of our members are town residents, the majority, including myself, reside in the County. I am writing this letter on behalf of the whole Group to express our disagreement with the siting of the proposed Amazon Data Center in the town of Warrenton and the complete opposition to the proposed Dominion power line supporting it through the County. Please read my alternative proposal because you may find that it helps in your decision making.

Others have pointed out the obvious shortcomings of the Amazon/Dominion project: the very real chance of a shortfall or no revenue as has happened in Loudon County, the use of over 41 prime business acres with almost a complete lack of employment available to County residents, the certainty of home value reduction, the irritations of noise and heat, the land lost by citizens to Eminent Domain for the power line, the pollution of the view shed, the loss of what makes Fauquier a desirable place to live – the list just keeps going on. This is a lose/lose situation. There may be a way to turn this lose/lose situation into a win.

There is a proposed utility scale solar facility south of the Warrenton/Fauquier Airport. Next to the proposed utility scale solar facility, there is a closed golf course, already not farmland, with more than enough land for construction (properly sited out of view) and an existing high power line already in place without any new construction. I am proposing that the Amazon site be changed from Blackwell/Lee Highway to this alternate site. This idea will provide an option that meets the needs of the stakeholders:

- Amazon will be able to build their data center (the existing site is a sunk cost with no bearing on their decision).
- The utility scale solar facility will have a customer for its power and Amazon will further its corporate goal to use alternative energy.
- The existing high power line already in place and not needing any construction will handle the load and provide uninterrupted power (day and night).
- The concern for a historically Black area is being addressed with the residents by the solar farm company.
- **The County will still reap tax revenue with a negotiated part to go to the town of Warrenton to help compensate for lost revenue due to the shift in location.**
- The issue of the current citizen uprising will just go away.

While getting all of the pieces to fit together has proven to be an interesting puzzle, it is possible according to my research. The advantages to the Town of considering this proposal are obvious. I appreciate the attention that you will give to this proposal.

Kevin T. O'Neill, Director
Fauquier Climate Change Group

cc: Warrenton Town Planning Commission

Brittany Latack

From: Kevin Ramundo <ramundok@gmail.com>
Sent: Tuesday, August 23, 2022 1:25 PM
To: Planning Department; Denise Harris; townmanager
Cc: Carter Nevill; Renard Carlos; Sean Polster; Heather Sutphin; William Semple; Brett Hamby; James Hartman; Kevin Carter
Subject: CFFC Message On Amazon
Attachments: PC Aug. 23, 2022.docx

Follow Up Flag: Follow up
Flag Status: Flagged

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Good Afternoon,

Thank you for your time in reviewing the attached message.

Kevin Ramundo
President, Citizens for Fauquier County

CITIZENS FOR FAUQUIER COUNTY

EST. 1968

PROTECTING FAUQUIER'S FUTURE™

August 23, 2022

Dear Planning Commissioners and Ms. Harris:

Citizens for Fauquier County is pleased that the second work session on the Amazon data center application has been deferred since there are significant omissions that prevent the Planning Commission from evaluating the application properly. At your July 26 work session, the omissions you identified included:

Noise Abatement Study -- Noise level and sound distance travel are highly impactful considerations when assessing a SUP. During questioning of the noise attributed to the multiple outdoor diesel generators during their bi-monthly test runs, Amazon's attorney stated he has the related numbers, but he didn't bring them with him to the work session. The PC rightly requested the actual noise abatement study;

Balloon test – Visibility and appearance are also central concerns relative to a SUP;

Site visit of the property – This will be very useful to the commissioners;

Site visit at an exemplar data center -- This will be especially useful to the commissioners. CFFC concurs that the noise levels generated by the rooftop air chillers and diesel generators in regular testing mode at a similarly-sized data center are imperative for the Planning Commission to experience directly;

Amazon's electrical use demand, and analyses of its **impact** on the town's electrical infrastructure -- Amazon's attorney says he is unaware of the power needs and supply of Amazon and Dominion, *but certainly Amazon is aware, and its failure to provide this information prevents a proper evaluation of the impact of the data center use.* If Amazon is exaggerating its power needs, or Dominion is proposing a power supply that exceeds Amazon's power demands, then the data center may also be providing a pretext to service regional needs or other data centers. This is information that the town, and the citizens of Fauquier County, deserve to know;

Amazon's water demand, and an analysis of its **impact** on the Town's public works infrastructure --Amazon's attorney represented during the work session that data center water use will be 1500 gallons a day, which would indicate that a study has been conducted. The study, not an Applicant's or its attorney's interpretation of a study, is required with the SUP application. CFFC requests that an analysis of the **sewer usage and impact** be required as well; and;

CITIZENS FOR FAUQUIER COUNTY
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PROTECTING FAUQUIER'S FUTURE™

Revised line of sight visual slide presentation -- Despite apparently having reviewed the line of site exhibit with town staff in a December 2021 pre-application meeting, at the work session Amazon presented line of sight slides from the street level along Lee Highway, which placed the top of the 37-foot high data center building into the bank of the subject property. Planning Commission questioning revealed that both the elevation for the site, 50+ feet, and the additional 12 feet for the rooftop air chillers, were omitted from the visual presentation. The PC rightly requested a revised, accurate line of site illustration.

In addition to addressing these omissions, CFFC respectfully requests:

Amazon be required to provide the geotechnical study, which indicates that **blasting** may be required for removal of weathered or intact rock (Resubmission, page 5). In a telling contrast, the issue of blasting was a significant concern in the coincidental Harris Teeter gas station application, yet blasting at the Amazon site received no mention in the List of application considerations provided to the Planning Commission on July 26, 2022**.**

Confirmation of the completeness of agency comments, both with regard to comments that may still be needed, such as from DEQ, and those that may have been submitted, such as from VDOT. According to FOIA'd documents, VDOT was providing comments that may raise an access configuration concern, and indeed, two VDOT representatives appear to have participated in a Post Comment Review Meeting on June 23, 2022, along with seven (7) Town Staff members, eight (8) Amazon representatives, Amazon's attorneys and others, *yet no VDOT Comments, or Applicant's Reply to VDOT Comments, have been provided* pursuant to our requests for the Application materials, nor were they included with the materials attached to the PC's work session Agenda.

CFFC has created a task force to study this Application and the related project, and members of that group have spent hundreds of hours understanding the Amazon data center situation and are available to provide information that may be helpful to you in your critical work here on behalf of the community. A large part of our organization's mission is engaging with land use projects that may be incompatible with our towns, villages and the county, and that threaten to change our community character, and we believe that Amazon's data center and the affiliated substation and transmission lines, *at this location,* are exactly the type of incompatible development that would change Warrenton's small-town nature forever.

We thank you for your service, time and continued attention to detail as you consider this very significant application.

Respectfully submitted,
Kevin Ramundo
President, Citizens for Fauquier County

CC: Warrenton Town Council Members



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CITIZENS FOR FAUQUIER COUNTY
EST. 1968
PROTECTING FAUQUIER'S FUTURE

October 24, 2022

Town of Warrenton Planning Commission
Ms. Denise Harris, Planning Manager
21 Main Street
Warrenton, VA 20186

Re: Special Use Permit Application (SUP 2022-03) AWS Data Center

Dear Commissioners and Ms. Harris,

Citizens for Fauquier County respectfully submits the following comments to Amazon's Third Submission dated September 9, 2022, and in opposition to Amazon's SUP, for consideration by the Planning Commission (PC). After six months and three submissions, Amazon's application remains incomplete and inadequate. The application is still missing information that the Planning Department's June 6, 2022 comments identified as necessary to fully understand the impacts of the proposed data center. The Town should not have forwarded to the PC this incomplete application— not on July 26 and not with four-days' notice given to the public on October 25 — as Amazon's third submission still contains unanswered questions about the most basic project criteria, including the building height and elevation. According to the third submission, as of September 9, 2022, Amazon's architects are still working on revising graphics for the building, but they are not complete, and Amazon advises that they will *be made available for the first time at the work session* – giving no opportunity for staff analysis and comment for the PC's benefit, nor public input, before the work session.

While Amazon apparently is adding almost 20 feet to the height of the data center from what was originally submitted in April, Bohler Engineer's "revised graphics" that are purported to depict the new height are devoid of any measurements or details, and were prepared on July 10, 2022 – which pre-dates the first work session (submitted as Exhibit 2, "Revised Renderings"). The remaining eight slides in Exhibit 2 are the line of site exhibits displayed at the first work session that the PC aptly considered misleading for the exhibits fail to account for the elevation of the property.

Similarly, the creation of Amazon's tree study (April 5, 2022) also pre-dates the first work session, and it is unclear why Amazon failed to produce these documents for staff and the

Commission's consideration at that time. It is also unclear whether Amazon's consultants at Wetlands Studies and Solutions factored in the additional 20 feet height of the structure or the proposed removal of a vast number of trees when conducting the balloon test on September 15, for which Amazon also has yet to submit a report more than a month later.

Also glaringly omitted from the third submission is Corgan architect's water and sewer demand and usage study, which apparently has been completed, but not yet submitted. Instead, Amazon has selected two numbers to share with the Town to support its conclusions, but omits the objective information, data and analysis that are needed to evaluate the usage and impact on the Town's systems, and the accuracy of the study. Amazon needs to be required to produce the Corgan study.

Amazon provided only an incomplete summary of the Polysonics noise study. The Planning Commission should not consider anything less than a complete and certified copy of the entire study. After careful review by our experts, we found that the information submitted as Exhibit 4 is incomplete, flawed, and materially inconsistent with the summary conclusions. The lack of contextual information, including a description of the methodology, primary sources, and applicable assumptions, is unprofessional and misleading. The poor quality and interpretation of the choropleth noise maps indicate fundamental flaws in physics. There appear to be significant errors in the application of daytime and night-time reductions, and it is unclear if even essential ambient road noise was consistently included. The lack of explanations for the changes in high and low-frequency scales, inexplicable changes of impedances for air handlers and generators alike, the bewildering choice of sample point locations that dismissed residential communities, and a complete lack of emission source information renders the work useless. The fact that the study completely ignores the substantial noise spillover into Fauquier County, implicating another set of standards, is careless. Perhaps most importantly, many frequency-based histograms in the study clearly identify frequencies and times where noise levels exceed Town of Warrenton standards across several sites, directly contradicting the summary conclusion that "the only place frequency levels are exceeded is over Route 17 and at the very edge of Parcel 9985-60-5718-500, which is itself zoned Industrial, and is currently vacant". CFFC continues our willingness to share the results of our own noise assessment.

The 124-page Geotechnical Engineering Report, revised on August 15, 2022, also requires independent expert review and analysis. The report notes that weathered rock was encountered and states that blasting will likely be required to remove the weathered or intact rock. The impact of blasting on the surrounding neighborhoods, if any, needs to be fully explored and assessed (Submitted Exhibit 6, p. 33, which is page 29 of the Report).

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Amazon's third submission sheds no new light on its data center's electrical demands, and Amazon continues to attempt to disassociate the data center from Dominion's on-site substation and the power lines ("While AWS does not have a role in planning transmission line routing, it understands that Dominion is working" to "refine routes prior to its SCC submission." 3rd Submission, pages 4-5). However, Amazon's data center is inextricably tied to the substation, as Amazon has reserved 8-acres for the substation if the data center is approved. Amazon's attorney admitted during the first work session and in its second submission that Amazon needs Dominion's future on-site substation to fully operate. (July 20, 2022 AWS Resubmission, page 7: "Future power needs will require the substation that Dominion will file a special use permit to obtain").

To date, Dominion has proposed nine alternative transmission line routes to service Amazon's data center, and it appears that Dominion's proposal for power exceeds Amazon's estimated "load letter" requirements by a factor of 15 to 20. The new electrical infrastructure proposed to service the data center – and only the data center – are substantial and cannot continue to be ignored. If Amazon cannot provide the information, then Dominion needs to inform the PC of the consequential impacts of your decision. Moreover, we believe that the significant spillover of electrical and environmental impacts into Fauquier County warrants the consideration of the recently refreshed Town-County Liaison Committee.

Finally, while CFFC submits that Amazon's data center cannot be aligned with the Town's Comprehensive Plan and the SUP application is fatally incomplete and flawed, any decisions this year would be untimely. No decisions should be made before a new Town Council is formed in January, with two new members at-large and potentially a new mayor. A "lame duck" Council should not make a decision as significant as this one for Warrenton. A rush to put this decision before the current Town Council in December would be inappropriate and improper, even suspect. <u>The new Town Council should render a decision only after the Planning Commission and the public have the opportunity for a thorough review and analysis of a complete SUP application.</u>

Respectfully submitted,

Kevin Ramundo,

President, Citizens for Fauquier County


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From: Denise Harris
To: Brittany Latack
Subject: Fwd: For 10/25 Amazon Work Session
Date: Tuesday, October 25, 2022 12:43:04 PM

Denise M. Harris, AICP
Planning Manager
Town of Warrenton
(540) 935-6791

Begin forwarded message:

From: Spencer Snakard <spencer.snakard@gmail.com>
Date: October 25, 2022 at 12:40:38 PM EDT
To: Susan Helander <shelander@warrentonva.gov>, James Lawrence <jlawrence@warrentonva.gov>, Steve Ainsworth <sainsworth@warrentonva.gov>, Ali Zarabi <AZarabi@warrentonva.gov>, Ryan Stewart <rstewart@warrentonva.gov>, Denise Harris <dharris@warrentonva.gov>, Rob Walton <rwalton@warrentonva.gov>
Cc: Peter Cary <peter.cary@verizon.net>, Jeanine Lawson <jlawson@pwcgov.org>, bos@fauquiercounty.gov
Subject: For 10/25 Amazon Work Session

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Dear Planning Commission

As you enter the 2nd working session with Amazon, we ask you to consider the REAL LIVES of your REAL CITIZENS who will suffer the REAL CONSEQUENCES of data center impacts if Amazon's Special Use Permit is approved.

It is your responsibility to protect Warrenton residents from these very real health and safety consequences that are *not* imagined or theoretical, they are *proven* by our neighbors just one county away.

In late August I was invited to participate in a protest against the Amazon data center on Tanner Way due to the noise that is destroying resident's quality of life and peaceful enjoyment of their homes. ***They wanted us - in Warrenton / Fauquier - to LEARN from their suffering so we can stop it before it is too late***.

You can see from the 3-minute news stories linked below how residents are

suffering in the Great Oak neighborhood, which is just 600 feet from an Amazon Data Center in Prince William County.

Fox5 News story highlighting *lived experiences* of residents and a quote from a Harvard Medical study on health risks associated with noise.

WUSA9 News story

The noise and disturbance to quality of life has caused a number of residents there to sell their homes and move away. One resident is a migraine sufferer who spent over $20,000 replacing all his windows, and still had to move his baby's nursery to the basement and give up working from home to go back into an office due to noise. Others are experiencing anxiety, depression, and more.

It has not escaped us that one member of the Warrenton Planning Commission has already sold his home to move to Culpeper County, no doubt in anticipation of how the Data Center would have impacted his family. How many more residents will move away and *stay away* from the Town and County to escape the coming onslaught of Data Centers and their many undesirable impacts?

Great Oak's proximity to the data center and what they are experiencing as a result of being so close to them is much like residents of Oak Springs, near Walker Drive, and Poet's Walk will experience - most of whom will not have the luxury or means to move away or to invest tens of thousands of dollars to try to reduce the impacts.

And, lest you get too hung up on the exact number of feet away, remember that we have already learned from residents like Dave Winn who have spoken during the Warrenton Town Council's 'Citizen's Time' that even being a mile away from the Training Center through dense woods and over the ridge of the hill, he and his neighbors are unable to sleep with their windows open at night due to the maddeningly persistent hum and vibration of the data center's cooling equipment.

As documented by the Fauquier Times, **Dr. John Lyver has determined that Amazon's "noise study" is not only insufficient but flat out wrong**.

Please do NOT let Amazon skate through with insufficient or inaccurate information. It is imperative that you **take your time and due diligence to protect the citizens of Warrenton and Fauquier who will bear the burden of this decision**. If approved, there will be no turning back.

Respectfully,
- Spencer Snakard, President of Protect Fauquier



For the best experience, open this PDF portfolio in Acrobat X or Adobe Reader X, or later.

Get Adobe Reader Now!

Brittany Latack

From: riffkhala@aol.com
Sent: Thursday, November 10, 2022 1:56 PM
To: citizencomment
Cc: rick.gerhardt@fauquiercounty.gov; chris.butler@fauquiercounty.gov; kevin.carter@fauquiercounty.gov; maryleigh.mcdaniel@fauquiercounty.gov; holder.trumbo@fauquiercounty.gov
Subject: Amazon Special Use Permit 2022-203

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

November 10, 2022

Warrenton Town Council

21 Main Street

Warrenton, VA 20186

Dear Town Council Members:

On behalf of the Oak Springs Homeowners' Association ("Association"), a property owner within the Town of Warrenton, and its Board of Directors, I am writing to request the Town Council disapprove the Special Use Permit (SUP) 2022-203 which has been requested by Amazon.

The Oak Springs subdivision is one of the closest neighborhoods in proximity to the proposed data center and is directly across from Blackwell Road where Dominion Energy plans to build a power substation, should the SUP be approved,

The Association is adamantly opposed to the SUP as it will adversely impact our neighborhood by 1) decreasing property values as much as $88,000 to $136,000 per parcel as per the National Association of Realtors; 2) generating intolerable noise levels exceeding both town and county noise ordinances and affecting our residents' health and well-being; 3) drastically changing the eastern vista of our community through heavy deforestation by removing hundreds of trees and further decimating the wildlife corridor; and 4) severely impacting ingress and egress along Blackwell Road and Oak Springs Drive during an extended construction process.

Although the Association has been monitoring this issue since April, interestingly, the Oak Springs subdivision has never been identified as a potential stakeholder. That, in of itself, is telling, along with the seemingly lack of transparency by Town officials to keep its public apprised, and its failure to seek out independent review of how such a project would impact not only our community but others. How does this SUP fit into the Town's 2040 Comprehensive Plan? How is building a 50 foot high 5 acre data center and power substation at the entrance to the Town, visible within a 2 mile radius, consistent with the goal of "preserving, enhancing and protecting the environmental, scenic, and natural quality of the Town?" Many of our residents have moved here to get away from the urban, industrial sprawl of the counties north to us. How does building a data center at Warrenton's northern gateway ensure that our beloved Town remains the bucolic, quaint town that it is?

The residents and property owners of the Oak Springs subdivision, as represented by the Association, depend on the prudence, forethought and commitment of its elected officials to represent its constituents in a fair and honorable manner. The Town Council must vote to disapprove this SUP, if it is to keep the confidence of the residents and property owners residing in Oak Springs.

Respectfully submitted, on behalf of the Association's Board of Directors,

Robin C. Lohnes, President

Oak Springs Homeowners' Association

P.O. Box 341

Warrenton, VA 20188

Brittany Latack

From: Kevin Ramundo <ramundok@gmail.com>
Sent: Monday, November 14, 2022 3:20 PM
To: townmanager; Carter Nevill; Susan Helander
Cc: Planning Department; Denise Harris; Ali Zarabi; Steve Ainsworth; James Lawrence; Ryan Stewart; Sean Polster; Renard Carlos; Heather Sutphin; William Semple; Brett Hamby; James Hartman; John B. Heroux; Mullen, Dale G.
Subject: CFFC Letter
Attachments: Final PC 11.15.22 on LH.docx

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Good afternoon,

Attached is a letter from CFFC which we are submitting in advance of the tomorrow's Planning Commission public hearing. Thank you in advance for reviewing it and taking our concerns into consideration.

Kevin Ramundo
President, Citizens for Fauquier County

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November 14, 2022

Mr. Christopher Martino, Interim Town Manager
Mr. Carter Nevill, Mayor
Ms. Susan Helander, Chair, Planning Commission
Town of Warrenton
21 Main Street
Warrenton, VA 20186

Dear Messrs. Martino and Nevill and Ms. Helander,

As you are aware, Amazon's Data Center Special Use Permit Application SUP 2022-03 is scheduled for public hearing before the Town Planning Commission on November 15, 2022. CFFC is writing now to urge the Town to reconsider three elements that render this Application incomplete, inadequate and premature for determination.

A rushed decision on such a highly technical, dense, complicated and interconnected application - with so much at stake for the Town and County – cannot be explained, let alone justified. Rather, given that the Application is universally seen as the most consequential land-use decision by the Town in history, it clearly should proceed only after a full, complete, and comprehensive review. There is still time to get this right, and doing so requires (i) first obtaining all the necessary supporting materials, significant elements of which (e.g., the corrected noise study) remain undelivered; and (ii) the following steps be taken by the Town:

1. Rejecting the Town Attorney's suspect and unfounded opinion that the Planning Commission must vote on Amazon's SUP Application on November 15, 2022;

2. Referring Amazon's new Land Use Application with the accompanying supporting documents and exhibits, all dated and submitted on October 28, 2022, to the Town Staff for review and proper processing in the ordinary course rather than a premature Planning Commission final decision lacking the benefit of full professional review and analysis; and

3. Pausing the Application to investigate whether Amazon's attorneys led by John Foote and Amazon, through their involvement with former Town Manager Brandie Schaeffer and Town Staff, exerted undue influence over the Town that affected the data center zoning ordinance text amendment process, and whether similar undue influence is ongoing and continuing to corrupt Amazon's present data center SUP Application process.

Advice to the Planning Commission to Vote On Tuesday

On November 2, 2022, the Planning Commission - as well as the public - received notice that Amazon's SUP Application was scheduled for public hearing on November 15, 2022. Two days later, the Planning Commission received a legal opinion from the

Town Attorney that 100 days is a reasonable time to review and act upon a special use permit application, and that the PC should issue its recommendation on the Amazon special use permit application within 100 days of the date of its first meeting to consider the Application. The Town Attorney suggests that the 100 days has or is expiring, and if the Planning Commission is not satisfied with the Application – and unless the Applicant requests a deferral beyond the 100 days - that the PC's only recourse is to vote to recommend denial, stating the reasons for denial in the record.

CFFC submits that this advice is unfounded, disconnected from both the controlling law and the facts of this Application, and should receive the most intense scrutiny, as this determination not only affects Amazon's SUP Application on November 15, but also potentially all special use permit applications before the Town in the future. There are abundant questions: for example, it appears that a rezoning application "100-day rule" does not apply to special use permits at all, so why invoke it here? How are the 100 days counted and from when? Does the clock start with the work session, as the Town Attorney indicates, or the upcoming public hearing, as that is the first time the Staff's Report and Analysis will be presented to the PC, and the first time it is being referred to the PC for its recommendations? Does an Applicant's request for a deferral toll the time period? Does "delay" created by the applicant, here Amazon, by failing to produce required information and documents identified as missing yet necessary to the PC's evaluation, vitiate the applicant's ability to assert the rule? Also, has Amazon even asserted the rule in this instance and at this time? Does Amazon believe it is applicable? Reading the Town Attorney's opinion, he is clearly uncertain himself.

Further undermining the Town Attorney's opinion is a substantial concern over the Application's readiness for review. This entirely legitimate concern was aptly encapsulated by PC Stewart at the conclusion of Amazon's presentation on 10/25/22: *"Amazon does have an uphill battle to demonstrate it can mitigate the impacts of this particular data center at this location and from what I've seen so far, there's still a lot of work that needs to be done".*

New Undigested Factors

Last week, significant changes to the Application were revealed relating to two significant mandatory criteria of a SUP application – determination and evaluation of noise impact and abatement and electrical utility use and impact. Both issues are under review by third parties, and will take several weeks if not months before answers can be received and reviewed. If the PC is unsatisfied with the state of the Application, the Town Council will be no less unsatisfied and incapable of performing a proper evaluation and determination if the PC votes prematurely and advances the incomplete Application to the TC.

On noise, the relevant ordinance and how compliance will be determined is under agency review before the Zoning Administrator and is not due until mid-January. Once

released, Staff must review and Amazon must respond appropriately. This is self-evidently an activity for the Planning Commission, not the Town Council.

On electrical power, although as of October 25, 2022 Amazon represents that the new substation required to service its data center will not be on-site, and that it will ask to underground and share in the cost to bury distribution lines from the off-site substation to the data center, the information relating to the location of the substation and related power lines are still impacts that must be evaluated as part of this Application. This brand-new information will be perhaps welcome news to some, but alarming to many others especially newly impacted town residents, and these Town and other County residents who will be impacted have not even been contacted yet, and will have no opportunity to be heard if it is rushed to a premature vote by the PC on November 15.

Staff relies on Dominion to supply the electrical information and indicates that information would be forthcoming from Dominion before the Fauquier County Board of Supervisors on November 10, 2022. (See Staff Analysis, B-12-13). On November 10, 2022, Dominion's representative, Stephen Precker, advised that this was all new information, and that Dominion does not have all of it ready yet, in fact, he was working on routes that very morning. Dominion's Precker emphasized several times during the presentation that the plans presented are very preliminary, that there's considerable work to be done, with determinations yet on what's possible, feasible and viable. Clearly, even what is just put on the table is subject to coming off the table.

With those caveats, Dominion presented it's first preference, which is a 5 to 10 acre substation on the 30-35 acre site at the old wire factory off of Falmouth Street. Coincidentally, this was the first site Amazon considered for its data center before purchasing the Weissberg property, and it is currently being marketed by the owner for 5-6 data centers (the substation will accommodate 300 MW of power – the equivalent of 60,000-75,000 homes, and enough for a campus-style data center development). There would be an above-ground transmission line on steel 100-120 feet towers with 100 feet of right-of-way to the existing transmission line behind Dominion's offices off of Meetze Road to this site, and an approximately 3-mile underground distribution line with a 30-40 feet right-of-way route from the wire factory to Amazon's Blackwell Road data center. Concerns over the impact to the Warrenton Greenway were raised. Dominion confirmed that if the Town does not approve Amazon's Data Center, Dominion's project is moot. All of the related-costs, disruptions and disturbances and impacts are directly related to Amazon's Application, and they must be determined, evaluated and those impacted have a right to be heard before this Application advances towards a decision. Again, this is clearly the portfolio of the Planning Commission.

Refusal to Pause and to Investigate

Community outrage over the lack of transparency including a process that led to the adoption of a text amendment to allow data centers in Town has predominated the

focus of citizens' comments before Town Council meetings, letters to the editor, written comments to the Planning Commission and Town Council and news media articles for months.

The public has also made the Town aware of concerns that this lack of transparency and irregularity in process is ongoing, and permeating the manner in which Amazon's SUP application is being processed by Town Staff. Requests for an investigation have been made by at least one, and likely two Town Council members, and one citizen group, ours, but have fallen on seemingly deaf ears. *The Town's failure even to speak to these concerns is inexplicable and the source of considerable and growing public suspicion.*

According to documents obtained through extensive and expensive FOIA requests, Jessica Pfeiffer, a land-use planner with John Foote's office, Amazon's attorney, initially contacted Brandie Schaeffer on February 24, 2021 to discuss data centers globally in the Town, although they had a specific user and location in mind. This contact was made at the tail-end of the Comprehensive Plan Amendment process wherein data centers were not part of the people or Town's vision for future development of the Town. Town Manager Schaeffer instigated the process that would culminate in the text amendment by Town Council (on April 13, 2021) on the same date that Plan Warrenton 2040 was adopted, while keeping Amazon's interest a secret from Town Council.

Thereafter, Ms. Schaeffer and Rob Walton coordinated with Mr. Foote to write the data center text amendment and a final version of three sections of the zoning ordinance were presented to the Planning Commission at its May 25, 2021 work session. Staff misrepresented the initiation process to the PC, and again maintained Amazon's interest a secret from the PC. CFFC has been unable to obtain the drafts of the data center text amendments through various FOIA requests, as the Town has claimed a proprietary privilege exemption to preclude production of the documents, apparently in order to protect Amazon's interests. It is clear, however, from comparing the Town's ordinance with the Fauquier County cognate that the Town's was designed to provide less protection to the Town in comparison, and greater advantage to applicants.

Staff and Ms. Schaeffer continued to facilitate Amazon's involvement in the text amendment process by assisting with individual briefings of the PC, TC and Mayor Nevill in Town Hall in July, 2021, and introducing Amazon's Becky Ford to Fauquier County's Commissioner of Revenue and Coordinator of the Department of Economic Development. Although Staff Memorandum on the zoning ordinance misrepresented the contents of the ordinance itself, the text amendment was passed by the PC 5-1, and unanimously by the TC. Amazon purchased the Weissberg parcel just weeks after the text amendment was passed.

Over the course of the next year, Amazon's Becky Ford and Mr. Foote attended several

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meetings with Ms. Schaeffer and Town Staff relating to Amazon's impending data center application on the Weissberg land, and Staff kept the advancement of Amazon's data center development plans a secret from the public during that time. Amazon filed the SUP application in April 2022, and Ms. Schaeffer continued to be actively involved in the process, and with Amazon, as the Town's chief executive to whom all staff reported.

In July, 2022, Ms. Schaeffer left the Town's employment to work for Amazon, and is believed to be working in the same department and with the same representative, Becky Ford, who continues to consult with Town Staff about the SUP application. A fair and yet unanswered question is when exactly did Ms. Schaeffer shift allegiances?

This is just a sampling of the irregular and troubling history of the Amazon Application's path through the review and approval process in Warrenton. A greater and more detailed CFFC briefing is available to Town Council members and Planning Commissioners, few of whom have taken advantage of this review even as we have offered to all of them.

It is the Town's duty to get this right. It is the obligation of Council members and Planning Commissioners to make all the due inquiries and decide on the questions only after being fully informed and advised. It is the Planning Commission's duty now to complete the investigation and assessment before sending it to Council.

Given the near universal unhappiness in the community with this process so far, and the very considerable opposition of the citizens to the Application, it behooves the Town to proceed with only the most scrupulous processes, and to be certain the law is being followed.

We suggest that the Town needs to make considerable additional progress in all three areas we have identified. There is still time to get this right.

Yours Respectfully,

Kevin Ramundo
President, Citizens for Fauquier County

Cc: Dale G. Mullen, Esq., Whiteford, Taylor & Preston, L.L.P.
Denise Harris, Planning Manager
Warrenton Planning Commission
Warrenton Town Council

Brittany Latack

From: Kevin Kask <kkask@pecva.org>
Sent: Tuesday, November 15, 2022 11:39 AM
To: Planning Department; Susan Helander; James Lawrence; Ali Zarabi; Steve Ainsworth; Ryan Stewart; Rob Walton
Subject: Re: PEC Comments on SUP 2022-03
Attachments: SUP 2022-03 Warrenton Planning Commission Hearing.pdf; Amazon_DataCenter_Viewshed (1).pdf; warrenton-amazon-data-center-noise-charts-maps-credit-dr-john-lyver-10-20-2022.pdf

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Good Afternoon,

Please find comments from the Piedmont Environmental Council regarding SUP2022-03 along with supplemental materials attached for your review. We would be happy to discuss or answer any questions you may have.

Thank you,

On Tue, Aug 16, 2022 at 4:53 PM Kevin Kask <kkask@pecva.org> wrote:

> Good Afternoon,
>
> Please find comments from the Piedmont Environmental Council on SUP 2022-03 for the Amazon Data Center on Blackwell Road. We would be happy to discuss or answer any questions you may have.
>
> Thank you,
>
> --
>
> Kevin Kask, AICP
> Fauquier County Field Representative
>
> Piedmont Environmental Council
> www.pecva.org
> 45 Horner St.
> Warrenton, VA 20186
> Office: 540-347-2334 ext. 7046
> Cell 703-863-2663

--

Kevin Kask, AICP

Fauquier County Field Representative

Piedmont Environmental Council
www.pecva.org
45 Horner St.
Warrenton, VA 20186
Office: 540-347-2334 ext. 7046
Cell 703-863-2663

Noise Charts/Maps for Proposed Warrenton AWS Data Center

By John W. Lyver, IV, Ph.D.
JLyver4@Comcast.NET

File as of: 10/20/2022

Updates since last version

- All analyses updated
- Review of 9/9/22 AWS Submitted Noise Study
- Comparison to Fauquier and ToW Noise Ordinances
- Residential areas affected added

Note:
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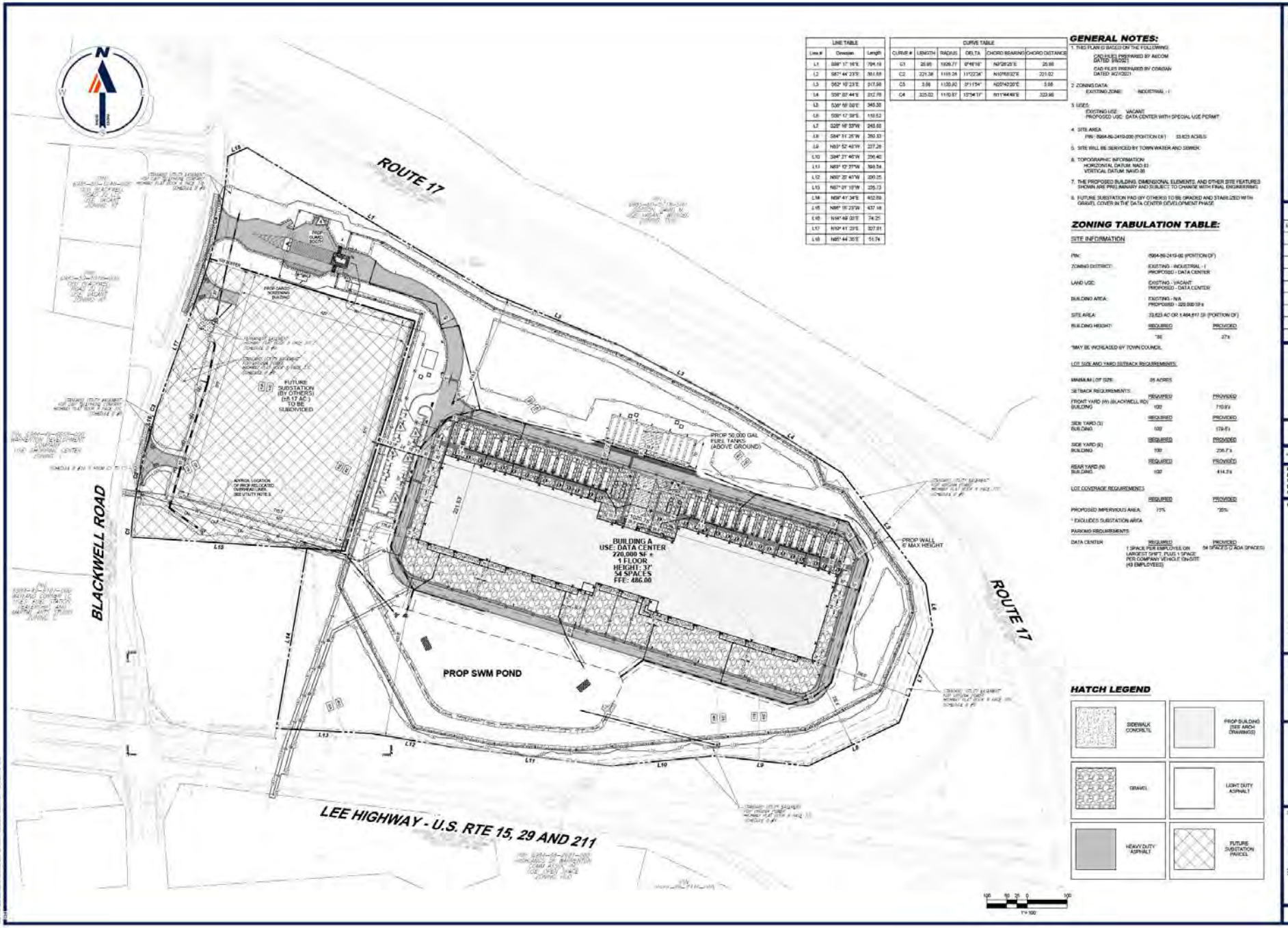
Contents

Contained in this file are for the Proposed Warrenton AWS Data Center:

- Town of Warrenton (ToW) Special Use Permit
- Residential Areas near site
- Excerpts from Fauquier County and ToW Noise Ordinances and Zoning
- Noise Analysis and Noise Mapping
- Review of Submitted AWS Noise Study
- Reference Material

Special Use Permit

- In Fauquier County, Virginia there are presently 2 data centers spanning over 180,000 square feet of operational space. Particularly, these facilities are operated by Amazon Web Services (AWS), at the Warrenton Training Center (WTC), and OVHcloud, a European-focused cloud service provider.
- Amazon Data Services, Inc. is the owner of property identified as Parcel ID 6984-69-2419-000, on the east side of Blackwell Road and north of Country Chevrolet. The parcel is approximately 41.793 acres in size, and this Special Use Permit (SUP) is for approximately 33.62 acres of the parcel.
- Amazon seeks to build one single story structure of approximately 220,000 square feet. The structure is shown conceptually on the Special Use Permit SUP Plan.
- At full buildout there will be approximately 52 employees at the Project, but only a maximum of 32 employees will be present on the Property at any given time, primarily during shift changes. *(Estimate from similar PW County data centers)*
- The design of the Applicant's data centers employs air cooling systems that produce significant noise. Generators are employed in emergency situations only to ensure power supplies in the event of a loss of public power are typically tested briefly every two weeks and produce sound in the range of 90 to 95 dB, effectively the sound of the human conversation.
- <u>Notes:</u>
  - Data in this section is from the SUP Application dated April 13, 2022.



LINE TABLE		
Line #	Direction	Length
L1	S89° 17' 16"E	794.19
L2	S87° 44' 23"E	361.88
L3	S62° 10' 23"E	317.98
L4	S38° 07' 44"E	312.78
L5	S39° 59' 00"E	345.38
L6	S39° 17' 39"E	159.52
L7	S20° 16' 33"W	248.68
L8	S84° 51' 25"W	260.33
L9	N83° 52' 46"W	227.26
L10	S84° 21' 46"W	256.40
L11	N83° 12' 27"W	368.54
L12	N80° 25' 40"W	290.35
L13	N87° 01' 18"W	225.13
L14	N59° 41' 34"E	452.89
L15	N86° 16' 23"W	437.48
L16	N14° 49' 20"E	74.25
L17	N10° 41' 23"E	327.81
L18	N85° 44' 30"E	51.74

CURVE TABLE					
CURVE #	LENGTH	RADIUS	DELTA	CHORD BEARING	CHORD DISTANCE
C1	25.95	1926.77'	0°46'16"	N0°28'28"E	25.95
C2	221.38	1169.28	11°22'34"	N10°59'32"E	221.02
C3	3.68	1120.92	0°11'54"	N25°40'20"E	3.68
C4	325.02	1170.87	15°54'17"	N11°44'49"E	323.98

GENERAL NOTES:

1. THIS PLAN IS BASED ON THE FOLLOWING:
   CAD FILES PREPARED BY AECOM DATED: 8/9/2021
   CAD FILES PREPARED BY COMSAN DATED: 9/27/2021
2. ZONING DATA:
   EXISTING ZONE: INDUSTRIAL - I
3. USES:
   EXISTING USE: VACANT
   PROPOSED USE: DATA CENTER WITH SPECIAL USE PERMIT
4. SITE AREA:
   PIN: 6984-86-2419-000 (PORTION OF) 33.623 ACRES
5. SITE WILL BE SERVICED BY TOWN WATER AND SEWER.
6. TOPOGRAPHIC INFORMATION:
   HORIZONTAL DATUM: NAD 83
   VERTICAL DATUM: NAVD 88
7. THE PROPOSED BUILDING, DIMENSIONAL ELEMENTS, AND OTHER SITE FEATURES SHOWN ARE PRELIMINARY AND SUBJECT TO CHANGE WITH FINAL ENGINEERING.
8. FUTURE SUBSTATION PAD (BY OTHERS) TO BE GRADED AND STABILIZED WITH GRAVEL COVER IN THE DATA CENTER DEVELOPMENT PHASE.

ZONING TABULATION TABLE:

SITE INFORMATION

PIN:	6984-86-2419-00 (PORTION OF)	
ZONING DISTRICT:	EXISTING - INDUSTRIAL - I PROPOSED - DATA CENTER	
LAND USE:	EXISTING - VACANT PROPOSED - DATA CENTER	
BUILDING AREA:	EXISTING - N/A PROPOSED - 220,000 SF±	
SITE AREA:	33.623 AC OR 1,464,617 SF (PORTION OF)	
BUILDING HEIGHT:	REQUIRED *85'	PROVIDED ±71'

*MAY BE INCREASED BY TOWN COUNCIL.

LOT SIZE AND YARD SETBACK REQUIREMENTS:

MINIMUM LOT SIZE:	25 ACRES	
SETBACK REQUIREMENTS:		
FRONT YARD (W) (BLACKWELL RD) BUILDING	REQUIRED 100'	PROVIDED 710.9'±
SIDE YARD (S) BUILDING	REQUIRED 100'	PROVIDED 179.4'±
SIDE YARD (E) BUILDING	REQUIRED 100'	PROVIDED 236.7'±
REAR YARD (N) BUILDING	REQUIRED 100'	PROVIDED 414.3'±

LOT COVERAGE REQUIREMENTS:

	REQUIRED	PROVIDED
PROPOSED IMPERVIOUS AREA:	75%	*25%

* EXCLUDES SUBSTATION AREA

PARKING REQUIREMENTS:

DATA CENTER	REQUIRED 1 SPACE PER EMPLOYEE ON LARGEST SHIFT, PLUS 1 SPACE PER COMPANY VEHICLE ON-SITE (49 EMPLOYEES)	PROVIDED 54 SPACES (2 ADA SPACES)

HATCH LEGEND

SIDEWALK CONCRETE	PROP BUILDING (SEE ARCH+ DRAWINGS)
GRAVEL	LIGHT DUTY ASPHALT
HEAVY DUTY ASPHALT	FUTURE SUBSTATION PARCEL

BOHLER

SITE CIVIL AND CONSULTING ENGINEERING
LAND DEVELOPMENT
PROGRAM MANAGEMENT
LANDSCAPE ARCHITECTURE
SURVEYING SERVICES
PERMITTING SERVICES
TRANSPORTATION SERVICES

REVISIONS

REV	DATE	COMMENT	ORIGINAL BY

811 Know what's below. Call before you dig.
ALWAYS CALL 811
It's fast. It's free. It's the law.

NOT APPROVED FOR CONSTRUCTION

THIS DRAWING IS INTENDED FOR MUNICIPAL AND/OR AGENCY REVIEW AND APPROVAL. IT IS NOT INTENDED FOR USE IN CONSTRUCTION, PERMITTING, OR BID PURPOSES.

PROJECT No.:	V21269
DRAWN BY:	DSH
CHECKED BY:	JCM
DATE:	4/6/2022
CAD I.D.:	SUP7-0

PROJECT:

SPECIAL USE PERMIT

FOR

AMAZON DATA SERVICES, INC.

PROPOSED DEVELOPMENT

BLACKWELL ROAD & LEE HIGHWAY
TOWN OF WARRENTON
FAUQUIER COUNTY, VIRGINIA 20186

BOHLER
28 BLACKWELL PARK LANE, SUITE 201
WARRENTON, VIRGINIA 20186
Phone: (540) 349-4500
Fax: (540) 349-0321
VA@BohlerEng.com

SHEET TITLE:

SITE DEVELOPMENT PLAN

SHEET NUMBER:

2

ORIG. DATE - 4/6/2022

What is Noise?

- From Merriam-Webster Dictionary:
  - ✓ “loud, confused, and usually inharmonious sound”
  - ✓ “any sound that is undesired or interferes with one's hearing of something”
- The human auditory system does NOT “sleep” during sleep like other bodily functions. From evolution, humans are most attuned to hear a few frequencies:
  - ✓ ~1,000 Hz: A baby’s cry
  - ✓ ~ 600 Hz: Sound from a predator
  - ✓ ~ lower frequencies are felt and cannot be filtered out.

Data Center Noise

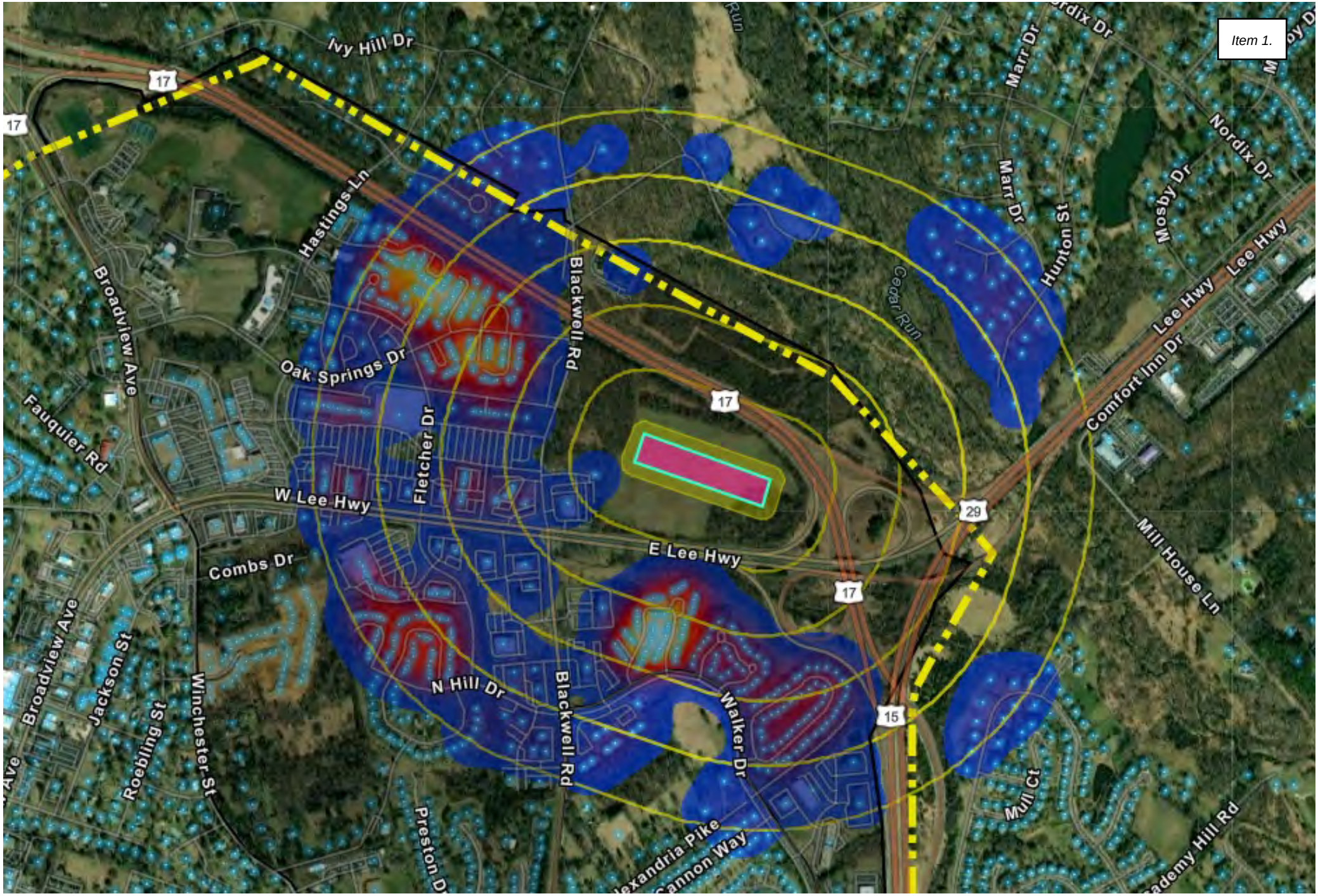
- Persistent noise causes a human stress response which leads to:
  - ✓ Chronic Sleep Deprivation
  - ✓ Anxiety and Depression due to combination of noise and lack of control
  - ✓ Difficulty with Concentration
  - ✓ Increases stress-related conditions such as: gastrointestinal problems, autoimmune diseases, hypertension and cardiovascular disease
  - ✓ Increased health risk as residents avoid outdoor exercise

Residential Areas near site

- Fauquier County: Approximately 40 homes are within the 2,500 foot line inside the "earshed" (north of the ToW Boundary shown as a dashed yellow line)
- The chart on the next page shows the large number of residences within the TOW that will be affected.
- Since this facility will produce excessive noise within the TOW and within the Fauquier County, it is assumed that SUP proffers will need to be placed on the developer to ensure that both Noise ordinances are complied with.

Notes:

- The Town of Warrenton overlay is available at: https://services9.arcgis.com/qoIL2Yd5pjdAD2CP/arcgis/rest/services/Town_Warrenton/FeatureServer
- Fauquier County Code of Ordinances: Chapter 13.5 – NOISE *https://library.municode.com/va/fauquier_county/codes/code_of_ordinances?nodeId=COOR_CH13.5NO#*
- An excerpt from the Fauquier County Noise ordinance is on the next page, the decibel limits in the ToW noise ordinance is included 3 pages later


Ivy Hill Dr
17
Hastings Ln
Broadview Ave
Fauquier Rd
Oak Springs Dr
Blackwell Rd
Fletcher Dr
W Lee Hwy
Combs Dr
Broadview Ave
Jackson St
Roebling St
Winchester St
N Hill Dr
Blackwell Rd
Preston Dr
Alexandria Pike
Cannon Way
Walker Dr
15
Cedar Run
Marr Dr
Hunton St
Marr Dr
Nordix Dr
Mosby Dr
Lee Hwy
Lee Hwy
Comfort Inn Dr
29
E Lee Hwy
17
17
Mill House Ln
Mull Ct
Academy Hill Rd

Excerpts from Fauquier County Noise Ordinance

Sec. 13.5-3. - Prohibitions.

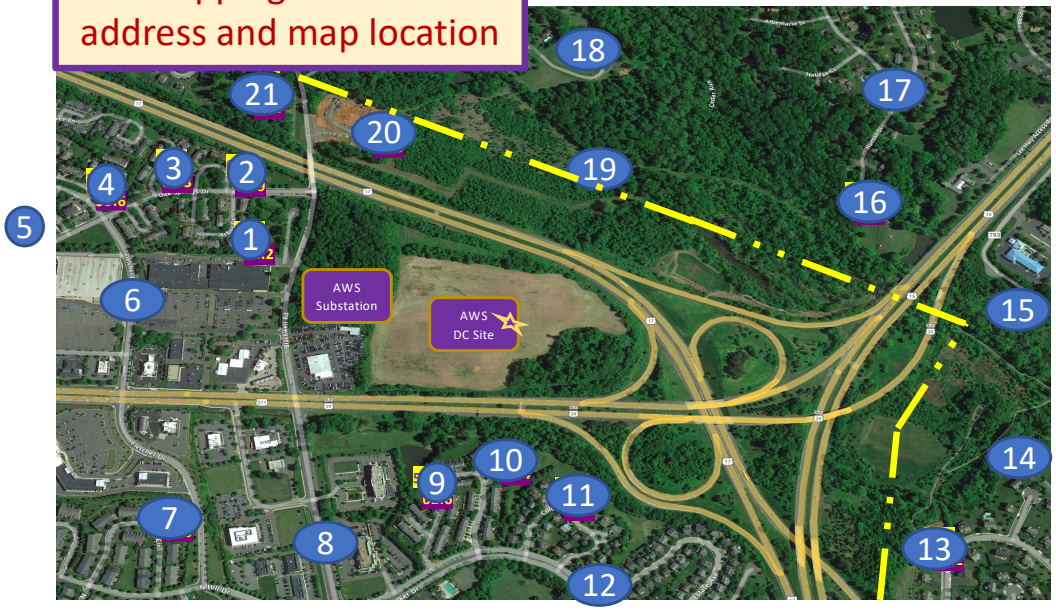
(a) No person shall permit, operate, or cause any source of sound or sound generation to create a sound that is plainly audible in any other person's residential dwelling or place of business with the doors and windows of that residential dwelling or place of business closed. In addition, the source of sound or sound generation must be discernible regardless of whether such doors and windows are closed. Plainly audible means the sound can be heard by the human ear with or without a medically approved hearing aid or device. Discernible means that the sound is sufficiently distinct such that its source can be clearly identified.

(b) No person shall permit, operate, or cause any source of sound or sound generation to create a sound that is in excess of sixty-five (65) A-weighted decibels (dBA) measured at the emitter's property line or at any point within any other affected property.

Sec. 13.5-5. - Severability; private nuisance actions preserved; enforceability.

(g) A-weighted sound level or decibels (dBA) is the sound pressure level in decibels as measured on a sound level meter (SLM) using the A-weighting network. L equivalent (Leq) is the constant sound level that, in a given situation and time period, conveys the same sound energy as the actual time-varying, A-weighted sound level.

Mapping between address and map location



Town of Warrenton
Zoning Ordinance, Chapter 9

Table 9-1
Maximum Permissible Sound Pressure Levels Measured

Freq Band (Hz)	dB(Z) Limit	Watts/m2	% total energy
63	64	2.51E-06	65.2%
125	60	1.00E-06	26.0%
250	54	2.51E-07	6.5%
500	48	6.31E-08	1.6%
1,000	42	1.58E-08	0.4%
2,000	38	6.31E-09	0.2%
4,000	34	2.51E-09	0.1%
8,000	30	1.00E-09	0.03%
IF maximum in each frequency band (dBA)		3.85E-06	65.9

Table 9-2 Correction Factors

Condition	Correction in dB(Z) to Limit
At contiguous or across the street boundary from any R-district	Minus 5
Operation between the hours of 10:00pm and 7:00am	Minus 5

'Fraction' of energy in each frequency Octave

DC	Road	
35.17%	0.53%	63
31.95%	2.19%	125
12.55%	3.27%	250
7.65%	16.92%	500
8.93%	52.02%	1000
3.01%	21.81%	2000
0.72%	2.86%	4000
0.02%	0.40%	8000

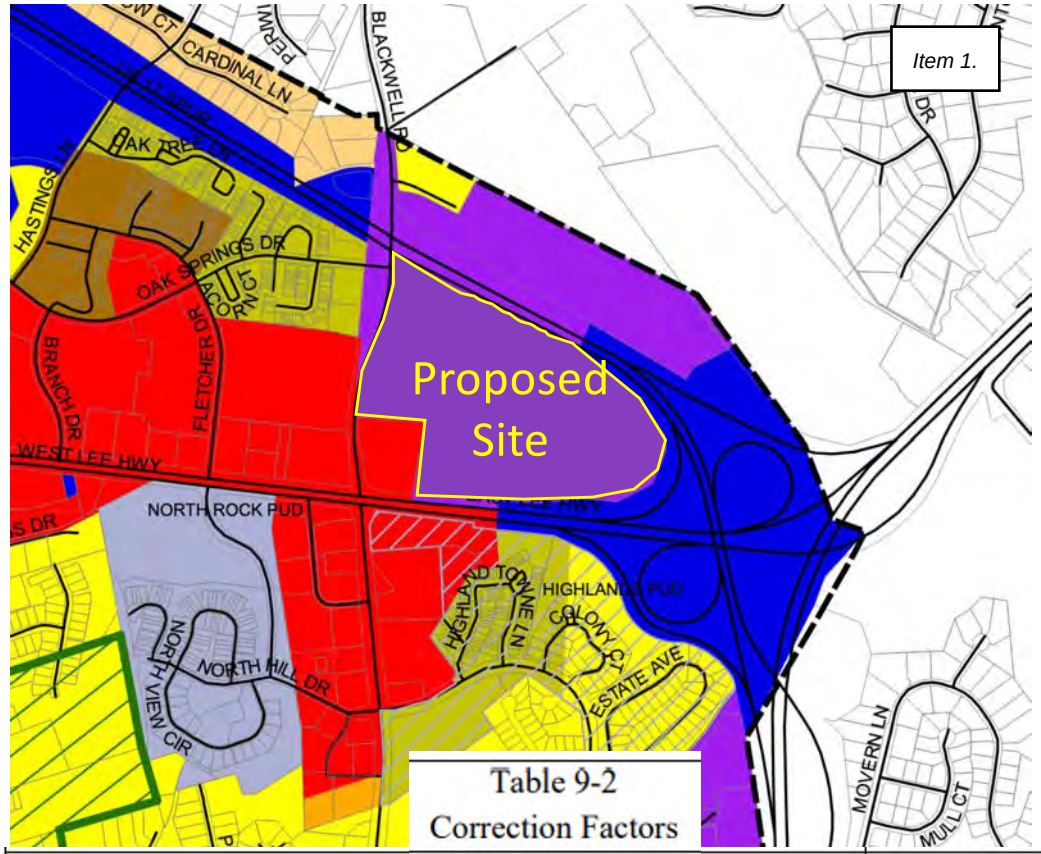
Interpolated from AWS Noise Study

"9-14 Performance Standards for All Non-Residential Uses
9-14.2 The sound pressure level of sound radiated from an establishment, measured at the lot line of the site thereof that is the nearest thereto, **shall not exceed the values in any octave band of frequency** that are specified in Table 9-1 below, or in Table 9-1 as modified by the correction factors set forth in Table 9-2."

10/20/2022
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Zoning

- SUP requesting use within purple "I" (Industrial) zone.
- Site directly adjacent to red "C" Commercial and yellow "R-10" and "R-15" (Residential) zones.
- Other adjoining is blue "PSP" as a residential supporting zone



Warrenton Town Ordinance:

- Section 9-14.2 (previous page) cites Table 9-2 for correction factors.
- ***"Across the street"*** to the south and west and northwest are R-10 and R-15 zoned areas ***SO*** -5 dBZ applies

Table 9-2
Correction Factors

Condition	Correction in Decibels
On a site contiguous to or across a street from the boundary of any R-district established by this chapter.	Minus 5
Operation between the hours of 10:00 p.m. and 7:00 a.m.	Minus 5

- Data centers operate 24/7, ***SO*** at night another -5 dBZ reduction applies
- Corrected Table 9-1 limits at the closest R-10/R-15 zone boundary:

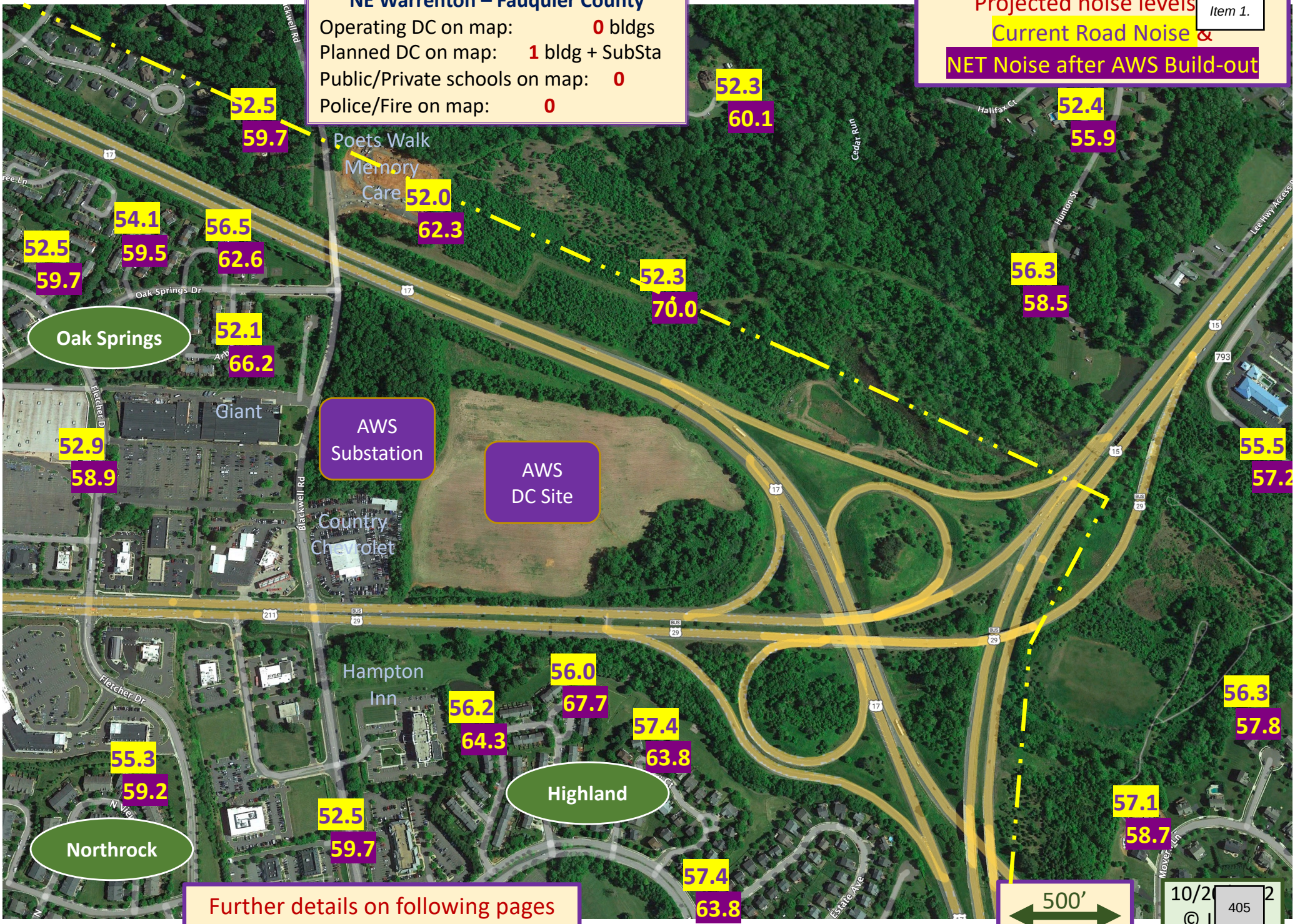
63 Hz – 59 dBZ day/54 dBZ night, 1,000 Hz – 37 dBZ day/32 dBZ night,
125 Hz – 55 dBZ day/50 dBZ night, 2,000 Hz – 33 dBZ day/28 dBZ night,
250 Hz – 49 dBZ day/44 dBZ night, 4,000 Hz – 29 dBZ day/24 dBZ night,
500 Hz – 43 dBZ day/38 dBZ night, 8,000 Hz – 25 dBZ day/20 dBZ night

© J

Noise Analysis Methodology

- Noise analysis developed by J.Lyver.
- Projected Road noise:
  - Traffic Volumes: https://www.virginiadot.org/info/2021_traffic_data_by_jurisdiction.asp
  - Modeling developed from various internet sources and validated from readings taken along I-66.
  - Noise attenuation for roads not included in model, however, geography of the area would not have attenuation from road noises for US-15/29, US-211 and Blackwell Road. Some attenuation would be experienced for portions of US-17 bypass.
- Projected Data Center noise:
  - Normalized data applied as the average from 4 data center sites: AWS Tanner Way, QTS University Drive, facility south of Manassas Airport, and randomly selected data center along Loudoun County Parkway near US-50. First 3 sites are in Manassas, VA.
  - SUP states the proposed Warrenton AWS data center would be air cooled. This is similar to the 4 reference data centers. (Expected noise from DC only: 62.8 dBA @ 500').
- Notes on the following Charts:
  - All data presented is calculated from the above parameters.
  - Data provided for 21 separate sites at the locations used in the analysis.
  - Upper (yellow box) is predicted noise only from the traffic.
  - Lower (purple box) is predicted noise from traffic, the proposed data center, and the proposed substation.
  - Green ovals are neighborhood names.
  - Choropleth charts show noise levels across areas and interpolated between data points for the two noise ranges indicated.

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NE Warrenton – Fauquier County
Operating DC on map: 0 bldgs
Planned DC on map: 1 bldg + SubSta
Public/Private schools on map: 0
Police/Fire on map: 0
Projected noise levels
Current Road Noise &
NET Noise after AWS Build-out
52.5
59.7
Poets Walk
Memory
Care
52.0
62.3
52.3
60.1
52.4
55.9
54.1
59.5
56.5
62.6
52.5
59.7
52.3
70.0
56.3
58.5
Oak Springs Dr
Oak Springs
52.1
66.2
Giant
AWS
Substation
AWS
DC Site
52.9
58.9
55.5
57.2
Country
Chevrolet
Blackwell Rd
Hampton
Inn
56.0
67.7
56.2
64.3
57.4
63.8
56.3
57.8
55.3
59.2
Highland
52.5
59.7
57.1
58.7
Northrock
57.4
63.8
Further details on following pages
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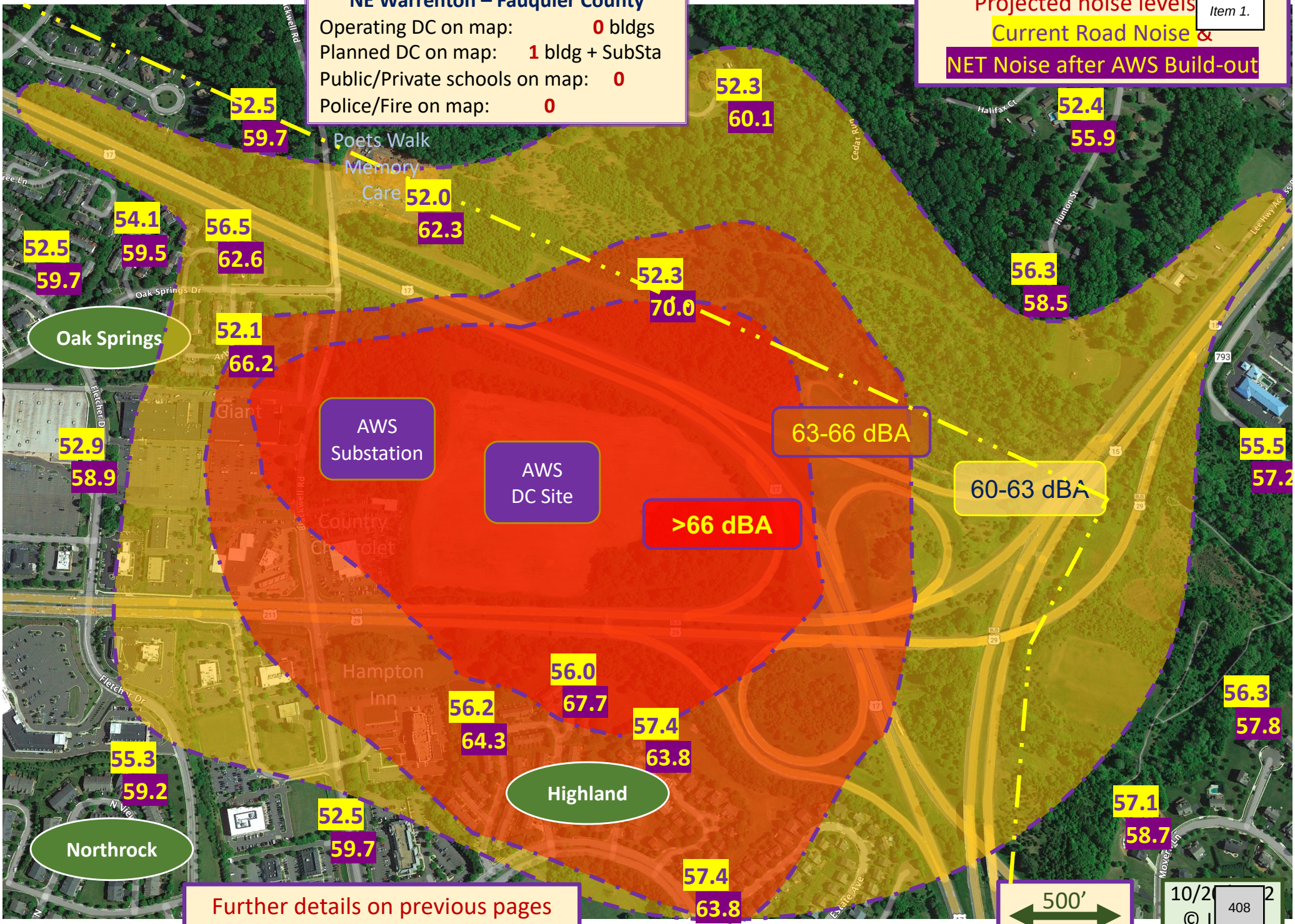
Results of analysis

Resulting Noise Levels in
dBA and dBZ by Frequency Octave

Locations of sites to analyse		Road dBA	DC dBA	Total dBA		Total 63 dBZ	Total 125 dBZ	Total 250 dBZ	Total 500 dBZ	Total 1,000 dBZ	Total 2,000 dBZ	Total 4,000 dBZ	Total 8,000 dBZ
1	725 Arbor Ct	52.1	54.5	66.2		61.5	61.1	57.1	55.3	56.5	52.0	45.3	31.9
2	21 Pepper Tree Ct	56.5	59.3	62.6		56.8	56.5	52.7	52.5	55.5	51.4	43.5	33.2
3	751 Cherry Tree Ln	54.1	56.7	59.5		53.5	53.2	49.5	49.7	52.8	48.8	40.8	30.7
4	721 Acron Ct	52.5	55.0	59.7		54.3	53.9	50.1	49.5	52.1	47.9	40.3	29.5
5	761 Gen Wallace Ct	52.5	55.3	58.0		52.1	51.8	48.0	48.2	51.3	47.2	39.2	29.1
6	141 W. Lee Hwy	52.9	55.7	58.9		53.2	52.9	49.1	48.9	51.8	47.8	39.9	29.5
7	222 North View Circle	55.3	54.4	59.2		52.4	52.2	48.6	49.8	53.4	49.5	41.2	31.6
8	492 Blackwell Rd	52.6	55.4	61.0		55.8	55.4	51.5	50.5	52.8	48.6	41.1	29.8
9	530 Highland Towne Ln	56.2	56.3	64.3		59.1	58.7	54.8	53.9	56.2	52.0	44.5	33.3
10	102 Dorsett Ln	56.0	59.0	67.7		62.9	62.5	58.5	56.9	58.4	54.0	47.1	34.5
11	514 Camden Cir	57.4	57.5	63.8		58.1	57.8	53.9	53.7	56.6	52.5	44.6	34.2
12	534 Estate Ave	53.8	56.2	58.5		52.3	52.0	48.3	48.8	52.2	48.2	40.1	30.2
13	7648 Moven Dr	57.1	57.4	58.7		49.4	49.4	46.7	50.2	54.6	50.7	42.1	33.2
14	7482 Argyll Ct	56.3	55.4	57.8		48.1	48.2	45.6	49.3	53.7	49.9	41.3	32.3
15	7379 Comfort Inn Dr	55.5	53.5	57.2		48.0	48.0	45.2	48.7	53.0	49.2	40.6	31.6
16	7350 Hunton St	56.3	56.1	58.5		50.1	50.0	46.9	49.7	53.9	50.1	41.5	32.4
17	7320 Marr Dr	52.4	54.9	55.9		48.7	48.5	45.1	46.6	50.4	46.5	38.1	28.7
18	6539 Hidden Hollow Ln	52.3	55.0	60.1		54.8	54.4	50.5	49.7	52.2	48.0	40.4	29.4
19	Parcel 6985-60-5718-500	52.3	54.9	70.0		65.3	64.9	60.9	58.9	59.8	55.2	48.7	34.6
20	33 Woodlands Way	52.0	54.7	62.3		57.3	56.9	52.9	51.6	53.4	49.1	41.9	29.9
21	800 Blackwell Rd	52.5	55.0	59.7		54.3	53.9	50.0	49.5	52.1	47.9	40.2	29.5

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NE Warrenton – Fauquier County
Operating DC on map: 0 bldgs
Planned DC on map: 1 bldg + SubSta
Public/Private schools on map: 0
Police/Fire on map: 0
Projected noise levels
Current Road Noise &
NET Noise after AWS Build-out
52.5
59.7
Poets Walk
Memory
Care
52.0
62.3
52.3
60.1
52.4
55.9
54.1
59.5
56.5
62.6
52.5
59.7
52.3
70.0
56.3
58.5
Oak Springs
52.1
66.2
Giant
AWS
Substation
AWS
DC Site
60-63 dBA
52.9
58.9
Country
Chevrolet
55.5
57.2
Hampton
Inn
56.0
67.7
56.2
64.3
57.4
63.8
56.3
57.8
55.3
59.2
Highland
52.5
59.7
57.1
58.7
Northrock
57.4
63.8
Further details on previous pages
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407


NE Warrenton – Fauquier County
Operating DC on map: 0 bldgs
Planned DC on map: 1 bldg + SubSta
Public/Private schools on map: 0
Police/Fire on map: 0
Projected noise levels
Current Road Noise &
NET Noise after AWS Build-out
52.5
59.7
52.3
60.1
52.4
55.9
Poets Walk
Memory
Care
52.0
62.3
54.1
59.5
56.5
62.6
52.5
59.7
52.3
70.0
56.3
58.5
Oak Springs
52.1
66.2
AWS
Substation
AWS
DC Site
63-66 dBA
60-63 dBA
>66 dBA
52.9
58.9
55.5
57.2
Giant
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Chevrolet
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Highland
52.5
59.7
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58.7
Northrock
57.4
63.8
Further details on previous pages
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© J
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List of Noise Ordinance Violations for mapped locations after DC is built

	Daytime Violations							
Location	63 Hz	125 Hz	250 Hz	500 Hz	1,000 Hz	2,000 Hz	4,000 Hz	8,000 Hz
1		V	V	V	V	V	V	V
2				V	V	V	V	V
3				V	V	V	V	V
4				V	V	V	V	
5				V	V	V	V	
6				V	V	V	V	
7				V	V	V	V	V
8				V	V	V	V	
9			V	V	V	V	V	V
10		V	V	V	V	V	V	V
11				V	V	V	V	V
12				V	V	V	V	V
13				V	V	V	V	V
14				V	V	V	V	V
15				V	V	V	V	V
16				V	V	V	V	V
17				V	V	V	V	
18				V	V	V	V	
19	V	V	V	V	V	V	V	V
20				V	V	V	V	
21				V	V	V	V	

	Nighttime Violations							
Location	63 Hz	125 Hz	250 Hz	500 Hz	1,000 Hz	2,000 Hz	4,000 Hz	8,000 Hz
1	V	V	V	V	V	V	V	V
2		V	V	V	V	V	V	V
3			V	V	V	V	V	V
4	V		V	V	V	V	V	V
5				V	V	V	V	V
6			V	V	V	V	V	V
7				V	V	V	V	V
8		V	V	V	V	V	V	V
9		V	V	V	V	V	V	V
10	V	V	V	V	V	V	V	V
11				V	V	V	V	V
12	V			V	V	V	V	V
13				V	V	V	V	V
14	V			V	V	V	V	V
15				V	V	V	V	V
16	V			V	V	V	V	V
17				V	V	V	V	V
18	V		V	V	V	V	V	V
19	V	V	V	V	V	V	V	V
20	V	V	V	V	V	V	V	V
21	V		V	V	V	V	V	V

- Above results are compared to Warrenton Noise Ordinance limits for each noise frequency octave
- “V” indicates violation, blank is within limits
- “Day” indicates noise limitation violation during the daytime hours
- “Night” indicates noise limitation violation during the nighttime hours

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Review of AWS' Noise Study - Physics

- Data from "*Walsh, Collucci, Lubeley & Walsh letter dated 9/9/2002 Exhibits 4 & 5"*
- Isopleth Charts from Exhibits 4 & 5 were analyzed for: [pp 29-47 in reference .pdf]
  - ✓ The 'fraction' of the data center noise energy in each Frequency octave
  - ✓ The spreading of the energy wave as a function of distance for "point sources" (data center is considered a point source)
    - Basic Energy Physics: In a vacuum energy expands at R^{-2} *[R is ratio of a given distance to new distance]*
    - Generally accepted with ground & cloud reflection $R^{-1.5}$ *(used in Lyver model)*
    - AWS Sound study used: R^{-2} for 63Hz to 250Hz, $R^{-2.6}$ for 500-1,000Hz, and $R^{-4.9}$ for 2,000Hz to 8,000Hz *[No physical rational for this assumption]*
    - Result: AWS reported noise attenuated too rapidly
- Road Noise charts were analyzed for: [pp 57-84 in reference .pdf]
  - ✓ The 'fraction' of the data center noise energy in each Frequency octave
  - ✓ The spreading of the energy wave as a function of distance for "line sources" (roads are considered a point source)
    - Basic Energy Physics: In a vacuum energy expands at R^{-1}
    - Generally accepted with ground & cloud reflection R^{-1} *(used in Lyver model)*
    - AWS Sound study used: unknown.
    - Result: In Lyver model averaged the M1-M5 readings with the calculations of point sources

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Review of AWS' Noise Study - Engineering

- Engineering review of Noise Analysis presented in:
  '*Walsh, Collucci, Lubeley & Walsh letter dated 9/9/2002 Exhibits 4 & 5*'
- Letter Page 4 item (6): False statement. The noise that is over the Town limit is from road noise. The data presented in the isopleth charts shows more violations of the noise ordinance.
- Town Noise limits:
  - ✓ Limits cited do not match the Warrenton Town Noise Ordinance.
- Isopleth Charts (Daytime, Nighttime, and Generator):
  - ✓ Charts show the center of the noise isopleth contours as being about 50' north of the building. On the Daytime 1,000Hz chart, the entire highest isopleth is north of the site. These charts are titled for "Rooftop Mechanical Noise". Should be centered on rooftop noise sources.
  - ✓ Noise reduces at various rates depending on the frequency. See "Results of Analysis page"
  - ✓ Violations and discussion missing for residential areas west-north-west, north-west, and south of the proposed site.
  - ✓ Summary page violations note does not match between two pages.
  - ✓ Isopleth contours do not match topography in several areas, such as to the east.
  - ✓ Unexplained major change in isopleths between 4,000Hz and 8,000Hz charts.
  - ✓ No explanation for differences between day/night in base noise generation.
  - ✓ Generator Noise charts are identical to day charts in shapes.
- Road noise charts:
  - ✓ Incorrect Town Noise limits cited on Measurement Summary page.
  - ✓ The measurements (blue lines) is incorrectly analyzed in the dashed line. Resulting in many missed violations of road noise.
- Page between 250Hz and 500Hz nighttime charts is for a site in Gainesville area.
- Fauquier County Noise Ordinance not cited or analyzed for.

© J.Lyve

Reference Noise Chart

Typical Noise Levels	
45-50 dBA	Quiet Suburb~ & Moderate Rainfall~
50-60 dBA	Modern Built in Dishwasher ~
55 dBA	Coffee percolator ~
59 dBA	Volvo @ idle @ 5′ *
60 dBA	Restaurant with regular conversation ~ Modern garbage disposal @ 5′ * Sewing Machine @ 5′ ~
65-70 dBA	Restaurant which is too loud for conversation ~ Average 2000's Dishwasher ~
72 dBA	I-66 @ 300' * (to median strip)
74 dBA	Dyson Vacuum Cleaner @ 5′ *, Hairdryer @ 1′ ~ Battery powered Leaf Blower @ 5′ * *(Hearing damage begins)*
80 dBA	Food Blender ~, 2000's garbage disposal ~, Typical alarm clock~, coffee grinder ~
81 dBA	Push Gasoline Lawn Mower @ 5′ *
85 dBA	Train whistle @ 500' ~, Passing diesel semi-Truck ~

Notes:

- ✓ On the above chart, *indicates measured noise and ~ indicates internet referenced noise level
- ✓ Distance indicated is between noise generator and measurement
- ✓ All readings in this analysis are in decibels [dB(A)], Town of Warrenton's noise ordinance limits are expressed in dB(Z) so additional analyses are needed to directly apply
- ✓ Decibels are a logarithmic representation of the noise energy expressed as $^{watts}/_{meter^2}$
- ✓ A 3 decibel change in readings is a doubling of the noise energy, a change of 10 decibels is an increase the noise energy by a factor of 10
- ✓ Noise energy is additive

Visibility of Proposed Amazon Data Center

Piedmont Environmental Council

0 0.25 0.5 Miles

- Town of Warrenton
- Property Lines
- Publicly Owned Land
- Conservation Easements
- Historic District
- Buildings
- Data Center Visibility*
  - High
  - Low

*Data Center Visibility calculated using a Digital Surface Model from LiDAR data that includes of existing vegetation and buildings. Vegetation was removed on the data center site inside the 'Limits of Disturbance' from the applicants Special Use Permit. Viewshed analysis was performed using the data center building at a height of 37 feet from current ground level.

C.M. Bradley Elem.

Fauquier High

Warrenton Middle

Warrenton

Warrenton Historic District

Piedmont Environmental Council

Promoting and protecting the natural resources, rural economy, history and beauty of the Virginia Piedmont

November 14, 2022

Town of Warrenton Planning Commissioners; Susan Rae Helander, Chair

c/o Town of Warrenton Community Development Department, 21 Main Street, Warrenton, VA 20186

Re: SUP 2022-03 Amazon Data Services

Dear Planning Commissioners,

As the Planning Commission prepares for its scheduled public hearing on the special use permit (SUP) application for a proposed Amazon Web Services Data Center in Warrenton, the Piedmont Environmental Council respectfully submits the following comments. PEC has followed the SUP review up to this point and while we are encouraged by the scrutiny and response to community concerns the Commission has exhibited, we find it equally alarming that just weeks after Amazon's representatives postponed work sessions on the application "indefinitely" a Planning Commission public hearing was scheduled for November 15th, with a number of unresolved issues regarding viewsheds, noise and energy infrastructure.

Our Coalition (comprising our partner organizations Citizens for Fauquier County and Protect Fauquier as well as numerous concerned citizens) has submitted numerous FOIA requests, enlisted the help of experts, held two well-received Town Hall meetings and engaged with numerous decision makers regarding this application. Given what we know, what we have learned and what we have yet to determine, we have concluded that this application is simply not ready for public hearing. We therefore urge the Planning Commission to deny the application at the upcoming public hearing.

We hope that the Planning Commission, in keeping with their obligation to holistically review of the SUP application and its broader implications for County and Town residents, will consider the following concerns that PEC, its partners and the community at large share:

> **Energy Infrastructure.** Dominion has appeared to change its position on whether the Amazon facility can be served with distribution lines. At a work session with the Fauquier County Board of Supervisors on November 10th, Dominion proposed 2 alternative options for new substations offsite to serve the Amazon facility. Their preferred option is at 615 Falmouth Street (aka the Old Wire Factory) where the landowner has advertised the site for data center development. The second option is along the Warrenton Branch Greenway, south of Meetze Rd but the distribution line route would still be accessible to the 615 Falmouth Street site as well.
>
> Amazon has agreed to pay for an underground distribution line potentially between 615 Falmouth Sreet and the Blackwell Road site in accordance with Dominion requirements. Now it appears

that the proposed data center can be served at its full operational capacity on that line, despite documents we obtained through the Freedom of Information Act indicating that only the initial phase of the data center's estimated 40-50 megawatts of energy demand could run on a distribution line.

Dominion has stated on the record that both the previously proposed transmission lines from the data center on Blackwell Road to Warrenton substation and from Wheeler substation to Blackwell Road could accommodate future load growth and would only be necessary if ***multiple data centers*** were built in the Town. Furthermore, documents we've obtained under the Freedom of Information Act indicate that the Falmouth Street site was the site Amazon was initially interested in, but insufficient fiber-optic infrastructure there had caused them to choose the subject property for this proposal. However, this new plan to serve the Blackwell site via a distribution line from the proposed substation at 615 Falmouth Street, land zoned and advertised for data center development, could provide a conduit through which to run fiber to the Falmouth Street site, virtually guaranteeing it is developed as a data center.

Despite Amazon's plans for an underground distribution line to the Blackwell Road site, it is possible that, as the data center at the Blackwell Road site is built out or expanded along with data centers on other industrially zoned parcels advertised as potential data center sites (such as those north of Rt. 17 or the Falmouth Street site), a transmission line connection could still be deemed necessary by Dominion or the SCC. If future data center load growth, enabled by this initial proposal's infrastructure, triggers the need for more transmission lines, the SCC will have the final say on the routing of the proposed lines.

It appears that Amazon's special use permit for Blackwell Road could be the first approval needed for a larger scheme to stage infrastructure to ultimately colocate a cluster of data centers in the Town of Warrenton. Notwithstanding the immediate noise and viewshed impacts of this proposal, we ask that you consider this information and these potential scenarios in providing your recommendation to the Town Council. Although Amazon's representatives will continue to claim that they are solely focused on this individual SUP, it is the role of the Planning Commission to consider the broader impacts of this proposal, like any land use application.

Noise. We believe that the Planning Commission should not take the Applicant's purported inability to adhere to the noise ordinance as a sufficient justification for the deferral of any analysis on noise impacts to site plan review. Noise impact and abatement studies are a required item for special use permit applications pursuant to 11-3.10.2 of the Town Zoning Ordinance. Although waivers to such requirements for SUP applications may be issued by the Zoning Administrator, absent such a waiver, we believe this application should be deemed incomplete and therefore deserving of a recommendation of denial. The Applicant has requested a Zoning Determination to clarify how the Noise Ordinance is to be interpreted with a January 16, 2023 deadline. However, an application for which noise is a central issue deserves a compelling justification as to why an analysis of noise impacts is deferred to site plan review when the Zoning Determination is expected in just two months. So far we have been given none.

Even if the Zoning Administrator were to waive the requirement for a noise study, for SUP approval, our Coalition has enlisted the help of Dr. John Lyver, a retired computational scientist from NASA, who created his own model to assess the impact of the data center's noise. His model found much higher levels of noise than Amazon's study did, exceeding Town designated noise levels in multiple areas and producing tangible noise impacts to property owners as far as 2,500 feet from the proposed data center. We ask that, in lieu of a credible study by Amazon, you consider the information revealed by this separate noise impact analysis in issuing your recommendation.

Visual Impacts. We appreciate the scrutiny the balloon test received at the last Planning Commission work session and that some of its flaws have been brought into light. Although the heights of the balloons from the September balloon test were revealed at the latest work session, it did not account for the exact building locations, it only analyzed visibility from 7 photo locations and it did not accurately reflect the heights of balloons in those photos. The balloon test also failed to account for the removal of trees particularly at the northern and western edges of the property shown on their latest Tree Study (which the Applicant's latest submission indicates is out of date due to recent site plan changes). These are some of the most visible portions of the site to adjacent neighborhoods and Rt. 17.

PEC prepared a GIS viewshed analysis of the 37-foot data center building using LIDAR data encompassing current groundcover and topography. As we predicted, the balloons were visible from a number of different vantage points in Town. It is likely that the visual impacts are understated given that the heights of all balloons exceeded 37 feet.

Amazon's latest submission largely ignores visual impacts on adjacent neighborhoods revealed by our Coalition's independent analyses. When addressing the requirement to address the compatibility of the proposed use with other existing or proposed uses in the neighborhood, and adjacent parcels, the Applicant's representatives responded with:

"The surrounding area consists of a significant highway, a good deal of existing and much older retail and commercial, and residential uses. It is bordered on the southwest by a car dealership, and on the east by a major interchange", leaving out adjacent residential neighborhoods to the northwest and south.

They do acknowledge that "the nearest residence uses (are) currently located over 400 feet away on Oak Springs Drive." However we've found that these residences are very much within the viewshed and earshed of this proposal. We ask that you consider this and the information revealed by this separate visual impact analysis in issuing your recommendation.

Issues from our Prior Letter. We have not seen the Planning Commission address some of the considerations that we brought to their attention in our letter dated August 16, 2022, including prior recommendations for bicycle and pedestrian improvements on the site identified in the 2009 Fauquier-Warrenton Destinations Plan, potential remains of a historic home identified on 1937 aerials on land currently encompassed by the Lee Highway right of way and potential conditions outlining protective measures to ensure fuel tanks do not leak.

Inconsistency with the Comprehensive Plan. In our previous letter, we asked that the Planning Commission seek a sufficient justification for such a blatant deviation from the "New Town District" Character area, an area described as having a mix of uses including office, residential, green space, and public amenities. We do not believe the reasons the Applicant has provided for such a deviation are sufficient. They claim:

"No individual site can be expected to meet all of the objectives in the Plan and the New Town District seeks a signature job center. The Applicant in this case is indeed a major employer".

While the desire to provide a location for a major employer is a goal of the Character District, and it is true that the comprehensive plan is only a guide, the proposed data center substantially detracts from the original intent of the New Town District. While accepting a use that is not necessarily articulated in a Character District's vision for the sake of economic development might be reasonable at times, doing so for a proposed use that runs directly counter to it and would encompass approximately one third of the District's land area is entirely different. Data centers are insular uses that do not promote the goals of mixed use, walkability and public space of the New Town District in any such way. Furthermore, the goal to attract a major employer is written to be broadly applicable, and contributes the least to the placemaking goals that characterize the New Town District. Placing a data center on a parcel that could otherwise contribute to a mixed use area would also detract from virtually all of the Comprehensive Plan's Housing Goals and its stated need to diversify its housing stock (Housing Recommendations, page 26). We ask that you consider both the goals of the comprehensive plan and what needs of the Town the subject site could fulfill if built out in a manner that aligns with the New Town District.

In our previous letter, we acknowledged that some of the application's unknowns could be addressed with information provided by the Applicant. However, it is clear that since that letter was submitted, many of the Applicant's claims regarding noise, visual impacts and energy infrastructure have grown increasingly murky. Yet, a Planning Commission public hearing and potential recommendation is still being considered for this week.

The gravity of the decision at hand cannot be overstated. This application will set the precedent for the review of future data centers applications in the Town of Warrenton, which, given the proximity of land advertised for data center development and Dominion's latest plans for associated energy infrastructure, could be anticipated soon. We ask that you please continue to exercise your full discretion and apply the same scrutiny to this application as you would to any other land use application, with the community's concerns, potential for data center growth in Town, and the public benefit in mind. In light of the

significant issues, of which you are well aware, we respectfully request that the Planning Commission issues a recommendation of denial.

We would be happy to discuss any of these issues or provide any additional materials.

Sincerely,

Kevin Kask, AICP
Fauquier County Field Representative
Piedmont Environmental Council
kkask@pecva.org
540-347-2334 ext. 7046

PLANNING COMMISSION REGULAR MEETING

Tuesday, November 22, 2022 at 7:00 PM

MINUTES

CALL TO ORDER AND ESTABLISHMENT OF A QUORUM.

Ms. Susan Helander called the meeting to order at 7:01 P.M.

ADOPTION OF MINUTES.

HEARING OF PUBLIC HEARING ITEMS.

1. **SUP 2022-03 Amazon Data Center** - This is a continuance of the November 15, 2022 and November 22, 2022 Planning Commission Public Hearings. The Applicant is requesting a Special Use Permit for a 220,200 square foot data center on Industrial zoned property designated in the New Town Character District on the Future Land Use Map located off Blackwell Road and Lee Highway. Previously there were two work sessions held by the Planning Commission. GPIN 6984-69-2419-000.

   Ms. Helander introduces SUP2022-03 - Amazon Data Center continuance of the November 15, 2022, Planning Commission Public Hearing.

   Ms. Helander states I have a motion to change the agenda. I move to postpone indefinitely the review of SUP2022-03 until we get more information.

   Mr. James Lawrence motions this meeting be postponed indefinitely.

   Seconded by Mr. Ryan Stewart.

   Mr. Lawrence motions to explain Robert's rules.

   Mr. Lawrence asks for a second for purposes of discussion.

   Seconded by Mr. Ryan Stewart.

   Mr. Lawrence states I first want to talk about the reasoning to come to this public hearing. The 100-day rule. And I think I have a few points to make here. I think it's clear that it's reasonable to suggest that when the applicant twice delayed meeting with us during that period of time, you could assume that paused the clock. The Virginia Code that was cited as a reasoning for going to this public hearing references rezoning, not special use permits which one can reasonably assume have a higher standard for review. The justification states the board shall fix a reasonable time within 90 days of the filing of the application or appeal. So, our latest application is dated October 28th, so it's reasonable to assume we have until January 28. The timing of the decision by Virginia Code 15 2.2312. This time period is directory rather than mandatory, and the entity does not lose its jurisdiction to act on a variance after the time period has passed. And I think for my fellow commissioners, I think what that means is it's nice to do things in a timely manner, but we still have a job to do.

DRAFT

Mr. Lawrence states the concern for not acting in a reasonable time is to avoid harm to the applicant. And in this case, I think the only harm would be to the town of Warrenton by rushing this decision.

Mr. Lawrence states the second reason to postpone this discussion is in regard to the incompleteness of the application before us. In the October 28 cover letter from the applicant, the first two items referenced to the land development application and the land use application are listed as not executed, ergo incomplete.

Mr. Lawrence states the noise study submitted is either incomplete or invalid or both, and therefore not ready for review. From the staff report, the applicant provided a noise study. However, in the October 28th, 2022, submission, it was stated the report is a preliminary draft. The applicant submitted a zoning determination to be able to interpret the zoning ordinance correctly for the noise analysis. This determination per state code must be completed by January 16, 2023.

Mr. Lawrence states the potential for overhead power lines and/or substations serving this site are up in the air and both the applicant and Dominion power state. The decision ultimately rests with others from the application. The applicant proposes a condition that there be no electric substation permitted on the site. It also proposes to request and pay for the undergrounding, although it acknowledges final decision on this rests with others. And as we all probably know, Dominion power recently spoke before the Fauquier County board of supervisors, and they also state the decision is not final and rests with others.

Mr. Lawrence states regarding the visual impact on the town gateway, the applicant agreed to condition the October 2020 eighth, 2022 illustrative elevations. However, the submittal does not include a visual from Lee highway, the town's gateway. Additional information will need to be provided at the time of site development survey report provided by the applicant indicates a large number of trees to be removed along Blackwell Road. This report has not been updated with the October 28, 2022, submission.

Mr. Lawrence states please note I'm not passing judgment on the merits of the application. I am passing judgment on the incompleteness of the application. It would be a tragic rush to act on this matter. With so much missing information, we as a planning commission have a job to do, and that job is not done. The applicant has stated they're confident they will resolve some of these large issues before us. There is no harm, then to get these things done. And completed. I think we need to adopt the United States policy towards Russia during nuclear disarmament treaties that is trust but verify.

Mr. Lawrence states I reserve the right to speak again after my colleagues have spoken.

Mr. Ryan Stewart states if asked to vote on this application tonight, I would have to say no.

Mr. Ali Zarabi states I concur with my colleagues and recommend sending this application back to the applicant for completion and resubmission.

Mr. Steve Ainsworth states I would have to say there's nothing to dispute. And commissioner Lawrence's statements and I would agree with it as well.

Ms. Helander asks Mr. Martin Crim, Town Attorney do we vote on this.

Mr. Martin Crim states yes your motion is properly before you. Discussion is over, which it sounds like it is.

Mr. Stewart states I would like to propose an Amendment to that motion. Given that I'm assuming that we would keep the public hearing open. We would continue to have public hearing tonight and hear from the residents. Are superseding this delay with not keeping the public hearing open as my question.

Mr. Martin Crim asks Madam chairman, I understood the original motion to be that the public hearing would not be held. But commissioner Stewart's amendment, if seconded and voted approvingly, would keep the public hearing open, even though you've alerted people that you're going to be continuing it indefinitely.

Mr. Stewart states my question is I'm requesting clarification on whether or not it would be closed.

Mr. Martin Crim states that is up to the commission.

Mr. Ainsworth states I would suggest that if there's another application, there probably should be another public hearing for people to review that new application and provide their comments for that.

Mr. Lawrence states the point of this is we want to meet and discuss when we have a final application to review. And I think the public would like to speak on a final application. Therefore, despite the massive inconvenience to all of you have showed up today, I don't know if there's much point in asking them to speak on the complete application.

Mr. Lawrence asks Ms. Helander if she has any comments.

Ms. Helander states I will call the vote.

Motion to adjourn Mr. Zarabi, Mr. Ainsworth Seconds.

Mr. Zarabi motions this meeting be postponed indefinitely.

Seconded by Mr. Ainsworth. All were in favor, no discussion.

Ayes: Ms. Susan Helander, Chair; Mr. James Lawrence, Vice Chair;

Mr. Ali Zarabi; Mr. Ryan Stewart; Mr. Steven Ainsworth.

Nays: None

Absent During Vote: None

Abstention: None

With no further business this meeting was adjourned at **7:10 P.M.**

COMMENTS FROM THE COMMISSION.

DRAFT

COMMENTS FROM THE STAFF.

ADJOURN.

DRAFT

IN-TOWN

Brittany Latack

From: david@hsnaia.com
Sent: Tuesday, November 15, 2022 12:04 PM
To: citizencomment
Subject: Amazon Hearing

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Dear Commissioners,

Besides all the arguments you already know for denying this application, this hearing should not even be taking place with an INCOMPLETE APPLICATION!

No one else in our community would be ushered along to a hearing with an incomplete application, but you are willing to do this with the biggest land-use decision in Warrenton's history.

I would also say, shame on you and the town administration for holding this hearing at Town Hall. This citizens should be allowed a comfortable and dry place to sit and watch the interactions as they wait their turn to speak. Instead, you will have hundreds of people standing out in the cold rain, unable to hear or see anything, and probably just going home. This is the Mayor's version of a "transparent government" I guess.

This hearing should not happen tonight and when the application is complete, you should hold a public hearing at a local auditorium where the citizens can actually participate.

I hope you will do the right thing!

David A. Norden, AIA
Managing Partner
Hinckley, Shepherd, Norden, Architects
19 Winchester Street
Warrenton, Virginia 20186
Tel 540-347-4232
Fax 540-349-3042
www.hsnaia.com

Brittany Latack

From: wardec09@everyactioncustom.com on behalf of Elsy Ward <wardec09@everyactioncustom.com>
Sent: Tuesday, November 15, 2022 3:48 PM
To: Rob Walton
Subject: Please Deny the Amazon Data Center Special Use Permit:

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Dear Director of Community Development Rob Walton,

I don’t want Amazon data center in Warrenton it will be negative for our community who always has been taken care of our environment. I am writing to urge you to vote against the Special Use Permit application for an Amazon data center on Blackwell Road.

We want Warrenton to be a good place to live. In addition to the numerous flaws of Amazon’s application, including the lack of a completed noise study and the known visual impacts to the Town’s gateway, Dominion has revealed plans for one of two potential offsite substations to serve the data center less than a week before the scheduled Planning Commission hearing. This recent development calls into question what new impacts the proposed data center and its associated energy infrastructure might have on Warrenton's historic downtown, property values and the rural character that draws residents and visitors both to the Town and County.

With so many unknowns, I ask that the Town please deny this application.

Thank you for hearing my concerns.

Sincerely,
Mrs. Elsy Ward
180 Preston Dr Warrenton, VA 20186-2663 wardec09@hotmail.com

Brittany Latack

From: David Dobson <dobsondm@aol.com>
Sent: Monday, November 21, 2022 7:37 PM
To: Planning Department; susan FVCmanagement; electzarabiward1@gmail.com
Subject: Hi Susan, James, Ali, Steve and Ryan -- The Planning Commission has done a great job on this AWS project - no lattice tower transmission line as all are OUT now, no water use, no substation, better architecture, more trees and vegetation, large $3M+ an...

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Susan Rae Helander, Chair
James Lawrence, Vice Chair
Ali Zarabi, Member
Steve Ainsworth, Member
Ryan J. Stewart, Member
Town of Warrenton Planning Commission

Hi Susan, James, Ali, Steve and Ryan -- The Planning Commission has done a great job on this AWS project - no lattice tower transmission line as all are OUT now, no water use, no substation, better architecture, more trees and vegetation, large $3M+ annual tax payments to both Town and County, and large multi-million water & sewer taps and monthly payments to the Town too. That is a tremendous result - all super positive, batting like the World Series! And I certainly understand trying to do even more. So, this may give some additional helpful points to wrap that up too for Tuesday's AWS Planning Commission public hearing. Today's better technology solves building noise, vibration, and humming. Things have changed for the better with today's technology. The large super quiet OVH Data Center in Vint Hill shows this and deserves attention as it does what everyone wants - avoiding noise, vibrations, and humming. It is exactly what everyone wants and shows the way. Plus, Warrenton has the large super quiet Fauquier Hospital chiller, cooling & heating plant, so both with no noise, vibrations, or humming. They were eliminated, and both right next to many residential homes, offices, and healthcare/hospital facilities. So, technology solves this, and no lattice towers, no water use, good architecture, extra landscaping, no traffic, substantial annual Town and County taxes, large Town tap fees and monthly payments, and small 220,000 sf building compared to the very large By-Right 1,300,000+ sf industrial-distribution one that could be built here By-Right. Written binding Conditions get the Town to this great victory, and using today's better technology, this data center is better.

In addition to the super quiet the Fauquier Hospital chilling, cooling, and heating complex, please note the large super quiet OVH Data Center in Vint Hill that uses Liquid Immersion Cooling/LIC which makes virtually **NO** noise, vibrations, or humming, so Proof that even very large data centers here can "run silent, quiet, vibration and humming-free". In use here at the large OVH Data Center right in Vint Hill - and directly next to residents, businesses, neighbors and visitors without complaint or problem. The neighbors here can confirm its super quiet today.

So, technology works! Liquid Immersion Cooling/LIC is just one type of solution well-tested and operating already in Vint Hill. OVH shows how straightforward and effective. It eliminates noise, vibrations, and humming, so simple, effective, and OVH - and Fauquier Hospital-tested solutions are

already used here successfully. OVH shows the way with simple, effective, and super quiet technology. Same for the Fauquier Hospital. Here is the link to some aerials and photos of the Fauquier Hospital's large chiller, cooling & heating plant right on hospital grounds, with two very large blue chemical tanks too, right next to numerous residences, offices and the hospital itself - with its hundreds of patients, visitors, employees, healthcare professionals all 24/7, from Google Earth: **https://bit.ly/3EHitft.** As you can see, they abut many residences and offices, and hospital itself with all its patients, visitors and workers. Nobody complains as sound technology works.

To show you the technical facts on the super quiet, no vibrations and no humming OVH data center in Vint Hill, I thought you would like to watch this short 2-minute video on Liquid Immersion Cooling/LIC for Data Centers in the article below, as used by OVH here. A big plus for Warrenton as no water is needed for cooling and no noise, vibrations, or humming. And the "footprint" and Capex for the data center can be reduced, so works well for Warrenton. And super, super quiet and no vibrations or humming. **More articles on this Liquid Immersion Cooling streamed below.**

So, the large OVH Data Center in Vint Hill already uses Immersion Liquid Cooling at Vint Hill. **NO water use, LESS energy use AND most importantly - most importantly - dramatically less noise and lower frequency and no humming too, plus fewer exterior fans, all for fewer complaints from neighbors, and SMALLER cooling footprint too** This is very efficient at handling high thermal loads in smaller "footprints" too. Fast replacing other Chilling, so I thought this might want to see this short video. And Liquid Immersion Cooling/LIC technology costs less, is more efficient and takes up less space. And it works - the large OVH Data Center at Vint Hill proves it! And no noise, vibrations, or humming. Same for the Fauquier Hospital large chilling, cooling, and heating plant with large blue chemical tanks there too.

The Town and neighbors have the chance to obtain the best - as AWS could revert to a fully By-Right distribution, logistics and e-commerce center, recycling, bitcoin mining, slaughterhouse or other much less attractive use with hundreds and hundreds of car-driving round the clock employees, with large and noisy tractor trailers with lights and horns, terrible traffic, huge paved parking lot and no extra setbacks, buffers or trees - and all fully built out here all By-Right to over 1,300,000 SF compared to the only 220,000 SF that AWS wants to do here instead. Warrenton can avoid what Amazon did for 1,200,000 SF of distribution center opened last week in the Baltimore area and the same in Richmond as you see below. Warrenton can do better than Baltimore and Richmond. So, AWS will not throw in the towel and do much, much larger By-Right uses (they can do 1,300,000+ SF completely By-Right here, larger than Baltimore and Richmond distribution-fulfillment buildings), so no need for AWS to do much worse by neighbors and the Town (and NO large annual tax and taps benefits). **As the Prince William newspaper itself stated this Friday** - sound, noise, vibrations, and humming can be eliminated-greatly suppressed **by using today's better technology.** Town just needs to hold AWS-Amazon to it, as one of the express written Conditions for the SUP. Technology solves this well - the large OVH Data Center in Vint Hill and large chilling plant at the Fauquier Hospital both prove that - just need to use today's better technology. And the Town and neighbors get something better, not a massive 24/7 Amazon distribution-fulfilment center like Richmond or Baltimore. Think of a super quiet EV vehicle today compared to a loud, badly mufflered pick-up truck! AWS-Amazon can make a super quiet EV style data center here with today's better technology.

AWS-Amazon is a major taxpayer for County and Town needs, and subject to upwards reassessments too, so would be good for Fauquier County and Town of Warrenton now and in the long future. Good for $3M+ regular tax revenues every year (and more with regular reassessments), plus over $1M of sanitary sewer & water taps fees to the Town with high minimum monthly sewer & water charges too even with low water/sewer use, plus the many high-tech well-paid jobs and

community support for education, workforce training and community colleges here as AWS has regularly done at and near each center, and their regular use of local services and products from many Warrenton and Fauquier companies to help Warrenton's economy and businesses. The long lattice towers transmission line is now out, only low/no water use, and attractive proposed building. Remaining issue seems to be noise, and I suggested a visit Fauquier Hospital to see how they eliminate noise, vibrations and humming like they did at their exceptionally large cooling, heating, and energy plant there - it is really quiet, and a good example of what good sound-deadening technology can do. AWS has many engineers who should be able to do this. And AWS has already agreed in a binding Condition to respect the Town's lowest sound and toughest "residential" noise rules. **Plus, like OVH - the answer is to just use super quiet Liquid Immersion Cooling/LIC or similar technology. It is already operating quietly at Vint Hill for proof. And OVH shows the way! Just like the large Fauquier Hospital** at their noticeably quiet large cooling, heating, and energy plant there. Technology works.

I thought you would like to watch this short 2-minute video on Liquid Immersion Cooling/LIC for Data Centers in the article below. You have seen this at OVH. It shows the non-water-cooling systems now being used by most modern data centers. A big plus for Warrenton-Fauquier as water is not needed for cooling - giving Warrenton & AWS much more flexibility on where it can locate data centers. In short, all you need is electricity (230kV), but you do not need water with this new cooling technology. And the "footprint" and Capex for the data center can be reduced, so works well for Warrenton. **More articles on this Liquid Immersion Cooling streamed below.**

So, data center technology keeps getting better for NO water use, LESS energy use AND VERY DRAMATICALLY LESS NOISE and lower frequency for no vibrations or humming, plus fewer exterior fans, all for helping neighbors, and SMALLER cooling footprint too. This is the way of the future, not water, as liquid immersion cooling is more efficient at handling high thermal loads in smaller "footprints" too. This video shows what actually happens with Liquid Immersion Cooling, as it's sometimes hard to understand without seeing it in action. So I thought this might be good to see, as it makes things easier here. And Liquid Immersion Cooling/LIC technology costs less, is more efficient and takes less space, so gives more flexibility. All this helps to attract data centers and gain their high, steady tax revenues and high-tech jobs.

As the Prince William newspaper itself stated this Friday - sound, noise, vibrations and humming can be eliminated-greatly suppressed by just using today's better technology. Town just needs to hold AWS-Amazon to it, as one of the express written Conditions for the SUP. Technology solves this - the large OVH Data Center in Vint Hill and large chilling plant at the Fauquier Hospital both prove it - just need to use today's better technology. It works - and the Town and neighbors get something better, not a massive heavy car and employee 24/7 Amazon distribution-fulfilment center. **Think of a super quiet EV vehicle today compared to a loud, badly mufflered pick-up truck! AWS-Amazon can make a super quiet EV style data center with today's better technology.**

So, the Planning Commission has done an excellent job on this. **Just look at these results** - 1.) NO lattice tower transmission line as all OUT now, 2.) no water use, 3.) better architecture, 4.) more vegetation, 5.) more trees, 6.) no substation, 7.) large $3M+ annual tax payments to both the Town and County, 8.) multi-million water & sewer tap fees and monthly payments, 9.) many well-paid high-tech jobs, 10.) use of many local business services and supplies, and 11.) tough Noise Ordinance SUP Condition to best residential standards and, especially by simply using better technology like the Fauquier Hospital and the OVH Data Center in Vint Hill. That is a tremendous result - all super positive, and especially with the good end result of **DRAMATICALLY LESS NOISE and lower frequency for no vibrations or humming, plus fewer exterior fans, all for helping**

neighbors get to their remaining goals. OVH and the Fauquier Hospital lead the way. AWS done this incredibly careful way - will be a very Big Win for Warrenton.

Sincerely, David

David Dobson
Premium Business Parks International LLC
Office: 540-937-7010
Cell & Text: 540-229-7010
Email: dobsondm@aol.com

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Hi David,

You know what's cool? Seeing IT hardware operating while submerged in liquid.

This **2-minute video** from LiquidStack shows the process of 2-phase immersion cooling and why it is undeniably the most efficient data center cooling system in the world.

2-phase immersion is the cornerstone of tomorrow's data centers:

- **28 times more heat rejection than air cooling**
- **41% reduction in energy use vs. air cooling**
- **Zero water consumption**

CLICK HERE - See for yourself! Watch here

Kind Regards,

Alexandria Madamba
Marketing & Sales Operations Coordinator | LiquidStack Inc.

LiquidStack has the world's largest install base of liquid cooling for data centers, edge and high-performance computing. LiquidStack's 2-phase immersion liquid cooling is the only proven, highly scalable, environmentally safe and sustainable solution to meet the growing thermal challenges of cloud, enterprise, 5G and edge computing applications. Find out more at www.LiquidStack.com.

LiquidStack, 11 Apex Drive, Suite 300A, Marlborough, MA 01752, United States, +1 508-231-4675

Quiet of Immersion Cooling Improves Quality of Life

https://www.datacenterknowledge.com › sounds-data-ce...
Apr 14, 2022 — Data centers are **noisy places** – both inside and out. On the inside, high velocity fans on IT equipment and the HVAC system create an ...

Silencing Your Noisy Data Center Infrastructure – with Liquid ...

https://blog.se.com › datacenter › 2019/01/18 › silencin...
Jan 18, 2019 — Data centers are famous for being **very noisy, surprisingly** noisy in fact. If you have ever visited one or often work with data center ...

Immersion Cooling Solution for Data Centers - Gigabyte

The scalable, faster, and energy-efficient way to cool your **data center**, **immersion cooling** can save more for your business and is overall more reliable.

Liquid Immersion Cooling for Data Centers | ICEraQ | GRC

GRC is the leader in **liquid immersion cooling** for **data centers**. Our ICEraQ™ micro-modular systems increase efficiency and lower CAPEX & OPEX by 50%.

Immersion Cooling with 3M Fluids for Data Centers

Immersion cooling is a method for cooling **data center** IT hardware by directly immersing the hardware in a non-**conductive liquid such as 3M™ Fluorinert™ ...**
$
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Data Center

Silencing Your Noisy Data Center Infrastructure – **with Liquid Cooling**

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Global Specialist in Energy Management and Automati**3 min read**



Steven Carlini | January 18, 2019 | 9803 views

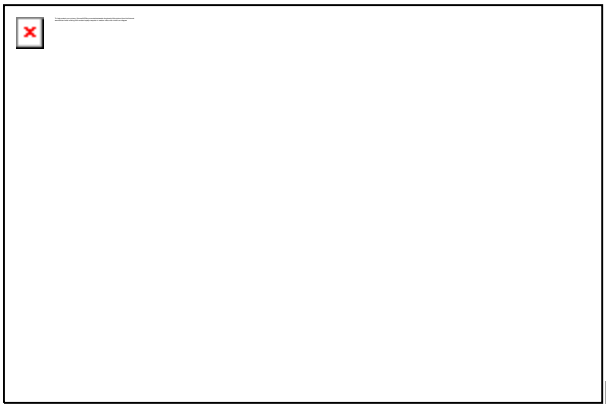
The Silent Data Center is Possible – Achieve it with Liquid Cooling

What if all of the server fan noise and all the noise emanating from the cooling equipment went away? **The data center would be virtually silent! Is that possible? It is possible by going with liquid cooling servers.**

The world is generally a noisy place that is sometimes soothing or relaxing, but most often unpleasant with excessive levels of noise. In urban areas, there is constant noise emanating from car engines, bus and delivery truck engines, and even noise from jet engines in the sky. In the suburbs, it's the lawn mower, grass trimmer engines or snow blower engines (in colder climate areas). In warmer climates, especially along the coast, it's quite common to hear the Harley Davidson motorcycle engines reverberating down the strip.

Conversely, if you've ever almost been run over by an electric car in a parking lot, you know it's virtually silent. Regarding the other noise generating devices I mentioned, I recently purchased an electric lawn trimmer and I have to say that this gen 3 product with advanced Lithium Ion batteries replicates the power of an old gas trimmer and is much lighter to boot – without the super load gas engine. Electric push lawn mowers have been around for a while, but now there are riding lawn mowers powered by Lithium Ion. Believe it or not Harley Davidson has announced that an electric "hog" is in development. Also, there has been a flurry of electric airplane engine testing successes and commercial flights up to 1,000 miles will be technically possible by 2024. It seems like the world is about to be a quieter place.

Why Typical Data Center Infrastructure Noise is Above Average



Data centers are famous for being very noisy, surprisingly noisy in fact. If you have ever visited one or often work with data center infrastructure, you are very familiar with how unpleasantly loud they can be. I recently visited one where the noise readings ranged from a low of 75 dBA to a high of 95 dBA. In comparison, normal conversation is about 60 dB, a power lawn mower is about 90 dB, and a jet engine at takeoff is 140 dB, according to the National Institute for Occupational Safety and Health (NIOSH). The federal government sets workplace standards for noise and doesn't require action until workers are exposed to average noise levels of 85 dB or greater during an eight-hour day.

Where does the sound in data centers come from? The servers themselves generate noise coming from the high velocity fans, but the highest levels come from the HVAC equipment (air conditioners) from the fans, condensers, compressors and evaporators. Some efforts can be made to lower this noise in a reactive way by installing sound-deadening acoustic tiles on the ceiling and data center's walls. However, data centers today (small and large), are extremely noisy environments

The Silent Data Center is Possible – Achieve it with Liquid Cooling

What if all of the server fan noise and all the noise emanating from the cooling equipment went away? **The data center would be virtually silent! Is that possible? It is possible by going with liquid cooling servers.** Liquid cooling servers do not have fans and make zero noise. There are two different types – emersion and direct to chip (sometimes called cold plate). Emersion technology floods the server with a liquid designed to collect and dissipate heat. This liquid circulates around the server and heat is rejected to a heat exchanger usually on the back of the server. With direct to chip, fluid (usually water) is sprayed on the plate on the back of the micro pressor in the server. Both of these are dependent on a cold-water supply from outside the building. This cold-water supply also is silent inside the data center. Plus, all of those noisy fans, condensers, compressors and evaporators go away.

Learn More about the Impact of Liquid Cooling in the Data Center Industry

There you have it, technology advancements are eliminating unpleasant sounds that you hear every day and now we can have silent data centers with liquid cooling – a world without noise. Check out my other blog on liquid cooling and why aside from the reduction of noise pollution, it is making its way back in the mainstream of the data center industry.

Why are data centers so noisy? Loose rules, pricey solutions ...

https://www.princewilliamtimes.com › news › why-are-dat...

4 days ago — The answer, experts on noise reduction say, is that they could be....

Amazon's Baltimore fulfillment center gears up for busy season

https://www.bizjournals.com › news › 2022/11/09 › amaz...

Nov 9, 2022 — The first phase of peak holiday season has kicked off at Amazon.com Inc.'s BWI2 fulfillment center on Broening Highway in Baltimore, which serves as an origin point for many orders for customers living in Greater Washington.

By the time seasonal hiring wraps up, **within the next week, BWI2 will have 5,000 employees, including 500 seasonal hires, working 10-hour shifts throughout the week to prepare for the coming busy season, said Cole Fisher, Amazon's general manager for the fulfillment center...**.

Goochland poised for another big Virginia fulfillment center

https://richmond.com › news › govt-and-politics › goochl...

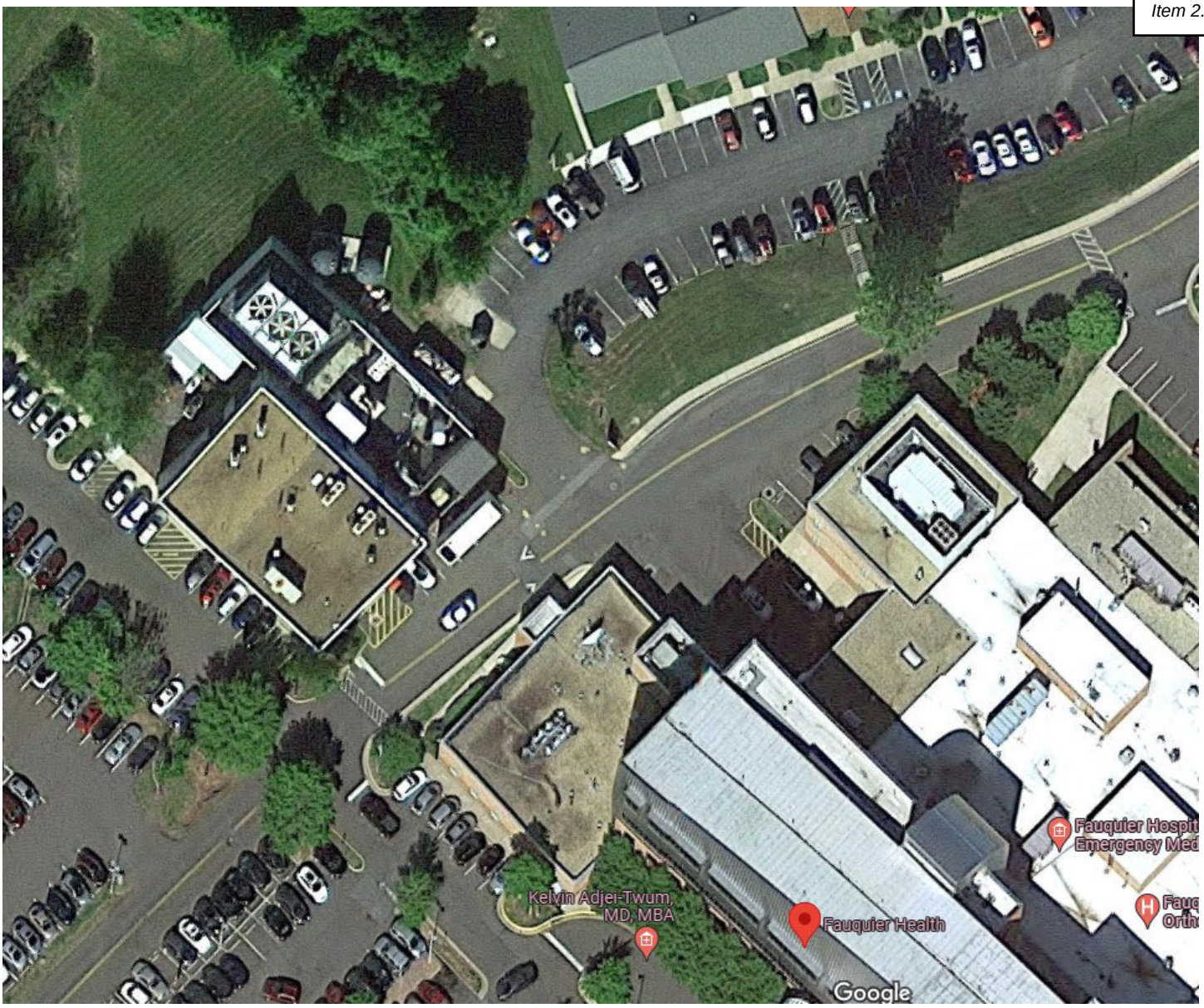
Aug 8, 2022 — A **giant fulfillment center** set to employ more than 1,000 people is poised to come to Goochland County. County supervisors approved plans for ...

Fauquier Health

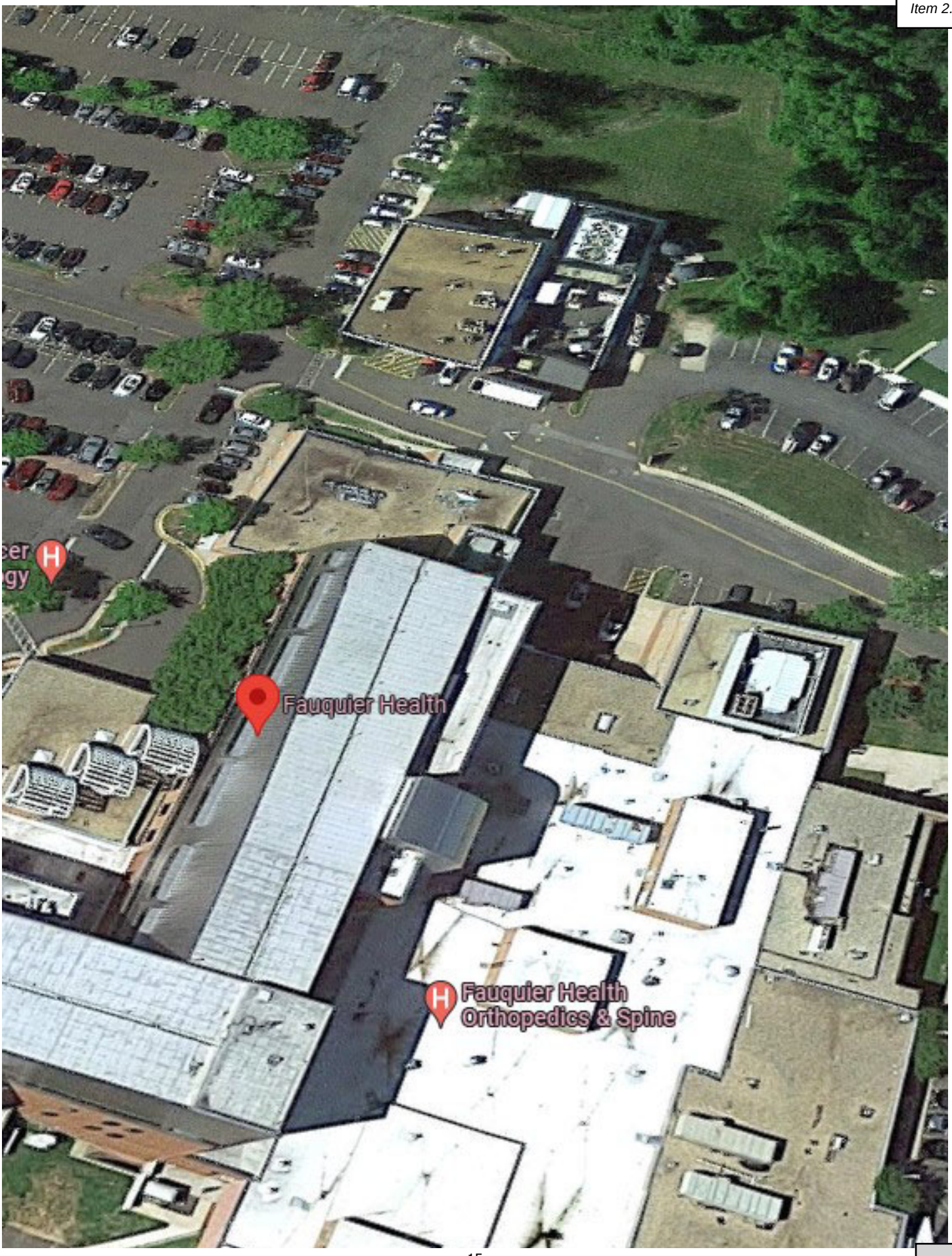
https://www.fauquierhealth.org

Fauquier Health is a 97-bed acute care **hospital** offering surgical services (including robotics), a 24-hour Emergency Department, extensive medical




Kelvin Adjei-Twum, MD, MBA
Fauquier Health
Google


UVA Obstetrics and Gynecology Warrenton
Arlington Healing Ministry
Fauquier Cancer & Hematology
Polysonics
Carriage Chase Cir
Fauquier Health Physician Services
Hospital Dr
Brittany Ln
Sire Way
Menlough Dr
Veterans Dr
Carriage House Ln
Google
Virginia Cancer Specialists - Fauquier


Fauquier Health
Fauquier Health
Orthopedics & Spine


GMC


SLOW
SPEED BUMP
Shipping & Receiving
Hospital Hill Medical Center
Warrenton Medical Associates
Professional Office Park
Google

OUT OF TOWN

Brittany Latack

From: cooke.travis@everyactioncustom.com on behalf of Travis Cooke <cooke.travis@everyactioncustom.com>
Sent: Tuesday, November 15, 2022 5:18 PM
To: Rob Walton
Subject: Please Deny the Amazon Data Center Special Use Permit:

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Dear Director of Community Development Rob Walton,

I am writing to urge you to vote against the Special Use Permit application for an Amazon data center on Blackwell Road.

My wife and I moved here from Alexandria 6 years ago to get away from the city, the large buildings and the ugly development around the beltway. Instead we bought a run down property on 6 acres to start a family. We have invested an immense amount of our time, sweat and personal savings into developing our property here as a place we want to see our 3- and 1-year old daughters grow up and call home for years to come. We love the area so much that we convinced half of our extended family to move here too (my In-laws moved here from Germany, and my sister-in-law from Portland). Warrenton is a hidden gem and the place we all want to call our forever home.

As a member of the FBI's Hostage Rescue Team, I drive rt-234 every day on my way to Quantico and see miles of huge, ugly concrete boxes lining the road. Each day I am so thankful we don't have that here and each day my concern grows that it might be on the way. I even convinced a teammate to buy a house down the road from me. The fact is, Prince William and Loudon county have been inundated with data centers and it drives residents away, and pushes them to our enclave. Places like Warrenton, Middleburg, and Marshall are where people go to find what Northern Virginia living is meant to be.

If you want to develop the land around Warrenton, develop it into what the residents want, and what bring families here. If you want to commercialize, add a movie theater, a bowling alley, or better yet a Trader Joe's. Don't start a runaway process that turns us into another internet hub with no benefit for those who live here. I finally found a place worth staying. Please don't send us down a path that changes that.

Sincerely,
Travis Cooke
6422 Georgetown Rd Broad Run, VA 20137-2121 cooke.travis@gmail.com

Brittany Latack

From: slk0648@everyactioncustom.com on behalf of Linda Crosby <slk0648@everyactioncustom.com>
Sent: Tuesday, November 15, 2022 5:42 PM
To: Rob Walton
Subject: Please Deny the Amazon Data Center Special Use Permit:

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Dear Director of Community Development Rob Walton,

I am writing to urge you to vote against the Special Use Permit application for an Amazon data center on Blackwell Road.

In addition to the numerous flaws of Amazon's application, including the lack of a completed noise study and the known visual impacts to the Town's gateway, Dominion has revealed plans for one of two potential offsite substations to serve the data center less than a week before the scheduled Planning Commission hearing. This recent development calls into question what new impacts the proposed data center and its associated energy infrastructure might have on Warrenton's historic downtown, property values and the rural character that draws residents and visitors both to the Town and County.

With so many unknowns, I ask that the Town please deny this application.

Thank you for hearing my concerns.

Sincerely,
Linda Crosby
5429 Wemberly Dr Warrenton, VA 20187-9169 slk0648@comcast.net

Brittany Latack

From: Tom deButts <twocanoe@yahoo.com>
Sent: Tuesday, November 15, 2022 2:50 PM
To: citizencomment
Subject: Warrenton Data Center

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

I am writing to urge the Council to postpone any action approving the massive data center in town due to the noise and vibration that will be caused by the center. The noise will be a permanent loss of the quiet that is a part of Warrenton and once lost, cannot be regained. Approval of this proposal will permanently change Warrenton's small-town appeal and Fauquier County's rural character, and significant noise and visual impacts will affect citizens and visitors alike. Citizens and visitors will be greeted by a fifty-foot-high building on an elevated site, right at the eastern entry to Warrenton. The data center and power lines will be visible from many parts of both Warrenton itself and the surrounding countryside.

Please don't sell out the town for such a short-term financial gain at the expense of the town and its residents.

Thomas M. deButts
1415 Snowden Road
Delaplane, VA 20144
540-592-3151

Brittany Latack

From: Rein du Pont <reindp@aol.com>
Sent: Tuesday, November 15, 2022 12:09 PM
To: citizencomment
Subject: letter
Attachments: Planning Commission Draft Letter.docx

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

please read,
thank you,
Rein T du Pont

Rein T. du Pont REALTOR®, ABR®, e-PRO®
Licensed in the State of Virginia since 1993
Thomas and Talbot Estate Properties, Inc. Middleburg, VA
reindp@aol.com
rein@reindupont.com (540) 454 3355
thomasandtalbot.com



To: The Warrenton Planning Commission
Subject: Amazon Blackwell Road Data Center

Email: citizencomment@warrentonva.gov
Date:

Dear Planning Commissioners:

I am writing to ask you **to not vote** on the Amazon Special Use Permit (SUP) application at your public hearing on Tuesday, November 15th.

The reason is that the application is quite incomplete as some of you and Amazon stated publicly on October 25th acknowledging information gaps on critical issues including noise/vibration, view shed impacts and power supply. A vote that would prematurely advance Amazon's incomplete application to the Town Council would further discredit the planning commission and how the town has handled the entire Amazon situation.

Based on what I know, I am opposed to this data center. It would seriously tarnish one of the main gateways into our historic town, and would be visible from many parts of the town and even the county. The noise and vibration it would generate constantly would cause physical and mental harm to hundreds of residents, and it would lead the way for more data centers and massive power towers and transmission lines.

Based on the town's own rules, approving any SUP must meet two conditions. It must first be consistent with town's comprehensive plan. Second, the development proposed under the SUP must not adversely affect surrounding homes and businesses. **The Amazon data center meets neither one.**

Thank you for the opportunity to voice my opinion.

Sincerely, Rein T du Pont
William H du Pont

Name
Address 5658 Merry Oaks Rd, The Plains, VA 20198

Brittany Latack

From: Tina Ference <ferencetm@gmail.com>
Sent: Tuesday, November 15, 2022 1:32 PM
To: Planning Department
Subject: Amazon Data Center

Follow Up Flag: Follow up
Flag Status: Completed

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Good afternoon,

I wanted to take a minute and ask that you please deny the Amazon Data Center. I am a resident of Arbor Court, and the back of my home will face the data center. I am concerned about the noise level and my property values. I would ask you to stop and ask yourself would you want to live that close to the data center? Would you want your family living there? I don't doubt there is a need for a data center, but is beside residential communities the right place for this? There are several neighborhoods and a memory center within very close proximity and will be greatly impacted by the build of the data center. In addition to the noise that the data center will be making, the land provides a little noise buffer from the by-pass as well as provides a home for the wildlife. I ask that you please not approve the data center in Warrenton.

Sincerely,
Tina Ference
resident of Oak Springs Town Homes

Brittany Latack

From: ksym@aol.com
Sent: Tuesday, November 15, 2022 5:30 PM
To: citizencomment
Subject: Proposed data center - vote NO !!!
Attachments: opposition email.docx

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Please refer to Attachment to this email

and https://bristowbeat.com/stories/nasa-scientist-brings-attention-to-data-center-noise-levels,11231

and say NO to the proposed data center !!!

Sincerely,
Gayle M. Hinton

Steve Ainsworth, Warrenton Planning Commission

Nov. 14, 2022

Dear Mr. Ainsworth,

I am writing to ask you to not vote on the Amazon Special Use Permit (SUP) application at your public hearing on Tuesday, November 15th.

I am OPPOSED because of:

- the visual impact
- noise (refer to link to article from Bristow Beat)
- effect on property values of my home and my neighbors' homes

As you must know, one member of the Planning Commission is leaving Warrenton partly because "we did not want to live beside a data center."

Furthermore, the application is quite incomplete as some of you and Amazon stated publicly on October 25th acknowledging information gaps on critical issues including noise/vibration, view shed impacts and power supply. A vote that would prematurely advance Amazon's incomplete application to the Town Council would further discredit the planning commission and how the town has handled the entire Amazon situation.

Based on what I know, I am opposed to this data center. It would seriously tarnish one of the main gateways into our historic town, and would be visible from many parts of the town and even the county. The noise and vibration it would generate constantly would cause physical and mental harm to hundreds of residents, and it would lead the way for more data centers and massive power towers and transmission lines.

Based on the town's own rules, approving any SUP must meet two conditions. It must first be consistent with town's comprehensive plan. Second, the development proposed under the SUP must not adversely affect surrounding homes and businesses.

The Amazon data center meets neither one.

Thank you for the opportunity to voice my opinion.

Sincerely,

Gayle M. Hinton
Warrenton, VA

Brittany Latack

From: karlamackimmie@everyactioncustom.com on behalf of Karla MacKImmie <karlamackimmie@everyactioncustom.com>
Sent: Tuesday, November 15, 2022 2:04 PM
To: Rob Walton
Subject: Please Deny the Amazon Data Center Special Use Permit:

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Dear Director of Community Development Rob Walton,

I am writing to urge you to vote against the Special Use Permit application for an Amazon data center on Blackwell Road.

In addition to the numerous flaws of Amazon's application, including the lack of a completed noise study and the known visual impacts to the Town's gateway, Dominion has revealed plans for one of two potential offsite substations to serve the data center less than a week before the scheduled Planning Commission hearing. This recent development calls into question what new impacts the proposed data center and its associated energy infrastructure might have on Warrenton's historic downtown, property values and the rural character that draws residents and visitors both to the Town and County.

With so many unknowns, I ask that the Town please deny this application.

Thank you for hearing my concerns.

Sincerely,
Karla MacKImmie
8505 Lees Ridge Rd Warrenton, VA 20186-8744 karlamackimmie@gmail.com

Brittany Latack

From: marciawrightmarsh@everyactioncustom.com on behalf of marcia marsh <marciawrightmarsh@everyactioncustom.com>
Sent: Tuesday, November 15, 2022 7:48 PM
To: Rob Walton
Subject: Please Deny the Amazon Data Center Special Use Permit:

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Dear Director of Community Development Rob Walton,

I am writing to urge you to vote against the Special Use Permit application for an Amazon data center on Blackwell Road.

I moved to this area because of the special character of Warrenton. I come from a business background (was previously a tax professional) so I am sympathetic to the Town's consideration of economic, employment and tax options. However, having seen the impact on other counties and towns in Northern Virginia from the data center spread; read about the energy, noise and other challenges for neighbors, this community and our environment and considered the impact on Warrenton's town character - I would urge you to vote no.

You don't want your legacy to be the leaders who degraded our very special town status, comprised the living standards of neighbors and added to the energy and water drain here. To what end?

I showed up for tonight's hearing in the pouring rain and was told I would have to wait to observe the hearing because of the overflow crowd which kept coming. People of all walks of life were turned away, many angry about rushing to the meeting from work only to be held in the vestibule with no guarantee of a seat to observe.

This town and the area is so special and trust in our elected leaders is central to keeping the sense of community that makes us so special. I hope that you have the chance to hear from all and the time to reflect about other options for town development.

With so many unknowns, I ask that the Town please deny this application.

Thank you for hearing my concerns.

Sincerely,
marcia marsh
9255 Harts Mill Rd Warrenton, VA 20186-8531 marciawrightmarsh@gmail.com

Brittany Latack

From: npremen@everyactioncustom.com on behalf of Nancy Premen <npremen@everyactioncustom.com>
Sent: Tuesday, November 15, 2022 4:07 PM
To: Rob Walton
Subject: Please Deny the Amazon Data Center Special Use Permit:

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Dear Director of Community Development Rob Walton,

I am writing to urge you to vote against the Special Use Permit application for an Amazon data center on Blackwell Road. If I were able , I would be attending the meeting tonight. Unfortunately , I was just diagnosed with covid and feel truly terrible. Therefore, because my brain is exhausted, I will submit this 'form' letter which accurately states my opposition to the data center plan. I urge you to PLEASE remember that the citizens of Warrenton and Fauquier County live here for a reason….and it's not to be a new hub for data centers. Please vote AGAINST allowing this process to proceed. Thank you.

In addition to the numerous flaws of Amazon's application, including the lack of a completed noise study and the known visual impacts to the Town's gateway, Dominion has revealed plans for one of two potential offsite substations to serve the data center less than a week before the scheduled Planning Commission hearing. This recent development calls into question what new impacts the proposed data center and its associated energy infrastructure might have on Warrenton's historic downtown, property values and the rural character that draws residents and visitors both to the Town and County.

With so many unknowns, I ask that the Town please deny this application.

Thank you for hearing my concerns.

Sincerely,
Mrs. Nancy Premen
5830 Chittenden Dr Warrenton, VA 20187-4565 npremen@earthlink.net

Brittany Latack

From: catholic4life@everyactioncustom.com on behalf of Dionna Prestera <catholic4life@everyactioncustom.com>
Sent: Tuesday, November 15, 2022 1:02 PM
To: Rob Walton
Subject: Please Deny the Amazon Data Center Special Use Permit:

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Dear Director of Community Development Rob Walton,

I am writing to urge you to vote against the Special Use Permit application for an Amazon data center on Blackwell Road.

In addition to the numerous flaws of Amazon's application, including the lack of a completed noise study and the known visual impacts to the Town's gateway, Dominion has revealed plans for one of two potential offsite substations to serve the data center less than a week before the scheduled Planning Commission hearing. This recent development calls into question what new impacts the proposed data center and its associated energy infrastructure might have on Warrenton's historic downtown, property values and the rural character that draws residents and visitors both to the Town and County.

With so many unknowns, I ask that the Town please deny this application.

Thank you for hearing my concerns.

Sincerely,
Mrs. Dionna Prestera
7173 Gray Ct Warrenton, VA 20187-4531
catholic4life@protonmail.com

Brittany Latack

From: Kevin Ramundo <ramundok@gmail.com>
Sent: Tuesday, November 15, 2022 6:09 PM
To: Planning Department
Subject: Fwd: Public Meeting Comments
Attachments: Planning Commission Comments 11.15.22.docx

Follow Up Flag: Follow up
Flag Status: Flagged

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Attached please find my comments for tonight's public hearing. Would you please make sure the planning commissions receive them.

Kevin Ramundo
President, Citizens for Fauquier County.

Sent from my iPhone

Begin forwarded message:

> **From:** Kevin Ramundo <ramundok@gmail.com>
> **Date:** November 15, 2022 at 4:00:34 PM EST
> **To:** Kevin Ramundo <ramundok@gmail.com>
> **Subject: Public Meeting Comments**

Kevin Ramundo

Planning Commission Comments

(11/15/22)

Good evening. I am Kevin Ramundo, President of Citizens for Fauquier County. I appreciate the opportunity to speak with you about the Amazon data center. I understand I have up to five minutes as CFFC's president.

Yesterday, we submitted our fourth detailed letter to the town regarding the Amazon special use permit. CFFC has spent many hundreds of hours analyzing the application since it is the most consequential land use decision in the town's history. Most of my comments tonight are based on this letter, but first a few words about CFFC.

While some have discounted CFFC as a special interest group, nothing could be further from the truth. Our 700 plus members, including many town residents, believe in our mission of protecting open space, preserving historical resources and supporting agriculture. Over 80 percent of our financial support comes from annual membership fees of $35 per person or $65 per family. And as I told over 200 people who attended our late October town hall meeting, **"All of you are our special interest."**

Our letter emphasized how incomplete this constantly changing Amazon special use application is; and, how it's simply not ready to be voted on by the planning commission. These points are important because there sure seems to be an inexplicable rush to act on this application. Just three weeks ago at a contentious planning commission work session, it was obvious that more work was needed. Commissioner Stewart got it right when he observed, and I quote, "**Amazon does have**

an uphill battle to demonstrate it can mitigate the impacts from this data center at this location… and from what I have seen so far, there is a lot of work that needs to be done."

Yet, here we are tonight with the real possibility that the planning commission might vote on an **incomplete,** highly technical application with profound implications for the future of this historic town and impacts in terms of noise, viewshed and the proliferation of additional data centers in the town and beyond.

As you know, town's outside legal counsel has suggested that you must vote on Amazon's application tonight. That suggestion, which seems to lack a definitive legal basis, raises numerous questions. Why is a 100-day rule stipulated for rezoning applications being applied to a special use permit? How are the 100 days counted and when does the clock start? And what happens when an applicant , namely Amazon, delays the process by postponing a scheduled work session, submits flawed studies, fails repeatedly to complete its application, or changes it? **Please don't be rushed into a vote because of some questionable interpretation of a 100-day rule.**

Amazon's resubmitted application of October 28 is the latest example of the company's ever-changing plans. Two of the most important considerations, noise and electrical power supply, are now dramatically different. Specifically, what noise standards will Amazon have to comply with is now in question; and, power will now be supplied from an off-site substation with never-before-contemplated power lines through new neighborhoods. Has town staff fully reviewed these changes, and why wasn't a work session held prior to a public meeting let alone a possible vote?

Our letter also asks the town to investigate whether Amazon and its attorneys exerted undue influence over the town and if it is continuing. This investigation is long overdue and it should be comprehensive and impartial.

Let me close with three conclusions and a request.

We know this proposed data center will seriously tarnish one of the town's main gateways; generate constant noise and vibration to the physical and mental detriment of hundreds of residents; and, lead to more data centers. **The most consequential land use decision in the town's history should not be rushed?**

The Amazon application is incomplete and I respectfully request that the planning commission should insist on a complete one before voting on it. That's just common sense. Voting prematurely tonight will reinforce widely held citizen concerns about the lack of integrity and transparency involved in this entire data center situation.

So please do what your job requires and the town's residents need. The future of the town is at stake, and as someone at our town hall said**, it's never too late to get it right**. That comment stuck with me and I hope it will with you. Thank you!

727 Words

Brittany Latack

From: yrtrainer <yrtrainer@yahoo.com>
Sent: Tuesday, November 15, 2022 8:21 PM
To: Planning Department
Subject: Amazon

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

To whom it may concern,

I unfortunately could not be at tonight's meeting as I had planned to but nonetheless, I wanted to voice my concern with the proposed Amazon data center.

As a former resident of the Loudoun County area, specifically the Ashburn area (data center alley), my husband and I were saddened to see that yet another Data Center was going to plague the area that we moved to, specifically an area that we chose based on the fact that there were no data centers close by. We chose Fauquier County and more specifically the Warrenton area, as our hopefully forever home for many reasons. We were looking to get away from townhouse living as well as looking to get away from an area that turned out to be nothing more than a concrete Jungle. Massive buildings, endless construction, an area that started out with just one Data Center, to a County that now has over 200 within its boundaries. TWO HUNDRED! In Ashburn alone there are 67!

I can tell you that from 10 years of living in that area, I saw major changes that were not only turning into an eyesore but we're impacting so many aspects of that area, a place I once dreamed of staying in. Now, understand that I am from a big city specifically New York City (and worked in a data center)and I'm used to seeing building after building being constructed but when I decided to leave the city, eventually my dream was to move to an area I would escape all of that. Our major concerns are turning into an unfortunate potential reality. Why choose an area that is so rich in its "country living charm" and has a vast majority or wildlife, farms, beautiful views and just ruin it with another concrete wall of a building? Even if it was made to "blend in", it wouldn't.

I saw basically the LAST horse farm in the Ashburn/Sterling area go away within weeks. I saw a beautiful view outside my window turn into knocked down trees, displaced wildlife, more traffic, ironically the worst internet service, and with all of this also came housing developments and the dreadful storage units. All because of "potential jobs" that would come to the area. What I always found interesting is that, my work was in the service industry and not one of my MANY Many clients worked in or near Ashburn so I don't know who these jobs went to (and within the circle of my coworkers who also had clients in the area, most worked in Fairfax, Centerville and down 66 towards DC)

As much as many may think that this Data Center will bring progress to the Warrenton/Fauquier area, I beg to differ. This one data center will be sure to bring an excess (unfortunately) of more data centers in the future which will ruin so much that this County has to offer. Instead of bringing more to an area like Warrenton, you are putting the "small town charm" that so many have adored (I see and hear this on my walks around town) You may actually drive people out of the county instead of keeping them here. I for one, would not stick around to see the explosion of data centers, unsightly giant power line towers, and the endless construction that will plague the area.

I do hope you take this into consideration and hear the voices of this town and county, those who have nurtured this area and cared for it for so long.

Thank you for your time.

Sincerely,

Yvette Rodriguez

Sent from my Verizon, Samsung Galaxy smartphone

Brittany Latack

From: sladethorpe@everyactioncustom.com on behalf of Foster Thorpe <sladethorpe@everyactioncustom.com>
Sent: Tuesday, November 15, 2022 9:29 PM
To: Rob Walton
Subject: Please Deny the Amazon Data Center Special Use Permit:

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Dear Director of Community Development Rob Walton,

I am writing to urge you to vote against the Special Use Permit application for an Amazon data center on Blackwell Road.

In addition to the numerous flaws of Amazon's application, including the lack of a completed noise study and the known visual impacts to the Town's gateway, Dominion has revealed plans for one of two potential offsite substations to serve the data center less than a week before the scheduled Planning Commission hearing. This recent development calls into question what new impacts the proposed data center and its associated energy infrastructure might have on Warrenton's historic downtown, property values and the rural character that draws residents and visitors both to the Town and County.

With so many unknowns, I ask that the Town please deny this application.

Thank you for hearing my concerns.

Sincerely,
MAJOR Foster Thorpe
7333 Goose Creek Rd Marshall, VA 20115-3354 sladethorpe@gmail.com

Brittany Latack

From: maureen.fci@everyactioncustom.com on behalf of Maureen Wilcox <maureen.fci@everyactioncustom.com>
Sent: Tuesday, November 15, 2022 11:38 PM
To: Rob Walton
Subject: Please Deny the Amazon Data Center Special Use Permit:

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Dear Director of Community Development Rob Walton,

I am writing to urge you to vote against the Special Use Permit application for an Amazon data center on Blackwell Road.

This will open the door to more data centers. I used to live in Prince William County. I moved to Warrenton for a reason. I do not wish to see beautiful Fauquier County turn into another Prince William. Nor do I want to see quaint Warrenton turn into Manassas sprawl.

Neither Amazon nor Dominion can be trusted. The story keeps changing. Fauquier citizens will end up paying a huge bill to bring power to something that is no benefit to them.

With so many unknowns, I ask that the Town please deny this application.

Thank you for hearing my concerns.

Sincerely,
Ms. Maureen Wilcox
8341 Springs Rd Warrenton, VA 20186-7644 maureen.fci@gmail.com

Brittany Latack

From: Aleta Daniels <aleta.gardens@gmail.com>
Sent: Wednesday, November 16, 2022 12:35 PM
To: citizencomment
Subject: Amazon Data Centers

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Hello!

Thank you for the opportunity to share my thoughts.

I love Warrenton. I moved here in October 2020 because I fell in love with its charm, its beauty, its support and protection of agriculture, and its small yet mighty Old Town district. I do not wish to move again- my roots have been set here in Warrenton and I want to stay here- yet I will likely find myself moving if this data center is approved. Let the other counties and cities who have let data centers move in be a dire warning- data centers come in, and peace, quiet, and charm move out. You approve just one and more are sure to follow.

Someone has to stand up to these monstrous corporations- please let the Council be the force which does not give in to the allure of promised revenue and potential jobs (both of which are uncertain), as I am positive that the cost will far outweigh any potential benefits.

Thank you,
Aleta Daniels
8586A Lees Ridge Rd

Brittany Latack

From: Diane <diane.blackwell7@gmail.com>
Sent: Thursday, November 17, 2022 8:24 AM
To: citizencomment
Subject: AMAZON DATA CENTER

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

I wish to oppose the AWS center proposed for Warrenton. I have lived in Fauquier County since the mid- seventies. I have lived in four different residences here, now residing in The Town of Warrenton. My daughter lives here, my married daughter and her family live here. No one wants the character of our town ruined!

The Planning Commission should NOT approve this. It doesn't meet any of the requirements! It actually shouldn't have gotten to the Planning Commission.

Sent from Diane's iPad

Brittany Latack

From: Lois Hughes <loishughes222@gmail.com>
Sent: Thursday, November 17, 2022 9:52 AM
To: citizencomment
Subject: Citizen Comment regarding Amazon

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Good morning!

Thank you for sharing the recording from the meeting Tuesday evening regarding the proposed Amazon Data Center. I was unable to attend, but Ii am most thankful for the outstanding representation from citizen against this proposal.

I just recently moved to Warrenton, in May 2021. I LOVE this town and am already serving on my community Board of Directors and getting involved as quickly as possible. I work from home and am also a Real Estate agent PT. My 97 yo WWII Veteran father lives with me. We relocated to Warrenton for the beauty, the people, and mostly for the less congestion and noise from Fairfax. I have also brought my son and his family here from Loudoun Co. They also came for the same reasons.

I have lived through and have witnessed the growth of Data Centers both in Loudoun and Prince William Counties. My daughter and her family live in Nokesville, just off Rt. 28 and I owned a ministry located off University Dr in Prince William from 2012-2018.I physically watched the surrounding acreage become COVERED in Data Centers in a matter of just a few short years. I witnessed the same when traveling to my son's home in Ashburn. These Data Centers are one reason that we all CHOSE to come to Fauquier. We made this decision to GET AWAY from the noise, the unsightly buildings, the high electrical resources - and basically, to a County where we believed valued land and families.

These data centers are de-valuing real estate. I have seen it in many transactions, and its just not fair to the homeowners. We see this same type of destruction when roads have to be built, but at least the roads serve the communities. The data centers could easily be placed AWAY FROM homes and local communities.

I am firmly against the data centers, yet I also firmly support the 2040 plan for Warrenton. I am in favor of modernization (to a point) within Fauquier, but I believe the data centers would be detrimental to this County.

Thank you,

Lois Hughes

Brittany Latack

From: Jason Smolinski <jsmo2283@yahoo.com>
Sent: Thursday, November 17, 2022 12:56 PM
To: citizencomment
Subject: Comments on Amazon Data Center

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Thank you for receiving my comments.

The recent vote to turn rural land on the edge of the Manassas Battlefield National Park into Data Centers is one of the most egregious violations of the character and history of that space.

The data center proposed within the boundaries of the Town of Warrenton will undisputedly open the door for more of the same here.

Warrenton is a gem - a town that is absolutely beautiful at every entrance, whether coming in from 29 near Chevy, Meetze Rd, 29 near the community college, Culpeper St, 211, or 17, Each entrance has character and natural beauty. There is no way to hide the behemoth of a data center at one of those entrances to town.

Warrenton appreciates peace and quiet. Recent data centers erected along the Prince William Parkway PROVE without a doubt that the ambient noise reduces the quality of life of residents nearby, more than a highway or an airport ever would.

Warrenton likes smart growth. A warehouse-style building is not smart growth.

Warrenton likes transparency in the process. The number of speakers is testament to that.

Consider me a "no" on the data center consideration.

Respectfully,
Jason Smolinski
Warrenton resident

Brittany Latack

From: Charles Carroll IV <ccarrolliv@gmail.com>
Sent: Monday, November 21, 2022 10:06 PM
To: citizencomment
Subject: Data Center

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

As a resident of Faquier County and on who visits a shops in Warrenton, we say no to towers and a data center.

Use brown space to build and not the present site. We do not support the towers, the electrical use or water use. No to the noise.

Amazon wins and Warrenton will lose.

Say no!

Charlie and Geraldine Carroll
Delaplane, VA

Sent from my iPhone
Charles Carroll IV

Brittany Latack

From: Jasmin Ponti <jponti02@aol.com>
Sent: Monday, November 21, 2022 6:24 PM
To: Planning Department
Subject: Vote NO to Amazon Data Center

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Dear Commissioners:

My husband and I attended last Tuesday's Planning Commission meeting. I had signed up to speak, but had to leave before my name was called. Unfortunately, neither my husband nor I can attend the follow-up meeting. That is not because we don't think it is a meeting of the utmost importance. It is because we have both had deaths in the family, including my father, and consequently have numerous guests visiting. So it is with regret that we cannot attend.

There is not much more to add to all the the good comments that were made last week in opposition to this project of Amazon. I would merely like to point out the obvious, that the Amazon Data Center is nothing more than a Trojan house. Saying there will be no massive power lines for this particular data center is cold comfort, because more hideous and gargantuan Data Centers will follow, and with them will come the hideous, gargantuan power lines.

My husband and I fled Loudoun County after watching this disaster unfold there. We were not subjected to the noise factor because we weren't close enough, but the daily assault on our senses from being forced to look upon these hideous structures and the attendant power lines every day took its toll on our mental well being. At first it is subconscious, but soon it becomes impossible to ignore.

The "new look" for the data centers that the Amazon representative showed us on his slide was just as unrelentingly ugly as all the others and has no place in a small community such as Warrenton, dwarfing all surrounding structures, and in such close proximity to so many hapless residents.

The irreversible adverse effects of allowing this data center to be plunked down in the middle of our small, quaint and sweet town cannot be overstated. The unsightliness and noise is nothing but a blight on the surrounding area and without a doubt will cause the people subjected to this onslaught to suffer physically, mentally and even financially as their home values plummet. These data centers have already blighted enough areas. Perhaps the people who like them so much should install them in their own backyards.

For the well-being of this town and county, and for all the people living here you must vote against it.

I would very much appreciate a confirmation that you have received and read this e-mail.

Jasmin and Edward Plekavich
8412 Meadows Road
Warrenton VA 20186
540-341-3654

Brittany Latack

From: Mary and Ray Root <rootsite@msn.com>
Sent: Monday, November 21, 2022 6:56 PM
To: citizencomment
Subject: Proposed Amazon Data Center

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Dear Town of Warrenton Planning Commissioners:

Citizens of the Remington Service District were once promised a 125-acre park (Fauquier Comprehensive Plan, 2003) but we lost our park to a utility solar site. The Remington solar facility produces about 20 megawatts of power annually at operating capacity. Meanwhile, Amazon's proposed Warrenton data center will consume between 5 to 20 megawatts per year (estimates vary due to a lack of information from Amazon and Dominion Energy).

Though we lost our park, Remington residents thought we were helping combat climate change. Now we are dismayed to learn our power generation might be used to satisfy Amazon's thirst.

Please don't approve this proposal; there are negative repercussions for every Fauquier citizen, but especially Remington residents, who have two power plants and one solar facility already.

How much more of a sacrifice must we make to satisfy Amazon, Dominion Energy, and Fauquier County desires? Please don't add more demand.

Sincerely, Mary M. Root

Chairman, Remington Community Partnership

Brittany Latack

From: Katy Barber <katybarber20186@gmail.com>
Sent: Tuesday, November 22, 2022 11:41 AM
To: citizencomment
Subject: Data center

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Data Centers are a horrible idea. They can be built in areas that don't have such a tremendous negative impact on the citizens of the town of Warrenton. The noise & resulting vibrations will decimate the quality of life we currently enjoy. I can only surmise that officials making the decision on such an important issue are either ill informed or influenced by some other method. To even consider this going though unrestricted with an open contract is unethical.
Why are you selling out our bucolic area?
This issue reminds me of what the chicken farms have done to the Shenandoah Valley. Promise of jobs & money have polluted ann Eden like area & proved to be a drain & eyesore to the farmer's & environment.

Respectfully, Kathryn Barber

Sent from my iPhone

Brittany Latack

From: Shino Brown <shino.brown@yahoo.com>
Sent: Tuesday, November 22, 2022 11:26 AM
To: citizencomment
Subject: Citizen Comment

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

I do not want the power lines in my town. Please do not do this!

Sent from my iPhone

Brittany Latack

From: Cindy Burbank <cindy.burbank@comcast.net>
Sent: Tuesday, November 22, 2022 11:34 AM
To: citizencomment; Ali Zarabi; Steve Ainsworth; Susan Helander; James Lawrence; Ryan Stewart
Cc: Cindy Burbank
Subject: Amazon Data Center - SUP Noise Conditions are Deceptive and a Give-Away to Amazon

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

To the Planning Commission:

If you allow the Amazon Data Center SUP to move forward to the Town Council, you will be aiding and abetting an end run around the Warrenton noise ordinance.

Do not allow that to happen. Do not subject Oak Springs, North Rock, and the Highlands neighborhood to constant noise violations. You will be ruining their property values, their health, and their quality of life. These are real people, with real families.

The conditions developed for the SUP by Amazon and Town staff DO NOT REQUIRE COMPLIANCE WITH THE NOISE ORDINANCE. Read those conditions carefully, like a judge, like a lawyer. Those conditions tacitly give the green light to Amazon to build and commence operations in violation of the noise ordinance -- and only "undertaking" and "diligently pursuing" mitigation -- which is open-ended in time -- i.e., potentially forever.

Do not even think about allowing this to happen. Do not put the interests of a trillion dollar international corporation over the interests of residents and families in the nearby residential neighborhoods of Oak Springs, Highlands, and North Rock. These are not affluent households. Many are working class, modest-income families.

You will further be putting at risk the patients and employees at Poet's walk, the employees and patrons of Giant, Country Chevrolet, Piedmont Family Practice, the Harris Teeter Shopping Center, and many other nearby businesses. Do you really want to drive away patrons and employees from these businesses, reducing their bottom line, and potentially endangering their continuing operation?

Think of the precedent you will be allowing if you allow Amazon's SUP to proceed, without a noise study, without compliance with the Town noise ordinance -- and with tacit written approval to violate the noise ordinance for an indefinite and potentially prolonged period,

Moreover, you must realize that Town staff have already been complicit with Amazon in trying to deceive you and the public. The Town Staff Analysis prepared for you says that the Noise Conditions require compliance with the Town noise ordinance. That is clearly not true. Instead the Noise Conditions tacitly approve violations, and only require "diligently pursuing" mitigation -- open-endedly -- potentially forever.

Meanwhile, in nearby Prince WIlliam County, Amazon is "diligently pursuing" mitigation by wrapping yoga mats around rooftop AC units, bound with bungee cords. Amazon clearly does not know how or

whether it can meet even the weak noise standards in PWC -- much less the more protective noi standards of Warrenton.

Do not allow this Amazon SUP to proceed to Town Council without a noise study that demonstrates compliance with the Warrenton noise ordinance. And do not trust Town staff to review such a study. They do not have the expertise -- and have shown they are much more attentive to the needs of Amazon than the needs of residents and neighborhoods in Warrenton.

Look to your consciences, and to your responsibility to the people of this Town and County.

Sincerely,
Cynthia Burbank
6347 Barn Owl Ct
Warrenton, VA 20187

Brittany Latack

From: Kathy Draheim <kdraheim@comcast.net>
Sent: Tuesday, November 22, 2022 11:37 AM
To: citizencomment
Subject: NO Data Center

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

I DO NOT want the data center

Kathy Draheim
7168 King William St
Warrenton. VA. 20187

Brittany Latack

From: Lauren MacKechnie <mackechniele@gmail.com>
Sent: Tuesday, November 22, 2022 11:26 AM
To: citizencomment
Subject: Please vote no

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

I am a Fauquier citizen letting you know we do not want the date center. Please vote no.

Brittany Latack

From: Rebecca Yates <Rebeccay@comcast.net>
Sent: Tuesday, November 22, 2022 11:51 AM
To: citizencomment
Subject: Data Center vote

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Our family does not support the Amazon Data center placement in Our wonderful town. Please vote no!
Robert Yates

Community Development Department

STAFF REPORT

Commission Meeting Date:	November 15, 2022
Agenda Title:	SUP 2022-03 Amazon Data Services
Requested Action:	Hold a Public Hearing
Department / Agency Lead:	Community Development
Staff Lead:	Denise Harris, AICP

EXECUTIVE SUMMARY

The Owner/Applicant, Amazon Data Services, Inc., seeks a Special Use Permit under Article 3-4.12.3 of the Zoning Ordinance for an approximately 220,200 square foot data center on Industrial zoned parcel consisting of approximately 41.793 acre parcel identified as GPIN 6984-69-2419-000. Designated in the New Town Character District on the Future Land Use Map located off Blackwell Road and Lee Highway. The Owner/Applicant is requesting modifications for building height allowance, parking, and fence height allowance as part of the Special Use Permit.

BACKGROUND

The proposed Special Use Permit was accepted on May 6, 2022, and proceeded to a Planning Commission Work Session on July 26, 2022 and again on October, 25, 2022 after the Applicant requested a deferral. The Applicant submitted their Public Hearing materials on October 28, 2022, for a November 15, 2022, Planning Commission Public Hearing.

To date the Applicant has submitted a Special Use Permit Plan, draft Conditions of Approval, a tree survey, a Geotechnical Report, a draft Noise Study, Illustrative Elevations, a balloon test, and other supporting documents. Throughout the Planning Commission Work Sessions the topics of noise, elevations, and visibility have been raised most often. The Applicant responded by agreeing to condition illustrative elevations, landscaping and tree buffers, one access point off Blackwell Road, dimming of lights between the hours of 11 PM and dawn, and no sub-station to be located on the site. The Applicant further agreed to condition to offer to pay for the cost of undergrounding electrical lines to a future sub-station.

Based on conversations with the Planning Commission, the Applicant agreed to conditions regarding offering outreach to qualified persons residing in the Town of Warrenton for potential employment. In addition, the Applicant agreed to condition coordinating with Fauquier County Public Schools K-12 and with Laurel Ridge Community College to establish a work force development program.

The remaining issue of noise has been heavily conditioned and agreed to by the Applicant. The Applicant filed for a Zoning Determination to clarify how the Noise Ordinance is to be interpreted. The deadline for this determination is January 16, 2023. After the determination, the Applicant is required to submit a noise study demonstrating the use meet the Town of Warrenton Zoning Ordinance at time of Site Plan submission. The condition goes further to require the Applicant must conduct a separate noise study one month after commencement of the use to ensure compliance with the Zoning Ordinance. Finally, the condition states if the use exceeds noise limits at any time, the Applicant shall undertake mitigation measures to achieve compliance.

STAFF RECOMMENDATION

Hold a public hearing.

Service Level / Policy Impact

The proposed use is located within the New Town Character District of Plan Warrenton 2040.

Fiscal Impact

Currently, the Town of Warrenton Real Estate Tax is $0.0401 per $100 and Business Property Tax is $1.00 per $100. Contractors are assessed at a rate of $0.085 per $100 per gross receipts during construction. Governing bodies set the tax rate on an annual basis. There are no similar businesses in the Town and State Code §58.1-3 prohibits local tax officials from divulging any information with respect to “the transactions, property, including personal property, income or business of any person, firm or

corporation." The parcel is currently vacant. Any industrial development on it will result in an additional valuation of the property.

Legal Impact

Draft Conditions of Approval run with the land so as to bind future property owners. Any party or officer identified by title shall mean and include any successor to that person or entity's powers or responsibilities.

ATTACHMENTS

1. Staff Analysis
2. Applicant's Supporting Materials
    - Statement of Justification
    - SUP Plan
    - Illustrative Elevations
    - Existing Conditions Plan
    - Tree Study
    - Draft Noise Study
    - Geotechnical Report

Community Development

Staff Analysis

Planning Commission Public Hearing

DATE OF HEARING: NOVEMBER 15, 2022

SUMMARY

Applicant/ Owner Amazon Data Services, Inc.
Representative Walsh, Colucci, Lubeley & Walsh, P.C.

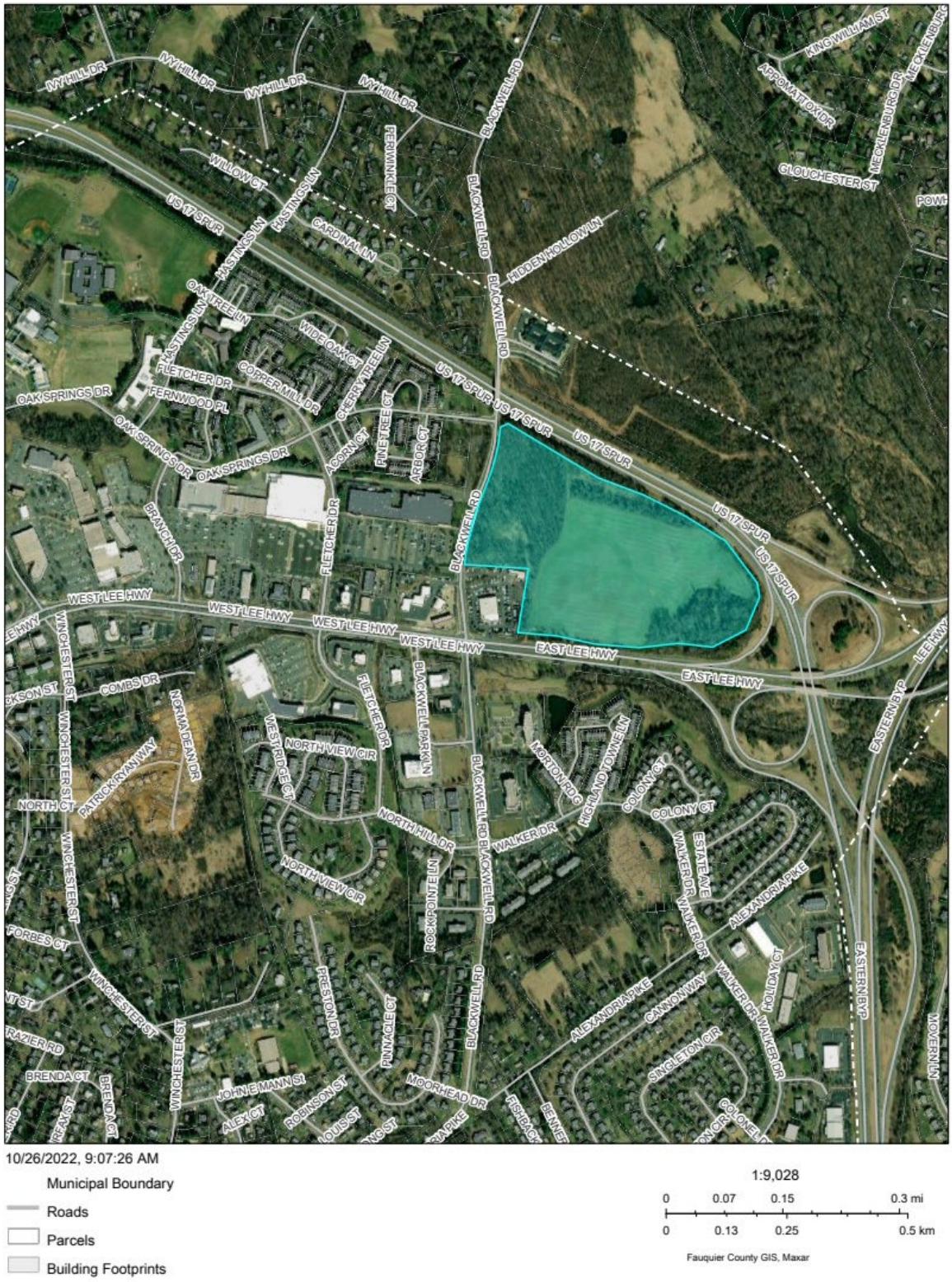
Applicant's Proposal/Request

The owner, Amazon Data Services, Inc., represented by Walsh, Colucci, Lubeley & Walsh, P.C., seeks a Special Use Permit for a 220,200 square foot data center on a 41.79-acre Industrial zoned parcel, identified as GPIN 6984-69-2419-000, designated in the New Town Character District on the Future Land Use Map located off Blackwell Road and Lee Highway. The Owner/Applicant is requesting modifications and waivers.

REFERRAL AGENCY COMMENT SUMMARY

Referral Agency	Date	Outstanding Issues
Zoning	11/1/22	Noise; conditioned to-be addressed
PW/PU	11/1/22	None for SUP; must comply at Site Plan
Police	5/27/22	None for SUP; must comply at Site Plan
Emergency Services	11/1/22	None for SUP; must comply at Site Plan
VDOT	7/7/22	Eliminate as much of guardrail on Blackwell as possible at Site Plan.

AERIAL MAP



10/26/2022, 9:07:26 AM

Municipal Boundary

Roads

Parcels

Building Footprints

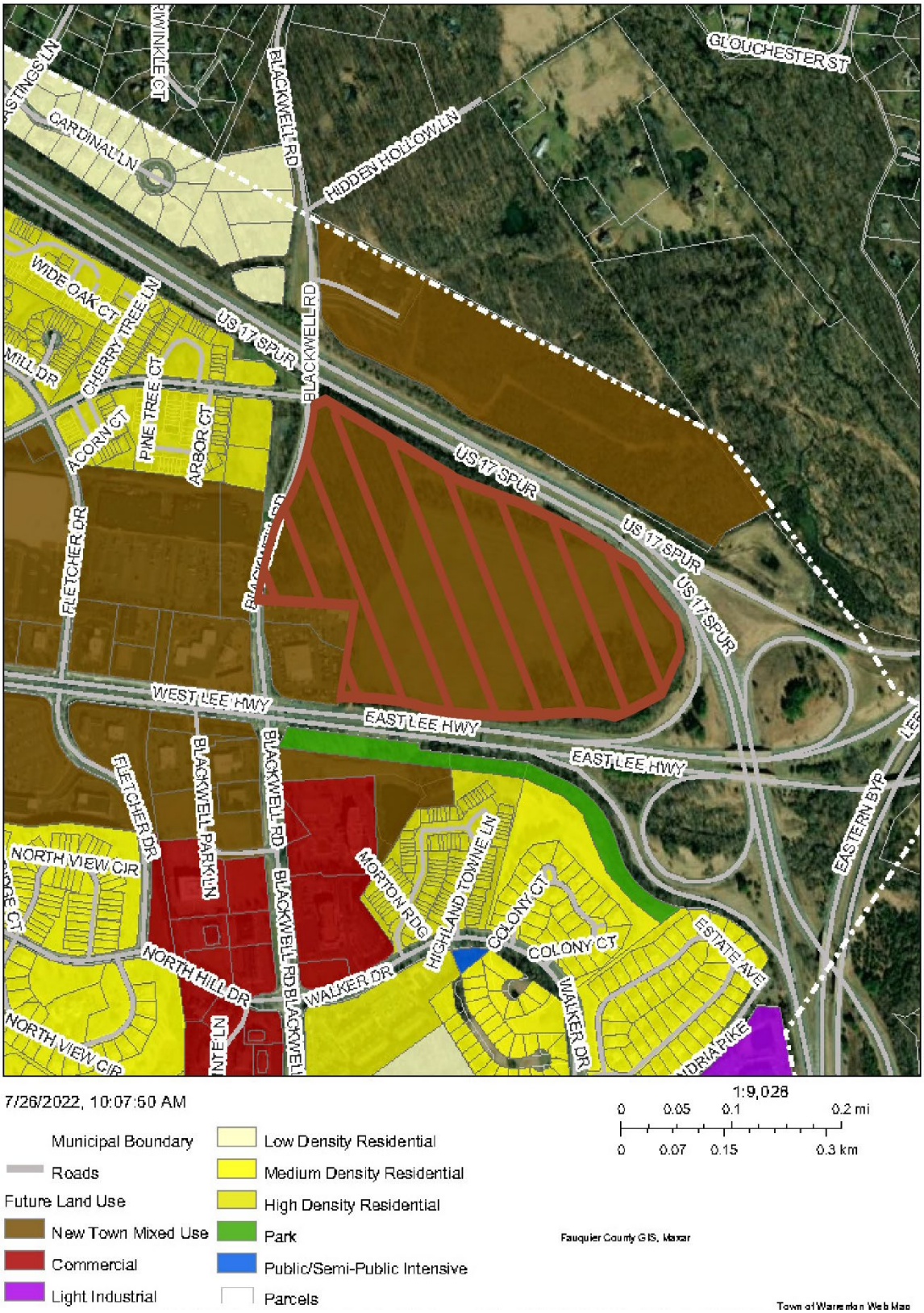
1:9,028

0 0.07 0.15 0.3 mi

0 0.13 0.25 0.5 km

Fauquier County GIS, Maxar

FUTURE LAND USE MAP



ZONING MAP

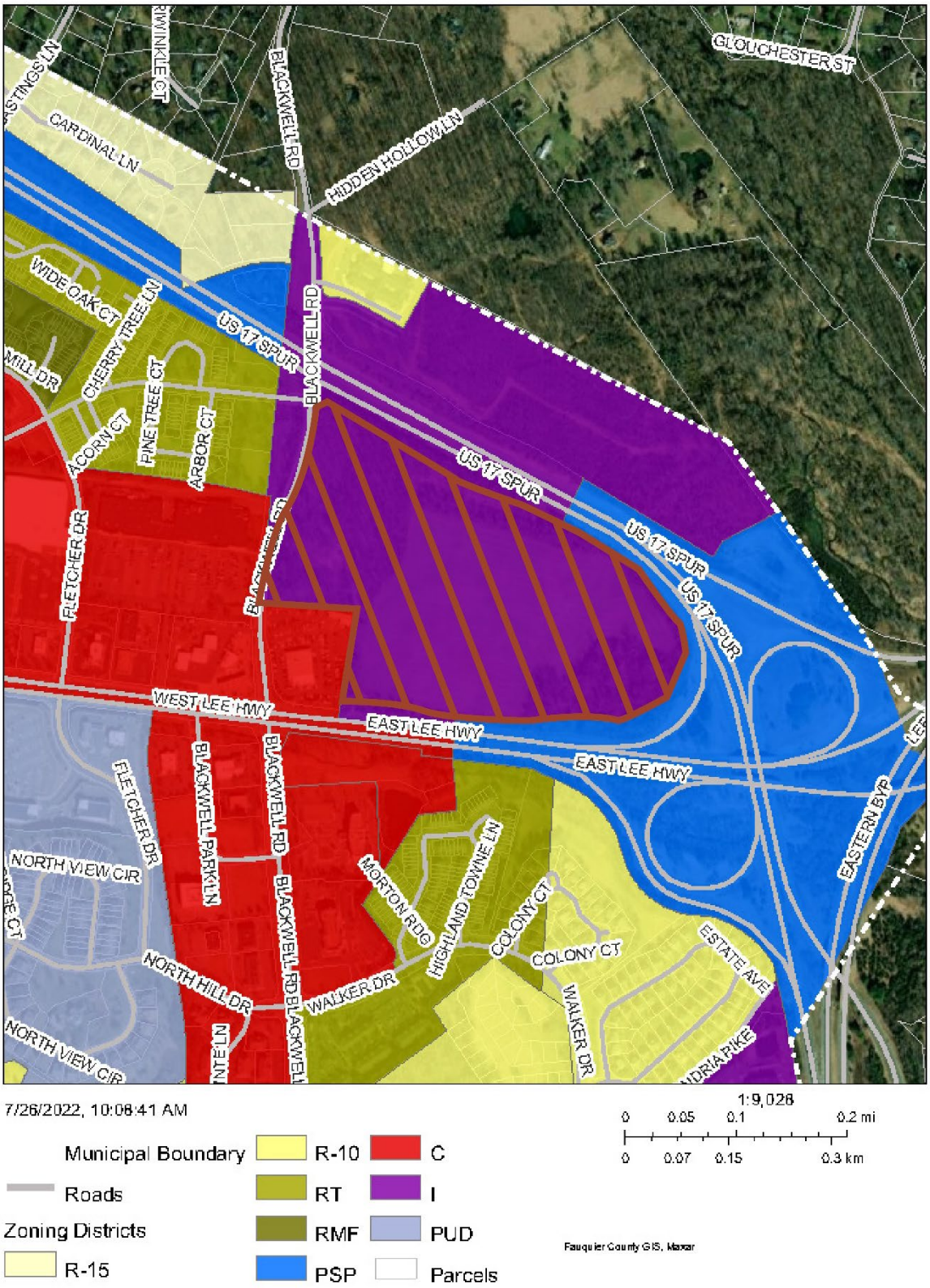

GLOUCHESTER ST
BLACKWELL RD
HIDDEN HOLLOW LN
CARDINAL LN
WIDE OAK CT
CHERRY TREE LN
US 17 SPUR
MILL DR
PINE TREE CT
ACORN CT
ARBOR CT
FLETCHER DR
WEST LEE HWY
EAST LEE HWY
BLACKWELL PARK LN
NORTH VIEW CIR
MORTON RD
HIGHLAND TOWNE LN
COLONY CT
ESTATE AVE
NORTH HILL DR
WALKER DR
EASTERN BYP
7/26/2022, 10:08:41 AM
1:9,028
0 0.05 0.1 0.2 mi
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Municipal Boundary
Roads
Zoning Districts
R-15
R-10
RT
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I. Regulation & Planning Consistency

This section is based on relevant regulatory and planning documents. The following table summarizes the area characteristics:

Direction	Current Land Use	Future Land Use Map Designation	Zoning
North	Poet's Walk / Hwy 17 Spur	New Town Mixed Use	R 10 / Industrial / PSP
South	Country Chevrolet / Hotel / Residential Townhouses	New Town Mixed Use / High Density Residential	Commercial / RT Residential
East	Highway	N/A	PSP Public Semi-Public
West	Car Dealership / Gas Station / Commercial Retail	New Town Mixed Use / High Density Residential	RT Residential/ Commercial / PSP

A. Comprehensive Plan Analysis

The Code of Virginia §15.2223 states the Comprehensive Plan's purpose is to serve as a guide for the future. It is general in nature in that it designates the general location, character, and extent of features for the Town. While not to be confused with entitled zoning, Plan Warrenton 2040 features an overall vision of the Town. The multiple sections of the plan are extensive. Below are highlights related to the Plan.

Plan Warrenton 2040 designates this proposed parcel on the Future Land Use Map in the New Town Character District. This character district consists of mostly commercial and industrial lands on the northern side of Town from the US29/15 gateway entrance to the Business17 gateway entrance. In its entirety, it is envisioned to be "*a signature location for a regional employer and jobs center, it will contain mixed-use residential, entertainment and commercial uses organized by a compact interior street grid network and a park area that is located over an existing floodplain*," (Plan Warrenton 2040 Character District Guide Book page 15).

The intent of this district is to utilize the direct access from US 29/15 to encourage potential signature office and job centers with the characteristics of a mixed-use development. The proposal area was initially envisioned with structures up to six stories, with a minimum of thirty-five (35) feet for a single-story commercial, and lot coverage of 80% (Plan Warrenton 2040 Character District Guide Book page 20).

The New Town District provides a major economic development opportunities given its accessibility, large lots, and high visibility. Therefore, a goal for this district is to, "*Evaluate development incentives that stimulate private investment and new development*," (Plan Warrenton 2040 page 63).

Economic development is further encouraged within the Community Facilities section noting the importance of making responsible and strategic community facility investments to sustain the fiscal well-being and economic resiliency of the Town. This is further reiterated in the vision calling to, "*Provide a high quality of life to capture economic benefits through diverse businesses, employers, and residences*," (Plan

Warrenton 2040 Character District Guide Book page 19).

Quality of life is an important aspect throughout the Comprehensive Plan, noted especially in the Open Space, Parks, and Environment section as a promotion of health and wellness. A goal in this section encourages "*Preserving, enhancing, and protecting the environmental, scenic, and natural quality of the Town,*" (Plan Warrenton 2040 page 33). Strategies to this goal include utilization of nature-based systems for stormwater management and minimize the loss of existing tree cover for habitat preservation. Connectivity improvements are also noted as tools for strengthening the public health infrastructure.

Walkability and multimodal transportation are noted within the Transportation section of the Comprehensive Plan as ways to improve health and safety to promote community livability. This section encourages construction of sidewalks on both sides of an existing street, specifically introducing sidewalk linkages in Character District redevelopments. This proposal's parcel fronts the Gateway and Signature streets identified in Plan Warrenton 2040 Warrenton Street Typology and includes new bicycle/pedestrian facilities on the Desired Outcome Map (Plan Warrenton 2040 page 40).

The Applicant stated on page 3 of the October 28, 2022, letter to Denise Harris, Planning Manager, from the Applicant's representative John Foote that the comprehensive plan "is a compilation of policies…No individual site can be expected to meet all objectives in the Plan." The letter goes on to state the "2040 Plan has significant economic and fiscal goals that seeks to achieve a strong, diversified, and resilient economy…" The proposal includes no access to US29/15 as the New Town Character District Illustrative concept chows on page 19 of Plan Warrenton 2040.

Staff Findings

The application is proposing a single use, major employer on the site that will diversify the Town economic base. The secured site will not allow public access and thus no internal streets or open space. However, the Applicant is including a 5' sidewalk along the property frontage on Blackwell Road. The requested waiver to increase the height of the buildings to 37' is within the two to six stories envisioned on this parcel in the comprehensive plan (Plan Warrenton 2040 page 14). Staff has asked the Applicant to consider green infrastructure and LEED standards as encouraged in Plan Warrenton 2040. The Applicant is proposing building elevations that will incorporate a variety of materials at the gateway of Town. Staff has conditioned the consideration for additional architectural design elements in conjunction with Zoning Ordinance Article 9-26.1.F, which require these to better align with the character and goals of the Town.

B. Historic and Cultural Resources

U.S. 29/15 and US29 Business (aka Lee Highway) are designated as part of the Journey Through Hallowed Ground National Scenic Byway (JTHG NSB). The National Park Service defines byways as "a distinctive collection of American roads that tell a story and provide the visitor a unique experience." To be designated, a corridor must contain one of the following six intrinsic qualities: archaeological, cultural, historic, natural, recreational, or scenic. The JTHG NSB Corridor Management Plan (CMP) states under 4.2.15 Managing Roadside Character, "byway communities should work with utility companies to underground utility lines whenever possible." The CMP provides best practices for roadway design, gateways, and access management. The National Park Service National Scenic Byways Guide dated May 2002 stated, "Perhaps one of the underlying principles for the program has been articulated best by a byway leader who said the program is about recognition, not regulation."

Plan Warrenton 2040 dedicates a section to historic resources within the Town of Warrenton. A key aspiration of which is to, "*conserve, reuse, and promotes historic resources to enhance the Town's sense of place and grow the economy through economic activity,*" (Plan Warrenton 2040 page 16). An emphasis of this

section focuses on the existing built environment and conservation of natural resources, inside and outside of the Historic District. Preservation of the natural environment is further supported by encouraging, "*enhance[ing] the environment through preservation and sustainability best practices*," (Plan Warrenton 2040 page 17).

Staff Findings

The Virginia Department of Historic Resources database does not list any archeological or historic resources on the proposed site. There are two noted archeological sites adjacent to the north-east corner of the property on the north side of US 17. Any underground lines should avoid the proposed area to protect documented historic resources. The Town of Warrenton is pursuing a Smart Scale grant for a roundabout at Lee Highway and Blackwell Road which will help to address the gateway transition from US 29/15 to Old Town. The Applicant provides access to the site off Blackwell Road and has agreed to condition no access from the site to Lee Highway thereby eliminating the need for additional deceleration lanes or additional transportation measures that would alter the existing road. The Applicant has also indicated there is no intention to introduce new signage beyond the street address off Blackwell Road. The October 28, 2022 submission removes a potential substation from this property and the Applicant agrees to condition no substation. The Zoning Ordinance requires all electrical service lines from a sub-station to the use to be placed underground.

C. Zoning Analysis

On August 10, 2021, Town Council approved a Zoning Ordinance Amendment (ZOTA 2021-0321) to Articles 3, 9, and 12 to allow for Data Centers within the Industrial (I) Zoning District by Special Use Permit approval, subject to the requirements of §9-26.

The legislative intent of the Industrial Zoning District is "*providing for a variety of light manufacturing, fabricating, processing, wholesale distributing, and warehousing uses appropriately located for access by highways and providing a controlled environment within which signing is limited, uses are to be conducted generally within completely enclosed buildings, and a moderate amount of landscaping is required.*"

Town of Warrenton Zoning Ordinance Permissible Uses By-Right in the Industrial District

By right, this zoning district entitles the property to the following uses without legislative approval under Article 3-4.12.2:

- *Accessory buildings*
- *Active and Passive Recreation and Recreational Facilities*
- *Banks and savings and loan offices*
- *Broadcasting studios and offices*
- *Business and office supply establishments*
- *Cabinet, upholstery, and furniture shops*
- *Cafeteria or snack bar for employees*
- *Clinics, medical or dental*
- *Commercial uses constituting up to 15% of permitted site or building area*
- *Motion picture studio*
- *Nurseries and greenhouses*
- *Offices- business, professional, or administrative*
- *Off-street parking and loading subject to Article 7*
- *Open space subject to Article 9*
- *Printing, publishing, and engraving establishment; photographic processing; blueprinting; photocopying; and similar uses*
- *Private club, lodge, meeting hall, labor union, or fraternal organization or sorority*
- *Rental service establishment*
- *Retail or wholesale sales and service incidental to a*

- Conference Centers

- Contractor's office and warehouse without outdoor storage

- Crematory

- Dwellings for resident watchmen and caretakers employed on the premises

- Employment service or agency

- Flex Office and Industrial uses

- Health and Fitness Facilities

- Institutional buildings

- Janitorial service establishment

- Laboratories, research, experimental or testing, but not testing explosives, rockets, or jet engines

- Light manufacturing uses which do not create danger to health and safety in surrounding areas and which do not create offensive noise, vibration, smoke, dust, lint, odor, heat, glare, or electrical impulse than that which is generally associated with light industries

- Mobile Food Vendors subject to Article 9-24

- Monument sales establishments with incidental processing to order but not including shaping of headstones

permitted manufacturing, processing, storing, or distributing use

- Rug and carpet cleaning and storage with incidental sales of rugs and carpets

- Security service office or station

- Sign fabricating and painting

- Signs, subject to Article 6

- Studios

- Transmission and receiving towers of height not exceeding 125'

- Utilities related to and necessary for service within the Town, including poles, wires, transformers, telephone booths, and the like for electrical power distribution or communication service, and underground pipelines or conduits for local electrical, gas, sewer, or water service, but not those facilities listed as requiring a special use permit

- Wholesale establishment, storage warehouse, or distribution center. Furniture moving.

This application is for a permissible use by special use permit upon approval by the Town Council under the Town of Warrenton Zoning Ordinance Article 3-4.12.3 for a data center in the Industrial District.

Noise

The Applicant provided a Noise Study; however, in the October 28, 2022, submission it was stated the report is a preliminary draft. The Town's Zoning Ordinance Article 9-14 governs the noise regulations. It contains the following performance standards:

9-14 Performance Standards for All Non-Residential Uses

9-14.1 Performance Standards. Performance standards for each non-residential use will be in conformance with standards adopted by the Town Council and in no case shall standards relative to water, air, sound, and land pollution control be less than those standards adopted by the Virginia Department of Health, the Virginia Water Control Board, and the Virginia Air Pollution Control Board.

9-14.2 The sound pressure level of sound radiated from an establishment, measured at the lot line of the site thereof that is the nearest thereto, shall not exceed the values in any octave band of frequency that are specified in Table 9-1 below, or in Table 9-1 as modified by the correction factors set forth in Table 9-2. The sound pressure level shall be measured with a sound level meter and an associated octave band analyzer conforming to standards prescribed by the American National Standards Institute.

Table 9-1 *Maximum Permissible Sound Pressure Levels Measured* *re 0.0002 dyne per CM²*		
Frequency Band *Cycles per Second*	*Along Residential District Boundaries – Maximum Permitted Sound Level In Decibels*	*At Any Other Point on the Lot Boundary – Maximum Permitted Sound Level In Decibels*
63	*64*	*72*
125	*60*	*70*
250	*54*	*65*
500	*48*	*59*
1000	*42*	*55*
2000	*38*	*51*
4000	*34*	*47*
8000	*30*	*44*

Table 9-2 *Correction Factors*	
Condition	*Correction in Decibels*
On a site contiguous to or across a street from the boundary of any R-district established by this chapter.	*Minus 5*
Operation between the hours of 10:00 p.m. and 7:00 a.m.	*Minus 5*
Sound of impulsive character (e.g., hammering)	*Minus 5*
Sound of periodic character (e.g., sawing)	*Minus 5*
Tone (e.g., hum or screech)	*Minus 5*
Sound source operated less than:	
20% in any one hour period	*Plus 5[1]*
5% in any one hour period	*Plus 10[1]*
1% in any one hour period	*Plus 15[1]*

1. Apply only one of these corrections. All other corrections (including any one of the footnoted) are cumulative.

Staff Findings

The Applicant submitted a Zoning Determination to be able to interpret the Zoning Ordinance correctly for their noise analysis. This determination, per State Code, must be completed by January 16, 2023. Therefore, the Applicant is offering to agree to a Condition of Approval that requires a sound study demonstrating the operation of the data center meets the requirements of the Zoning Ordinance as a condition of approval of a Site Plan. The Applicant further agreed to a condition to conduct a sound study one month after the use commences to demonstrate compliance. If the use does not comply, the Applicant is required to reach compliance within 180 days. Staff finds that the proposed Conditions of Approval provide assurances that the use must meet the Zoning Ordinance prior to Site Plan approval.

Lights

The Zoning Ordinance states all lighting must be full cut-off and cast no glare on adjacent properties or on the public right-of-way. Intensities should not exceed 1.0-foot candles upon adjoining streets, commercial, and industrial properties and shall not exceed 0.5-foot candles upon adjoining residential and institutional properties (Article 9-8.6.3).

Staff Findings

All lighting requirements are required to be met under Article 9-8 at time of Site Plan Development submission. Staff cannot comment on lighting at this time as the Applicant has not provided specific lighting information. However, the draft Conditions of Approval agreed to by the Applicant state all lighting provisions will meet the requirements of §9-8, all exterior lighting will utilize LED, designed with cutoff and fully shielded fixtures, all building mounted lighting will be maximum height of 25', lights will be dimmed to 50% output between 11 PM and dawn, and parking lot lights will be a maximum height of 20'.

Building Design and Elevations

The Applicant presented at the October 18, 2022, Planning Commission work session new elevations. The Town of Warrenton Zoning Ordinance Article 9-26.1.F.1 states building facades for data centers shall include at least two of the following design elements:

- Change in building height.
- Buildings set-backs or recesses.
- Fenestration (25% minimum).
- Change in building material, pattern, texture, or color.
- Use of accent materials.

The Applicant is requesting, per Zoning Ordinance Article 9-26.1.D, to have Town Council approve a building height two feet higher than the allowed 35.'

Staff Findings

The Applicant agreed to condition the October 28, 2022 "Illustrative Elevations;" however the submittal does not include a visual from Lee Highway – the Town's gateway. Therefore, staff is proposing further design conditions specific to the building orientation to Lee Highway.

Landscaping and Tree Buffers

The Town of Warrenton Zoning Ordinance Article 9-26.1.I includes additional landscaping requirements for data centers, beyond Article 8 Landscaping Requirements. This includes any portion of the data center visible from a park or adjoining/across the street from a residential district to be screened by vegetation consisting of a double staggered row of evergreen trees planted 15 feet on center. A three-foot berm with a double staggered row of shrubs on ten-foot center may be used in place of the double staggered row of evergreen trees.

Staff Findings

The SUP Plan provides landscaping calculations that meet minimum requirements for parking and canopy. Additional information will need to be provided at time of Site Development Plan submission showing conformance with landscape species type and height requirements and minimum buffer requirements under Article 9-26. Existing vegetation is shown as to be utilized for some of the buffer requirements. No waivers of landscaping requirements have been requested. While the SUP Plan indicates a 100' buffer and tree save area, the Tree Survey report provided by the Applicant indicates a large number of trees to be removed along Blackwell Road. This report has not been updated with the October 28, 2022 submission. Staff has requested the Applicant consider a larger tree save area along Blackwell Road and adjacent to the car dealership. Another concern of staff is where the electrical lines will access the site. Dominion indicated their practice is to underground distribution lines in roads or access roads where feasible. If it is determined not feasible, an easement with no vegetation planted above it will be required to access the site. Finally, the Journey Through Hallowed Ground National Scenic Byway includes a landscape plan for the Living Legacy Project with identified tree and shrubs (e.g. red cedars, red maples, red buds, etc). Plantings along the JTHG NSB corridor are encouraged to incorporate these species as VDOT did for the interchange over US29 to Laurel Ridge Community College.

D. Electrical Power Needs

The Applicant has stated several times the use may commence on the existing power; however, it will need additional power to become fully operational. As such, the Applicant submitted a "load request" to Dominion Energy. This triggered a lengthy, and separate, review process by that company that is required to explore multiple options. Dominion has held community meetings and continues its review. At the time of the writing of this analysis, Dominion is scheduled to provide Fauquier County Board of Supervisors with an update on November 10, 2022. This process is outside of the Town and outside of the Town Council decision.

What is under consideration is how utility lines are implemented within Town boundaries. Likewise, sub-stations within the Town boundaries require Special Use Permits. However, this SUP application is specific to a data center use. The Applicant agreed to condition no sub-station will be located on the property and to offer to fund the undergrounding of utility lines from any future sub-station to the use.

Staff Findings

The Zoning Ordinance Article 9-26.1.C requires all utility lines between a sub-station and data center will be placed underground. If a future sub-station was determined by Dominion to be located within Town boundaries, it would require a separate SUP application. If Dominion determines that a future sub-station is located outside of Town boundaries, then it will fall under the purview of the jurisdiction the sub-station would be located. Regardless, all utility lines from the sub-station to the data center are required to be placed underground within the Town limits.

Public Works and Utilities will require careful planning and approval of the location of these underground facilities so as not to interfere with the provision of water, sanitary sewer and storm sewer facilities required for this property and offsite properties in the area where those underground power facilities are proposed. This is critical for sanitary and storm sewers that are typically gravity systems and are typically constrained by the vertical elevation of surface features.

E. Transportation & Circulation Analysis

Transportation is reviewed and regulated with the standards imposed by the Public Facilities Manual and Virginia Department of Transportation (VDOT). The bounding roads for the proposed parcel are Blackwell Road that is designated as a signature street; Route 17 is a limited access freeway/expressway; and the eastern end of Lee Highway is a principle arterial gateway. The Applicant states the use will generate "very little traffic" in the Statement of Justification. The full buildout is anticipated to be approximately 52 employees with a maximum of 32 employees at any given time.

The gateway into Town is the subject of a VDOT Pipeline Study and a Town of Warrenton 2022 Smart Scale application for a roundabout. Development of this site has proven problematic in the past for interested parties due to constraints that prevent transportation improvements without extensive investment.

The Applicant is proposing a single access to the site off Blackwell Road, closing the existing access point off Blackwell Road once construction is completed, and a five-foot sidewalk along the frontage of Blackwell Road. There is to be no access on to Lee Highway resulting in no additional conflict points at the entrance of Town. The site will have a 24 hour a day gated security with no public access.

Staff Findings

The proposed traffic generation for this use is less than other potential by-right industrial uses. The Applicant agrees to condition no access on to US Routes 29 nor 17. The Applicant is further asking for a reduction in the Town of Warrenton Zoning Ordinance required 22 loading spaces on site for a traditional industrial use. The Applicant is providing a five-foot-wide sidewalk along the frontage of Blackwell Street where none currently exists.

F. Environmental Analysis

Development within the Town of Warrenton is held to federal, state, and local regulations or standards including, but not limited to:

- Virginia Stormwater Management Program (VSMP) Regulations
- Article 3-5.1 Floodplain District (FPD)
- Article 4 Site Conservation Manual (SCM)
- Article 5 Stormwater Management (SWM)
- Article 10 Site Development Plan (SDP)
- Commonwealth of Virginia Erosion and Sediment Control (ESC) Law
- Virginia Erosion and Sediment Control Handbook (VESCH)
- Department of Environmental Quality (DEQ) Regulations

The Applicant submitted a Geotechnical Engineering Analysis produced by ECS Mid Atlantic, LLC dated August 15, 2022. This document conducted field and lab testing, design recommendations, and site construction recommendations. The report details a proposed retaining wall on the northeast side of the

site to expose a maximum of six feet. Page 8 of the report characterizes the subsurface as being located within the Central Blue Ridge Anticlinorium. Based on the USGS Geological Map of Virginia the site is within the Catoctin Formation – Metabasalt soils. The groundwater observations found groundwater was encountered in four of the 20 borings. Page 29 Item 5.2.3 indicates weathered rock was encountered. Rock excavations will be required for mass grading and installation of deep utilities with the likelihood that blasting and/or hoe-ramming will be required for below auger refusal depths.

The Applicant also submitted a grading plan produced by Bohler dated October 28, 2022, and a tree survey conducted by TNT Environmental dated April 5, 2022.

Grading plan, SWM, BMP, aeration condition, permeable pavers, tree save, underground utilities for this project or the substation, shall not interfere with the surface or subsurface features of the floodplain for that tributary.

Staff Findings

In general, the following measures should be incorporated to the maximum extent possible to ensure that the development of the data center is done in a sustainable manner that is consistent with the goals of the Town:

- Apply best practices for erosion control.
- Minimize land disturbance and maximize on-site tree preservation.
- Reduce the heat island effect by minimizing impervious areas and enhancing the landscaping.
- Reduce, control, and treat surface runoff through effective stormwater practices that treat the quantity and quality of runoff to comply with the Town's Municipal Separate Storm Sewer System (MS4) Stormwater Requirement and Stormwater Management Ordinance.
- Use Best Management Practices (BMP), per Virginia Stormwater BMP Clearinghouse, to meet water quality and quantity requirements.
- Incorporate permeable paving in parking areas.
- Protection of surface and groundwater quality.
- Comply with all applicable State and Federal regulations regarding spill prevention and control requirements.
- Comply with all applicable State and Federal requirements and regulations regarding wetlands preservation and mitigation.

G. Community Facilities Analysis

Public community facilities in the Town are provided by the Town, Fauquier County, and other public groups for the benefit of all residents. The availability and quality of these facilities, that include, schools, libraries, hospitals, parks, police and fire and rescue services, are evaluated when people are considering moving into the Town or nearby area. The provision of these facilities adds to the desirability of living in the Town.

Water and Sewer

The Town's Water and Sewer Capacity Evaluation of 2015 anticipated water and sewer demand of approximately 23,500 gallons per day. Per the letter provided by Mr. John Foote, Esquire, Walsh, Colucci, Lubeley, & Walsh, dated September 9th, the proposed use will require the following:

1. Domestic Water Use of: 190.5 GPD
2. Humidification of: 190.1 GPD

Total Daily Use Committed by the letter: 380.6 GPD

The initial charging of the Air-Cooling System will require 19,000 gallons of water. However, this will not create a daily demand on water use since the system is a closed system to assist with the cooling of air, such as an air conditioning system.

The Town of Warrenton Zoning Ordinance Article 9-26.B states data centers shall utilize recycled water for air chillers, in conjunction with using recycled water, for cooling purposes. Potable water is not permitted to be used for cooling.

Staff Findings

The initial charging of the air-cooling system will not create an excess daily demand on water; therefore, the average demand will not put a burden on the Town water system. The domestic water use will be determined by the number and types of bathroom fixtures, which are not provided at this time. Based on the commitments above, wastewater generation will not create an issue to the Town's wastewater infrastructure.

In regards to other public infrastructure, undergrounding of the power lines will need careful considerations and approval so as not to interfere with the water, sanitary sewer, and storm sewer facilities required for this site and off-site properties.

Emergency Services and Police

The proposed data center will be a highly secured site with guard gate security personnel 24 hours a day, security fencing surrounding the site, and a patrolled trail. The Applicant stated on page 9 of the October 28, 2022, letter to Denise Harris, Planning Manager, from the Applicant's representative John Foote that, "The security that will be provided will benefit the surrounding area…Compared to other uses it will not increase the burden of local law enforcement."

The Applicant has agreed to conditions that require coordination with the Town and Emergency Services through training, a designated point of contact, and abiding to all federal and state compliance requirements.

Staff Findings

The Town of Warrenton Police Department state the proposed data center is in a unique location that effectively insulates it from the rest of the Town. From a public safety perspective, the impact to the citizens will mostly begin and end at the entry and exit point on Blackwell Road.

H. Economic & Fiscal Analysis

The Town and Fauquier County both collect real estate and business personal property tax. The Fauquier County Commissioner of the Revenue serves as the assessor for all real and personal property located in the Town.

- Real estate is reassessed every four years.
- Business personal property assessments are updated annually. Businesses are required to file an annual declaration of business personal property with the Commissioner's office. Assets are reported at their original cost and the Commissioner's office applies a depreciation factor based on the year that the asset was acquired by the business.

- Tax rates are set by the governing bodies as part of the annual budget process. Current rates per $100 of assessed value are shown in the chart below.

Jurisdiction	Real Estate	Business Personal Property
Fauquier County	$0.903	$3.65
Town of Warrenton	$0.0401	$1.00

During the construction phase, the Town will collect Business, Professional, and Occupational License taxes from the contractors working on the construction of the building. Contractors are assessed at a rate of $0.085 per $100 of gross receipts.

There currently are no similar businesses located in the Town upon which to base a comparison for a fiscal analysis. While real estate assessments are public, personal property assessments are not. Per Code of Virginia §58.1-3, local tax officials are prohibited from divulging any information acquired with respect to, "the transactions, property, including personal property, income or business of any person, firm or corporation." As such, other jurisdictions are unable to provide fiscal information on similar businesses.

In the October 28, 2022, letter to Denise Harris, Planning Manager, from the Applicant's representative John Foote, there is a statement on page 10 that, "The Applicant will invest approximately $550,000,000 in this facility and thus in the community."

Staff Findings

The Applicant indicated in the Statement of Justification that the use will "materially grow its non-residential tax base…data centers produce a substantial revenue stream." The Applicant goes on to state "Amazon pays taxes on all of its data centers, principally consisting of an increased valuation of real property on which the facility sits, and business personal property taxes." Due to the fact the property is vacant, staff finds these statements to be true if the use is permitted.

II. Materially Relevant Data Center Considerations

This section of the report is intended to identify issues raised during the review of the proposal, which are not directly related to the policies, goals, or action strategies, but which are materially relevant to the Town's responsibilities in considering land use issues. The materially relevant issues in this case are as follows:

- Town Council Zoning Text Amendment: July 11, 2017, Town Council initiates a Zoning Ordinance Text Amendment to research industrial areas and the possibility of adding data centers. The ensuing initiation was not pursued with the Planning Commission nor Town Council. On April 13, 2021, Town Council again initiated a Zoning Ordinance Text Amendment to allow for data centers in the I – Industrial District with the approval of a Special Use Permit. On May 25, 2021, the Planning Commission held a Work Session to discuss the Zoning Ordinance Text Amendment (ZOTA 2021-0321) for allowance of data centers in the I District with a Special Use Permit. Two subsequent Planning Commission Public Hearings were held on June 15, 2021, and July 20, 2021, resulting in a vote 5-1 to recommend approval of the Zoning Ordinance Text Amendment. On August 10, 2021, Town Council held a Public Hearing for ZOTA 2021-0321. Two Warrenton residents and one non-resident spoke during the Public Hearing. Town Council voted unanimously (7-0) to approve ZMA 2021-0321.
- Dominion Energy Virginia (Dominion): According to the Dominion Energy website, in April 2022, Dominion Power initiated a public notification to address increasing demand for energy and

infrastructure needs. This process includes desktop review of existing features and constraints, such as culturally sand environmentally sensitive lands, residences, schools, and parks. Dominion explores co-locating along existing corridors like roads and other linear easements. The process includes public outreach. Dominion's approval process for energy infrastructure follows regulatory procedures with authority resting with the State Corporation Commission (SCC) that requires certification of transmission lines at or above 138 kilovolts (kV). Additionally, the PJM Interconnection is the regional transmission organization that coordinates the movement of wholesale electricity in Virginia, Delaware, Illinois, Indiana, Kentucky, Maryland, Michigan, New Jersey, North Carolina, Ohio, Pennsylvania, Tennessee, West Virginia, and Washington, D.C. At the time of the writing of this Staff Analysis, Dominion is indicating the intent to submit to the SCC in the first quarter of 2023. The SCC review process may take a year or longer. Local permitting requirements commence after the SCC process concludes.

- Fauquier County Board of Supervisors: The Board of Supervisors Work Sessions with Dominion Energy providing updates regarding energy needs and infrastructure occurred on the following dates: April 14, 2022; June 9, 2022; May 12, 2022; September 8, 2022; July 14, 2022; August 11, 2022, and November 10, 2022.

III. Modifications/Waivers

1. A two-foot increase allowance for an eight-foot fence is requested. The maximum by-right fencing height allowed is six feet, as noted in Article 2-19 of the Zoning Ordinance.
2. A decrease in required loading spaces is requested. Twenty-two spaces are required per Article 7-18 and the Special Use Permit Plan is providing one loading space.
3. A building-height waiver allowance to increase two feet is requested. The maximum building height permitted is 35 feet (Article 9-25.1 (D)(1)) and the Applicant is requesting a modification to permit a building height of 37 feet. The setbacks to be provided by the Applicant exceed the minimum setback required for the additional building height. The Comprehensive Plan called for building heights up to 65' or 75' with a Special Use Permit in this location of the New Town Character District.

IV. ZO Article 11-3.10.3: Evaluation Criteria for Special Use Permit Applications

Standard	**Analysis**
1. Whether the proposed Special Use Permit is consistent with the Comprehensive Plan.	The Comprehensive Plan includes goals and policies for Historic Resources, Community Facilities, Housing, Open Space and Environment, Transportation, Economic and Fiscal Resilience, and Character District Plans. The New Town Character District envisions a mix of uses and a major employer for this part of the Town.
2. Whether the proposed Special Use Permit will adequately provide for safety from fire hazards and have effective measures of fire control.	The project is required to meet all building and safety codes at time of construction. The Conditions of Approval outline federal, state, and local coordination

	and compliance regulations.
3. The level and impact of any noise emanating from the site, including that generated by the proposed use, in relation to the uses in the immediate area.	A Zoning Determination has been requested by the Applicant on October 18, 2022. Compliance with the Noise Ordinance cannot be confirmed before the Zoning Determination has been completed. The Conditions of Approval call for the Applicant to demonstrate compliance at time of Site Plan and again after the use is operational. Conditions also include a process and timeline for compliance if at any time the use fails to comply in the future.
4. The glare or light that may be generated by the proposed use in relation to uses in the immediate area.	All lighting must meet the requirements under Article 9-8 at time of Site Development Plan submission. Lighting must be full cut-off and, "shall not cast glare upon adjacent property or upon a public right of way. The intensity at adjoining streets and commercial or industrial properties shall not exceed 1.0-foot candles, and the intensity at adjoining residential or institutional property boundaries shall not exceed 0.5-foot candles." No waivers of lighting requirements have been requested (Article 9-8.8). Further the Applicant agreed to a condition addressing maximum heights of lights and dimming to 50% between 11 PM and dawn.
5. The proposed location, lighting and type of signs in relation to the proposed use, uses in the area, and the sign requirements of this Ordinance.	The Applicant stated there are no signs proposed nor required for the use, aside from addressing numbers.
6. The compatibility of the proposed use with other existing or proposed uses in the neighborhood, and adjacent parcels.	The use adjacent to commercial uses, with the nearest residential uses currently located over 400 feet away on Oak Springs Drive. All landscape buffering requirements must be met at time of Site Development Plan submission.
7. The location and area footprint with dimensions (all drawn to scale), nature and height of existing or proposed buildings, structures, walls, and fences on the site and in the neighborhood.	An SUP plan has been provided showing the general location of the existing and proposed structures. • The SUP plan shows an existing fence noting maximum height of 8'. • The proposed 37' tall single-story data center building is 220,200 square feet. A 6' retaining wall is proposed at the Northeast corner of the site. There is a proposed guard booth and cargo screening building at the entrance to the site.

8. The nature and extent of existing or proposed landscaping, screening and buffering on the site and in the neighborhood.	The SUP plan shows existing tree preservation areas located throughout the site and include approximately 122,000 square feet of existing tree canopy. Additional landscaping is proposed throughout to help screen the use. Some landscaping is proposed along Blackwell Road around the entrance to the site.
9. Whether the proposed Special Use Permit will result in the preservation or destruction, loss or damage of any significant topographic or physical, natural, scenic, archaeological or historic feature.	The Applicant must meet all local, state, and federal requirements at time of Site Development Plan submission associated with environmental impacts, wetlands, etc. A Phase 1 investigation is required at time of Site Development Plan submission. Wetlands have been noted on the SUP Plan. The Virginia Department of Historic Resources database does not list any archeological or historic resources on the proposed site.
10. The timing and phasing of the proposed development and the duration of the proposed use.	A single phase is proposed with construction lasting 18 months.
11. Whether the proposed Special Use Permit at the specified location will contribute to or promote the welfare or convenience of the public.	The Applicant is proposing sidewalk extension on Blackwell Road.
12. The traffic expected to be generated by the proposed use, the adequacy of access roads and the vehicular and pedestrian circulation elements (on and off-site) of the proposed use, all in relation to the public's interest in pedestrian and vehicular safety, efficient traffic movement and access in case of fire or catastrophe.	52 maximum employees are proposed with 32 employees on site at any one time. Visitors to the site are proposed average 5-10 persons per day. The projected traffic would have minimal impact on Blackwell Road with the internal circulation designed to accommodate this need.
13. Whether the proposed use will facilitate orderly and safe road development and transportation.	The proposed SUP Plan provides adequate parking on site for employees and company vehicles per Article 7-7 of the Zoning Ordinance. Sidewalk connections are shown on the SUP Plan as to be provided along Blackwell Road and within the property from to Blackwell Road. The proposed Data Center will be a secured site restricting access to the site. A continuous internal roadway is proposed from the Blackwell Road entrance following around the building and back to the entrance. A continuous sidewalk around the entirety of the building is additionally proposed.
14. Whether, in the case of existing structures proposed to be converted to uses requiring a Special Use Permit, the structures meet all code	There are no existing structures currently on site other than some fencing.

requirements of the Town of Warrenton.	
15. Whether the proposed Special Use Permit will be served adequately by essential public facilities, services and utilities.	Public Works Department finds the initial charging of the air-cooling system will not create an excess daily demand on water and the average demand will not put a burden on the Town water system. The domestic water use will be determined by the number and types of bathroom fixtures, which are not provided at this time. The wastewater generation will not create an issue to the Town's wastewater infrastructure.
16. The effect of the proposed Special Use Permit on environmentally sensitive land or natural features, wildlife habitat and vegetation, water quality and air quality. The location of any major floodplain and steep slopes.	The site will be graded and cleared, except the buffers. A Geotechnical Report, Grading Plan, and Tree Survey were submitted with the application. Staff encourages the Applicant to consider best management practices as the Applicant will be required to follow local, state, and federal standards at Site Plan and construction.
17. Whether the proposed Special Use Permit use will provide desirable employment and enlarge the tax base by encouraging economic development activities consistent with the Comprehensive Plan.	The Applicant states the proposal invests approximately $550,000,000 which is an indirect investment into the community. Opportunity for employment and taxable revenue are also mentioned as economic benefits.
18. The effect of the proposed Special Use Permit use in enhancing affordable shelter opportunities for residents of the Town, if applicable.	Not applicable.
19. The location, character, and size of any outdoor storage.	No outdoor storage is proposed.
20. The proposed use of open space.	The Applicant states all open space on the property will be used for security fencing or left as open space following construction.
21. The location of any major floodplain and steep slopes.	No floodplain is located on site. A steep slope on the north-eastern end of the property will require a 6' retaining wall.
22. The location and use of any existing non-conforming uses and structures.	The parcel is considered vacant but has been utilized for some farming which is a non-conforming use.
23. The location and type of any fuel and fuel storage.	50,000 gallon above-ground fuel tanks are proposed on the northern end of the site.
24. The location and use of any anticipated accessory uses and structures.	A guard booth is shown at the entrance to the property.
25. The area of each proposed use.	Refuse storage shown on north side of the building. All refuse storage must be screened.

26. The proposed days/hours of operation.	The facility will operate twenty-four hours a day, each day of the year.
27. The location and screening of parking and loading spaces and/or areas.	Proposed landscaping is shown around the parking spaces. A waiver is requested for loading from the required 22 spaces to one.
28. The location and nature of any proposed security features and provisions.	The SUP plan shows a guard booth at the entrance to the site and fencing around the perimeter. The Applicant is requesting an increase of the fence height from six feet to eight feet.
29. The number of employees.	52 employees are projected at full buildout of the data center. The Applicant states an average of 32 present on site at any given time.
30. The location of any existing and/or proposed adequate on and off-site infrastructure.	The Applicant is proposing to underground all power needs from an off-site power distribution facility. A stormwater management pond is proposed on the southern edge of the parcel.
31. Any anticipated odors which may be generated by the uses on site.	None proposed.
32. Refuse and service areas.	Refuse storage shown on north side of the building. All refuse storage must be screened.

V. Draft Conditions of Approval

SPECIAL USE PERMIT CONDITIONS
Applicant: AMAZON DATA SERVICES, INC. (the "Applicant")
Owner: AMAZON DATA SERVICES, INC.
SUP2022-0003, Amazon Data Center
PIN # 6984-69-2419 (the "Property")
Special Use Permit Area: ± 41.79 acres
Zoning: INDUSTRIAL (I)
Date: November 15, 2022

In approving a Special Use Permit, the Town Council may impose such conditions, safeguards, and restrictions as may be necessary to avoid, minimize, or mitigate any potentially adverse or injurious effect of such special uses upon other properties in the neighborhood, and to carry out the general purpose and intent of this Ordinance. The Council may require a guarantee or bond to ensure that compliance with the imposed conditions. All required conditions shall be set out in the documentation approving the Special Use Permit (SUP). These conditions shall run with the land so as to bind future landowners. Any party or officer identified by title shall mean and include any successor to that person or entity's powers or responsibilities.

1. Site Development: The Property shall be developed in substantial conformance with these conditions and the Special Use Permit Plan entitled, "Special Use Permit Plan for Amazon Data Services, Inc.," prepared by Bohler Engineering, dated July 10, 2022 and revised through October 28, 2022, and consisting of 3 sheets, subject to minor modifications approved by the Town in connection with final Site Plan review and final engineering, and except as otherwise provided in these Conditions (the "SUP Plan"). The building and other structures to be constructed on the Property are referred to herein as the "Facility."

2. Use Parameters. Use Limitation: The use approved with this SUP shall be limited to a data center as set forth in § 3-4.12.3 of the Town of Warrenton Zoning Ordinance.

3. Electric Substation: There shall be no electric substation constructed on the Property.

4. Undergrounding of Electrical Lines from a Substation to the Facility: Pursuant to Warrenton Zoning Ordinance § 9-26.1(C), the distribution lines from the off-site substation serving the data center are required to be underground. Applicant will ensure payment of the undergrounding of these distribution lines with the utility company in accordance with its requirements.

5. Building Design and Elevations:

    a. The architectural design of the data center shall substantially conform to the elevations entitled "Illustrative Elevations," shown on Sheet 6 of the SUP Plan. The Elevations shall be subject to minor modification approved by the Town in connection with Site Plan review. Additional changes to the design and materials may be made provided that any such changes are approved by the Planning Director prior to the issuance of a building permit.

    b. At time of Site Plan, the Applicant shall provide all elevations for the building in compliance with the Town of Warrenton Zoning Ordinance Article 9-26.1.F. In

addition, the Applicant shall orient the building along Lee Highway to reduce the visible impact using architectural details such as a perceived reduction in massing and scale, fenestration and windows, exterior colors and materials, overhangs, canopy or porticos, recesses and/or projections, arcade, raised corniced parapets, and varying roof lines.

c. The Facility shall be no greater than 37 feet in height, as that term is defined in the Town Zoning Ordinance. The mechanical equipment installed on the roof of the building shall be screened with mechanical louver screens.

6. Signage: There shall be no signage except for a street address; provided that if any further signage is sought it shall comply with applicable sign ordinance requirements.

7. Fencing: All fencing on the Property shall be as depicted on the SUP Plan, and shall not exceed 8 feet in height. Security fencing shall be the style and type as shown on Page 2 of the Special Use Permit Plan produced by Bohler dated July 10, 2022 and updated through October 28, 2022. Chain link fencing, with or without slatted inserts, and/or barbed wire or other similar visible deterrence devices shall not be permitted where visible from the public.

8. External Fuel Storage Tanks: The Applicant shall install above-ground double-walled fuel tanks that meet the definition of secondary containment under the DEQ LPR-SRR-2019-03 - Storage Tank Program Compliance Manual, Volume V - AST Guidance, and pursuant to 40 CFR Part 112, Section 8.1.2.2, in the general locations shown on the SUP Plan, for the storage of fuel supplies necessary to maintain an Uninterruptible Power Supply in the event of a loss of external electrical power.

9. Parking: The Applicant shall provide not fewer than 56 parking spaces as shown on the SUP Plan, one of which shall be a loading space.

10. Site Maintenance: The Applicant shall maintain the Property in a clean and orderly manner, and shall provide an on-site masonry screened refuse container station in the location generally shown on the SUP Plan.

11. Access: Access to the site shall be provided as shown on the SUP Plan, subject to changes approved by the Town in consultation with the Virginia Department of Transportation. Mountable curbs shall be provided as required by the Town. There shall be no access from either Routes 17 or 29.

12. Access for Town Staff: The Town is obliged to report annually to the Virginia Department of Environmental Quality as to the ongoing operation and maintenance of stormwater management facilities installed on the Property. The Applicant shall provide the Town Manager with an on-site employee who shall serve as the sole point of contact for arranging access to the Property for the Town's conduct of such inspections, and shall keep that point of contact current at all times.

13. Water & Public Sewer Connection: The Property shall connect to public water and public sewer at the Applicant's expense. The Applicant shall limit its water use to internal domestic uses such as service to bathrooms, kitchens, humidification, and external irrigation. It shall not use public water for the general purposes of cooling the data center, but may use it for the initial charging of

the cooling system. It shall consult with the Director of the Department of Public Works and Utilities as to the scheduling of the initial charging of the system so as to minimize the impact on the Town's water system.

14. Emergency Services:

    a. The Applicant shall coordinate training between the Town's fire and rescue companies and those other companies and departments that have experience with data centers after commencement of operations at the Property and when convenient for the Town's first responders. Furthermore, upon commencement of operations at the Property, the Applicant will provide the Town's first responders its "Data Center Response Manual" for use in training for emergencies at its Facility, and shall assist in advising those first responders how to implement its provisions.

    b. The Applicant shall assure that the water line systems at the Facility have sufficient fire flows, as determined by the Town Fire Marshal.

    c. The Applicant shall maintain Facility security personnel 24 hours a day, and each day of the year.

15. Pedestrian access: The Applicant shall construct a five-foot sidewalk on the east side of Blackwell Road along its frontage on that Road.

16. Noise: The Applicant shall provide a sound study prepared by a qualified party or company approved by the Director of Community Development that demonstrates the operation of the data center will meet the requirements of § 9-14.2 of the Town of Warrenton Zoning Ordinance relating to noise, as a condition of approval of a site development plan. In addition, the Applicant shall conduct a separate sound study one month after commencement of business operations to ensure compliance with the aforesaid Section. If noise levels at any point where a measurement is required by the Ordinance to be taken do not so comply, the Applicant shall forthwith undertake such further mitigation measures as are required to achieve compliance within a reasonable time not to exceed 60 days, or, if 60 days is insufficient to achieve compliance, the Applicant shall promptly begin and diligently pursue mitigation until compliance has been achieved.

    For reference, the Town of Warrenton Zoning Ordinance § 9-14.2 states:

    9-14.2 The sound pressure level of sound radiated from an establishment, measured at the lot line of the site thereof that is the nearest thereto, shall not exceed the values in any octave band of frequency that are specified in Table 9-1 below, or in Table 9-1 as modified by the correction factors set forth in Table 9-2. The sound pressure level shall be measured with a sound level meter and an associated octave band analyzer conforming to standards prescribed by the American National Standards Institute.

Table 9-1 Maximum Permissible Sound Pressure Levels Measured re 0.0002 dyne per CM^2		
Frequency Band Cycles per Second	Along Residential District Boundaries – Maximum Permitted Sound Level In Decibels	At Any Other Point on the Lot Boundary – Maximum Permitted Sound Level In Decibels
63	64	72
125	60	70
250	54	65
500	48	59
1000	42	55
2000	38	51
4000	34	47
8000	30	44

Table 9-2 Correction Factors	
Condition	Correction in Decibels
On a site contiguous to or across a street from the boundary of any R-district established by this chapter.	Minus 5
Operation between the hours of 10:00 p.m. and 7:00 a.m.	Minus 5
Sound of impulsive character (e.g., hammering)	Minus 5
Sound of periodic character (e.g., sawing)	Minus 5
Tone (e.g., hum or screech)	Minus 5
Sound source operated less than:	
20% in any one hour period	Plus 5[1]
5% in any one hour period	Plus 10[1]
1% in any one hour period	Plus 15[1]

1. Apply only one of these corrections. All other corrections (including any one of the footnoted) are cumulative.

17. Lighting: The Applicant shall submit a Lighting Plan pursuant to the provisions of § 9-8 et seq. of the Town of Warrenton Zoning Ordinance in connection with its Site Development Plan. All exterior lighting shall utilize LED and be designed and constructed with cutoff and fully shielded fixtures that direct light downward and into the interior of the property and away from adjacent roads and adjacent properties. All building mounted lighting shall have a maximum height of 25', and the Applicant shall install controls on the site fixtures such that they dim to 50% output between 11 PM and dawn. Freestanding parking lot lights shall be a maximum of 20.'

18. Tree Save: The Applicant shall provide a tree preservation plan at time of Site Plan that seeks to minimize land disturbance and maximize on-site vegetation.

19. Best Management Practices: BMPs shall incorporate aeration for water retention using solar power.

20. Landscaping: The Applicant will follow the Zoning Ordinance Article. All plantings must consist of native, drought tolerant species appropriate for the Town of Warrenton climate.

21. Employment Opportunities: The Applicant shall provide outreach to qualified persons residing in the Town of Warrenton who may be interested in employment at the data center through a variety of media such as the conduct of a job fair, the inclusion of a direct link to potential opportunities on the Town website, or on other websites for the purpose. Such outreach shall be made reasonably in advance of the construction of the Project so that interested persons may make application for positions, not less than six months prior to the anticipated completion of construction.

22. Programs for Local Schools: The Applicant shall ensure coordination by the appropriate Amazon personnel with the Town of Warrenton and the Fauquier County School Division regarding the establishment and maintenance of educational programs in the K-12 grades, and with Laurel Ridge Community College, to establish and maintain workforce development programs for career pathways in data center construction and operations, and such other programs as the parties may deem mutually beneficial.

STATEMENT OF JUSTIFICATION
WARRENTON DATA CENTER SPECIAL USE PERMIT
Parcel ID 6984-69-2419-000
Owner/Applicant: Amazon Data Services, Inc.

October 28, 2022

Introduction. Amazon Data Services, Inc. (hereinafter, the "Applicant"), is the owner of property identified as Parcel ID 6984-69-2419-000, on the east side of Blackwell Road and north of Country Chevrolet. The parcel is approximately 41.793 acres in size (the "Property").

The Applicant seeks this SUP to allow the development of a data center (the "Project"). As is well known, the Council amended the Town's Zoning Ordinance on August 10, 2021, to include such a use by SUP in the I (Industrial) District, to which the land has been zoned for many years.

Land Use and Compatibility with Existing and Proposed Uses Adjacent and in the Vicinity and Economic Impact.

The Applicant seeks to build one single story structure of approximately 220,000 square feet. The structure is shown conceptually on the Special Use Permit Plan ("SUP Plan") prepared by Bohler Engineering and submitted herewith.

The Property is identified as a part of the New Town Warrenton District in the 2040 Comprehensive Plan, but, as noted, it has long been industrially zoned and has sat fallow for decades. The proposed data center will be so well-designed and sited in this location that it should be a welcome addition to the older uses that predominate on Blackwell Road from Lee Highway to the Giant Food Store. The buildings to the south of the site currently house Country Chevrolet, Sheetz, and the small retail center with the Tae Kwon Do dojo, The Cotton House, and Summit Motors. Across Blackwell is the Giant-anchored strip center. A data center is a comparable use – at the very least – to all, and will have visually less impact on its surroundings than any of them because of the ability to screen it substantially from view. The closest residence is approximately 400 feet from Blackwell Road, on Arbor Court, and the building will be set-back approximately 1,000 feet from Blackwell Road. With ample landscaping the data center will be well shielded from view from the west, and from the east as well. Given the site's importance as a gateway into the Town, the Applicant intends to screen the site with substantial landscaping to shield views of the buildings from the east and the west.

The Applicant wishes to locate in Warrenton and invest in the Town. Three of the goals of the 2040 Comprehensive Plan are to grow a strong, diversified, and resilient economy that supports residents and businesses alike, increase the employment base to allow residents to live and work in Warrenton, and to be proactive in the Town's Economic Development. The Project will have a positive economic impact. To that end, cloud services have become essential to the economy, and the construction of such centers is a capital intensive business.

Data centers are "the Cloud" that has become essential to almost every aspect of today's home and business life. The proposed SUP is consistent with the Town's economic objectives since the

approval of this SUP will materially grow its non-residential tax base. A data center produces a substantial revenue stream during construction, pays significant taxes thereafter, and the salaries of operational personnel once a center is completed will likely exceed the average salary of current County and Town residents. The Applicant's spending on equipment, construction labor and materials, utilities, security, data center employee salaries, and third-party services to build and operate data centers has had a major impact on Northern Virginia.

Amazon pays taxes on all of its data centers, principally consisting of an increased valuation of the real property on which the facility sits, and business personal property taxes.

At full buildout there will be approximately 52 employees at the Project, but only a maximum of 32 employees will be present on the Property at any given time, primarily during shift changes. Employees are comprised of engineering technicians, data center operators, security personnel, and logistics personnel. The estimated number of visitors, including vendors and subcontractors, is 5-10 persons per day on average.

Transportation Impact. During construction there will be construction traffic that will access the site from Broadview Avenue and Blackwell Road. Once in operation, however, there is very little traffic, and what there is will have no appreciable effect on existing conditions.

Impact on Community Facilities. The data center will utilize public water, and will require a connection to the Town's public sewer system. Details on this can be provided during the special use permit review process.

Stormwater management will be provided according to applicable regulations, and plans will be subject to review by the Town during site plan review.

None of these infrastructure facilities will require an expenditure of Town funds, since the Applicant will bear the cost of new infrastructure that will be needed and any upgrades to existing facilities.

The proposed development will have no adverse impact on schools, libraries, housing, or parks.

Fire, Rescue, and Police Services. The proposed development will have no significant impact upon the Police Department. The facility will be secured and surrounded by a security fence. Access to emergency service personnel will be assured as required by the new Ordinance provisions.

Site conditions. The proposed site is located to the northeast of the intersection of Lee Highway and Blackwell Road and spans a single parcel, which is mostly lawn with some wooded areas in the northwest and southeast portions, and elevations ranging from approximately 510 feet +/- along the north edge, to approximately 465 feet +/- in the northwest corner.

The site is located within the Central Blue Ridge Anticlinorium. According to the USGS Geological Map of Virginia (1993), the site is mapped within the Catoctin Formation – Metabasalt soils. This formation typically consists of grayish green to dark yellowish green, fine grained,

schistose chlorite and actinolite bearing metabasalt. The materials will initially weather into Silty and Clayey Sand and then into Silt and Clay with extensive weathering.

Height Modification. On August 10, 2021, the Town Council approved a zoning text amendment related to data centers that included a provision that it may "approve building heights greater than 35 feet during the review of the Special Use Permit. Buildings must be setback one (1) additional foot (horizontally) from the required setback line for each additional one (1) foot (vertically) greater than 35 feet. Building heights shall be in conformance with the Comprehensive Plan." The proposed building height in this case is 37 feet, but the building has been setback from all surrounding property lines sufficiently to accommodate the ordinance requirement. Because the increase is small but necessary to accommodate the facility, the Applicant respectfully requests the additional height.

Environmental Impact. In 2020, the Applicant became the world's largest purchaser of renewable energy. Its facilities are almost 4 times as energy efficient as other enterprise data centers because of its use of more efficient servers and increased server utilization for cutting carbon output by 88% versus enterprise centers that have been replaced.

SPECIAL USE PERMIT

FOR

WARRENTON DATA CENTER

LOCATION OF SITE

BLACKWELL ROAD & LEE HIGHWAY
TOWN OF WARRENTON
FAUQUIER COUNTY, VIRGINIA 20186

PARCEL ID: 6984-69-2419-000

PARCEL IDENTIFICATION TABLE

PARCEL NUMBER	OWNER	ADDRESS	AREA	CURRENT ZONE	CURRENT PLANNED LAND USE	PROPOSED PLANNED LAND USE
6984-69-2419-000	AMAZON DATA SERVICES, INC.	BLACKWELL ROAD WARRENTON, VA 20186	41.793 ACRES	INDUSTRIAL	VACANT	DATA CENTER

REFERENCES AND CONTACTS

REFERENCES
♦BOUNDARY & TOPOGRAPHIC SURVEY:
AECOM
101 RESEARCH DRIVE
COLUMBIA, SC 29203
TOPOGRAPHY CAD FILE, DATED 9/8/2021.
PROPERTY CAD FILE: "BOUNDARY", DATED 9/8/2021.

♦ARCHITECTURAL PLAN:
CORGAN
401 NORTH HOUSTON STREET
DALLAS, TX 75202
CAD FILE, DATED: 09/27/2021

GOVERNING AGENCIES
♦ TOWN OF WARRENTON
COMMUNITY DEVELOPMENT
21 MAIN STREET
WARRENTON, VA 20188-0341
CONTACT: ROB WALTON, DIRECTOR OF COMMUNITY DEVELOPMENT
PHONE: (540) 347-2405

* THE ABOVE REFERENCED DOCUMENTS ARE INCORPORATED BY REFERENCE AS PART OF THESE PLANS, HOWEVER, BOHLER ENGINEERING DOES NOT CERTIFY THE ACCURACY OF THE WORK REFERENCED OR DERIVED FROM THESE DOCUMENTS, BY OTHERS.



LOCATION MAP

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SCALE: 1" = 2,000'

OWNER/DEVELOPER

AMAZON DATA SERVICES, INC.
410 TERRY AVENUE NORTH
SEATTLE, WA 98109

SHEET INDEX

SHEET TITLE	SHEET NUMBER
COVER SHEET	1
SITE DEVELOPMENT PLAN	2
LANDSCAPE PLAN	3

PREPARED BY

BOHLER

CONTACT: JOHN C. WRIGHT, P.E.

GENERAL NOTE:
IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REVIEW ALL OF THE DRAWINGS AND SPECIFICATIONS ASSOCIATED WITH THIS PROJECT WORK SCOPE PRIOR TO THE INITIATION OF CONSTRUCTION. SHOULD THE CONTRACTOR FIND A CONFLICT WITH THE DOCUMENTS RELATIVE TO THE SPECIFICATIONS OR APPLICABLE CODES, IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE PROJECT ENGINEER OF RECORD IN WRITING PRIOR TO THE START OF CONSTRUCTION. FAILURE BY THE CONTRACTOR TO NOTIFY THE PROJECT ENGINEER SHALL CONSTITUTE ACCEPTANCE OF FULL RESPONSIBILITY BY THE CONTRACTOR TO COMPLETE THE SCOPE OF THE WORK AS DEFINED BY THE DRAWINGS AND IN FULL CONFORMANCE WITH LOCAL REGULATIONS AND CODES.

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SITE CIVIL AND CONSULTING ENGINEERING
LAND SURVEYING
PROGRAM MANAGEMENT
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REVISIONS

REV	DATE	COMMENT	DRAWN BY / CHECKED BY
1	7/10/22	TOWN COMMENTS	CPH / JCW
2	9/8/22	DEVELOPER REVISIONS	CPH / JCW
3	10/28/2022	DEVELOPER REVISIONS	DSH / JCW

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NOT APPROVED FOR CONSTRUCTION

THIS DRAWING IS INTENDED FOR MUNICIPAL AND/OR AGENCY REVIEW AND APPROVAL. IT IS NOT INTENDED AS A CONSTRUCTION DOCUMENT UNLESS INDICATED OTHERWISE.

PROJECT No.: V212093
DRAWN BY: DSH
CHECKED BY: JCW
DATE: 4/13/2022
CAD I.D.: SUPP -2

PROJECT:

SPECIAL USE PERMIT

FOR

AMAZON DATA SERVICES, INC.

PROPOSED DEVELOPMENT

BLACKWELL ROAD & LEE HIGHWAY
TOWN OF WARRENTON
FAUQUIER COUNTY, VIRGINIA 20186

BOHLER
28 BLACKWELL PARK LANE, SUITE 201
WARRENTON, VIRGINIA 20186
Phone: (540) 349-4500
Fax: (540) 349-0321
VA@BohlerEng.com

COMMONWEALTH OF VIRGINIA
JOHN C. WRIGHT
Lic. No. 046960
10/28/2022
PROFESSIONAL ENGINEER

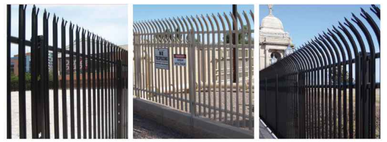
SHEET TITLE:

COVER SHEET

SHEET NUMBER:

1

REVISION 3 - 10/28/2022



SECURITY FENCE DETAIL

NOT TO SCALE

NOTE: SECURITY FENCE TO BE MAXIMUM OF 8' IN HEIGHT.

LINE TABLE		
Line #	Direction	Length
L1	S59° 17' 16"E	704.19
L2	S67° 44' 23"E	351.55
L3	S62° 10' 23"E	317.98
L4	S58° 03' 44"E	312.76
L5	S36° 58' 09"E	345.35
L6	S08° 17' 38"E	118.52
L7	S20° 16' 33"W	240.65
L8	S64° 31' 25"W	250.33
L9	N83° 52' 48"W	237.26
L10	S84° 21' 46"W	256.40
L11	N83° 12' 27"W	399.24
L12	N80° 20' 43"W	200.25
L13	N87° 01' 18"W	235.73
L14	N09° 41' 34"E	452.69
L15	N86° 15' 23"W	437.16
L16	N14° 49' 03"E	74.25
L17	N19° 41' 23"E	327.81
L18	N65° 44' 35"E	51.74

CURVE TABLE					
CURVE #	LENGTH	RADIUS	DELTA	CHORD BEARING	CHORD DISTANCE
C1	25.95	1926.77	0°46'18"	N3°26'25"E	25.95
C2	221.38	1115.28	11°22'24"	N10°58'02"E	221.02
C3	3.88	1120.92	0°11'54"	N20°40'20"E	3.88
C4	325.02	1170.87	15°54'17"	N11°44'49"E	323.98

GENERAL NOTES:

1. THIS PLAN IS BASED ON THE FOLLOWING:
   CAD FILES PREPARED BY AECOM
   DATED: 9/8/2021
   CAD FILES PREPARED BY CORGAN
   DATED: 9/27/2021
2. ZONING DATA:
   EXISTING ZONE: INDUSTRIAL - I
3. USES:
   EXISTING USE: VACANT
   PROPOSED USE: DATA CENTER WITH SPECIAL USE PERMIT
4. SITE AREA
   PIN : 6984-69-2419-000 41.793 ACRES
5. SITE WILL BE SERVICED BY TOWN WATER AND SEWER.
6. TOPOGRAPHIC INFORMATION:
   HORIZONTAL DATUM: NAD 83
   VERTICAL DATUM: NAVD 88
7. THE PROPOSED BUILDING, DIMENSIONAL ELEMENTS, AND OTHER SITE FEATURES SHOWN ARE PRELIMINARY AND SUBJECT TO CHANGE WITH FINAL ENGINEERING.
8. FIRE DEPARTMENT CONNECTION TO BE A 4" STORZ CONNECTION AND MARKED WITH SIGNAGE.

ZONING TABULATION TABLE:

SITE INFORMATION

PIN:	6984-69-2419-000	
ZONING DISTRICT:	EXISTING - INDUSTRIAL - I PROPOSED - DATA CENTER	
LAND USE:	EXISTING - VACANT PROPOSED - DATA CENTER	
BUILDING AREA:	EXISTING - N/A PROPOSED - 220,200 SF±	
SITE AREA:	41.793 AC OR 1,820,504 SF	
BUILDING HEIGHT:	REQUIRED *35'	PROVIDED 37±

*MAY BE INCREASED BY TOWN COUNCIL
NOTE: BUILDING ROOF HEIGHT IS 37', STANDARD PARAPET HEIGHT IS 41', HIGHEST PARAPET HEIGHT IS 45', ROOF MOUNTED EQUIPMENT HEIGHT IS 56' - 57'.

LOT SIZE AND YARD SETBACK REQUIREMENTS:

MINIMUM LOT SIZE:	25 ACRES	
SETBACK REQUIREMENTS:		
FRONT YARD (W) BUILDING	REQUIRED 100'	PROVIDED 712.7±
SIDE YARD (S) BUILDING	REQUIRED 100'	PROVIDED 261.7±
SIDE YARD (E) BUILDING	REQUIRED 100'	PROVIDED 256.6'±
REAR YARD (N) BUILDING	REQUIRED 100'	PROVIDED 167.1'±

LOT COVERAGE REQUIREMENTS

	MAXIMUM	PROVIDED
PROPOSED IMPERVIOUS AREA:	75%	51%

PARKING REQUIREMENTS

DATA CENTER	REQUIRED 1 SPACE PER EMPLOYEE ON LARGEST SHIFT, PLUS 1 SPACE PER COMPANY VEHICLE ON-SITE. LARGEST SHIFT = 20 EMPLOYEES ASSUME 10 COMPANY VEHICLES TOTAL = 30 SPACES	PROVIDED 58 SPACES (2 ADA SPACES)

HATCH LEGEND

- SIDEWALK CONCRETE
- PROP BUILDING
- GRAVEL
- LIGHT DUTY ASPHALT
- HEAVY DUTY ASPHALT

LEGEND

- PROPOSED SANITARY SEWER
- PROPOSED SANITARY MANHOLE
- PROPOSED WATER MAIN
- PROPOSED FIRE HYDRANT
- LIMITS OF DISTURBANCE

100 50 25 0 100
1"= 100'

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LAND SURVEYING
PROGRAM MANAGEMENT
LANDSCAPE ARCHITECTURE
URBAN PLANNING & DESIGN
PERMITTING SERVICES
TRANSPORTATION SERVICES

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REVISIONS

REV	DATE	COMMENT	DRAWN BY / CHECKED BY
1	7/10/22	TOWN COMMENTS	CPH / JCW
2	9/8/22	DEVELOPER REVISIONS	CPH / JCW
3	10/28/2022	DEVELOPER REVISIONS	DSH / JCW

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PROJECT No.:	V212093
DRAWN BY:	DSH
CHECKED BY:	JCW
DATE:	4/12/2022
CAD I.D.:	SUPP -2

PROJECT:

SPECIAL USE PERMIT

FOR

AMAZON DATA SERVICES, INC.

PROPOSED DEVELOPMENT

BLACKWELL ROAD & LEE HIGHWAY
TOWN OF WARRENTON
FAUQUIER COUNTY, VIRGINIA 20186

BOHLER
28 BLACKWELL PARK LANE, SUITE 201
WARRENTON, VIRGINIA 20186
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Fax: (540) 349-0321
VA@BohlerEng.com

COMMONWEALTH OF VIRGINIA
JOHN C. WRIGHT
Lic. No. 046960
10/28/2022
PROFESSIONAL ENGINEER

SHEET TITLE:

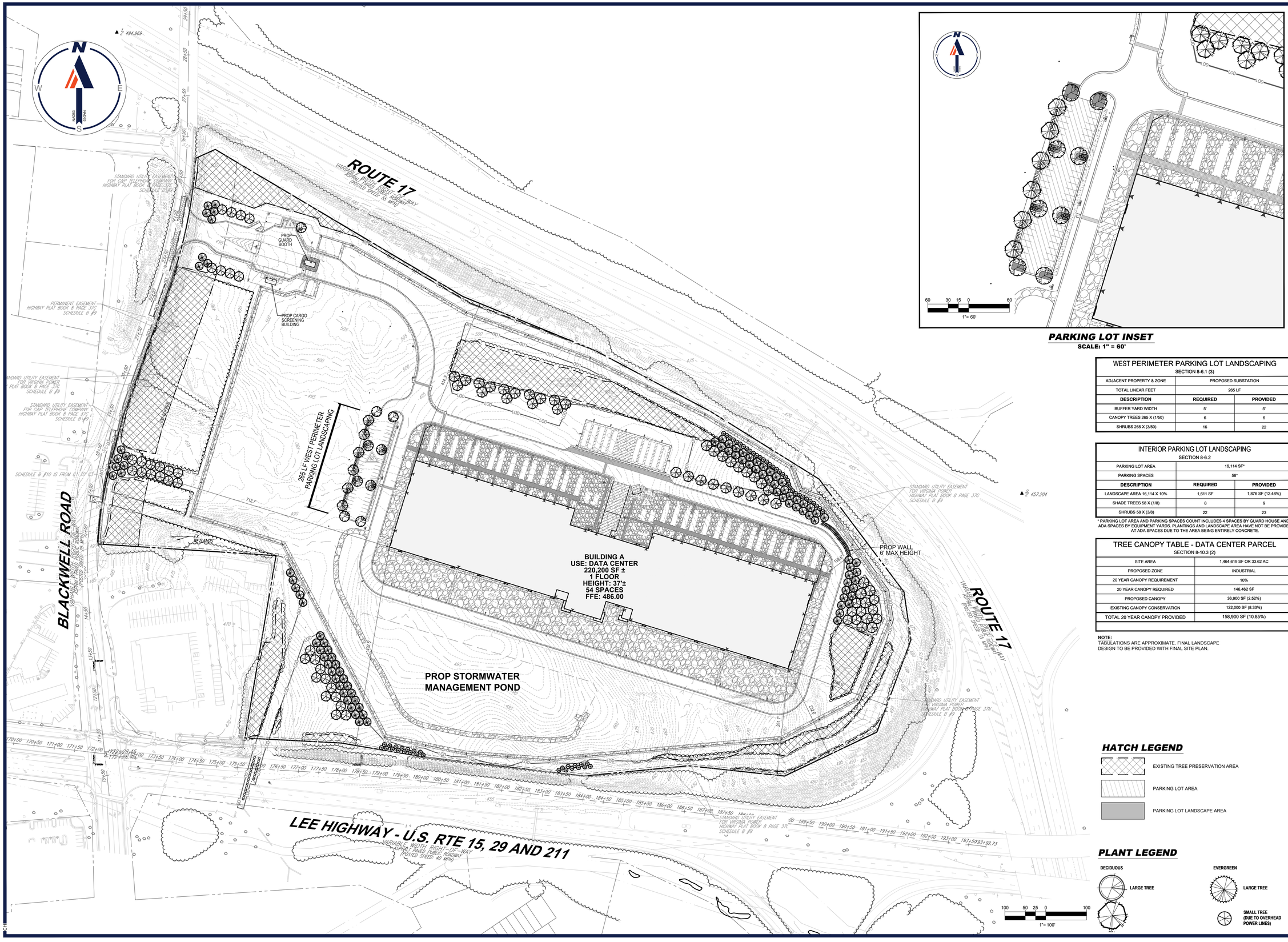
SITE DEVELOPMENT PLAN

SHEET NUMBER:

2

REVISION 3 - 10/28/2022

Oct 28, 2022
H:\211\V212093\CAD\DRAWINGS\PLAN SETS\SUPV212093 - SUPP - 3---LAYOUT 2 - SITE DEVELOPMENT PLAN
CHRISTOPHER PHILLIPS



PARKING LOT INSET
SCALE: 1" = 60'

WEST PERIMETER PARKING LOT LANDSCAPING SECTION 8-6.1 (3)		
ADJACENT PROPERTY & ZONE	PROPOSED SUBSTATION	
TOTAL LINEAR FEET	265 LF	
DESCRIPTION	**REQUIRED**	**PROVIDED**
BUFFER YARD WIDTH	5'	5'
CANOPY TREES 265 X (1/50)	6	6
SHRUBS 265 X (3/50)	16	22

INTERIOR PARKING LOT LANDSCAPING SECTION 8-6.2		
PARKING LOT AREA	16,114 SF*	
PARKING SPACES	58*	
DESCRIPTION	**REQUIRED**	**PROVIDED**
LANDSCAPE AREA 16,114 X 10%	1,611 SF	1,876 SF (12.48%)
SHADE TREES 58 X (1/8)	8	9
SHRUBS 58 X (3/8)	22	23

* PARKING LOT AREA AND PARKING SPACES COUNT INCLUDES 4 SPACES BY GUARD HOUSE AND 2 ADA SPACES BY EQUIPMENT YARDS. PLANTINGS AND LANDSCAPE AREA HAVE NOT BE PROVIDED AT ADA SPACES DUE TO THE AREA BEING ENTIRELY CONCRETE.

TREE CANOPY TABLE - DATA CENTER PARCEL SECTION 8-10.3 (2)	
SITE AREA	1,464,619 SF OR 33.62 AC
PROPOSED ZONE	INDUSTRIAL
20 YEAR CANOPY REQUIREMENT	10%
20 YEAR CANOPY REQUIRED	146,462 SF
PROPOSED CANOPY	36,900 SF (2.52%)
EXISTING CANOPY CONSERVATION	122,000 SF (8.33%)
TOTAL 20 YEAR CANOPY PROVIDED	158,900 SF (10.85%)

NOTE:
TABULATIONS ARE APPROXIMATE. FINAL LANDSCAPE DESIGN TO BE PROVIDED WITH FINAL SITE PLAN.

HATCH LEGEND
- EXISTING TREE PRESERVATION AREA
- PARKING LOT AREA
- PARKING LOT LANDSCAPE AREA

PLANT LEGEND
DECIDUOUS
- LARGE TREE
- SMALL TREE (DUE TO OVERHEAD POWER LINES)

EVERGREEN
- LARGE TREE
- SMALL TREE (DUE TO OVERHEAD POWER LINES)

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PROJECT No.: V212093
DRAWN BY: DSH
CHECKED BY: JCW
DATE: 4/12/2022
CAD I.D.: LSCP -2

PROJECT:

SPECIAL USE PERMIT

FOR

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PROPOSED DEVELOPMENT

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COMMONWEALTH OF VIRGINIA
NICHOLAS T GEORGAS
Cert. No. 001653
10/28/2022
LANDSCAPE ARCHITECT

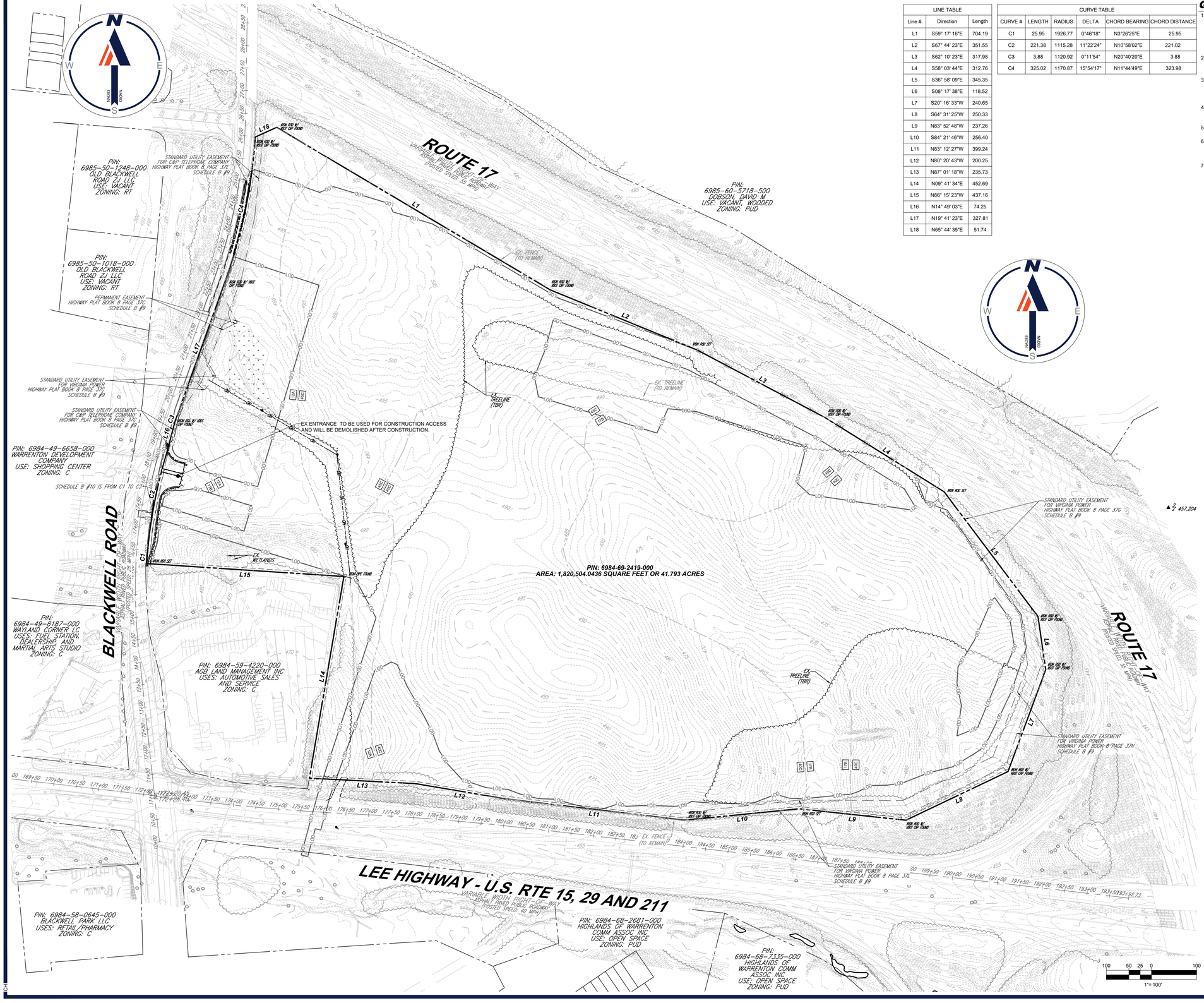
SHEET TITLE:

LANDSCAPE PLAN

SHEET NUMBER:
3

REVISION 3 - 10/28/2022

Oct 28, 2022
H:\21\v212093\CAD\DRAWINGS\PLAN SETS\SUP\V212093 - LSCP -3---LAYOUT 3 - LANDSCAPE PLAN
CHH



LINE TABLE		
Line #	Direction	Length
L1	S59° 17' 16"E	704.19
L2	S67° 44' 23"E	351.55
L3	S62° 10' 23"E	317.98
L4	S58° 03' 44"E	312.76
L5	S36° 58' 09"E	345.35
L6	S08° 17' 38"E	118.52
L7	S20° 16' 33"W	240.65
L8	S64° 31' 25"W	250.33
L9	N83° 52' 48"W	237.26
L10	S84° 21' 46"W	256.40
L11	N83° 12' 27"W	399.24
L12	N80° 20' 43"W	200.25
L13	N87° 01' 18"W	235.73
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SOILS LEGEND	
	SOILS BOUNDARY
XxX	SOILS TYPE

LEGEND

LOD — LIMITS OF DISTURBANCE

EXISTING WETLANDS

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PROJECT No.:	V212093
DRAWN BY:	DSH
CHECKED BY:	JCW
DATE:	4/12/2022
CAD I.D.:	SUPP -2

PROJECT:

SPECIAL USE PERMIT

FOR

AMAZON DATA SERVICES, INC.

PROPOSED DEVELOPMENT

BLACKWELL ROAD & LEE HIGHWAY
TOWN OF WARRENTON
FAUQUIER COUNTY, VIRGINIA 20186

BOHLER
28 BLACKWELL PARK LANE, SUITE 201
WARRENTON, VIRGINIA 20186
Phone: (540) 349-4500
Fax: (540) 349-0321
VA@BohlerEng.com

SHEET TITLE:

EXISTING CONDITIONS EXHIBIT

SHEET NUMBER:

1

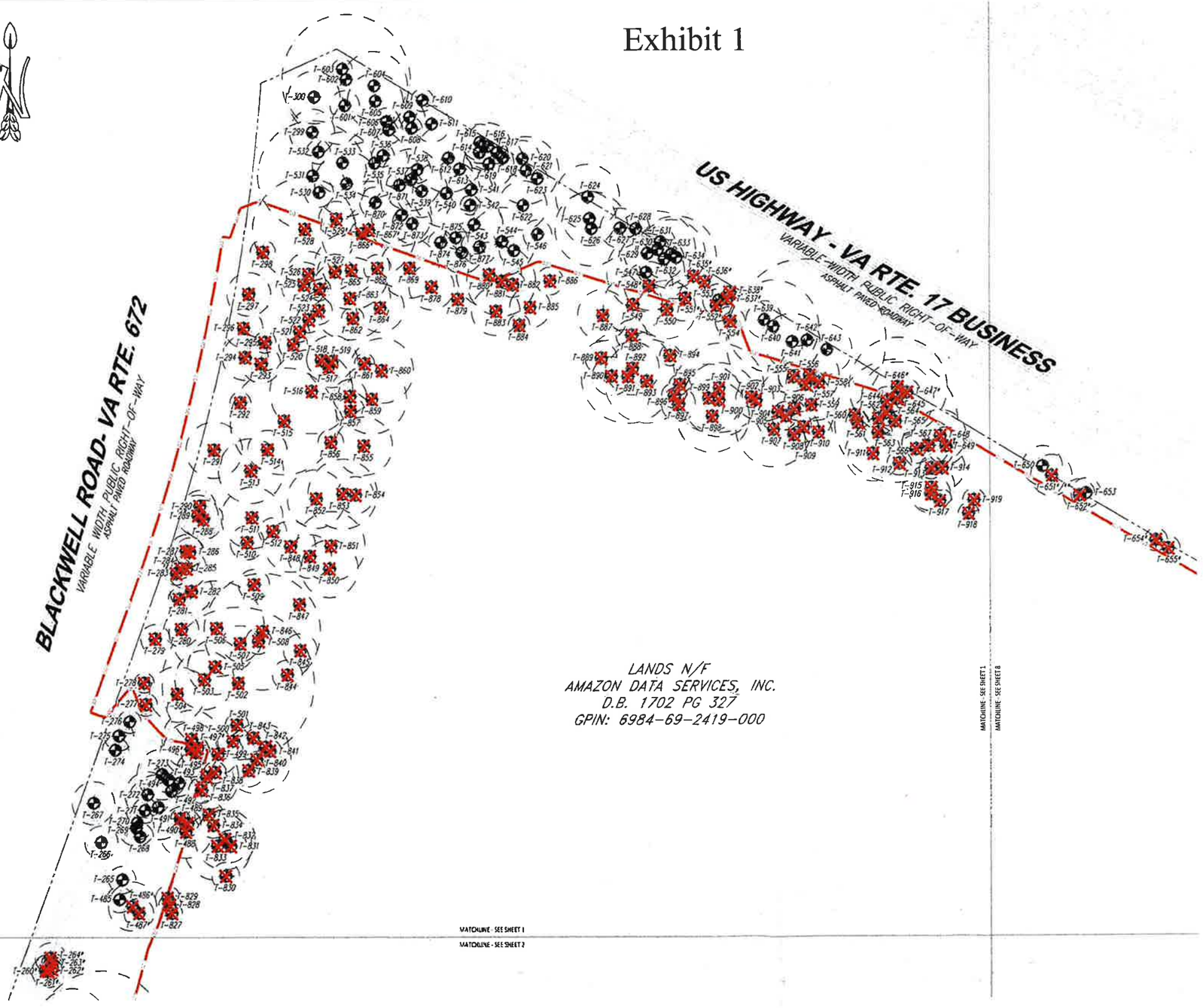
REVISION 3 - 10/28/2022

Oct 28, 2022
H:\DV\210935\CAD\DRAWINGS\PLAN SETS\SUP\V210935_SUPP -3.----LAYOUT: DO NOT PRINT - EX. CONDITIONS
CH

Illustrative Building Elevations
Corgan
October 28, 2022

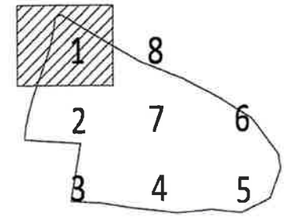


Exhibit 1



LEGEND

- CRITICAL ROOT ZONE (CRZ)
- T-XXX — TREE LOCATION
- T-XXX — TREE TO BE REMOVED



TREE INVENTORY NOTES:
1. **SHARED/ROW TREES SHALL NOT BE REMOVED WITHOUT WRITTEN PERMISSION FROM AFFECTED ADJACENT PROPERTY OWNERS.
2. *TREES NOTED FOR REMOVAL WITHIN THE SAVE AREAS SHALL BE DONE SO BY HAND WITHOUT THE USE OF HEAVY MACHINERY.
3. OFFSITE TREES WERE ASSESSED FROM THE SUBJECT PROPERTY SO NOT TO TRESPASS ONTO ADJACENT PROPERTY. DBH MEASUREMENTS AND TREE LOCATIONS ARE APPROXIMATE.
4. TREES LOCATED WITHIN OR ON THE LIMITS OF DISTURBANCE, OR RATED AS BEING "POOR" IN CONDITION, ARE RECOMMENDED FOR REMOVAL BY TNT ARBORISTS DUE TO THE LIKELIHOOD OF TREE FAILURE. HOWEVER, AT THE DISCRETION OF THE APPLICANT, SOME OF THESE MAY BE PRESERVED DURING CONSTRUCTION WITH THE APPROVAL OF URBAN FORESTRY.

SCALE (IN FEET)
15 30
30 0

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BLACKWELL ROAD & LEE HIGHWAY
TOWN OF WARRENTON

TREE REMOVAL BASE

REVISIONS

DATE	COMMENTS

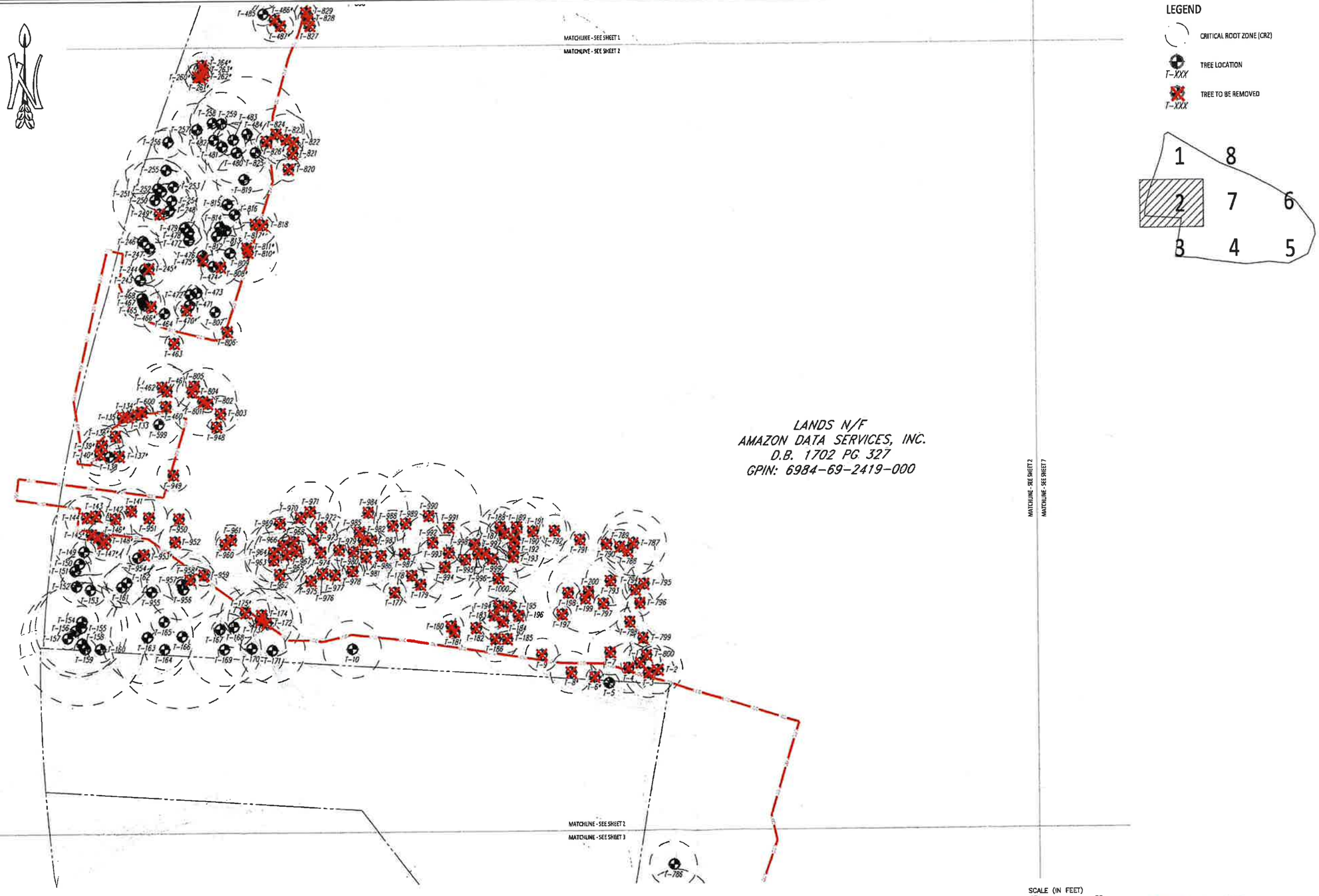
SHEET 1 OF 11

SCALE: 1" = 30'

PROJECT DATE: 04/05/22

DRAFT: EFW | CHECK: AMS

FILE NUMBER: 2724



LEGEND

- CRITICAL ROOT ZONE (CRZ)
- TREE LOCATION T-XXX
- TREE TO BE REMOVED T-XXX

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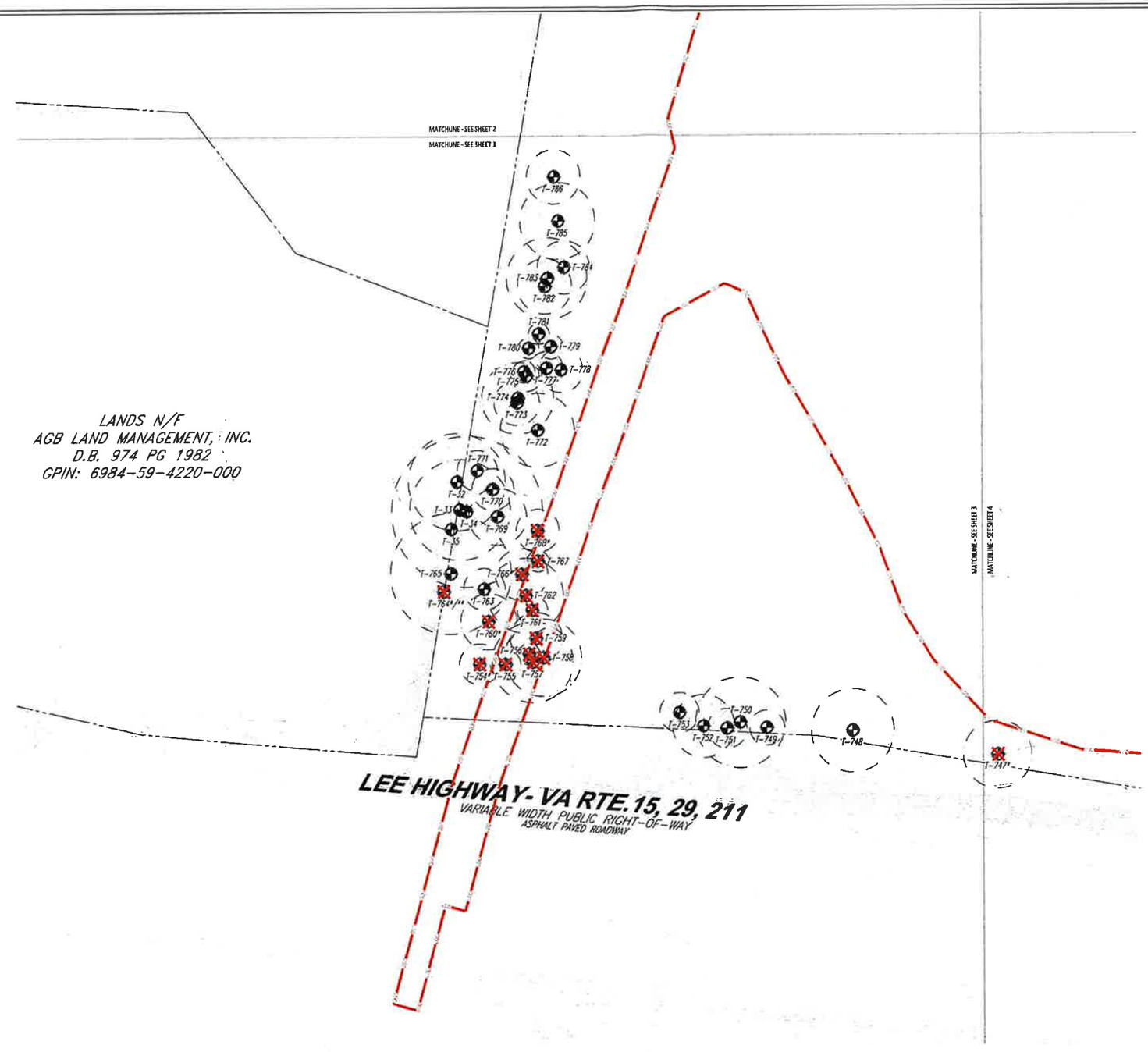
TREE REMOVAL BASE

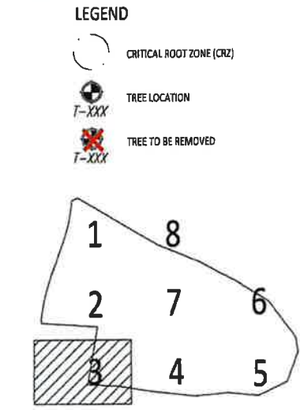
REVISIONS

DATE	COMMENTS

SHEET 2 OF 11
SCALE: 1" = 30'
PROJECT DATE: 04/05/22
DRAFT: EFW
CHECK: AMS
FILE NUMBER: 2724

Kenneth M. Sarsen
Certified Arborist
Certification # MA-4127A





TREE INVENTORY NOTES:
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SCALE (IN FEET)
15 30
30 0

Kenneth M. Sareen
Certified Arborist
Certification # MA 4723A

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BLACKWELL ROAD
& LEE HIGHWAY
TOWN OF WARRENTON

TREE REMOVAL
BASE

REVISIONS
DATE | COMMENTS

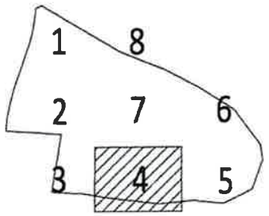
SHEET 3 OF 11
SCALE: 1" = 30'
PROJECT DATE: 04/05/22
DRAFT: BTW | CHECK: AMS
FILE NUMBER: 2724

LEGEND

CRITICAL ROOT ZONE (CRZ)

T-XXX TREE LOCATION

T-XXX TREE TO BE REMOVED



MATCHLINE - SEE SHEET 7

MATCHLINE - SEE SHEET 4

MATCHLINE - SEE SHEET 3

MATCHLINE - SEE SHEET 4

MATCHLINE - SEE SHEET 4

MATCHLINE - SEE SHEET 5

T-748

T-747*

SCALE (IN FEET)
15 30
30 0

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Kinash M. Surgeon
Certified Arborist
Certification # MA-4729A

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BLACKWELL ROAD
& LEE HIGHWAY
TOWN OF WARRENTON

TREE REMOVAL
BASE

REVISIONS

DATE	COMMENTS

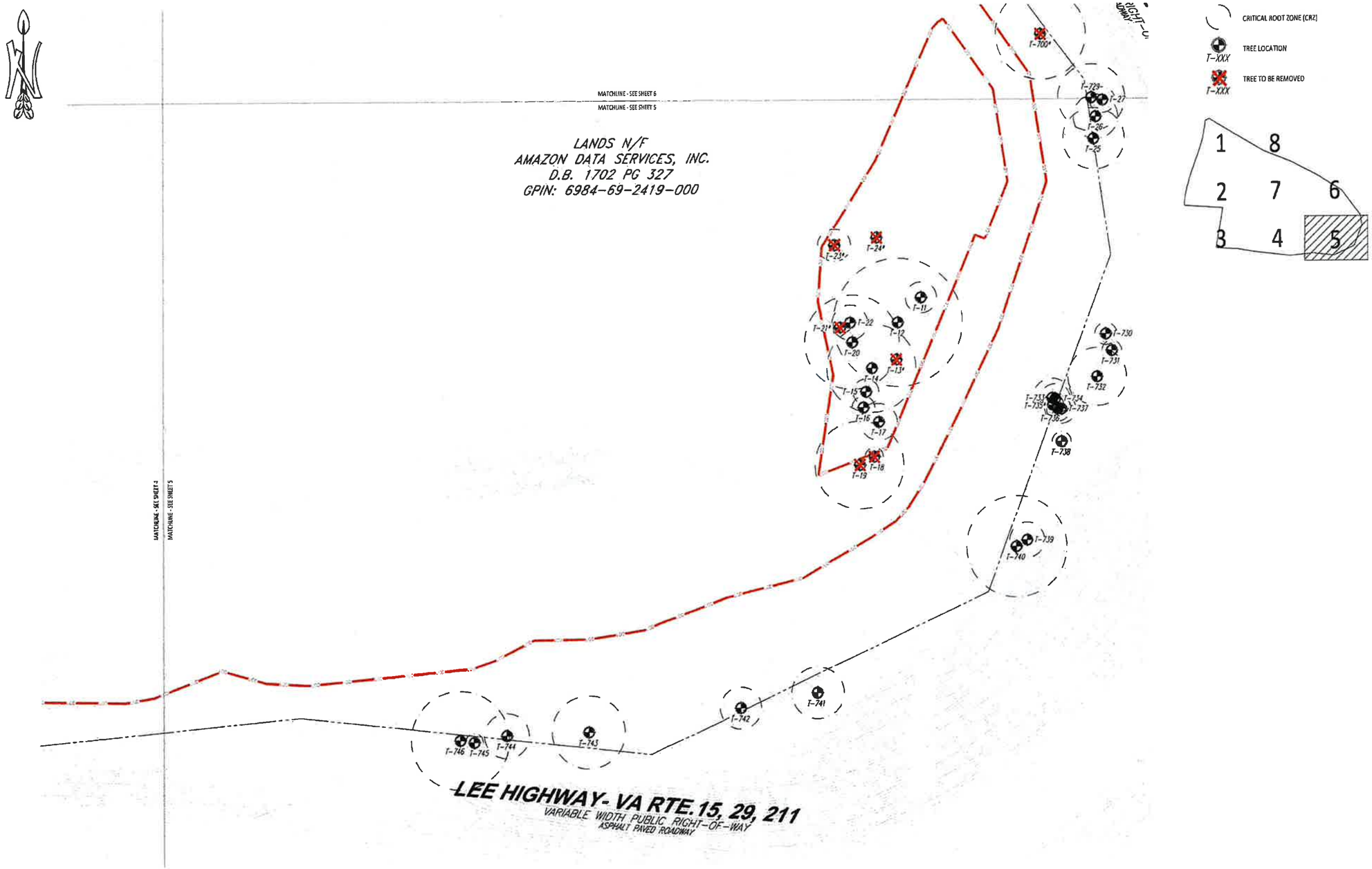
SHEET 4 OF 11

SCALE: 1" = 30'

PROJECT DATE: 04/05/22

DRAFT: EFW | CHECK: AMS

FILE NUMBER: 2724



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BLACKWELL ROAD
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TREE REMOVAL
BASE

REVISIONS

DATE	COMMENTS

SHEET 5 OF 11
SCALE: 1" = 30'
PROJECT DATE: 04/05/22
DRAFT: BFW | CHECK: AMS
FILE NUMBER: 2724

TREE INVENTORY NOTES:
1. **SHARED/ROW TREES SHALL NOT BE REMOVED WITHOUT WRITTEN PERMISSION FROM AFFECTED ADJACENT PROPERTY OWNERS.
2. *TREES NOTED FOR REMOVAL WITHIN THE SAVE AREAS SHALL BE DONE SO BY HAND WITHOUT THE USE OF HEAVY MACHINERY.
3. OFFSITE TREES WERE ASSESSED FROM THE SUBJECT PROPERTY SO NOT TO TRESPASS ONTO ADJACENT PROPERTY. DBH MEASUREMENTS AND TREE LOCATIONS ARE APPROXIMATE.
4. TREES LOCATED WITHIN OR ON THE LIMITS OF DISTURBANCE, OR RATED AS BEING "POOR" IN CONDITION, ARE RECOMMENDED FOR REMOVAL BY TNT ARBORISTS DUE TO THE LIKELIHOOD OF TREE FAILURE. HOWEVER, AT THE DISCRETION OF THE APPLICANT, SOME OF THESE MAY BE PRESERVED DURING CONSTRUCTION WITH THE APPROVAL OF URBAN FORESTRY.

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BLACKWELL ROAD & LEE HIGHWAY
TOWN OF WARRENTON

TREE REMOVAL BASE

REVISIONS

DATE	COMMENTS

SHEET 6 OF 11

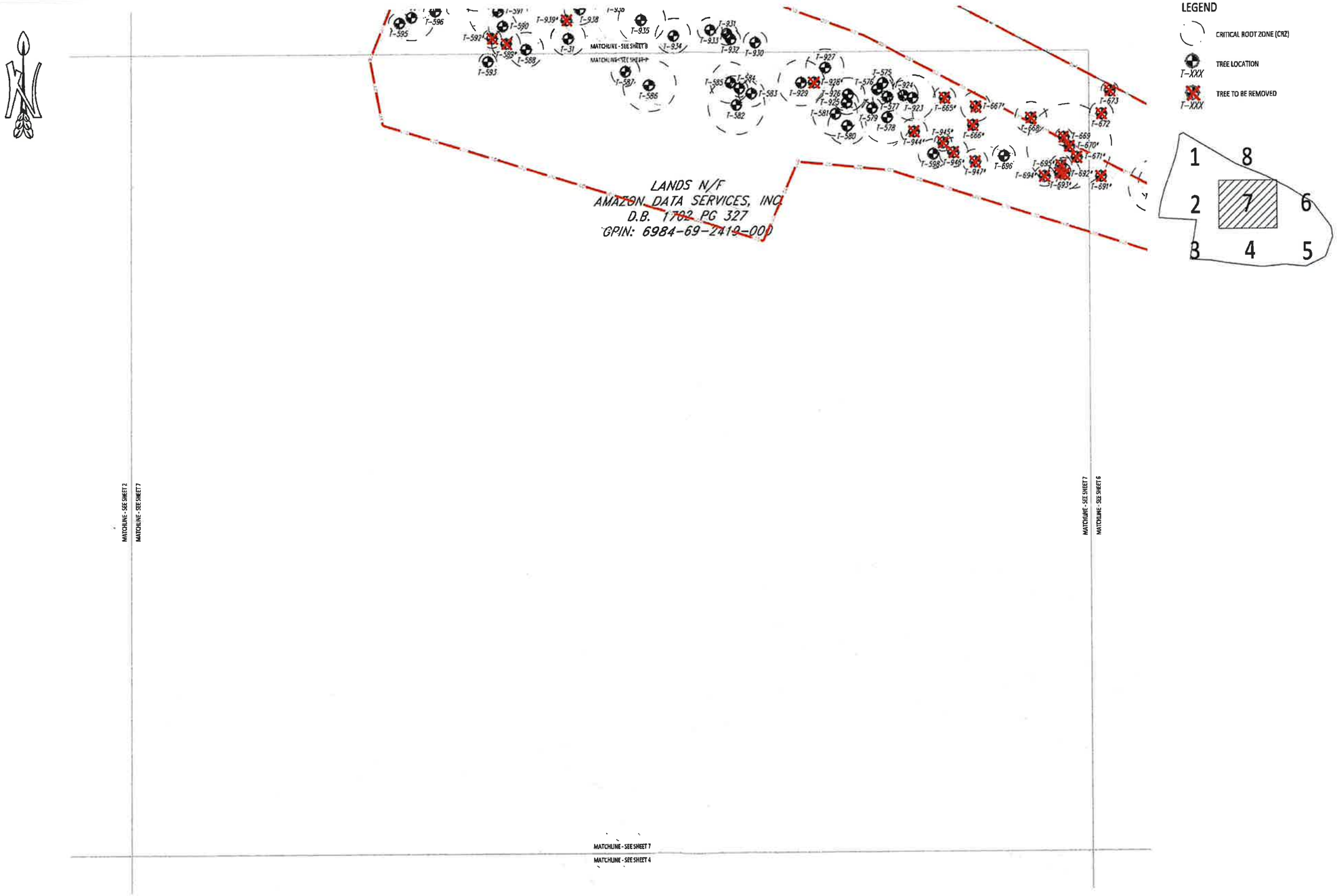
SCALE: 1" = 30'

PROJECT DATE: 04/05/22

DRAFT: EFW | CHECK: AMS

FILE NUMBER: 2724

Kenneth M. Sorgen
Certified Arborist
Certification # MA-4729A



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SCALE (IN FEET)
15 30
30 0

Kenneth M. Sargent
Certified Arborist
Certification # MA-4729A

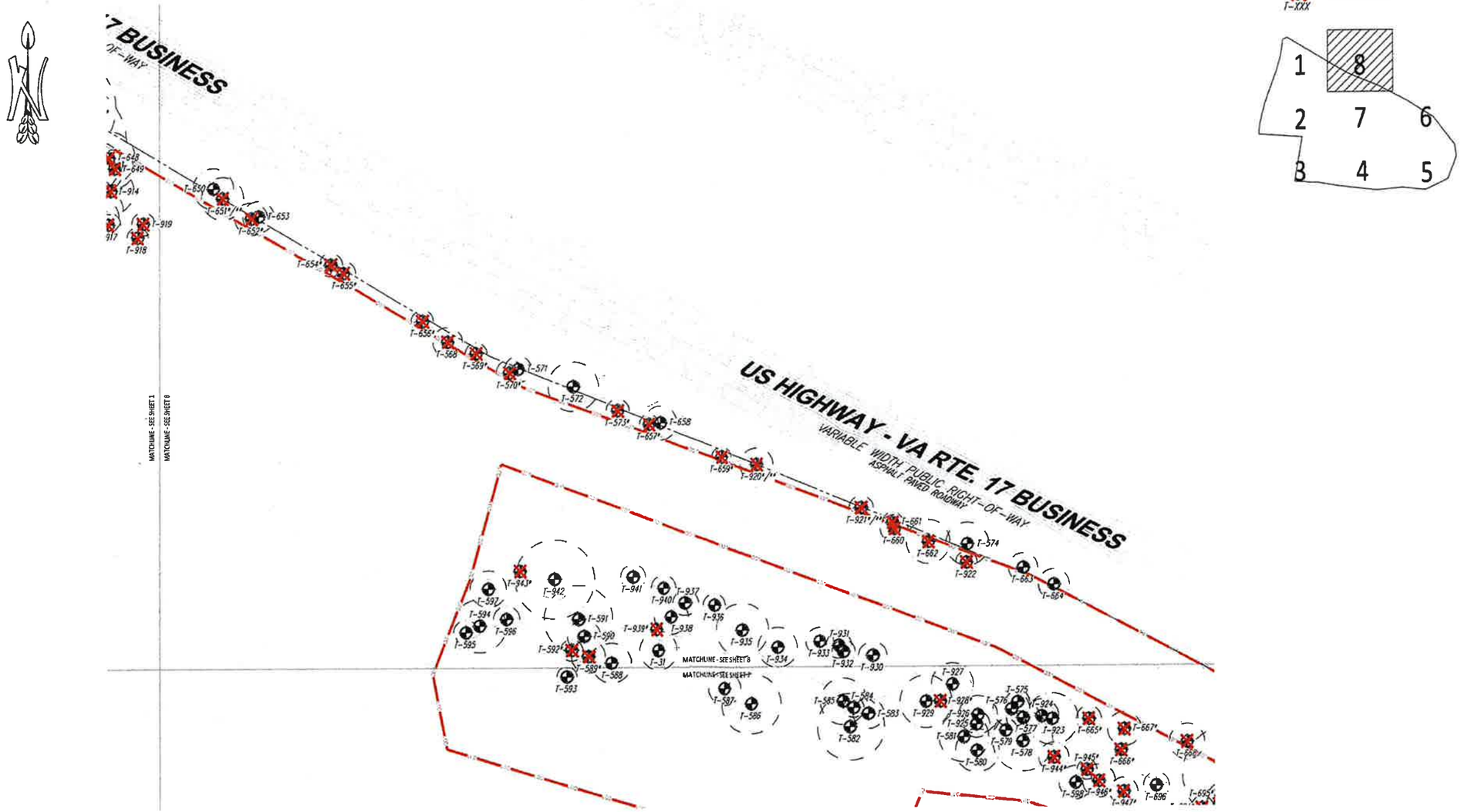
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BLACKWELL ROAD & LEE HIGHWAY
TOWN OF WARRENTON

TREE REMOVAL BASE

REVISIONS
DATE	COMMENTS

SHEET 7 OF 11
SCALE: 1" – 30'
PROJECT DATE: 04/05/22
DRAFT: EFW | CHECK: AMS
FILE NUMBER: 2724



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TOWN OF WARRENTON

TREE REMOVAL BASE

REVISIONS

DATE	COMMENTS

SHEET 8 OF 11

SCALE: 1" = 30'

PROJECT DATE: 04/05/22

DRAFT: EFW | CHECK: ANS

FILE NUMBER: 2724

Certified Arborist
Certification # MA-4727A

Tree Number	Common Name	Size (inches DBH)	Critical Root Zone (feet)	Condition	Remove	Offsite or Shared	Notes & Arborist Recommendations
1	Black Walnut	14.0	14.0	Fair	X		Dead and broken limbs
2	Black Walnut	16.8	16.8	Fair	X		CODIT, tower wound, and dead limbs
3	Black Walnut	17.3	17.3	Fair	X		Vines, and dead limbs
4	Hackberry	17.5	17.5	Fair	X		Watersprouts, dead limbs, and lean in growth
5	Pignut Hickory	7.0	7.0	Poor		Offsite	Double trunk, dead limbs, topped, and vines
6	Black Walnut	6.0	6.0	Poor	X*		Mechanical damage to lower stem, and root flare
7	Hackberry	15.7	15.7	Fair	X		Vines
8	Black Walnut	14.6	14.6	Fair	X*		Vines, dead limbs, and small cavities
9	Pignut Hickory	11.5	11.5	Fair	X		Vines, and dead limbs
10	Black Walnut	20.2	20.2	Fair			Dead limbs, vines, and watersprouts
11	Black Locust	10.4	10.4	Fair			Vines
12	Red Maple	43.0	43.0	Fair			Multi-trunk, vines, watersprouts, and some deadwood
13	Dead	-	-	-	X*		
14	Red Maple	29.7	29.7	Fair			Vines, and dead limbs
15	Black Cherry	8.7	8.7	Fair			Lean in growth
16	Black Locust	7.6	7.6	Fair			Vines, and dead limbs
17	Black Locust	12.4	12.4	Fair			Double trunk, and vines
18	Black Locust	6.1	6.1	Fair	X		Vines, and lean in growth
19	Black Locust	29.5	29.5	Fair	X		Multi-trunk, and vines
20	Red Maple	31.5	31.5	Fair			Multi-trunk
21	Dead	-	-	-	X*		
22	Black Locust	11.7	11.7	Fair			Multi-trunk, and vines
23	White Ash	10.8	10.8	Fair	X*		
24	Dead	-	-	-	X*		
25	Bradford Pear	20.6	20.6	Fair		ROW	
26	Black Walnut	14.9	14.9	Fair		ROW	Dead limbs, and watersprouts
27	Tree of Heaven	8.3	8.3	Fair		ROW	
28	Black Walnut	10.2	10.2	Poor	X		Vines, and dead limbs
29	Black Walnut	7.2	7.2	Poor	X		Vines, dead limbs, and hollow
30	Black Walnut	10.2	10.2	Poor	X*/**	ROW	Dead limbs, and vines
31	Black Walnut	11.7	11.7	Fair			Vines, and dead limbs
32	Tulip Poplar	29.0	29.0	Fair		Offsite	Multi-trunk, watersprouts, and broken leader
33	Boxelder	30.0	30.0	Fair			Multi-trunk, and ivy
34	Boxelder	45.0	45.0	Fair			Multi-trunk, and ivy
35	Dead	-	-	-		Offsite	
133	Black Locust	6.0	6.0	Fair	X		Dead limbs, dieback, vines, and watersprouts
134	Black Locust	10.0	10.0	Fair	X		Dead limbs, dieback, vines, and watersprouts
135	Black Locust	6.0	6.0	Poor	X		Dead limbs, dieback, vines, and watersprouts
136	Black Locust	8.5	8.5	Fair	X*		Dead limbs, dieback, vines, and watersprouts
137	Black Locust	10.0	10.0	Poor	X*		Dead limbs, dieback, vines, and watersprouts
138	Tulip Poplar	20.0	20.0	Fair			Dead limbs, dieback, vines, and watersprouts
139	Pignut Hickory	14.5	14.5	Fair	X*		Dead limbs, dieback, vines, and watersprouts
140	Pignut Hickory	14.3	14.3	Fair	X*		Dead limbs, dieback, vines, and watersprouts
141	Black Locust	16.0	16.0	Poor	X		Dead limbs, dieback, vines, and watersprouts
142	Hackberry	6.3	6.3	Fair	X		Dead limbs, dieback, vines, and watersprouts
143	Tulip Poplar	5.5	5.5	Fair	X		Dead limbs, double trunk, dieback, vines, and watersprouts
144	Pignut Hickory	15.0	15.0	Fair	X		Dead limbs, double trunk, dieback, vines, and watersprouts
145	Tulip Poplar	28.0	28.0	Fair	X*		Dead limbs, dieback, vines, and watersprouts
146	Tulip Poplar	11.0	11.0	Fair	X*		Dead limbs, dieback, vines, and watersprouts
147	Black Locust	8.0	8.0	Poor	X*		Dead limbs, dieback, vines, and watersprouts
148	Black Locust	14.0	14.0	Poor	X*		Dead limbs, dieback, vines, and watersprouts
149	Pignut Hickory	8.0	8.0	Fair			Dead limbs, dieback, vines, and watersprouts
150	Pignut Hickory	8.0	8.0	Fair			Dead limbs, dieback, vines, and watersprouts
151	Pignut Hickory	10.3	10.3	Fair			Dead limbs, dieback, vines, and watersprouts
152	Black Locust	11.2	11.2	Fair			Dead limbs, dieback, vines, and watersprouts
153	Pignut Hickory	11.1	11.1	Fair			Dead limbs, dieback, vines, and watersprouts
154	Tulip Poplar	11.3	11.3	Fair			Dead limbs, dieback, vines, and watersprouts
155	Tulip Poplar	32.0	32.0	Fair			Dead limbs, dieback, vines, and watersprouts
156	Tulip Poplar	32.0	32.0	Poor			Dead limbs, dieback, vines, and watersprouts
157	Black Locust	7.5	7.5	Fair			Dead limbs, dieback, vines, and watersprouts
158	Red Maple	43.0	43.0	Fair			Dead limbs, multi-trunk, dieback, vines, and watersprouts
159	Red Maple	7.5	7.5	Poor			Dead limbs, dieback, vines, and watersprouts
160	Pignut Hickory	9.0	9.0	Fair			Dead limbs, dieback, vines, and watersprouts
161	Pignut Hickory	14.0	14.0	Fair			Dead limbs, dieback, vines, and watersprouts
162	Pignut Hickory	14.0	14.0	Fair			Dead limbs, dieback, vines, and watersprouts
163	White Oak	32.0	32.0	Fair			Dead limbs, dieback, vines, and watersprouts
164	Red Maple	14.0	14.0	Poor			Dead limbs, dieback, vines, and watersprouts
165	Pignut Hickory	9.2	9.2	Fair			Dead limbs, dieback, vines, and watersprouts
166	Northern Red Oak	50.0	50.0	Fair			Dead limbs, dieback, vines, and watersprouts
167	Pignut Hickory	6.0	6.0	Fair			Dead limbs, dieback, vines, and watersprouts
168	Tulip Poplar	14.0	14.0	Fair			Dead limbs, double trunk, dieback, vines, and watersprouts
169	Tulip Poplar	25.5	25.5	Fair			Dead limbs, dieback, vines, and watersprouts
170	Tulip Poplar	23.5	23.5	Fair			Dead limbs, dieback, vines, and watersprouts
171	Tulip Poplar	22.5	22.5	Fair			Dead limbs, watersprouts, and vines
172	Tulip Poplar	24.0	24.0	Fair	X		Dead limbs, watersprouts, and vines
173	Tulip Poplar	22.5	22.5	Fair	X		Dead limbs, watersprouts, and vines
174	Tulip Poplar	11.0	11.0	Fair	X		Dead limbs, watersprouts, and vines
175	Tulip Poplar	17.0	17.0	Fair	X*		Dead limbs, watersprouts, and vines
177	Black Walnut	8.0	8.0	Fair	X		Dead limbs, watersprouts, and vines
178	Black Walnut	8.5	8.5	Fair	X		Dead limbs, watersprouts, and vines
179	Tulip Poplar	16.0	16.0	Fair	X		Dead limbs, watersprouts, and vines
180	Pignut Hickory	8.5	8.5	Poor	X		Dead limbs, watersprouts, and vines
181	Dead	-	-	-	X		Dead limbs, watersprouts, and vines
182	Black Walnut	16.0	16.0	Poor	X		Dead limbs, watersprouts, and vines
183	Tulip Poplar	8.5	8.5	Fair	X		Dead limbs, watersprouts, and vines
184	Black Walnut	16.0	16.0	Fair	X		Dead limbs, watersprouts, and vines
185	Pignut Hickory	9.5	9.5	Fair	X		Dead limbs, watersprouts, and vines
186	Pignut Hickory	16.0	16.0	Fair	X		Dead limbs, watersprouts, and vines
187	Tulip Poplar	12.2	12.2	Fair	X		Crooked trunk, and co-dominant stems
188	Tulip Poplar	13.9	13.9	Fair	X		Covered in dense vines
189	Tulip Poplar	18.4	18.4	Good	X		
190	Tulip Poplar	13.1	13.1	Good	X		A few small broken limbs
191	Tulip Poplar	23.7	23.7	Fair	X		Poor branch formation , and covered in dense vines
192	Tulip Poplar	22.0	22.0	Fair	X		Co-dominant stems
193	Tulip Poplar	10.5	10.5	Fair	X		Broken leader, and covered in vines
194	Tulip Poplar	18.3	18.3	Fair	X		Covered in vines, and several dead and broken limbs
195	Flowering Dogwood	11.0	11.0	Poor	X		Double trunk, and mostly dead
196	Black Walnut	7.3	7.3	Fair	X		Co-dominant stems, and covered in vines
197	Pignut Hickory	6.3	6.3	Fair	X		Covered in vines
198	Pignut Hickory	8.0	8.0	Good	X		Covered in vines
199	Pignut Hickory	6.4	6.4	Fair	X		One-sided
200	Tulip Poplar	29.0	29.0	Fair	X		Several dead and broken limbs
243	Black Oak	8.0	8.0	Fair			Some dead limbs, and vines up trunk
244	Black Oak	9.8	9.8	Fair			Some dead limbs, and mostly one-sided
245	Dead	-	-	-	X*		
246	Black Locust	11.0	11.0	Fair			Several dead limbs, and vines up trunk
247	Black Locust	8.2	8.2	Fair			Several dead limbs, and vines up trunk
248	Northern Red Oak	19.1	19.1	Poor			Mostly dead
249	Dead	-	-	-	X*		
250	Tulip Poplar	29.2	29.2	Fair			Some dead limbs, and vines up trunk
251	Cottonwood	17.3	17.3	Good			
252	Tulip Poplar	21.4	21.4	Good			Some dead limbs
253	Tulip Poplar	11.4	11.4	Fair			Cavity up trunk
254	Tulip Poplar	12.4	12.4	Fair			Some dead limbs

Tree Number	Common Name	Size (inches DBH)	Critical Root Zone (feet)	Condition	Remove	Offsite or Shared	Notes & Arborist Recommendations
255	Tulip Poplar	28.2	28.2	Good			Some dead limbs
256	Black Locust	10.2	10.2	Poor			Mostly one-sided, several dead limbs, and vines in canopy
257	Tulip Poplar	18.6	18.6	Poor			Deadwood at base, and vines in canopy
258	Black Cherry	10.2	10.2	Fair			Dense vines up trunk, and irregular growth
259	Tulip Poplar	22.0	22.0	Good			Some dead limbs
260	Tree of Heaven	8.3	8.3	Poor	X*		Several dead limbs, vines up trunk and in canopy. Recommended for removal due to invasive nature.
261	Tree of Heaven	10.1	10.1	Poor	X*		Several dead limbs, vines up trunk and in canopy. Recommended for removal due to invasive nature.
262	Tree of Heaven	6.3	6.3	Poor	X*		Several dead limbs, vines up trunk and in canopy. Recommended for removal due to invasive nature.
263	Tree of Heaven	6.5	6.5	Poor	X*		Several dead limbs, vines up trunk and in canopy. Recommended for removal due to invasive nature.
264	Tree of Heaven	9.4	9.4	Poor	X*		Several dead limbs, vines up trunk and in canopy. Recommended for removal due to invasive nature.
265	Black Locust	8.4	8.4	Poor			Several dead limbs, and vines up trunk
266	Green Ash	10.3	10.3	Poor			Several dead limbs, and vines up trunk
267	Tulip Poplar	13.3	13.3	Fair			Vines up trunk
268	Black Locust	8.3	8.3	Fair			Some dead limbs
269	Black Locust	11.3	11.3	Poor			Several dead limbs, and vines up trunk
270	Black Locust	10.3	10.3	Poor			Several dead limbs, and vines up trunk
271	Black Locust	7.8	7.8	Poor			Several dead limbs, and vines up trunk
272	Black Locust	14.2	14.2	Fair			Double trunk, vines up trunk, and leaning
273	Tulip Poplar	15.6	15.6	Fair			Triple trunk, one dead leader, and some dead limbs
274	Black Locust	8.1	8.1	Poor			Several dead limbs, and vines up trunk
275	American Sycamore	9.1	9.1	Fair			Vines up trunk
276	Tulip Poplar	7.1	7.1	Fair			Vines up trunk
277	Tulip Poplar	7.1	7.1	Fair	X		Vines up trunk
278	Tulip Poplar	6.2	6.2	Good	X		
279	Tulip Poplar	9.0	9.0	Good	X		Vines at base
280	Tulip Poplar	10.8	10.8	Good	X		
281	Red Maple	6.8	6.8	Fair	X		Mostly one-sided, and vines up trunk
282	American Sycamore	13.2	13.2	Good	X		
283	Cottonwood	7.3	7.3	Good	X		
284	Tulip Poplar	6.2	6.2	Good	X		
285	Tulip Poplar	12.3	12.3	Good	X		
286	Tulip Poplar	9.0	9.0	Good	X		
287	Tulip Poplar	10.2	10.2	Good	X		
288	Tulip Poplar	12.2	12.2	Good	X		
289	Tulip Poplar	12.6	12.6	Good	X		
290	Tulip Poplar	9.8	9.8	Good	X		
291	Tulip Poplar	17.4	17.4	Good	X		Vines up trunk
292	Bradford Pear	6.3	6.3	Fair	X		Vines in canopy
293	Tulip Poplar	11.8	11.8	Good	X		
294	American Sycamore	14.0	14.0	Fair	X		Vines up trunk
295	Tulip Poplar	6.6	6.6	Good	X		
296	Tulip Poplar	11.9	11.9	Good	X		Vines at base
297	Tulip Poplar	13.4	13.4	Fair	X		Some dead limbs, and vines up trunk
298	Cottonwood	7.6	7.6	Poor	X		Dense vines in canopy
299	Pignut Hickory	14.2	14.2	Fair			Vines in canopy
300	Pignut Hickory	16.3	16.3	Fair			Double trunk, some dead limbs, and vines up trunk
460	Black Gum	9.2	9.2	Fair	X		Vines, and dead limbs
461	Red Maple	17.7	17.7	Fair	X		Vines, and slight lean in growth
462	Red Maple	17.0	17.0	Fair	X		Multi-trunk, and vines
463	American Sycamore	6.4	6.4	Good	X		Vines
464	Kwanzan Cherry	16.2	16.2	Good			Vines
465	Kwanzan Cherry	14.6	14.6	Fair			Vines, and dead limbs
466	Dead	-	-	-	X*		
467	Kwanzan Cherry	12.4	12.4	Fair			Vines, and dead limbs
468	Kwanzan Cherry	11.2	11.2	Fair			Vines, and dead limbs
470	Tree of Heaven	7.6	7.6	Fair	X*		Lean. Recommended for removal due to invasive nature.
471	Black Locust	10.6	10.6	Fair			
472	Black Cherry	7.4	7.4	Fair			
473	Green Ash	7.0	7.0	Poor			Emerald Ash Borer
474	Black Locust	8.7	8.7	Fair			
475	Dead	-	-	-	X*		
476	Green Ash	7.2	7.2	Fair			Dead limbs
477	American Sycamore	12.8	12.8	Poor			Many small cavities, and vines
478	Tulip Poplar	7.0	7.0	Fair			Vines
479	American Sycamore	13.5	13.5	Fair			Vines
480	Tulip Poplar	21.1	21.1	Good			Double trunk
481	Tulip Poplar	16.2	16.2	Good			
482	Tulip Poplar	12.0	12.0	Fair			Watersprouts, and vines
483	Tulip Poplar	11.3	11.3	Good			Watersprouts
484	Tulip Poplar	40.0	40.0	Fair			Double trunk, dead limbs, and vines
485	Black Walnut	8.0	8.0	Fair			Vines, and dead limbs
486	Black Locust	15.0	15.0	Poor	X*		Multi-trunk ,and vines
487	Tree of Heaven	9.2	9.2	Poor	X*		Topped. Recommended for removal due to invasive nature.
488	Silver Maple	16.2	16.2	Fair	X		Dead limbs, and watersprouts
489	Red Maple	8.0	8.0	Fair	X		Dead limbs, and watersprouts
490	Eastern Redcedar	6.0	6.0	Fair	X		
491	Tulip Poplar	20.0	20.0	Fair			Vines
492	Tulip Poplar	17.0	17.0	Good			
493	Red Maple	8.0	8.0	Good			
494	Eastern Redcedar	8.0	8.0	Fair			Double trunk
495	Tulip Poplar	9.0	9.0	Good	X*		
496	Tulip Poplar	17.0	17.0	Good	X*		
497	Red Maple	6.5	6.5	Good	X*		
498	Tulip Poplar	18.2	18.2	Good	X		
499	Tulip Poplar	12.5	12.5	Good	X		
500	Tulip Poplar	10.2	10.2	Poor	X		Large cavity at base
501	Pin Oak	7.3	7.3	Fair	X		Vines
502	Cottonwood	47.1	47.1	Fair	X		Multi-trunk, and dead limbs
503	Red Maple	18.3	18.3	Fair	X		Multi-trunk, dead limbs, and deadwood
504	Red Maple	17.2	17.2	Fair	X		Multi-trunk
505	Red Maple	17.0	17.0	Good	X		Vines
506	Red Maple	29.5	29.5	Fair	X		Double trunk, and dead limbs
507	Green Ash	11.2	11.2	Poor	X		Emerald Ash Borer
508	Green Ash	8.0	8.0	Poor	X		Emerald Ash Borer
509	Green Ash	9.5	9.5	Fair	X		Lean in growth
510	Mockernut Hickory	10.5	10.5	Good	X		
511	White Oak	19.0	19.0	Fair	X		Dead limbs, and deadwood
512	Mockernut Hickory	8.5	8.5	Good	X		Dead limbs
513	White Oak	20.0	20.0	Fair	X		Dead limbs, and deadwood
514	Red Maple	12.0	12.0	Good	X		
515	White Oak	33.0	33.0	Fair	X		Dead limbs, and deadwood
516	White Oak	26.0	26.0	Fair	X		Dead limbs, and deadwood
517	Tulip Poplar	6.2	6.2	Fair	X		Vines, and dead limbs
518	Tulip Poplar	9.0	9.0	Fair	X		Vines, and dead limbs
519	Tulip Poplar	16.1	16.1	Good	X		
520	White Oak	9.0	9.0	Fair	X		Dead limbs, and deadwood
521	White Oak	6.2	6.2	Fair	X		Dead limbs, and deadwood
522	White Oak	8.0	8.0	Fair	X		Dead limbs, and deadwood
523	Mockernut Hickory	8.5	8.5	Fair	X		Dead limbs, and deadwood
524	Tulip Poplar	7.0	7.0	Fair	X		Dead limbs, and deadwood
525	Tulip Poplar	14.0	14.0	Fair	X		Dead limbs, and deadwood
526	Tulip Poplar	14.0	14.0	Fair	X		Dead limbs, and deadwood
527	Mockernut Hickory	11.0	11.0	Fair	X		Dead limbs, and deadwood
528	Northern Red Oak	32.0	32.0	Fair	X		Dead limbs, and deadwood

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Chantilly, VA 20151
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BLACKWELL ROAD & LEE HIGHWAY

TOWN OF WARRENTON

EXISTING VEGETATION INVENTORY

REVISIONS

DATE	COMMENTS

SHEET 9 OF 11

SCALE: NTS

PROJECT DATE: 04/05/22

DRAFT: BFW | CHECK: AMS

FILE NUMBER: 2724

Kenneth M. Simon
Certified Arborist
Certification # MA-4727A

Tree Number	Common Name	Size (inches DBH)	Critical Root Zone (feet)	Condition	Remove	Offsite or Shared	Notes & Arborist Recommendations
529	White Oak	11.0	11.0	Fair	X*		Watersprouts
530	Mockernut Hickory	9.0	9.0	Fair			
531	White Oak	14.0	14.0	Fair			Double trunk, dead limbs, and deadwood
532	White Oak	7.5	7.5	Fair			Dead limbs, and deadwood
533	Mockernut Hickory	19.0	19.0	Fair			Dead limbs, and deadwood
534	White Oak	20.0	20.0	Fair			Dead limbs, and deadwood
535	Northern Red Oak	21.0	21.0	Fair			Dead limbs, and deadwood
536	Pignut Hickory	7.0	7.0	Fair			Dead limbs, and deadwood
537	Tulip Poplar	19.0	19.0	Fair			Dead limbs, and deadwood
538	Pignut Hickory	8.5	8.5	Fair			Dead limbs, and deadwood
539	Pignut Hickory	16.2	16.2	Fair			Dead limbs, and deadwood
540	Pignut Hickory	21.0	21.0	Fair			Dead limbs, and deadwood
541	Pignut Hickory	13.2	13.2	Fair			Dead limbs, and deadwood
542	Tulip Poplar	6.0	6.0	Fair			Dead limbs, and deadwood
543	Tulip Poplar	18.0	18.0	Fair			Dead limbs, vines, and deadwood
544	Tulip Poplar	21.0	21.0	Good			
545	Tulip Poplar	9.0	9.0	Fair			Vines, and dead limbs
546	Pignut Hickory	9.0	9.0	Fair			Dead limbs, and vines
547	Tulip Poplar	24.0	24.0	Good			
548	Tulip Poplar	15.0	15.0	Fair	X*		Dead limbs, and small cavity at base
549	Tulip Poplar	18.7	18.7	Fair	X		Double trunk, and dead limbs
550	Northern Red Oak	18.0	18.0	Poor	X		Vines, dead limbs, and deadwood
551	Northern Red Oak	14.0	14.0	Fair	X*		Dead limbs
552	Black Cherry	10.0	10.0	Fair	X*		Dead limbs, and deadwood
553	Black Cherry	10.0	10.0	Fair			Dead limbs, and deadwood
554	Black Cherry	9.0	9.0	Fair	X		Dead limbs, and deadwood
555	Tree of Heaven	9.0	9.0	Fair	X		Dead limbs, deadwood, and watersprouts
556	Tulip Poplar	19.0	19.0	Fair	X		Dead limbs, and deadwood
557	Tulip Poplar	12.0	12.0	Fair	X		Dead limbs, and deadwood
558	Northern Red Oak	7.2	7.2	Fair	X		
559	Dead	-	-	-	X		
560	Dead	-	-	-	X		
561	Black Gum	7.2	7.2	Fair	X		Dead limbs
562	Black Walnut	10.5	10.5	Fair	X		Dead limbs, and deadwood
563	White Oak	9.0	9.0	Fair	X		Dead limbs, and deadwood
564	White Oak	8.0	8.0	Fair	X		Dead limbs, and watersprouts
565	Tulip Poplar	18.0	18.0	Fair	X		Dead limbs, and deadwood
566	Tulip Poplar	9.0	9.0	Fair	X		Dead limbs
567	Tulip Poplar	16.0	16.0	Fair	X		Dead limbs, and watersprouts
568	Tulip Poplar	9.0	9.0	Good	X		Vines
569	Black Walnut	6.5	6.5	Fair	X*		Vines, and dead limbs
570	Black Walnut	8.0	8.0	Fair	X*		Vines
571	Black Walnut	8.0	8.0	Fair			Dead limbs, and watersprouts
572	Black Cherry	15.0	15.0	Fair		ROW	Lean in growth, vines, and dead limbs
573	Black Walnut	7.0	7.0	Fair	X*		
574	Black Cherry	13.0	13.0	Poor		ROW	Dead limbs
575	Black Walnut	7.0	7.0	Poor			Dead limbs, vines, and deadwood
576	Black Walnut	11.0	11.0	Fair			Dead limbs
577	Black Cherry	10.0	10.0	Poor			Deadwood, dead limbs, and conks
578	Black Cherry	18.0	18.0	Poor			Dead limbs, deadwood, and dead leader
579	Black Walnut	7.0	7.0	Good			Vines
580	Black Walnut	13.0	13.0	Fair			Vines, and dead limbs
581	Black Walnut	15.0	15.0	Fair			Vines, and dead limbs
582	Black Walnut	20.0	20.0	Fair			Vines, and dead limbs
583	Hackberry	9.0	9.0	Fair			Vines, and dead limbs
584	Black Walnut	6.0	6.0	Fair			
585	Black Walnut	14.0	14.0	Poor			Topped
586	Black Walnut	18.0	18.0	Fair			Dead limbs, deadwood, and vines
587	Black Walnut	10.0	10.0	Fair			Dead limbs, deadwood, and vines
588	Black Walnut	12.0	12.0	Fair			Dead limbs, deadwood, and vines
589	Tree of Heaven	10.0	10.0	Poor	X*		Dead limbs, deadwood, small cavity, and vines. Recommended for removal due to invasive nature.
590	Black Walnut	9.8	9.8	Fair			Dead limbs, deadwood, and vines
591	Black Walnut	20.5	20.5	Fair			Dead limbs, deadwood, and vines
592	Tree of Heaven	6.5	6.5	Fair	X*		Dead limbs, deadwood, and vines. Recommended for removal due to invasive nature.
593	Black Walnut	6.0	6.0	Fair			Dead limbs, dieback, vines, and watersprouts
594	Black Walnut	16.0	16.0	Fair			Dead limbs, dieback, vines, and watersprouts
595	Black Walnut	7.5	7.5	Fair			Dead limbs, dieback, vines, and watersprouts
596	Black Walnut	8.0	8.0	Fair			Dead limbs, dieback, vines, and watersprouts
597	Black Walnut	11.0	11.0	Fair			Dead limbs, dieback, vines, and watersprouts
598	Black Walnut	10.0	10.0	Fair			Dead limbs, dieback, vines, and watersprouts
599	Tulip Poplar	15.1	15.1	Fair			Dead limbs, dieback, vines, and watersprouts
600	Tulip Poplar	7.6	7.6	Fair	X		Dead limbs, dieback, vines, and watersprouts
601	Pignut Hickory	9.3	9.3	Good			
602	White Oak	40.2	40.2	Poor			Cavity at base, several dead limbs, and hollow sound
603	Tulip Poplar	6.3	6.3	Good			
604	Pignut Hickory	21.0	21.0	Good			
605	Pignut Hickory	17.4	17.4	Poor			Deadwood up trunk, fungal growth up trunk, and several dead limbs
606	Tulip Poplar	8.4	8.4	Good			
607	Tulip Poplar	8.6	8.6	Good			Sweeping growth
608	Pignut Hickory	6.7	6.7	Good			
609	Pignut Hickory	9.8	9.8	Good			
610	Tulip Poplar	7.0	7.0	Good		Shared	Some vines up trunk
611	Tulip Poplar	11.3	11.3	Good			One-sided with some vines
612	Pignut Hickory	21.1	21.1	Good			Some dead limbs
613	Tulip Poplar	7.8	7.8	Good			
614	Tulip Poplar	6.7	6.7	Good			Sweeping growth
615	Tulip Poplar	11.2	11.2	Poor			Large cavity near base
616	Tulip Poplar	14.4	14.4	Good			Mostly one-sided
617	Tulip Poplar	6.8	6.8	Good			Mostly one-sided
618	Tulip Poplar	12.2	12.2	Good			Vines up trunk, and mostly one-sided
619	Tulip Poplar	15.6	15.6	Good			
620	Tulip Poplar	11.3	11.3	Poor		ROW	Decay at base
621	Tulip Poplar	20.8	20.8	Fair			Vines in canopy, and some dead limbs
622	Tulip Poplar	15.2	15.2	Good			Vines up trunk
623	White Oak	6.7	6.7	Fair			Vines up trunk, and some dead limbs
624	Tulip Poplar	20.0	20.0	Good		ROW	Vines up trunk
625	White Oak	16.6	16.6	Fair			Vines up trunk, swelling at base, and some dead limbs
626	Northern Red Oak	22.9	22.9	Fair			Vines up trunk, and several dead limbs
627	Pignut Hickory	12.3	12.3	Fair			Vines up trunk, and several dead limbs
628	Pignut Hickory	8.8	8.8	Good		Shared	
629	Tulip Poplar	14.2	14.2	Good			
630	Tulip Poplar	23.4	23.4	Fair			Several dead limbs
631	Northern Red Oak	9.1	9.1	Fair		Shared	Mostly one-sided, and vines in canopy
632	Tulip Poplar	12.1	12.1	Good			Vines up trunk
633	Tulip Poplar	21.1	21.1	Poor			Missing top
634	Tulip Poplar	25.4	25.4	Good			Some dead limbs
635	Dead	-	-	-	X*		
636	Dead	-	-	-	X*		
637	Dead	-	-	-	X*		
638	Dead	-	-	-	X*		
639	Pignut Hickory	11.4	11.4	Good			Vines up trunk
640	Tulip Poplar	28.4	28.4	Good			Some dead limbs
641	Tulip Poplar	17.4	17.4	Good			Some dead limbs
642	Tulip Poplar	49.8	49.8	Good			Double trunk, and some dead limbs

Tree Number	Common Name	Size (inches DBH)	Critical Root Zone (feet)	Condition	Remove	Offsite or Shared	Notes & Arborist Recommendations
643	Black Walnut	15.6	15.6	Fair			Some dead limbs
644	White Oak	8.8	8.8	Good	X		
645	Black Walnut	22.3	22.3	Fair	X		Some dead limbs
646	White Oak	30.3	30.3	Fair	X*		Several dead limbs, and mostly one-sided
647	Black Cherry	8.2	8.2	Fair	X*		Some dead limbs
648	Tulip Poplar	18.0	18.0	Fair	X		Vines in canopy
649	Green Ash	11.6	11.6	Fair	X		Vines in canopy
650	Tulip Poplar	12.3	12.3	Fair		ROW	Dense vines up trunk and in canopy
651	Tulip Poplar	12.8	12.8	Fair	X*/**	Shared	Dense vines up trunk and in canopy
652	Tulip Poplar	9.8	9.8	Fair	X*		Dense vines up trunk and in canopy
653	Mulberry	9.3	9.3	Poor		ROW	Dense vines up trunk and in canopy
654	Green Ash	7.0	7.0	Poor	X*		Dense vines up trunk and in canopy
655	Green Ash	7.4	7.4	Poor	X*		Dense vines up trunk and in canopy
656	Black Walnut	6.7	6.7	Fair	X*		Vines in canopy
657	Black Walnut	6.0	6.0	Poor	X*		Dense vines in canopy
658	Boxelder	10.2	10.2	Poor		ROW	Dense vines in canopy
659	Black Walnut	6.0	6.0	Fair	X*		Dense vines in canopy
660	Black Walnut	8.4	8.4	Fair	X		Dense vines in canopy
661	Black Walnut	6.2	6.2	Fair	X		Dense vines in canopy
662	Black Walnut	13.7	13.2	Fair	X		Dense vines in canopy
663	Black Cherry	8.8	8.8	Poor		ROW	Dense vines in canopy
664	Black Cherry	9.3	9.3	Poor		ROW	Dense vines in canopy
665	Black Walnut	7.6	7.6	Poor	X*		Dense vines in canopy
666	Dead	-	-	-	X*		
667	Hackberry	10.2	10.2	Poor	X*		Failed top, and dense vines
668	Tulip Poplar	10.8	10.8	Fair	X		Dense vines up trunk
669	Black Walnut	6.1	6.1	Poor	X		Failing trunk, and dense vines up trunk
670	Tulip Poplar	29.0	29.0	Fair	X*		Dense vines up trunk
671	Dead	-	-	-	X*		
672	Black Walnut	8.1	8.1	Fair	X		Vines in canopy
673	Black Walnut	6.0	6.0	Fair	X		Vines up trunk
674	Black Walnut	13.2	13.2	Fair	X		Vines up trunk
675	Black Cherry	11.4	11.4	Fair	X		Vines up trunk
676	Tulip Poplar	27.0	27.0	Fair	X		Vines up trunk
677	Dead	-	-	-	X		
678	Tulip Poplar	20.3	20.3	Fair	X		Dense vines up trunk
679	Black Cherry	8.5	8.5	Fair	X		Dense vines up trunk
680	Dead	-	-	-	X		
681	Black Walnut	15.7	15.7	Fair	X		Dense vines up trunk
682	Black Walnut	12.8	12.8	Fair	X		Dense vines up trunk
683	Boxelder	17.4	17.4	Fair		ROW	Double trunk, and dense vines up trunk
684	Black Walnut	8.4	8.4	Fair	X		Dense vines up trunk
685	Black Walnut	9.0	9.0	Fair	X		Dense vines up trunk
686	Dead	-	-	-	X		
687	Black Walnut	17.9	17.9	Fair			Dense vines up trunk
688	Dead	-	-	-	X*		
689	Black Walnut	18.0	18.0	Fair	X		Dense vines up trunk
690	Black Walnut	12.4	12.4	Fair	X		Dense vines up trunk
691	Dead	-	-	-	X*		
692	Tree of Heaven	11.1	11.1	Fair	X*		Dense vines up trunk. Recommended for removal due to invasive nature.
693	Tree of Heaven	7.8	7.8	Fair	X*		Dense vines up trunk. Recommended for removal due to invasive nature.
694	Tree of Heaven	7.0	7.0	Fair	X*		Dense vines up trunk. Recommended for removal due to invasive nature.
695	Tree of Heaven	7.4	7.4	Fair	X*		Dense vines up trunk. Recommended for removal due to invasive nature.
696	Black Cherry	7.9	7.9	Poor			Mostly dead
697	Eastern Redcedar	9.7	9.7	Fair		ROW	Double trunk, and dense vines up trunk
698	Black Cherry	22.5	22.5	Fair		ROW	Vines up trunk
699	Slippery Elm	9.4	9.4	Fair		ROW	Vines up trunk
700	Bradford Pear	30.5	30.5	Fair	X*		Double trunk, and poorly pruned for powerlines. Recommended for removal due to invasive nature.
729	Black Walnut	22.4	22.4	Fair		ROW	Vines up trunk
730	Eastern Redcedar	7.4	7.4	Fair		ROW	Several small dead limbs
731	Eastern Redcedar	6.5	6.5	Fair		ROW	Several small dead limbs
732	Tulip Poplar	19.5	19.5	Good		ROW	
733	Black Cherry	13.2	13.2	Poor			Mostly dead, and vines up trunk
734	Eastern Redcedar	10.1	10.1	Poor			Mostly dead, and many dead limbs
735	Tree of Heaven	7.1	7.1	Fair	X*		Poorly pruned for powerlines. Recommended for removal due to invasive nature.
736	Persimmon	8.7	8.7	Fair		ROW	Vines up trunk
737	Black Cherry	9.8	9.8	Poor		ROW	Poor form, and watersprouts
738	Persimmon	6.4	6.4	Fair		ROW	Vines up trunk
739	Tulip Poplar	11.8	11.8	Fair		ROW	Vines up trunk
740	Tulip Poplar	34.0	34.0	Good		ROW	Double trunk, and vines up trunk
741	Bradford Pear	17.4	17.4	Fair		ROW	Double trunk, and vines up trunk
742	Red Maple	14.0	14.0	Fair			Vines up trunk, and in canopy
743	Black Cherry	24.4	24.4	Fair			Poorly pruned for powerlines, and vines in canopy
744	Black Cherry	15.1	15.1	Fair			Poorly pruned for powerlines, and vines in canopy
745	Red Maple	6.1	6.1	Fair		ROW	Vines up trunk, and some dead limbs
746	Red Maple	33.0	33.0	Fair		ROW	Multi-trunk, poorly pruned for powerlines, and several dead limbs
747	Black Cherry	20.2	20.2	Poor	X*		Deadwood at base, dense vines, and many dead limbs
748	Red Maple	24.8	24.8	Fair			Multi-trunk, several dead limbs, and vines up trunk
749	Red Maple	10.4	10.4	Fair			Vines in canopy
750	Black Cherry	27.0	27.0	Fair			Double trunk, some dead limbs, and vines up trunk
751	Eastern Redcedar	11.8	11.8	Fair			Vines up trunk, and some dead limbs
752	Tulip Poplar	18.8	18.8	Fair			Pruned for powerlines, one-sided, and English ivy up trunk
753	Black Cherry	13.9	13.9	Poor			Dense vines up trunk, and many dead limbs
754	Boxelder	12.1	12.1	Poor	X*		Mostly dead
755	Boxelder	8.8	8.8	Fair	X		Dense vines up trunk
756	Slippery Elm	6.4	6.4	Fair	X		Vines in canopy
757	American Sycamore	24.0	24.0	Fair	X		Dense vines up trunk
758	American Sycamore	23.0	23.0	Fair	X		Dense vines up trunk
759	Tulip Poplar	15.4	15.4	Poor	X		Failed crown, vines up trunk, and poor form
760	Boxelder	16.7	16.7	Poor	X*		Mostly dead
761	Persimmon	9.0	9.0	Fair	X		Vines up trunk
762	Tulip Poplar	22.3	22.3	Fair	X		Several dead limbs
763	Boxelder	12.4	12.4	Fair			Dense vines in canopy
764	Dead				X*/**	Shared	
765	Black Cherry	16.0	16.0	Poor			Mostly dead
766	Tulip Poplar	15.4	15.4	Fair	X*		Dense vines in canopy
767	Boxelder	6.4	6.4	Fair			Vines up trunk
768	Black Walnut	12.8	12.8	Fair	X*		Vines up trunk
769	Boxelder	17.0	17.0	Fair			Corrected growth some dead limbs, and vines in canopy
770	Boxelder	12.4	12.4	Fair			Dense vines up trunk
771	Hackberry	12.1	12.1	Fair			Dense vines up trunk
772	Boxelder	22.0	22.0	Fair			Dense vines up trunk
773	Boxelder	13.4	13.4	Poor			Mostly dead
774	Hackberry	21.2	21.2	Fair			Dense vines up trunk
775	Boxelder	9.2	9.2	Fair			Dense vines up trunk
776	Hackberry	6.6	6.6	Fair			Vines up trunk
777	Hackberry	10.0	10.0	Fair			Vines up trunk
778	Black Walnut	13.4	13.4	Fair			Vines up trunk, and pruned for powerlines
779	Boxelder	7.3	7.3	Poor			Poorly pruned for powerlines, and many dead limbs
780	Hackberry	6.2	6.2	Fair			Dense vines up trunk
781	Hackberry	6.2	6.2	Fair			Dense vines up trunk
782	Hackberry	16.3	16.3	Fair			Vines up trunk
783	Tulip Poplar	24.2	24.2	Poor			Deadwood up trunk, and vines in canopy
784	Tulip Poplar	15.8	15.8	Poor			Poorly pruned for powerlines, hollow sound, and many dead limbs
785	Black Walnut	22.8	22.8	Fair			Vines up trunk

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BLACKWELL ROAD
& LEE HIGHWAY
TOWN OF WARRENTON

EXISTING VEGETATION INVENTORY

REVISIONS	
DATE	COMMENTS

SHEET 10 OF 11

SCALE: NTS

PROJECT DATE: 04/05/22

DRAFT: EFW | CHECK: AMS

FILE NUMBER: 2774

Kenneth A. Sweet
Certified Arborist
Certification # MA-4727A

Tree Number	Common Name	Size (inches DBH)	Critical Root Zone (feet)	Condition	Remove	Offsite or Shared	Notes & Arborist Recommendations
786	Black Walnut	16.2	16.2	Fair			Some dead limbs
787	Tulip Poplar	27.7	27.7	Fair	X		Ivy, and dead limbs
788	American Sycamore	19.5	19.5	Fair	X		Vines and dead limbs
789	Tulip Poplar	12.0	12.0	Fair	X		Vines
790	Eastern Redcedar	6.0	6.0	Fair	X		Topped, broken leader, and vines
791	Eastern Redcedar	6.5	6.5	Poor	X		Topped, and vines
792	Eastern Redcedar	11.1	11.1	Poor	X		Vines, and dead limbs
793	Tulip Poplar	17.4	17.4	Fair	X		Vines
794	Black Walnut	9.5	9.5	Fair	X		Vines, and dead limbs
795	Black Walnut	13.8	13.8	Fair	X		Vines, and dead limbs
796	Eastern Redcedar	9.3	9.3	Fair	X		Dead and broken limbs
797	Pignut Hickory	6.7	6.7	Fair	X		Lean in growth, and vines
798	Black Walnut	9.7	9.7	Fair	X		Dead limbs
799	Eastern Redcedar	6.4	6.4	Good	X		
800	Hackberry	9.8	9.8	Fair	X		Watersprouts, and dead limbs
801	Tulip Poplar	23.7	23.7	Fair	X		Dense vines up trunk
802	Red Maple	6.0	6.0	Fair	X		Growing into trunk of T-801
803	Tulip Poplar	12.5	12.5	Fair	X		Dense vines up trunk
804	Red Maple	10.8	10.8	Fair	X		Dense vines up trunk
805	Red Maple	8.0	8.0	Fair	X		Poor form, and lean in growth
806	Red Maple	9.5	9.5	Fair	X		Poor form, covered in dense vines, and lean in growth
807	Red Maple	12.5	12.5	Fair			Double trunk, co-dominant stems, and covered in dense vines
808	Tulip Poplar	12.3	12.3	Poor	X*		Poor form, broken co-stem, and covered in dense vines
809	American Sycamore	12.5	12.5	Good			
810	American Sycamore	21.0	21.0	Good	X*		Vines in canopy
811	Pignut Hickory	6.5	6.5	Fair	X*		Broken top, and vines up trunk
812	American Sycamore	7.0	7.0	Good			
813	Tulip Poplar	11.1	11.1	Good			
814	American Sycamore	14.6	14.6	Fair			Lean in growth, and vines on trunk
815	Pignut Hickory	7.1	7.1	Fair			Vines on trunk, and a few broken limbs
816	American Sycamore	9.8	9.8	Good			Vines on trunk
817	Tulip Poplar	15.3	15.3	Fair	X*		Codominant stems, and vines on trunk
818	Tulip Poplar	6.8	6.8	Fair	X		Vines on trunk, and several dead and broken limbs
819	American Sycamore	19.1	19.1	Fair			Dense vines on trunk and in canopy
820	American Sycamore	8.3	8.3	Good	X		
821	Tulip Poplar	7.6	7.6	Poor	X		Broken top, and dense vines up trunk
822	Tulip Poplar	11.0	11.0	Fair	X		Vines up trunk
823	Tulip Poplar	18.0	18.0	Fair	X		Vines up trunk
824	Tulip Poplar	18.3	18.3	Fair	X		Vines up trunk
825	American Sycamore	9.5	9.5	Good			Lean in growth
826	Pignut Hickory	7.0	7.0	Good	X*		
827	Tree of Heaven	6.5	6.5	Fair	X		Poor form, and covered in vines
828	Tree of Heaven	7.0	7.0	Fair	X		Poor form, and covered in vines
829	Tree of Heaven	7.6	7.6	Fair	X		Poor form, and covered in vines
830	Red Maple	8.5	8.5	Poor	X		Cavity, dead and broken limbs, and poor form
831	Dead	-	-	-	X		
832	Cottonwood	18.5	18.5	Fair	X		Poor form, and covered in dense vines
833	American Sycamore	21.0	21.0	Good	X		
834	Red Maple	7.9	7.9	Fair	X		Poor form, and vines in canopy
835	Red Maple	8.7	8.7	Fair	X		Co-dominant stems, and several dead and broken limbs
836	Dead	-	-	-	X		
837	Cottonwood	19.8	19.8	Fair	X		Several large dead and broken limbs
838	Red Maple	6.8	6.8	Fair	X		Vines up trunk
839	White Oak	10.0	10.0	Fair/Poor	X		Double trunk, dead co-stems, some broken limbs, and vines in canopy
840	Cottonwood	21.0	21.0	Fair	X		A few dead and broken limbs
841	Mockernut Hickory	6.9	6.9	Poor	X		Double trunk, dead co-stem, poor form, and vines up canopy
842	Northern Red Oak	14.0	14.0	Poor	X		High dieback, hypoxylon canker on limbs
843	Northern Red Oak	8.5	8.5	Fair	X		Vines in canopy
844	Pignut Hickory	9.3	9.3	Fair	X		Dense vines up trunk
845	Tulip Poplar	10.5	10.5	Good	X		Vines up trunk and in canopy
846	White Oak	36.0	36.0	Poor	X		Large cavity, and large dead and broken limbs
847	Dead	-	-	-	X		
848	Mockernut Hickory	15.8	15.8	Good	X		
849	Mockernut Hickory	13.5	13.5	Good	X		
850	Mockernut Hickory	17.8	17.8	Good	X		Vines in canopy
851	Mockernut Hickory	21.4	21.4	Good	X		
852	White Oak	18.1	18.1	Fair	X		A few dead and broken limbs
853	Northern Red Oak	21.6	21.6	Poor	X		High amount of dieback, large dead and broken limbs, and rot throughout
854	Mockernut Hickory	11.5	11.5	Good	X		
855	Tulip Poplar	18.0	18.0	Fair	X		Co-dominant stems, included bark, and several small dead and broken limbs
856	Tulip Poplar	8.0	8.0	Fair	X		Dead co-stem, and several small broken limbs
857	Tulip Poplar	9.0	9.0	Good	X		
858	White Oak	10.5	10.5	Fair	X		Lean in growth
859	Mockernut Hickory	21.5	21.5	Good	X		
860	Mockernut Hickory	20.0	20.0	Good	X		
861	Mockernut Hickory	6.3	6.3	Good	X		
862	Mockernut Hickory	7.0	7.0	Good	X		Dead tree hooked onto T-862
863	White Oak	25.5	25.5	Fair	X		Several dead and broken limbs
864	Mockernut Hickory	15.0	15.0	Fair	X		Many broken limbs in lower canopy
865	Northern Red Oak	23.9	23.9	Fair	X		Several dead and broken limbs
866	Tulip Poplar	7.5	7.5	Good	X*		
867	Northern Red Oak	30.0	30.0	Fair	X*		Several dead and broken limbs
868	Mockernut Hickory	8.5	8.5	Good	X		
869	Tulip Poplar	18.5	18.5	Good	X		
870	Mockernut Hickory	9.7	9.7	Good			
871	Mockernut Hickory	8.2	8.2	Good			
872	Northern Red Oak	18.9	18.9	Fair			Several large dead and broken limbs
873	White Oak	12.4	12.4	Fair			Co-dominant stems, and a few small dead limbs
874	Tulip Poplar	7.5	7.5	Good			
875	Tulip Poplar	7.0	7.0	Fair			Co-dominant stems, and one large dead limb
876	White Oak	12.8	12.8	Fair			Many watersprouts
877	Tulip Poplar	11.0	11.0	Fair			Co-dominant stems
878	White Oak	14.0	14.0	Fair	X		Several dead and broken limbs
879	Dead	-	-	-	X		
880	White Oak	20.0	20.0	Fair	X*		Co-dominant stems, and a few dead and broken limbs
881	Mockernut Hickory	21.5	21.5	Fair	X		Lean in growth, and several dead and broken limbs
882	Mockernut Hickory	7.9	7.9	Good	X		
883	Mockernut Hickory	15.0	15.0	Fair	X		Several dead and broken limbs, and vines in canopy
884	American Elm	6.8	6.8	Fair	X		A few dead and broken limbs
885	Tulip Poplar	12.8	12.8	Fair	X		Crooked trunk, and a few dead and broken limbs
886	White Oak	8.5	8.5	Fair	X		Several dead and broken limbs, and dense vines in canopy
887	Mockernut Hickory	15.8	15.8	Fair	X		Co-dominant stems, and several small broken limbs
888	Mockernut Hickory	9.5	9.5	Good	X		Vines on trunk
889	Tulip Poplar	10.0	10.0	Fair	X		Vines up trunk
890	Tulip Poplar	12.0	12.0	Good	X		
891	Tulip Poplar	29.0	29.0	Poor	X		Several large dead and broken limbs
892	Tulip Poplar	16.5	16.5	Fair	X		Crooked trunk
893	Tulip Poplar	26.0	26.0	Fair	X		A few dead and broken limbs
894	American Elm	6.3	6.3	Good	X		
895	Mockernut Hickory	6.4	6.4	Good	X		
896	Mockernut Hickory	7.8	7.8	Fair/Poor	X		Cavity in trunk
897	Mockernut Hickory	10.5	10.5	Fair	X		Several dead and broken limbs
898	Tulip Poplar	22.5	22.5	Good	X		
899	Tulip Poplar	20.8	20.8	Good	X		Crooked trunk
900	Tulip Poplar	22.8	22.8	Good	X		

Tree Number	Common Name	Size (inches DBH)	Critical Root Zone (feet)	Condition	Remove	Offsite or Shared	Notes & Arborist Recommendations
901	Tulip Poplar	27.5	27.5	Good	X		
902	Tulip Poplar	6.5	6.5	Good	X		Vines on trunk
903	Cottonwood	11.9	11.9	Fair	X		Crooked trunk, and poor form
904	Mockernut Hickory	12.4	12.4	Poor	X		Cavity in trunk, and poor form
905	Pignut Hickory	8.8	8.8	Good	X		
906	Tulip Poplar	25.3	25.3	Fair	X		Co-dominant stems
907	Tulip Poplar	23.4	23.4	Poor	X		Cavity with weep wounds
908	Dead	-	-	-	X		
909	Black Walnut	9.5	9.5	Fair	X		Poor form, and several dead and broken limbs
910	Pignut Hickory	8.8	8.8	Good	X		
911	White Oak	17.4	17.4	Fair	X		Crooked trunk, and several dead and broken limbs
912	Hackberry	7.5	7.5	Fair	X		Several small dead and broken limbs
913	Black Gum	7.0	7.0	Poor	X		Poor form, many dead and broken limbs, and leaning
914	Black Gum	14.0	14.0	Poor	X		Double trunk, weak crotch, many watersprouts, dead and broken limbs, and dead co-stem
915	Tulip Poplar	14.4	14.4	Fair	X		Poor form, crooked trunk, and several broken limbs
916	Tulip Poplar	12.0	12.0	Poor	X		Cavities throughout, and co-dominant stems
917	Mockernut Hickory	7.5	7.5	Poor	X		Covered in dense vines, and many dead and broken limbs
918	Mockernut Hickory	6.4	6.4	Fair	X		Covered in vines
919	Mockernut Hickory	7.0	7.0	Fair	X		Twisted trunk
920	Mockernut Hickory	10.0	10.0	Poor	X*/**	Shared	Topped, and covered in dense vines
921	American Elm	7.0	7.0	Poor	X*/**	Shared	Partially toped, and covered in dense vines
922	Mockernut Hickory	6.5	6.5	Fair	X		Double trunk, and covered in dense vines
923	Black Cherry	15.5	15.5	Poor			Double trunk, covered in dense vines, and many dead and broken limbs
924	Black Walnut	10.2	10.2	Fair			Covered in vines
925	Black Walnut	8.0	8.0	Fair			Covered in vines
926	Black Walnut	11.5	11.5	Fair			Covered in vines
927	Black Walnut	12.8	12.8	Poor			Large dead and broken limbs, and covered in dense vines
928	Dead	-	-	-	X*		
929	Black Walnut	15.8	15.8	Poor			Large dead and broken limbs, and covered in dense vines
930	Black Walnut	8.2	8.2	Poor			Covered in dense vines, and topped
931	Black Walnut	7.8	7.8	Poor			Covered in dense vines, and topped
932	Black Walnut	7.0	7.0	Poor			Covered in dense vines, and topped
933	Black Walnut	8.5	8.5	Poor			Covered in dense vines, and topped
934	Black Walnut	12.0	12.0	Poor			Poor form, and covered in dense vines
935	Black Walnut	16.0	16.0	Poor			Covered in dense vines, and several cavities throughout
936	Black Walnut	6.8	6.8	Poor			Covered in dense vines, and poor form
937	Black Walnut	7.5	7.5	Poor			Covered in dense vines, and poor form
938	Black Walnut	10.5	10.5	Poor			Covered in dense vines, and poor form
939	Dead	-	-	-	X*		
940	Black Walnut	7.8	7.8	Poor			Covered in dense vines, and poor form
941	Black Walnut	7.5	7.5	Poor			Covered in dense vines, and poor form
942	Black Walnut	23.8	23.8	Poor			Covered in dense vines, large broken limbs, and some dead limbs
943	Dead	-	-	-	X*		Double trunk, covered in dense vines, large broken limbs, and some dead limbs
944	Black Walnut	9.0	9.0	Poor	X*		Topped, and covered in dense vines
945	Black Walnut	6.0	6.0	Poor	X*		Topped, and covered in dense vines
946	Kwanzan Cherry	10.0	10.0	Poor	X*		Poor form, covered in dense vines, and uprooting
947	Black Walnut	8.5	8.5	Poor	X*		Co-dominant stems, covered in dense vines, and partially topped
948	Red Maple	6.5	6.5	Fair	X		Crooked trunk, and vines on trunk
949	Red Maple	11.5	11.5	Fair	X		Covered in dense vines, and several dead and broken limbs
950	Black Cherry	8.3	8.3	Fair	X		Crooked trunk, and covered in dense vines
951	Red Maple	13.1	13.1	Fair	X		Double trunk, dead and broken limbs, and vines in canopy
952	Red Maple	11.7	11.7	Fair	X		Double trunk, included bark, and vines in canopy
953	Black Locust	10.2	10.2	Poor	X*		Topped, and covered in vines
954	Black Locust	12.0	12.0	Fair			Covered in dense vines
955	Pignut Hickory	6.0	6.0	Good			Co-dominant stems
956	American Sycamore	9.0	9.0	Good			Lean in growth
957	Tulip Poplar	24.5	24.5	Fair			Vines on trunk, and a few dead and broken limbs
958	American Sycamore	15.0	15.0	Good	X*		
959	Pignut Hickory	7.5	7.5	Good	X		Vines on trunk
960	Tulip Poplar	6.5	6.5	Poor	X		Cavity in base, and dense vines up truck
961	Tulip Poplar	10.8	10.8	Fair	X		Vines on trunk
962	Tulip Poplar	16.5	16.5	Good	X		
963	Tulip Poplar	20.0	20.0	Good	X		
964	Tulip Poplar	20.5	20.5	Good	X		
965	American Sycamore	23.0	23.0	Good	X		
966	Tulip Poplar	20.0	20.0	Fair	X		Co-dominant stems
967	Tulip Poplar	14.0	14.0	Good	X		
968	Tulip Poplar	10.0	10.0	Fair	X		Covered in dense vines
969	Tulip Poplar	10.0	10.0	Fair	X		Poor form
970	Tulip Poplar	7.0	7.0	Fair	X		Poor form
971	Tulip Poplar	21.0	21.0	Fair	X		A few dead and broken limbs
972	Red Maple	7.5	7.5	Fair	X		Poor form, and vines up trunk
973	Tulip Poplar	17.0	17.0	Good	X		
974	Tulip Poplar	27.8	27.8	Fair	X		Co-dominant stems
975	Red Maple	7.0	7.0	Good	X		
976	Dead	-	-	-	X		
977	Tulip Poplar	8.0	8.0	Fair	X		Covered in dense vines
978	Pignut Hickory	7.1	7.1	Good	X		
979	Pignut Hickory	7.2	7.2	Good	X		
980	Tulip Poplar	17.0	17.0	Good	X		
981	Tulip Poplar	20.0	20.0	Fair	X		Co-dominant stems
982	American Sycamore	7.0	7.0	Good	X		
983	American Sycamore	18.5	18.5	Good	X		
984	Tulip Poplar	28.0	28.0	Fair	X		Dense vines in canopy
985	Dead	-	-	-	X		
986	Tulip Poplar	9.0	9.0	Fair	X		A few dead and broken limbs
987	American Sycamore	30.0	30.0	Fair	X		Covered in dense vines, a few broken limbs, and shallow roots
988	Tulip Poplar	11.0	11.0	Good	X		Vines up trunk
989	Tulip Poplar	22.5	22.5	Fair	X		Co-dominant stems
990	Tulip Poplar	36.8	36.8	Fair	X		Double trunk, covered in dense vines, and some broken limbs
991	Dead	-	-	-	X		
992	American Sycamore	20.7	20.7	Fair	X		Covered in dense vines
993	Tulip Poplar	21.2	21.2	Fair	X		Co-dominant stems, and vines up trunk
994	Tulip Poplar	22.5	22.5	Fair	X		Co-dominant stems, and vines up trunk
995	Tulip Poplar	13.5	13.5	Good	X		Vines on trunk
996	Tulip Poplar	13.7	13.7	Good	X		Vines on trunk
997	Tulip Poplar	17.0	17.0	Good	X		Vines on trunk
998	Tulip Poplar	16.3	16.3	Fair	X		Covered in dense vines, and some broken limbs
999	Tulip Poplar	9.5	9.5	Fair	X		Covered in dense vines, and some broken limbs
1000	Tulip Poplar	13.8	13.8	Fair	X		Co-dominant stems





ENVIRONMENTAL
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BLACKWELL ROAD & LEE HIGHWAY
TOWN OF WARRENTON

EXISTING VEGETATION INVENTORY

REVISIONS

DATE	COMMENTS

SHEET 11 OF 11

SCALE: NTS

PROJECT DATE: 04/05/22

DRAFT: EFW | CHECK: AMS

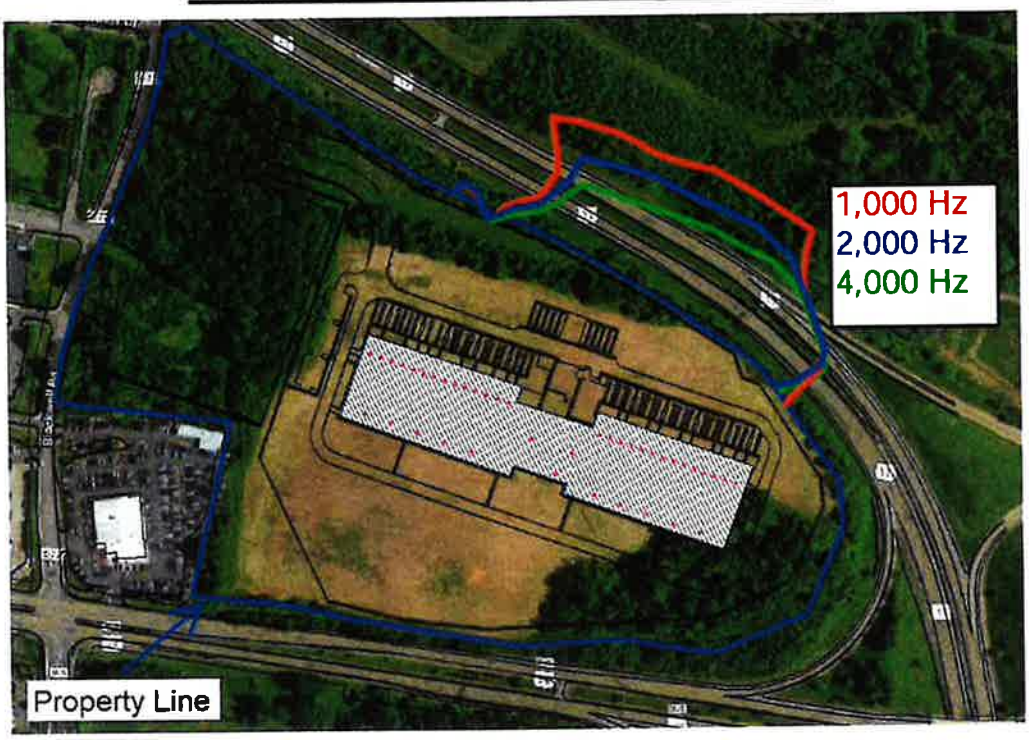
FILE NUMBER: 2724

Exhibits 4 and 5

Town Limits

Limit	Correction	63	125	250	500	1000	2000	4000	8000
Base Limits	n/a	72	70	65	59	55	51	47	44
Daytime	-5 R-District	67	65	60	54	50	46	42	39
Nighttime	-5 R-District -5 10pm-7am	62	60	55	49	45	41	37	34
Daytime Industrial	n/a	72	70	65	59	55	51	47	44
Nighttime Industrial	**-5 10pm-7am**	**67**	**65**	**60**	**54**	**50**	**46**	**42**	**39**
Generator	-5 R-District +5 20% of 1 hr	72	70	65	59	55	51	47	44

Locations Exceeding at Property Line



- Noise Levels
  - Noise from chillers will exceed town limit @ 1,000 – 4,000 Hz at northeast property line for nighttime limits.
  - All other frequencies will be contained within the property line.
  - Daytime limits at all frequencies will be contained within the property line.
- Impact
  - Impact is not possible on Route 17, as there is no one to hear noise.
  - For Industrial land impacted, noise will be equal to traffic noise (per measurements at site).
- Mitigation
  - Either involves a roof barrier taller than equipment (~16-20' tall) or baffles incorporated into sheaths, which would impact airflow.

Summary

- Daytime Model
  - Will exceed town limit @ 1,000 – 4,000 Hz northeast of Route 17, but there is not residential present.
  - Town limit shown to be met.
- Nighttime Model
  - Will exceed town limit @ 500 – 4,000 Hz northeast of Route 17, but there is not residential present.
  - Town limit shown to be met.
- Generator
  - Town limit shown to be met.
- Measurements
  - All measurements in residential areas shown to meet Town Limit. M3 (north of site) is the loudest, but is not impacting residences.
  - M1
    - Data center quieter than background noise except during evening hours.
    - Quieter than town limit except for 2,000 Hz by 1 dB.
  - M2
    - Data center quieter than background noise except during evening hours.
    - Quieter than town limit except for 1,000 – 2,000 Hz, by 1 dB.
  - M3
    - For low frequencies, quieter except during evening hours. For mid to high frequencies, equal to or higher background noise.
    - Quieter than town limit except for 1,000 – 4,000 Hz, by 9 dB.
  - M4
    - Data center quieter than background noise.
    - Quieter than town limit.
  - M5
    - For low frequencies, quieter except during evening hours.
    - Quieter than town limit.

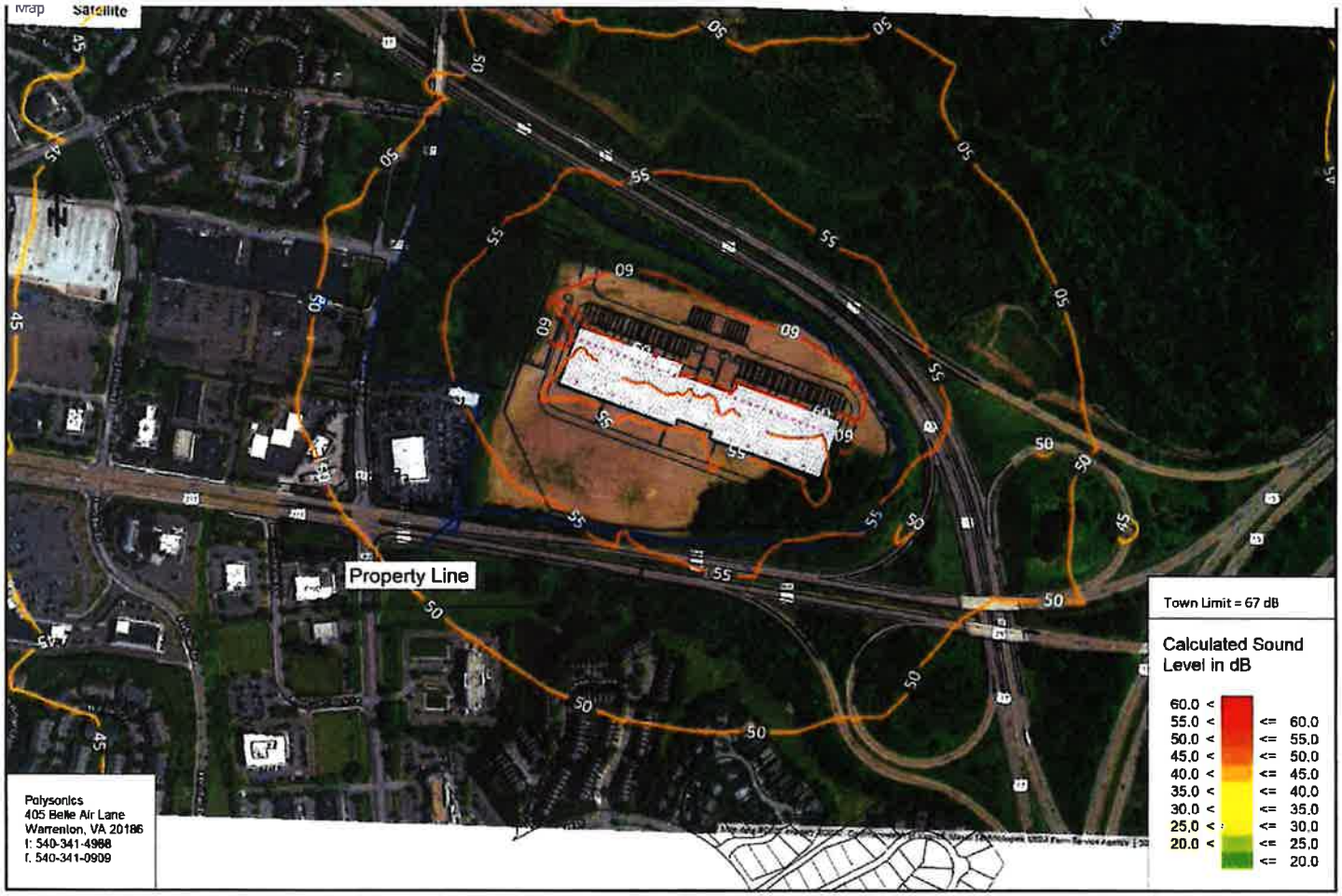
Town Limits

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Generator	-5 R-District +5 20% of 1 hr	72	70	65	59	55	51	47	44

Daytime Model

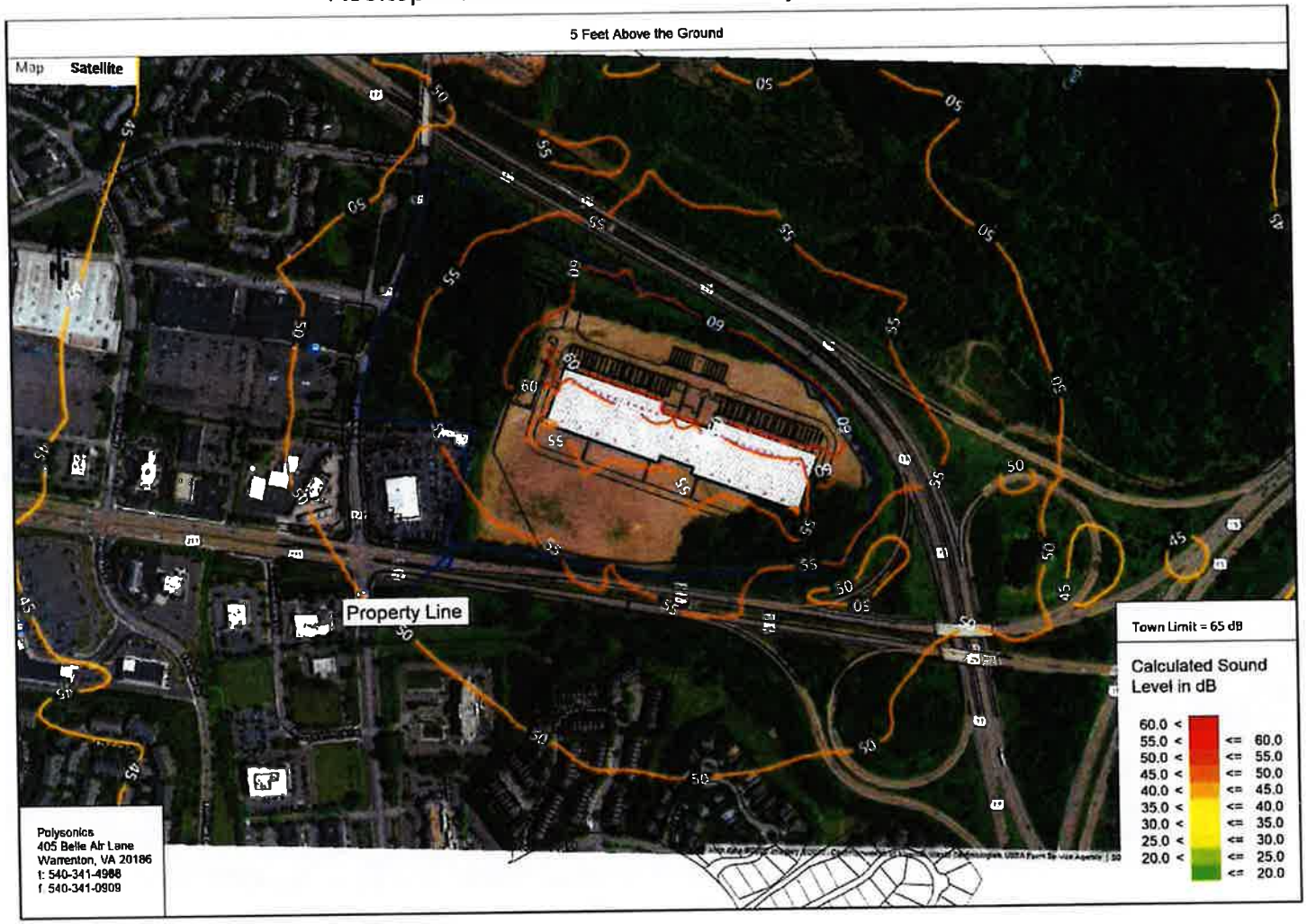
Warrenton Data Center

Rooftop Mechanical Noise Levels Daytime - 63 Hz



Warrenton Data Center

Rooftop Mechanical Noise Levels Daytime - 125 Hz



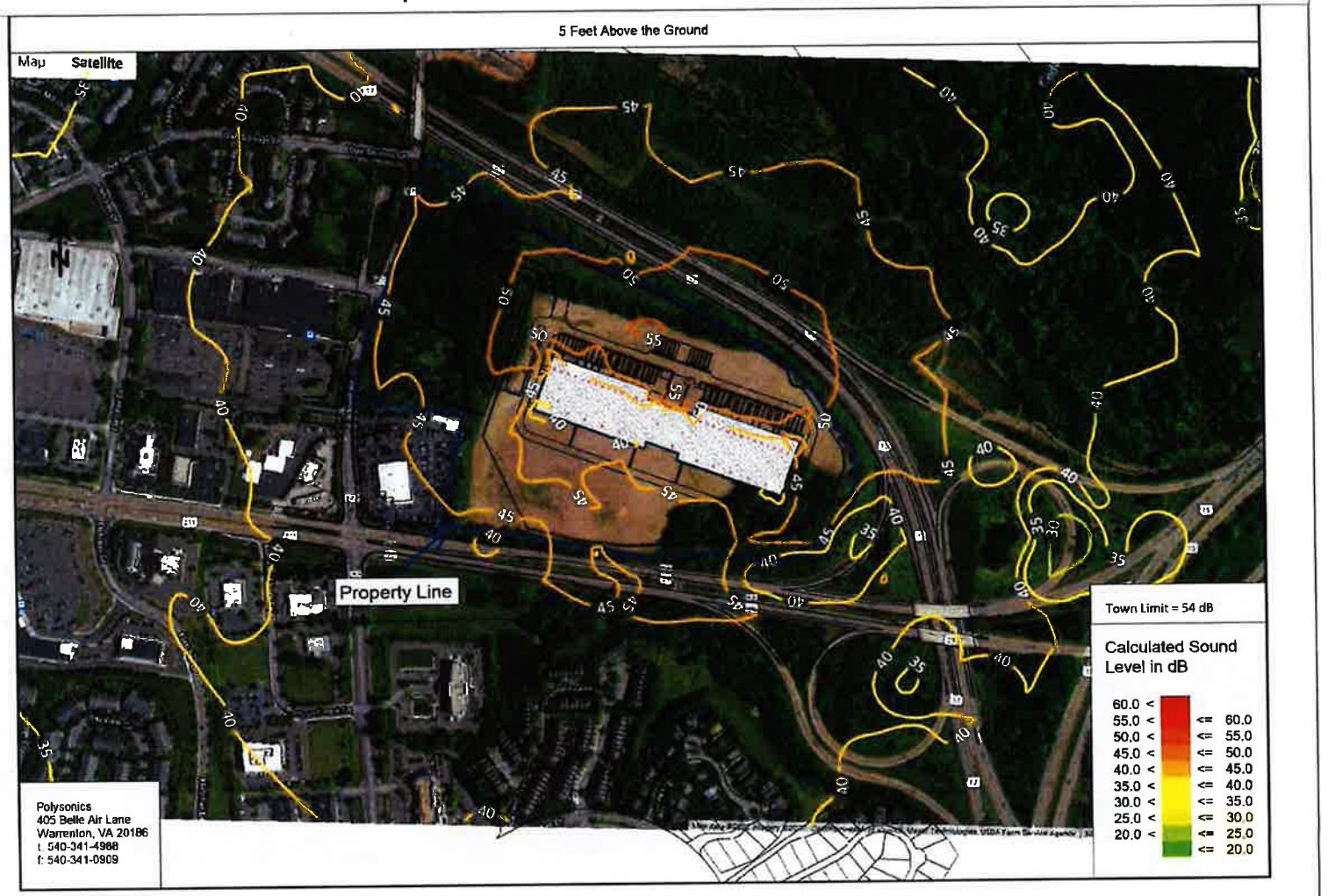
Warrenton Data Center

Rooftop Mechanical Noise Levels Daytime - 250 Hz



Warrenton Data Center

Rooftop Mechanical Noise Levels Daytime - 500 Hz



Warrenton Data Center

Rooftop Mechanical Noise Levels Daytime - 1000 Hz



Warrenton Data Center

Rooftop Mechanical Noise Levels Daytime - 2000 Hz



Warrenton Data Center

Rooftop Mechanical Noise Levels Daytime - 4000 Hz



Warrenton Data Center

Rooftop Mechanical Noise Levels Daytime - 8000 Hz



Nighttime Model

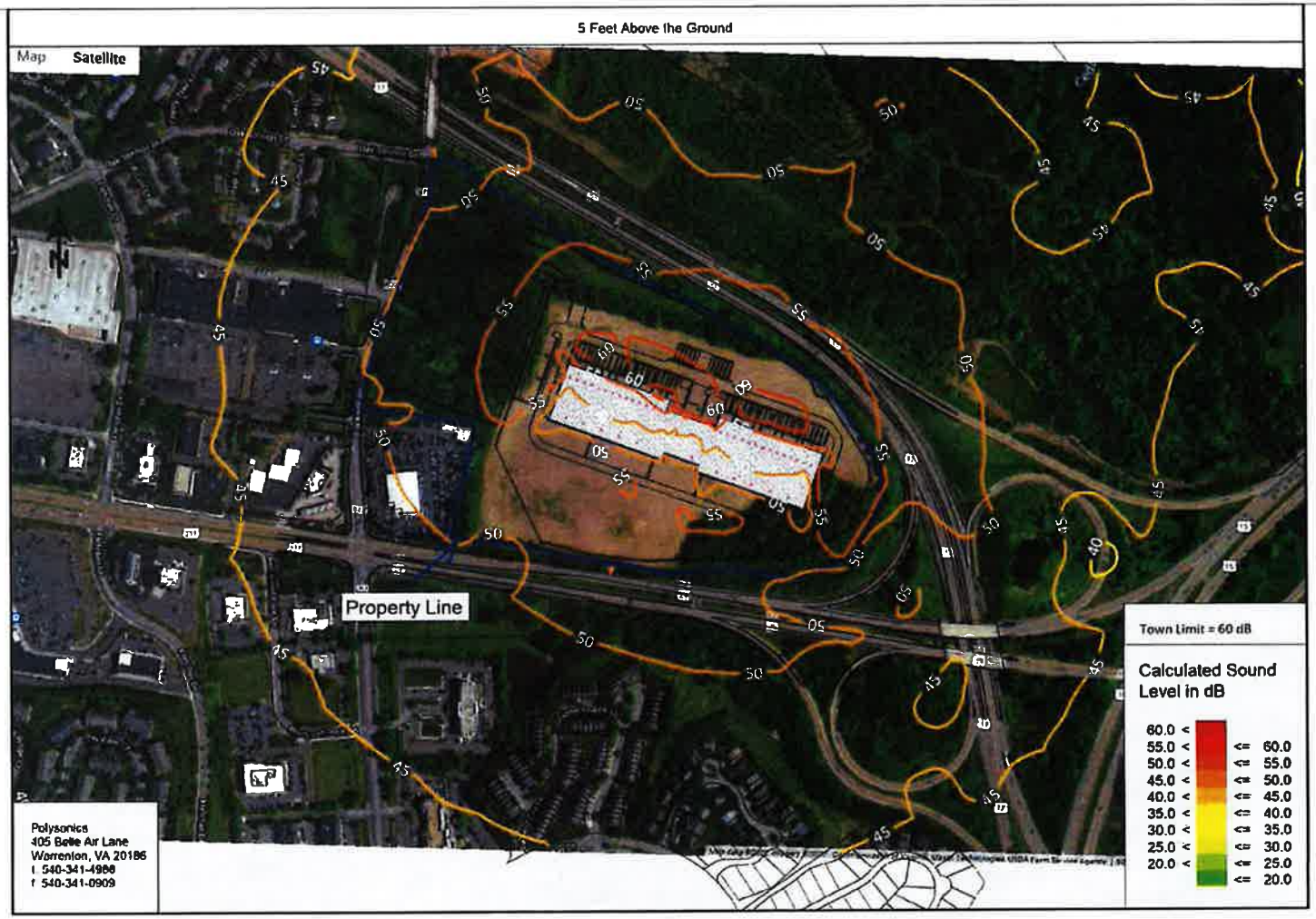
Warrenton Data Center

Rooftop Mechanical Noise Levels Nighttime - 63 Hz



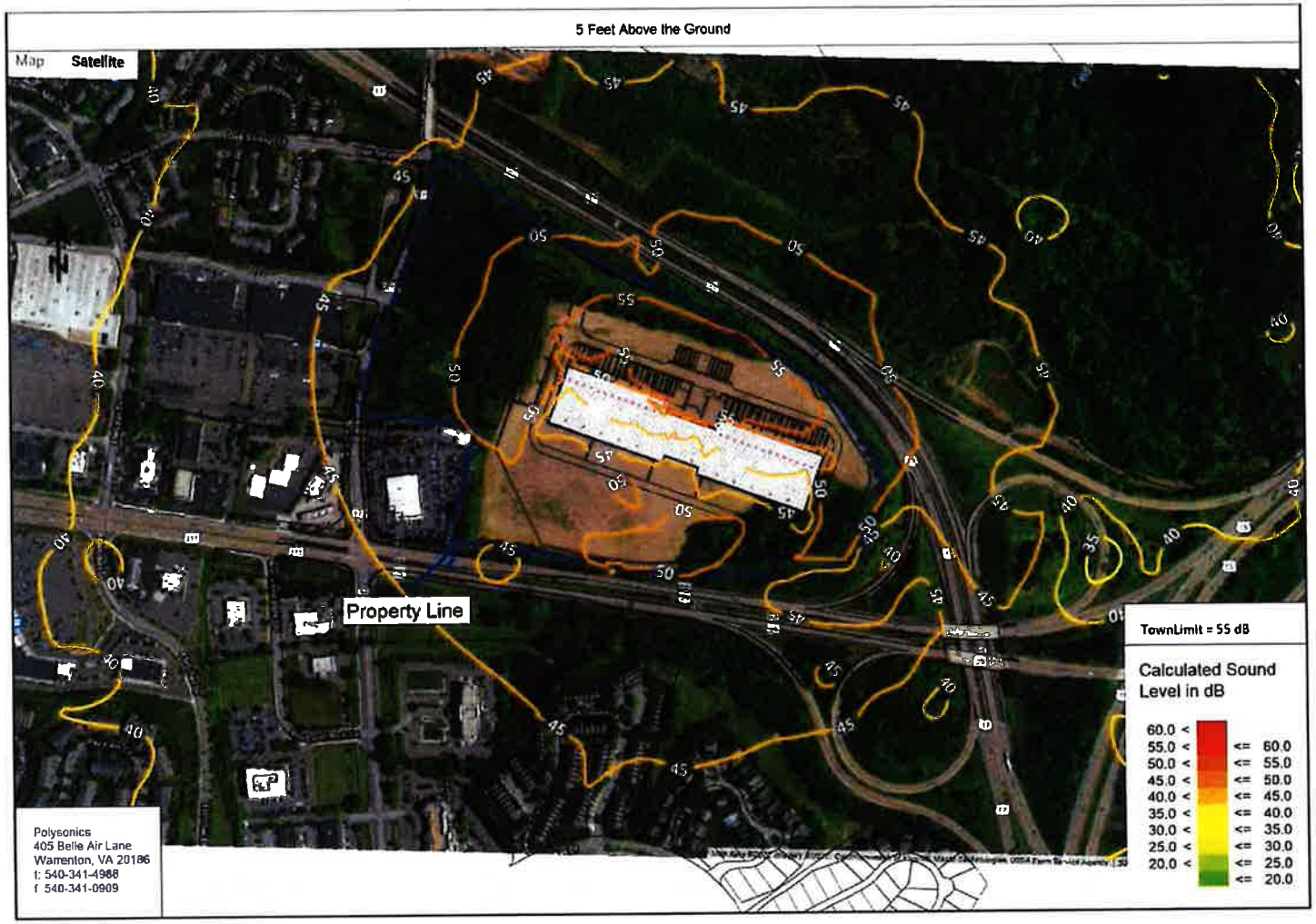
Warrenton Data Center

Rooftop Mechanical Noise Levels Nighttime - 125 Hz



Warrenton Data Center

Rooftop Mechanical Noise Levels Nighttime - 250 Hz

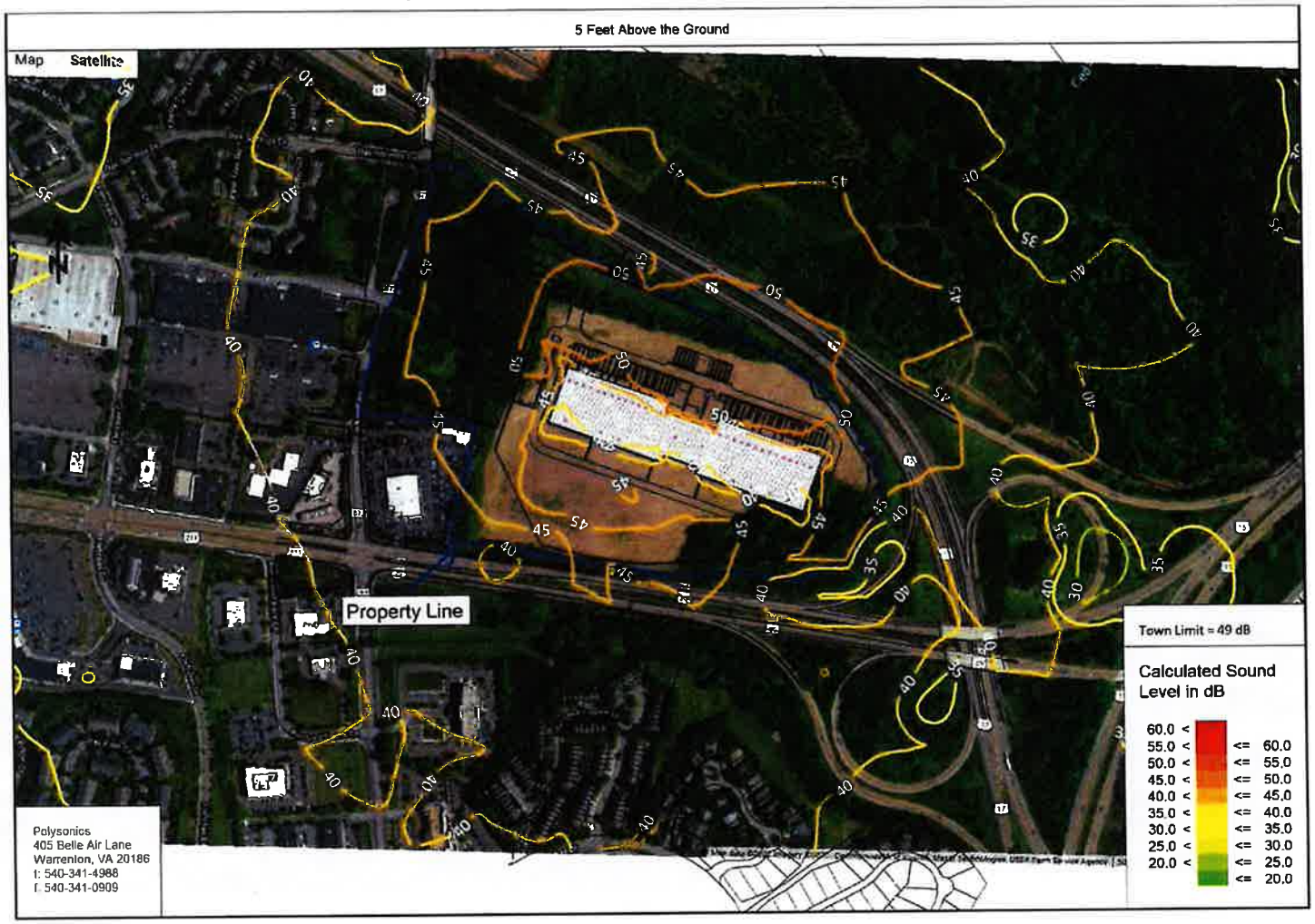


Adjacent Property Owners List
Generated and Reviewed with PWC Real Estate Assessments Website on August 26, 2022

idx	Identifier	PropAdd1	PropAdd2	MailTo1	MailTo2	MailTo3	MailAdd1	MailAdd2	Source
1	7397-84-4736	13000 GATEWAY CEN	GAINESVILLE, VA	LOWES HOME CENTERS INC ATTN: SR VICE PRES C			1000 LOWI	MOORESV	Prince William County
2	7397-93-1744	7450 LIMESTONE DR	GAINESVILLE, VA	VGCC LC			12500 FAIF	FAIRFAX, V	Prince William County
3	7497-03-0650.00	7475 LIMESTONE DR	GAINESVILLE, VA	UNIT OWNERS GATEWAY CROSSING RETAIL CONI			12500 FAIF	FAIRFAX, V	Prince William County
4	7397-93-8571.00	7481 LIMESTONE DR	GAINESVILLE, VA	GATEWAY CENTER LC			12500 FAIF	FAIRFAX, V	Prince William County
5	7497-03-0758.00	7485 LIMESTONE DR	GAINESVILLE, VA	FAUQUIER BANK			10 COURTI	WARRENT	Prince William County
6	7397-93-8854.00	7489 LIMESTONE DR	GAINESVILLE, VA	H3L1 INVESTMENT LLC ATTN KYUNG SIN LEE & LE			14256-A W	CENTREVIL	Prince William County
7	7397-94-3859	5291 WELLINGTON BR	GAINESVILLE, VA	GATEWAY BRANCH OUTDOORS LC			12500 FAIF	FAIRFAX, V	Prince William County
8	7397-93-0796	5300 WELLINGTON BR	GAINESVILLE, VA	DTE WSSI FACILITY LLC C/O THE DAVEY TREE EXPE			1500 N MA	KENT, OH	Prince William County
9	7397-94-5516	5351 WELLINGTON BR	GAINESVILLE, VA	GATEWAY BRANCH LC			12500 FAIF	FAIRFAX, V	Prince William County
10	7497-04-1151	5399 WELLINGTON BR	GAINESVILLE, VA	NORTHERN VIRGINIA ELECTRIC COOP PLANT ACC			PO BOX 27	MANASSA	Prince William County
1	Gateway Crossing Retail C	12500 Fair Lake Circle	Fairfax, VA 22033	Gateway Crossing Retail CUO			12500 Fair	Fairfax, VA	Planned Development District
				Walsh, Colucci, Lubeley & Walsh, P.C. (c/o Jessica Pfeiffer)			4310 Princ	Prince William, VA 22192	

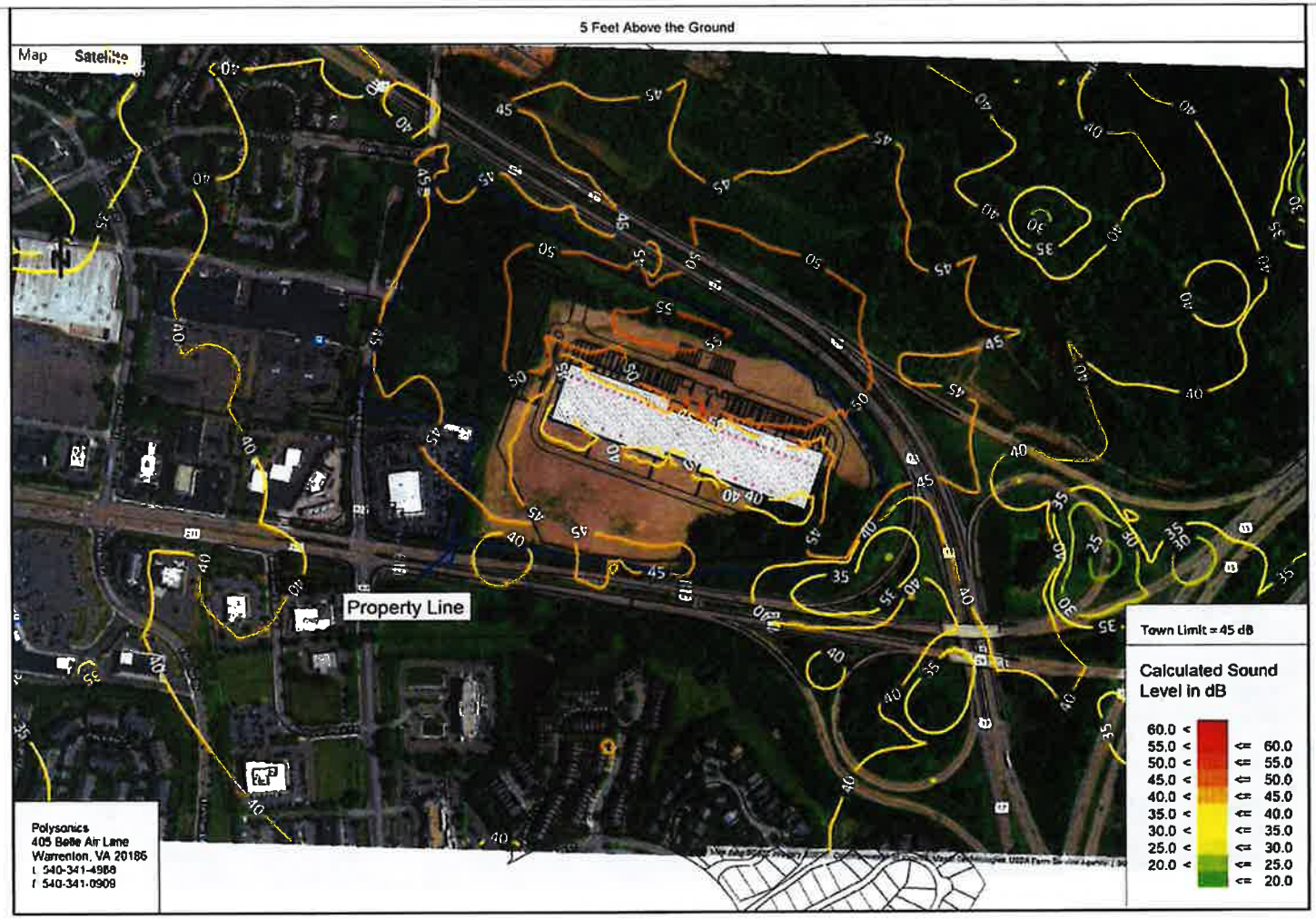
Warrenton Data Center

Rooftop Mechanical Noise Levels Nighttime - 500 Hz



Warrenton Data Center

Rooftop Mechanical Noise Levels Nighttime - 1000 Hz



Warrenton Data Center

Rooftop Mechanical Noise Levels Nighttime - 2000 Hz



Warrenton Data Center

Rooftop Mechanical Noise Levels Nighttime - 4000 Hz



Warrenton Data Center

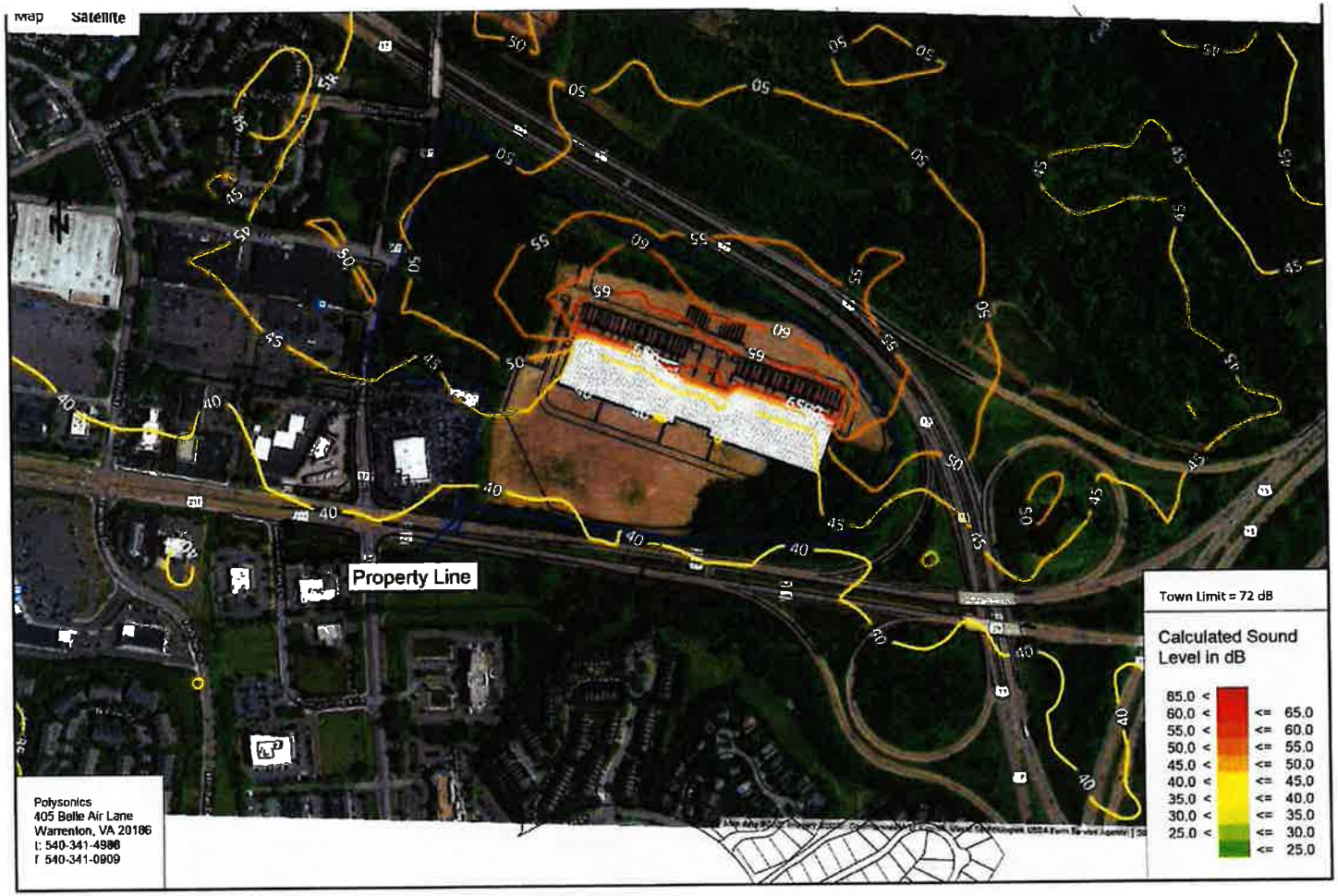
Rooftop Mechanical Noise Levels Nighttime - 8000 Hz



Generator Model

Warrenton Data Center

Generator Noise Levels - 63 Hz



Warrenton Data Center

Generator Noise Levels - 125 Hz



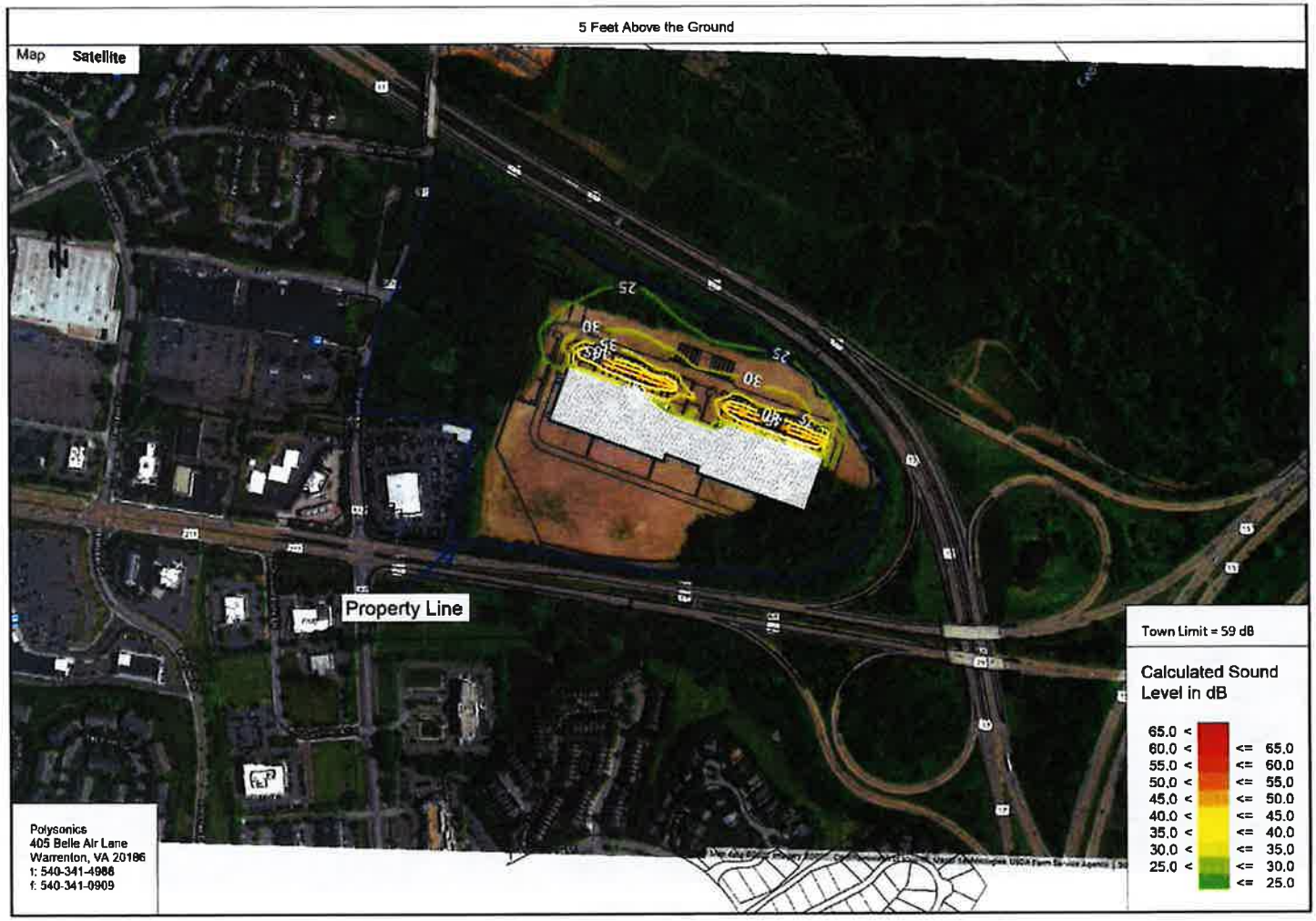
Warrenton Data Center

Generator Noise Levels - 250 Hz



Warrenton Data Center

Generator Noise Levels - 500 Hz



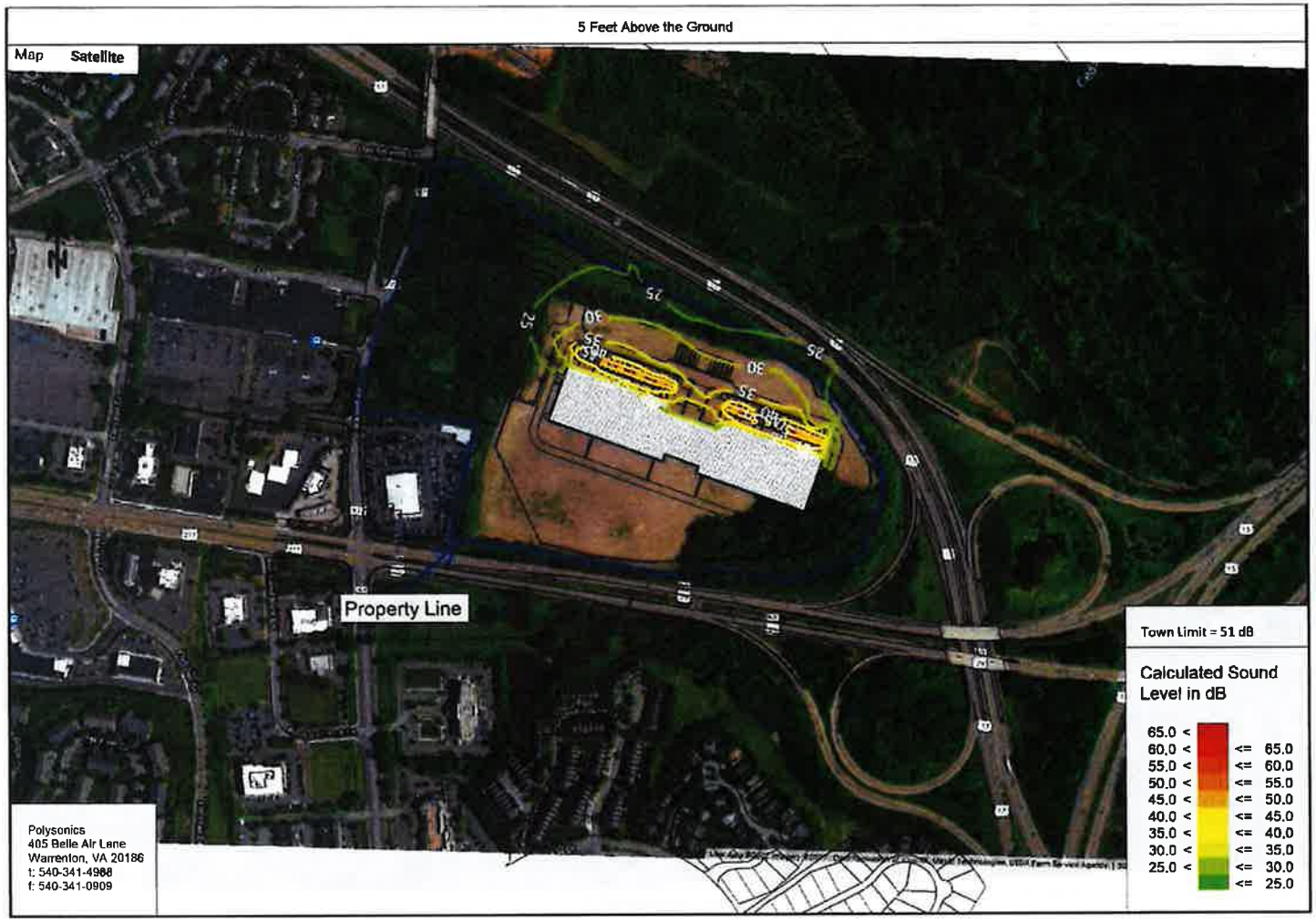
Warrenton Data Center

Generator Noise Levels - 1000 Hz



Warrenton Data Center

Generator Noise Levels - 2000 Hz



Warrenton Data Center

Generator Noise Levels - 4000 Hz



Warrenton Data Center

Generator Noise Levels - 8000 Hz



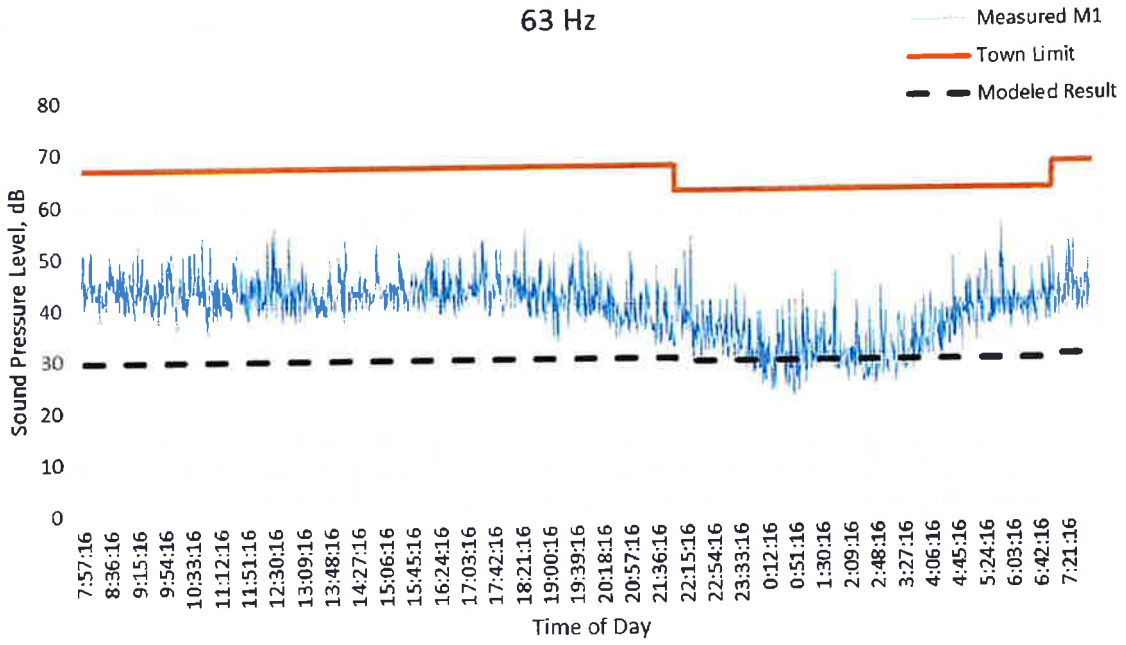
Measurement Map

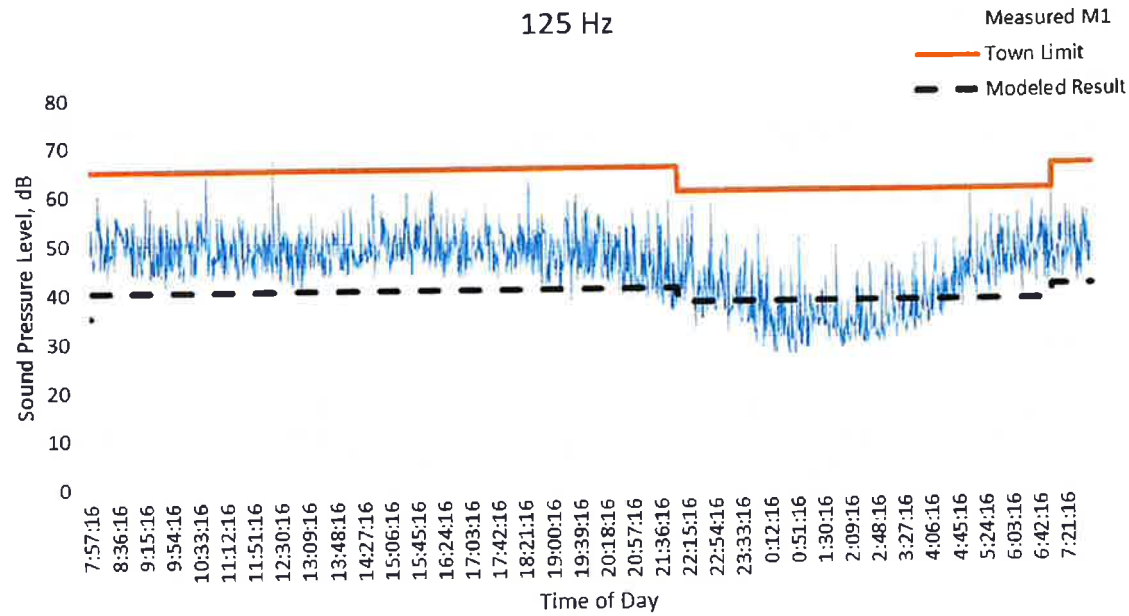

CM1
CM2
CM3
CM4
CM5
Google Earth

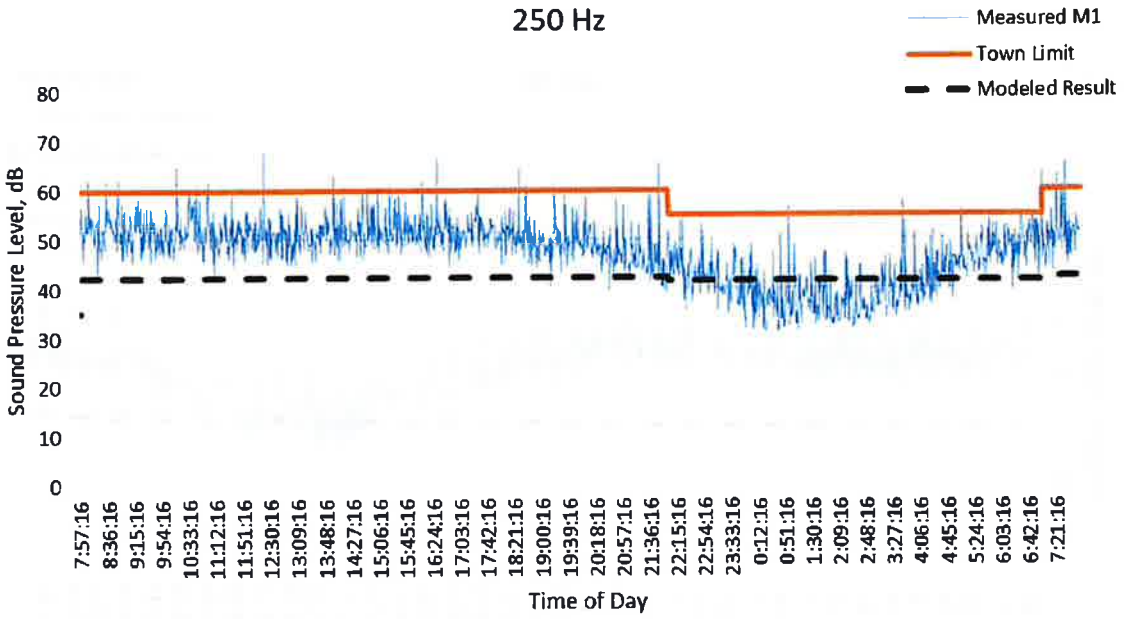
Measurement Summary

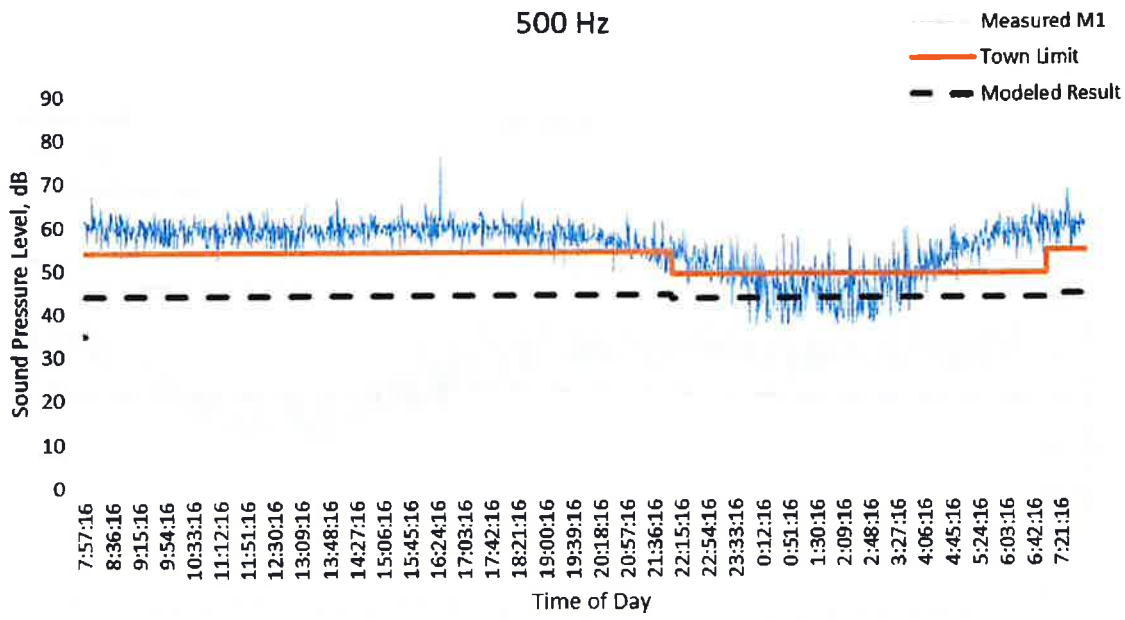
Loc.	Day/ Night	Data	63	125	250	500	1000	2000	4000	8000
M1	Day	Lowest Measured	32	35	40	48	58	52	38	25
		Town Limit	67	65	60	54	50	46	42	39
		SoundPlan	30	40	42	44	48	44	39	17
	Night	Lowest Measured	22	26	31	36	36	28	24	19
		Town Limit	62	60	55	49	45	41	37	34
		SoundPlan	29	37	42	43	**46**	**42**	36	17
M2	Day	Lowest Measured	32	36	34	40	49	46	37	24
		Town Limit	67	65	60	54	50	46	42	39
		SoundPlan	27	38	40	42	47	44	39	16
	Night	Lowest Measured	23	27	27	32	32	23	25	19
		Town Limit	62	60	55	49	45	41	37	34
		SoundPlan	26	35	39	41	**46**	**42**	36	16
M3	Day	Lowest Measured	28	35	34	38	42	37	32	20
		Town Limit	67	65	60	54	50	46	42	39
		SoundPlan	32	45	46	49	**55**	**52**	**48**	32
	Night	Lowest Measured	22	30	31	33	34	32	31	19
		Town Limit	62	60	55	49	45	41	37	34
		SoundPlan	31	42	45	48	**53**	**50**	**45**	32
M4	Day	Lowest Measured	30	37	41	45	53	50	42	26
		Town Limit	67	65	60	54	50	46	42	39
		SoundPlan	25	37	38	41	47	43	35	3
	Night	Lowest Measured	22	30	33	34	35	26	37	19
		Town Limit	62	60	55	49	45	41	37	34
		SoundPlan	24	34	38	41	45	41	32	3
M5	Day	Lowest Measured	27	28	31	37	42	37	30	20
		Town Limit	67	65	60	54	50	46	42	39
		SoundPlan	23	34	37	39	44	42	32	0
	Night	Lowest Measured	22	25	28	29	29	27	23	19
		Town Limit	62	60	55	49	45	41	37	34
		SoundPlan	23	31	36	38	43	40	30	0

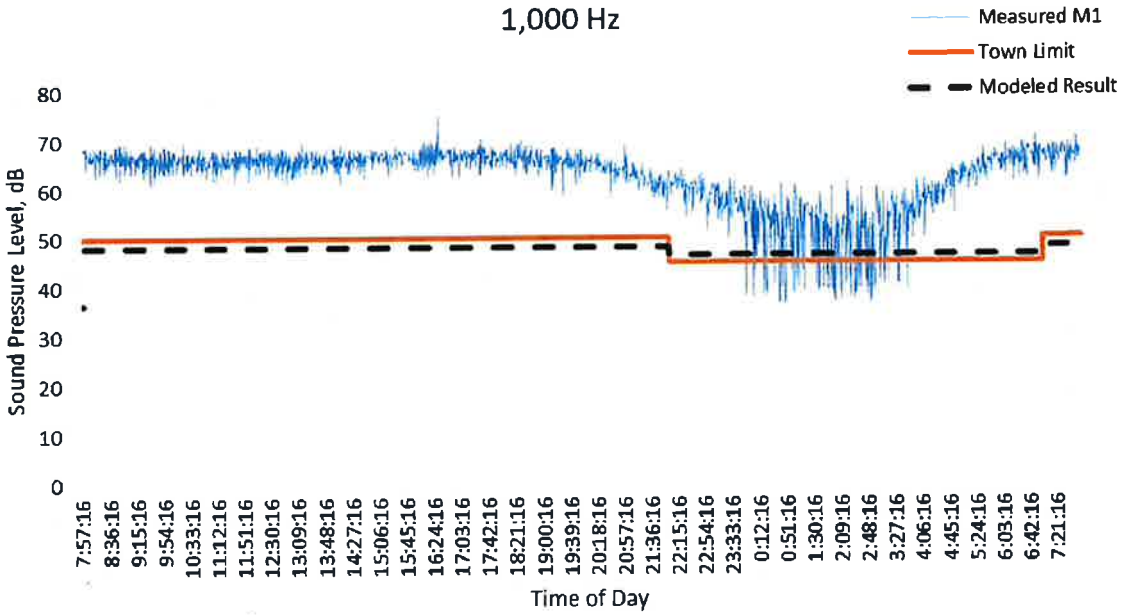
M1 Results

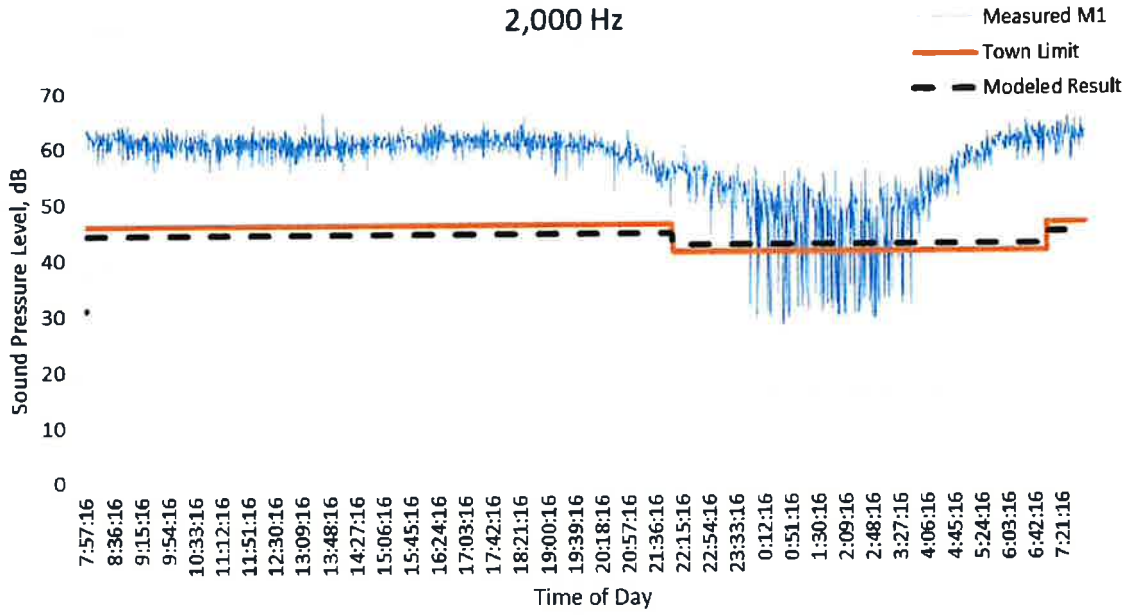

63 Hz
Measured M1
Town Limit
Modeled Result
Sound Pressure Level, dB
80
70
60
50
40
30
20
10
0
7:57:16
8:36:16
9:15:16
9:54:16
10:33:16
11:12:16
11:51:16
12:30:16
13:09:16
13:48:16
14:27:16
15:06:16
15:45:16
16:24:16
17:03:16
17:42:16
18:21:16
19:00:16
19:39:16
20:18:16
20:57:16
21:36:16
22:15:16
22:54:16
23:33:16
0:12:16
0:51:16
1:30:16
2:09:16
2:48:16
3:27:16
4:06:16
4:45:16
5:24:16
6:03:16
6:42:16
7:21:16
Time of Day

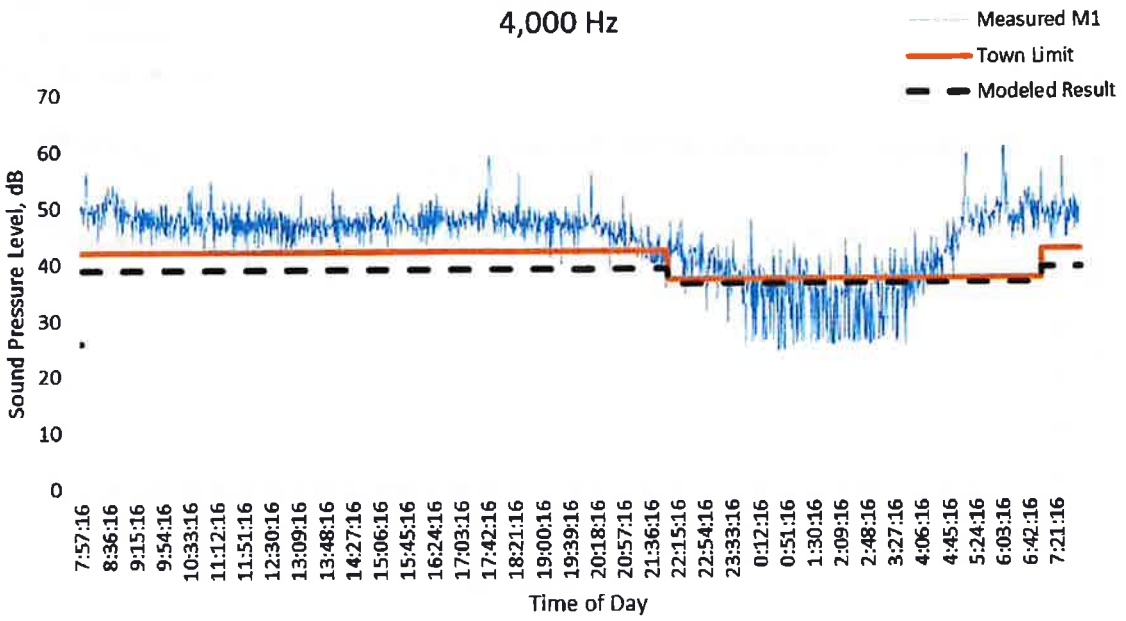

125 Hz
Measured M1
Town Limit
Modeled Result
Sound Pressure Level, dB
80
70
60
50
40
30
20
10
0
7:57:16
8:36:16
9:15:16
9:54:16
10:33:16
11:12:16
11:51:16
12:30:16
13:09:16
13:48:16
14:27:16
15:06:16
15:45:16
16:24:16
17:03:16
17:42:16
18:21:16
19:00:16
19:39:16
20:18:16
20:57:16
21:36:16
22:15:16
22:54:16
23:33:16
0:12:16
0:51:16
1:30:16
2:09:16
2:48:16
3:27:16
4:06:16
4:45:16
5:24:16
6:03:16
6:42:16
7:21:16
Time of Day

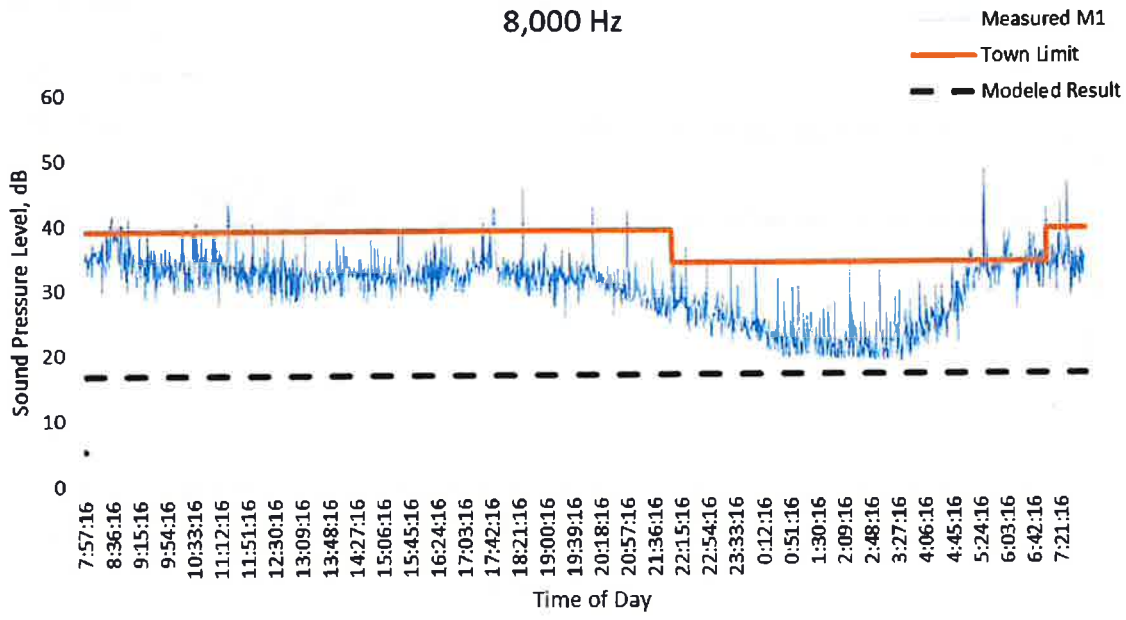

250 Hz
Measured M1
Town Limit
Modeled Result
Sound Pressure Level, dB
80
70
60
50
40
30
20
10
0
7:57:16
8:36:16
9:15:16
9:54:16
10:33:16
11:12:16
11:51:16
12:30:16
13:09:16
13:48:16
14:27:16
15:06:16
15:45:16
16:24:16
17:03:16
17:42:16
18:21:16
19:00:16
19:39:16
20:18:16
20:57:16
21:36:16
22:15:16
22:54:16
23:33:16
0:12:16
0:51:16
1:30:16
2:09:16
2:48:16
3:27:16
4:06:16
4:45:16
5:24:16
6:03:16
6:42:16
7:21:16
Time of Day


500 Hz
Measured M1
Town Limit
Modeled Result
Sound Pressure Level, dB
90
80
70
60
50
40
30
20
10
0
7:57:16
8:36:16
9:15:16
9:54:16
10:33:16
11:12:16
11:51:16
12:30:16
13:09:16
13:48:16
14:27:16
15:06:16
15:45:16
16:24:16
17:03:16
17:42:16
18:21:16
19:00:16
19:39:16
20:18:16
20:57:16
21:36:16
22:15:16
22:54:16
23:33:16
0:12:16
0:51:16
1:30:16
2:09:16
2:48:16
3:27:16
4:06:16
4:45:16
5:24:16
6:03:16
6:42:16
7:21:16
Time of Day

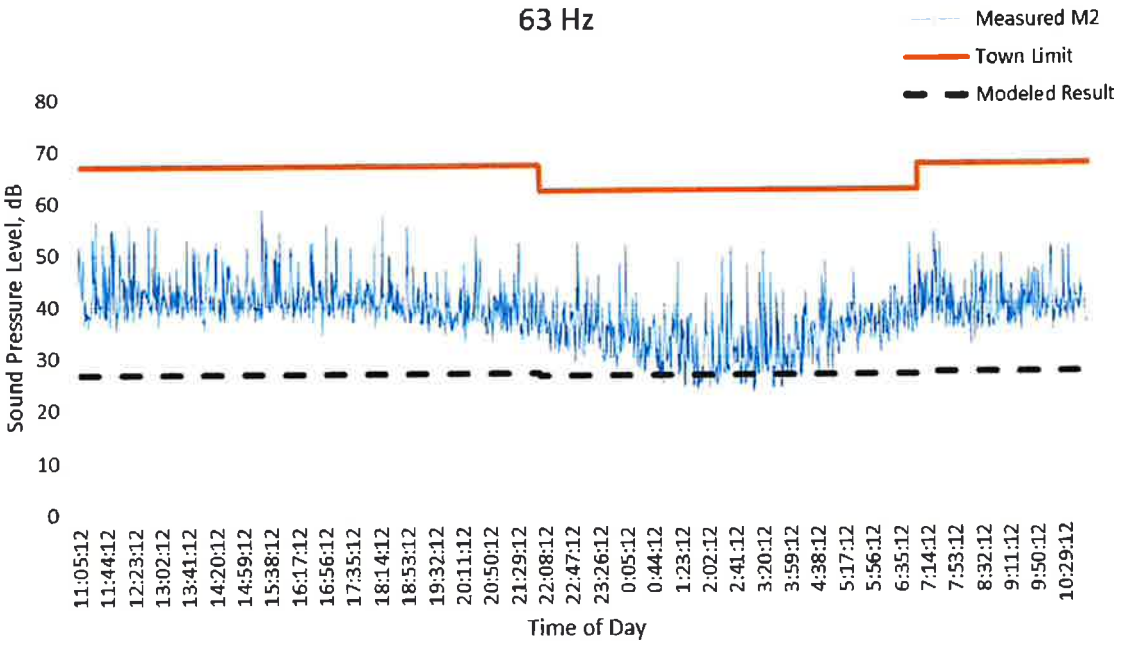

1,000 Hz
Measured M1
Town Limit
Modeled Result
Sound Pressure Level, dB
80
70
60
50
40
30
20
10
0
7:57:16
8:36:16
9:15:16
9:54:16
10:33:16
11:12:16
11:51:16
12:30:16
13:09:16
13:48:16
14:27:16
15:06:16
15:45:16
16:24:16
17:03:16
17:42:16
18:21:16
19:00:16
19:39:16
20:18:16
20:57:16
21:36:16
22:15:16
22:54:16
23:33:16
0:12:16
0:51:16
1:30:16
2:09:16
2:48:16
3:27:16
4:06:16
4:45:16
5:24:16
6:03:16
6:42:16
7:21:16
Time of Day

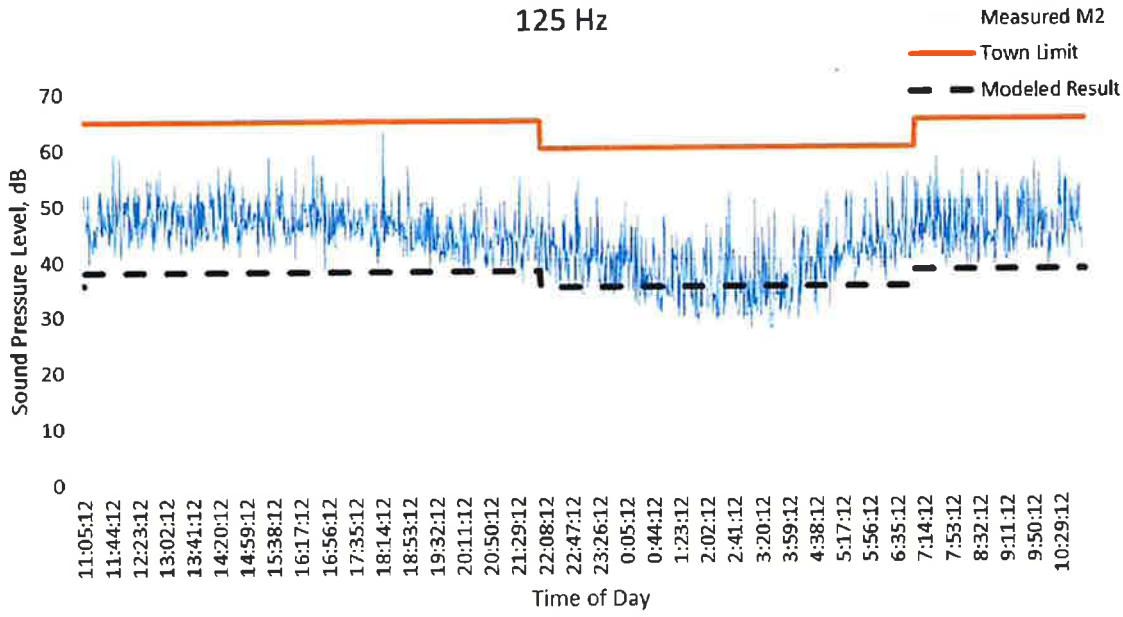

2,000 Hz
Measured M1
Town Limit
Modeled Result
Sound Pressure Level, dB
70
60
50
40
30
20
10
0
7:57:16
8:36:16
9:15:16
9:54:16
10:33:16
11:12:16
11:51:16
12:30:16
13:09:16
13:48:16
14:27:16
15:06:16
15:45:16
16:24:16
17:03:16
17:42:16
18:21:16
19:00:16
19:39:16
20:18:16
20:57:16
21:36:16
22:15:16
22:54:16
23:33:16
0:12:16
0:51:16
1:30:16
2:09:16
2:48:16
3:27:16
4:06:16
4:45:16
5:24:16
6:03:16
6:42:16
7:21:16
Time of Day

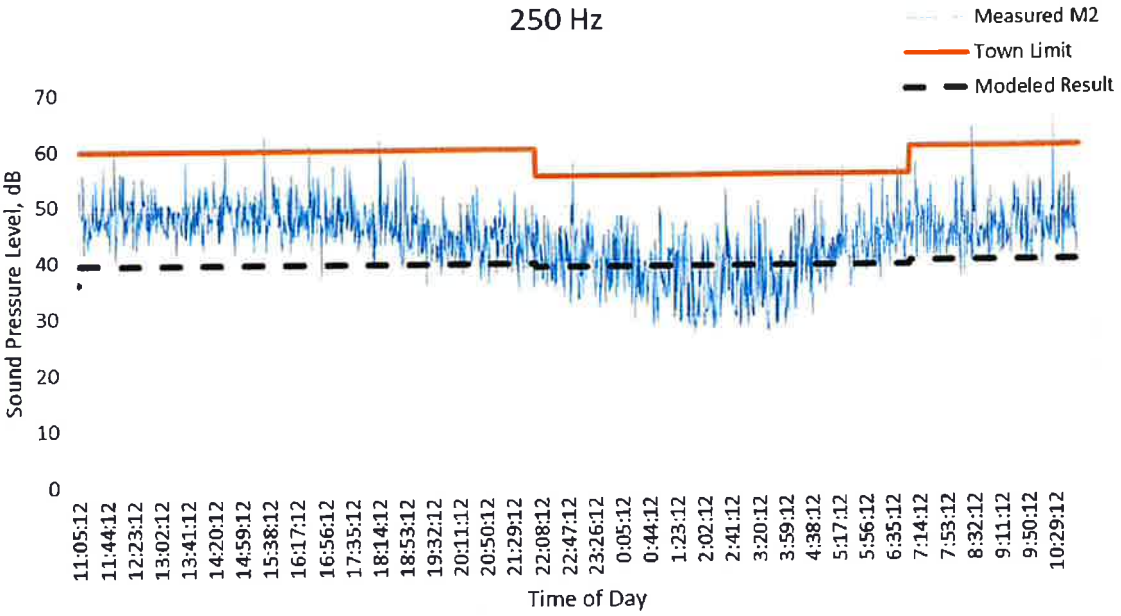

4,000 Hz
Measured M1
Town Limit
Modeled Result
Sound Pressure Level, dB
70
60
50
40
30
20
10
0
7:57:16
8:36:16
9:15:16
9:54:16
10:33:16
11:12:16
11:51:16
12:30:16
13:09:16
13:48:16
14:27:16
15:06:16
15:45:16
16:24:16
17:03:16
17:42:16
18:21:16
19:00:16
19:39:16
20:18:16
20:57:16
21:36:16
22:15:16
22:54:16
23:33:16
0:12:16
0:51:16
1:30:16
2:09:16
2:48:16
3:27:16
4:06:16
4:45:16
5:24:16
6:03:16
6:42:16
7:21:16
Time of Day

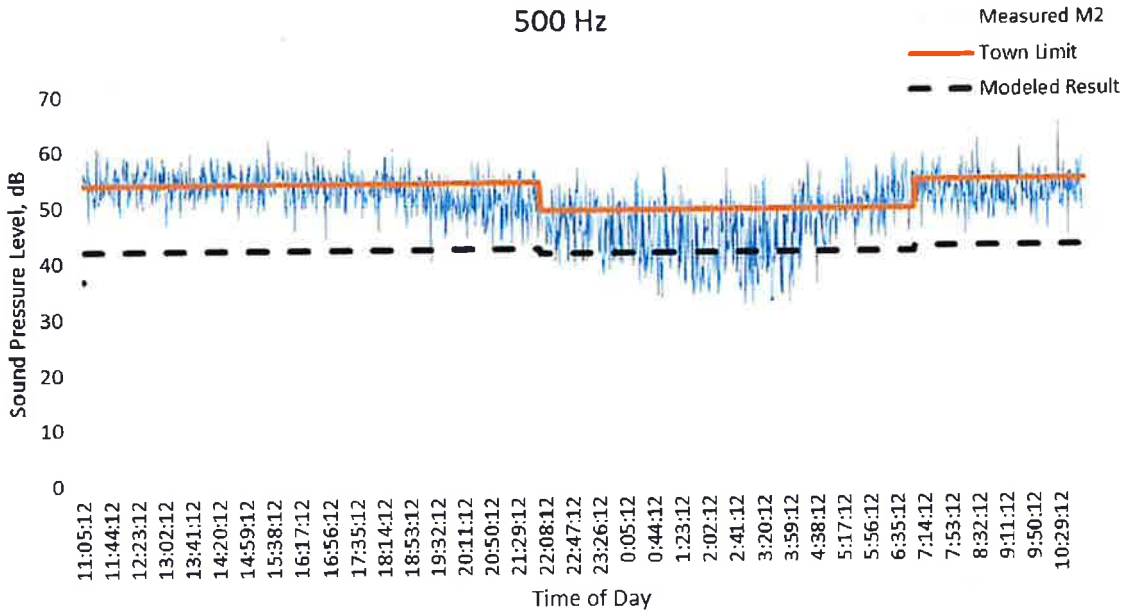

8,000 Hz
Measured M1
Town Limit
Modeled Result
Sound Pressure Level, dB
60
50
40
30
20
10
0
7:57:16
8:36:16
9:15:16
9:54:16
10:33:16
11:12:16
11:51:16
12:30:16
13:09:16
13:48:16
14:27:16
15:06:16
15:45:16
16:24:16
17:03:16
17:42:16
18:21:16
19:00:16
19:39:16
20:18:16
20:57:16
21:36:16
22:15:16
22:54:16
23:33:16
0:12:16
0:51:16
1:30:16
2:09:16
2:48:16
3:27:16
4:06:16
4:45:16
5:24:16
6:03:16
6:42:16
7:21:16
Time of Day

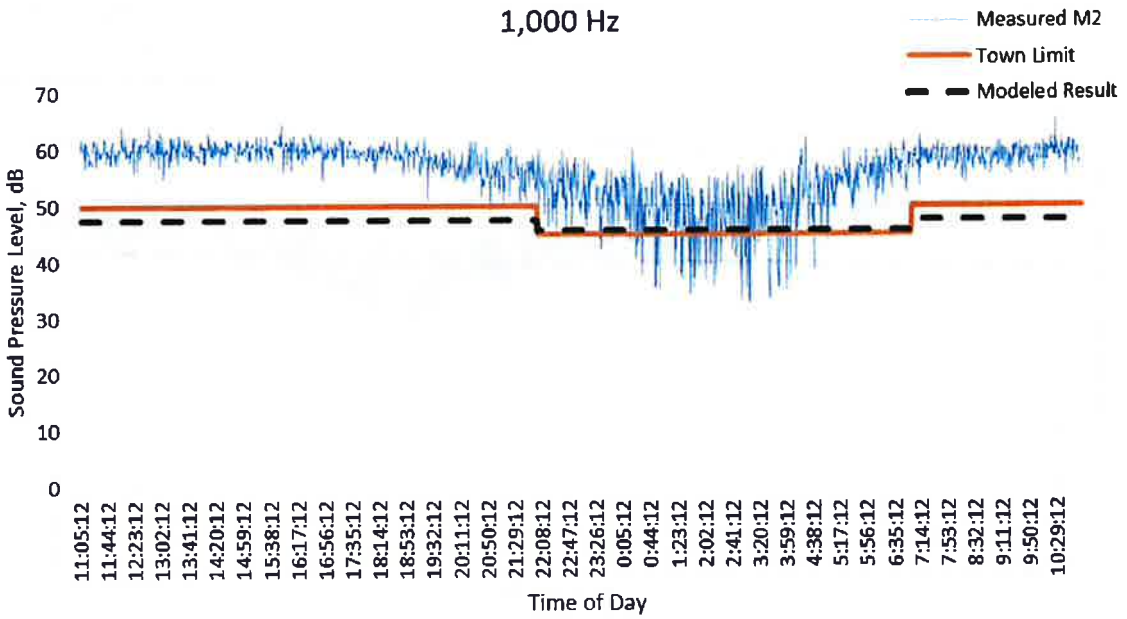
M2 Results

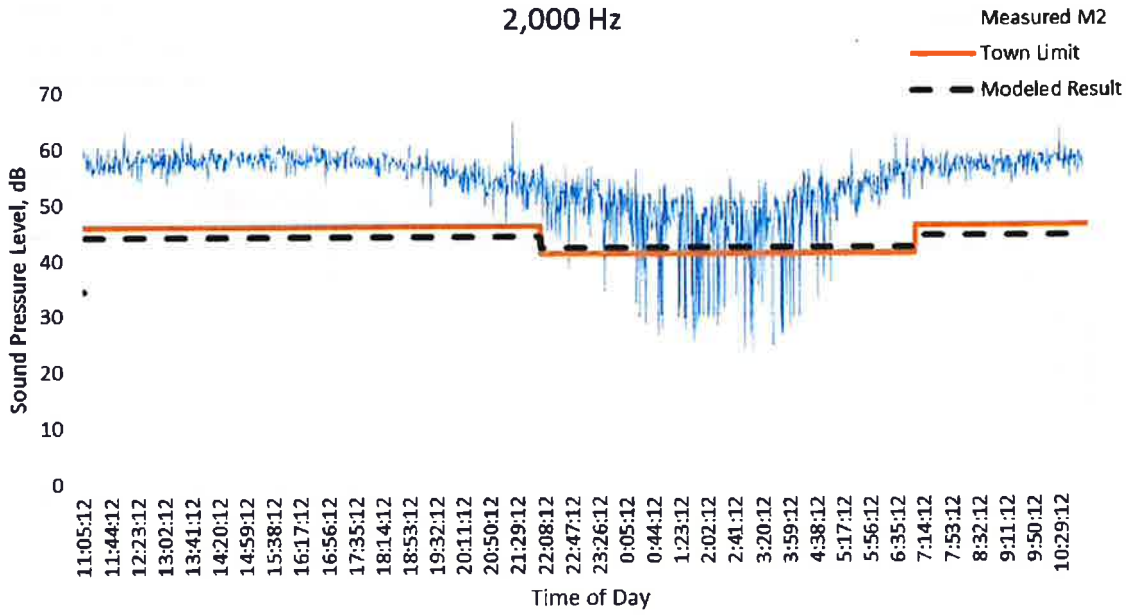

63 Hz
Measured M2
Town Limit
Modeled Result
Sound Pressure Level, dB
80
70
60
50
40
30
20
10
0
11:05:12
11:44:12
12:23:12
13:02:12
13:41:12
14:20:12
14:59:12
15:38:12
16:17:12
16:56:12
17:35:12
18:14:12
18:53:12
19:32:12
20:11:12
20:50:12
21:29:12
22:08:12
22:47:12
23:26:12
0:05:12
0:44:12
1:23:12
2:02:12
2:41:12
3:20:12
3:59:12
4:38:12
5:17:12
5:56:12
6:35:12
7:14:12
7:53:12
8:32:12
9:11:12
9:50:12
10:29:12
Time of Day

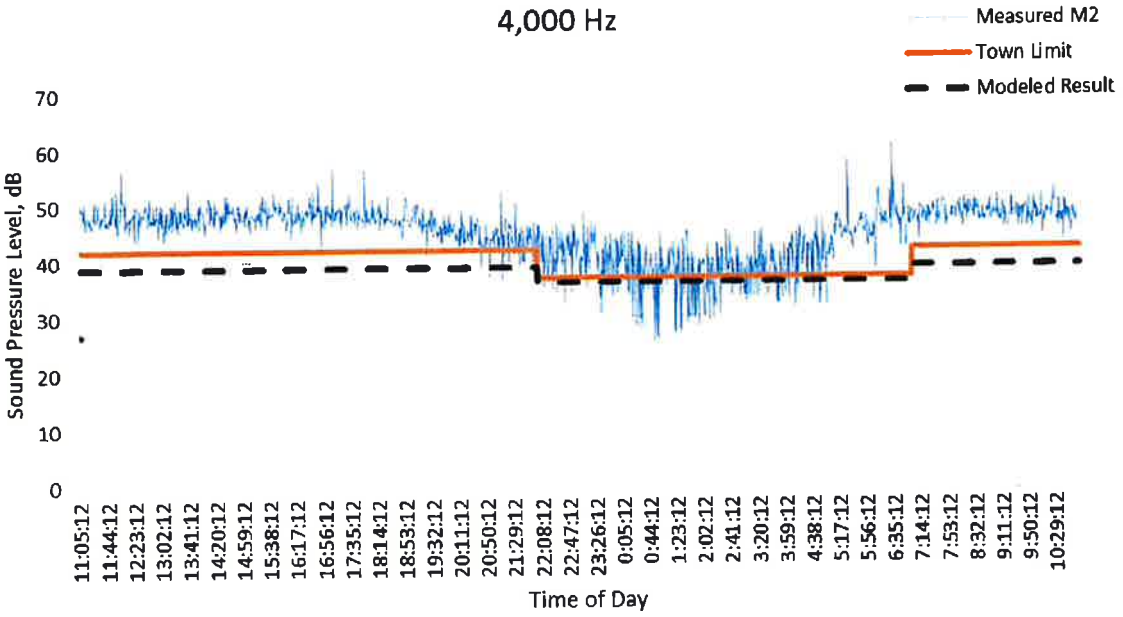

125 Hz
Measured M2
Town Limit
Modeled Result
Sound Pressure Level, dB
70
60
50
40
30
20
10
0
11:05:12
11:44:12
12:23:12
13:02:12
13:41:12
14:20:12
14:59:12
15:38:12
16:17:12
16:56:12
17:35:12
18:14:12
18:53:12
19:32:12
20:11:12
20:50:12
21:29:12
22:08:12
22:47:12
23:26:12
0:05:12
0:44:12
1:23:12
2:02:12
2:41:12
3:20:12
3:59:12
4:38:12
5:17:12
5:56:12
6:35:12
7:14:12
7:53:12
8:32:12
9:11:12
9:50:12
10:29:12
Time of Day

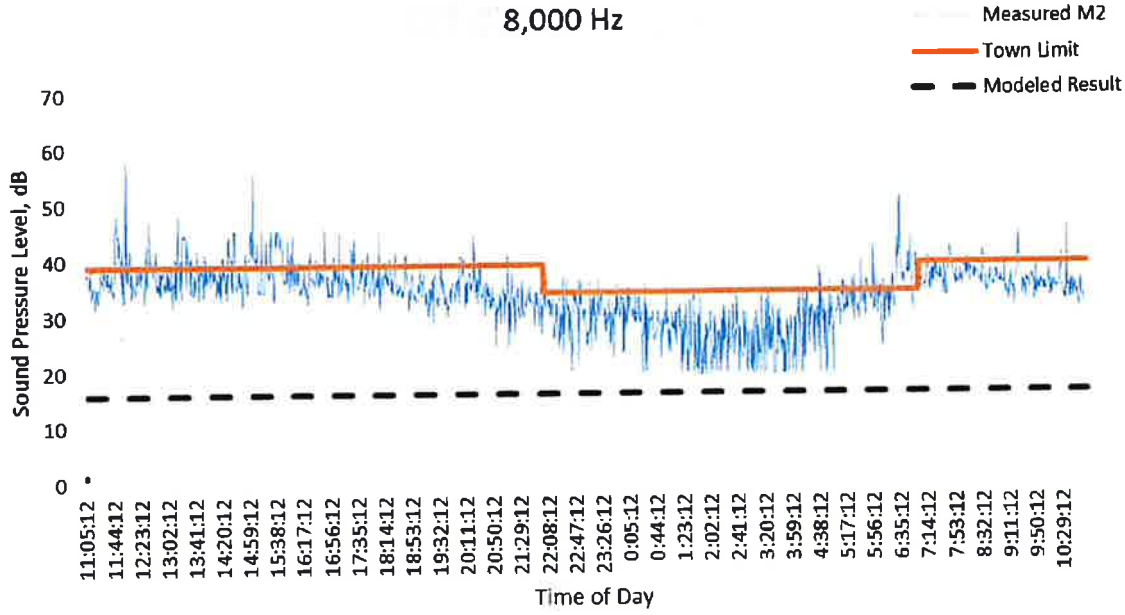

250 Hz
Measured M2
Town Limit
Modeled Result
Sound Pressure Level, dB
70
60
50
40
30
20
10
0
11:05:12
11:44:12
12:23:12
13:02:12
13:41:12
14:20:12
14:59:12
15:38:12
16:17:12
16:56:12
17:35:12
18:14:12
18:53:12
19:32:12
20:11:12
20:50:12
21:29:12
22:08:12
22:47:12
23:26:12
0:05:12
0:44:12
1:23:12
2:02:12
2:41:12
3:20:12
3:59:12
4:38:12
5:17:12
5:56:12
6:35:12
7:14:12
7:53:12
8:32:12
9:11:12
9:50:12
10:29:12
Time of Day


500 Hz
Measured M2
Town Limit
Modeled Result
Sound Pressure Level, dB
70
60
50
40
30
20
10
0
11:05:12
11:44:12
12:23:12
13:02:12
13:41:12
14:20:12
14:59:12
15:38:12
16:17:12
16:56:12
17:35:12
18:14:12
18:53:12
19:32:12
20:11:12
20:50:12
21:29:12
22:08:12
22:47:12
23:26:12
0:05:12
0:44:12
1:23:12
2:02:12
2:41:12
3:20:12
3:59:12
4:38:12
5:17:12
5:56:12
6:35:12
7:14:12
7:53:12
8:32:12
9:11:12
9:50:12
10:29:12
Time of Day

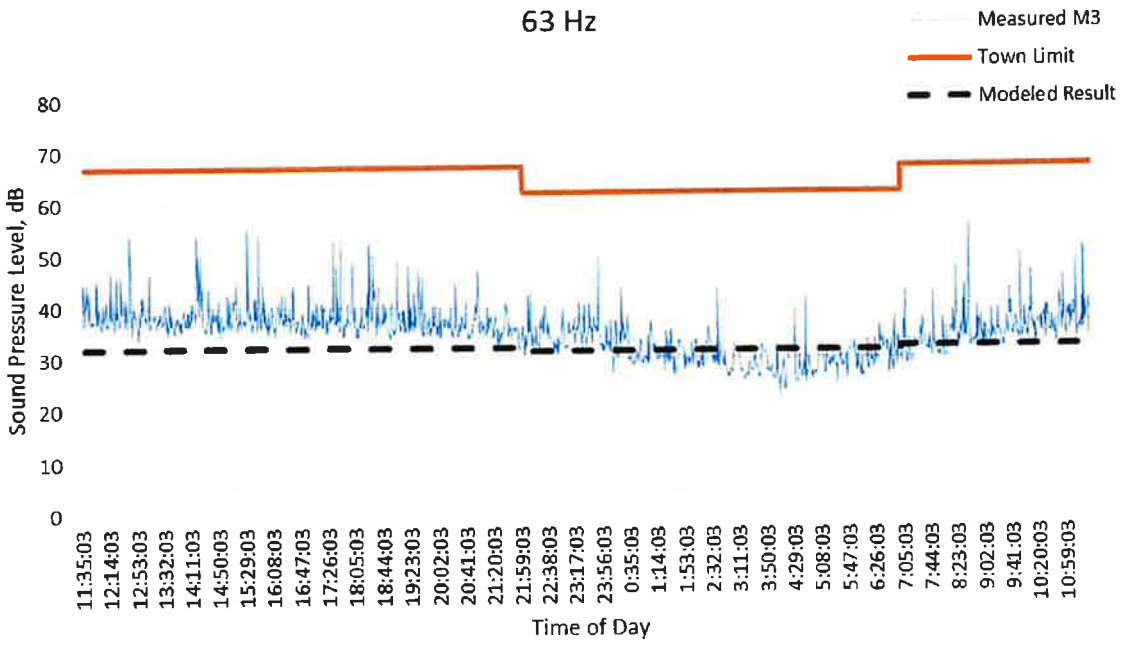

1,000 Hz
Measured M2
Town Limit
Modeled Result
Sound Pressure Level, dB
70
60
50
40
30
20
10
0
11:05:12
11:44:12
12:23:12
13:02:12
13:41:12
14:20:12
14:59:12
15:38:12
16:17:12
16:56:12
17:35:12
18:14:12
18:53:12
19:32:12
20:11:12
20:50:12
21:29:12
22:08:12
22:47:12
23:26:12
0:05:12
0:44:12
1:23:12
2:02:12
2:41:12
3:20:12
3:59:12
4:38:12
5:17:12
5:56:12
6:35:12
7:14:12
7:53:12
8:32:12
9:11:12
9:50:12
10:29:12
Time of Day

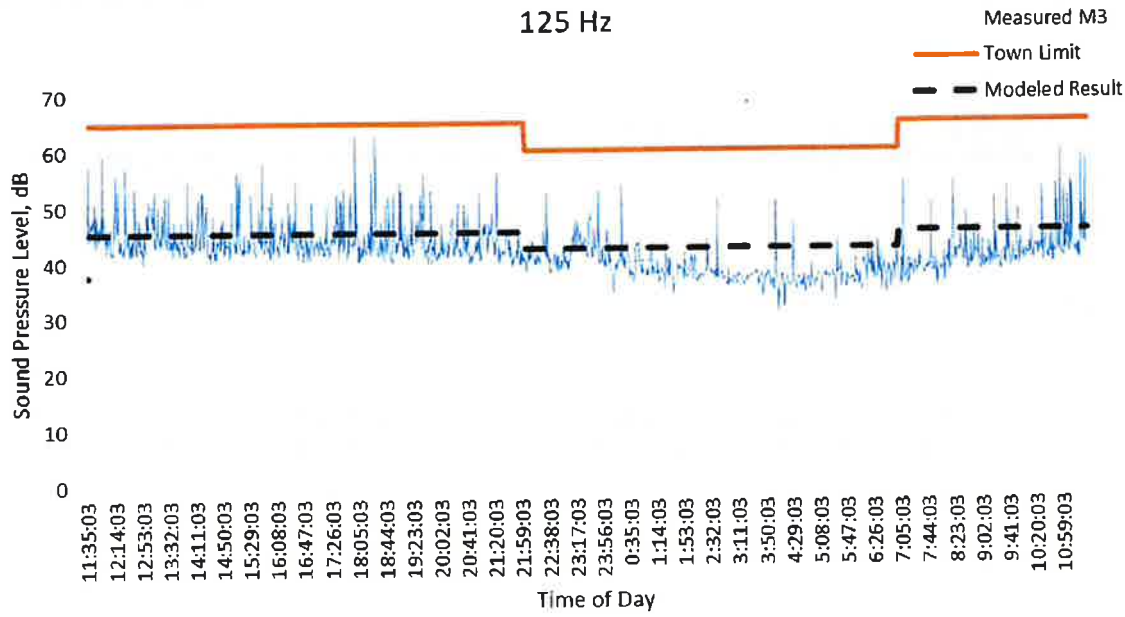

2,000 Hz
Measured M2
Town Limit
Modeled Result
Sound Pressure Level, dB
70
60
50
40
30
20
10
0
11:05:12
11:44:12
12:23:12
13:02:12
13:41:12
14:20:12
14:59:12
15:38:12
16:17:12
16:56:12
17:35:12
18:14:12
18:53:12
19:32:12
20:11:12
20:50:12
21:29:12
22:08:12
22:47:12
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1:23:12
2:02:12
2:41:12
3:20:12
3:59:12
4:38:12
5:17:12
5:56:12
6:35:12
7:14:12
7:53:12
8:32:12
9:11:12
9:50:12
10:29:12
Time of Day

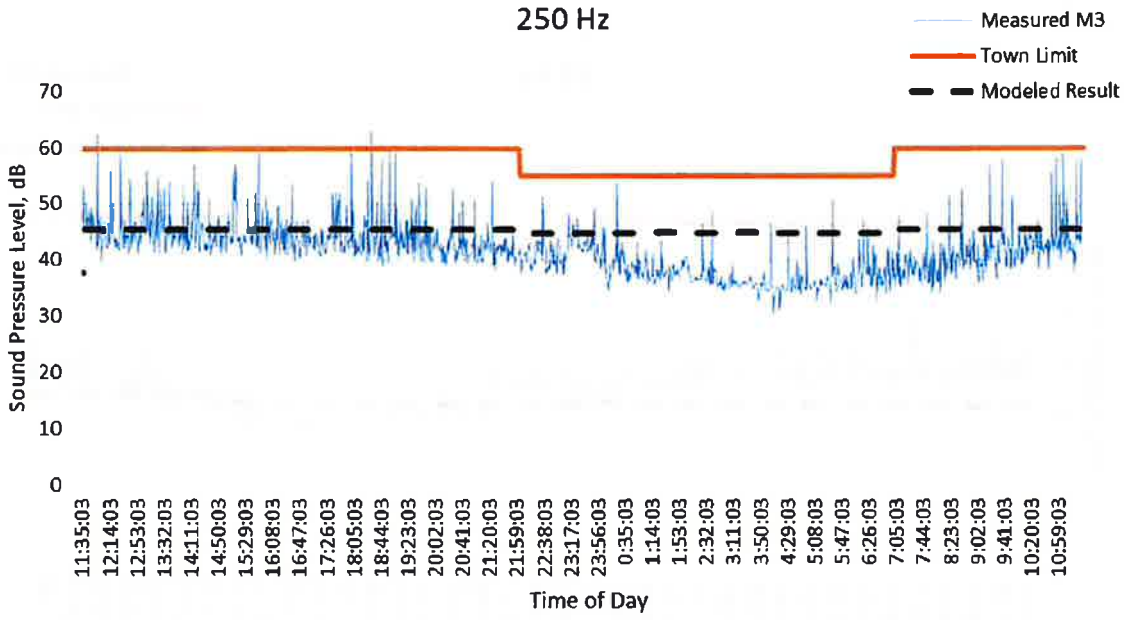

4,000 Hz
Measured M2
Town Limit
Modeled Result
Sound Pressure Level, dB
70
60
50
40
30
20
10
0
11:05:12
11:44:12
12:23:12
13:02:12
13:41:12
14:20:12
14:59:12
15:38:12
16:17:12
16:56:12
17:35:12
18:14:12
18:53:12
19:32:12
20:11:12
20:50:12
21:29:12
22:08:12
22:47:12
23:26:12
0:05:12
0:44:12
1:23:12
2:02:12
2:41:12
3:20:12
3:59:12
4:38:12
5:17:12
5:56:12
6:35:12
7:14:12
7:53:12
8:32:12
9:11:12
9:50:12
10:29:12
Time of Day

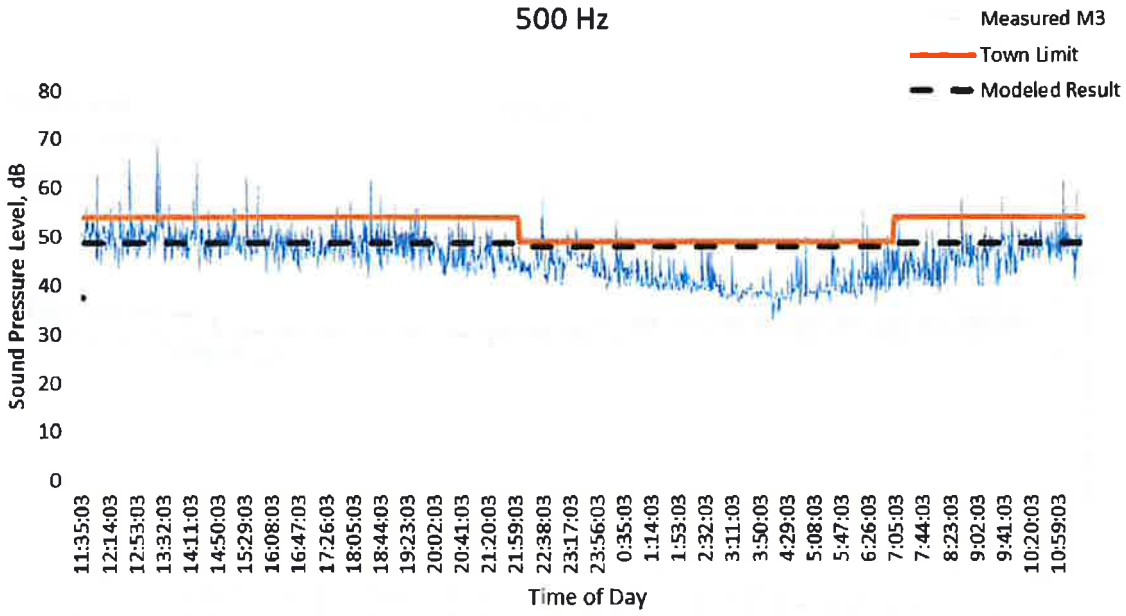

8,000 Hz
Measured M2
Town Limit
Modeled Result
Sound Pressure Level, dB
70
60
50
40
30
20
10
0
11:05:12
11:44:12
12:23:12
13:02:12
13:41:12
14:20:12
14:59:12
15:38:12
16:17:12
16:56:12
17:35:12
18:14:12
18:53:12
19:32:12
20:11:12
20:50:12
21:29:12
22:08:12
22:47:12
23:26:12
0:05:12
0:44:12
1:23:12
2:02:12
2:41:12
3:20:12
3:59:12
4:38:12
5:17:12
5:56:12
6:35:12
7:14:12
7:53:12
8:32:12
9:11:12
9:50:12
10:29:12
Time of Day

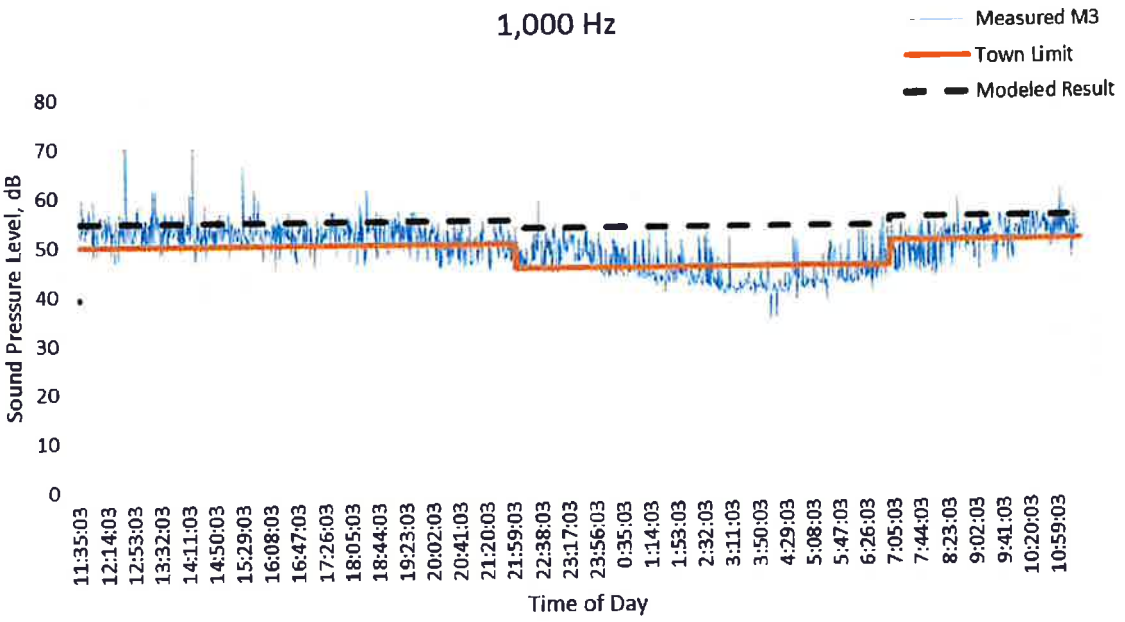
M3 Results

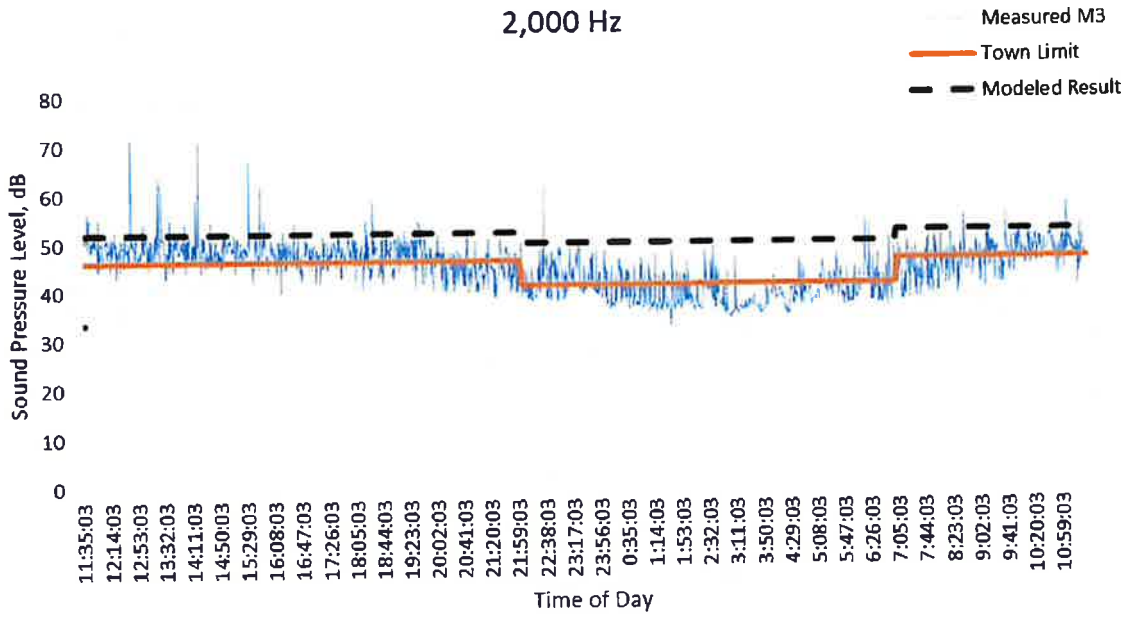

63 Hz
Measured M3
Town Limit
Modeled Result
Sound Pressure Level, dB
80
70
60
50
40
30
20
10
0
11:35:03
12:14:03
12:53:03
13:32:03
14:11:03
14:50:03
15:29:03
16:08:03
16:47:03
17:26:03
18:05:03
18:44:03
19:23:03
20:02:03
20:41:03
21:20:03
21:59:03
22:38:03
23:17:03
23:56:03
0:35:03
1:14:03
1:53:03
2:32:03
3:11:03
3:50:03
4:29:03
5:08:03
5:47:03
6:26:03
7:05:03
7:44:03
8:23:03
9:02:03
9:41:03
10:20:03
10:59:03
Time of Day

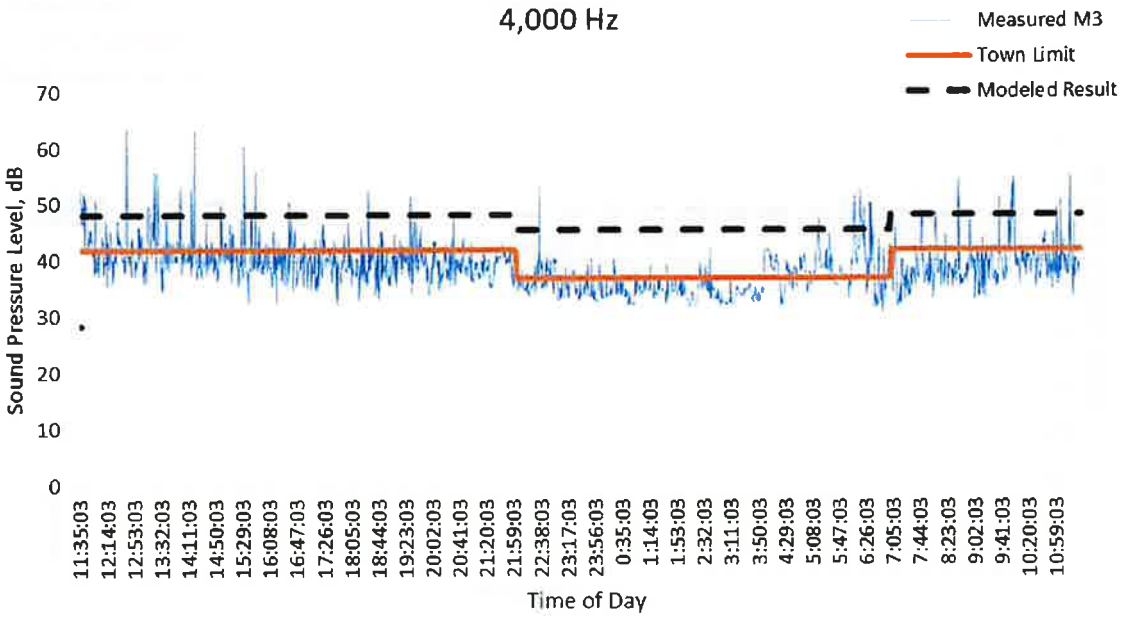

125 Hz
Measured M3
Town Limit
Modeled Result
Sound Pressure Level, dB
70
60
50
40
30
20
10
0
11:35:03
12:14:03
12:53:03
13:32:03
14:11:03
14:50:03
15:29:03
16:08:03
16:47:03
17:26:03
18:05:03
18:44:03
19:23:03
20:02:03
20:41:03
21:20:03
21:59:03
22:38:03
23:17:03
23:56:03
0:35:03
1:14:03
1:53:03
2:32:03
3:11:03
3:50:03
4:29:03
5:08:03
5:47:03
6:26:03
7:05:03
7:44:03
8:23:03
9:02:03
9:41:03
10:20:03
10:59:03
Time of Day

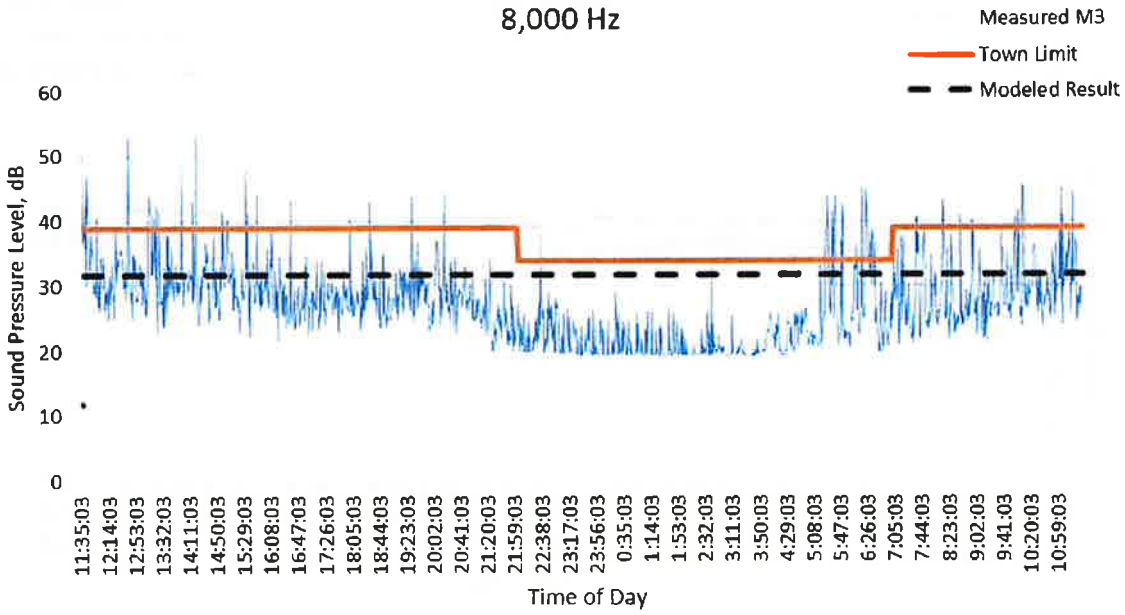

250 Hz
Measured M3
Town Limit
Modeled Result
Sound Pressure Level, dB
70
60
50
40
30
20
10
0
11:35:03
12:14:03
12:53:03
13:32:03
14:11:03
14:50:03
15:29:03
16:08:03
16:47:03
17:26:03
18:05:03
18:44:03
19:23:03
20:02:03
20:41:03
21:20:03
21:59:03
22:38:03
23:17:03
23:56:03
0:35:03
1:14:03
1:53:03
2:32:03
3:11:03
3:50:03
4:29:03
5:08:03
5:47:03
6:26:03
7:05:03
7:44:03
8:23:03
9:02:03
9:41:03
10:20:03
10:59:03
Time of Day


500 Hz
Measured M3
Town Limit
Modeled Result
Sound Pressure Level, dB
80
70
60
50
40
30
20
10
0
11:35:03
12:14:03
12:53:03
13:32:03
14:11:03
14:50:03
15:29:03
16:08:03
16:47:03
17:26:03
18:05:03
18:44:03
19:23:03
20:02:03
20:41:03
21:20:03
21:59:03
22:38:03
23:17:03
23:56:03
0:35:03
1:14:03
1:53:03
2:32:03
3:11:03
3:50:03
4:29:03
5:08:03
5:47:03
6:26:03
7:05:03
7:44:03
8:23:03
9:02:03
9:41:03
10:20:03
10:59:03
Time of Day

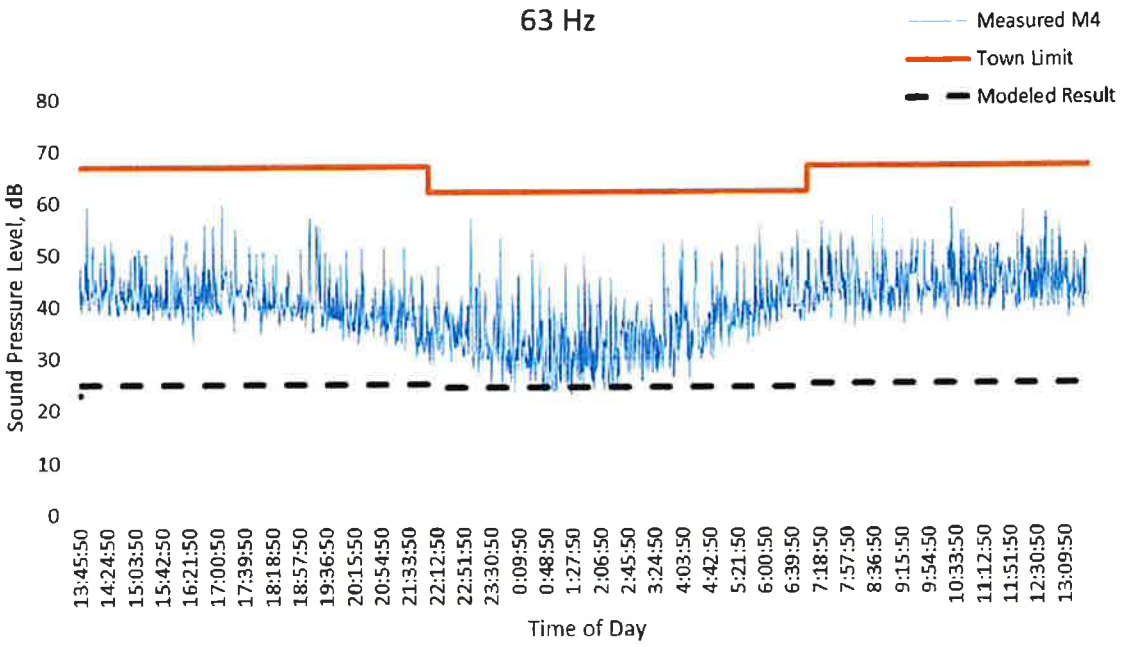

1,000 Hz
Measured M3
Town Limit
Modeled Result
Sound Pressure Level, dB
80
70
60
50
40
30
20
10
0
11:35:03
12:14:03
12:53:03
13:32:03
14:11:03
14:50:03
15:29:03
16:08:03
16:47:03
17:26:03
18:05:03
18:44:03
19:23:03
20:02:03
20:41:03
21:20:03
21:59:03
22:38:03
23:17:03
23:56:03
0:35:03
1:14:03
1:53:03
2:32:03
3:11:03
3:50:03
4:29:03
5:08:03
5:47:03
6:26:03
7:05:03
7:44:03
8:23:03
9:02:03
9:41:03
10:20:03
10:59:03
Time of Day

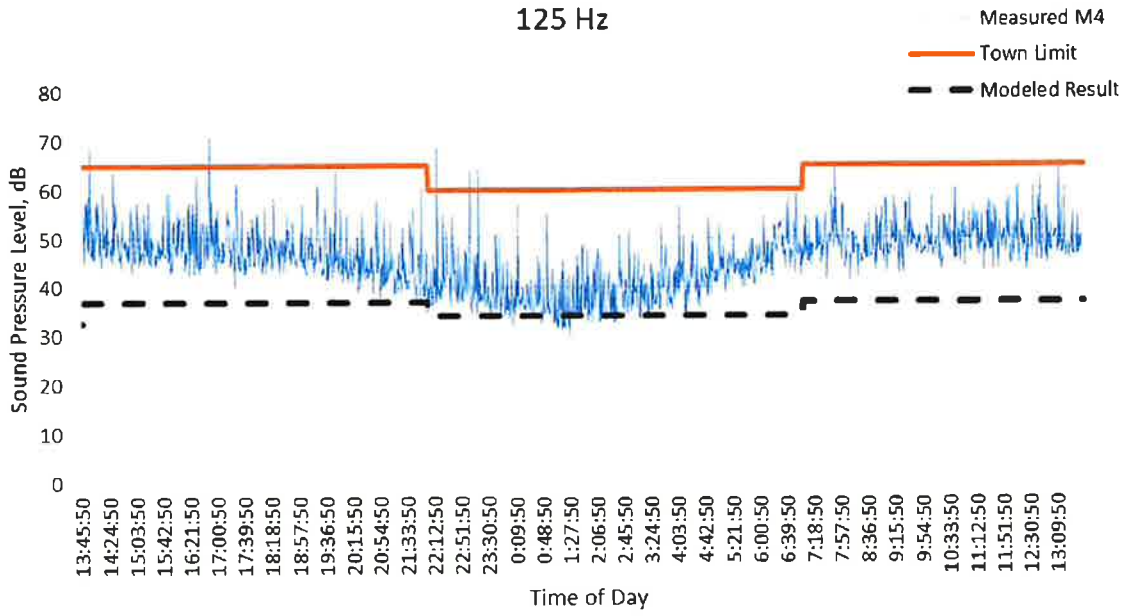

2,000 Hz
Measured M3
Town Limit
Modeled Result
Sound Pressure Level, dB
80
70
60
50
40
30
20
10
0
11:35:03
12:14:03
12:53:03
13:32:03
14:11:03
14:50:03
15:29:03
16:08:03
16:47:03
17:26:03
18:05:03
18:44:03
19:23:03
20:02:03
20:41:03
21:20:03
21:59:03
22:38:03
23:17:03
23:56:03
0:35:03
1:14:03
1:53:03
2:32:03
3:11:03
3:50:03
4:29:03
5:08:03
5:47:03
6:26:03
7:05:03
7:44:03
8:23:03
9:02:03
9:41:03
10:20:03
10:59:03
Time of Day

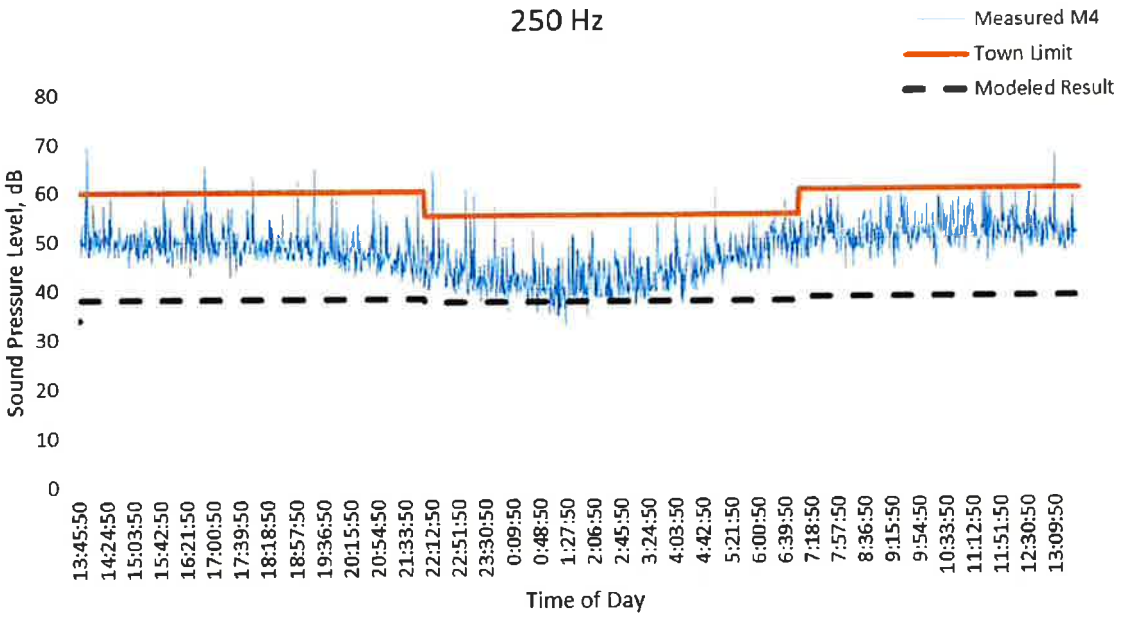

4,000 Hz
Measured M3
Town Limit
Modeled Result
Sound Pressure Level, dB
70
60
50
40
30
20
10
0
11:35:03
12:14:03
12:53:03
13:32:03
14:11:03
14:50:03
15:29:03
16:08:03
16:47:03
17:26:03
18:05:03
18:44:03
19:23:03
20:02:03
20:41:03
21:20:03
21:59:03
22:38:03
23:17:03
23:56:03
0:35:03
1:14:03
1:53:03
2:32:03
3:11:03
3:50:03
4:29:03
5:08:03
5:47:03
6:26:03
7:05:03
7:44:03
8:23:03
9:02:03
9:41:03
10:20:03
10:59:03
Time of Day

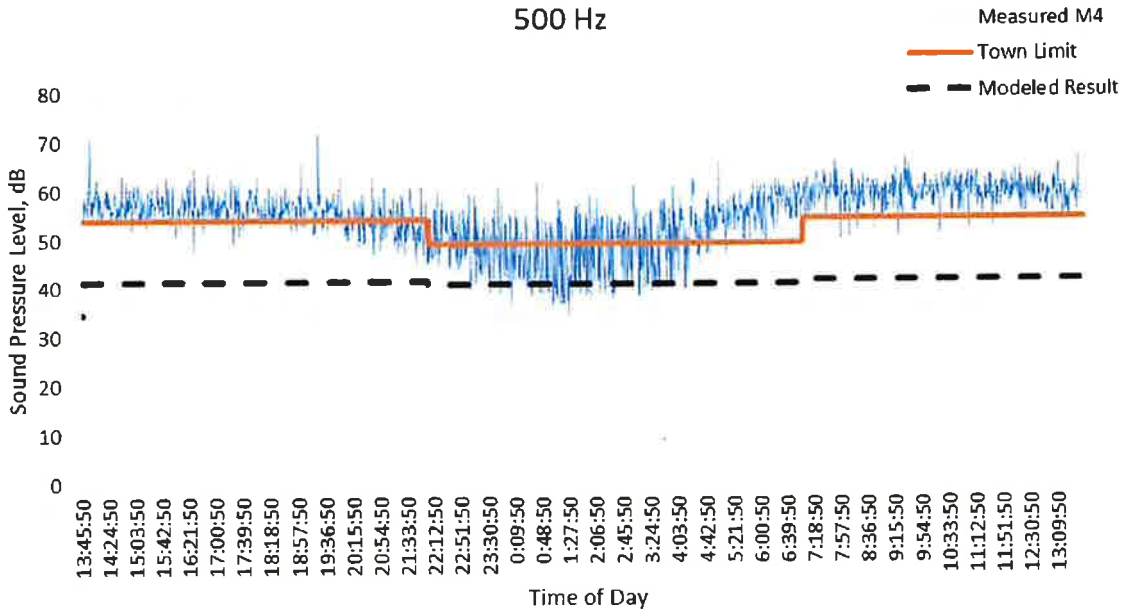

8,000 Hz
Measured M3
Town Limit
Modeled Result
Sound Pressure Level, dB
60
50
40
30
20
10
0
11:35:03
12:14:03
12:53:03
13:32:03
14:11:03
14:50:03
15:29:03
16:08:03
16:47:03
17:26:03
18:05:03
18:44:03
19:23:03
20:02:03
20:41:03
21:20:03
21:59:03
22:38:03
23:17:03
23:56:03
0:35:03
1:14:03
1:53:03
2:32:03
3:11:03
3:50:03
4:29:03
5:08:03
5:47:03
6:26:03
7:05:03
7:44:03
8:23:03
9:02:03
9:41:03
10:20:03
10:59:03
Time of Day

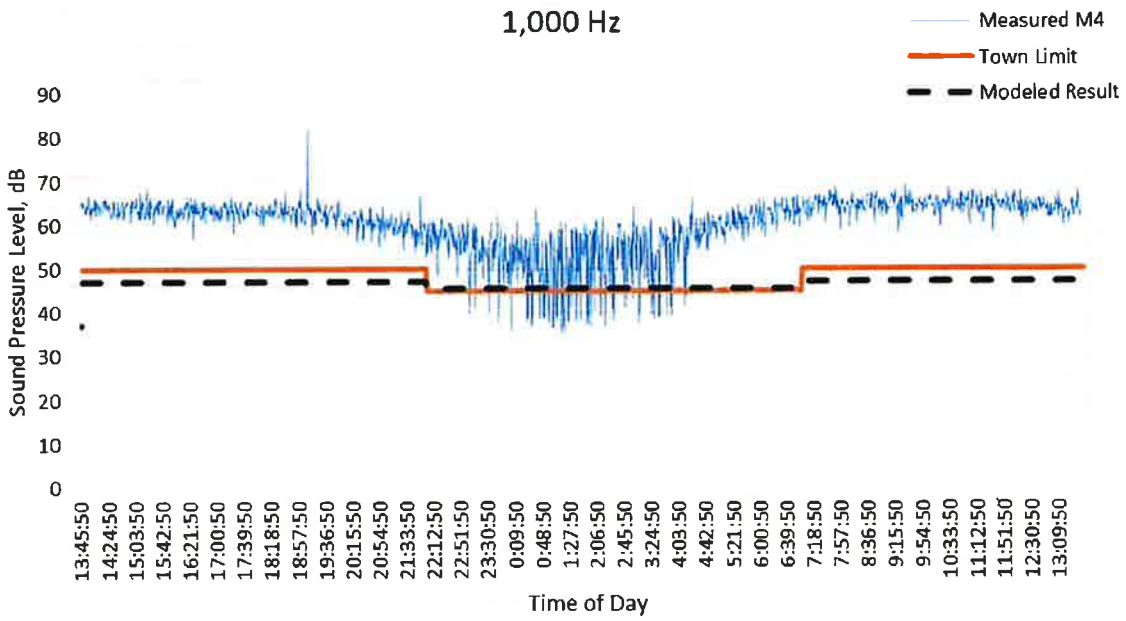
M4 Results

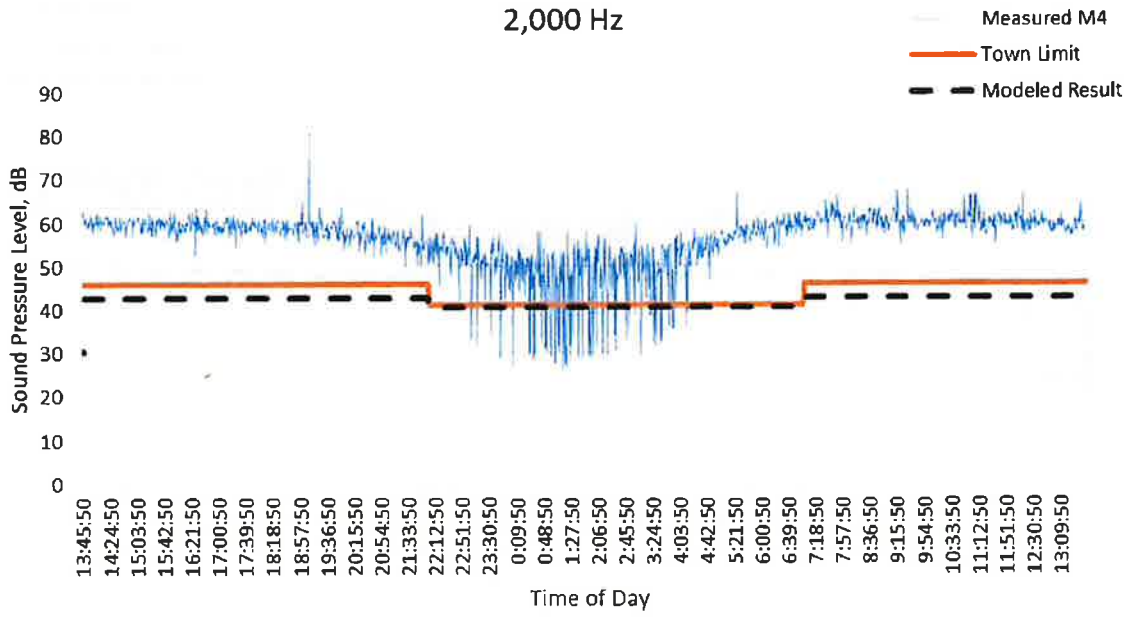

63 Hz
Measured M4
Town Limit
Modeled Result
Sound Pressure Level, dB
80
70
60
50
40
30
20
10
0
13:45:50
14:24:50
15:03:50
15:42:50
16:21:50
17:00:50
17:39:50
18:18:50
18:57:50
19:36:50
20:15:50
20:54:50
21:33:50
22:12:50
22:51:50
23:30:50
0:09:50
0:48:50
1:27:50
2:06:50
2:45:50
3:24:50
4:03:50
4:42:50
5:21:50
6:00:50
6:39:50
7:18:50
7:57:50
8:36:50
9:15:50
9:54:50
10:33:50
11:12:50
11:51:50
12:30:50
13:09:50
Time of Day

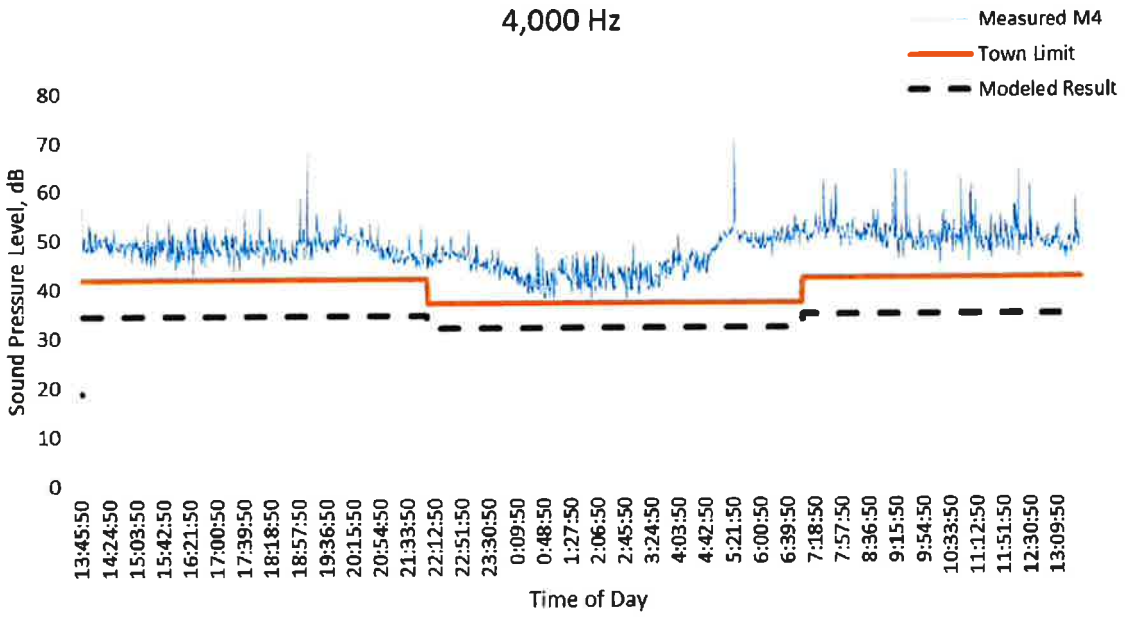

125 Hz
Measured M4
Town Limit
Modeled Result
Sound Pressure Level, dB
80
70
60
50
40
30
20
10
0
13:45:50
14:24:50
15:03:50
15:42:50
16:21:50
17:00:50
17:39:50
18:18:50
18:57:50
19:36:50
20:15:50
20:54:50
21:33:50
22:12:50
22:51:50
23:30:50
0:09:50
0:48:50
1:27:50
2:06:50
2:45:50
3:24:50
4:03:50
4:42:50
5:21:50
6:00:50
6:39:50
7:18:50
7:57:50
8:36:50
9:15:50
9:54:50
10:33:50
11:12:50
11:51:50
12:30:50
13:09:50
Time of Day

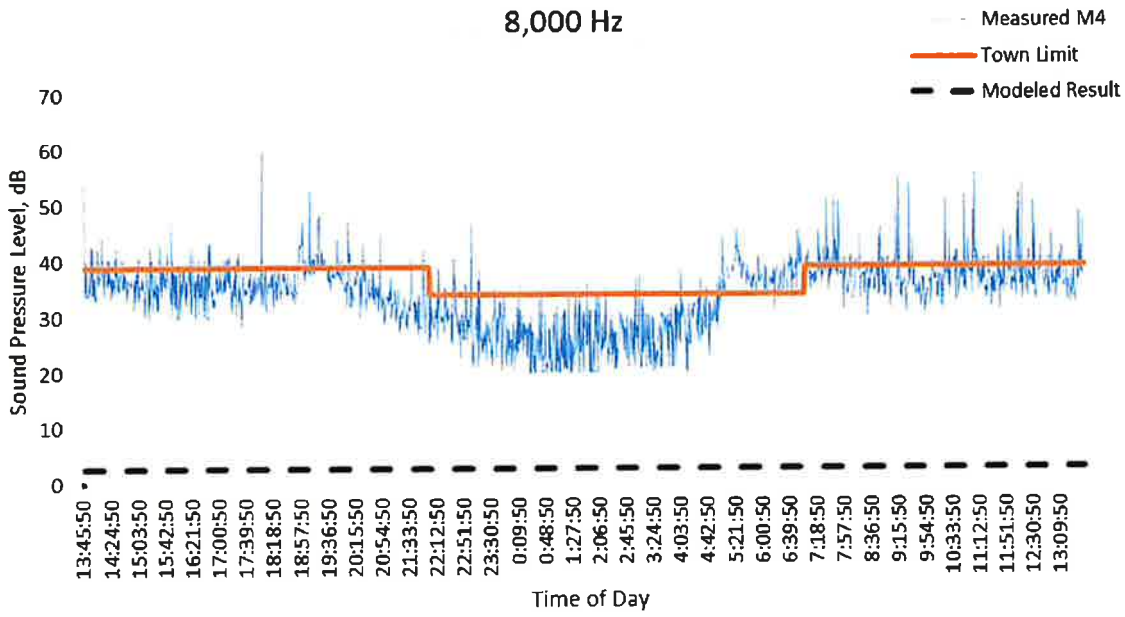

250 Hz
Measured M4
Town Limit
Modeled Result
Sound Pressure Level, dB
80
70
60
50
40
30
20
10
0
13:45:50
14:24:50
15:03:50
15:42:50
16:21:50
17:00:50
17:39:50
18:18:50
18:57:50
19:36:50
20:15:50
20:54:50
21:33:50
22:12:50
22:51:50
23:30:50
0:09:50
0:48:50
1:27:50
2:06:50
2:45:50
3:24:50
4:03:50
4:42:50
5:21:50
6:00:50
6:39:50
7:18:50
7:57:50
8:36:50
9:15:50
9:54:50
10:33:50
11:12:50
11:51:50
12:30:50
13:09:50
Time of Day


500 Hz
Measured M4
Town Limit
Modeled Result
Sound Pressure Level, dB
80
70
60
50
40
30
20
10
0
13:45:50
14:24:50
15:03:50
15:42:50
16:21:50
17:00:50
17:39:50
18:18:50
18:57:50
19:36:50
20:15:50
20:54:50
21:33:50
22:12:50
22:51:50
23:30:50
0:09:50
0:48:50
1:27:50
2:06:50
2:45:50
3:24:50
4:03:50
4:42:50
5:21:50
6:00:50
6:39:50
7:18:50
7:57:50
8:36:50
9:15:50
9:54:50
10:33:50
11:12:50
11:51:50
12:30:50
13:09:50
Time of Day

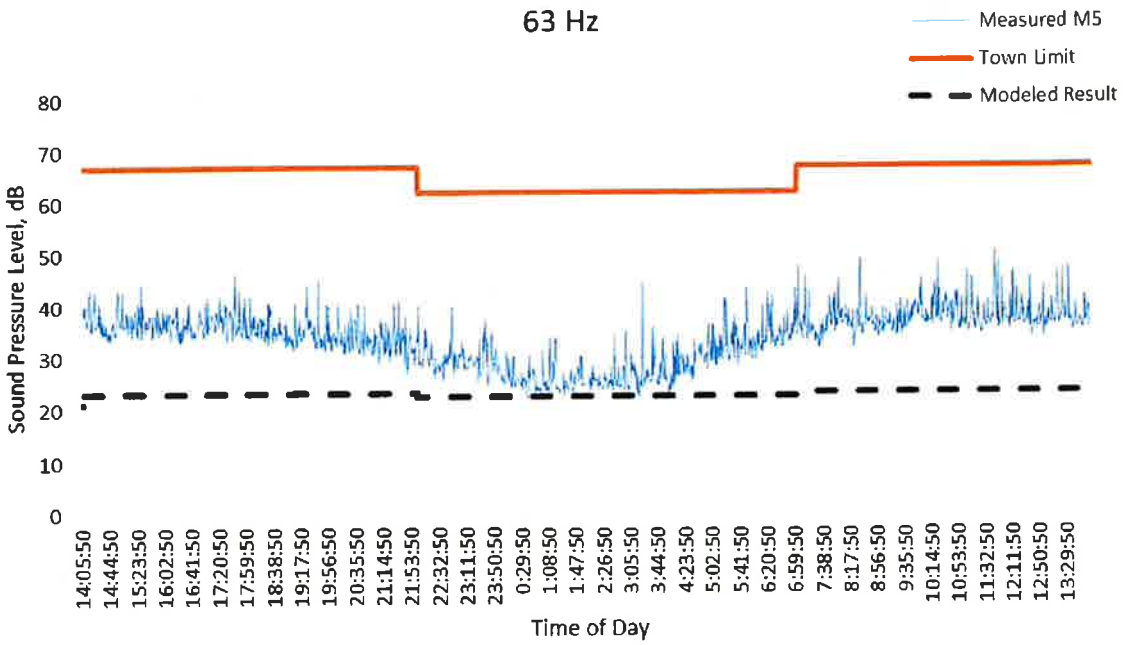

1,000 Hz
Measured M4
Town Limit
Modeled Result
Sound Pressure Level, dB
90
80
70
60
50
40
30
20
10
0
13:45:50
14:24:50
15:03:50
15:42:50
16:21:50
17:00:50
17:39:50
18:18:50
18:57:50
19:36:50
20:15:50
20:54:50
21:33:50
22:12:50
22:51:50
23:30:50
0:09:50
0:48:50
1:27:50
2:06:50
2:45:50
3:24:50
4:03:50
4:42:50
5:21:50
6:00:50
6:39:50
7:18:50
7:57:50
8:36:50
9:15:50
9:54:50
10:33:50
11:12:50
11:51:50
12:30:50
13:09:50
Time of Day

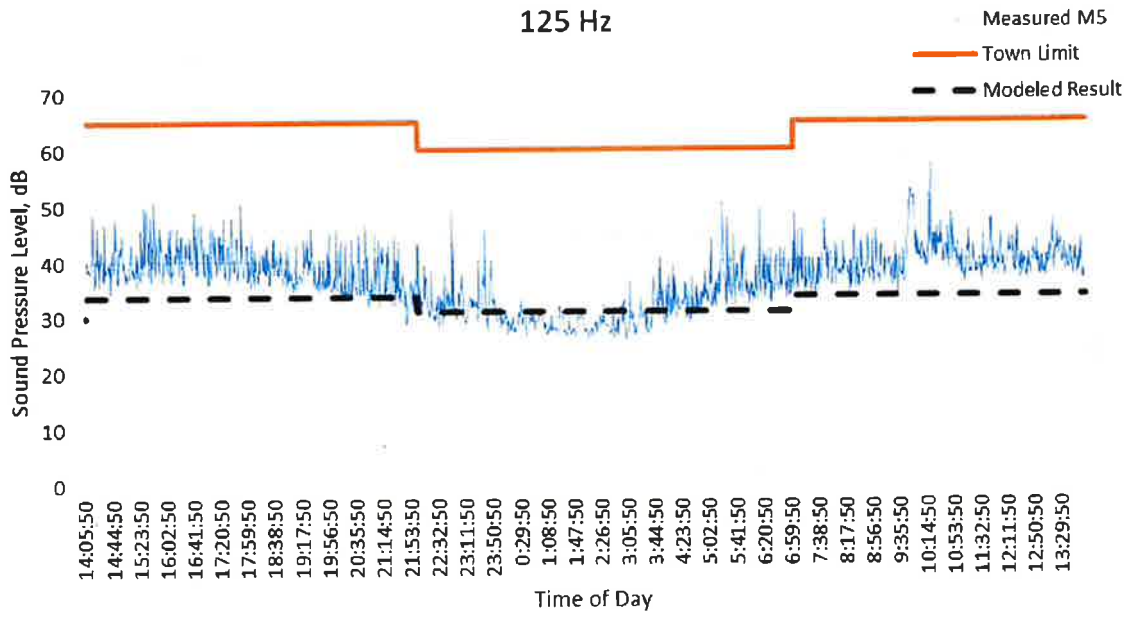

2,000 Hz
Measured M4
Town Limit
Modeled Result
Sound Pressure Level, dB
90
80
70
60
50
40
30
20
10
0
13:45:50
14:24:50
15:03:50
15:42:50
16:21:50
17:00:50
17:39:50
18:18:50
18:57:50
19:36:50
20:15:50
20:54:50
21:33:50
22:12:50
22:51:50
23:30:50
0:09:50
0:48:50
1:27:50
2:06:50
2:45:50
3:24:50
4:03:50
4:42:50
5:21:50
6:00:50
6:39:50
7:18:50
7:57:50
8:36:50
9:15:50
9:54:50
10:33:50
11:12:50
11:51:50
12:30:50
13:09:50
Time of Day

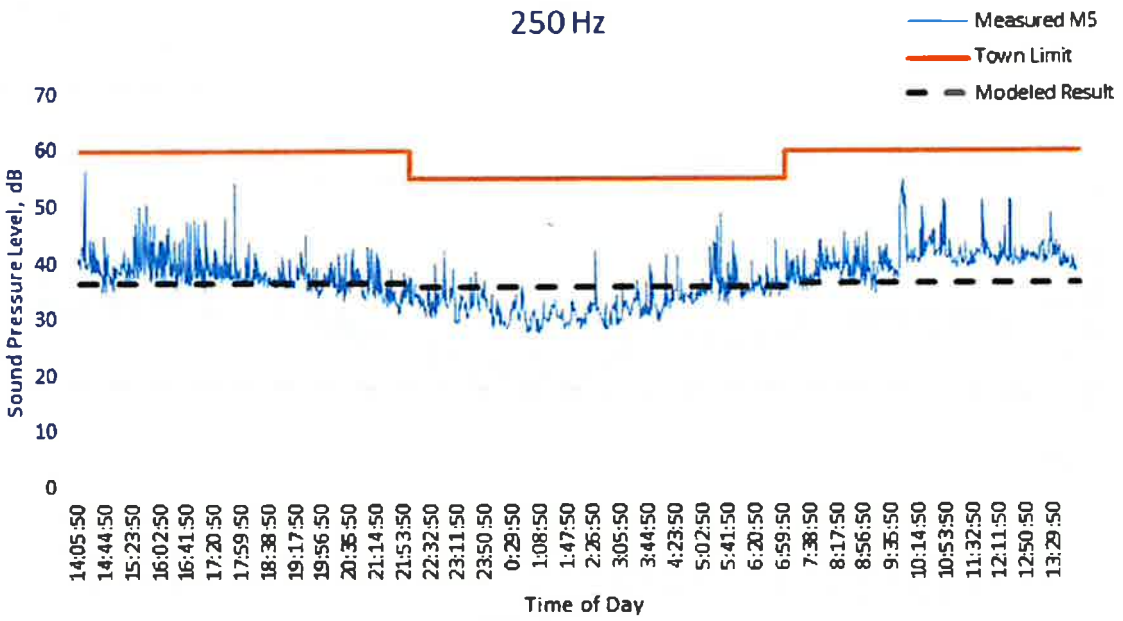

4,000 Hz
Measured M4
Town Limit
Modeled Result
Sound Pressure Level, dB
80
70
60
50
40
30
20
10
0
13:45:50
14:24:50
15:03:50
15:42:50
16:21:50
17:00:50
17:39:50
18:18:50
18:57:50
19:36:50
20:15:50
20:54:50
21:33:50
22:12:50
22:51:50
23:30:50
0:09:50
0:48:50
1:27:50
2:06:50
2:45:50
3:24:50
4:03:50
4:42:50
5:21:50
6:00:50
6:39:50
7:18:50
7:57:50
8:36:50
9:15:50
9:54:50
10:33:50
11:12:50
11:51:50
12:30:50
13:09:50
Time of Day

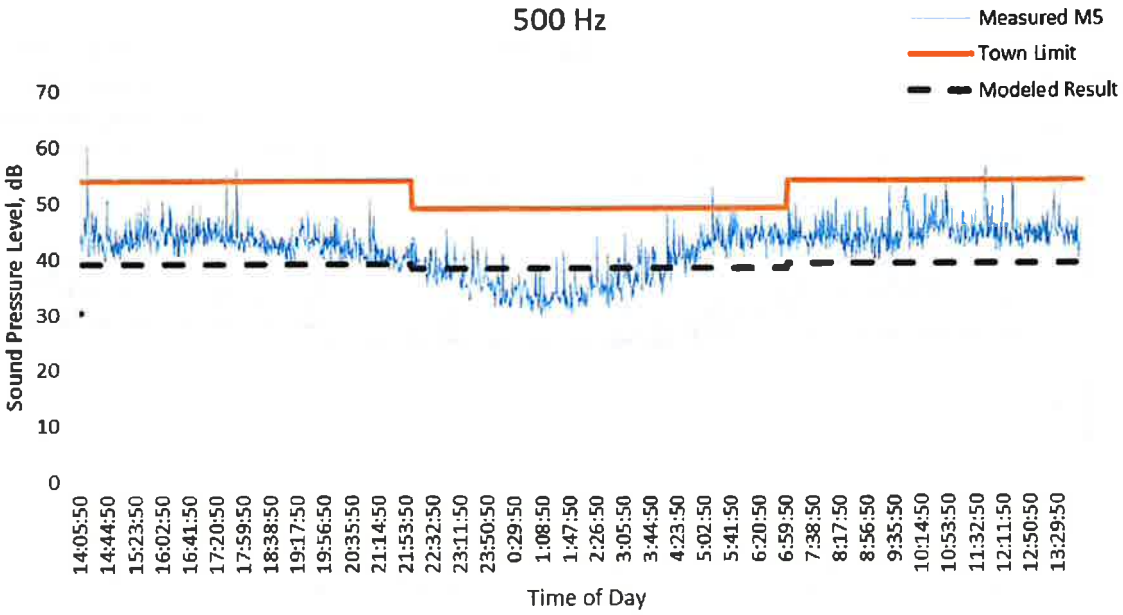

8,000 Hz
Measured M4
Town Limit
Modeled Result
Sound Pressure Level, dB
70
60
50
40
30
20
10
0
13:45:50
14:24:50
15:03:50
15:42:50
16:21:50
17:00:50
17:39:50
18:18:50
18:57:50
19:36:50
20:15:50
20:54:50
21:33:50
22:12:50
22:51:50
23:30:50
0:09:50
0:48:50
1:27:50
2:06:50
2:45:50
3:24:50
4:03:50
4:42:50
5:21:50
6:00:50
6:39:50
7:18:50
7:57:50
8:36:50
9:15:50
9:54:50
10:33:50
11:12:50
11:51:50
12:30:50
13:09:50
Time of Day

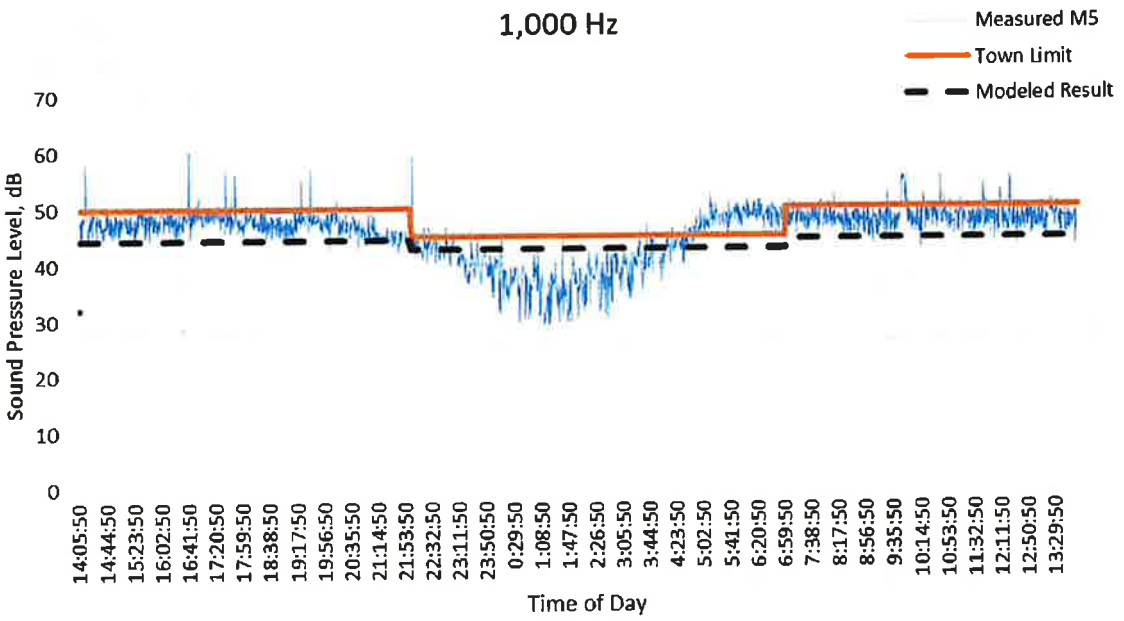
M5 Results

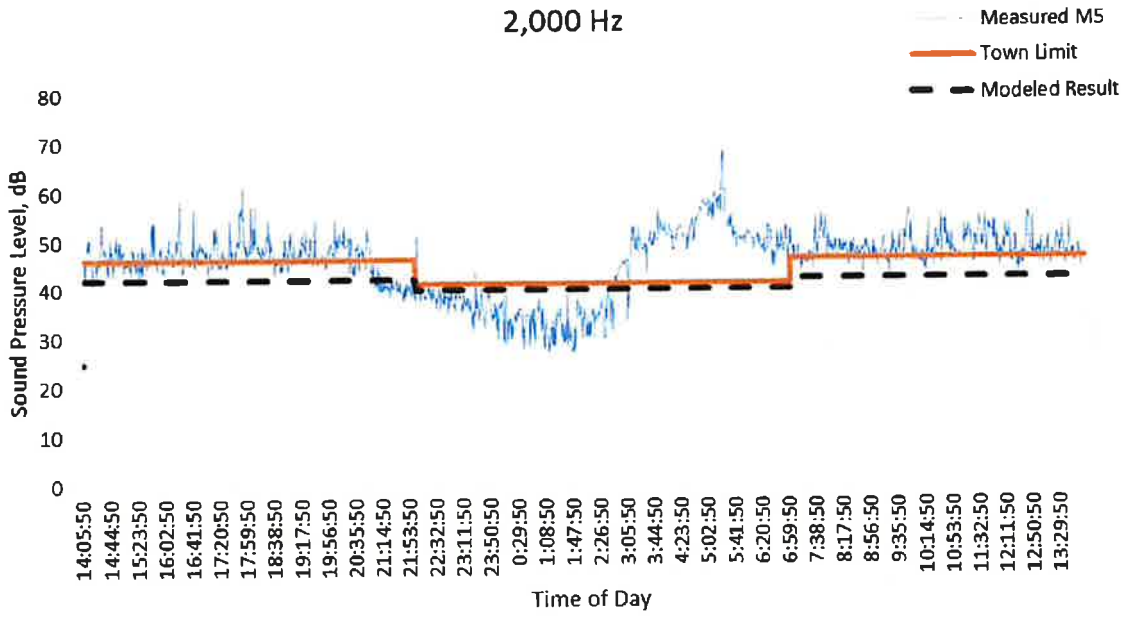

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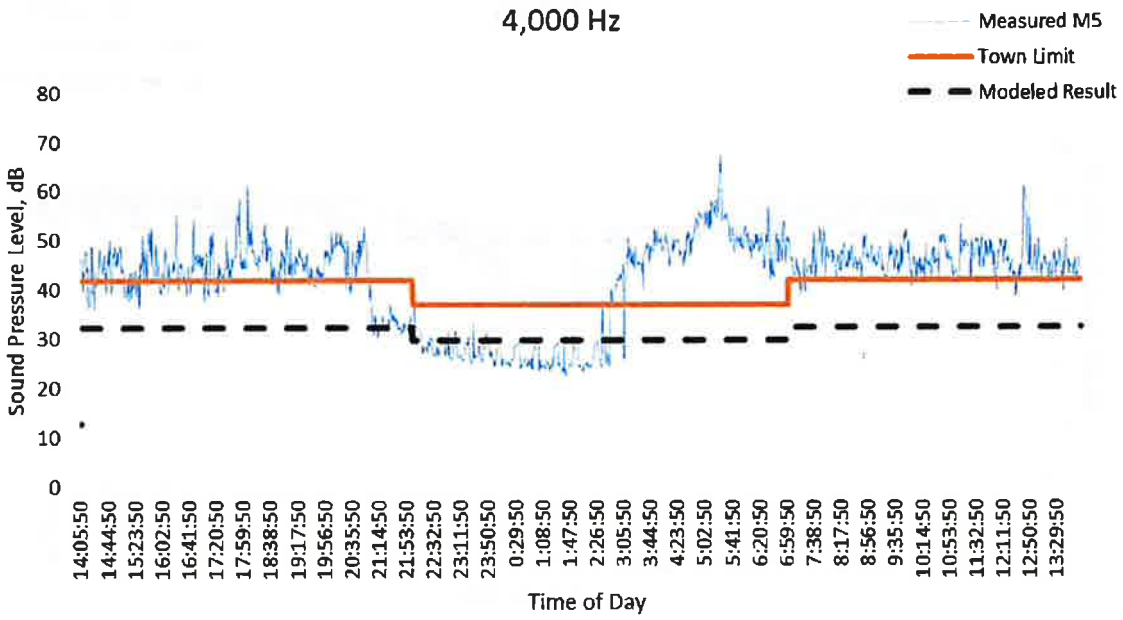

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Town Limit
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250 Hz
Measured M5
Town Limit
Modeled Result
Sound Pressure Level, dB
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Time of Day


2,000 Hz
Measured M5
Town Limit
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Sound Pressure Level, dB
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Time of Day


4,000 Hz
Measured M5
Town Limit
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Sound Pressure Level, dB
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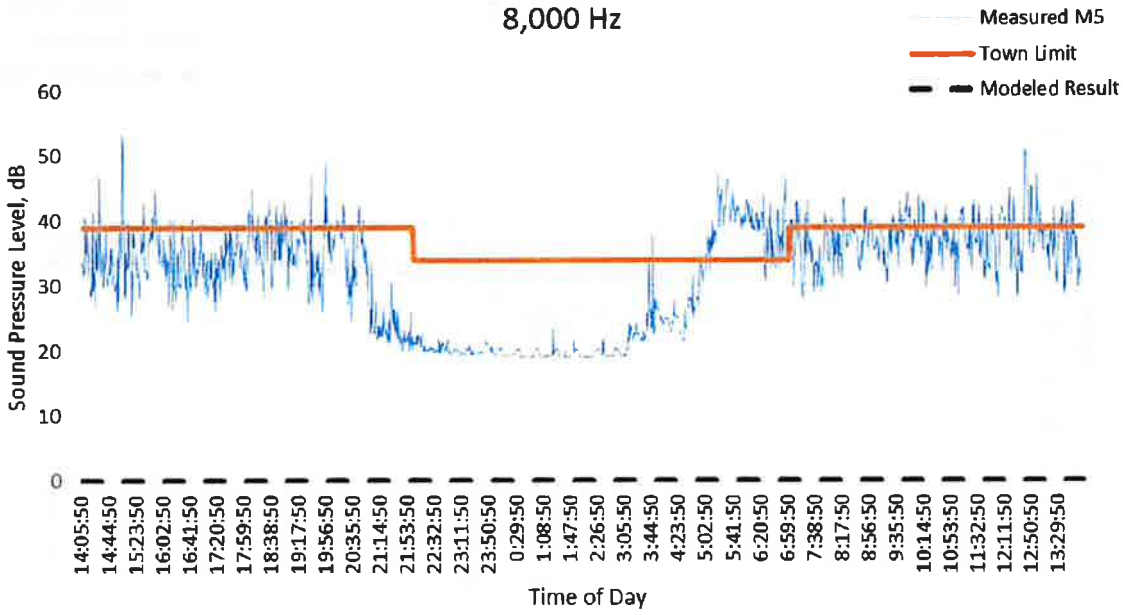

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Time of Day

Exhibit 6



ECS MID-ATLANTIC, LLC

Geotechnical Engineering Report

Warrenton Data Center

Lee Highway and Blackwell Road
Warrenton, Virginia 20186

ECS Project No. 01:31153

Revised August 15, 2022

ECS MID-ATLANTIC, LLC
"Setting the Standard for Service"
Geotechnical • Construction Materials • Environmental • Facilities

Revised August 15, 2022

Ms. Patricia Krinke
Bohler Engineering
28 Blackwell Park Lane, Suite 201
Warrenton, Virginia 20186

ECS Project No. 01:31153

Reference: Geotechnical Engineering Report
Warrenton Data Center
Lee Highway and Blackwell Road
Warrenton, Virginia 20186

Dear Ms. Krinke:

ECS Mid-Atlantic, LLC (ECS) has completed the subsurface exploration and geotechnical engineering analyses for the above-referenced project. Our services were performed in general accordance with our Proposal No. 01:63686-GP1, dated May 4, 2021. This report presents our understanding of the geotechnical aspects of the project along with the results of the field exploration conducted and our design and construction recommendations.

It has been our pleasure to be of service to Bohler Engineering during the design phase of this project. We would welcome the opportunity to remain involved during the continuation of the design phase, and we would like to provide our services during construction phase operations as well to verify subsurface conditions assumed for this report. Should you have any questions concerning the information contained in this report, or if we can be of further assistance to you, please contact us.

Respectfully submitted,

ECS MID-ATLANTIC, LLC



John A. Short, EIT
Project Manager
JAShort@ecslimited.com

Dominic O. Agyepong, PE
Principal Engineer
DAgyepong@ecslimited.com

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- Site Location Diagram
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Appendix B – Field Operations

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- Laboratory Test Results Summary
- Plasticity Charts
- Grain Size Analyses
- Standard Proctor Test Results
- California Bearing Ratio Test Results
- Thermal Resistivity Test Results

Appendix D – Supplemental Report Documents

- French Drain Installation Procedure
- Zone of Influence Diagram

EXECUTIVE SUMMARY

This Executive Summary is intended as a brief overview of the primary geotechnical conditions that are expected to affect design and construction. Information gleaned from this Executive Summary should not be utilized in lieu of reading the entire geotechnical report.

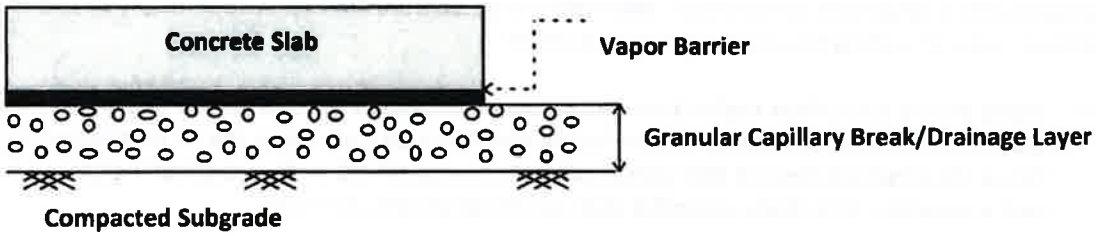
- Based on the subsurface exploration completed we anticipate the site will be suitable for the proposed development. We do not anticipate conditions on the project site to adversely affect future development beyond the typical difficulties encountered in this geographic region (i.e., rock excavation, potentially expansive soils, and moisture sensitive soils).
- For shallow foundation design we recommend the following design parameters:

Design Parameter	Column Footing	Wall Footing
Net Allowable Bearing Pressure (Stratum I Soil/Structural Fill)	3,000 psf	3,000 psf
Net Allowable Bearing Pressure (Stratum II- Weathered Rock Areas)	8,000 psf	8,000 psf
Minimum Width	24 inches	24 inches
Minimum Footing Embedment Depth (below slab or finished grade)	24 inches	24 inches

Deep foundation systems such as Drilled Shaft foundations or Auger Cast-In-Place (ACIP) Pile foundations can be utilized for heavily loaded structures. Deep foundations may be designed for an allowable bearing pressure on the order of 50 tons to 100 tons, if extended at least 3 drilled shaft diameters into the relatively unweathered rock. Actual designs will be provided in the final geotechnical report.

- Provided subgrades and structural fills are prepared as discussed herein, the proposed floor slabs can be constructed as **Ground Supported Slabs (or Slab-on-Grade).**

- The following graphic depicts our soil-supported slab recommendations:



1. Drainage Layer Thickness: 6 inches minimum.
2. Drainage Layer Material: 6 Inches of VDOT #57 stone, VDOT 21-A/21-B

Soft or yielding soils may be encountered in some areas. Those soils should be removed and replaced with compacted Structural Fill in accordance with the recommendations included in this report. Floor slabs placed in areas where expansive soils (CH/MH) are encountered should be underlain by at least 2 feet of compacted suitable fill.

Subgrade Modulus: Provided the Structural Fill and Granular Drainage Layer are constructed in accordance with our recommendations, the slab may be designed assuming a modulus of subgrade reaction, k_1 of 150 pci (lbs./cu. inch).

Based on report, the anticipated geotechnical issues be considered during design included issues related to shallow bedrock, perched groundwater, potentially expansive and moisture sensitive soils, and deep foundations (drilled shafts) for the buildings.

- **Satisfactory Structural Fill Materials:** Materials satisfactory for use as Structural Fill should consist of inorganic soils with the following engineering properties and compaction requirements.

STRUCTURAL FILL INDEX PROPERTIES	
Subject	**Property**
Building and Structural Areas	LL < 40, PI<15
Pavement Areas	LL < 45, PI<20
Max. Particle Size	4 inches
Fines Content (% passing #200 sieve)	Max. 25 %
Max. organic content	5% by dry weight

- Compaction Methodologies:

STRUCTURAL FILL COMPACTION REQUIREMENTS	
Subject	**Requirement**
Compaction Standard	Standard Proctor, ASTM D698/ Virginia Test Method (VTM-1)
Required Compaction	95% of Max. Dry Density for fill less than 10 feet
	98% of Max. Dry Density for fill greater than 10 feet
Moisture Content	-2 to +3 % points of the soil's optimum value
Loose Thickness	8 inches prior to compaction

- Building and site retaining walls and foundations (soil bearing, lateral earth pressures, subgrade modulus, coefficients of friction, etc.)

- Site Soil Design Parameters

Material	Unit Weight (pcf)	Angle of Internal Friction (phi)	At-Rest Pressure (psf per vertical foot of wall)	Active Pressure (psf per vertical foot of wall)	Passive Pressure (psf per vertical foot of wall)
CH	115	12	90	75	175
ML	120	25	70	50	300
SM	125	30	65	45	375
Weathered Rock	135	45	40	25	400

Material	Compacted or In-Situ Soil Moist Unit Weight (δ)	Angle of Internal Friction (ø)	Cohesion (C)	Coefficient of Earth Pressure at Rest (K_o)	Coefficient of Active Earth Pressure (Ka)	Coefficient of Passive Earth Pressure (K_p)
CH	115	12	0	0.79	0.66	1.52
ML	120	25	0	0.58	0.41	2.46
SM	125	30	0	0.50	0.33	3.0
Weathered Rock	135	45	0	0.29	0.17	5.82

- For sliding coefficient:

Sliding Friction Coefficient [Concrete on Soil] (μ)	0.30
Skin Friction [Concrete cast against Soil] (F_s) [1]	250 psf

- Potentially expansive soils (CH/MH) are common in the local geology characterized at this site. Expansive soils should not be reused as engineered fill in the building pad, nor as fill for roadway, curb, gutter, and sidewalk subgrade, within utility trenches, or within embankment slopes. Expansive soils (CH/MH) should be undercut to 4 feet below finished exterior grade or to 2 feet below the bottom of footing, whichever is deeper, and backfilled with controlled, compacted fill where encountered. In proposed pavement areas, we recommend undercutting and replacement of the expansive soils (CH/MH) to provide at least 2 feet of non-expansive soil fill below the pavement subgrade.

- Based on the soil conditions encountered (shallow rock and low permeability soils), stormwater management facilities that require infiltration are not feasible for this site.

- Considering the shallow weathered rock surface encountered at this site and our experience with other projects in the area, we recommend that the design for the building be based on a seismic site classification of **Site Class C**.

- Preliminary pavement section designs based on laboratory data and assumed design parameters are included within the report. We recommend pavement designs be developed in accordance with applicable VDOT requirements. Finalized designs should be based on anticipated traffic loading conditions and actual soil subgrade conditions. For design purposes, we recommend using a design California Bearing Ratio (CBR) value of 4 for the on-site clayey, silty, and sandy soil materials. Additionally, we recommend a Resiliency Factor (RF) of 1.5 be utilized for design of the proposed pavements.

- Groundwater on this site can be characterized as being broadly perched above less permeable materials and shallow rock. The depth at which perched water is present on the site varies with surface elevation. In low-lying areas, the presence of perched water is more pronounced. In higher areas and on ridge lines, perched water may be present, including above design cut elevations, but is less concentrated. Soils at contact with perched water levels were very moist to wet. In most cases, moisture then decreased with depth. The permanent groundwater able is significantly below the anticipated extents of excavation for this project.

1.0 INTRODUCTION

The purpose of this study was to provide geotechnical information for the design and construction of an industrial site which includes one data center building, a guard house facility, a stormwater management pond, a substation area, associated pavement infrastructure, and mass grading for the overall site. The recommendations developed for this report are based on project information supplied by Bohler Engineering.

Our services were provided in accordance with our Proposal No. No. 01:63686-GP1, dated May 4, 2021. This report contains the procedures and results of our subsurface exploration program, review of existing site conditions, engineering analyses, and recommendations for the design and construction of the project.

The report includes the following items.

- A brief review and description of our field and laboratory test procedures.
- A review of surface topographical features and site conditions.
- A review of area and site geologic conditions.
- A review of subsurface soil stratigraphy with pertinent available physical properties.
- Copies of our soil test boring logs.
- Recommendations for site preparation and construction of compacted fills, including an evaluation of on-site soils for use as compacted fills.
- Recommended foundation types.
- General recommendations for pavement design including a recommended design CBR value.
- Evaluation and recommendations relative to groundwater control.
- Recommendations for design and construction of drainage structures and stormwater management facilities.
- An evaluation of potential soil and rock excavation issues.

2.0 PROJECT INFORMATION

2.1 PROJECT LOCATION & CURRENT SITE CONDITIONS

The proposed project site is located to the northeast of the intersection of Lee Highway and Blackwell Road in Warrenton, Fauquier County, Virginia. The subject property spans a single parcel (GPIN: 6984-69-2419) which, at the time of this exploration, is primarily occupied by active farmland with some wooded areas in the northwest and southeast portions, and site elevations range from approximate EL. 510± feet along the north edge of the site to approximate EL. 465± feet in the northeast corner. The southwest corner of the site is bordered by an existing car dealership. An aerial view of the site is pictured below.



Figure 2.1.1 Site Location

2.2 PROPOSED CONSTRUCTION

It is our understanding that the development will include the construction of one 214,388 sq. ft., 1-story data center building (FFE = EL. 486.0 feet), a guard house facility, a stormwater management pond, a 6-acre substation area, a retaining wall with a maximum exposed height of 6 feet, and associated pavement infrastructure. Based on current proposed grading information, it is our understanding that soils fill on the order of 21± feet and cuts on the order of 40± feet will be required in order to establish final site grades.

The description of the proposed project is based on the information provided to us by your office or other design team members at this time. If any of the information is inaccurate, either due to misunderstanding or due to design changes that may occur later, we recommend that we be contacted to provide additional or alternate recommendations that may be required.

2.2.1 Structural Information/Loads

A maximum structural column loading of 450 kips has been provided by the structural engineer at this time and it is our understanding that shallow foundations are considered feasible in design for support of the main building. If additional/revised maximum structural loading becomes available, ECS should be informed so that we may confirm or re-evaluate our recommendations.

3.0 FIELD EXPLORATION AND LABORATORY TESTING

Our exploration procedures are explained in greater detail in Appendix B including the insert titled Subsurface Exploration Procedures. Our overall scope of work included drilling a total of 20 soil borings. Thirteen borings were performed in the vicinity of the data center building and guard house structural footprints, two borings were performed within the proposed stormwater pond, and five borings were performed within proposed pavement areas.

A track-mounted drill rig was utilized to drill the soil test borings. Borings were advanced to depths on the order of up to 80± feet below the existing ground surface. The subsurface exploration was completed under the general supervision of an ECS geotechnical engineer.

Boring locations were identified in the field by ECS personnel using GPS techniques prior to mobilization of our drilling equipment. The approximate as-drilled boring locations are shown on the Boring Location Diagram in Appendix A. Ground surface elevations noted on our boring logs were interpolated from the provided existing contour mapping.

Standard penetration tests (SPTs) were conducted in the borings at regular intervals in general accordance with ASTM D 1586. Representative samples were obtained during these tests and were used to classify the soils encountered. The standard penetration resistances obtained provide a general indication of soil shear strength and compressibility.

Rock sampling was performed at Borings B-3 and B-10 in accordance with ASTM D-2113 using a diamond-studded bit fastened to the end of a hollow double-tube core barrel. The core barrel was drilled into the rock up to five feet at a time, and the samples were removed for measurement of sample recovery. The recovery is determined as the ratio of sample length recovered to the distance drilled.

The core samples were stored in boxes and returned to our laboratory for identification and determination of the Rock Quality Designation (RQD). The RQD is determined as the ratio of intact rock in NX or NQ core sections 4 inches or longer to the distance drilled. Percentages of recovery and RQD are given on the boring logs included in the Appendix of this report and summarized within the table below.

Boring No.	Depth of Core Run (feet)	REC (%)	RQD (%)
B-3	39.0-44.0	32	13
	44.0-49.0	53	7
B-10	23.5-28.5	87	17
	28.5-33.5	100	22

3.1 SUBSURFACE CHARACTERIZATION

The project site is located within the Central Blue Ridge Anticlinorium. Based on the USGS Geological Map of Virginia (1993), the site is mapped within the Catoctin Formation – Metabasalt soils. This formation typically consists of grayish green to dark yellowish green, fine-grained, schistose chlorite and actinolite

bearing metabasalt. The materials will initially weather into Silty and Clayey SAND and then into SILT and CLAY with extensive weathering.

The subsurface conditions encountered were generally consistent with published geological mapping. The following sections provide generalized characterizations of the soil and rock strata. Please refer to the boring logs in Appendix B.

Table 3.1.1 – Subsurface Soil Summary

Approximate Depth (ft)	Stratum	Description	Ranges of SPT[1] N-values (bpf)
0-0.5 (Surface cover)	n/a	Topsoil, Roots, and Organics	N/A
0.3-32.0	I	- Very Loose to Very Dense SAND (SM) and SILT (ML) with varying amounts of parent rock fragments - Firm to Very Stiff CLAY (CL, CH, MH)	4 to 50/4
3.0-80.0	II	- Very Dense Weathered Rock with varying amounts of parent rock fragments	60 to 50/0

Notes: (1) Standard Penetration Test

3.2 GROUNDWATER OBSERVATIONS

Groundwater was encountered in 4 of the 20 borings (B-1, B-2, B-3, and B-5) drilled as part of this geotechnical study ranging from depths of 23± to 53± feet below the existing ground surface. Perched water occurs as precipitation that enters the site, either directly or from overland flow from adjacent properties, begins to percolate through the near surface soils. Once the water percolation reaches the bedrock, which is virtually impermeable, it begins to flow at the intersection of the rock and the soil. This groundwater flow continues down gradient with the water table occasionally surfacing to form as springs and intermittent streams. Only in the lowest lying areas and adjacent to existing creeks is a shallow groundwater table in a continuous condition. Otherwise, it is related to precipitation, although springs may exist in the lower lying areas for extended periods of time without recharge from rainfall. Therefore, the groundwater conditions at this site are expected to be significantly influenced by surface water runoff and precipitation.

Because of the perched nature of the groundwater at this site, long term groundwater conditions can be deceptive. Although the true groundwater table can exist several hundred feet below the existing ground surface, groundwater located in streams and creeks, because of perched overland flow, creates the presence of an effective near surface groundwater table. Because the water is perched and flows at the interface between the soil and bedrock, water exiting fracture channels and cracks is common. Therefore, although all building excavations may appear dry at the time of completion, it is very common for fracture patterns in the rock, because of natural conditions or blasting to become natural pathways for ground water flow.

The highest groundwater observations are normally encountered in the late winter and early spring. Variations in the location of the long-term water table may occur because of changes in precipitation, evapo-transpiration, surface water runoff, and other factors not immediately apparent at the time of this

exploration. The site may also be subject to severe desiccation during extended dry periods. Therefore, earthwork operations, especially in the winter and spring months are more likely to encounter difficulties with perched conditions than those operations undertaken in the summer or fall.

3.3 LABORATORY TESTING

Representative soil samples were selected tested in our laboratory to check field classification and to evaluate pertinent engineering properties. The laboratory testing program included visual classifications (ASTM D4318), moisture content tests (ASTM D2216), Atterberg Limits tests (ASTM D4318), washed sieve grain size analyses (ASTM D412), thermal resistivity testing (ASTM D5334), and California Bearing Ratio testing.

Each soil sample was visually classified on the basis of texture and plasticity in accordance with the Unified Soil Classification System. The group symbols for each soil type are indicated in parentheses following the soil descriptions on the boring logs. A brief explanation of the Unified Soil Classification System is included in Appendix B of this report. The various soil types were grouped into the major zones noted on the boring logs. The stratification lines designating the interfaces between earth materials on the boring logs and profiles are approximate; in situ, the transitions may be gradual, rather than distinct.

4.0 DESIGN RECOMMENDATIONS

The design recommendations outlined in this report are based on the 20 soil test borings performed within the proposed development limits. The following sections provide recommendations for foundation design, soil supported floor slabs, seismic design parameters, pavements, and stormwater management facilities.

4.1 BUILDING FOUNDATIONS

4.1.1 Shallow Foundations (Option)

Provided subgrades and structural fills are prepared as recommended in this report, the buildings, structures, and lightly-loaded substation features may be supported by shallow foundations including column footings and continuous wall footings. We recommend the foundation design use the following parameters:

Table 4.1.1.1 Shallow Foundation Design

Design Parameter	Column Footing	Wall Footing
Net Allowable Bearing Pressure (Stratum I Soil/Structural Fill) [1]	3,000 psf	3,000 psf
Net Allowable Bearing Pressure (Stratum II)[1]	8,000 psf	8,000 psf
Minimum Width	24 inches	24 inches
Minimum Footing Embedment Depth (below slab or finished grade) [2]	24 inches	24 inches
Estimated Total Settlement [3]	Less than 1 inch	Less than 1 inch
Estimated Differential Settlement [4]	Less than 0.5 inches between columns	Less than 0.5 inches

Notes:

(1) Net allowable bearing pressure is the applied pressure in excess of the surrounding overburden soils above the base of the foundation.
(2) For frost penetration requirements.
(3) Based on assumed structural loads. If final loads are different, ECS must be contacted to update foundation recommendations and settlement calculations.
(4) Based on maximum column/wall loads and variability in borings. Differential settlement should be re-evaluated once the foundation plans are more complete.

Potential Undercuts: Most of the natural soils at the foundation bearing elevation are anticipated to be suitable for support of the proposed structures. If soft or unsuitable soils are observed at the footing bearing elevations, the unsuitable soils should be undercut and removed. Any undercut should be backfilled with lean concrete ($f'_c \geq 1{,}000$ psi at 28 days) up to the original design bottom of footing elevation; the original footing shall be constructed on top of the hardened lean concrete. Additional undercutting of foundations may be required if highly plastic soils or undocumented fill soils are present below the foundation. Please see the High Plasticity Soils section of this report.

For building and site retaining walls and foundations (soil bearing, lateral earth pressures, subgrade modulus, coefficients of friction, etc.).

- Site Soil Design Parameters

Material	Unit Weight (pcf)	Angle of Internal Friction (phi)	At-Rest Pressure (psf per vertical foot of wall)	Active Pressure (psf per vertical foot of wall)	Passive Pressure (psf per vertical foot of wall)
CH	115	12	90	75	175
ML	120	25	70	50	300
SM	125	30	65	45	375
Weathered Rock	135	45	40	25	400

Material	Compacted or In-Situ Soil Moist Unit Weight (δ)	Angle of Internal Friction (ø)	Cohesion (C)	Coefficient of Earth Pressure at Rest (K_o)	Coefficient of Active Earth Pressure (Ka)	Coefficient of Passive Earth Pressure (K_p)
CH	115	12	0	0.79	0.66	1.52
ML	120	25	0	0.58	0.41	2.46
SM	125	30	0	0.50	0.33	3.0
Weathered Rock	135	45	0	0.29	0.17	5.82

- For sliding coefficient:

Sliding Friction Coefficient [Concrete on Soil] (μ)	0.30
Skin Friction [Concrete cast against Soil] (F_s) [1]	250 psf

4.1.2 Drilled Shafts (Option)

In the event maximum structural loads for the building are considered to be excessive for shallow foundation system design, the building as well as typical more heavily-loaded substation structures (e.g. transmission line towers, etc.) can be designed to bear on drilled shaft foundations. **For preliminary design purposes only,** we estimated that drilled shafts may be designed to bear in rock sockets having a depth of at least 1 shaft diameter with a design capacity of 60 ksf. An average rock unconfined strength of 4,000 psi may be utilized for preliminary design purposes. Rock suitable for end bearing can generally be identified in the field during drilling by observing drill cuttings which appear generally dry and to consist of rock fragments, a pronounced grinding of the auger teeth and visible dust noted during drilling. Based on the rock depths encountered, we estimate the shaft lengths will vary across the site between 15 feet to over 40 feet in some areas. **Additional borings and rock coring data will be required to determine final tip elevations for each drilled shaft location.** Project planning and estimates should account for potential variability of drilled shaft length throughout the project.

The actual structural designs of the drilled shaft foundation system (including final pier locations, pier lengths, pier dimensions, and spacing) shall be designed and submitted, separately, for review approval and appropriate permit to Prince William County Building Division prior to construction.

We recommend all drilled shaft excavations be observed and approved by the GER prior to concrete placement. We recommend a pre-production meeting be held prior to drilling operations to review the shaft termination criteria with the GER and drilling contractor. Termination criteria shall be determined by the GER based on the final structural design and type of rig.

4.1.3 Auger Cast-In-Place (ACIP) Pile Foundations (Option)

Auger Cast-In-Place (ACIP) piles are installed by drilling a hollow stem auger with a closed tip. Upon reaching the bearing stratum, the plug is removed, and a sand-cement grout is placed under pressure through the hollow stem as the augers are withdrawn (tremie placement). The upper portion of the pile is terminated approximately 6 inches above the bottom of the proposed pile cap. ACIP foundations may be preliminarily designed for an allowable bearing pressure on the order of 50 tons to 100 tons. We estimate the shaft lengths will vary across the site between 25 feet to over 60 feet in some areas. **Additional borings and rock coring data will be required to determine final tip elevations for each ACIP location.** Project planning and estimates should account for potential variability of drilled shaft length throughout the project.

Auger cast-in-place piles greater than 18 inches in diameter will require special equipment to be installed and generally cannot be drilled more than 60 feet in the ground. Please note top of pile elevations were used in calculations and were estimated to be two feet below the finished floor elevations.

The actual structural designs of the ACIP foundation system (including final pier locations, pier lengths, pier dimensions, and spacing) shall be designed and submitted, separately, for review approval and appropriate permit to Prince William County Building Division prior to construction.

We recommend a series of three widely spaced auger probe/test piles be installed under the observation of the geotechnical engineer. Based on these observations, at least one pile should be selected for load testing, by the geotechnical engineer. The purpose of the test piles is to confirm our assumption of pile capacity (which is related to our design safety factor) and to allow observation of the subsurface conditions encountered by the augers.

The single test pile should be load tested in axial compression. The primary objective of the load test program is to observe the load-settlement response of an individual pile in order to verify that the contractor's construction procedures and installation equipment can produce an acceptable pile foundation. The geotechnical engineer should be retained to select the location of the test, observe and document the installation of the test pile and reaction piles, perform the load test and interpret the results, and develop recommendations concerning installation procedure and design tip elevations of production piles. Significant differences from accepted procedures or expected results should be brought to the attention of the Structural Consultant.

The axial compressive pile load test should be performed in general accordance with procedures outlined in ASTM D1143, Paragraphs 5.1 and 5.3. The test pile should eventually be loaded to plunging failure, which can be described as a total pile butt displacement on the order of 15% of the pile diameter, or about

2 inches. Accurate systems referenced to a stationary reference beam supported well away from the zone of influence of the test pile and reaction piles (if applicable). We recommend the load test be performed no sooner than five days after the installation of the test pile, unless the contractor can establish sufficient grout strength only after three days.

Auger cast piles may also be utilized to anchor the reaction frame system for the pile load test. However, these anchor piles may be pulled upward during loading. Upward movement of the piles beyond that of elastic elongation would reduce the downward axial capacity of these piles. Therefore, these anchor piles should not be used as production piles.

4.2 SLABS ON GRADE

Provided subgrades and structural fills are prepared as discussed herein, the proposed floor slabs can be constructed as Ground Supported Slabs (or Slab-on-Grade). The following graphic depicts our soil-supported slab recommendations:

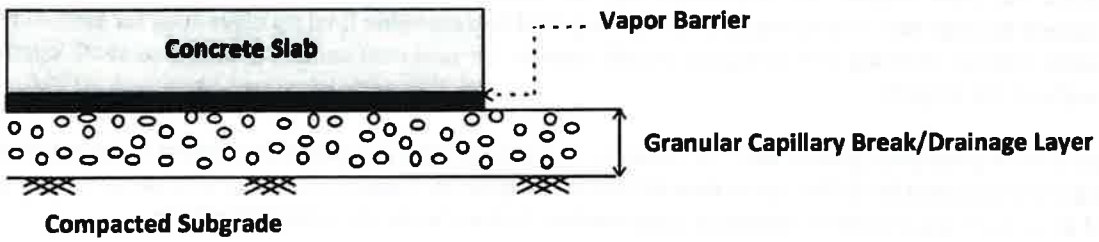


Figure 4.2.1

1. Drainage Layer Thickness: 6 inches minimum.
2. Drainage Layer Material: 6 inches of VDOT #57 stone, VDOT 21-A/21-B

Soft or yielding soils may be encountered in some areas. Those soils should be removed and replaced with compacted structural fill in accordance with the recommendations included in this report. Floor slabs placed in areas where expansive soils (CH/MH) are encountered should be underlain by at least 2 feet of compacted suitable fill.

Subgrade Modulus: Provided the Structural Fill and Granular Drainage Layer are constructed in accordance with our recommendations, the slab may be designed assuming a modulus of subgrade reaction, k_1 of 150 pci (lbs./cu. inch).

Vapor Barrier: Before the placement of concrete, a vapor barrier may be placed on top of the granular drainage layer to provide additional protection against moisture penetration through the floor slab. When a vapor barrier is used, special attention should be given to surface curing of the slab to reduce the potential for uneven drying, curling and/or cracking of the slab. Depending on proposed flooring material types, the structural engineer and/or the architect may choose to eliminate the vapor barrier.

Slab Isolation: Soil-supported slabs should be isolated from the foundations and foundation-supported elements of the structure so that differential movement between the foundations and slab will not induce excessive shear and bending stresses in the floor slab. Where the structural configuration prevents the

use of a free-floating slab such as in a drop down footing/monolithic slab configuration, the slab should be designed with suitable reinforcement and load transfer devices to preclude overstressing of the slab.

4.3 BELOW GRADE WALLS

Any below grade walls that will be backfilled with soil or aggregate should be designed to withstand lateral earth pressures and surcharge loads. For below grade walls that are properly drained, the walls may be designed for an equivalent fluid pressure of 60 pounds per square foot (psf) per foot of wall height. The 60 psf horizontal pressure reflects the moderate strength low plasticity silty and clayey soils present with the wall influence zones. A Lateral Earth Pressure Diagram illustrating our general recommendations regarding the application of lateral earth pressure are included in the Appendix D of this report and in Figure 4.3.1.

The following Figure depicts the suggested lateral earth pressure condition for a "drained condition" with restrained wall top:

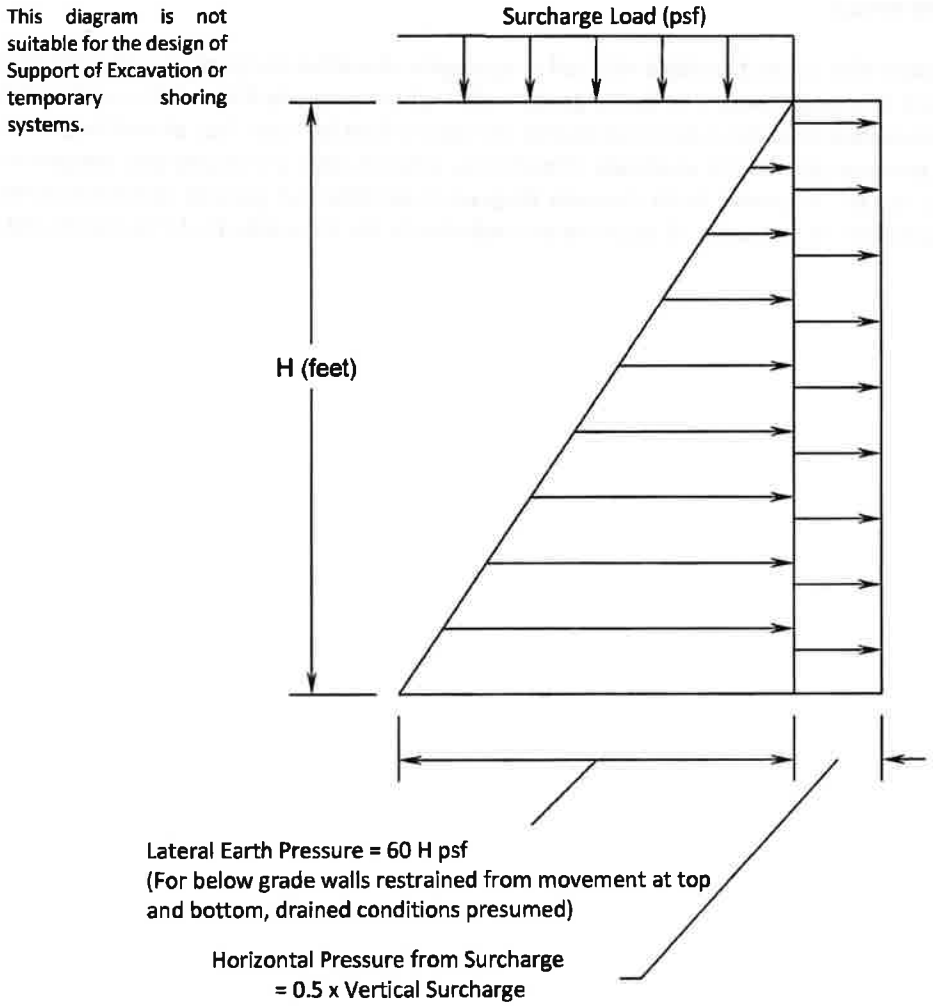


Figure 4.3.1

Any surcharge loads imposed within a 45 degree slope of the base of the wall should be considered in the below grade wall design. The influence of these surcharge loads on the below grade walls should be based on an at-rest pressure coefficient, k_0, of 0.5 in the case of restrained walls.

Backfill materials should consist of inorganic materials, free of debris and be free draining. The fill placed adjacent to the below grade walls should not be over-compacted. Heavy earthwork equipment should maintain a minimum horizontal distance away from the below grade walls of 1 foot per foot of vertical wall height. Lighter compaction equipment should be used close to the below grade walls and the thickness of the lifts should be no more than 6 inches where light weight compaction equipment is used.

To reduce excessive pressures against the below grade walls, and to reduce the settlement of the wall backfill, it is recommended that the wall backfill be compacted to between 92% and 95% of the maximum dry density determined in accordance with ASTM D 698 or VTM-1. Where the fill will be supporting pavement or other structures, the fill should be compacted to near 95% of this specification. Backfill materials which are placed behind below-grade walls should be free of organic materials and debris, free-draining, non-frost susceptible, and should not include any high plasticity Elastic SILT (MH) or Fat CLAY (CH) materials.

Depending upon the excavation methods employed at the time of installation, it may be advantageous to discontinue use of soil as structural backfill and substitute using open graded stone such as VDOT No. 57 stone. The use of No. 57 stone should help with any problems that should be encountered when attempting to backfill and compact soils. The top 2 feet of backfill should be suitable soils placed and compacted in accordance with the section titled Fill Placement. We recommend filter fabric be placed between the VDOT No. 57 stone and the compacted soil to reduce the risk of the soil fines migrating into the voids in the VDOT No. 57 stone. The GER should be contacted prior to employing the use of open graded stone to backfill around these structures.

Suitable manmade drainage materials may be used in lieu of the free draining granular backfill, adjacent to the below grade walls. These materials should be covered with a filter fabric having an Apparent Opening Size (AOS) consistent with the size of the soils to be retained. The material should be placed in accordance with the manufacturer's recommendations and connected to either the perimeter drainage system or the underslab granular mat, which in turn should be properly drained. The ground surface adjacent to the below grade walls should be kept properly graded to prevent ponding of water adjacent to below grade walls.

4.4 SEISMIC DESIGN CONSIDERATIONS

The International Building Code (IBC) 2012 and Chapter 20 of ASCE 7 require site classification for seismic design based on the upper 100 feet of a soil profile. Three methods are utilized in classifying sites, namely the shear wave velocity (v_s) method; the undrained shear strength (s_u) method; and the Standard Penetration Test Resistance (N-value) method. Where site specific data are not available to a depth of 100 feet, appropriate soil properties are permitted to be estimated by the registered design professional preparing the soils report based on known geologic conditions. The seismic site class definitions for the weighted average of either the SPT N-values or the shear wave velocities in the upper 100 feet of the soil profile are presented in Chapter 20 of ASCE 7 and in the table below.

Table 4.4.1: Seismic Site Classification

Site Class	Soil Profile Name	Shear Wave Velocity, Vs, (ft./s)	N value (bpf)
A	Hard Rock	Vs > 5,000 fps	N/A
B	Rock	2,500 < Vs ≤ 5,000 fps	N/A
C	Very dense soil and soft rock	1,200 < Vs ≤ 2,500 fps	>50
D	Stiff Soil Profile	600 ≤ Vs ≤ 1,200 fps	15 to 60
E	Soft Soil Profile	Vs < 600 fps	<15

In the absence of actual shear wave (V_s) data, we utilized the Standard Penetration Test (SPT) N-values recorded from the borings. Considering the shallow rock surface encountered at this site and our experience with other projects in the area, we recommend that the design for the building be based on a seismic site classification of **Site Class C**.

Considering that the foundation will bear in or close to bedrock, a Site Class B may be possible; however, site specific seismic testing to determine the shear wave velocity of the rock would be required to evaluate this site classification. If it is determined by the structural engineer that an increase in the site class for the project site will result in significant economic savings in the final design, we would be pleased to provide additional site-specific seismic testing services.

4.5 PAVEMENTS

The pavement design recommendations shall conform to the latest VDOT Road and Bridge Standards and Specifications. For the design and construction of exterior pavements, we recommend that all the procedures outlined in the Subgrade Preparation and Earthwork Operations and Fill Placement and Compaction sections be followed through the establishment of roadway section subgrade elevations.

We recommend that topsoil, existing fill material, construction debris, and any other soft or unsuitable materials be removed from the pavement area. The stripped surface should be proofrolled and carefully observed at the time of construction in order to aid in identifying the localized soft or unsuitable materials which should be removed. If high plasticity soils are exposed during the final grading of the paved areas, we recommend that these areas be over-excavated of the high plasticity soil to a depth of 2 feet and replaced with engineered fill.

An important consideration with the design and construction of pavements is surface and subsurface drainage. Where standing water develops, either on the pavement surface or within the base course layer, softening of the subgrade and other problems related to the deterioration of the pavement can be expected. Furthermore, good drainage should reduce the possibility of the subgrade materials becoming saturated over a long period of time. We would be pleased to be of further assistance to you in the design of the project pavements by providing additional recommendations during construction of the project.

It is common practice to install only the base aggregate and the base course asphalt during initial construction, and then the final topping surface asphalt much later in the construction process. Often, depending upon the sequence and timing of construction, the final pavement surface may not be placed until several months to even years after the initial base asphalt is placed. Studies have shown that the most critical load conditions for most development occur during the construction phase. In particular, the pavement system is subjected to loading that includes construction equipment, low-boys, concrete trucks, pre-fabricated joist and dry wall deliveries, and other heavy, high concentrated truck loading which does not occur once the development is finished. Not only does this represent the highest traffic loading condition, but it occurs at a time when the pavement section is not at its full strength, simply because the surface asphalt has not been placed.

Although it is usually not economically feasible to increase the pavement section to satisfy this potential design issue, it should be recognized that prudent steps can be taken to help reduce failures of the pavement system during the construction. For example, we recommend using intermediate type asphalt for the base layer of asphalt to reduce the amount of surface water infiltration into the pavement subbase.

Furthermore, any areas that are low and will have a tendency to pond water should be drained to the extent feasible. This should normally be undertaken in areas that are relatively low and wet, or in areas where there is known to be a concentration of construction traffic. These concentrations should be considered to be the initial entryways to the site, the travelways and any other high-construction traffic areas.

Depending upon the time in which the temporary construction is used as a service road, some failures should be expected. If the construction pavement system fails, it will be necessary to remove this failed section and replace it with the initial design section or an equivalent repaired section.

If pavements will be constructed early during site development to accommodate construction traffic, consideration must be given to the construction of heavier pavement sections, capable of accommodating the much heavier loads normally associated with these activities. The design of actual pavement sections is beyond the scope of this report. We recommend final pavement designs be developed in accordance with applicable VDOT and Prince William County requirements, as appropriate. Such a design should be developed considering anticipated traffic loading conditions, soil subgrade conditions, and CBR value.

Rutting of pavement and ultimately pavement failure are typically experienced due to front loading garbage trucks imposing concentrated wheel loads on pavements. Therefore, we recommend that the pavement in any trash pick-up areas consist of a reinforced concrete pavement underlain by VDOT 21A subbase. Design of concrete pavements is beyond the scope of this report. We recommend concrete pavement designs be developed in accordance with applicable VDOT and Prince William County requirements. Such a design should be based on anticipated traffic loading conditions and soil subgrade conditions.

A design CBR value of 4 is recommended based on laboratory testing performed on samples obtained from Borings B-14 and B-15 during our subsurface exploration. Additionally, we recommend that a Resiliency Factor (RF) of 1.5 be utilized for design purposes of the pavements. If the results of the CBR tests taken during construction differ from that mentioned above, the pavement design should be modified as necessary.

New Asphalt Pavement Section: We have assumed that asphalt (light-duty and heavy-duty) and concrete (heavy-duty) pavement section designs for the parking lot and access roadway pavement areas will be based upon 20-year and 30-year design lives with assumed ESALs of 19,300/610,000 for light/heavy-duty Flexible Pavements and 1,400,000 for Rigid Pavement. If these assumptions are found to be inaccurate for the finalized project average daily traffic values, ECS shall be informed in order to revise pavement section design accordingly.

We have also assumed other design parameters in table below.

Table 4.5.1 Pavement Design Parameters

Reliability	90%
Overall Standard Deviation	0.49
Effective Subgrade Resilient Modulus	6,000 psi
Initial Serviceability	4.2
Terminal Serviceability	2.8

The following sections are expected to provide adequate support for standard-duty pavement and heavy-duty pavements for the newly constructed pavement areas that will be part of the development of the project site.

Table 4.5.2 Design Pavement Sections

Pavement Material	**Pavement Thickness (inches)**		
	Standard-Duty - Asphalt	**Heavy-Duty - Asphalt**	**Heavy-Duty - Concrete**
Surface Course	1.5	1.5	---
Intermediate Course		2.0	---
Base Course	3.0	3.0	---
Portland Cement Concrete	---	---	8.0
Aggregate Base Material	6.0	8.0	8.0
Total Pavement Section Thickness	**10.5**	**14.5**	**16.0**

It should be recognized that construction loading conditions may be more severe than in-service conditions and the Geotechnical Engineer should be advised of any traffic loading conditions that become available in order to confirm and/or modify the pavement section recommendations.

New Concrete Pavement Section: The heavy-duty concrete pavement section should consist of a minimum of 8 inches of air-entrained Portland cement concrete having a minimum 28-day compressive strength of 4,000 pounds per square inch (psi). The concrete pavement shall be underlain by a minimum of 8 inches of compacted dense-graded aggregate base course stone (VDOT 21-A). The rigid concrete pavement section should be provided with construction joints at appropriate intervals per typical concrete pavement construction requirements.

Exterior Concrete Slabs on Grade (Sidewalks, Curbs, Gutters, and Dumpster Pads): The exterior concrete slabs recommendations should conform to the latest VDOT Road and Bridge Standards and Specifications. For the construction of exterior concrete, we recommend that topsoil and any other soft or unsuitable materials be removed from the paved area. The stripped surface should be proofrolled and carefully

observed at the time of construction in order to aid in identifying the localized soft or unsuitable materials which should be removed.

We recommend that exterior concrete slabs such as sidewalks, curbs and gutter be underlain by a minimum of 4 inches of granular material having a maximum aggregate size of 1.5 inches and no more than 2% passing the #200 sieve. This granular layer will reduce the potential for frost heaving of the exterior slabs. Exterior concrete exposed to the weather should be air-entrained.

4.6 SITE RETAINING WALL

One retaining wall with a maximum exposed wall height of 6 feet is proposed along the northeast edge of the site. While design details for the wall are not available at this time, general recommendations have been provided below.

Since retaining walls are free to rotate at the top, they effectively mobilize more of the shear strength of the retained soil than conventional basement or loading dock walls. For the design of permanent site retaining walls with level backfill, we recommend an equivalent fluid pressure of 45 psf per vertical foot of wall. At the areas of the walls such as corners where rotation will be limited, we recommend an equivalent fluid pressure of 60 psf per vertical foot of wall since rotation is restricted in these areas. This lateral earth pressure assumes that low-plasticity materials with a LL equal to or less than 40 and a PI less than 15, unless the material can be shown to have a very low expansion potential, are used for the wall backfill and that drainage of the backfill is provided as discussed below. A Lateral Earth Pressure Diagram has been included in the Appendix to further detail the anticipated earth pressure distribution behind the wall. The design should also account for any surcharge loads that are within a 45° slope from the base of the wall, and any slope of the backfill. The retaining wall should be designed so that the resultant of the overturning forces remains in the central one-third of the footing.

The foundations for proposed retaining wall should be designed for a maximum allowable soil bearing pressure of 3,000 psf, provided that the footings are founded within firm natural soils or engineered fill placed over firm natural soils. Special care should be taken to confirm soft existing soils are removed prior to the placement of structural fill on the established foundation subgrades.

Sliding resistance of the retaining wall can be achieved either through the use of a shear key (for concrete retaining walls only) or through the frictional forces developed at the base of the retaining wall. A shear key, if installed, can be designed for a passive pressure of 300 psf per foot of depth. This assumes that the soils at the base of the retaining wall are approved, firm natural soils or compacted structural fill. A frictional resistance coefficient of 0.3 can be utilized for sliding resistance design for the retaining wall. The structural design of proposed retaining walls should be approved prior to site implementation.

The recommendations presented herein assume that the backfill behind the retaining wall is properly drained. Suitable man-made drainage materials may be used in lieu of the free draining granular backfill, adjacent to the wall. These materials should be covered with a filter fabric having an Apparent Opening Size (AOS) consistent with the size of the soils to be retained and should be placed in accordance with the manufacturer's requirements. Drainage of the backfill may be accomplished through the use of 4-inch diameter weep holes at 8 feet spacing, through the wall, immediately above proposed grade at the front of the wall. Alternatively, a longitudinal drain line could be used behind the retaining wall. The drain should consist of a 6-inch perforated pipe surrounded by a minimum of 6 inches of VDOT No. 57 stone.

The No. 57 stone should be completely wrapped in a filtration geotextile such as Mirafi 140N. The geotextile used should be reviewed and approved by the geotechnical engineer. The ground surface adjacent to the retaining wall should be kept properly graded to prevent ponding of water adjacent to the wall or drainage of water over the front of the wall.

The land above the recommended geogrid reinforcement layers must be designated as a "soil reinforcement zone easement" and any future landscaping or planting should be coordinated such that it does not disturb the soil reinforcement system and/or will not affect the retaining wall stability. The geogrid layers will be installed in conjunction with the wall construction and thus will precede the excavations for plant material and landscaping. Trees and other plant material that might impact the geogrid reinforcing shall be kept outside the soil reinforcement zone easement.

The construction sequence will be important in areas where construction of the wall will either be in conflict or be too close to any existing storm pipes and structures. We recommend that in such cases, the storm pipes and the structures be installed first or simultaneously with the construction of the wall, since excavation for the storm pipes and structures after construction of the wall may jeopardize the stability of the wall. The wall designer should consider the presence of the storm structures in his or her design and should include standard or specific details for placement of wall backfill around these structures in design. In cases where storm sewer pipes penetrate and/or are located underneath the proposed wall, we recommend the provision of an encasement/liner or a grade beam in order to allow the pipes to be removed for maintenance without affecting the wall stability. If the storm line extends through the face of the wall, then block units should be saw cut within 1/2-inch of the pipe. Details for the pipe outlet and casing as well as wall sections with the pipe in the reinforcing zone should be included in the retaining wall design.

4.7 STORM WATER MANAGEMENT PONDS

One storm water management pond is currently proposed for the site. At the time of this report, specific details regarding water surface elevations and locations and elevations of pond structures were not available. As such, it is the intent of this section to provide general recommendations for design and construction of the pond. Once detailed pond designs and grading is available, ECS should be contacted to provide updated recommendations and, if necessary, global stability analyses for the pond.

4.7.1 Earthwork Operations

Subgrade preparation operations should consist of stripping all vegetation, rootmat, and topsoil and any other soft or unsuitable material from the dam embankment. Where possible, stripping limits for the proposed grading of the dam should be extended at least 10 feet beyond the toe.

After stripping to the desired grade and prior to new fill placement, the exposed soils should be carefully examined to identify any localized loose, yielding or otherwise unsuitable materials by an experienced geotechnical engineer or his authorized representative. After examining the exposed soils, loose and yielding areas can be identified by proofrolling with an approved piece of equipment, such as a loaded dump truck having an axle weight of at least 10 tons. Any soft or unsuitable materials encountered during this proofrolling should be removed and replaced with an approved backfill.

4.7.2 Embankment Fill Placement

The on-site materials may be reused as engineered fill if they do not contain organics or foreign debris, are not highly plastic, are not environmentally impacted, and conform to the criteria outlined below for acceptable soil types for construction. Based on observations made during the subsurface exploration program and following visual observation of the recovered soil samples, some of the natural soils may be suitable for reuse as engineered fill materials; however additional laboratory testing will be required for confirmation of soils to be used as engineered fill. Under no circumstances should CH soils be used as fill material in proposed structural areas.

The preparation of fill subgrades should be observed on a full-time basis. These observations should be performed by the Geotechnical Engineer of Record, or their representative, to ensure all unsuitable materials have been removed, and the subgrade is suitable for support of the proposed construction and/or fills. In some areas, excessively soft and/or wet soils may be encountered for fill subgrades, especially in the winter or early spring months. All soft areas should be excavated and removed.

Upon achieving competent subgrade materials, the excavated area should be filled, where appropriate, to planned grades with an approved controlled, compacted fill. All fill and backfill placed within the embankments and around the structures should be placed in lifts not exceeding 8-inches in loose thickness and moisture conditioned to within 2 percentage points on the wet side of the optimum moisture content. We recommend that the lifts be compacted to at least 95 % of their maximum dry density, as determined by ASTM D-698, Standard Proctor, for the full depth of the fill. Acceptable soil types for construction of the embankment on the upstream and downstream side (excluding the clay liner) include soils having a USCS designation of ML and CL; and SM and SC having a minimum of 25% passing No. 200 sieve. The on-site SM and SC soils tested do generally meet these requirements and should be suitable for use as fill.

The timing for placement of backfill for the embankment should be planned to minimize the risk of piping of soil based on laboratory tests performed on the material proposed for use prior to construction (additional observations and analyses may be required for the clay liner placement).

It is recommended that new fill soils be **benched** into the existing soils to verify adequate soil bonding of these materials. If the top of an exposed layer is too smooth, it should be rerolled with a sheepsfoot roller, or scarified prior to the placement of the next lift of fill. Although it is desirable to seal off fill surfaces on a daily basis using a steel drum or rubber tired roller, these surfaces should be scarified the following day prior to fill activities to minimize the creation of planes of seepage within the embankment structure.

Fill materials should not be placed on frozen soils or frost-heaved soils and/or soils which have been recently subjected to precipitation. All frozen soils should be removed prior to continuation of fill operations. Borrow fill materials, if required, should not contain frozen materials at the time of placement. All frost-heaved soils should be removed prior to placement of controlled, compacted fill, granular subbase materials, foundation or slab concrete, and asphalt pavement materials. Soil bridging lifts within the proposed embankment should not be used since excessive settlement of the structure can occur. Also, trees should not be planted on the existing dam embankment.

4.7.3 Facility Outlets

The principal outlet pipes penetrating the embankment dams should be provided with seepage control measures consisting of a concrete cradle and downstream collection drain. Primary outlet conduits, which penetrate the facility embankments, should be constructed on a concrete cradle along the upstream two-thirds of the conduit length. The downstream one-third of the principal spillway pipe should be surrounded with a 12-inch thick layer of open graded coarse aggregate (VDOT No. 78) wrapped with a suitable nonwoven geotextile with an Apparent Opening Size (AOS) of 70. (The coarse aggregate should conform to the current VDOT Road and Bridge Specifications Section 203 and the geotextile with Section 245.) The gravel layer below and around the conduit at the downstream end will serve to collect any seepage along the conduit. This drainage blanket should be daylighted at the slope face or tied into the stormwater discharge structure.

4.7.4 Foundations for Drainage Control Structures

Based on the results of our subsurface exploration and our engineering analysis, we recommend that any proposed stormwater discharge control structures be supported on spread footing foundations bearing either on suitable firm natural soils or on new engineered fill constructed over suitable natural soils. Assuming subgrades are prepared according to the recommendations above, the foundations may be designed for a net allowable soil bearing pressure of 2,000 pounds per square foot (psf).

If unsuitable soil types or bearing conditions are found to exist at the foundation level, then the base of the excavation should be lowered to suitable materials. As an alternative, the original bottom-of-footing level can be restored by the placement of "lean" (1,000 psi) concrete after removal of the unsuitable soils.

Fill materials should be placed in accordance with the Compaction section of this report. The soil will be moisture and disturbance sensitive; therefore, excavation for the outlet structures should proceed in an expeditious manner in order to reduce exposure of the bedding soils. The foundation excavation should be observed and the bearing pressure of the footing subgrade tested by an authorized representative of the GER.

Granular bedding should not be used to support foundations or pipes penetrating the facility embankments. Granular soils should only be used where specifically designed for drainage. Conduits penetrating the embankments should be supported by properly placed soil or natural soils trimmed to fit the pipe diameter, or concrete fill, such as lean concrete or "flowable" fill, to control seepage along such conduits which could otherwise result in a soil piping failure. The upstream two thirds of the primary discharge pipe should be placed over a concrete cradle as described in the previous section.

4.7.5 Pond Liner (Wet Ponds Only)

In order to maintain the permanent pool elevations, we recommend the use of a clay or synthetic liner to minimize the potential for seepage through the silty and clayey sand materials and weathered rock.

The liner should be present along the entire pond bottom, including embankment slopes up to the 10-yr storm elevation on the impounded side only. The liner should consist of an 18-inch thick layer of material meeting the specification of the most recent edition of the BMP Clearinghouse (Table 14.4). The liner should consist of soil with a minimum of 30% clay particles, by weight. The material should also have a

minimum Plasticity Index of 15 and a minimum Liquid Limit of 30. We recommend the liner have a maximum permeability of $1x10^{-7}$ ft/sec and should be compacted to 90% to 95% of the maximum dry density as determined by the Standard Proctor Method (ASTM D698). Generally, a soil material classified as Lean CLAY (CL) and having less than 10% retained on the #4 sieve should meet this requirement. Fat CLAY (CH) is not recommended for use as a liner due to concerns over shrinkage cracks. We also recommend the soils for the liner be installed at 2 to 3 percentage points wet of the optimum moisture content. Clay liner materials should be kept moist during and after installation to reduce the potential for desiccation and cracking. It is recommended that new clay liner soils be benched into the existing soils to verify adequate soil bonding of these materials.

4.8 SOIL THERMAL RESISTIVITY

Soil thermal resistivity testing was performed on remolded samples obtained from depths ranging from 1± feet to 6± feet below site grades. The samples were compacted to approximately 95% of the maximum dry density as determined by the Standard Proctor Method (ASTM D698). Tests were performed in general accordance with ASTM D5334. Tests were performed at various moisture contents to develop a dry-out curve. Based on the test results, we recommend the following maximum resistivity values at each location be used for design:

Sample No.	Recommended Max. Rho (°C*cm/W)
B-2	220
B-7	190
B-11	205

Based on the test results, we recommend a **single maximum resistivity value of 220** be used for design of general site duct banks. Laboratory test results for each sample are included in the Appendix of this report.

5.0 SITE CONSTRUCTION RECOMMENDATIONS

5.1 SUBGRADE PREPARATION

5.1.1 Stripping and Grubbing

The subgrade preparation should consist of stripping all vegetation, rootmat, topsoil, existing fill, and any soft or unsuitable materials from the 10-foot expanded building and 5-foot expanded pavement limits, and 5 feet beyond the toe of structural fills. Deeper topsoil or organic laden soils may be present in wet, low-lying, and poorly drained areas. Root balls may extend as deep as about 2 feet and will require additional localized stripping depth to completely remove the organics. ECS should be retained to verify that topsoil and unsuitable surficial materials have been removed prior to the placement of structural fill or construction of structures.

5.1.2 Proofrolling

Prior to fill placement or other construction on subgrades, the subgrades should be evaluated by an ECS field technician. The exposed subgrade should be thoroughly proofrolled with construction equipment having a minimum axle load of 10 tons [e.g. fully loaded tandem-axle dump truck]. Proofrolling should be traversed in two perpendicular directions with overlapping passes of the vehicle under the observation of an ECS technician. This procedure is intended to assist in identifying any localized yielding materials.

Where proofrolling identifies areas that are unstable or "pumping" subgrade those areas should be repaired prior to the placement of any subsequent Structural Fill or other construction materials. Methods of stabilization include undercutting, moisture conditioning, or chemical stabilization. The situation should be discussed with ECS to determine the appropriate procedure. Test pits may be excavated to explore the shallow subsurface materials to help in determining the cause of the observed unstable materials, and to assist in the evaluation of appropriate remedial actions to stabilize the subgrade.

5.1.3 Site Temporary Dewatering

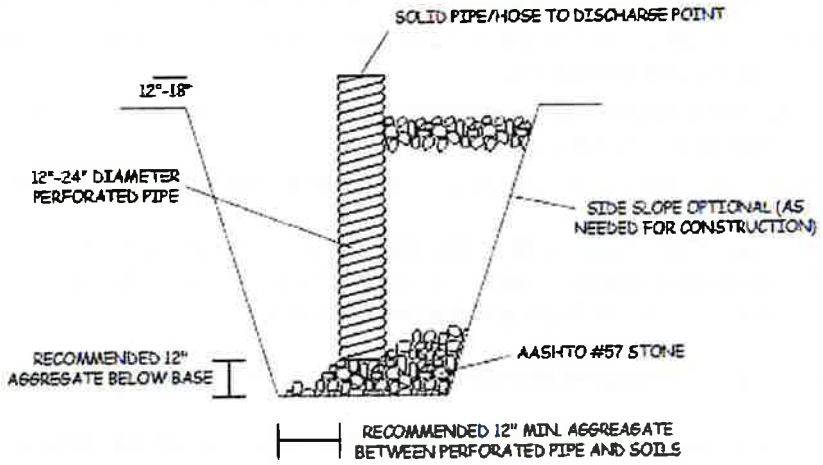
Groundwater on this site can be characterized as being broadly perched above less permeable materials and shallow rock. The depth at which perched water is present on the site varies with surface elevation. In low-lying areas the presence of perched water is more pronounced. In higher areas and on ridge lines, perched water may be present, including above design cut elevations, but is less concentrated. Soils at contact with perched water levels were very moist to wet. In most cases, moisture then decreased with depth.

The contractor shall make their own assessment of temporary dewatering needs based upon the limited subsurface groundwater information presented in this report. Soil sampling is not continuous, and thus soil and groundwater conditions may vary between sampling intervals (typically 5 feet). If the contractor believes additional subsurface information is needed to assess dewatering needs, they should obtain such information at their own expense. ECS makes no warranties or guarantees regarding the adequacy of the provided information to determine dewatering requirements; such recommendations are beyond our scope of services.

Dewatering systems are a critical component of many construction projects. Dewatering systems must be selected, designed, and maintained by a qualified and experienced (specialty or other) contractor familiar with the succinct geotechnical and other aspects of the project. The failure to properly design and maintain a dewatering system for a given project can result in delayed construction, unnecessary foundation subgrade undercuts, detrimental phenomena such as 'running sand' conditions, internal erosion (i.e., 'piping'), the migration of 'fines' down-gradient towards the dewatering system, localized settlement of nearby infrastructure, foundations, slabs-on-grade and pavements, etc. Water discharged from any site dewatering system shall be discharged in accordance with all local, state and federal requirements.

Strategies for Addressing Perched Groundwater:

The typical primary strategy for addressing perched groundwater seeping into excavations is pumping from trench (or French) and sump pits with sump pumps. A typical sump pump drain (found in a sump pit or along a French drain) is depicted below. The inlet of the sump pump is placed at the bottom of the corrugated pipe and the discharge end of the sump is directed to an appropriate stormwater drain.



Sump Pit/Pump Diagram

Details of a typical French drainage installation are included in Appendix D. A typical French drain consists of an 18 to 24-inch wide by 18 to 24-inch deep bed of AASHTO #57 (or similar open graded aggregate) aggregate wrapped in a medium duty, non-woven geotextile and (sometimes) containing a 6-inch diameter, Schedule 40 PVC perforated or slotted pipe. Actual dimensions should be as determined necessary by ECS during construction. After the installation has been completed, the geotextile should be wrapped over the top of the aggregate and pipe followed by placement of backfill. The top of the drain should be positioned at least 18 inches below the design subgrade elevations. Drains should not be routed within the expanded building limits.

Pumping wells or a vacuum system could also be used to address perched groundwater. These techniques often are only effective during the initial depletion of the perched water quantity and may quickly be ineffective at addressing accumulation of water from rain, snow, etc.

5.2 EARTHWORK OPERATIONS

5.2.1 High Plasticity Soils

Within the proposed project limits, potentially expansive soils (CH/MH) were encountered during this exploration; these types of soils are common in this area, and, based on the regional geology as well as results from past ECS subsurface explorations performed on nearby sites, these and other high plasticity soils are believed to present at the site at locations which may not have been evaluated during this subsurface exploration. Care should be taken to limit moisture variations in order to reduce potential volume changes. If the field work is conducted during the winter or early spring months, it is expected that even the low-plasticity clay/silt soils at the surface may need to be removed or dried prior to fill placement. If expansive clays and clay-silt mixtures are encountered, they should not be used as fill for roadway, curb, gutter, and sidewalk subgrade, within utility trenches, or within embankment slopes. For suitability of natural soils to be used in structural areas (i.e. foundations and floor slabs), soils meeting all four of the following provisions shall be considered expansive per IBC 2012, except that tests to show compliance with items 1, 2, and 3 shall not be required if the test prescribed in Item 4 is conducted:

1. *Plasticity Index (PI) of 15 or greater, determined in accordance with ASTM D 4318.*
2. *More than 10 percent of the soil particles pass a No. 200 sieve (0.75 µm), determined in accordance with ASTM D 422.*
3. *More than 10 percent of the soil particles are less than 5 micrometers in size, determined in accordance with ASTM D 422.*
4. *Expansion Index greater than 20, determined in accordance with ASTM D4829.*

If the Plasticity Index (PI) of the soil is 20 or less and the Liquid Limit (LL) is 45 or less, the Plasticity Index Corrected (PI cor) or the Expansion Index Corrected (E1 cor) may be substituted in the definition of Expansive Soil. Where PI cor and E1 cor are determined as follows:

PI cor = PI x (% Passing No.40 sieve)/100 and EI cor = EI x (% Passing No. 4 Sieve)/100

These soils should not be reused as engineered fill. When these soils are encountered in cut areas, they should be undercut to 4 feet below finished exterior grade or to 2 feet below the bottom of footing, whichever is deeper, and backfilled with controlled, compacted fill. If the bottom of the plastic soils extends to depths less than 4 feet below the finished exterior grade, the undercutting and replacement may be limited to the depth of the high plasticity soils.

Alternatively, the footings can be "stepped down" to bear either at 4 feet below exterior grade or at 2 feet below normal footing subgrade, whichever is deeper, bearing on the plastic soils. If the plastic soils are found to be less than 4 feet in thickness, the footing needs bear only below the plastic soils and the frost line.

Floor slabs placed in areas where highly plastic soils are encountered should be underlain by at least 2 feet of compacted suitable fill. In proposed pavement areas, we recommend undercutting and replacement of the expansive soils in order to provide at least 2 feet of non-expansive soil fill below the pavement subgrade.

5.2.2 Existing Man-Placed Fill

Existing man-placed fill was not encountered below the existing ground surface within any of the borings evaluated for this exploration. However, it should be noted that the general site is bordered by some developed areas and fill may be present in areas of the site not explored during our current study or adjacent to utilities or structures at the site. Existing fill material should be considered undocumented fill and will have to be removed and reworked or replaced within structural areas. Any encountered trash or unsuitable fill materials should be completely removed within structural areas and should not be used in structural fill areas.

If areas of existing fill are encountered at a subsequent time during site development, it may be feasible to remove and re-compact the existing fill materials; however, further laboratory testing should be performed at that time to confirm if the fill materials satisfy the requirements for an engineered fill. Some moisture conditioning of the soils may be necessary prior to placement in order to achieve proper compaction. Additionally, the amount of debris present in existing fill materials can frequently be difficult to evaluate with soil borings. Therefore, test pits may be warranted to confirm the fill does not contain unacceptable debris prior to reuse in engineered fill. Some screening may be required to remove any debris prior to placement of these soils, so the planning of earthwork operations should recognize and account for these efforts and increased costs.

5.2.3 Weathered Rock and Rock Excavation Operations

Weathered rock was encountered as shallow as 3.0± feet below the existing ground surface. Rock excavation will be required for mass grading and installation of any deep utilities. Typically, for excavations in relatively unweathered rock material, ripping is practical for excavations extending down to about 2 feet below the depth of auger refusal. However, blasting or hoe-ramming for removal of weathered rock or intact rock will likely be required below auger refusal depths.

For the construction planning and final pay quantities, we recommend that the following definition be utilized in the project specification to define rock:

> "For footings, trenches and pits, rock shall be defined as those materials that cannot be excavated with a Caterpillar Model No. 320L track-type hydraulic excavator, equipped with a 42-inch wide short-tip radius rock bucket, rated at not less than 120 hp flywheel power with a maximum drawbar pull force of not less than 39,700 lbs. Boulders or masses of rock exceeding one-half cubic yard in volume shall also be considered rock excavation. This classification does not include materials such as loose rock, concrete, or other materials that can be removed by means other than drilling and blasting, hoe-ramming, or rock trenching, but which for reasons of economy in excavating, the contractor chooses to remove by drilling and blasting, hoe-ramming, or rock trenching techniques."

Refusal materials (intact rock) normally require blasting in deep excavations. Blasting in utility trenches should be done carefully to avoid damage to the surrounding materials. When the material to be excavated requires blasting, the contractor should comply with the requirements of the county.

5.2.4 Structural Fill

Product Submittals: Prior to placement of structural fill, representative bulk samples (about 50 pounds) of on-site and off-site borrow should be submitted to ECS for laboratory testing, which will include Atterberg limits, natural moisture content, grain-size distribution, and moisture-density relationships for compaction. Import materials should be tested prior to being hauled to the site to determine if they meet project specifications.

Satisfactory Structural Fill Materials: Fill material underneath the proposed structures and pavements should consist of an approved material (CL, ML, SC, SM or more granular), free of debris, organics, and cobbles greater than 4 inches. The structural fill in the "active zone" under the building pad should have Liquid Limit (LL) no greater than 40 and Plasticity Index (PI) less than 15, and shall be non-expansive in addition to meeting all the other requirements for a suitable structural fill material. The "active zone" is defined by PWC as a buffer of at least four feet below the final exterior grades or two feet below the bottom of the foundation, whichever is greater. Fill below the "active zone" for structures, and below subgrade for slopes and pavement (curb and gutter, sidewalk, etc.) should have LL and PI no greater than 45 and 20, respectively, unless it can be shown to have very low expansion potential. If no structural fill is required, the upper two feet of existing soil shall meet these criteria. Under no circumstances should high plasticity (CH, MH) soil be used as fill material in proposed structural areas.

The low plasticity natural soils at this site are expected to be suitable for use as controlled fill; however, they may require moisture content adjustments, via discing or other drying techniques or spraying of water to the soil prior to their use as controlled fill material. Additionally, any debris or other unsuitable materials must be removed, as necessary, from the on-site materials prior to their reuse as engineered fill. The planning of earthwork operations should recognize and account for these efforts and increased costs. Suitable structural fill soils should have the index properties shown in the tables below.

STRUCTURAL FILL INDEX PROPERTIES	
Subject	Property
Building and Structural Areas	LL < 40, PI<15
Pavement Areas	LL < 45, PI<20
Max. Particle Size	4 inches
Fines Content (% passing #200 sieve)	Max. 25 %
Max. organic content	5% by dry weight

STRUCTURAL FILL COMPACTION REQUIREMENTS	
Subject	**Requirement**
Compaction Standard	Standard Proctor, ASTM D698/ Virginia Test Method (VTM-1)
Required Compaction	95% of Max. Dry Density for fill less than 10 feet
	98% of Max. Dry Density for fill greater than 10 feet
Moisture Content	-2 to +3 % points of the soil's optimum value
Loose Thickness	8 inches prior to compaction

Flowable Fill/Lean Concrete Fill Recommendations: Low strength flowable fill/lean concrete materials are also considered suitable for use as fill to restore site grades to final slab-on-grade elevations for conduit installation. Prior to the placement of these materials, subgrades shall be observed and approved in accordance with the requirements presented in this report. Fill areas shall be limited to locations where compaction of approved structural fill soils will not result in adequate parameters/values, and fill depths shall be limited to depths to which consolidation will not be permissible. The flowable fill shall be approved by the design team to ensure placement, curing, and resistivity values are achieved. Other approved structural fill materials shall not be layered between multiple lifts of flowable fill.

On-Site Borrow Suitability: Significant natural deposits of soils classified in our boring logs as Silty SAND/Sandy SILT (SM/ML) have been identified as being present on the site. These occur mostly at relatively shallow depth below the surface where residual soils are mostly weathered.

Non-Durable Rock: Nondurable rock materials removed in ripping excavations may be used as fill if suitably broken down by mechanical compaction effort. Durability is the term used to describe the ability of a rock or rock-like material to withstand long term chemical or mechanical weathering without size degradation. Any weathered rock excavated from the site and used as engineered fill should have a well-graded grain size distribution with rock and soil particles ranging from clay or silt size particles to a maximum size of 4 inches in diameter. Particles larger than this should be broken by mechanical compaction equipment to achieve the desired grain size distribution, and the samples should have a minimum of 20% passing the #200 sieve and 50% passing the #40 sieve. Variations from these recommendations should be approved by the GER, at the time the samples are prepared.

Fill Placement: Fill materials should not be placed on frozen soils, on frost-heaved soils, and/or on excessively wet soils. Borrow fill materials should not contain frozen materials at the time of placement, and all frozen or frost-heaved soils should be removed prior to placement of Structural Fill or other fill soils and aggregates. Excessively wet soils or aggregates should be scarified, aerated, and moisture conditioned.

Fill Equilibrium Monitoring: Up to approximately 21± feet of new fill will be required to reach planned grades in some areas. With this extensive fill and predominately fine-grained soils anticipated for its construction, settlement monitoring prior to commencing foundation construction is recommended in order to confirm the fill has reached equilibrium. Likewise, it would be prudent to place the extensive new fill for the building as early as possible in the site development phase so that any residual, fill-induced settlement can occur without major impacts to the building construction schedule.

We believe that the majority of the fill-induced settlement will occur within the fill itself, rather than over a deep soft soil layer. Therefore, a monitoring program utilizing near-surface settlement plates or

monuments should be implemented near or immediately upon the conclusion of the fill placement. The frequency of monitoring should be on a weekly basis, but this should be adjusted as necessary by the GER based upon settlement rates. The GER will also determine the duration of the settlement monitoring based on settlement rates and trends. Typically, the fill-induced settlement rates are highest during the fill placement and begin to taper off shortly after ceasing any fill placement. Fill-induced settlements will practically stop within two or so months after the completion of any fill placement. Construction can begin when subsequent readings indicate settlement of the fill under its own weight has virtually ceased.

5.2.5 Temporary and Permanent Slopes

Because of the erodibility of the natural soil at the site, special care should be taken to prevent erosion. We recommend that temporary slopes established during construction be constructed no steeper than 1H:1V and maintained for no more than 30 days.

Landscape berms can be constructed as steep as 2H:1V; however, it should be noted that the site soil is highly erodible and that adequate measures must be taken to prevent erosion of slopes steeper than 3H:1V. All slopes must be protected from erosion by a ground cover of adequate vegetation and erosion control measures. All excavations should be performed in accordance with the current OSHA and VOSHA regulations.

5.3 FOUNDATION AND SLAB OBSERVATIONS

Protection of Foundation Excavations: Exposure to the environment may weaken the soils at the footing bearing level if the foundation excavations remain open for too long a time. Therefore, foundation concrete should be placed the same day that excavations are made. If the bearing soils are softened by surface water intrusion or exposure, the softened soils must be removed from the foundation excavation bottom immediately prior to placement of concrete. If the excavation must remain open overnight, or if rainfall becomes imminent while the bearing soils are exposed, a 1 to 3-inch thick "mud mat" of "lean" concrete should be placed on the bearing soils before the placement of reinforcing steel.

Footing Subgrade Observations: Most of the soils at the foundation bearing elevation are anticipated to be suitable for support of the proposed structure. It is important to have ECS observe the foundation subgrade prior to placing foundation concrete, to confirm the bearing soils are what was anticipated.

Slab Subgrade Verification: Prior to placement of a drainage layer, the subgrade should be prepared in accordance with the recommendations found in **Section 5.1.2 Proofrolling**.

5.4 UTILITY INSTALLATIONS

Utility Subgrades: The soils encountered in our exploration are expected to be generally suitable for support of utility pipes. The pipe subgrades should be observed and probed for stability by ECS. Any loose or unsuitable materials encountered should be removed and replaced with suitable compacted structural fill or pipe stone bedding material.

Utility Backfilling: The granular bedding material (often VDOT #57 stone) should be at least 4 inches thick, but not less than that specified by the civil engineer's project drawings and specifications. We recommend

that the bedding materials be placed up to the springline of the pipe. Fill placed for support of the utilities, as well as backfill over the utilities, should satisfy the requirements for Structural Fill and Fill Placement.

Excavation Safety: All excavations and slopes should be constructed and maintained in accordance with OSHA excavation safety standards. The contractor is solely responsible for designing, constructing, and maintaining stable temporary excavations and slopes. The contractor's responsible person, as defined in 29 CFR Part 1926, should evaluate the soil exposed in the excavations as part of the contractor's safety procedures. In no case should slope height, slope inclination, or excavation depth, including utility trench excavation depth, exceed those specified in local, state, and federal safety regulations. ECS is providing this information solely as a service to our client. ECS is not assuming responsibility for construction site safety or the contractor's activities; such responsibility is not being implied and should not be inferred.

6.0 CLOSING

ECS has prepared this report to guide the geotechnical-related design and construction aspects of the project. We performed these services in accordance with the standard of care expected of professionals in the industry performing similar services on projects of like size and complexity at this time in the region. No other representation, expressed or implied, and no warranty or guarantee is included or intended in this report.

The description of the proposed project is based on information provided to ECS by Bohler. If any of this information is inaccurate or changes, either because of our interpretation of the documents provided or site or design changes that may occur later, ECS should be contacted so we can review our recommendations and provide additional or alternate recommendations that reflect the proposed construction.

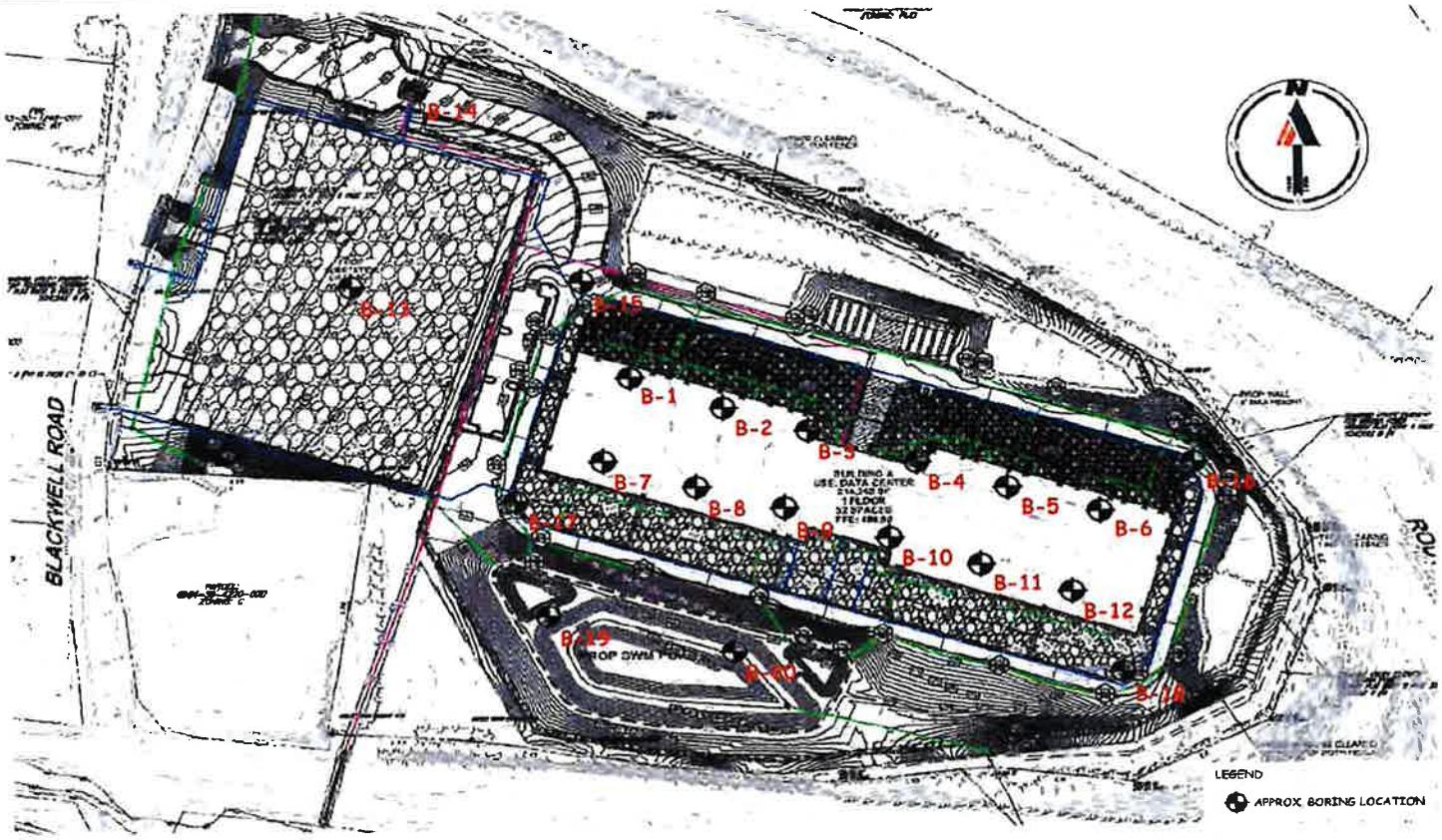
We recommend that ECS review the project plans and specifications so we can confirm that those plans/specifications are in accordance with the recommendations of this geotechnical report.

Field observations, and quality assurance testing during earthwork and foundation installation are an extension of, and integral to, the geotechnical design. We recommend that ECS be retained to apply our expertise throughout the geotechnical phases of construction, and to provide consultation and recommendation should issues arise. ECS is not responsible for the conclusions, opinions, or recommendations of others based on the data in this report.

APPENDIX A – Diagrams & Reports

Site Location Diagram
Boring Location Diagram


N
W
E
S
0
1,500
3,000
Feet
E Lee Hwy
Lee Hwy
Blackwell Rd
Broadview Ave
Oak Springs Dr
Willow Ct
Hidden Hollow Ln
Combs Dr
Richards Dr
Stuyvesant St
Chapel St
Main St
Church St
Academy Hill Rd
Catlett Rd
Old Lee Hwy
Meetze Rd
Ivy Hill Dr
Homestead Ct
Manor House Ln
Spotswood Dr
Lancaster Dr
King William Dr
Norfolk Dr
Orlando Rd
Hidden Hollow Ln
Foster Dr
Halsey Ct
Hudson Ct
Carrington Dr
Cedar Run Dr
Stephen Ct
Woodshire Ct
Millwood Dr
Main House Ln
Brighton Ct
Wake Robin Ct
Willow Rd
Fairview Rd
Beacon Dr
Nursery Dr
Strum St
Golding Cup Dr
Forbes Ct
Rose Bing St
Winchester St
Blue Ridge St
Peaks View St
Rappahannock St
Shenandoah St
Brent Ct
Maple Ave
Stribling Ave
Cannon Way
Simpson Ct
Pierce Ct
Kingsley Ct
Kingsley Pl
Kingsley Dr
Whites Mill Ln
Whites Mill Ct
Academy Hill Rd
Magnolia Ct
Mulberry Ct
Mulberry Dr
Ashby Ct
Ashby Dr
Ashby Pl
Ashby Cir
Ashby Ln



Proposed Boring Location Diagram Bohler Engineering	ECS	**Warrenton Data Center** Warrenton, Virginia	ENGINEER: JAS6 SCALE: NTS PROJ NO.: 01:31153 SHEET: 1 DATE: 3/18/2022

APPENDIX B – Field Operations

Reference Notes for Boring Logs
Subsurface Exploration Procedure Notes
Boring Logs B-1 through B-20

REFERENCE NOTES FOR BORING LOGS

MATERIAL[1,2]	
	ASPHALT
	CONCRETE
	GRAVEL
	TOPSOIL
	VOID
	BRICK
	AGGREGATE BASE COURSE
	FILL[3] MAN-PLACED SOILS
GW	WELL-GRADED GRAVEL gravel-sand mixtures, little or no fines
GP	POORLY-GRADED GRAVEL gravel-sand mixtures, little or no fines
GM	SILTY GRAVEL gravel-sand-silt mixtures
GC	CLAYEY GRAVEL gravel-sand-clay mixtures
SW	WELL-GRADED SAND gravelly sand, little or no fines
SP	POORLY-GRADED SAND gravelly sand, little or no fines
SM	SM SILTY SAND sand-silt mixtures
SC	CLAYEY SAND sand-clay mixtures
ML	SILT non-plastic to medium plasticity
MH	ELASTIC SILT high plasticity
CL	LEAN CLAY low to medium plasticity
CH	FAT CLAY high plasticity
OL	ORGANIC SILT or CLAY non-plastic to low plasticity
OH	ORGANIC SILT or CLAY high plasticity
PT	PEAT highly organic soils

DRILLING SAMPLING SYMBOLS & ABBREVIATIONS			
SS	Split Spoon Sampler	PM	Pressuremeter Test
ST	Shelby Tube Sampler	RD	Rock Bit Drilling
WS	Wash Sample	RC	Rock Core, NX, BX, AX
BS	Bulk Sample of Cuttings	REC	Rock Sample Recovery %
PA	Power Auger (no sample)	RQD	Rock Quality Designation %
HSA	Hollow Stem Auger		

PARTICLE SIZE IDENTIFICATION		
DESIGNATION		PARTICLE SIZES
Boulders		12 inches (300 mm) or larger
Cobbles		3 inches to 12 inches (75 mm to 300 mm)
Gravel:	Coarse	¾ inch to 3 inches (19 mm to 75 mm)
	Fine	4.75 mm to 19 mm (No. 4 sieve to ¾ inch)
Sand:	Coarse	2.00 mm to 4.75 mm (No. 10 to No. 4 sieve)
	Medium	0.425 mm to 2.00 mm (No. 40 to No. 10 sieve)
	Fine	0.074 mm to 0.425 mm (No. 200 to No. 40 sieve)
Silt & Clay ("Fines")		<0.074 mm (smaller than a No. 200 sieve)

COHESIVE SILTS & CLAYS		
UNCONFINED COMPRESSIVE STRENGTH, Q_P[4]	SPT[5] (BPF)	CONSISTENCY[7] (COHESIVE)
<0.25	<3	Very Soft
0.25 - <0.50	3 - 4	Soft
0.50 - <1.00	5 - 8	Firm
1.00 - <2.00	9 - 15	Stiff
2.00 - <4.00	16 - 30	Very Stiff
4.00 - 8.00	31 - 50	Hard
>8.00	>50	Very Hard

GRAVELS, SANDS & NON-COHESIVE SILTS	
SPT[5]	DENSITY
<5	Very Loose
5 - 10	Loose
11 - 30	Medium Dense
31 - 50	Dense
>50	Very Dense

RELATIVE AMOUNT[7]	COARSE GRAINED (%)[8]	FINE GRAINED (%)[8]
Trace	<5	<5
Dual Symbol (ex: SW-SM)	10	10
With	15 - 25	15 - 25
Adjective (ex: "Silty")	>30	>30

WATER LEVELS[6]	
	WL (First Encountered)
	WL (Completion)
	WL (Seasonal High Water)
	WL (Stabilized)

[1]Classifications and symbols per ASTM D 2488-17 (Visual-Manual Procedure) unless noted otherwise.

[2]To be consistent with general practice, "POORLY GRADED" has been removed from GP, GP-GM, GP-GC, SP, SP-SM, SP-SC soil types on the boring logs.

[3]Non-ASTM designations are included in soil descriptions and symbols along with ASTM symbol [Ex: (SM-FILL)].

[4]Typically estimated via pocket penetrometer or Torvane shear test and expressed in tons per square foot (tsf).

[5]Standard Penetration Test (SPT) refers to the number of hammer blows (blow count) of a 140 lb. hammer falling 30 inches on a 2 inch OD split spoon sampler required to drive the sampler 12 inches (ASTM D 1586). "N-value" is another term for "blow count" and is expressed in blows per foot (bpf). SPT correlations per 7.4.2 Method B and need to be corrected if using an auto hammer.

[6]The water levels are those levels actually measured in the borehole at the times indicated by the symbol. The measurements are relatively reliable when augering, without adding fluids, in granular soils. In clay and cohesive silts, the determination of water levels may require several days for the water level to stabilize. In such cases, additional methods of measurement are generally employed.

[7]Minor deviation from ASTM D 2488-17 Note 16.

[8]Percentages are estimated to the nearest 5% per ASTM D 2488-17.

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SUBSURFACE EXPLORATION PROCEDURE: STANDARD PENETRATION TESTING (SPT) ASTM D 1586 Split-Barrel Sampling

Standard Penetration Testing, or **SPT**, is the most frequently used subsurface exploration test performed worldwide. This test provides samples for identification purposes, as well as a measure of penetration resistance, or N-value. The N-Value, or blow counts, when corrected and correlated, can approximate engineering properties of soils used for geotechnical design and engineering purposes.

SPT Procedure:

- Involves driving a hollow tube (split-spoon) into the ground by dropping a 140-lb hammer a height of 30-inches at desired depth
- Recording the number of hammer blows required to drive split-spoon a distance of 12 inches (in 3 or 4 Increments of 6 inches each)



- Auger is advanced* and an additional SPT is performed
- One SPT test is typically performed for every two to five feet



- Obtain two-inch diameter soil sample

**Drilling Methods May Vary*— The predominant drilling methods used for SPT are open hole fluid rotary drilling and hollow-stem auger drilling.

CLIENT:	PROJECT NO.:	BORING NO.:	SHEET:
Bohler Engineering	**01:31153**	**B-01**	**1 of 2**
PROJECT NAME:	DRILLER/CONTRACTOR:		
Warrenton Data Center	**All American Geotech, Inc.**		
SITE LOCATION:			LOSS OF CIRCULATION
Lee Highway and Blackwell Road, Warrenton, Virginia 20186			
NORTHING:	EASTING:	STATION:	SURFACE ELEVATION: **492**
			BOTTOM OF CASING

DEPTH (FT)	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE DIST. (IN)	RECOVERY (IN)	DESCRIPTION OF MATERIAL	WATER LEVELS	ELEVATION (FT)	BLOWS/6"
					Topsoil Thickness [4"]			
	S-1	SS	18	12	(SM) SILTY SAND, brown, moist, loose			3-3-4 (7)
	S-2	SS	18	16	(CH) SANDY FAT CLAY, brown and gray, moist, firm			4-4-5 (9)
5	S-3	SS	18	10	(SM) SILTY SAND, brown, moist, medium dense		487	5-5-7 (12)
	S-4	SS	9	0	WEATHERED ROCK, light brown, moist, very dense	▽		32-50/3" (50/3")
10							482	
	S-5	SS	16	13				29-38-50/4" (88/10")
15							477	
	S-6	SS	3	3				50/3" (50/3")
20							472	
	S-7	SS	2	2				50/2" (50/2")
25							467	
	S-8	SS	5	5				50/5" (50/5")
30							462	

Plastic Limit Water Content Liquid Limit

⊗ STANDARD PENETRATION BLOWS/FT

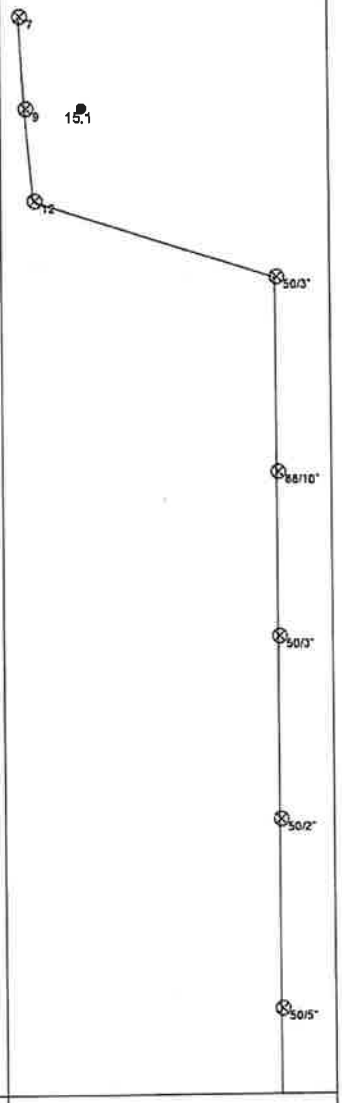
ROCK QUALITY DESIGNATION & RECOVERY

RQD

REC

○ CALIBRATED PENETROMETER TON/SF

[FINES CONTENT] %



CONTINUED ON NEXT PAGE

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL

▽ WL (First Encountered)	**23.0**	BORING STARTED:	**Sep 21 2021**	CAVE IN DEPTH:	**47.0**
▼ WL (Completion)	**34.0**	BORING COMPLETED:	**Sep 21 2021**	HAMMER TYPE:	**Auto**
▼ WL (Seasonal High Water)		EQUIPMENT:	LOGGED BY:	DRILLING METHOD:	**3.25 HSA**
▽ WL (Stabilized)		**ATV**			

GEOTECHNICAL BOREHOLE LOG

CLIENT:	PROJECT NO.:	BORING NO.:	SHEET:
Bohler Engineering	**01:31153**	**B-01**	**2 of 2**
PROJECT NAME:	DRILLER/CONTRACTOR:		
Warrenton Data Center	**All American Geotech, Inc.**		
SITE LOCATION:		LOSS OF CIRCULATION	
Lee Highway and Blackwell Road, Warrenton, Virginia 20186			
NORTHING:	EASTING:	STATION:	SURFACE ELEVATION: **492**

DEPTH (FT)	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE DIST. (IN)	RECOVERY (IN)	DESCRIPTION OF MATERIAL	WATER LEVELS	ELEVATION (FT)	BLOWS/6"
35	S-9	SS	5	5	WEATHERED ROCK, light brown, moist, very dense	▼	457	50/5" (50/5")
40	S-10	SS	15	15			452	24-43-50/3" (93/9")
45	S-11	SS	10	10			447	32-50/4" (50/4")
50	S-12	SS	4	4			442	50/4" (50/4")
55	S-13	SS	4	4			437	50/4" (50/4")
60	S-14	SS	3	3	END OF BORING AT 58.8 FT		432	50/3" (50/3")

Plastic Limit Water Content Liquid Limit

⊗ STANDARD PENETRATION BLOWS/FT

ROCK QUALITY DESIGNATION & RECOVERY

RQD

REC

○ CALIBRATED PENETROMETER TON/SF

[FINES CONTENT] %

16.5

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL

▽ WL (First Encountered)	**23.0**	BORING STARTED:	**Sep 21 2021**	CAVE IN DEPTH:	**47.0**
▼ WL (Completion)	**34.0**	BORING COMPLETED:	**Sep 21 2021**	HAMMER TYPE:	**Auto**
▼ WL (Seasonal High Water)		EQUIPMENT:	LOGGED BY:	DRILLING METHOD:	**3.25 HSA**
▽ WL (Stabilized)		**ATV**			

GEOTECHNICAL BOREHOLE LOG

CLIENT:	PROJECT NO.:	BORING NO.:	SHEET:
Bohler Engineering	**01:31153**	**B-02**	**1 of 2**
PROJECT NAME: **Warrenton Data Center**	DRILLER/CONTRACTOR: **All American Geotech, Inc.**		
SITE LOCATION: **Lee Highway and Blackwell Road, Warrenton, Virginia 20186**			LOSS OF CIRCULATION
NORTHING:	EASTING:	STATION:	SURFACE ELEVATION: **480**

BOTTOM OF CASING

Plastic Limit Water Content Liquid Limit

STANDARD PENETRATION BLOWS/FT

ROCK QUALITY DESIGNATION & RECOVERY

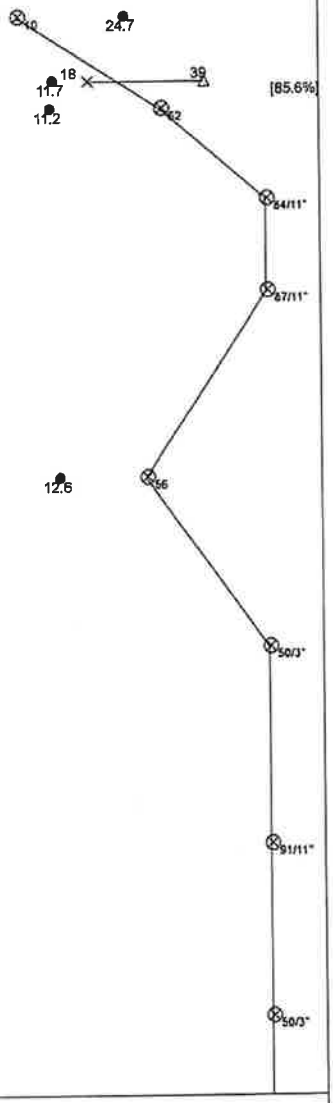
RQD

REC

CALIBRATED PENETROMETER TON/SF

(FINES CONTENT) %

DEPTH (FT)	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE DIST. (IN)	RECOVERY (IN)	DESCRIPTION OF MATERIAL	WATER LEVELS	ELEVATION (FT)	BLOWS/6"
					Topsoil Thickness [3"]			
	S-1	SS	18	12	(SM) SILTY SAND, brown, moist, loose			2-3-7 (10)
	~~D35~~ 191	~~BG1~~ SS	~~60~~ 18	18	WEATHERED ROCK, light brown, greenish gray, and black, moist, very dense			17-24-38 (62)
5	~~S-2~~						475	
	S-3	SS	17	17				19-34-50/5" (84/11")
	S-4	SS	17	17				20-37-50/5" (87/11")
10							470	
	S-5	SS	18	18				17-24-32 (56)
15							465	
	S-6	SS	9	9				24-50/3" (50/3")
20							460	
	S-7	SS	17	15				30-41-50/5" (91/11")
25							455	
	S-8	SS	9	9				45-50/3" (50/3")
30							450	



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THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL

WL (First Encountered)	**45.0**	BORING STARTED:	**Sep 27 2021**	CAVE IN DEPTH:	**52.0**
WL (Completion)	**53.0**	BORING COMPLETED:	**Sep 27 2021**	HAMMER TYPE:	**Auto**
WL (Seasonal High Water)		EQUIPMENT:	LOGGED BY:	DRILLING METHOD:	**3.25 HSA**
WL (Stabilized)		**ATV**			

GEOTECHNICAL BOREHOLE LOG

CLIENT:	PROJECT NO.:	BORING NO.:	SHEET:
Bohler Engineering	**01:31153**	**B-02**	**2 of 2**
PROJECT NAME:	DRILLER/CONTRACTOR:		
Warrenton Data Center	**All American Geotech, Inc.**		
SITE LOCATION:			LOSS OF CIRCULATION
Lee Highway and Blackwell Road, Warrenton, Virginia 20186			
NORTHING:	EASTING:	STATION:	SURFACE ELEVATION: **480**
			BOTTOM OF CASING

DEPTH (FT)	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE DIST. (IN)	RECOVERY (IN)	DESCRIPTION OF MATERIAL	WATER LEVELS	ELEVATION (FT)	BLOWS/6"
35	S-9	SS	11	10	WEATHERED ROCK, light brown, greenish gray, and black, moist, very dense		445	38-50/5" (50/5")
40	S-10	SS	4	4			440	50/4" (50/4")
45	S-11	SS	5	5		▽	435	50/5" (50/5")
50	S-12	SS	3	3			430	50/3" (50/3")
55	S-13	SS	4	4		▼	425	50/4" (50/4")
60	S-14	SS	3	3	END OF BORING AT 58.8 FT		420	50/3" (50/3")

Plastic Limit Water Content Liquid Limit
X——●——Δ
⊗ STANDARD PENETRATION BLOWS/FT
ROCK QUALITY DESIGNATION & RECOVERY
RQD
REC
○ CALIBRATED PENETROMETER TON/SF
(FINES CONTENT) %

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL

▽ WL (First Encountered)	**45.0**	BORING STARTED:	**Sep 27 2021**	CAVE IN DEPTH:	**52.0**
▼ WL (Completion)	**53.0**	BORING COMPLETED:	**Sep 27 2021**	HAMMER TYPE:	**Auto**
▼ WL (Seasonal High Water)		EQUIPMENT:	LOGGED BY:	DRILLING METHOD:	**3.25 HSA**
▽ WL (Stabilized)		**ATV**			

GEOTECHNICAL BOREHOLE LOG

CLIENT:	PROJECT NO.:	BORING NO.:	SHEET:
Bohler Engineering	**01:31153**	**B-03**	**1 of 2**
PROJECT NAME: **Warrenton Data Center**	DRILLER/CONTRACTOR: **All American Geotech, Inc.**		
SITE LOCATION: **Lee Highway and Blackwell Road, Warrenton, Virginia 20186**			LOSS OF CIRCULATION
NORTHING:	EASTING:	STATION:	SURFACE ELEVATION: **475**

BOTTOM OF CASING

Plastic Limit Water Content Liquid Limit

STANDARD PENETRATION BLOWS/FT

ROCK QUALITY DESIGNATION & RECOVERY

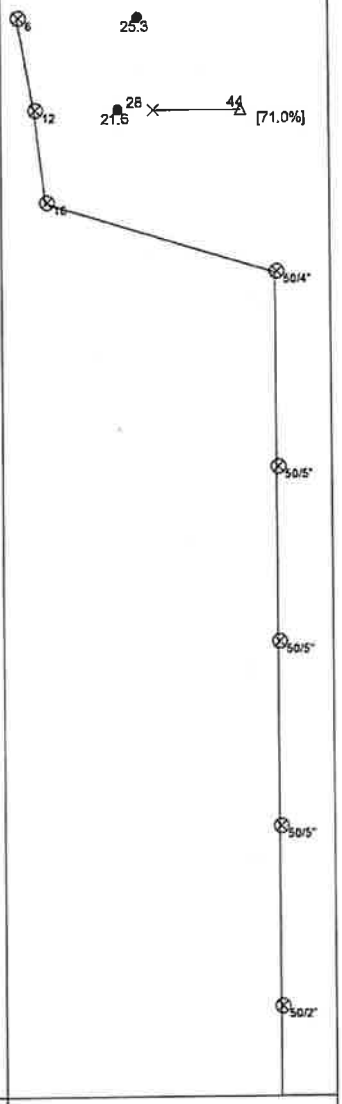
RQD

REC

CALIBRATED PENETROMETER TON/SF

[FINES CONTENT] %

DEPTH (FT)	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE DIST. (IN)	RECOVERY (IN)	DESCRIPTION OF MATERIAL	WATER LEVELS	ELEVATION (FT)	BLOWS/6"
					Topsoil Thickness [6"]			
	S-1	SS	18	12	(ML) SANDY SILT, light brown, moist, loose to medium dense			3-3-3 (6)
	S-2	SS	18	18			470	4-5-7 (12)
5	S-3	SS	18	12				6-7-9 (16)
	S-4	SS	4	4	WEATHERED ROCK, light brown to gray, moist, very dense			50/4" (50/4")
10							465	
	S-5	SS	11	11				39-50/5" (50/5")
15							460	
	S-6	SS	5	5				50/5" (50/5")
20							455	
	S-7	SS	5	5				50/5" (50/5")
25							450	
	S-8	SS	2	2		▽		50/2" (50/2")
30							445	



CONTINUED ON NEXT PAGE

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL

▽ WL (First Encountered)	**29.0**	BORING STARTED:	**Oct 04 2021**	CAVE IN DEPTH:	**36.0**
▼ WL (Completion)	**35.0**	BORING COMPLETED:	**Oct 04 2021**	HAMMER TYPE:	**Auto**
▼ WL (Seasonal High Water)		EQUIPMENT: **ATV**	LOGGED BY:	DRILLING METHOD:	**3.25 HSA**
▽ WL (Stabilized)					

GEOTECHNICAL BOREHOLE LOG

CLIENT:	PROJECT NO.:	BORING NO.:	SHEET:
Bohler Engineering	**01:31153**	**B-03**	**2 of 2**
PROJECT NAME: **Warrenton Data Center**	DRILLER/CONTRACTOR: **All American Geotech, Inc.**		
SITE LOCATION: **Lee Highway and Blackwell Road, Warrenton, Virginia 20186**			LOSS OF CIRCULATION
NORTHING:	EASTING:	STATION:	SURFACE ELEVATION: **475**

DEPTH (FT)	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE DIST. (IN)	RECOVERY (IN)	DESCRIPTION OF MATERIAL	WATER LEVELS	ELEVATION (FT)	BLOWS/6"
35	S-9	SS	3	3	WEATHERED ROCK, light brown to gray, moist, very dense	▼	440	50/3" (50/3")
	S-10	SS	2	2				50/2" (50/2")
40	S-11	RC	60	19	SCHIST, [REC=32%,RQD=13%], Highly Weathered, Very Hard, Light Gray		435	
45	S-12	RC	60	32	SCHIST, [REC=53%,RQD=7%], Highly Weathered, Very Hard, Brownish Gray		430	
50					**AUGER REFUSAL AT 49.0 FT**		425	
55							420	
60							415	

Plastic Limit Water Content Liquid Limit

⊗ STANDARD PENETRATION BLOWS/FT

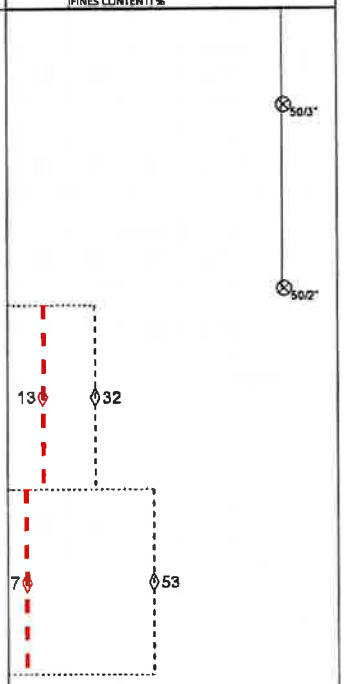
ROCK QUALITY DESIGNATION & RECOVERY

RQD

REC

○ CALIBRATED PENETROMETER TON/SF

FINES CONTENT| %



THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL

▽ WL (First Encountered)	**29.0**	BORING STARTED:	**Oct 04 2021**	CAVE IN DEPTH:	**36.0**
▼ WL (Completion)	**35.0**	BORING COMPLETED:	**Oct 04 2021**	HAMMER TYPE:	**Auto**
▼ WL (Seasonal High Water)		EQUIPMENT: **ATV**	LOGGED BY:	DRILLING METHOD:	**3.25 HSA**
▽ WL (Stabilized)					

GEOTECHNICAL BOREHOLE LOG

CLIENT:	PROJECT NO.:	BORING NO.:	SHEET:
Bohler Engineering	**01:31153**	**B-04**	**1 of 2**
PROJECT NAME: **Warrenton Data Center**	DRILLER/CONTRACTOR: **All American Geotech, Inc.**		
SITE LOCATION: **Lee Highway and Blackwell Road, Warrenton, Virginia 20186**			LOSS OF CIRCULATION
NORTHING:	EASTING:	STATION:	SURFACE ELEVATION: **483** / BOTTOM OF CASING

DEPTH (FT)	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE DIST. (IN)	RECOVERY (IN)	DESCRIPTION OF MATERIAL	WATER LEVELS	ELEVATION (FT)	BLOWS/6"
					Topsoil Thickness [6"]			
	S-1	SS	18	18	(ML) SILT, brown to light brown, moist, medium dense to very dense			5-5-16 (21)
	~~D35-188 S-2~~	~~BG1~~ SS	~~60~~ 18	18				11-13-19 (32)
5	S-3	SS	18	18			478	5-7-8 (15)
	S-4	SS	18	18				7-10-10 (20)
10							473	
	S-5	SS	18	18				11-11-13 (24)
15							468	
	S-6	SS	18	18				21-23-31 (54)
20					WEATHERED ROCK, brownish gray, moist, very dense		463	
	S-7	SS	8	8				47-50/2" (50/2")
25							458	
	S-8	SS	11	11				36-50/5" (50/5")
30							453	

Plastic Limit Water Content Liquid Limit

⊗ STANDARD PENETRATION BLOWS/FT

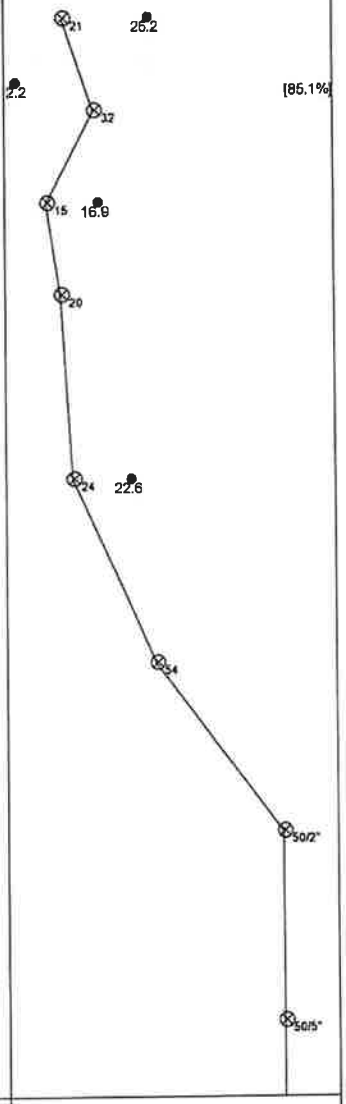
ROCK QUALITY DESIGNATION & RECOVERY

RQD

REC

○ CALIBRATED PENETROMETER TON/SF

[FINES CONTENT] %



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THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL

▽ WL (First Encountered)	**Dry**	BORING STARTED:	**Sep 28 2021**	CAVE IN DEPTH:	**17.0**
▼ WL (Completion)	**Dry**	BORING COMPLETED:	**Sep 28 2021**	HAMMER TYPE:	**Auto**
▼ WL (Seasonal High Water)		EQUIPMENT: **ATV**	LOGGED BY:	DRILLING METHOD:	**3.25 HSA**
▽ WL (Stabilized)					

GEOTECHNICAL BOREHOLE LOG

CLIENT:	PROJECT NO.:	BORING NO.:	SHEET:
Bohler Engineering	**01:31153**	**B-04**	**2 of 2**
PROJECT NAME: **Warrenton Data Center**	DRILLER/CONTRACTOR: **All American Geotech, Inc.**		
SITE LOCATION: **Lee Highway and Blackwell Road, Warrenton, Virginia 20186**			LOSS OF CIRCULATION
NORTHING:	EASTING:	STATION:	SURFACE ELEVATION: **483**
			BOTTOM OF CASING

DEPTH (FT)	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE DIST. (IN)	RECOVERY (IN)	DESCRIPTION OF MATERIAL	WATER LEVELS	ELEVATION (FT)	BLOWS/6"
35	S-9	SS	1	1	WEATHERED ROCK, brownish gray, moist, very dense **AUGER REFUSAL AT 33.6 FT**		448	50/1" (50/1")
40							443	
45							438	
50							433	
55							428	
60							423	

Plastic Limit Water Content Liquid Limit
X——●——△
⊗ STANDARD PENETRATION BLOWS/FT
ROCK QUALITY DESIGNATION & RECOVERY
RQD
REC
○ CALIBRATED PENETROMETER TON/SF
(FINES CONTENT) %

⊗ 50/1"

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL

▽ WL (First Encountered)	**Dry**	BORING STARTED:	**Sep 28 2021**	CAVE IN DEPTH:	**17.0**
▼ WL (Completion)	**Dry**	BORING COMPLETED:	**Sep 28 2021**	HAMMER TYPE:	**Auto**
▼ WL (Seasonal High Water)		EQUIPMENT: **ATV**	LOGGED BY:	DRILLING METHOD:	**3.25 HSA**
▽ WL (Stabilized)					

GEOTECHNICAL BOREHOLE LOG

CLIENT:	PROJECT NO.:	BORING NO.:	SHEET:
Bohler Engineering	**01:31153**	**B-05**	**1 of 3**
PROJECT NAME: **Warrenton Data Center**	DRILLER/CONTRACTOR: **All American Geotech, Inc.**		
SITE LOCATION: **Lee Highway and Blackwell Road, Warrenton, Virginia 20186**			LOSS OF CIRCULATION
NORTHING:	EASTING:	STATION:	SURFACE ELEVATION: **482** / BOTTOM OF CASING

DEPTH (FT)	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE DIST. (IN)	RECOVERY (IN)	DESCRIPTION OF MATERIAL	WATER LEVELS	ELEVATION (FT)	BLOWS/6"
					Topsoil Thickness [6"]			
	S-1	SS	18	10	(ML) SANDY SILT, reddish brown, moist, loose			3-3-5 (8)
	S-2	SS	18	18				4-5-4 (9)
5							477	
	S-3	SS	18	18	(ML) SILT, brown and black, moist, medium dense to very dense			3-5-7 (12)
	S-4	SS	18	18				6-9-9 (18)
10							472	
	S-5	SS	18	18				21-27-35 (62)
15							467	
	S-6	SS	5	5	(ML) SANDY SILT WITH GRAVEL, contains quartz fragments, light brownish gray, moist, very dense			50/5" (50/5")
20							462	
	S-7	SS	18	18	(ML) SILT, light brown, moist, medium dense to dense			9-10-13 (23)
25							457	
	S-8	SS	18	18				16-19-22 (41)
30							452	

Plastic Limit Water Content Liquid Limit

STANDARD PENETRATION BLOWS/FT

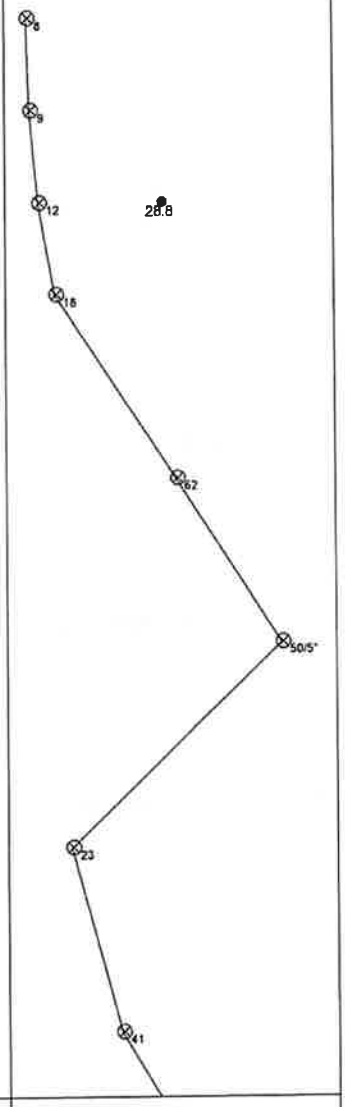
ROCK QUALITY DESIGNATION & RECOVERY

RQD

REC

CALIBRATED PENETROMETER TON/SF

[FINES CONTENT] %



CONTINUED ON NEXT PAGE

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL

▽ WL (First Encountered)	**53.0**	BORING STARTED:	**Sep 28 2021**	CAVE IN DEPTH:	**49.0**
▼ WL (Completion)	**48.0**	BORING COMPLETED:	**Sep 28 2021**	HAMMER TYPE:	**Auto**
▼ WL (Seasonal High Water)		EQUIPMENT: **ATV**	LOGGED BY:	DRILLING METHOD:	**3.25 HSA**
▽ WL (Stabilized)					

GEOTECHNICAL BOREHOLE LOG

CLIENT:	PROJECT NO.:	BORING NO.:	SHEET:
Bohler Engineering	**01:31153**	**B-05**	**2 of 3**
PROJECT NAME:	DRILLER/CONTRACTOR:		
Warrenton Data Center	**All American Geotech, Inc.**		
SITE LOCATION:			LOSS OF CIRCULATION
Lee Highway and Blackwell Road, Warrenton, Virginia 20186			
NORTHING:	EASTING:	STATION:	SURFACE ELEVATION: **482**
			BOTTOM OF CASING

DEPTH (FT)	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE DIST. (IN)	RECOVERY (IN)	DESCRIPTION OF MATERIAL	WATER LEVELS	ELEVATION (FT)	BLOWS/6"
35	S-9	SS	18	18	(ML) SILT, light brown, moist, medium dense to dense WEATHERED ROCK, brownish gray, moist, very dense		447	21-38-43 (81)
40	S-10	SS	11	11			442	46-50/5" (50/5")
45	S-11	SS	5	5			437	50/5" (50/5")
50	S-12	SS	3	3		▼	432	50/3" (50/3")
55	S-13	SS	2	2		▽	427	50/2" (50/2")
60	S-14	SS	2	2			422	50/2" (50/2")

Plastic Limit Water Content Liquid Limit

⊗ STANDARD PENETRATION BLOWS/FT

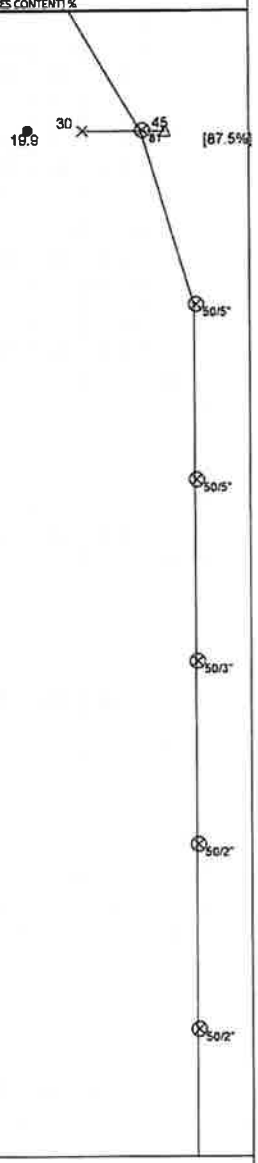
ROCK QUALITY DESIGNATION & RECOVERY

RQD

REC

○ CALIBRATED PENETROMETER TON/SF

[FINES CONTENT] %



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THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL

▽ WL (First Encountered)	**53.0**	BORING STARTED:	**Sep 28 2021**	CAVE IN DEPTH:	**49.0**
▼ WL (Completion)	**48.0**	BORING COMPLETED:	**Sep 28 2021**	HAMMER TYPE:	**Auto**
▼ WL (Seasonal High Water)		EQUIPMENT:	LOGGED BY:	DRILLING METHOD:	**3.25 HSA**
▽ WL (Stabilized)		**ATV**			

GEOTECHNICAL BOREHOLE LOG

CLIENT:	PROJECT NO.:	BORING NO.:	SHEET:
Bohler Engineering	**01:31153**	**B-05**	**3 of 3**
PROJECT NAME: **Warrenton Data Center**	DRILLER/CONTRACTOR: **All American Geotech, Inc.**		
SITE LOCATION: **Lee Highway and Blackwell Road, Warrenton, Virginia 20186**			LOSS OF CIRCULATION
NORTHING:	EASTING:	STATION:	SURFACE ELEVATION: **482**

DEPTH (FT)	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE DIST. (IN)	RECOVERY (IN)	DESCRIPTION OF MATERIAL	WATER LEVELS	ELEVATION (FT)	BLOWS/6"
65	S-15	SS	5	5	WEATHERED ROCK, brownish gray, moist, very dense		417	50/5" (50/5")
70	S-16	SS	1	1			412	50/1" (50/1")
75	S-17	SS	3	3			407	50/3" (50/3")
80	S-18	SS	1	1	END OF BORING AT 78.6 FT		402	50/1" (50/1")
85							397	
90							392	

Plastic Limit Water Content Liquid Limit

STANDARD PENETRATION BLOWS/FT

ROCK QUALITY DESIGNATION & RECOVERY

RQD

REC

CALIBRATED PENETROMETER TON/SF

[FINES CONTENT] %

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL

WL (First Encountered)	**53.0**	BORING STARTED:	**Sep 28 2021**	CAVE IN DEPTH:	**49.0**
WL (Completion)	**48.0**	BORING COMPLETED:	**Sep 28 2021**	HAMMER TYPE:	**Auto**
WL (Seasonal High Water)		EQUIPMENT: **ATV**	LOGGED BY:	DRILLING METHOD:	**3.25 HSA**
WL (Stabilized)					

GEOTECHNICAL BOREHOLE LOG

CLIENT:	PROJECT NO.:	BORING NO.:	SHEET:
Bohler Engineering	**01:31153**	**B-06**	**1 of 2**
PROJECT NAME:	DRILLER/CONTRACTOR:		
Warrenton Data Center	**All American Geotech, Inc.**		
SITE LOCATION:			LOSS OF CIRCULATION
Lee Highway and Blackwell Road, Warrenton, Virginia 20186			
NORTHING:	EASTING:	STATION:	SURFACE ELEVATION: **482**
			BOTTOM OF CASING

DEPTH (FT)	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE DIST. (IN)	RECOVERY (IN)	DESCRIPTION OF MATERIAL	WATER LEVELS	ELEVATION (FT)	BLOWS/6"
0					Topsoil Thickness [6"]			
	S-1	SS	18	12	(ML) SANDY SILT, reddish brown, moist, loose			4-5-5 (10)
	S-2	SS	18	10	(ML) SILT, light brown, moist, loose to medium dense		477	3-5-6 (11)
5	S-3	SS	18	18				3-4-4 (8)
	S-4	SS	18	18			472	7-7-7 (14)
10					WEATHERED ROCK, light brown and gray, moist, very dense			
	S-5	SS	18	18			467	22-27-33 (60)
15								
	S-6	SS	11	11			462	33-50/5" (50/5")
20								
	S-7	SS	16	16			457	27-39-50/4" (89/10")
25								
	S-8	SS	9	9			452	20-50/3" (50/3")
30								

Plastic Limit Water Content Liquid Limit

STANDARD PENETRATION BLOWS/FT

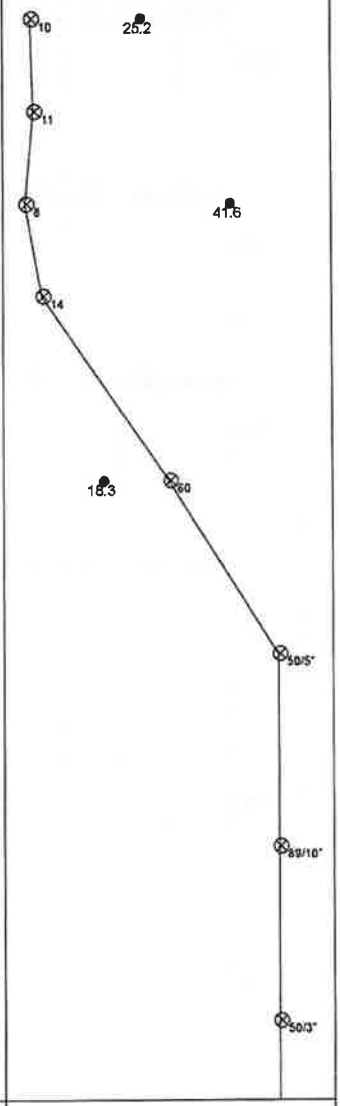
ROCK QUALITY DESIGNATION & RECOVERY

RQD

REC

CALIBRATED PENETROMETER TON/SF

[FINES CONTENT] %



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THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL

▽ WL (First Encountered)	**Dry**	BORING STARTED:	**Sep 28 2021**	CAVE IN DEPTH:	**20.0**
▼ WL (Completion)	**Dry**	BORING COMPLETED:	**Sep 28 2021**	HAMMER TYPE:	**Auto**
▼ WL (Seasonal High Water)		EQUIPMENT: **ATV**	LOGGED BY:	DRILLING METHOD:	**3.25 HSA**
▽ WL (Stabilized)					

GEOTECHNICAL BOREHOLE LOG

CLIENT:	PROJECT NO.:	BORING NO.:	SHEET:
Bohler Engineering	**01:31153**	**B-06**	**2 of 2**
PROJECT NAME: **Warrenton Data Center**	DRILLER/CONTRACTOR: **All American Geotech, Inc.**		
SITE LOCATION: **Lee Highway and Blackwell Road, Warrenton, Virginia 20186**			LOSS OF CIRCULATION
NORTHING:	EASTING:	STATION:	SURFACE ELEVATION: **482**

BOTTOM OF CASING

Plastic Limit Water Content Liquid Limit

STANDARD PENETRATION BLOWS/FT

ROCK QUALITY DESIGNATION & RECOVERY — RQD — REC

CALIBRATED PENETROMETER TON/SF

(FINES CONTENT) %

DEPTH (FT)	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE DIST. (IN)	RECOVERY (IN)	DESCRIPTION OF MATERIAL	WATER LEVELS	ELEVATION (FT)	BLOWS/6"
35	S-9	SS	1	1	WEATHERED ROCK, light brown and gray, moist, very dense		447	50/1" (50/1")
					AUGER REFUSAL AT 33.6 FT			
40							442	
45							437	
50							432	
55							427	
60							422	

50/1"

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL

WL (First Encountered)	Dry	BORING STARTED:	**Sep 28 2021**	CAVE IN DEPTH:	**20.0**
WL (Completion)	Dry	BORING COMPLETED:	**Sep 28 2021**	HAMMER TYPE:	**Auto**
WL (Seasonal High Water)		EQUIPMENT: **ATV**	LOGGED BY:	DRILLING METHOD:	**3.25 HSA**
WL (Stabilized)					

GEOTECHNICAL BOREHOLE LOG

CLIENT:	PROJECT NO.:	BORING NO.:	SHEET:
Bohler Engineering	**01:31153**	**B-07**	**1 of 1**
PROJECT NAME: **Warrenton Data Center**	DRILLER/CONTRACTOR: **All American Geotech, Inc.**		
SITE LOCATION: **Lee Highway and Blackwell Road, Warrenton, Virginia 20186**			LOSS OF CIRCULATION
NORTHING:	EASTING:	STATION:	SURFACE ELEVATION: **492**

BOTTOM OF CASING

Plastic Limit — Water Content — Liquid Limit

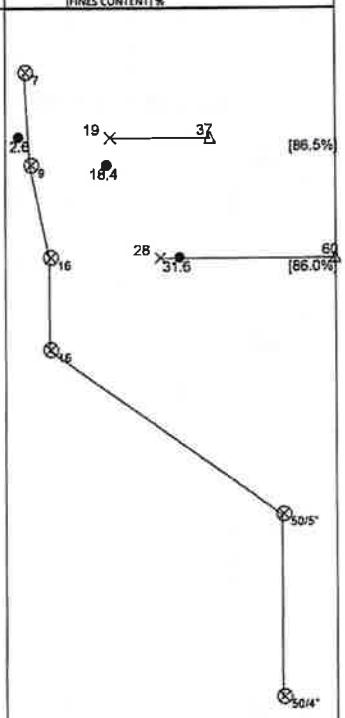
STANDARD PENETRATION BLOWS/FT

ROCK QUALITY DESIGNATION & RECOVERY — RQD — REC

CALIBRATED PENETROMETER TON/SF

[FINES CONTENT] %

DEPTH (FT)	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE DIST. (IN)	RECOVERY (IN)	DESCRIPTION OF MATERIAL	WATER LEVELS	ELEVATION (FT)	BLOWS/6"
0					Topsoil Thickness [6"]			
	S-1	SS	18	9	(ML) SANDY SILT, reddish brown, moist, loose			3-3-4 (7)
	~~D35-193~~ S-2	~~BG1~~ SS	~~60~~ 18	12				3-4-5 (9)
5					(CH) FAT CLAY, light brown and gray, moist, very stiff		487	
	S-3	SS	18	18				7-7-9 (16)
	S-4	SS	18	16	(ML) SANDY SILT, brown and gray, moist, medium dense			4-7-9 (16)
10							482	
	S-5	SS	5	5	WEATHERED ROCK, light brown to gray, moist, very dense			50/5" (50/5")
15							477	
	S-6	SS	4	4				50/4" (50/4")
20					**AUGER REFUSAL AT 20.0 FT**		472	
25							467	
30							462	



THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL

WL (First Encountered)	**Dry**	BORING STARTED:	**Sep 29 2021**	CAVE IN DEPTH:	**13.5**
WL (Completion)	**Dry**	BORING COMPLETED:	**Sep 29 2021**	HAMMER TYPE:	**Auto**
WL (Seasonal High Water)		EQUIPMENT: **ATV**	LOGGED BY:	DRILLING METHOD:	**3.25 HSA**
WL (Stabilized)					

GEOTECHNICAL BOREHOLE LOG

CLIENT:	PROJECT NO.:	BORING NO.:	SHEET:
Bohler Engineering	**01:31153**	**B-08**	**1 of 3**
PROJECT NAME: **Warrenton Data Center**	DRILLER/CONTRACTOR: **All American Geotech, Inc.**		
SITE LOCATION: **Lee Highway and Blackwell Road, Warrenton, Virginia 20186**			LOSS OF CIRCULATION
NORTHING:	EASTING:	STATION:	SURFACE ELEVATION: **487**

DEPTH (FT)	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE DIST. (IN)	RECOVERY (IN)	DESCRIPTION OF MATERIAL	WATER LEVELS	ELEVATION (FT)	BLOWS/6"
					Topsoil Thickness [6"]			
	S-1	SS	18	18	(ML) SANDY SILT, reddish brown, moist, loose			3-3-3 (6)
	S-2	SS	18	18				2-3-3 (6)
5					(ML) SILT, light brown and gray, moist, loose to medium dense		482	
	S-3	SS	18	18				3-4-5 (9)
	S-4	SS	18	18				4-5-6 (11)
10							477	
	S-5	SS	18	18				6-7-9 (16)
15							472	
	S-6	SS	18	18				7-8-10 (18)
20							467	
	S-7	SS	18	18				8-11-12 (23)
25							462	
	S-8	SS	18	18				9-10-13 (23)
30							457	

Plastic Limit Water Content Liquid Limit

STANDARD PENETRATION BLOWS/FT

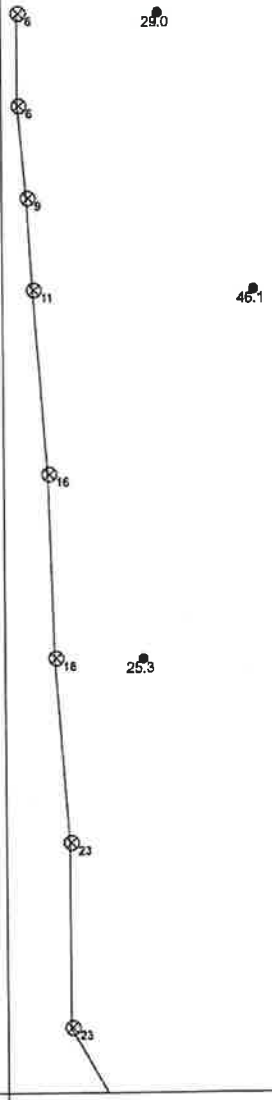
ROCK QUALITY DESIGNATION & RECOVERY

RQD

REC

CALIBRATED PENETROMETER TON/SF

[FINES CONTENT] %



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THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL

▽ WL (First Encountered)	**Dry**	BORING STARTED:	**Oct 02 2021**	CAVE IN DEPTH:	**53.0**
▼ WL (Completion)	**Dry**	BORING COMPLETED:	**Oct 02 2021**	HAMMER TYPE:	**Auto**
▼ WL (Seasonal High Water)		EQUIPMENT: **ATV**	LOGGED BY:	DRILLING METHOD:	**3.25 HSA**
▽ WL (Stabilized)					

GEOTECHNICAL BOREHOLE LOG

CLIENT:	PROJECT NO.:	BORING NO.:	SHEET:
Bohler Engineering	**01:31153**	**B-08**	**2 of 3**
PROJECT NAME:	DRILLER/CONTRACTOR:		
Warrenton Data Center	**All American Geotech, Inc.**		
SITE LOCATION: **Lee Highway and Blackwell Road, Warrenton, Virginia 20186**			LOSS OF CIRCULATION
NORTHING:	EASTING:	STATION:	SURFACE ELEVATION: **487**
			BOTTOM OF CASING

DEPTH (FT)	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE DIST. (IN)	RECOVERY (IN)	DESCRIPTION OF MATERIAL	WATER LEVELS	ELEVATION (FT)	BLOWS/6"
35	S-9	SS	18	18	(ML) SILT, light brown and gray, moist, loose to medium dense WEATHERED ROCK, brownish gray, moist, very dense		452	11-24-37 (61)
40	S-10	SS	17	17			447	14-23-50/5" (73/11")
45	S-11	SS	5	5			442	50/5" (50/5")
50	S-12	SS	3	3			437	50/3" (50/3")
55	S-13	SS	4	4			432	50/4" (50/4")
60	S-14	SS	3	3			427	50/3" (50/3")

Plastic Limit Water Content Liquid Limit

STANDARD PENETRATION BLOWS/FT

ROCK QUALITY DESIGNATION & RECOVERY

RQD

REC

CALIBRATED PENETROMETER TON/SF

(FINES CONTENT) %

61 73/11" 50/5" 50/3" 50/4" 50/3"

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THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL

▽ WL (First Encountered)	**Dry**	BORING STARTED:	**Oct 02 2021**	CAVE IN DEPTH:	**53.0**
▼ WL (Completion)	**Dry**	BORING COMPLETED:	**Oct 02 2021**	HAMMER TYPE:	**Auto**
▼ WL (Seasonal High Water)		EQUIPMENT: **ATV**	LOGGED BY:	DRILLING METHOD:	**3.25 HSA**
▽ WL (Stabilized)					

GEOTECHNICAL BOREHOLE LOG

CLIENT:	PROJECT NO.:	BORING NO.:	SHEET:
Bohler Engineering	**01:31153**	**B-08**	**3 of 3**
PROJECT NAME: **Warrenton Data Center**	DRILLER/CONTRACTOR: **All American Geotech, Inc.**		
SITE LOCATION: **Lee Highway and Blackwell Road, Warrenton, Virginia 20186**			LOSS OF CIRCULATION
NORTHING:	EASTING:	STATION:	SURFACE ELEVATION: **487**

BOTTOM OF CASING

Plastic Limit Water Content Liquid Limit

⊗ STANDARD PENETRATION BLOWS/FT

ROCK QUALITY DESIGNATION & RECOVERY

RQD

REC

○ CALIBRATED PENETROMETER TON/SF

[FINES CONTENT] %

DEPTH (FT)	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE DIST. (IN)	RECOVERY (IN)	DESCRIPTION OF MATERIAL	WATER LEVELS	ELEVATION (FT)	BLOWS/6"
65	S-15	SS	5	5	WEATHERED ROCK, brownish gray, moist, very dense		422	50/5" (50/5")
70	S-16	SS	2	2			417	50/2" (50/2")
75	S-17	SS	4	4			412	50/4" (50/4")
80	S-18	SS	5	5	END OF BORING AT 80.0 FT		407	50/5" (50/5")
85							402	
90							397	

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL

▽ WL (First Encountered)	Dry	BORING STARTED:	Oct 02 2021	CAVE IN DEPTH:	53.0
▼ WL (Completion)	Dry	BORING COMPLETED:	Oct 02 2021	HAMMER TYPE:	Auto
▼ WL (Seasonal High Water)		EQUIPMENT: ATV	LOGGED BY:	DRILLING METHOD:	3.25 HSA
▽ WL (Stabilized)					

GEOTECHNICAL BOREHOLE LOG

CLIENT:	PROJECT NO.:	BORING NO.:	SHEET:
Bohler Engineering	**01:31153**	**B-09**	**1 of 2**
PROJECT NAME:	DRILLER/CONTRACTOR:		
Warrenton Data Center	**All American Geotech, Inc.**		
SITE LOCATION:			LOSS OF CIRCULATION
Lee Highway and Blackwell Road, Warrenton, Virginia 20186			
NORTHING:	EASTING:	STATION:	SURFACE ELEVATION: **478**
			BOTTOM OF CASING

DEPTH (FT)	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE DIST. (IN)	RECOVERY (IN)	DESCRIPTION OF MATERIAL	WATER LEVELS	ELEVATION (FT)	BLOWS/6"
0					Topsoil Thickness [6"]			
	S-1	SS	18	9	(ML) SANDY SILT, reddish brown, moist, loose			2-2-3 (5)
	~~D3S-189~~	~~BG1~~ SS	~~60~~ 18	13	(CL) LEAN CLAY, reddish brown, moist, firm			3-4-5 (9)
5	~~S-2~~						473	
	S-3	SS	18	14	(ML) SANDY SILT, reddish brown, moist, loose			4-4-4 (8)
	S-4	SS	18	18	(ML) SILT, light brown, moist, dense to very dense			13-19-26 (45)
10							468	
	S-5	SS	18	17				11-15-27 (42)
15							463	
	~~S-6~~	~~SS~~	~~4~~	~~4~~				50/4" (50/4")
20							458	
	S-7	SS	18	18				14-15-17 (32)
25							453	
	~~S-8~~	~~SS~~	~~5~~	~~5~~	WEATHERED ROCK, light gray, brown, and black, moist, very dense			50/5" (50/5")
30							448	

Plastic Limit Water Content Liquid Limit

STANDARD PENETRATION BLOWS/FT

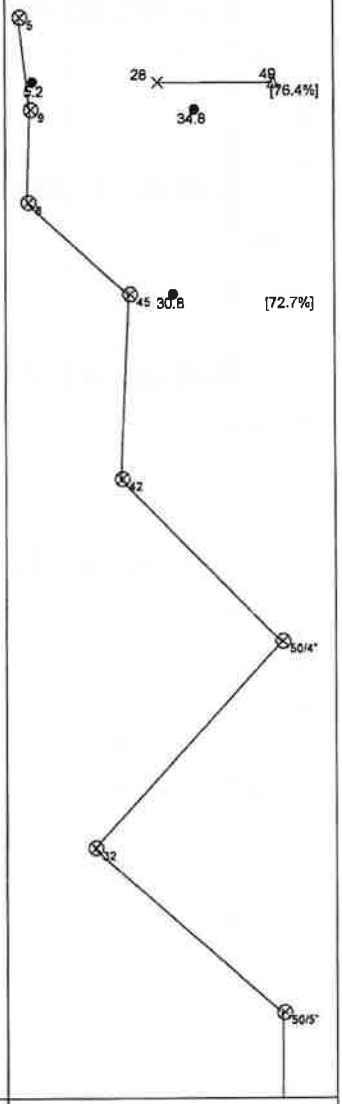
ROCK QUALITY DESIGNATION & RECOVERY

RQD

REC

CALIBRATED PENETROMETER TON/SF

[FINES CONTENT] %



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THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL

WL (First Encountered)	**Dry**	BORING STARTED:	**Sep 29 2021**	CAVE IN DEPTH:	**27.0**
WL (Completion)	**Dry**	BORING COMPLETED:	**Sep 29 2021**	HAMMER TYPE:	**Auto**
WL (Seasonal High Water)		EQUIPMENT: **ATV**	LOGGED BY:	DRILLING METHOD:	**3.25 HSA**
WL (Stabilized)					

GEOTECHNICAL BOREHOLE LOG

CLIENT:	PROJECT NO.:	BORING NO.:	SHEET:
Bohler Engineering	**01:31153**	**B-09**	**2 of 2**
PROJECT NAME: **Warrenton Data Center**	DRILLER/CONTRACTOR: **All American Geotech, Inc.**		
SITE LOCATION: **Lee Highway and Blackwell Road, Warrenton, Virginia 20186**			LOSS OF CIRCULATION
NORTHING:	EASTING:	STATION:	SURFACE ELEVATION: **478**

BOTTOM OF CASING

Plastic Limit Water Content Liquid Limit

⊗ STANDARD PENETRATION BLOWS/FT

ROCK QUALITY DESIGNATION & RECOVERY — RQD — REC

○ CALIBRATED PENETROMETER TON/SF

[FINES CONTENT] %

DEPTH (FT)	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE DIST. (IN)	RECOVERY (IN)	DESCRIPTION OF MATERIAL	WATER LEVELS	ELEVATION (FT)	BLOWS/6"
35	S-9	SS	14	14	WEATHERED ROCK, light gray, brown, and black, moist, very dense		443	17-26-50/2" (76/8")
					AUGER REFUSAL AT 34.8 FT			
40	S-10	SS	0	0			438	50/0" (50/0")
45							433	
50							428	
55							423	
60							418	

⊗ 76/8"

⊗ 50/0"

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL

▽ WL (First Encountered)	**Dry**	BORING STARTED:	**Sep 29 2021**	CAVE IN DEPTH:	**27.0**
▼ WL (Completion)	**Dry**	BORING COMPLETED:	**Sep 29 2021**	HAMMER TYPE:	**Auto**
▼ WL (Seasonal High Water)		EQUIPMENT: **ATV**	LOGGED BY:	DRILLING METHOD:	**3.25 HSA**
▽ WL (Stabilized)					

GEOTECHNICAL BOREHOLE LOG

CLIENT:	PROJECT NO.:	BORING NO.:	SHEET:
Bohler Engineering	**01:31153**	**B-10**	**1 of 2**
PROJECT NAME:	DRILLER/CONTRACTOR:		
Warrenton Data Center	**All American Geotech, Inc.**		
SITE LOCATION:			LOSS OF CIRCULATION
Lee Highway and Blackwell Road, Warrenton, Virginia 20186			
NORTHING:	EASTING:	STATION:	SURFACE ELEVATION: **469**
			BOTTOM OF CASING

DEPTH (FT)	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE DIST. (IN)	RECOVERY (IN)	DESCRIPTION OF MATERIAL	WATER LEVELS	ELEVATION (FT)	BLOWS/6"
0					Topsoil Thickness [6"]			
	S-1	SS	18	12	(SM) SILTY SAND, reddish brown, moist, very loose to loose			1-2-2 (4)
	S-2	SS	18	18				2-2-3 (5)
5							464	
	S-3	SS	18	18	(ML) SANDY SILT WITH GRAVEL, contains quartz fragments, light brown, moist, loose			5-4-5 (9)
	S-4	SS	5	5	WEATHERED ROCK, light brown to grayish brown, moist, very dense			50/5" (50/5")
10							459	
	S-5	SS	5	5				50/5" (50/5")
15							454	
	S-6	SS	3	3				50/3" (50/3")
20							449	
	S-7	SS	0	0	SCHIST, [REC=87%,RQD=17%], Highly Weathered, Very Hard, Grayish Brown			50/0" (50/0")
25	S-8	RC	60	52			444	
					SCHIST, [REC=100%,RQD=22%], Highly Weathered, Very Hard, Grayish Brown			
30	S-9	RC	60	60			439	

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Plastic Limit Water Content Liquid Limit

⊗ STANDARD PENETRATION BLOWS/FT

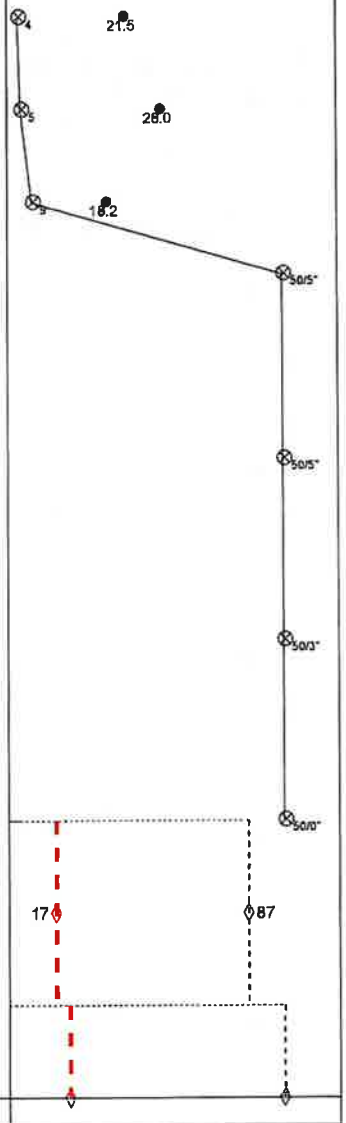
ROCK QUALITY DESIGNATION & RECOVERY

RQD

REC

○ CALIBRATED PENETROMETER TON/SF

(FINES CONTENT) %



THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL

▽ WL (First Encountered)	**Dry**	BORING STARTED:	**Oct 05 2021**	CAVE IN DEPTH:	**19.0**
▼ WL (Completion)	**Dry**	BORING COMPLETED:	**Oct 05 2021**	HAMMER TYPE:	**Auto**
▼ WL (Seasonal High Water)		EQUIPMENT: **ATV**	LOGGED BY:	DRILLING METHOD:	**3.25 HSA**
▽ WL (Stabilized)					

GEOTECHNICAL BOREHOLE LOG

CLIENT:	PROJECT NO.:	BORING NO.:	SHEET:
Bohler Engineering	**01:31153**	**B-10**	**2 of 2**
PROJECT NAME: **Warrenton Data Center**	DRILLER/CONTRACTOR: **All American Geotech, Inc.**		
SITE LOCATION: **Lee Highway and Blackwell Road, Warrenton, Virginia 20186**			LOSS OF CIRCULATION
NORTHING:	EASTING:	STATION:	SURFACE ELEVATION: **469**

BOTTOM OF CASING

Plastic Limit Water Content Liquid Limit

⊗ STANDARD PENETRATION BLOWS/FT

ROCK QUALITY DESIGNATION & RECOVERY — RQD — REC

○ CALIBRATED PENETROMETER TON/SF

[FINES CONTENT] %

DEPTH (FT)	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE DIST. (IN)	RECOVERY (IN)	DESCRIPTION OF MATERIAL	WATER LEVELS	ELEVATION (FT)	BLOWS/6"
					SCHIST, [REC=100%,RQD=22%], Highly Weathered, Very Hard, Grayish Brown			22 / 100
					AUGER REFUSAL AT 33.5 FT			
35							434	
40							429	
45							424	
50							419	
55							414	
60							409	

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL

▽ WL (First Encountered)	**Dry**	BORING STARTED:	**Oct 05 2021**	CAVE IN DEPTH:	**19.0**
▼ WL (Completion)	**Dry**	BORING COMPLETED:	**Oct 05 2021**	HAMMER TYPE:	**Auto**
▼ WL (Seasonal High Water)		EQUIPMENT: **ATV**	LOGGED BY:	DRILLING METHOD:	**3.25 HSA**
▽ WL (Stabilized)					

GEOTECHNICAL BOREHOLE LOG

CLIENT:	PROJECT NO.:	BORING NO.:	SHEET:
Bohler Engineering	**01:31153**	**B-11**	**1 of 1**
PROJECT NAME:	DRILLER/CONTRACTOR:		
Warrenton Data Center	**All American Geotech, Inc.**		
SITE LOCATION:			LOSS OF CIRCULATION
Lee Highway and Blackwell Road, Warrenton, Virginia 20186			
NORTHING:	EASTING:	STATION:	SURFACE ELEVATION: **468**
			BOTTOM OF CASING

DEPTH (FT)	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE DIST. (IN)	RECOVERY (IN)	DESCRIPTION OF MATERIAL	WATER LEVELS	ELEVATION (FT)	BLOWS/6"
					Topsoil Thickness [6"]			
	S-1	SS	18	8	(ML) SILT, brownish gray, moist, loose to dense			3-3-4 (7)
	~~D35-194 S-2~~	~~BG1~~ SS	~~60~~ 18	12				5-6-9 (15)
5	S-3	SS	18	16			463	7-10-12 (22)
	S-4	SS	18	18				11-12-16 (28)
10							458	
	S-5	SS	18	18				10-15-19 (34)
15							453	
	S-6	SS	5	5	WEATHERED ROCK, gray, moist, very dense			50/5" (50/5")
20							448	
	S-7	SS	3	3				50/3" (50/3")
25					END OF BORING AT 25.0 FT		443	
30							438	

Plastic Limit Water Content Liquid Limit

⊗ STANDARD PENETRATION BLOWS/FT

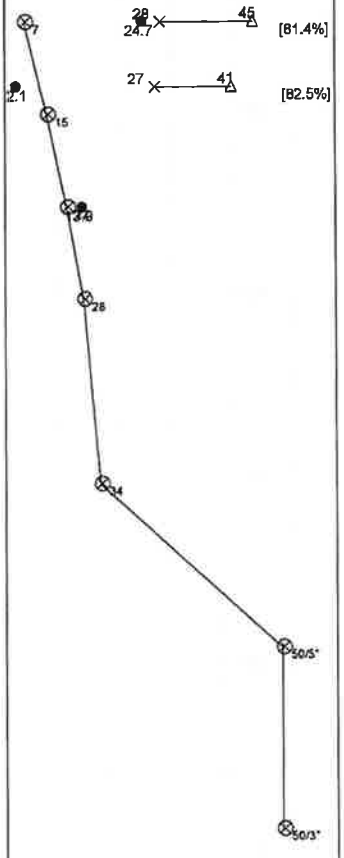
ROCK QUALITY DESIGNATION & RECOVERY

RQD

REC

○ CALIBRATED PENETROMETER TON/SF

[FINES CONTENT] %



THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL

▽ WL (First Encountered)	**Dry**	BORING STARTED:	**Sep 29 2021**	CAVE IN DEPTH:	**12.7**
▼ WL (Completion)	**Dry**	BORING COMPLETED:	**Sep 29 2021**	HAMMER TYPE:	**Auto**
▼ WL (Seasonal High Water)		EQUIPMENT: **ATV**	LOGGED BY:	DRILLING METHOD:	**3.25 HSA**
▽ WL (Stabilized)					

GEOTECHNICAL BOREHOLE LOG

CLIENT:	PROJECT NO.:	BORING NO.:	SHEET:
Bohler Engineering	**01:31153**	**B-12**	**1 of 1**
PROJECT NAME: **Warrenton Data Center**	DRILLER/CONTRACTOR: **All American Geotech, Inc.**		
SITE LOCATION: **Lee Highway and Blackwell Road, Warrenton, Virginia 20186**			LOSS OF CIRCULATION
NORTHING:	EASTING:	STATION:	SURFACE ELEVATION: **474**

BOTTOM OF CASING

DEPTH (FT)	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE DIST. (IN)	RECOVERY (IN)	DESCRIPTION OF MATERIAL	WATER LEVELS	ELEVATION (FT)	BLOWS/6"
0					Topsoil Thickness [6"]			
	S-1	SS	18	18	(SM) SILTY SAND, reddish brown, moist, loose			3-4-5 (9)
	S-2	SS	18	18	(ML) SANDY SILT, reddish brown, moist, medium dense		469	6-7-11 (18)
5	S-3	SS	18	18	(ML) SILT, light brown, moist, medium dense			10-13-12 (25)
	S-4	SS	18	18			464	10-11-15 (26)
10	S-5	SS	18	18				11-8-11 (19)
15	S-6	SS	5	5	WEATHERED ROCK, light brown and gray, moist, very dense		459	50/5" (50/5")
20	S-7	SS	5	5			454	50/5" (50/5")
25					END OF BORING AT 23.9 FT		449	
30							444	

Plastic Limit Water Content Liquid Limit

STANDARD PENETRATION BLOWS/FT

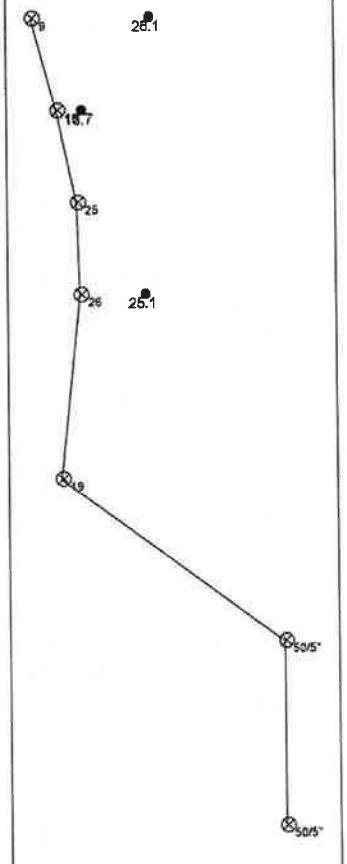
ROCK QUALITY DESIGNATION & RECOVERY

RQD

REC

CALIBRATED PENETROMETER TON/SF

[FINES CONTENT] %



THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL

WL (First Encountered)	**Dry**	BORING STARTED:	**Oct 02 2021**	CAVE IN DEPTH:	**14.0**
WL (Completion)	**Dry**	BORING COMPLETED:	**Oct 02 2021**	HAMMER TYPE:	**Auto**
WL (Seasonal High Water)		EQUIPMENT: **ATV**	LOGGED BY:	DRILLING METHOD:	**3.25 HSA**
WL (Stabilized)					

GEOTECHNICAL BOREHOLE LOG

CLIENT:	PROJECT NO.:	BORING NO.:	SHEET:
Bohler Engineering	**01:31153**	**B-13**	**1 of 1**
PROJECT NAME:	DRILLER/CONTRACTOR:		
Warrenton Data Center	**All American Geotech, Inc.**		
SITE LOCATION:			LOSS OF CIRCULATION
Lee Highway and Blackwell Road, Warrenton, Virginia 20186			
NORTHING:	EASTING:	STATION:	SURFACE ELEVATION: **490**
			BOTTOM OF CASING

DEPTH (FT)	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE DIST. (IN)	RECOVERY (IN)	DESCRIPTION OF MATERIAL	WATER LEVELS	ELEVATION (FT)	BLOWS/6"
					Topsoil Thickness [4"]			
	S-1	SS	18	10	(ML) SILT WITH SAND, reddish brown, moist, loose to medium dense			3-3-5 (8)
	S-2	SS	18	12				2-3-6 (9)
5							485	
	S-3	SS	18	18				7-8-11 (19)
	S-4	SS	4	4	(SM) SILTY SAND WITH GRAVEL, gray and dark brown, moist, medium dense to very dense			50/4" (50/4")
10							480	
	S-5	SS	18	18				12-13-15 (28)
15							475	
	S-6	SS	18	18				10-12-17 (29)
20							470	
	S-7	SS	2	2	WEATHERED ROCK, dark brownish gray, moist, very dense			50/2" (50/2")
25							465	
	S-8	SS	0	0	**AUGER REFUSAL AT 27.0 FT**			50/0" (50/0")
30							460	

Plastic Limit Water Content Liquid Limit

STANDARD PENETRATION BLOWS/FT

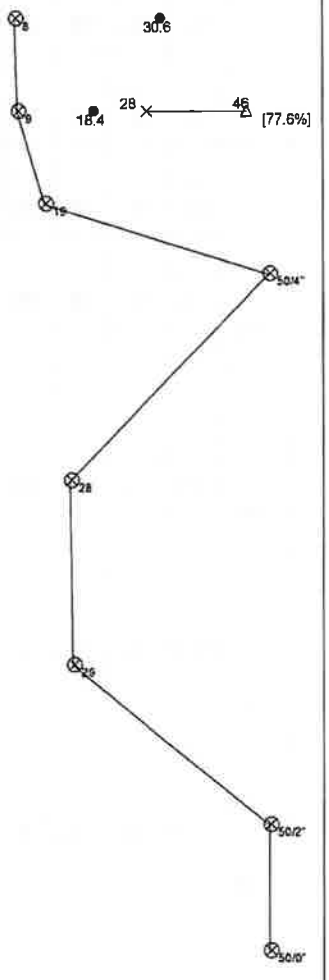
ROCK QUALITY DESIGNATION & RECOVERY

RQD

REC

CALIBRATED PENETROMETER TON/SF

(FINES CONTENT) %



THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL

▽ WL (First Encountered)	**Dry**	BORING STARTED:	**Sep 30 2021**	CAVE IN DEPTH:	**18.5**
▼ WL (Completion)	**Dry**	BORING COMPLETED:	**Sep 30 2021**	HAMMER TYPE:	**Auto**
▼ WL (Seasonal High Water)		EQUIPMENT: **ATV**	LOGGED BY:	DRILLING METHOD:	**3.25 HSA**
▽ WL (Stabilized)					

GEOTECHNICAL BOREHOLE LOG

CLIENT:	PROJECT NO.:	BORING NO.:	SHEET:
Bohler Engineering	**01:31153**	**B-14**	**1 of 1**
PROJECT NAME: **Warrenton Data Center**	DRILLER/CONTRACTOR: **All American Geotech, Inc.**		
SITE LOCATION: **Lee Highway and Blackwell Road, Warrenton, Virginia 20186**			LOSS OF CIRCULATION
NORTHING:	EASTING:	STATION:	SURFACE ELEVATION: **500**

DEPTH (FT)	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE DIST. (IN)	RECOVERY (IN)	DESCRIPTION OF MATERIAL	WATER LEVELS	ELEVATION (FT)	BLOWS/6"
0					Topsoil Thickness (3")			
	S-1	SS	18	18	(MH) ELASTIC SILT, light brown, moist, firm to stiff			3-4-4 (8)
	~~D35~~ 186	~~BG1~~ SS	~~60~~ 18	18				2-4-5 (9)
5	~~S-2~~				(SM) SILTY SAND, brown, moist, medium dense to dense		495	
	S-3	SS	18	18				5-9-11 (20)
	S-4	SS	18	18				10-12-19 (31)
10							490	
	~~S-5~~	~~SS~~	~~5~~	~~5~~	WEATHERED ROCK, reddish brown and black, moist, very dense			50/5" (50/5")
15							485	
	~~S-6~~	~~SS~~	~~2~~	~~2~~	END OF BORING AT 18.7 FT			50/2" (50/2")
20							480	
25							475	
30							470	

Plastic Limit Water Content Liquid Limit

⊗ STANDARD PENETRATION BLOWS/FT

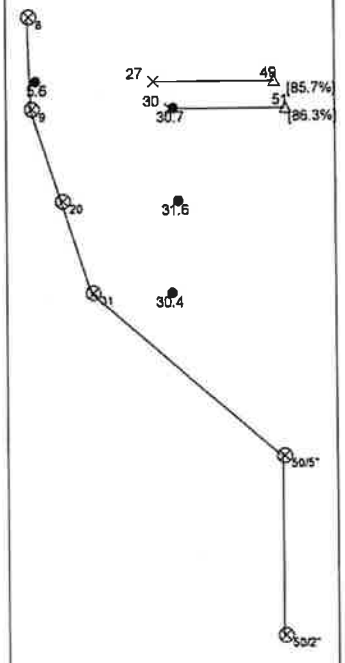
ROCK QUALITY DESIGNATION & RECOVERY

RQD

REC

○ CALIBRATED PENETROMETER TON/SF

[FINES CONTENT] %



THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL

▽ WL (First Encountered)	**Dry**	BORING STARTED:	**Sep 30 2021**	CAVE IN DEPTH:	**11.5**
▼ WL (Completion)	**Dry**	BORING COMPLETED:	**Sep 30 2021**	HAMMER TYPE:	**Auto**
▼ WL (Seasonal High Water)		EQUIPMENT: **ATV**	LOGGED BY:	DRILLING METHOD:	**3.25 HSA**
▽ WL (Stabilized)					

GEOTECHNICAL BOREHOLE LOG

CLIENT:	PROJECT NO.:	BORING NO.:	SHEET:
Bohler Engineering	**01:31153**	**B-15**	**1 of 1**
PROJECT NAME:	DRILLER/CONTRACTOR:		
Warrenton Data Center	**All American Geotech, Inc.**		
SITE LOCATION:			LOSS OF CIRCULATION
Lee Highway and Blackwell Road, Warrenton, Virginia 20186			
NORTHING:	EASTING:	STATION:	SURFACE ELEVATION: **497**
			BOTTOM OF CASING

DEPTH (FT)	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE DIST. (IN)	RECOVERY (IN)	DESCRIPTION OF MATERIAL	WATER LEVELS	ELEVATION (FT)	BLOWS/6"
0					Topsoil Thickness [4"]			
	S-1	SS	18	12	(CL) LEAN CLAY WITH SAND, grayish brown, moist, stiff			3-4-6 (10)
	~~D35-187~~	~~BG1~~ SS	~~60~~ 18	17				4-4-7 (11)
5	~~S-2~~				(ML) SANDY SILT WITH GRAVEL, light brown and gray, moist, very dense		492	
	S-3	SS	18	18				23-24-29 (53)
	S-4	SS	15	14	WEATHERED ROCK, grayish brown to gray, moist, very dense			15-34-50/3" (84/9")
10							487	
	~~S-5~~	~~SS~~	~~3~~	~~3~~				50/3" (50/3")
15							482	
	~~S-6~~	~~SS~~	~~1~~	~~1~~	**AUGER REFUSAL AT 16.1 FT**			50/1" (50/1")
20							477	
25							472	
30							467	

Plastic Limit Water Content Liquid Limit

STANDARD PENETRATION BLOWS/FT

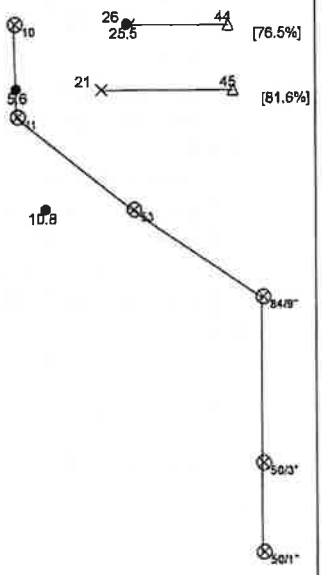
ROCK QUALITY DESIGNATION & RECOVERY

RQD

REC

CALIBRATED PENETROMETER TON/SF

[FINES CONTENT] %



THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL

▽ WL (First Encountered)	**Dry**	BORING STARTED:	**Sep 30 2021**	CAVE IN DEPTH:	**10.3**
▼ WL (Completion)	**Dry**	BORING COMPLETED:	**Sep 30 2021**	HAMMER TYPE:	**Auto**
▼ WL (Seasonal High Water)		EQUIPMENT: **ATV**	LOGGED BY:	DRILLING METHOD:	**3.25 HSA**
▽ WL (Stabilized)					

GEOTECHNICAL BOREHOLE LOG

CLIENT:	PROJECT NO.:	BORING NO.:	SHEET:
Bohler Engineering	**01:31153**	**B-16**	**1 of 1**
PROJECT NAME: **Warrenton Data Center**	DRILLER/CONTRACTOR: **All American Geotech, Inc.**		
SITE LOCATION: **Lee Highway and Blackwell Road, Warrenton, Virginia 20186**			LOSS OF CIRCULATION
NORTHING:	EASTING:	STATION:	SURFACE ELEVATION: **475**

BOTTOM OF CASING

Plastic Limit Water Content Liquid Limit

STANDARD PENETRATION BLOWS/FT

ROCK QUALITY DESIGNATION & RECOVERY

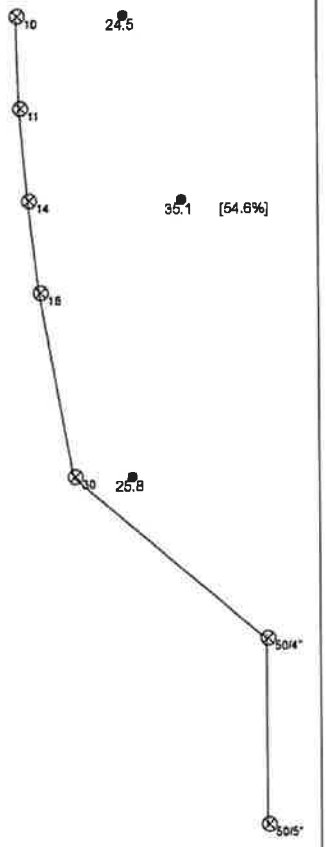
RQD

REC

CALIBRATED PENETROMETER TON/SF

[FINES CONTENT] %

DEPTH (FT)	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE DIST. (IN)	RECOVERY (IN)	DESCRIPTION OF MATERIAL	WATER LEVELS	ELEVATION (FT)	BLOWS/6"
					Topsoil Thickness [6"]			
	S-1	SS	18	18	(SM) SILTY SAND, brown, moist, loose			3-5-5 (10)
	S-2	SS	18	18	(ML) SANDY SILT, light brown and gray, moist, medium dense		470	5-4-7 (11)
5	S-3	SS	18	18				6-6-8 (14)
	S-4	SS	18	18			465	5-7-11 (18)
10								
	S-5	SS	18	14			460	10-13-17 (30)
15								
	S-6	SS	4	4	WEATHERED ROCK, light brown, moist, very dense		455	50/4" (50/4")
20								
	S-7	SS	5	5				50/5" (50/5")
25					END OF BORING AT 24.0 FT		450	
30							445	



THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL

▽ WL (First Encountered)	**Dry**	BORING STARTED:	**Oct 02 2021**	CAVE IN DEPTH:	**14.7**
▼ WL (Completion)	**Dry**	BORING COMPLETED:	**Oct 02 2021**	HAMMER TYPE:	**Auto**
▼ WL (Seasonal High Water)		EQUIPMENT:	LOGGED BY:	DRILLING METHOD:	**3.25 HSA**
▽ WL (Stabilized)		**ATV**			

GEOTECHNICAL BOREHOLE LOG

CLIENT:	PROJECT NO.:	BORING NO.:	SHEET:
Bohler Engineering	**01:31153**	**B-17**	**1 of 1**
PROJECT NAME:	DRILLER/CONTRACTOR:		
Warrenton Data Center	**All American Geotech, Inc.**		
SITE LOCATION:			LOSS OF CIRCULATION
Lee Highway and Blackwell Road, Warrenton, Virginia 20186			
NORTHING:	EASTING:	STATION:	SURFACE ELEVATION: **492**

DEPTH (FT)	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE DIST. (IN)	RECOVERY (IN)	DESCRIPTION OF MATERIAL	WATER LEVELS	ELEVATION (FT)	BLOWS/6"
0					Topsoil Thickness [3"]			
	S-1	SS	18	20	(SM) SILTY SAND, reddish brown, moist, loose			4-4-4 (8)
	S-2	SS	18	18				3-4-4 (8)
5							487	
	S-3	SS	18	18	(ML) SANDY SILT, brown and gray, moist, very loose			1-2-2 (4)
	S-4	SS	5	5	WEATHERED ROCK, dark gray, moist, very dense			50/5" (50/5")
10							482	
	S-5	SS	3	3				50/3" (50/3")
					END OF BORING AT 13.8 FT			
15							477	
20							472	
25							467	
30							462	

Plastic Limit Water Content Liquid Limit

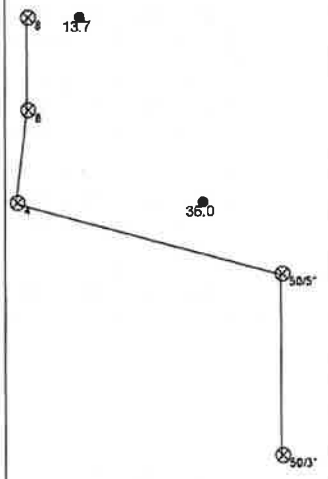
⊗ STANDARD PENETRATION BLOWS/FT

ROCK QUALITY DESIGNATION & RECOVERY

RQD

REC

○ CALIBRATED PENETROMETER TON/SF [FINES CONTENT] %



THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL

▽ WL (First Encountered)	**Dry**	BORING STARTED: **Oct 02 2021**	CAVE IN DEPTH: **7.0**	
▼ WL (Completion)	**Dry**	BORING COMPLETED: **Oct 02 2021**	HAMMER TYPE: **Auto**	
▼ WL (Seasonal High Water)		EQUIPMENT: **ATV**	LOGGED BY:	DRILLING METHOD: **3.25 HSA**
▽ WL (Stabilized)				

GEOTECHNICAL BOREHOLE LOG

CLIENT:	PROJECT NO.:	BORING NO.:	SHEET:
Bohler Engineering	**01:31153**	**B-18**	**1 of 1**
PROJECT NAME: **Warrenton Data Center**	DRILLER/CONTRACTOR: **All American Geotech, Inc.**		
SITE LOCATION: **Lee Highway and Blackwell Road, Warrenton, Virginia 20186**			LOSS OF CIRCULATION
NORTHING:	EASTING:	STATION:	SURFACE ELEVATION: **482**

DEPTH (FT)	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE DIST. (IN)	RECOVERY (IN)	DESCRIPTION OF MATERIAL	WATER LEVELS	ELEVATION (FT)	BLOWS/6"
0					Topsoil Thickness [6"]		482	
	S-1	SS	18	18	(SM) SILTY SAND, reddish brown, moist, loose to medium dense			3-3-4 (7)
	S-2	SS	18	18				4-5-7 (12)
5							477	
	S-3	SS	18	18				7-9-13 (22)
	S-4	SS	18	18	(ML) SILT, light brown, moist, dense			15-15-22 (37)
10							472	
	S-5	SS	5	5	WEATHERED ROCK, light brown to grayish brown, moist, very dense			50/5" (50/5")
15							467	
	S-6	SS	4	4				50/4" (50/4")
					END OF BORING AT 18.9 FT			
20							462	
25							457	
30							452	

Plastic Limit Water Content Liquid Limit

STANDARD PENETRATION BLOWS/FT

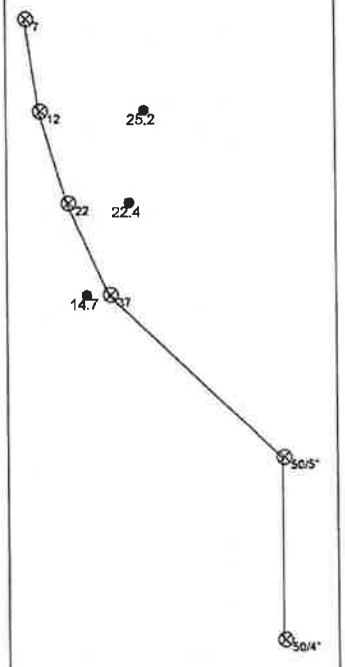
ROCK QUALITY DESIGNATION & RECOVERY

RQD

REC

CALIBRATED PENETROMETER TON/SF

[FINES CONTENT] %



THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL

▽ WL (First Encountered)	**Dry**	BORING STARTED:	**Oct 01 2021**	CAVE IN DEPTH:	**14.5**
▼ WL (Completion)	**Dry**	BORING COMPLETED:	**Oct 01 2021**	HAMMER TYPE:	**Auto**
▼ WL (Seasonal High Water)		EQUIPMENT: **ATV**	LOGGED BY:	DRILLING METHOD:	**3.25 HSA**
▽ WL (Stabilized)					

GEOTECHNICAL BOREHOLE LOG

CLIENT:	PROJECT NO.:	BORING NO.:	SHEET:
Bohler Engineering	**01:31153**	**B-19**	**1 of 1**
PROJECT NAME: **Warrenton Data Center**	DRILLER/CONTRACTOR: **All American Geotech, Inc.**		
SITE LOCATION: **Lee Highway and Blackwell Road, Warrenton, Virginia 20186**			LOSS OF CIRCULATION
NORTHING:	EASTING:	STATION:	SURFACE ELEVATION: **490**

BOTTOM OF CASING

DEPTH (FT)	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE DIST. (IN)	RECOVERY (IN)	DESCRIPTION OF MATERIAL	WATER LEVELS	ELEVATION (FT)	BLOWS/6"
					Topsoil Thickness [4"]			
	S-1	SS	18	18	(CL) SANDY LEAN CLAY, reddish brown, moist, firm			4-4-3 (7)
	~~D35-190~~ S-2	~~BG1~~ SS	~~60~~ 18	18	(GM) SILTY GRAVEL WITH SAND, reddish brown and brown, moist, loose to medium dense			3-4-6 (10)
5	S-3	SS	18	18			485	3-3-4 (7)
	S-4	SS	18	18				9-7-8 (15)
10							480	
	S-5	SS	5	5	WEATHERED ROCK, light brown and dark gray, moist, very dense			50/5" (50/5")
15							475	
	S-6	SS	1	1	END OF BORING AT 18.6 FT			50/1" (50/1")
20							470	
25							465	
30							460	

Plastic Limit Water Content Liquid Limit

⊗ STANDARD PENETRATION BLOWS/FT

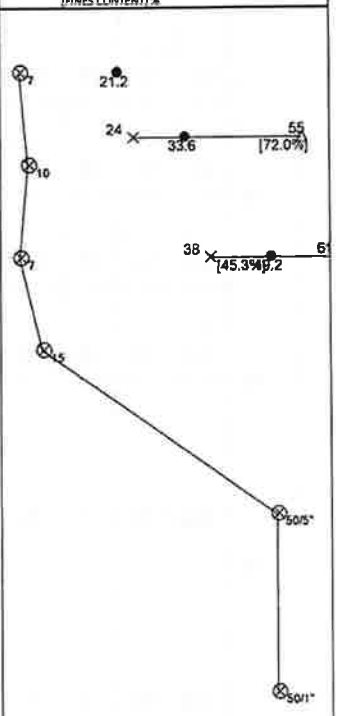
ROCK QUALITY DESIGNATION & RECOVERY

RQD

REC

○ CALIBRATED PENETROMETER TON/SF

(FINES CONTENT) %



THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL

▽ WL (First Encountered)	**Dry**	BORING STARTED:	**Oct 01 2021**	CAVE IN DEPTH:	**14.5**
▼ WL (Completion)	**Dry**	BORING COMPLETED:	**Oct 01 2021**	HAMMER TYPE:	**Auto**
⧩ WL (Seasonal High Water)		EQUIPMENT: **ATV**	LOGGED BY:	DRILLING METHOD:	**3.25 HSA**
⧩ WL (Stabilized)					

GEOTECHNICAL BOREHOLE LOG

CLIENT:	PROJECT NO.:	BORING NO.:	SHEET:
Bohler Engineering	**01:31153**	**B-20**	**1 of 1**
PROJECT NAME: **Warrenton Data Center**	DRILLER/CONTRACTOR: **All American Geotech, Inc.**		
SITE LOCATION: **Lee Highway and Blackwell Road, Warrenton, Virginia 20186**			LOSS OF CIRCULATION
NORTHING:	EASTING:	STATION:	SURFACE ELEVATION: **490**

BOTTOM OF CASING

Plastic Limit Water Content Liquid Limit

STANDARD PENETRATION BLOWS/FT

ROCK QUALITY DESIGNATION & RECOVERY

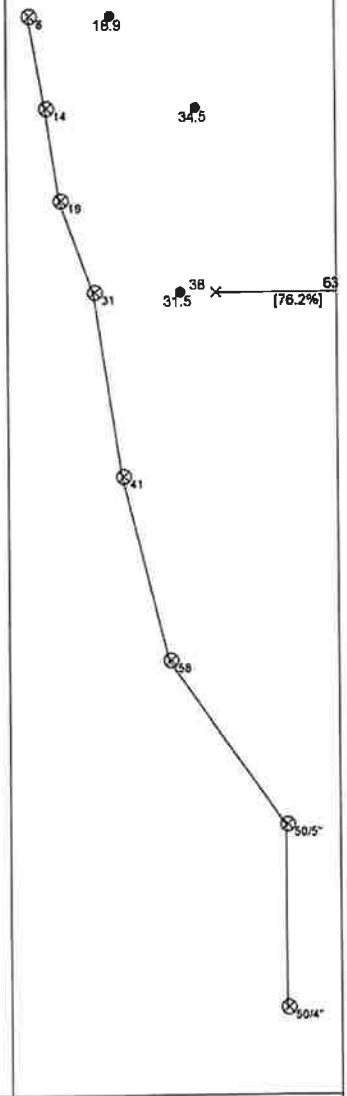
RQD

REC

CALIBRATED PENETROMETER TON/SF

[FINES CONTENT] %

DEPTH (FT)	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE DIST. (IN)	RECOVERY (IN)	DESCRIPTION OF MATERIAL	WATER LEVELS	ELEVATION (FT)	BLOWS/6"
					Topsoil Thickness [4"]			
	S-1	SS	18	10	(SM) SILTY SAND, brown, moist, loose			4-4-4 (8)
	S-2	SS	18	18	(ML) SILT, reddish brown to grayish brown, moist, medium dense to very dense			5-7-7 (14)
5	S-3	SS	18	18			485	7-9-10 (19)
	S-4	SS	18	18	(MH) ELASTIC SILT WITH SAND, yellowish brown, moist, hard to very hard			14-15-16 (31)
10							480	
	S-5	SS	18	18				8-15-26 (41)
15							475	
	S-6	SS	18	18				17-23-35 (58)
20							470	
	S-7	SS	5	5	WEATHERED ROCK, light brown and gray, moist, very dense			50/5" (50/5")
25							465	
	S-8	SS	4	4				50/4" (50/4")
30					END OF BORING AT 28.9 FT		460	



THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL

▽ WL (First Encountered)	**Dry**	BORING STARTED:	**Oct 01 2021**	CAVE IN DEPTH:	**23.0**
▼ WL (Completion)	**Dry**	BORING COMPLETED:	**Oct 01 2021**	HAMMER TYPE:	**Auto**
⧩ WL (Seasonal High Water)		EQUIPMENT:	LOGGED BY:	DRILLING METHOD:	**3.25 HSA**
⧩ WL (Stabilized)		**ATV**			

GEOTECHNICAL BOREHOLE LOG

APPENDIX C – Laboratory Testing

Laboratory Test Results Summary
Plasticity Charts
Grain Size Analysis
Standard Proctor Test Results
California Bearing Ratio Test Results
Thermal Resistivity Test Results

Laboratory Testing Summary

Sample Location	Sample Number	Depth (feet)	^MC (%)	Soil Type	Atterberg Limits			**Percent Passing No. 200 Sieve	Moisture - Density		CBR (%)		#Organic Content (%)
					LL	PL	PI		<Maximum Density (pcf)	<Optimum Moisture (%)	0.1 in.	0.2 in.	
B-01	S-10	38.5-39.75	16.5	ML	NP	NP	NP	75.6					
B-01	S-2	3.5-5	15.1										
B-02	S-1	1-2.5	24.7										
B-02	S-2	3.5-5	11.2										
B-02	S-5	13.5-15	12.6										
B-03	S-1	1-2.5	25.3										
B-03	S-2	3.5-5	21.6	ML	44	28	16	71.0					
B-04	S-1	1-2.5	26.2										
B-04	S-3	6-7.5	16.9										
B-04	S-5	13.5-15	22.6										

Notes: See test reports for test method, ^ASTM D2216-19, *ASTM D2488, **ASTM D1140-17, #ASTM D2974-20e1 < See test report for D4718 corrected values

Definitions: MC: Moisture Content, Soil Type: USCS (Unified Soil Classification System), LL: Liquid Limit, PL: Plastic Limit, PI: Plasticity Index, CBR: California Bearing Ratio, OC: Organic Content

Project: Warrenton Data Center
Client:

Project No.: 01:31153
Date Reported:

Office / Lab	Address	Office Number / Fax
ECS Mid-Atlantic LLC - Chantilly	14026 Thunderbolt Place Suite 100 Chantilly, VA 20151-3232	(703)471-8400 (703)834-5527

Tested by	Checked by	Approved by	
jvong	Htran	Dtran	

Laboratory Testing Summary

Sample Location	Sample Number	Depth (feet)	^MC (%)	Soil Type	Atterberg Limits			**Percent Passing No. 200 Sieve	Moisture - Density		CBR (%)		#Organic Content (%)
					LL	PL	PI		<Maximum Density (pcf)	<Optimum Moisture (%)	0.1 in.	0.2 in.	
B-05	S-3	6-7.5	28.8										
B-05	S-9	33.5-35	19.9	ML	45	30	15	87.5					
B-06	S-1	1-2.5	25.2										
B-06	S-3	6-7.5	41.6										
B-06	S-5	13.5-15	18.3										
B-07	S-2	3.5-5	18.4										
B-07	S-3	6-7.5	31.6	CH	60	28	32	86.0					
B-08	S-1	1-2.5	29.0										
B-08	S-4	8.5-10	46.1										
B-08	S-6	18.5-20	25.3										

Notes: See test reports for test method, ^ASTM D2216-19, *ASTM D2488, **ASTM D1140-17, #ASTM D2974-20e1 < See test report for D4718 corrected values

Definitions: MC: Moisture Content, Soil Type: USCS (Unified Soil Classification System), LL: Liquid Limit, PL: Plastic Limit, PI: Plasticity Index, CBR: California Bearing Ratio, OC: Organic Content

Project: Warrenton Data Center
Client:

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Tested by	Checked by	Approved by	
jvong	Htran	Dtran	

Laboratory Testing Summary

Sample Location	Sample Number	Depth (feet)	^MC (%)	Soil Type	Atterberg Limits			**Percent Passing No. 200 Sieve	Moisture - Density		CBR (%)		#Organic Content (%)
					LL	PL	PI		<Maximum Density (pcf)	<Optimum Moisture (%)	0.1 in.	0.2 in.	
B-09	S-2	3.5-5	34.8										
B-09	S-4	8.5-10	30.8	ML	NP	NP	NP	72.7					
B-10	S-1	1-2.5	21.5										
B-10	S-2	3.5-5	28.0										
B-10	S-3	6-7.5	18.2										
B-11	S-1	1-2.5	24.7	ML	45	28	17	81.4					
B-11	S-3	6-7.5	13.9										
B-12	S-1	1-2.5	26.1										
B-12	S-2	3.5-5	13.7										
B-12	S-4	8.5-10	25.1										

Notes: See test reports for test method, ^ASTM D2216-19, *ASTM D2488, **ASTM D1140-17, #ASTM D2974-20e1 < See test report for D4718 corrected values

Definitions: MC: Moisture Content, Soil Type: USCS (Unified Soil Classification System), LL: Liquid Limit, PL: Plastic Limit, PI: Plasticity Index, CBR: California Bearing Ratio, OC: Organic Content

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Tested by	Checked by	Approved by	
jvong	Htran	Dtran	

Laboratory Testing Summary

Sample Location	Sample Number	Depth (feet)	^MC (%)	Soil Type	Atterberg Limits			**Percent Passing No. 200 Sieve	Moisture - Density		CBR (%)		#Organic Content (%)
					LL	PL	PI		<Maximum Density (pcf)	<Optimum Moisture (%)	0.1 in.	0.2 in.	
B-13	S-1	1-2.5	30.6										
B-13	S-2	3.5-5	18.4	ML	46	28	18	77.6					
B-14	S-2	3.5-5	30.7	MH	51	30	21	86.3					
B-14	S-3	6-7.5	31.6										
B-14	S-4	8.5-10	30.4										
B-15	S-1	1-2.5	25.5	CL	44	26	18	76.5					
B-15	S-3	6-7.5	10.8										
B-16	S-1	1-2.5	24.5										
B-16	S-3	6-7.5	35.1	ML	NP	NP	NP	54.6					
B-16	S-5	13.5-15	25.8										

Notes: See test reports for test method, ^ASTM D2216-19, *ASTM D2488, **ASTM D1140-17, #ASTM D2974-20e1 < See test report for D4718 corrected values

Definitions: MC: Moisture Content, Soil Type: USCS (Unified Soil Classification System), LL: Liquid Limit, PL: Plastic Limit, PI: Plasticity Index, CBR: California Bearing Ratio, OC: Organic Content

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Tested by	Checked by	Approved by	
jvong	Htran	Dtran	

Laboratory Testing Summary

Sample Location	Sample Number	Depth (feet)	^MC (%)	Soil Type	Atterberg Limits			**Percent Passing No. 200 Sieve	Moisture - Density		CBR (%)		#Organic Content (%)
					LL	PL	PI		<Maximum Density (pcf)	<Optimum Moisture (%)	0.1 in.	0.2 in.	
B-17	S-1	1-2.5	13.7										
B-17	S-3	6-7.5	36.0										
B-18	S-2	3.5-5	25.2										
B-18	S-3	6-7.5	22.4										
B-18	S-4	8.5-10	14.7										
B-19	S-1	1-2.5	21.2										
B-19	S-3	6-7.5	49.2	GM	61	38	23	45.3					
B-20	S-1	1-2.5	18.9										
B-20	S-2	3.5-5	34.5										
B-20	S-4	8.5-10	31.5	MH	63	38	25	76.2					

Notes: See test reports for test method, ^ASTM D2216-19, *ASTM D2488, **ASTM D1140-17, #ASTM D2974-20e1 < See test report for D4718 corrected values

Definitions: MC: Moisture Content, Soil Type: USCS (Unified Soil Classification System), LL: Liquid Limit, PL: Plastic Limit, PI: Plasticity Index, CBR: California Bearing Ratio, OC: Organic Content

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Tested by	Checked by	Approved by	
jvong	Htran	Dtran	

Laboratory Testing Summary

Sample Location	Sample Number	Depth (feet)	^MC (%)	Soil Type	Atterberg Limits			**Percent Passing No. 200 Sieve	Moisture - Density		CBR (%)		#Organic Content (%)
					LL	PL	PI		<Maximum Density (pcf)	<Optimum Moisture (%)	0.1 in.	0.2 in.	
B-02	D3S-191	1-6	11.7	CL	39	18	21	85.6	122.1	15.2			
B-04	D3S-188	1-6	2.2	ML	NP	NP	NP	85.1	112.3	15.8			
B-07	D3S-193	1-6	2.6	CL	37	19	18	86.5	112.2	17.7			
B-09	D3S-189	1-6	5.2	ML	49	28	21	76.4	99.5	21.6			
B-11	D3S-194	1-6	2.1	ML	41	27	14	82.5	119.2	13.8			
B-14	D3S-186	1-6	5.6	CL	49	27	22	85.7	102.3	22.4	5	4.7	
B-15	D3S-187	1-6	5.6	CL	45	21	24	81.6	111.0	17.7	7.6	6.6	
B-19	D3S-190	1-6	33.6	CH	55	24	31	72.0	101.9	24.2			

Notes: See test reports for test method, ^ASTM D2216-19, *ASTM D2488, **ASTM D1140-17, #ASTM D2974-20e1 < See test report for D4718 corrected values

Definitions: MC: Moisture Content, Soil Type: USCS (Unified Soil Classification System), LL: Liquid Limit, PL: Plastic Limit, PI: Plasticity Index, CBR: California Bearing Ratio, OC: Organic Content

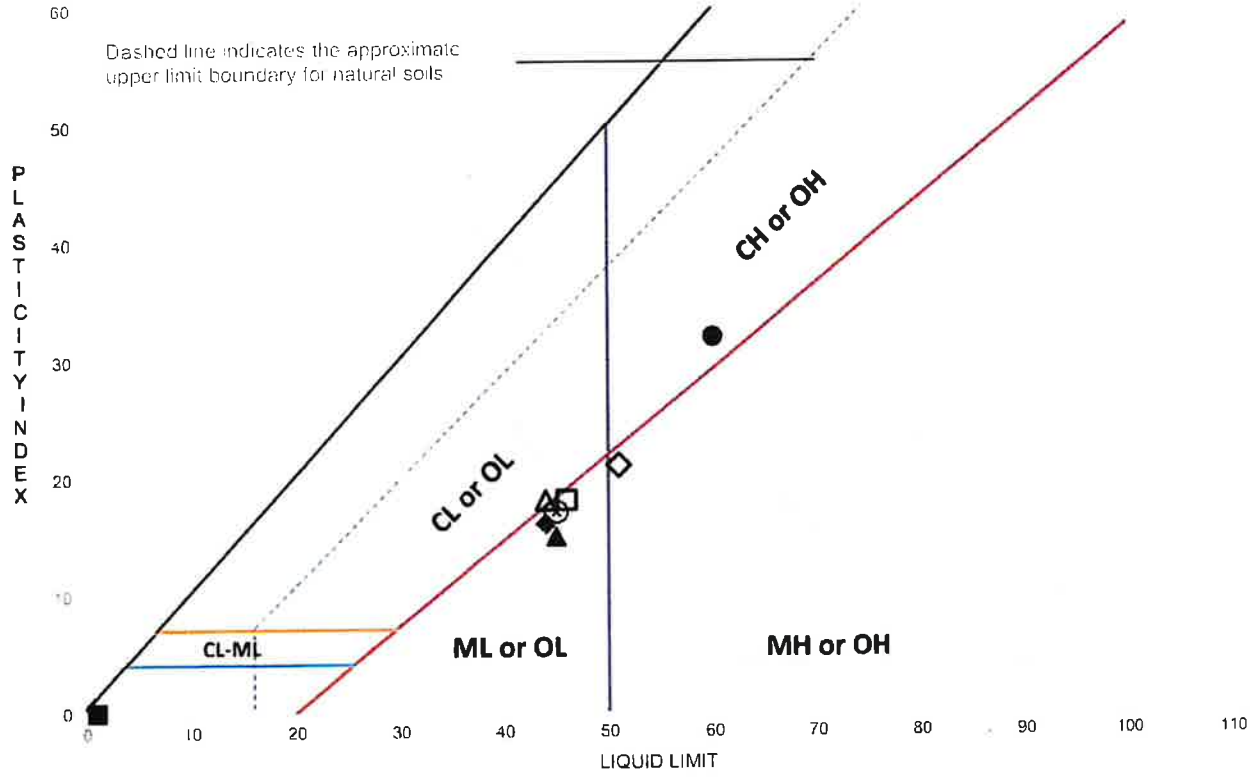
Project: Warrenton Data Center
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Tested by	Checked by	Approved by	
jvong	Htran	Dtran	

LIQUID AND PLASTIC LIMITS TEST REPORT



TEST RESULTS (ASTM D4318-10 (MULTIPOINT TEST))

	Sample Location	Sample Number	Sample Depth (ft)	LL	PL	PI	%<#40	%<#200	AASHTO	USCS	Material Description
■	B-01	S-10	38.5-39.75	NP	NP	NP	95.3	75.6	A-4	ML	Silt with Sand Trace Mica Yellow Light Brown
◆	B-03	S-2	3.5-5	44	28	16	91.7	71.0	A-7-6	ML	Silt with Sand Trace Mica Yellow Light Brown
▲	B-05	S-9	33.5-35	45	30	15	99.5	87.5	A-7-5	ML	Silt Trace Mica Yellow Light Brown
●	B-07	S-3	6-7.5	60	28	32	93.9	86.0	A-7-6	CH	Fat Clay Light Brown
✱	B-09	S-4	8.5-10	NP	NP	NP	95.9	72.7	A-4	ML	Silt with Sand Trace Mica Yellow Light Brown
⊗	B-11	S-1	1-2.5	45	28	17	95.3	81.4	A-7-6	ML	Silt with Sand Trace Mica Brown
□	B-13	S-2	3.5-5	46	28	18	89.9	77.6	A-7-6	ML	Silt with Sand Trace Mica Yellowish Light Brown
◇	B-14	S-2	3.5-5	51	30	21	94.7	86.3	A-7-5	MH	Elastic Silt Trace Mica Light Brown
△	B-15	S-1	1-2.5	44	26	18	85.8	76.5	A-7-6	CL	Lean Clay with Sand Light Brown
×	B-16	S-3	6-7.5	NP	NP	NP	85.3	54.6	A-4	ML	Sandy Silt Trace Mica Yellowish Light Brown

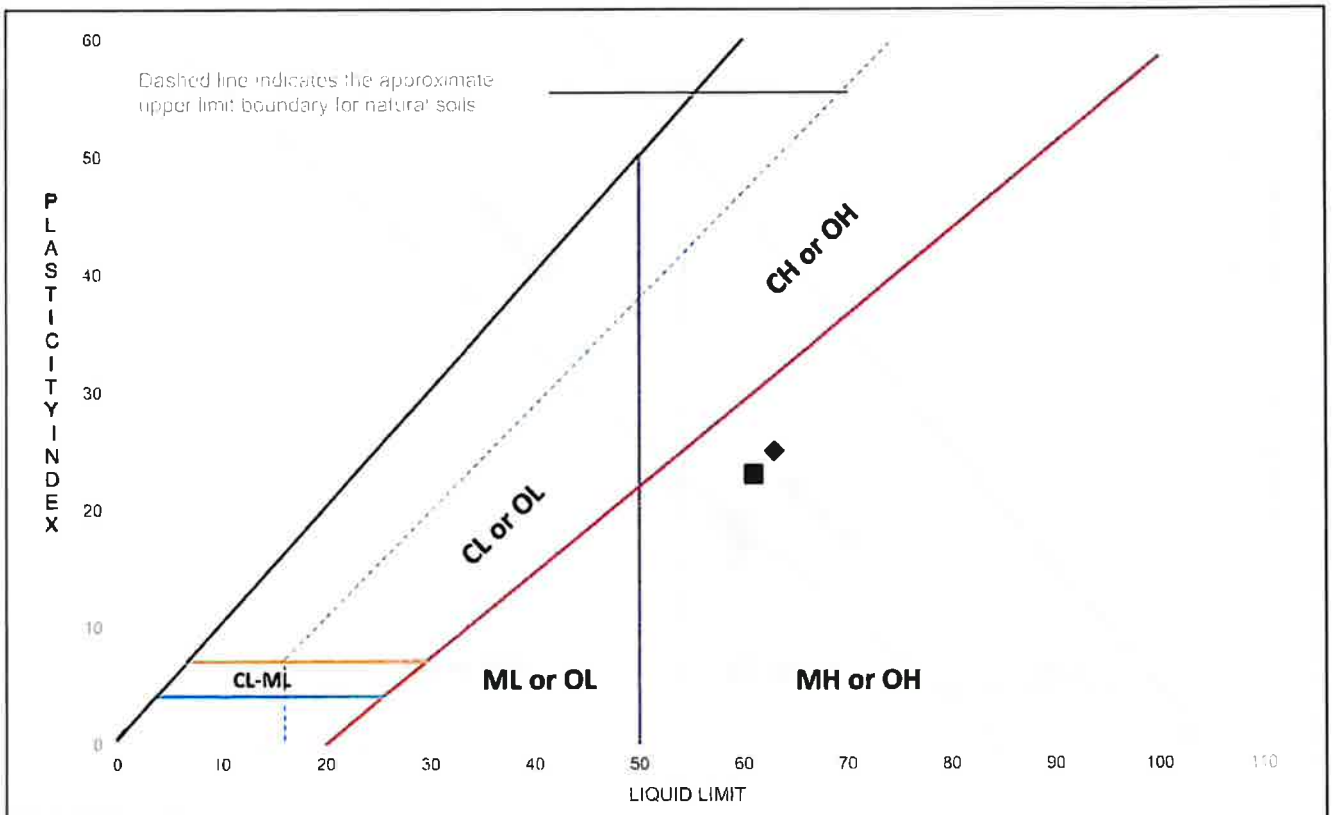
Project: Warrenton Data Center
Client:

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ECS Mid-Atlantic LLC - Chantilly	14026 Thunderbolt Place Suite 100 Chantilly, VA 20151-3232	(703)471-8400 (703)834-5527

Tested by	Checked by	Approved by	
jvong	Htran	Dtran	

LIQUID AND PLASTIC LIMITS TEST REPORT



TEST RESULTS (ASTM D4318-10 (MULTIPOINT TEST))

	Sample Location	Sample Number	Sample Depth (ft)	LL	PL	PI	%<#40	%<#200	AASHTO	USCS	Material Description
■	B-19	S-3	6-7.5	61	38	23	53.5	45.3	A-7-5	GM	Silty Gravel with Sand Trace Mica Yellowish Brown
◆	B-20	S-4	8.5-10	63	38	25	88.6	76.2	A-7-5	MH	Elastic Silt with Sand Trace Mica Yellowish Light Brown

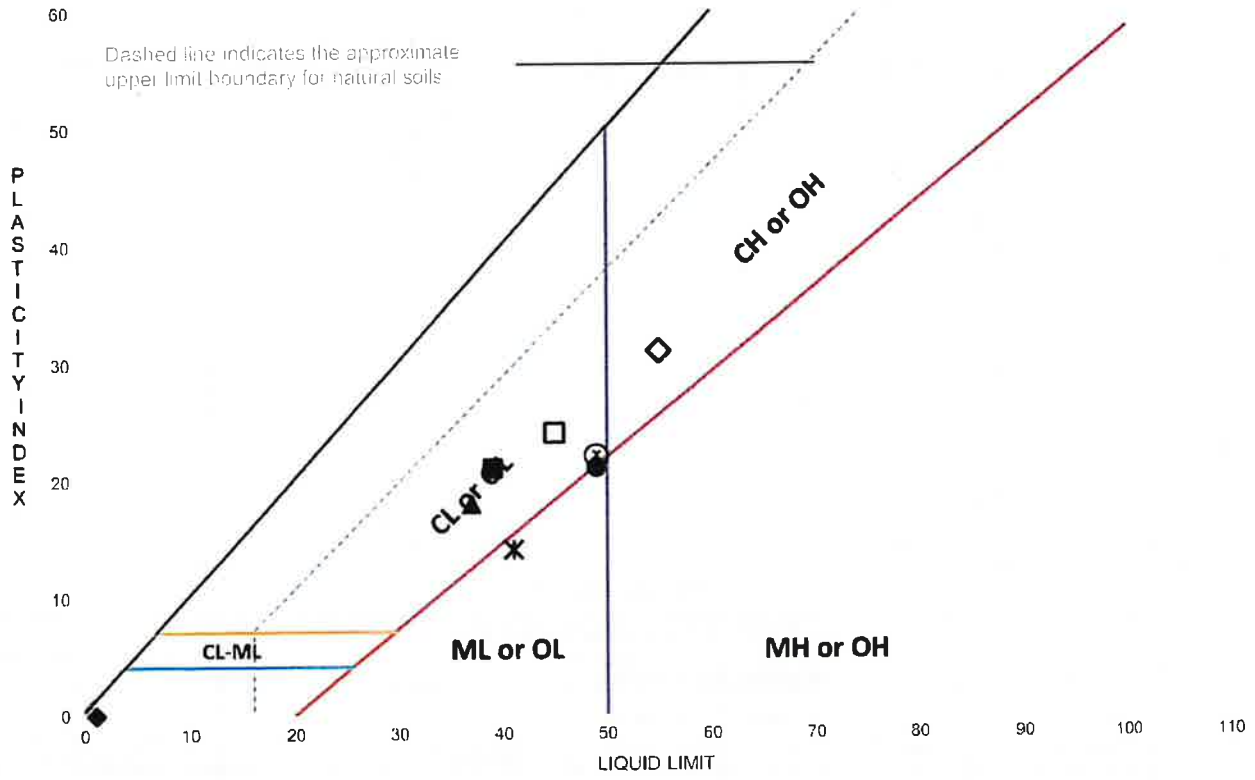
Project: Warrenton Data Center
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ECS Mid-Atlantic LLC - Chantilly	14026 Thunderbolt Place Suite 100 Chantilly, VA 20151-3232	(703)471-8400 (703)834-5527

Tested by	Checked by	Approved by	
jvong	Htran	Dtran	

LIQUID AND PLASTIC LIMITS TEST REPORT



TEST RESULTS (ASTM D4318-10 (MULTIPOINT TEST))

	Sample Location	Sample Number	Sample Depth (ft)	LL	PL	PI	%<#40	%<#200	AASHTO	USCS	Material Description
■	B-02	D3S-191	1-6	39	18	21	98.8	85.6	A-6	CL	Lean Clay Yellowish Brown
◆	B-04	D3S-188	1-6	NP	NP	NP	97.9	85.1	A-4	ML	Silt Trace Mica Yellowish Brown
▲	B-07	D3S-193	1-6	37	19	18	96.0	86.5	A-6	CL	Lean Clay Trace Mica Brown
●	B-09	D3S-189	1-6	49	28	21	91.1	76.4	A-7-6	ML	Silt with Sand Brwon
✱	B-11	D3S-194	1-6	41	27	14	97.9	82.5	A-7-6	ML	Silt with Sand Trace Mica Yellowish Brown
⊗	B-14	D3S-186	1-6	49	27	22	95.3	85.7	A-7-6	CL	Lean Clay with Sand Yellowisht Brown
□	B-15	D3S-187	1-6	45	21	24	92.4	81.6	A-7-6	CL	Lean Clay with Sand Yellowish Brown
◇	B-19	D3S-190	1-6	55	24	31	80.6	72.0	A-7-6	CH	Fat Clay with Sand Brown

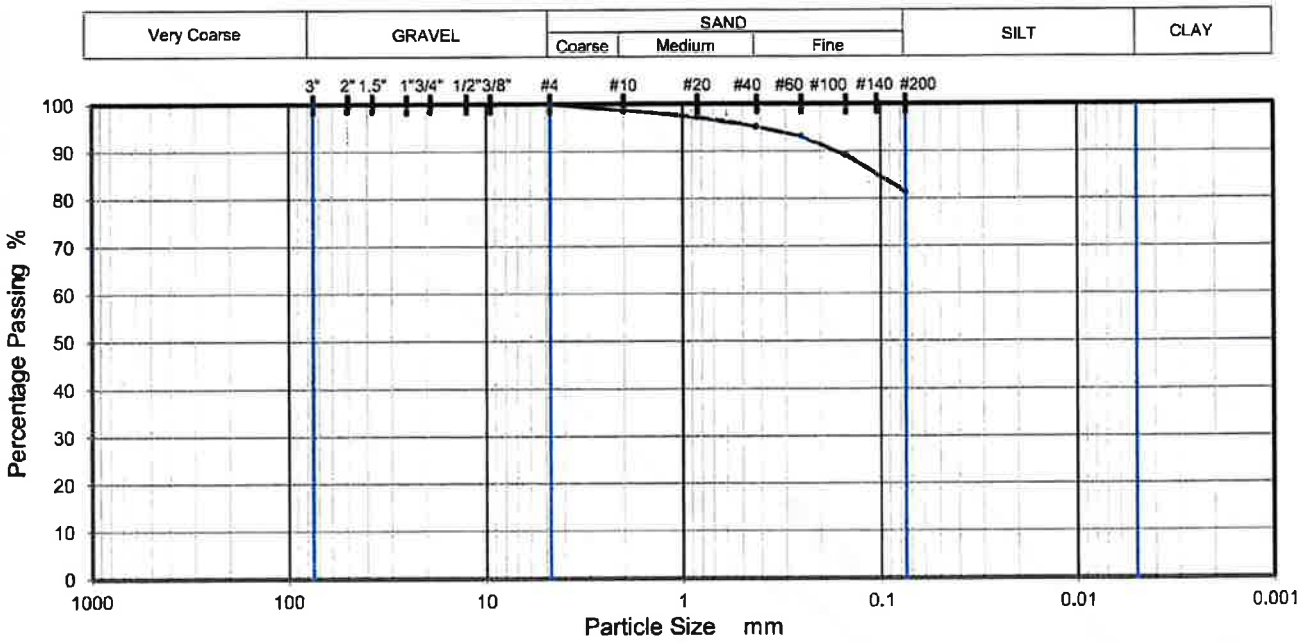
Project: Warrenton Dela Center
Client:

Project No.: 01:31153
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Office / Lab	Address	Office Number / Fax
ECS Mid-Atlantic LLC - Chantilly	14026 Thunderbolt Place Suite 100 Chantilly, VA 20151-3232	(703)471-8400 (703)834-5527

Tested by	Checked by	Approved by	
jvong	Htran	Dtran	

PARTICLE SIZE DISTRIBUTION



TEST RESULTS (ASTM D422-63(2007))

Sieving		Hydrometer Sedimentation	
Particle Size	% Passing	Particle Size mm	% Passing
3"	100.0		
#4	100.0		
#10	98.6		
#20	97.2		
#40	95.3		
#60	93.3		
#100	89.1		
#200	81.4		

Dry Mass of sample, g: 40.6

Sample Proportions	% dry mass
Very coarse, >3" sieve	0.0
Gravel, 3" to # 4 sieve	0.0
Coarse Sand, #4 to #10 sieve	1.4
Medium Sand, #10 to #40	3.3
Fine Sand, #40 to #200	13.9
Fines <#200	81.4

USCS	ML	Liquid Limit	45	D90	0.167	D50		D10	
AASHTO	A-7-6	Plastic Limit	28	D85	0.104	D30		Cu	
USCS Group Name	Silt with sand	Plasticity Index	17	D60		D15		Cc	

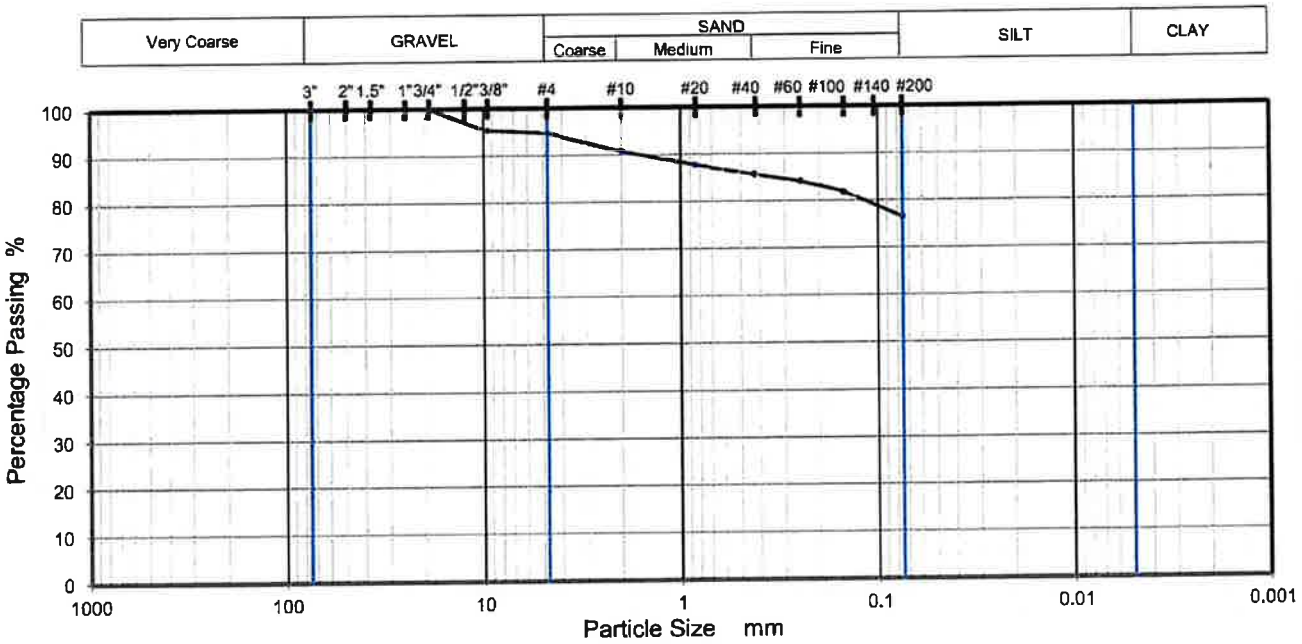
Project: Warrenton Data Center
Client:
Sample Description: Silt with Sand Trace Mica Brown
Sample Source: B-11

Project No.: 01:31153
Depth (ft): 1 - 2.5
Sample No.: S-1
Date Reported:

Office / Lab	Address	Office Number / Fax
ECS Mid-Atlantic LLC - Chantilly	14026 Thunderbolt Place Suite 100 Chantilly, VA 20151-3232	(703)471-8400 (703)834-5527

Tested by	Checked by	Approved by		Remarks
jvong	Htran	Dtran		

PARTICLE SIZE DISTRIBUTION



TEST RESULTS (ASTM D422-63(2007))

Sieving		Hydrometer Sedimentation	
Particle Size	% Passing	Particle Size mm	% Passing
3"	100.0		
3/4"	100.0		
3/8"	95.4		
#4	94.8		
#10	90.8		
#20	87.8		
#40	85.8		
#60	84.3		
#100	82.0		
#200	76.5		

Dry Mass of sample, g: 42.3

Sample Proportions	% dry mass
Very coarse, >3" sieve	0.0
Gravel, 3" to # 4 sieve	5.2
Coarse Sand, #4 to #10 sieve	4.0
Medium Sand, #10 to #40	5.0
Fine Sand, #40 to #200	9.3
Fines <#200	76.5

USCS	CL	Liquid Limit	44	D90	1.592	D50		D10	
AASHTO	A-7-6	Plastic Limit	26	D85	0.320	D30		Cu	
USCS Group Name	Lean clay with sand	Plasticity Index	18	D60		D15		Cc	

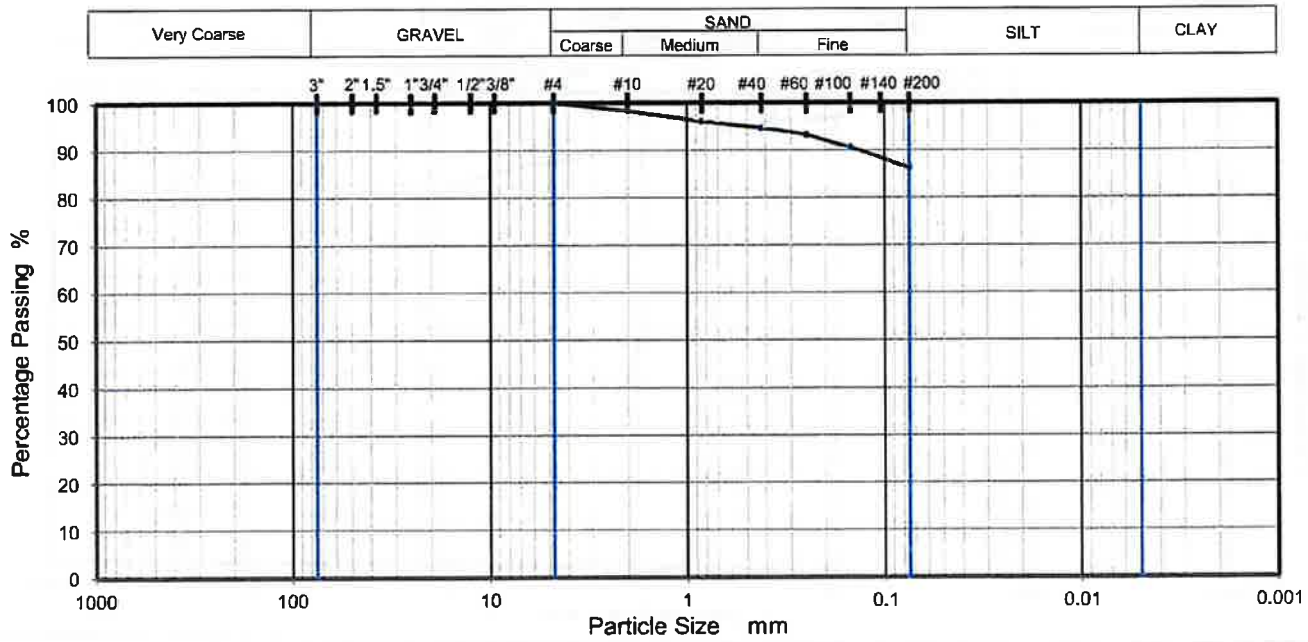
Project: Warrenton Data Center
Client:
Sample Description: Lean Clay with Sand Light Brown
Sample Source: B-15

Project No.: 01:31153
Depth (ft): 1 - 2.5
Sample No.: S-1
Date Reported:

Office / Lab	Address	Office Number / Fax
ECS Mid-Atlantic LLC - Chantilly	14026 Thunderbolt Place Suite 100 Chantilly, VA 20151-3232	(703)471-8400 (703)834-5527

Tested by	Checked by	Approved by		Remarks
jvong	Htran	Dtran		

PARTICLE SIZE DISTRIBUTION



TEST RESULTS (ASTM D422-63(2007))

Sieving		Hydrometer Sedimentation	
Particle Size	% Passing	Particle Size mm	% Passing
3"	100.0		
#4	100.0		
#10	98.3		
#20	96.1		
#40	94.7		
#60	93.4		
#100	90.7		
#200	86.3		

Dry Mass of sample, g: 43.6

Sample Proportions	% dry mass
Very coarse, >3" sieve	0.0
Gravel, 3" to # 4 sieve	0.0
Coarse Sand, #4 to #10 sieve	1.7
Medium Sand, #10 to #40	3.6
Fine Sand, #40 to #200	8.4
Fines <#200	86.3

USCS	MH	Liquid Limit	51	D90	0.134	D50		D10	
AASHTO	A-7-5	Plastic Limit	30	D85		D30		Cu	
USCS Group Name	Elastic silt	Plasticity Index	21	D60		D15		Cc	

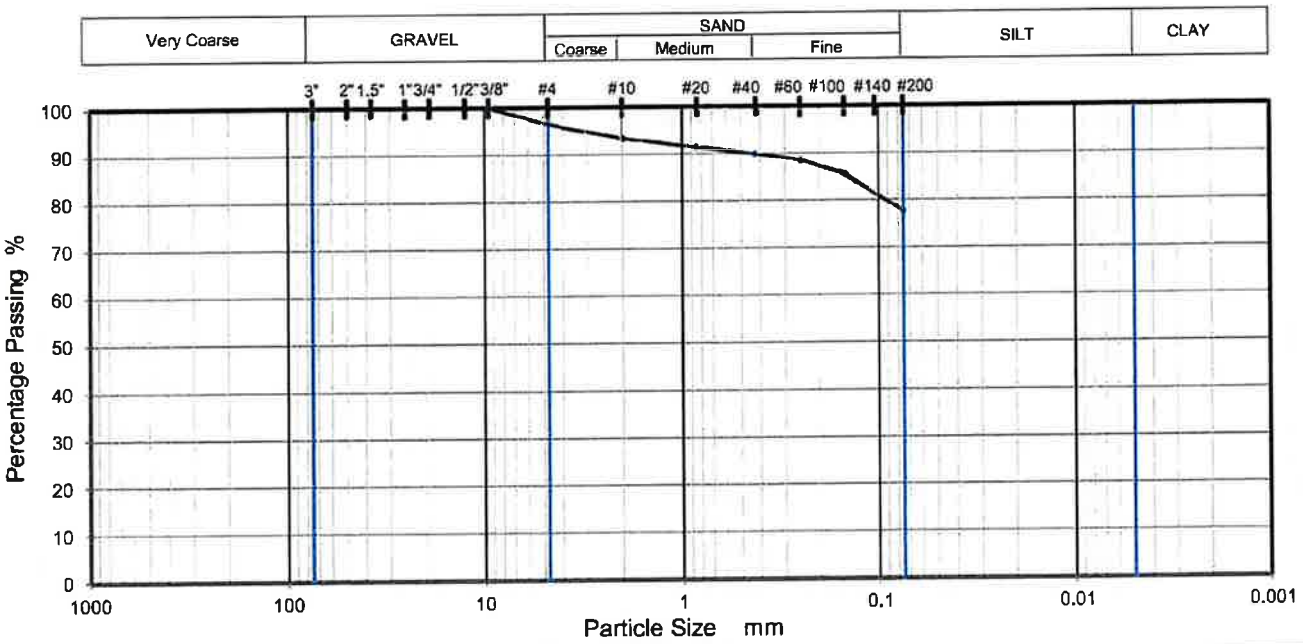
Project: Warrenton Data Center
Client:
Sample Description: Elastic Silt Trace Mica Light Brown
Sample Source: B-14

Project No.: 01:31153
Depth (ft): 3.5 - 5
Sample No.: S-2
Date Reported:

Office / Lab	Address	Office Number / Fax
ECS Mid-Atlantic LLC - Chantilly	14026 Thunderbolt Place Suite 100 Chantilly, VA 20151-3232	(703)471-8400 (703)834-5527

Tested by	Checked by	Approved by		Remarks
jvong	Htran	Dtran		

PARTICLE SIZE DISTRIBUTION



TEST RESULTS (ASTM D422-63(2007))

Sieving		Hydrometer Sedimentation	
Particle Size	% Passing	Particle Size mm	% Passing
3"	100.0		
3/8"	100.0		
#4	96.5		
#10	93.5		
#20	91.4		
#40	89.9		
#60	88.6		
#100	85.7		
#200	77.6		

Dry Mass of sample, g: 41.7

Sample Proportions	% dry mass
Very coarse, >3" sieve	0.0
Gravel, 3" to # 4 sieve	3.5
Coarse Sand, #4 to #10 sieve	3.0
Medium Sand, #10 to #40	3.6
Fine Sand, #40 to #200	12.3
Fines <#200	77.6

USCS	ML	Liquid Limit	46	D90	0.445	D50		D10	
AASHTO	A-7-6	Plastic Limit	28	D85	0.141	D30		Cu	
USCS Group Name	Silt with sand	Plasticity Index	18	D60		D15		Cc	

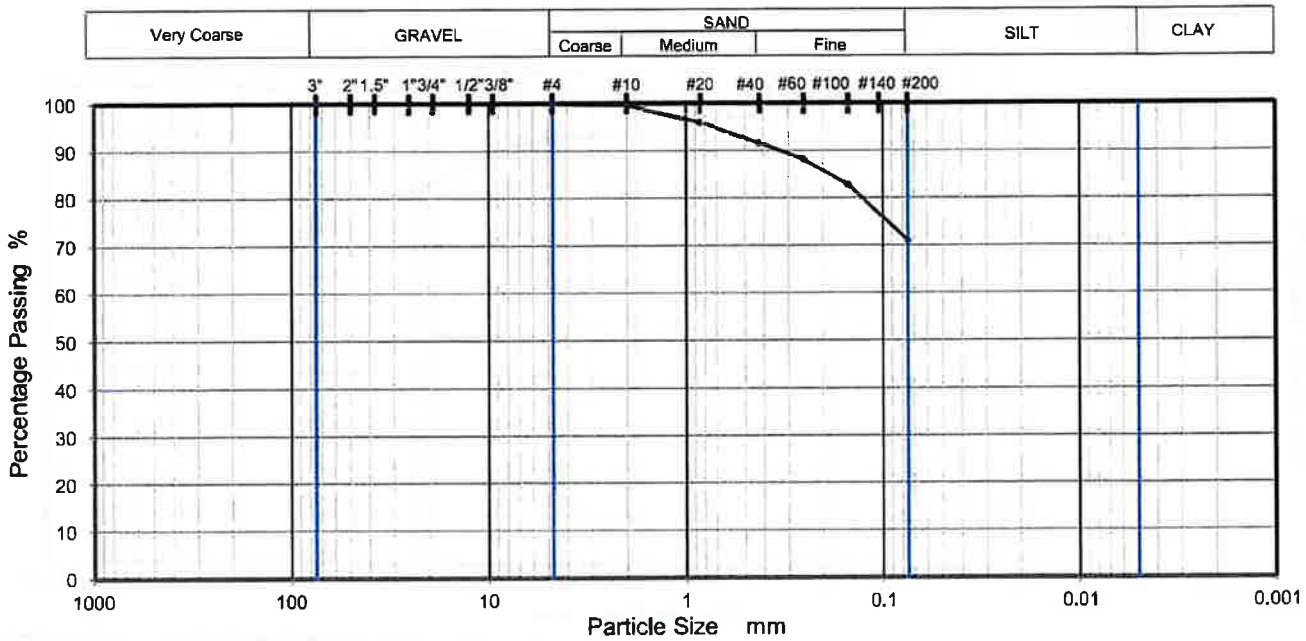
Project: Warrenton Data Center
Client:
Sample Description: Silt with Sand Trace Mica Yellowish Light Brown
Sample Source: B-13

Project No.: 01:31153
Depth (ft): 3.5 - 5
Sample No.: S-2
Date Reported:

Office / Lab	Address	Office Number / Fax
ECS Mid-Atlantic LLC - Chantilly	14026 Thunderbolt Place Suite 100 Chantilly, VA 20151-3232	(703)471-8400 (703)834-5527

Tested by	Checked by	Approved by		Remarks
jvong	Htran	Dtran		

PARTICLE SIZE DISTRIBUTION



TEST RESULTS (ASTM D422-63(2007))

Sieving		Hydrometer Sedimentation	
Particle Size	% Passing	Particle Size mm	% Passing
3"	100.0		
#4	100.0		
#10	99.6		
#20	96.1		
#40	91.7		
#60	88.2		
#100	82.9		
#200	71.0		

Dry Mass of sample, g: 40.9

Sample Proportions	% dry mass
Very coarse, >3" sieve	0.0
Gravel, 3" to # 4 sieve	0.0
Coarse Sand, #4 to #10 sieve	0.4
Medium Sand, #10 to #40	7.9
Fine Sand, #40 to #200	20.7
Fines <#200	71.0

USCS	ML	Liquid Limit	44	D90	0.328	D50		D10	
AASHTO	A-7-6	Plastic Limit	28	D85	0.184	D30		Cu	
USCS Group Name	Silt with sand	Plasticity Index	16	D60		D15		Cc	

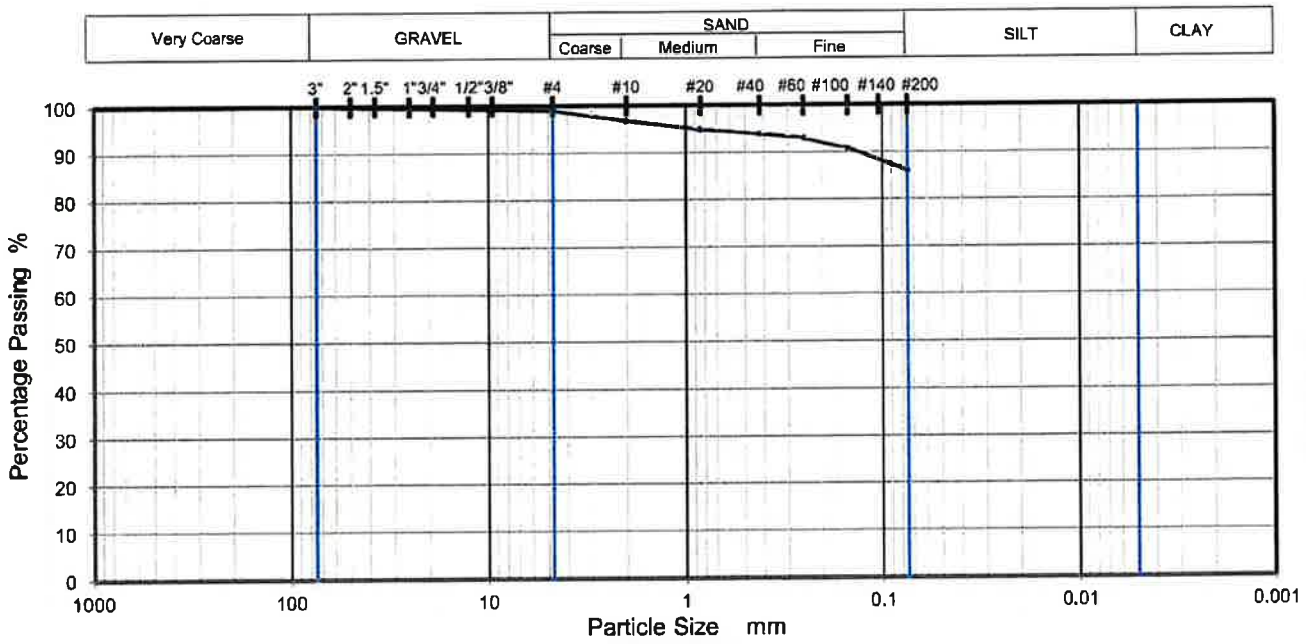
Project: Warrenton Data Center
Client:
Sample Description: Silt with Sand Trace Mica Yellow Light Brown
Sample Source: B-03

Project No.: 01:31153
Depth (ft): 3.5 - 5
Sample No.: S-2
Date Reported:

Office / Lab	Address	Office Number / Fax
ECS Mid-Atlantic LLC - Chantilly	14026 Thunderbolt Place Suite 100 Chantilly, VA 20151-3232	(703)471-8400 (703)834-5527

Tested by	Checked by	Approved by		Remarks
jvong	Htran	Dtran		

PARTICLE SIZE DISTRIBUTION



TEST RESULTS (ASTM D422-63(2007))

Sieving		Hydrometer Sedimentation	
Particle Size	% Passing	Particle Size mm	% Passing
3"	100.0		
#4	99.0		
#10	96.7		
#20	94.9		
#40	93.9		
#60	93.0		
#100	90.9		
#200	86.0		

Dry Mass of sample, g: 42.5

Sample Proportions	% dry mass
Very coarse, >3" sieve	0.0
Gravel, 3" to # 4 sieve	1.0
Coarse Sand, #4 to #10 sieve	2.3
Medium Sand, #10 to #40	2.8
Fine Sand, #40 to #200	7.9
Fines <#200	86.0

USCS	CH	Liquid Limit	60	D90	0.132	D50		D10	
AASHTO	A-7-6	Plastic Limit	28	D85		D30		Cu	
USCS Group Name	Fat clay	Plasticity Index	32	D60		D15		Cc	

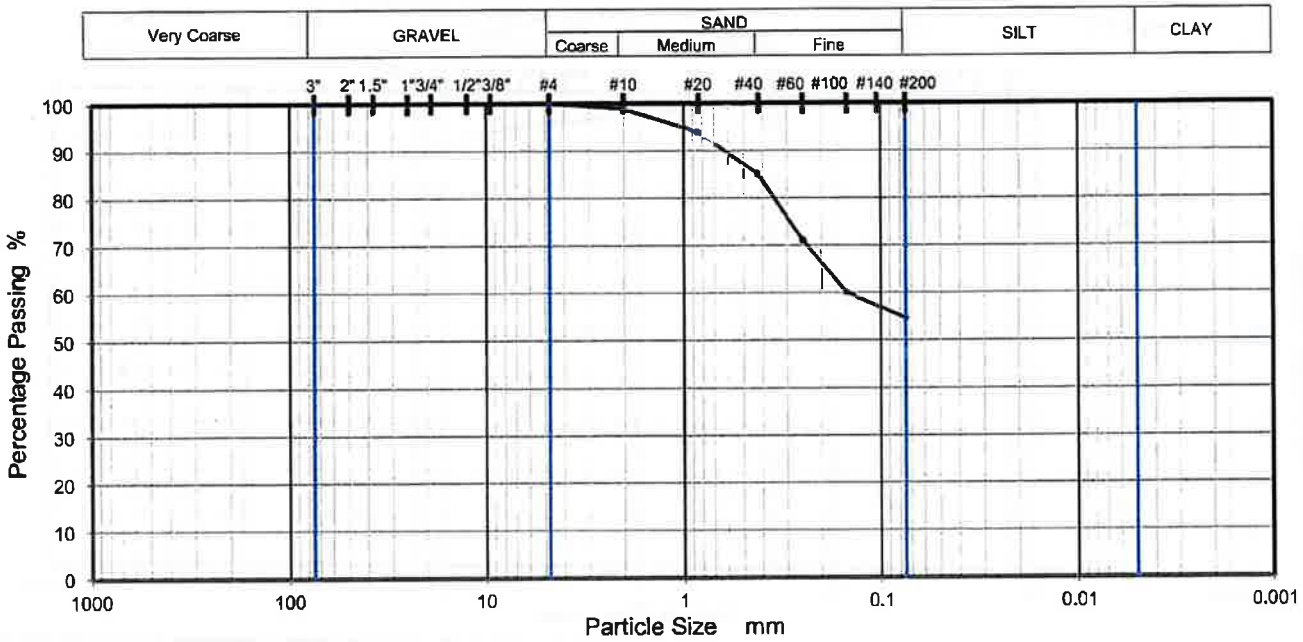
Project: Warrenton Data Center
Client:
Sample Description: Fat Clay Light Brown
Sample Source: B-07

Project No.: 01:31153
Depth (ft): 6 - 7.5
Sample No.: S-3
Date Reported:

Office / Lab	Address	Office Number / Fax
ECS Mid-Atlantic LLC - Chantilly	14026 Thunderbolt Place Suite 100 Chantilly, VA 20151-3232	(703)471-8400 (703)834-5527

Tested by	Checked by	Approved by		Remarks
jvong	Htran	Dtran		

PARTICLE SIZE DISTRIBUTION



TEST RESULTS (ASTM D422-63(2007))

Sieving		Hydrometer Sedimentation	
Particle Size	% Passing	Particle Size mm	% Passing
3"	100.0		
#4	100.0		
#10	98.9		
#20	94.1		
#40	85.3		
#60	71.2		
#100	60.1		
#200	54.6		

Dry Mass of sample, g: 41.9

Sample Proportions	% dry mass
Very coarse, >3" sieve	0.0
Gravel, 3" to # 4 sieve	0.0
Coarse Sand, #4 to #10 sieve	1.1
Medium Sand, #10 to #40	13.6
Fine Sand, #40 to #200	30.7
Fines <#200	54.6

USCS	ML	Liquid Limit	NP	D90	0.615	D50		D10	
AASHTO	A-4	Plastic Limit	NP	D85	0.420	D30		Cu	
USCS Group Name	Sandy silt	Plasticity Index	NP	D60	0.148	D15		Cc	

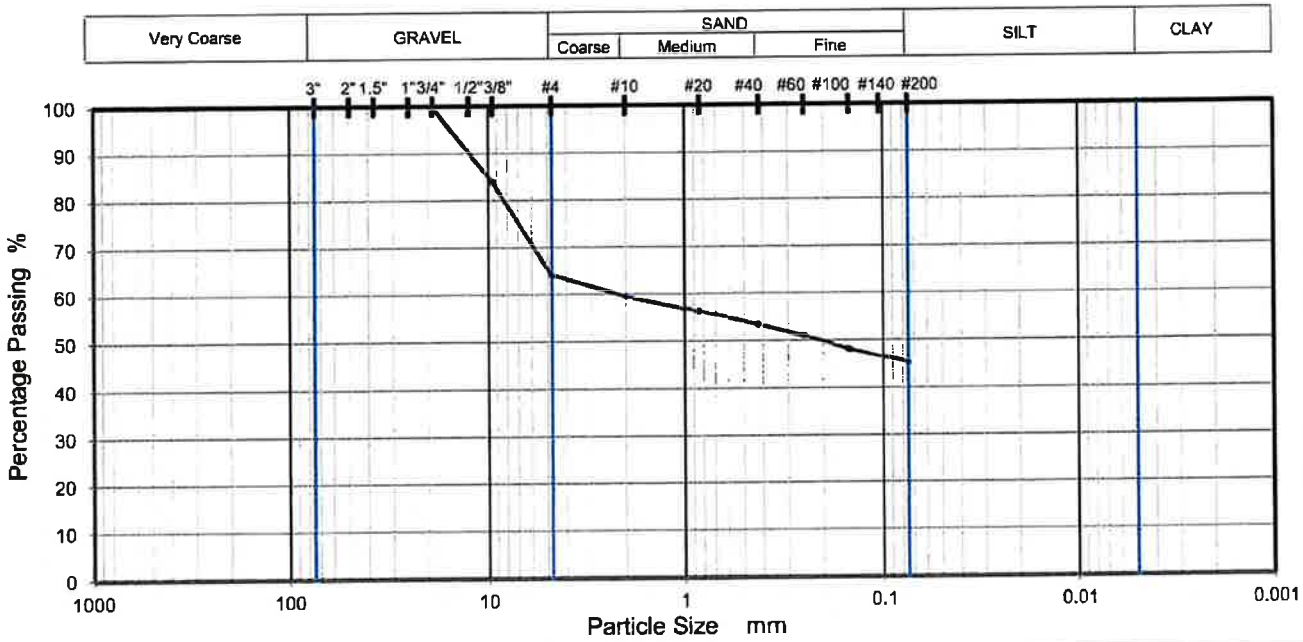
Project: Warrenton Data Center
Client:
Sample Description: Sandy Silt Trace Mica Yellowish Light Brown
Sample Source: B-16

Project No.: 01:31153
Depth (ft): 6 - 7.5
Sample No.: S-3
Date Reported:

Office / Lab	Address	Office Number / Fax
ECS Mid-Atlantic LLC - Chantilly	14026 Thunderbolt Place Suite 100 Chantilly, VA 20151-3232	(703)471-8400 (703)834-5527

Tested by	Checked by	Approved by		Remarks
jvong	Htran	Dtran		

PARTICLE SIZE DISTRIBUTION



TEST RESULTS (ASTM D422-63(2007))

Sieving		Hydrometer Sedimentation	
Particle Size	% Passing	Particle Size mm	% Passing
3"	100.0		
3/4"	100.0		
3/8"	83.9		
#4	64.1		
#10	59.5		
#20	56.3		
#40	53.5		
#60	51.0		
#100	48.3		
#200	45.3		

Dry Mass of sample, g: 41.9

Sample Proportions	% dry mass
Very coarse, >3" sieve	0.0
Gravel, 3" to # 4 sieve	35.9
Coarse Sand, #4 to #10 sieve	4.6
Medium Sand, #10 to #40	6.0
Fine Sand, #40 to #200	8.2
Fines <#200	45.3

USCS	GM	Liquid Limit	61	D90	12.350	D50	0.207	D10	
AASHTO	A-7-5	Plastic Limit	38	D85	9.961	D30		Cu	
USCS Group Name	Silty gravel with sand	Plasticity Index	23	D60	2.197	D15		Cc	

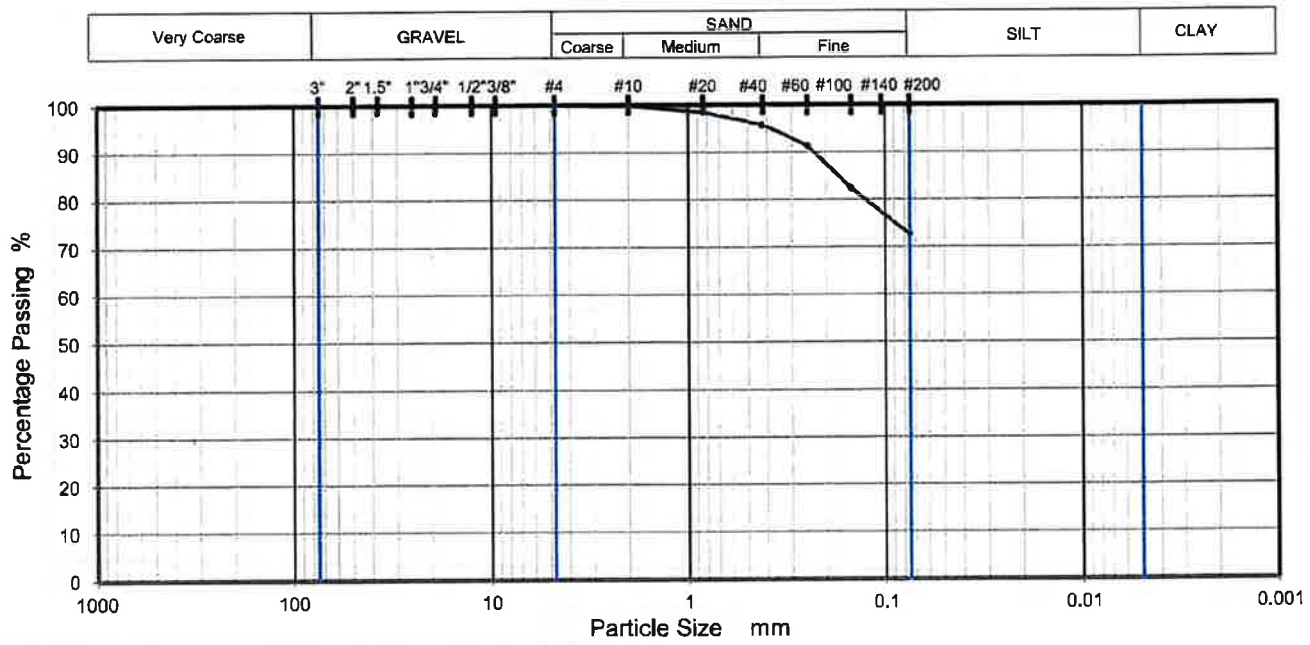
Project: Warrenton Data Center
Client:
Sample Description: Silty Gravel with Sand Trace Mica Yellowish Brown
Sample Source: B-19

Project No.: 01:31153
Depth (ft): 6 - 7.5
Sample No.: S-3
Date Reported:

Office / Lab	Address	Office Number / Fax
ECS Mid-Atlantic LLC - Chantilly	14026 Thunderbolt Place Suite 100 Chantilly, VA 20151-3232	(703)471-8400 (703)834-5527

Tested by	Checked by	Approved by		Remarks
jvong	Htran	Dtran		

PARTICLE SIZE DISTRIBUTION



TEST RESULTS (ASTM D422-63(2007))

Sieving		Hydrometer Sedimentation	
Particle Size	% Passing	Particle Size mm	% Passing
3"	100.0		
#4	100.0		
#10	99.8		
#20	98.5		
#40	95.9		
#60	91.5		
#100	82.4		
#200	72.7		

Dry Mass of sample, g: 41.7

Sample Proportions	% dry mass
Very coarse, >3" sieve	0.0
Gravel, 3" to # 4 sieve	0.0
Coarse Sand, #4 to #10 sieve	0.2
Medium Sand, #10 to #40	3.9
Fine Sand, #40 to #200	23.2
Fines <#200	72.7

USCS	ML	Liquid Limit	NP	D90	0.230	D50		D10	
AASHTO	A-4	Plastic Limit	NP	D85	0.174	D30		Cu	
USCS Group Name	Silt with sand	Plasticity Index	NP	D60		D15		Cc	

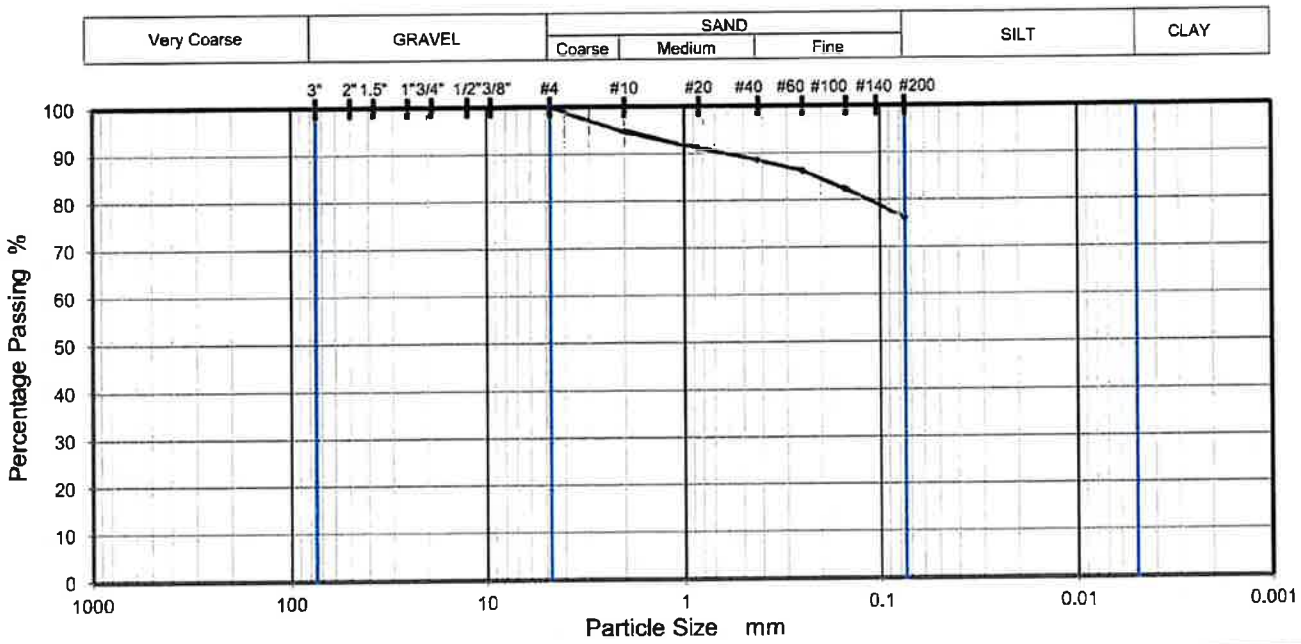
Project: Warrenton Data Center
Client:
Sample Description: Silt with Sand Trace Mica Yellow Light Brown
Sample Source: B-09

Project No.: 01:31153
Depth (ft): 8.5 - 10
Sample No.: S-4
Date Reported:

Office / Lab	Address	Office Number / Fax
ECS Mid-Atlantic LLC - Chantilly	14026 Thunderbolt Place Suite 100 Chantilly, VA 20151-3232	(703)471-8400 (703)834-5527

Tested by	Checked by	Approved by		Remarks
jvong	Htran	Dtran		

PARTICLE SIZE DISTRIBUTION



TEST RESULTS (ASTM D422-63(2007))

Sieving		Hydrometer Sedimentation	
Particle Size	% Passing	Particle Size mm	% Passing
3"	100.0		
#4	100.0		
#10	94.8		
#20	91.2		
#40	88.6		
#60	86.4		
#100	82.4		
#200	76.2		

Dry Mass of sample, g: 44.4

Sample Proportions	% dry mass
Very coarse, >3" sieve	0.0
Gravel, 3" to # 4 sieve	0.0
Coarse Sand, #4 to #10 sieve	5.2
Medium Sand, #10 to #40	6.2
Fine Sand, #40 to #200	12.4
Fines <#200	76.2

USCS	MH	Liquid Limit	63	D90	0.617	D50		D10	
AASHTO	A-7-5	Plastic Limit	38	D85	0.209	D30		Cu	
USCS Group Name	Elastic silt with sand	Plasticity Index	25	D60		D15		Cc	

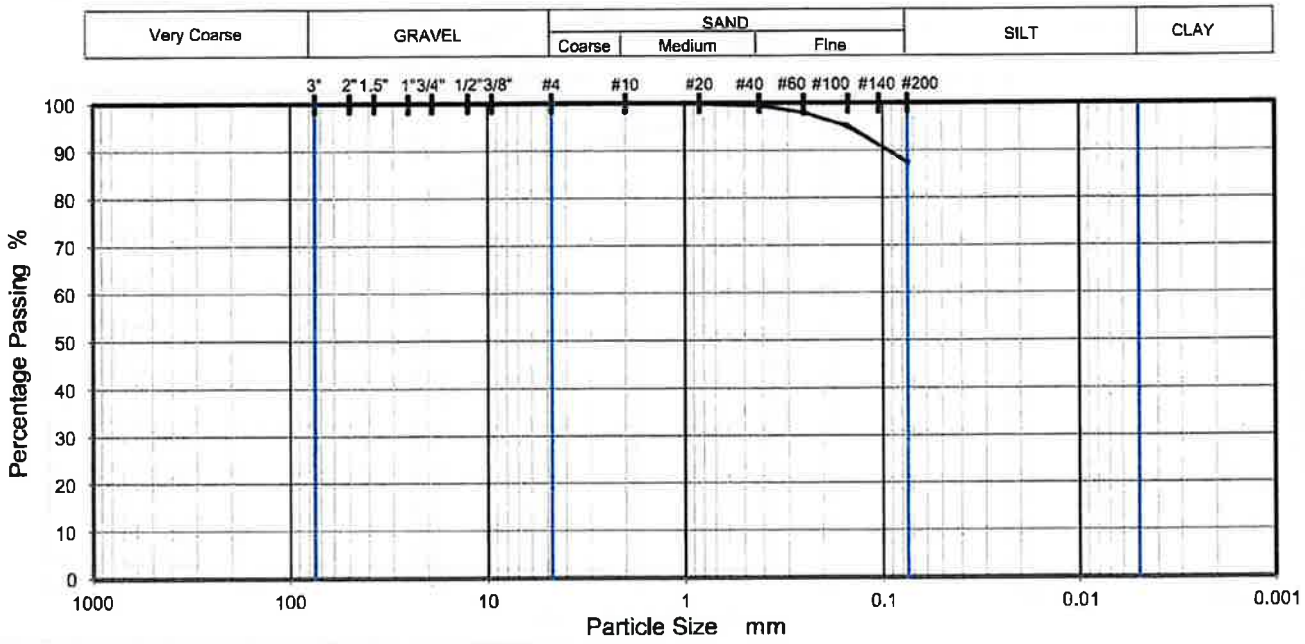
Project: Warrenton Data Center
Client:
Sample Description: Elastic Silt with Sand Trace Mica Yellowish Light Brown
Sample Source: B-20

Project No.: 01:31153
Depth (ft): 8.5 - 10
Sample No.: S-4
Date Reported:

Office / Lab	Address	Office Number / Fax
ECS Mid-Atlantic LLC - Chantilly	14026 Thunderbolt Place Suite 100 Chantilly, VA 20151-3232	(703)471-8400 (703)834-5527

Tested by	Checked by	Approved by		Remarks
jvong	Htran	Dtran		

PARTICLE SIZE DISTRIBUTION



TEST RESULTS (ASTM D422-63(2007))

Sieving		Hydrometer Sedimentation	
Particle Size	% Passing	Particle Size mm	% Passing
3"	100.0		
#4	100.0		
#10	100.0		
#20	100.0		
#40	99.5		
#60	98.1		
#100	95.2		
#200	87.5		

Dry Mass of sample, g: 41.8

Sample Proportions	% dry mass
Very coarse, >3" sieve	0.0
Gravel, 3" to # 4 sieve	0.0
Coarse Sand, #4 to #10 sieve	0.0
Medium Sand, #10 to #40	0.5
Fine Sand, #40 to #200	12.0
Fines <#200	87.5

USCS	ML	Liquid Limit	45	D90	0.094	D50		D10	
AASHTO	A-7-5	Plastic Limit	30	D85		D30		Cu	
USCS Group Name	Silt	Plasticity Index	15	D60		D15		Cc	

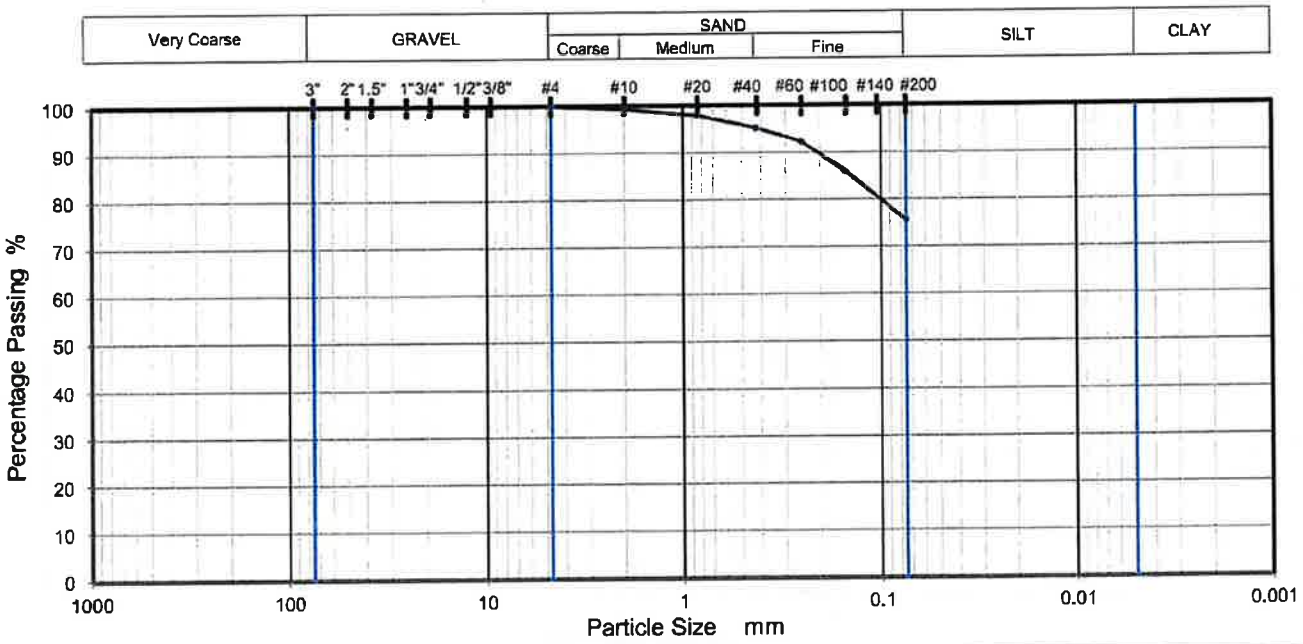
Project: Warrenton Data Center
Client:
Sample Description: Silt Trace Mica Yellow Light Brown
Sample Source: B-05

Project No.: 01:31153
Depth (ft): 33.5 - 35
Sample No.: S-9
Date Reported:

Office / Lab	Address	Office Number / Fax
ECS Mid-Atlantic LLC - Chantilly	14026 Thunderbolt Place Suite 100 Chantilly, VA 20151-3232	(703)471-8400 (703)834-5527

Tested by	Checked by	Approved by		Remarks
jvong	Htran	Dtran		

PARTICLE SIZE DISTRIBUTION



TEST RESULTS (ASTM D422-63(2007))

Sieving		Hydrometer Sedimentation	
Particle Size	% Passing	Particle Size mm	% Passing
3"	100.0		
#4	100.0		
#10	99.3		
#20	97.9		
#40	95.3		
#60	92.4		
#100	86.1		
#200	75.6		

Dry Mass of sample, g: 41.5

Sample Proportions	% dry mass
Very coarse, >3" sieve	0.0
Gravel, 3" to # 4 sieve	0.0
Coarse Sand, #4 to #10 sieve	0.7
Medium Sand, #10 to #40	4.0
Fine Sand, #40 to #200	19.7
Fines <#200	75.6

USCS	ML	Liquid Limit	NP	D90	0.206	D50		D10	
AASHTO	A-4	Plastic Limit	NP	D85	0.140	D30		Cu	
USCS Group Name	Silt with sand	Plasticity Index	NP	D60		D15		Cc	

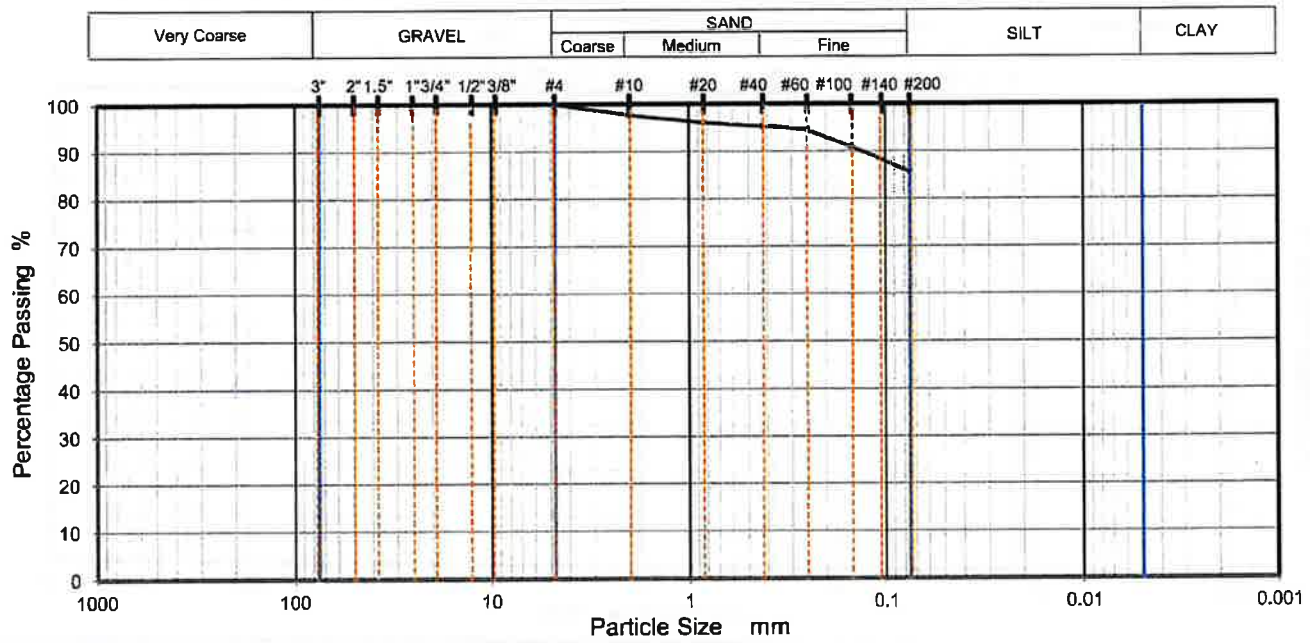
Project: Warrenton Data Center
Client:
Sample Description: Silt with Sand Trace Mica Yellow Light Brown
Sample Source: B-01

Project No.: 01:31153
Depth (ft): 38.5 - 39.75
Sample No.: S-10
Date Reported:

Office / Lab	Address	Office Number / Fax
ECS Mid-Atlantic LLC - Chantilly	14026 Thunderbolt Place Suite 100 Chantilly, VA 20151-3232	(703)471-8400 (703)834-5527

Tested by	Checked by	Approved by		Remarks
jvong	Htran	Dtran		

PARTICLE SIZE DISTRIBUTION



TEST RESULTS (ASTM D422-63(2007))

Sieving		Hydrometer Sedimentation	
Particle Size	% Passing	Particle Size mm	% Passing
3"	100.0		
#4	100.0		
#10	97.6		
#20	96.1		
#40	95.3		
#60	94.5		
#100	91.0		
#200	85.7		

Dry Mass of sample, g: 53.3

Sample Proportions	% dry mass
Very coarse, >3" sieve	0.0
Gravel, 3" to # 4 sieve	0.0
Coarse Sand, #4 to #10 sieve	2.4
Medium Sand, #10 to #40	2.3
Fine Sand, #40 to #200	9.6
Fines <#200	85.7

USCS	CL	Liquid Limit	49	D90	0.132	D50		D10	
AASHTO	A-7-6	Plastic Limit	27	D85		D30		Cu	
USCS Group Name	Lean clay	Plasticity Index	22	D60		D15		Cc	

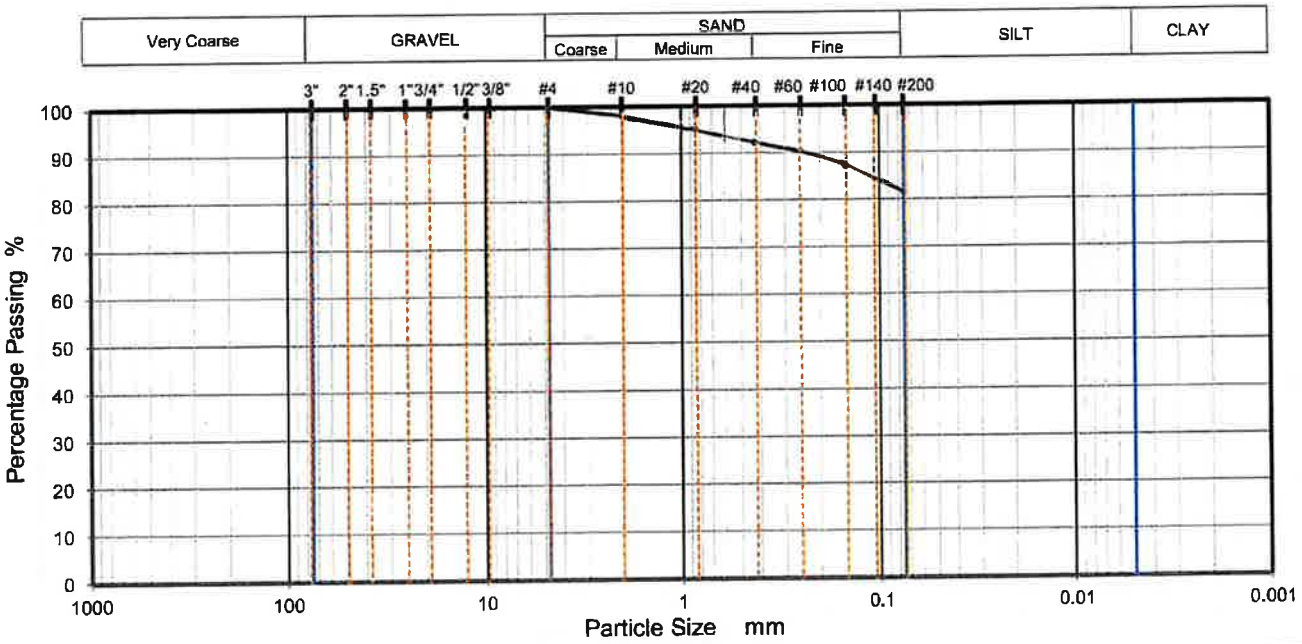
Project: Warrenton Data Center
Client:
Sample Description: Lean Clay with Sand Yellowisht Brown
Sample Source: B-14

Project No.: 01:31153
Depth (ft): 1 - 6
Sample No.: D3S-186
Date Reported:

Office / Lab	Address	Office Number / Fax
ECS Mid-Atlantic LLC - Chantilly	14026 Thunderbolt Place Suite 100 Chantilly, VA 20151-3232	(703)471-8400 (703)834-5527

Tested by	Checked by	Approved by		Remarks
jvong	Htran	Dtran		

PARTICLE SIZE DISTRIBUTION



TEST RESULTS (ASTM D422-63(2007))

Sieving		Hydrometer Sedimentation	
Particle Size	% Passing	Particle Size mm	% Passing
3"	100.0		
#4	100.0		
#10	98.1		
#20	95.1		
#40	92.4		
#60	90.3		
#100	87.6		
#200	81.6		

Dry Mass of sample, g: 64.5

Sample Proportions	% dry mass
Very coarse, >3" sieve	0.0
Gravel, 3" to # 4 sieve	0.0
Coarse Sand, #4 to #10 sieve	1.9
Medium Sand, #10 to #40	5.7
Fine Sand, #40 to #200	10.8
Fines <#200	81.6

USCS	CL	Liquid Limit	45	D90	0.236	D50		D10	
AASHTO	A-7-6	Plastic Limit	21	D85	0.111	D30		Cu	
USCS Group Name	Lean clay with sand	Plasticity Index	24	D60		D15		Cc	

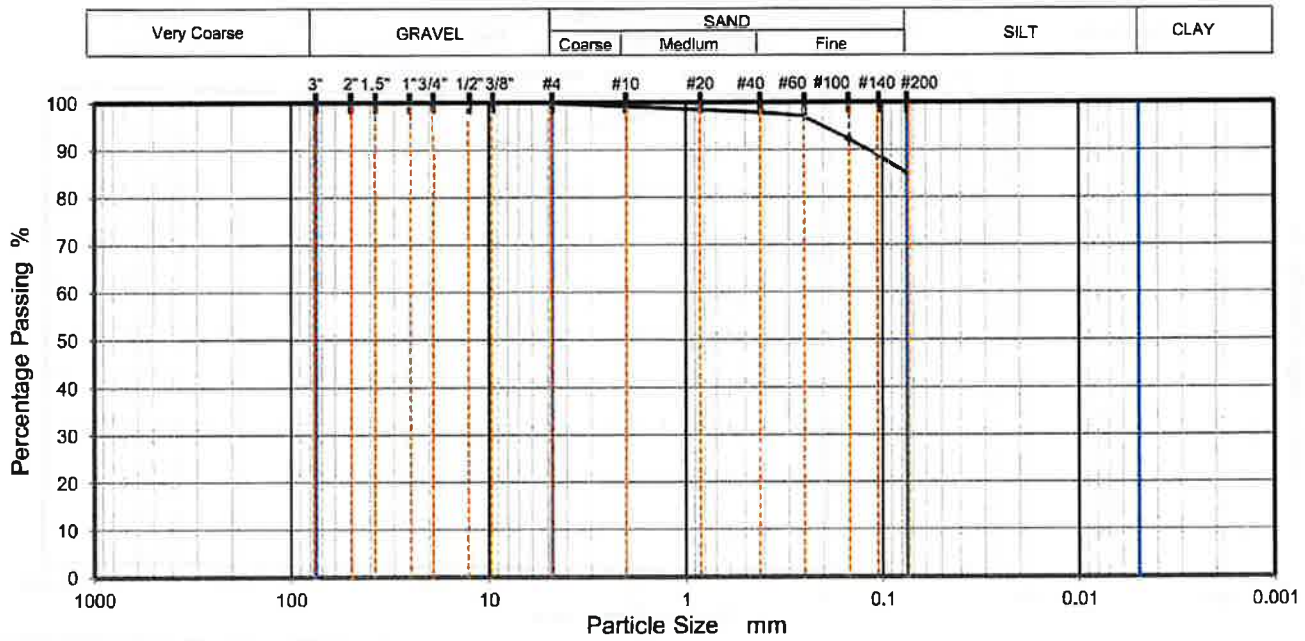
Project: Warrenton Data Center
Client:
Sample Description: Lean Clay with Sand Yellowish Brown
Sample Source: B-15

Project No.: 01:31153
Depth (ft): 1 - 6
Sample No.: D3S-187
Date Reported:

Office / Lab	Address	Office Number / Fax
ECS Mid-Atlantic LLC - Chantilly	14026 Thunderbolt Place Suite 100 Chantilly, VA 20151-3232	(703)471-8400 (703)834-5527

Tested by	Checked by	Approved by		Remarks
jvong	Htran	Dtran		

PARTICLE SIZE DISTRIBUTION



TEST RESULTS (ASTM D422-63(2007))

Sieving		Hydrometer Sedimentation	
Particle Size	% Passing	Particle Size mm	% Passing
3"	100.0		
2"	100.0		
1 1/2"	100.0		
1"	100.0		
3/4"	100.0		
3/8"	100.0		
#4	100.0		
#10	99.2		
#20	98.5		
#40	97.9		
#60	97.1		
#100	92.5		
#200	85.1		

Dry Mass of sample, g: 54.9

Sample Proportions	% dry mass
Very coarse, >3" sieve	0.0
Gravel, 3" to # 4 sieve	0.0
Coarse Sand, #4 to #10 sieve	0.8
Medium Sand, #10 to #40	1.3
Fine Sand, #40 to #200	12.8
Fines <#200	85.1

USCS	ML	Liquid Limit	NP	D90	0.119	D50		D10	
AASHTO	A-4	Plastic Limit	NP	D85		D30		Cu	
USCS Group Name	Silt	Plasticity Index	NP	D60		D15		Cc	

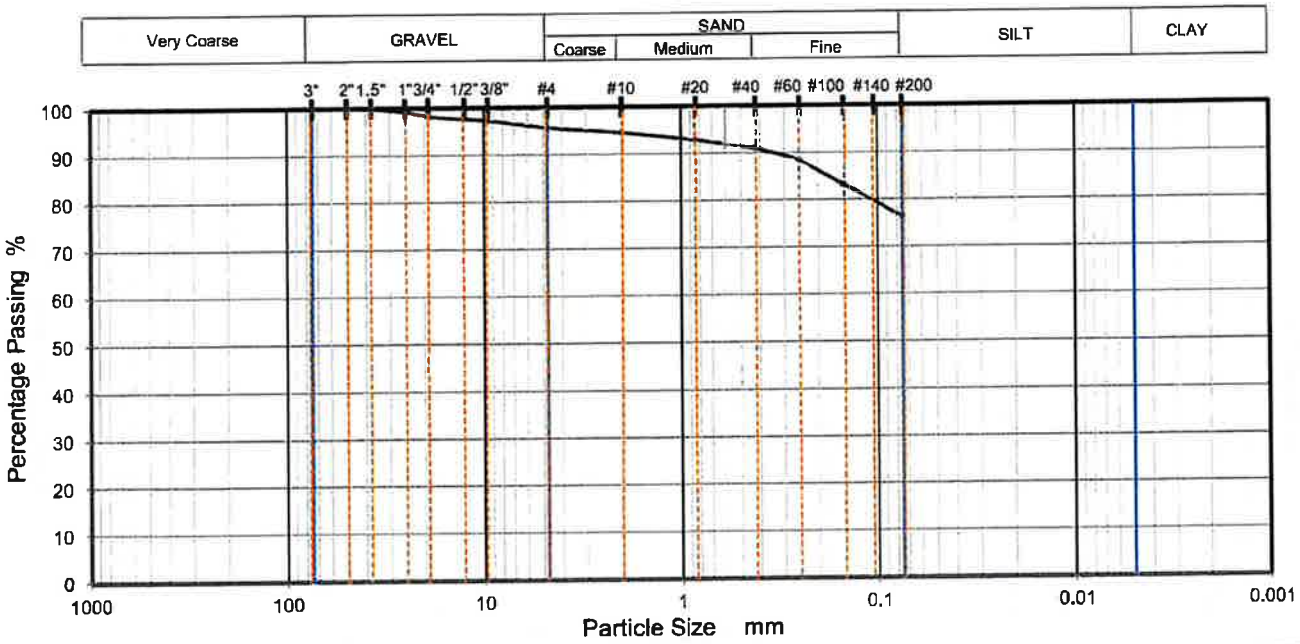
Project: Warrenton Data Center
Client:
Sample Description: Silt Trace Mica Yellowish Brown
Sample Source: B-04

Project No.: 01:31153
Depth (ft): 1 - 6
Sample No.: D3S-188
Date Reported:

Office / Lab	Address	Office Number / Fax
ECS Mid-Atlantic LLC - Chantilly	14026 Thunderbolt Place Suite 100 Chantilly, VA 20151-3232	(703)471-8400 (703)834-5527

Tested by	Checked by	Approved by		Remarks
	Htran	Dtran		

PARTICLE SIZE DISTRIBUTION



TEST RESULTS (ASTM D422-63(2007))

Sieving		Hydrometer Sedimentation	
Particle Size	% Passing	Particle Size mm	% Passing
3"	100.0		
2"	100.0		
1 1/2"	100.0		
1"	99.2		
3/4"	98.2		
3/8"	97.3		
#4	95.7		
#10	94.6		
#20	92.9		
#40	91.1		
#60	88.6		
#100	83.4		
#200	76.4		

Dry Mass of sample, g: 5235.0

Sample Proportions	% dry mass
Very coarse, >3" sieve	0.0
Gravel, 3" to # 4 sieve	4.3
Coarse Sand, #4 to #10 sieve	1.1
Medium Sand, #10 to #40	3.5
Fine Sand, #40 to #200	14.7
Fines <#200	76.4

USCS	ML	Liquid Limit	49	D90	0.337	D50		D10	
AASHTO	A-7-6	Plastic Limit	28	D85	0.176	D30		Cu	
USCS Group Name	Silt with sand	Plasticity Index	21	D60		D15		Cc	

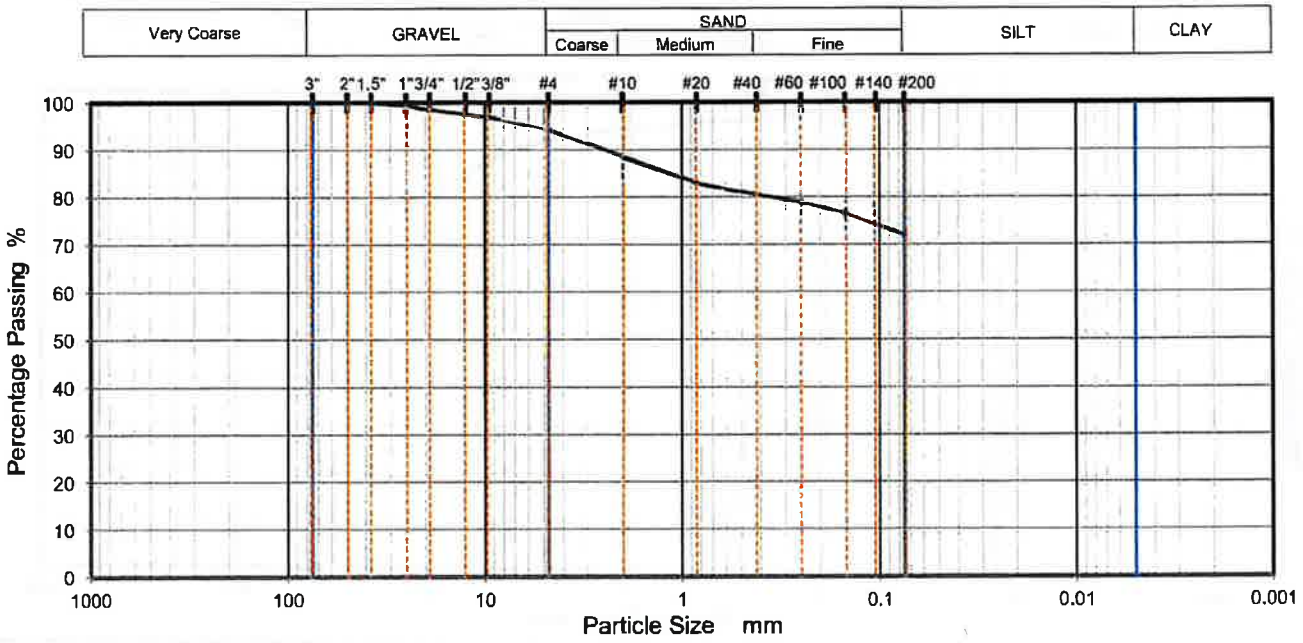
Project: Warrenton Data Center
Client:
Sample Description: Silt with Sand Brwon
Sample Source: B-09

Project No.: 01:31153
Depth (ft): 1 - 6
Sample No.: D3S-189
Date Reported:

Office / Lab	Address	Office Number / Fax
ECS Mid-Atlantic LLC - Chantilly	14026 Thunderbolt Place Suite 100 Chantilly, VA 20151-3232	(703)471-8400 (703)834-5527

Tested by	Checked by	Approved by		Remarks
jvong	Htran	Dtran		

PARTICLE SIZE DISTRIBUTION



TEST RESULTS (ASTM D422-63(2007))

Sieving		Hydrometer Sedimentation	
Particle Size	% Passing	Particle Size mm	% Passing
3"	100.0		
2"	100.0		
1 1/2"	100.0		
1"	99.4		
3/4"	98.5		
3/8"	96.9		
#4	94.4		
#10	88.7		
#20	83.1		
#40	80.6		
#60	79.0		
#100	76.7		
#200	72.0		

Dry Mass of sample, g: 10996.0

Sample Proportions	% dry mass
Very coarse, >3" sieve	0.0
Gravel, 3" to # 4 sieve	5.6
Coarse Sand, #4 to #10 sieve	5.7
Medium Sand, #10 to #40	8.1
Fine Sand, #40 to #200	8.6
Fines <#200	72.0

USCS	CH	Liquid Limit	55	D90	2.436	D50		D10	
AASHTO	A-7-6	Plastic Limit	24	D85	1.136	D30		Cu	
USCS Group Name	Fat clay with sand	Plasticity Index	31	D60		D15		Cc	

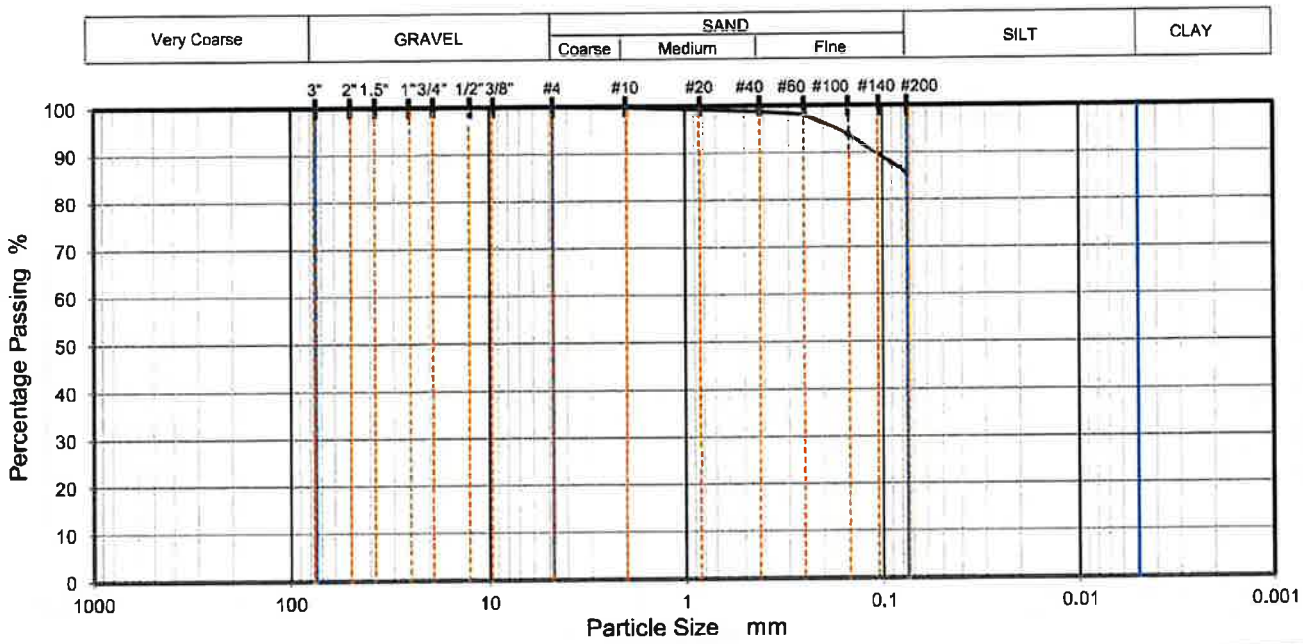
Project: Warrenton Data Center
Client:
Sample Description: Fat Clay with Sand Brown
Sample Source: B-19

Project No.: 01:31153
Depth (ft): 1 - 6
Sample No.: D3S-190
Date Reported:

Office / Lab	Address	Office Number / Fax
ECS Mid-Atlantic LLC - Chantilly	14026 Thunderbolt Place Suite 100 Chantilly, VA 20151-3232	(703)471-8400 (703)834-5527

Tested by	Checked by	Approved by		Remarks
jvong	Htran	Dtran		

PARTICLE SIZE DISTRIBUTION



TEST RESULTS (ASTM D422-63(2007))

Sieving		Hydrometer Sedimentation	
Particle Size	% Passing	Particle Size mm	% Passing
3"	100.0		
#4	100.0		
#10	99.8		
#20	99.3		
#40	98.8		
#60	98.1		
#100	94.0		
#200	85.6		

Dry Mass of sample, g: 54.9

Sample Proportions	% dry mass
Very coarse, >3" sieve	0.0
Gravel, 3" to # 4 sieve	0.0
Coarse Sand, #4 to #10 sieve	0.2
Medium Sand, #10 to #40	1.0
Fine Sand, #40 to #200	13.2
Fines <#200	85.6

USCS	CL	Liquid Limit	39	D90	0.108	D50		D10	
AASHTO	A-6	Plastic Limit	18	D85		D30		Cu	
USCS Group Name	Lean clay	Plasticity Index	21	D60		D15		Cc	

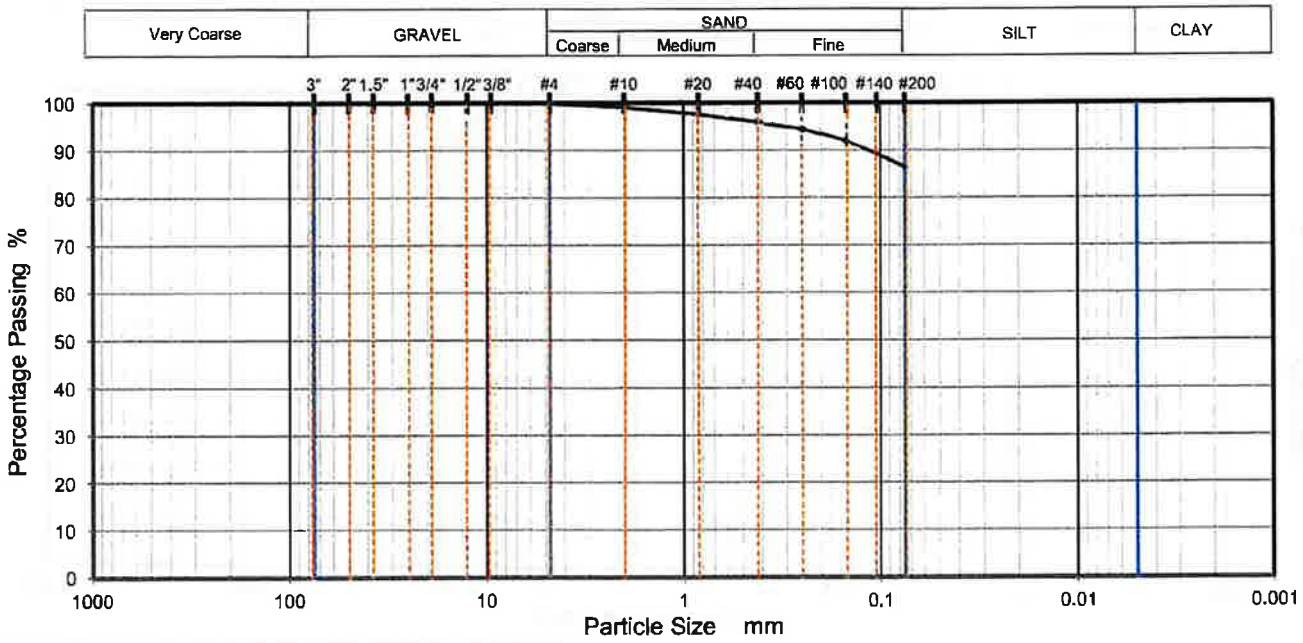
Project: Warrenton Data Center
Client:
Sample Description: Lean Clay Yellowish Brown
Sample Source: B-02

Project No.: 01:31153
Depth (ft): 1 - 6
Sample No.: D3S-191
Date Reported:

Office / Lab	Address	Office Number / Fax
ECS Mid-Atlantic LLC - Chantilly	14026 Thunderbolt Place Suite 100 Chantilly, VA 20151-3232	(703)471-8400 (703)834-5527

Tested by	Checked by	Approved by		Remarks
jvong	Htran	Dtran		

PARTICLE SIZE DISTRIBUTION



TEST RESULTS (ASTM D422-63(2007))

Sieving		Hydrometer Sedimentation	
Particle Size	% Passing	Particle Size mm	% Passing
3"	100.0		
#4	100.0		
#10	99.1		
#20	97.6		
#40	96.0		
#60	94.6		
#100	92.2		
#200	86.5		

Dry Mass of sample, g: 64.0

Sample Proportions	% dry mass
Very coarse, >3" sieve	0.0
Gravel, 3" to # 4 sieve	0.0
Coarse Sand, #4 to #10 sieve	0.9
Medium Sand, #10 to #40	3.1
Fine Sand, #40 to #200	9.5
Fines <#200	86.5

USCS	CL	Liquid Limit	37	D90	0.115	D50		D10	
AASHTO	A-6	Plastic Limit	19	D85		D30		Cu	
USCS Group Name	Lean clay	Plasticity Index	18	D60		D15		Cc	

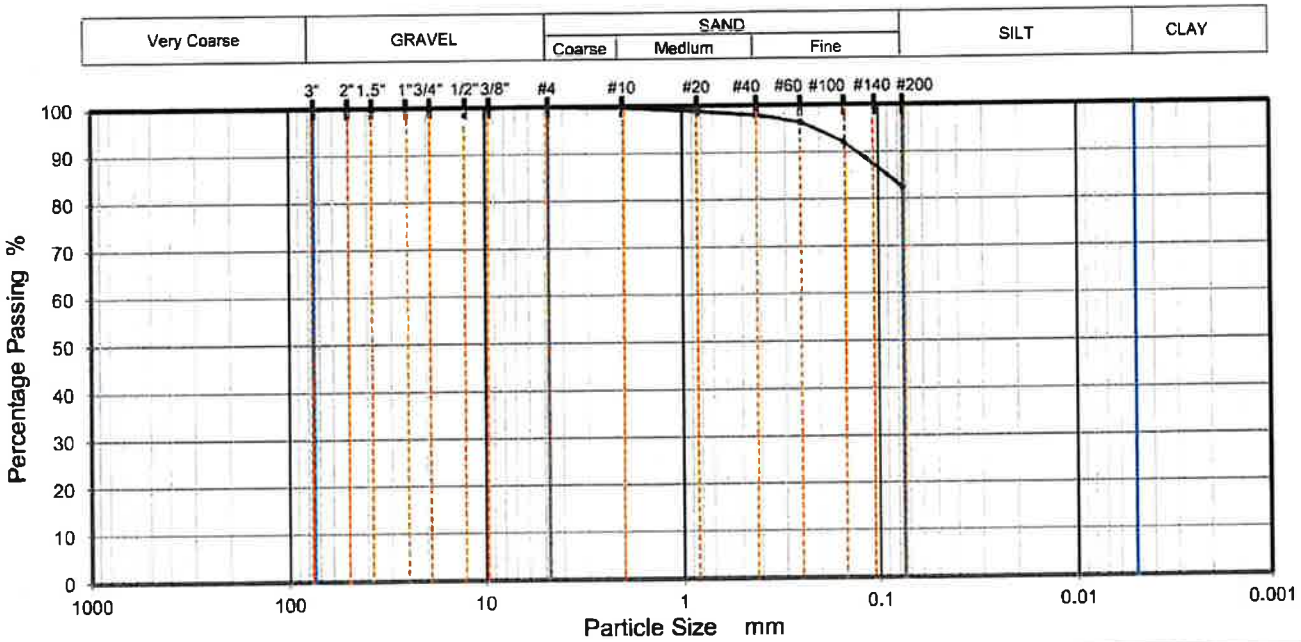
Project: Warrenton Data Center
Client:
Sample Description: Lean Clay Trace Mica Brown
Sample Source: B-07

Project No.: 01:31153
Depth (ft): 1 - 6
Sample No.: D3S-193
Date Reported:

Office / Lab	Address	Office Number / Fax
ECS Mid-Atlantic LLC - Chantilly	14026 Thunderbolt Place Suite 100 Chantilly, VA 20151-3232	(703)471-8400 (703)834-5527

Tested by	Checked by	Approved by		Remarks
jvong	Htran	Dtran		

PARTICLE SIZE DISTRIBUTION



TEST RESULTS (ASTM D422-63(2007))

Sieving		Hydrometer Sedimentation	
Particle Size	% Passing	Particle Size mm	% Passing
3"	100.0		
#4	100.0		
#10	99.7		
#20	98.9		
#40	97.9		
#60	96.5		
#100	92.3		
#200	82.5		

Dry Mass of sample, g: 51.5

Sample Proportions	% dry mass
Very coarse, >3" sieve	0.0
Gravel, 3" to # 4 sieve	0.0
Coarse Sand, #4 to #10 sieve	0.3
Medium Sand, #10 to #40	1.8
Fine Sand, #40 to #200	15.4
Fines <#200	82.5

USCS	ML	Liquid Limit	41	D90	0.128	D50		D10	
AASHTO	A-7-6	Plastic Limit	27	D85	0.090	D30		Cu	
USCS Group Name	Silt with sand	Plasticity Index	14	D60		D15		Cc	

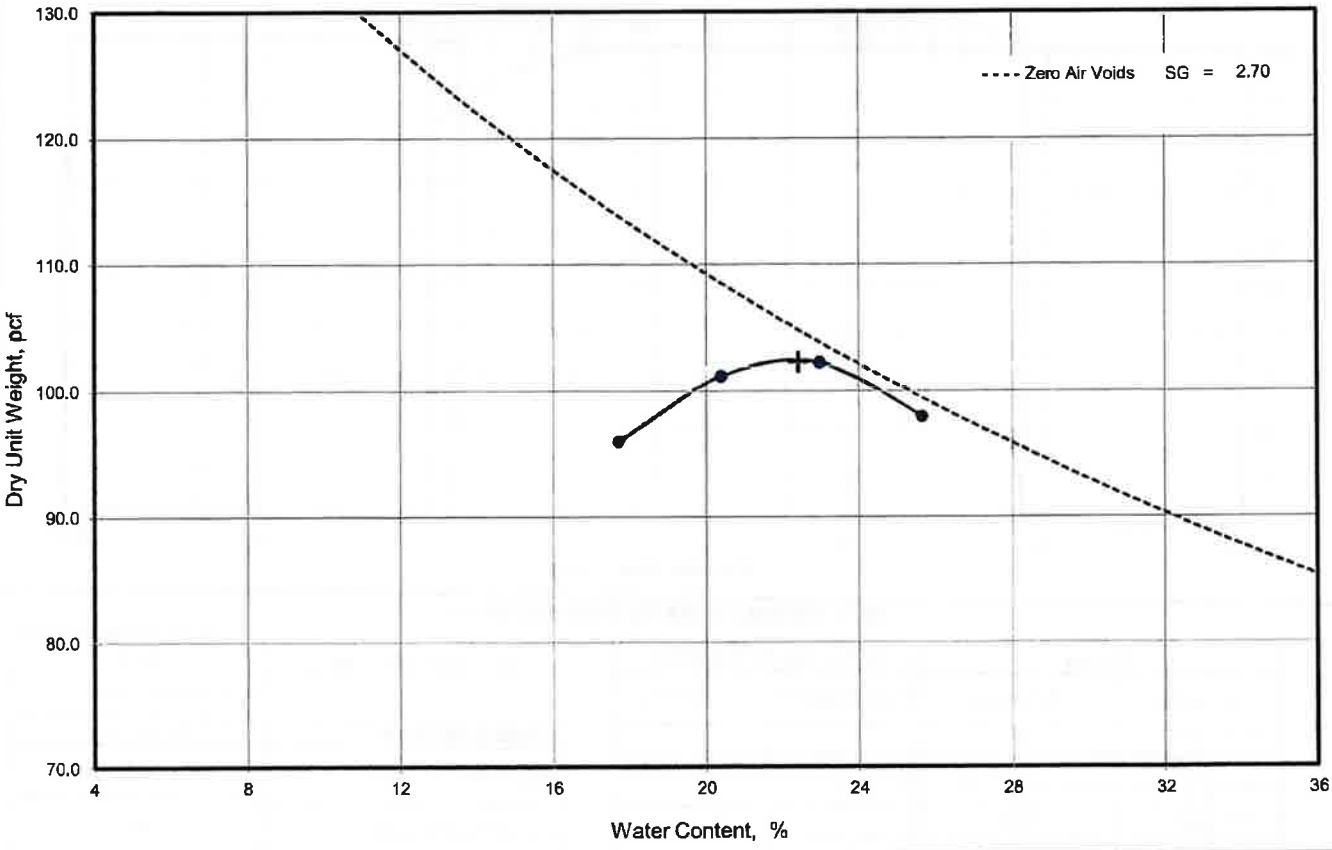
Project: Warrenton Data Center
Client:
Sample Description: Silt with Sand Trace Mica Yellowish Brown
Sample Source: B-11

Project No.: 01:31153
Depth (ft): 1 - 6
Sample No.: D3S-194
Date Reported:

Office / Lab	Address	Office Number / Fax
ECS Mid-Atlantic LLC - Chantilly	14026 Thunderbolt Place Suite 100 Chantilly, VA 20151-3232	(703)471-8400 (703)834-5527

Tested by	Checked by	Approved by		Remarks
jvong	Htran	Dtran		

Laboratory Compaction Characteristics of Soil Using Standard Effort



Optimum Moisture Content		**22.4**	%
Maximum Dry Unit Weight		**102.3**	pcf
Cumulative material retained on:	3/4 in. sieve	0.0	%
	3/8 in. sieve	0.0	%
	#4 sieve	0.0	%

Preparation	ASTM moist preparation
Type of rammer	Manual - 5.5lbf (24.5N)
Test Specfication / Method	ASTM D698-12e2-method A
Specific gravity - D854 water pycnometer	2.70 Assumed
Coarse Aggregate Specific Gravity -	

Soil Description	Nat. Moist. %	Liquid Limit	Plasticity Index	%< #200	USCS	AASHTO
Lean Clay with Sand Yellowisht Brown	5.6	49	22	85.7	CL	A-7-6

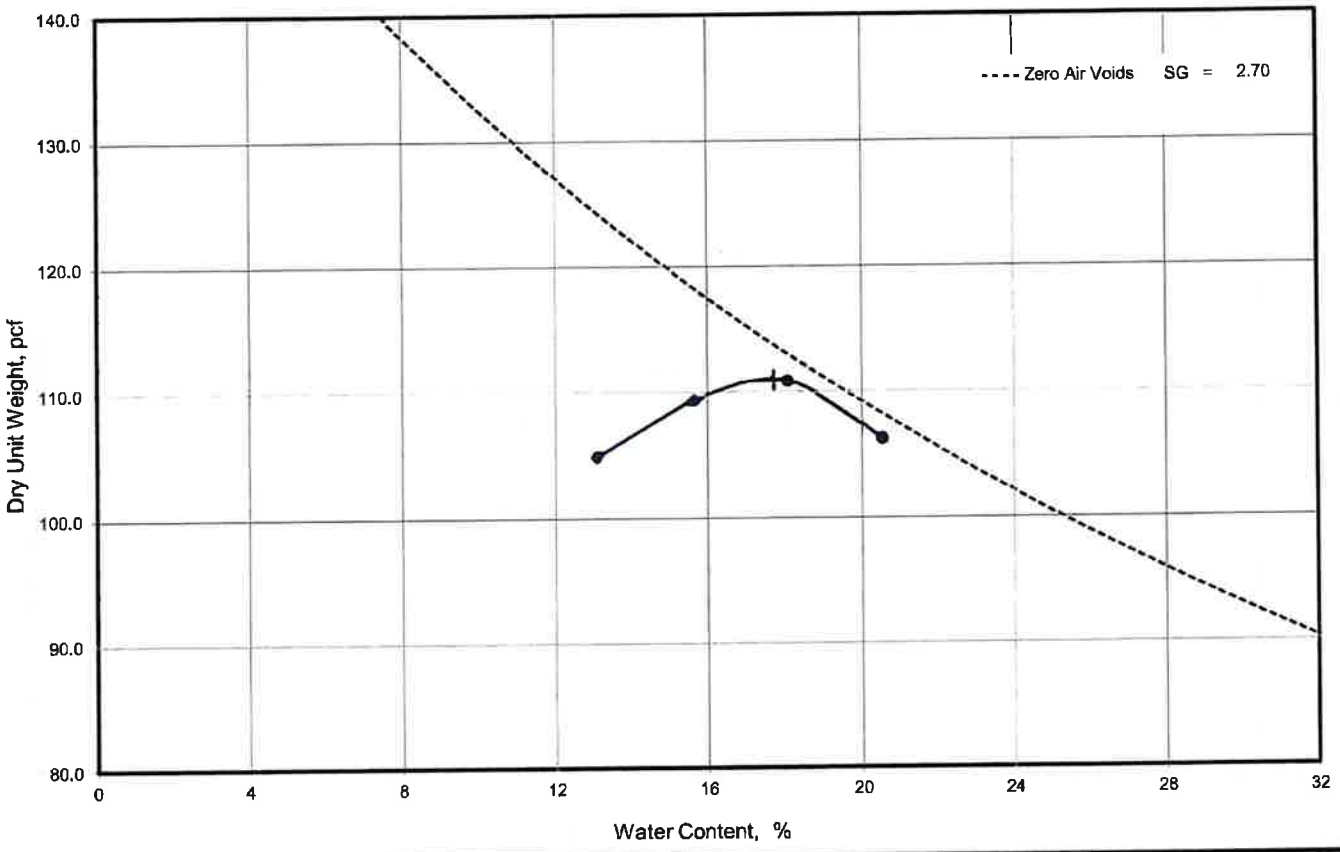
Project: Warrenton Data Center
Client:
Sample / Source B-14
Test Reference/No.:

Project No.: 01:31153
Depth (ft.): 1 - 6
Sample No.: D3S-186
Date Reported:

Office / Lab	Address	Office Number / Fax
ECS Mid-Atlantic LLC - Chantilly	14026 Thunderbolt Place Suite 100 Chantilly, VA 20151-3232	(703)471-8400 (703)834-5527

Tested by	Checked by	Approved by		Remarks
jvong	Htran	Dtran		

Laboratory Compaction Characteristics of Soil Using Standard Effort



Optimum Moisture Content		**17.7**	%
Maximum Dry Unit Weight		**111.0**	pcf
Cumulative material retained on:	3/4 in. sieve	0.0	%
	3/8 in. sieve	0.0	%
	#4 sieve	0.0	%

Preparation	ASTM moist preparation
Type of rammer	Manual - 5.5lbf (24.5N)
Test Specfication / Method	ASTM D698-12e2-method A
Specific gravity - D854 water pycnometer	2.70 Assumed
Coarse Aggregate Specific Gravity -	

Soil Description	Nat. Moist. %	Liquid Limit	Plasticity Index	%< #200	USCS	AASHTO
Lean Clay with Sand Yellowish Brown	5.6	45	24	81.6	CL	A-7-6

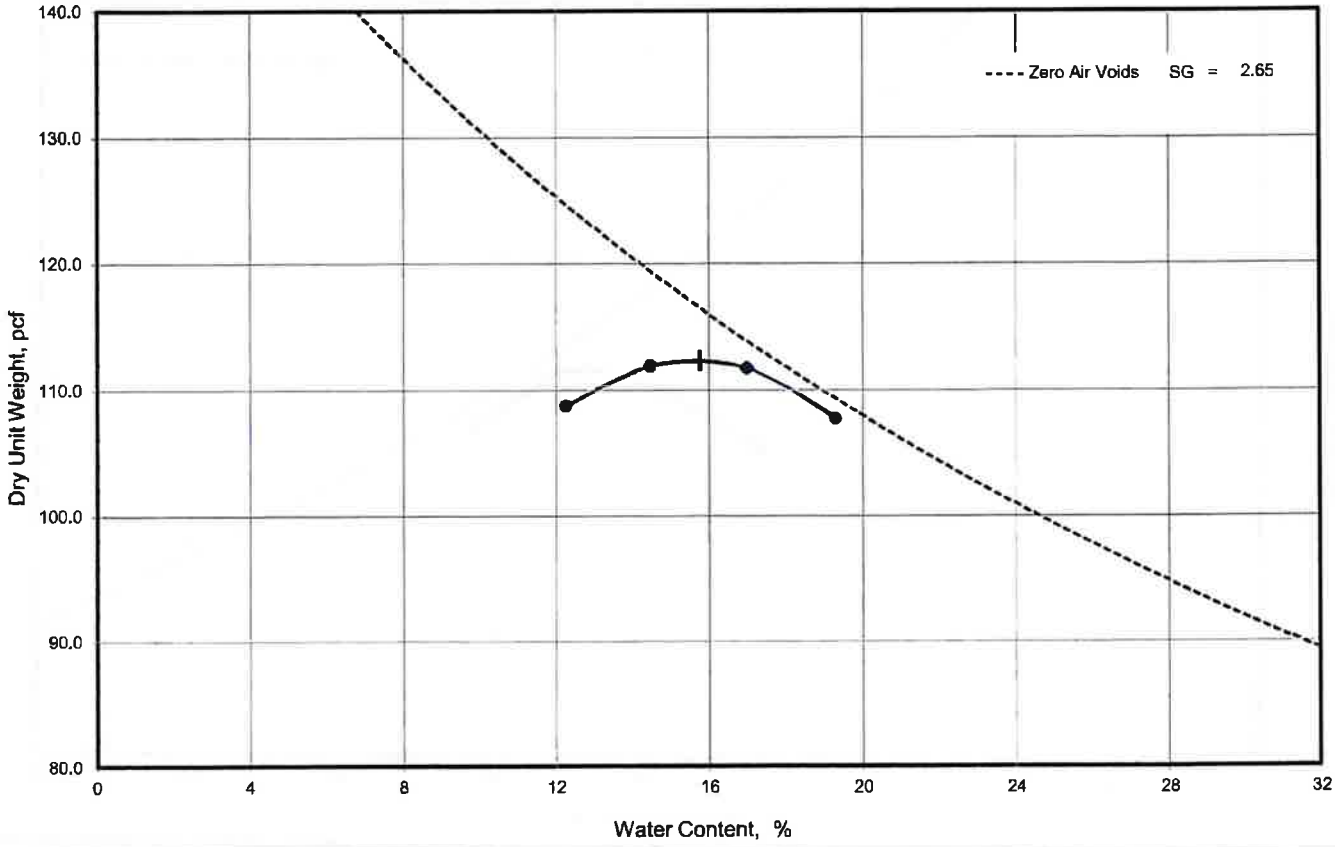
Project: Warrenton Data Center
Client:
Sample / Source B-15
Test Reference/No.:

Project No.: 01:31153
Depth (ft.): 1 - 6
Sample No.: D3S-187
Date Reported:

Office / Lab	Address	Office Number / Fax
ECS Mid-Atlantic LLC - Chantilly	14026 Thunderbolt Place Suite 100 Chantilly, VA 20151-3232	(703)471-8400 (703)834-5527

Tested by	Checked by	Approved by		Remarks
jvong	Htran	Dtran		

Laboratory Compaction Characteristics of Soil Using Standard Effort



Optimum Moisture Content		**15.8**	%
Maximum Dry Unit Weight		**112.3**	pcf
Cumulative material retained on:	3/4 in. sieve	0.0	%
	3/8 in. sieve	0.0	%
	#4 sieve	0.0	%

Preparation	ASTM moist preparation	
Type of rammer	Manual - 5.5lbf (24.5N)	
Test Specfication / Method	ASTM D698-12e2-method A	
Specific gravity - D854 water pycnometer	2.65	Assumed
Coarse Aggregate Specific Gravity -		

Soil Description	Nat. Moist. %	Liquid Limit	Plasticity Index	%< #200	USCS	AASHTO
Silt Trace Mica Yellowish Brown	2.2	NP	NP	85.1	ML	A-4

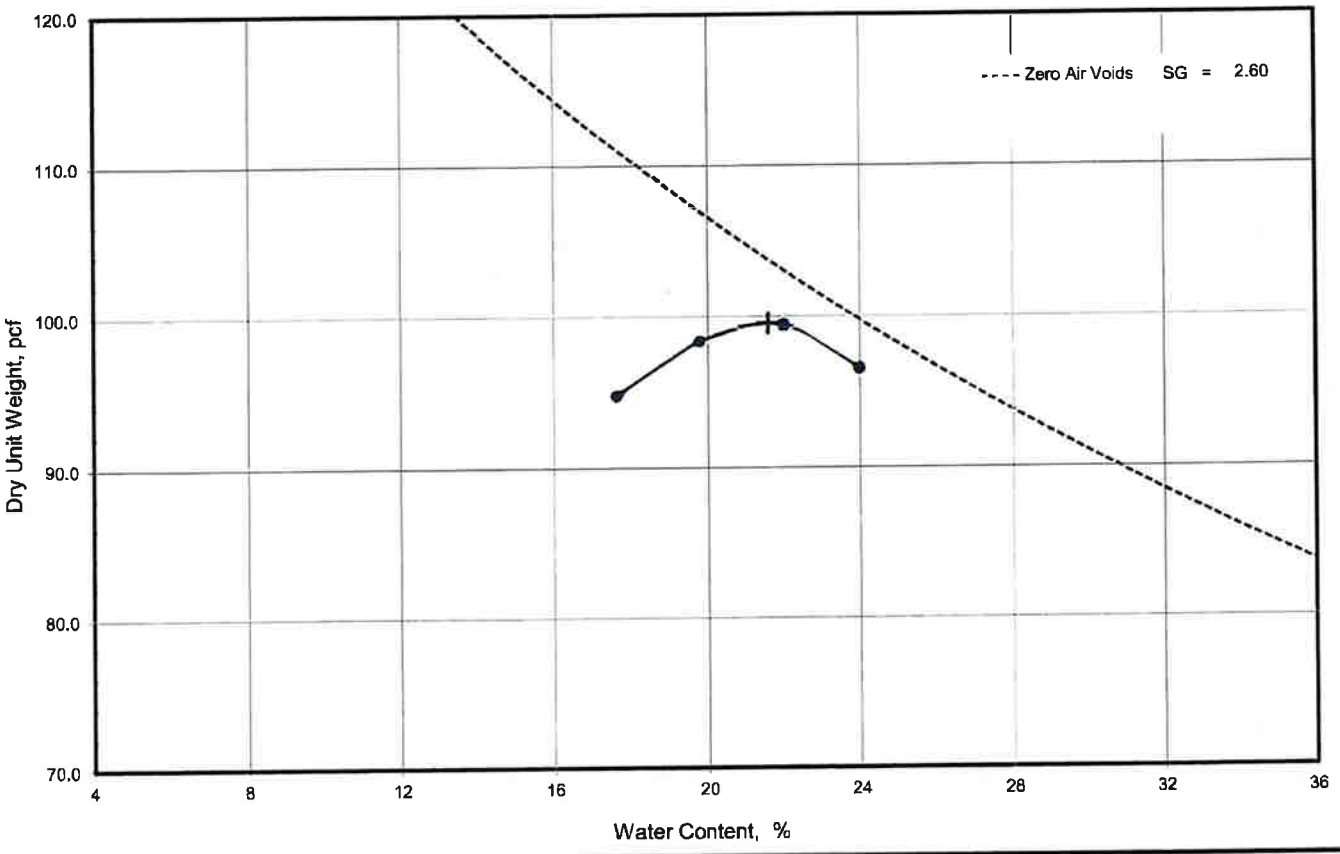
Project: Warrenton Data Center
Client:
Sample / Source B-04
Test Reference/No.:

Project No.: 01:31153
Depth (ft.): 1 - 6
Sample No.: D3S-188
Date Reported:

Office / Lab	Address	Office Number / Fax
ECS Mid-Atlantic LLC - Chantilly	14026 Thunderbolt Place Suite 100 Chantilly, VA 20151-3232	(703)471-8400 (703)834-5527

Tested by	Checked by	Approved by		Remarks
	Htran	Dtran		

Laboratory Compaction Characteristics of Soil Using Standard Effort



Optimum Moisture Content		**21.6**	%
Maximum Dry Unit Weight		**99.5**	pcf
Cumulative material retained on:	3/4 in. sieve	1.8	%
	3/8 in. sieve	2.7	%
	#4 sieve	4.3	%

Preparation	ASTM moist preparation	
Type of rammer	Manual - 5.5lbf (24.5N)	
Test Specfication / Method	ASTM D698-12e2-method A	
Specific gravity - D854 water pycnometer	2.60	Assumed
Coarse Aggregate Specific Gravity -		Assumed

Soil Description	Nat. Moist. %	Liquid Limit	Plasticity Index	%< #200	USCS	AASHTO
Silt with Sand Brown	5.2	19	21	76.4	ML	A-7-6

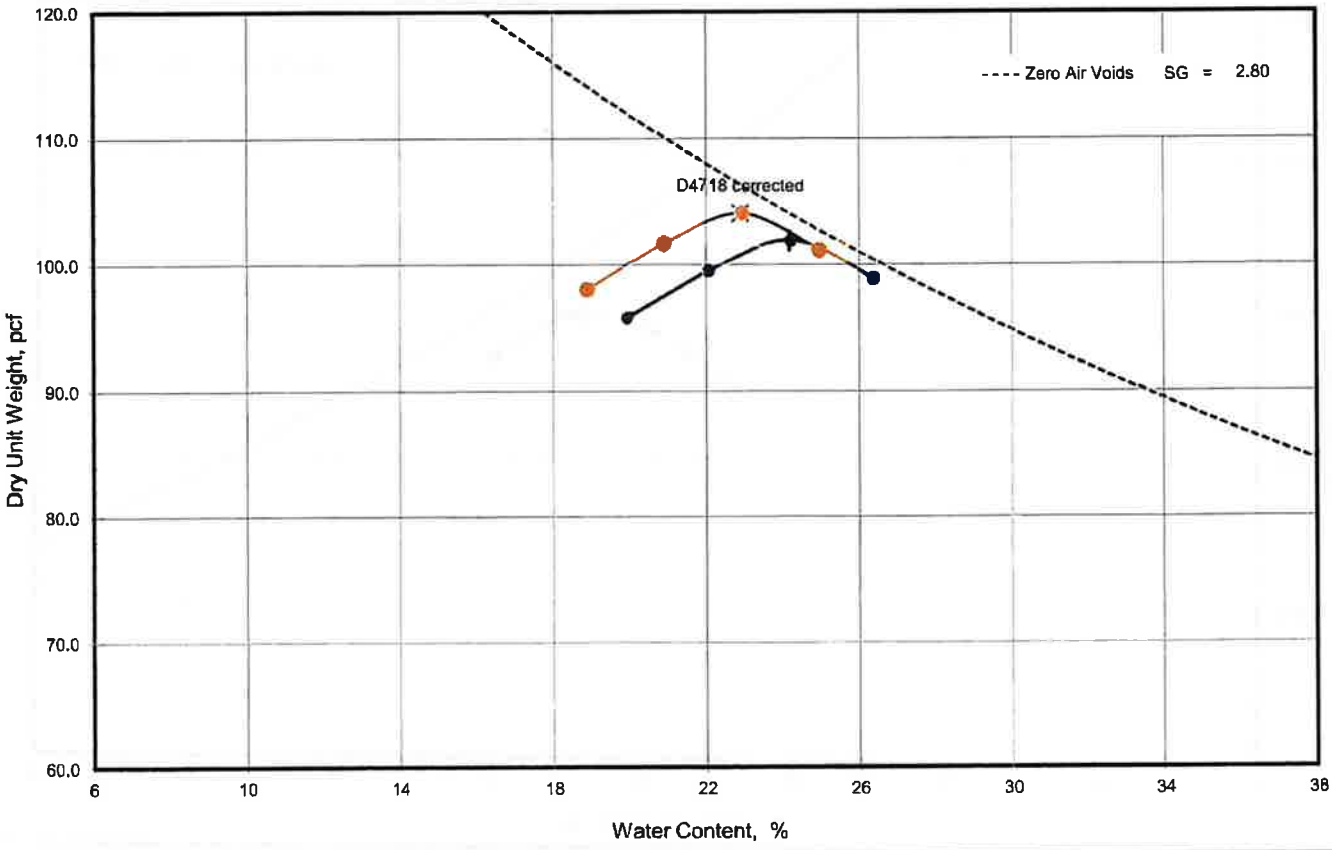
Project: Warrenton Data Center
Client:
Sample / Source B-09
Test Reference/No.:

Project No.: 01:31153
Depth (ft.): 1 - 6
Sample No.: D3S-189
Date Reported:

Office / Lab	Address	Office Number / Fax
ECS Mid-Atlantic LLC - Chantilly	14026 Thunderbolt Place Suite 100 Chantilly, VA 20151-3232	(703)471-8400 (703)834-5527

Tested by	Checked by	Approved by		Remarks
jvong	Htran	Dtran		

Laboratory Compaction Characteristics of Soil Using Standard Effort



Optimum Moisture Content		**24.2**	%
Maximum Dry Unit Weight		**101.9**	pcf
Corrected Opt. Moisture Content		22.9	%
Corrected Max. Dry Density		104.0	pcf
Cumulative material retained on:	3/4 in. sieve	1.5	%
	3/8 in. sieve	3.1	%
	#4 sieve	5.6	%

5.58 % retained on #4 sieve.

Preparation	ASTM moist preparation	
Type of rammer	Manual - 5.5lbf (24.5N)	
Test Specfication / Method	ASTM D698-12e2-method A	
Specific gravity - D854 water pycnometer	2.80	Assumed
Coarse Aggregate Specific Gravity -	2.60	Assumed

Soil Description	Nat. Moist. %	Liquid Limit	Plasticity Index	%< #200	USCS	AASHTO
Fat Clay with Sand Brown	33.6	55	31	72.0	CH	A-7-6

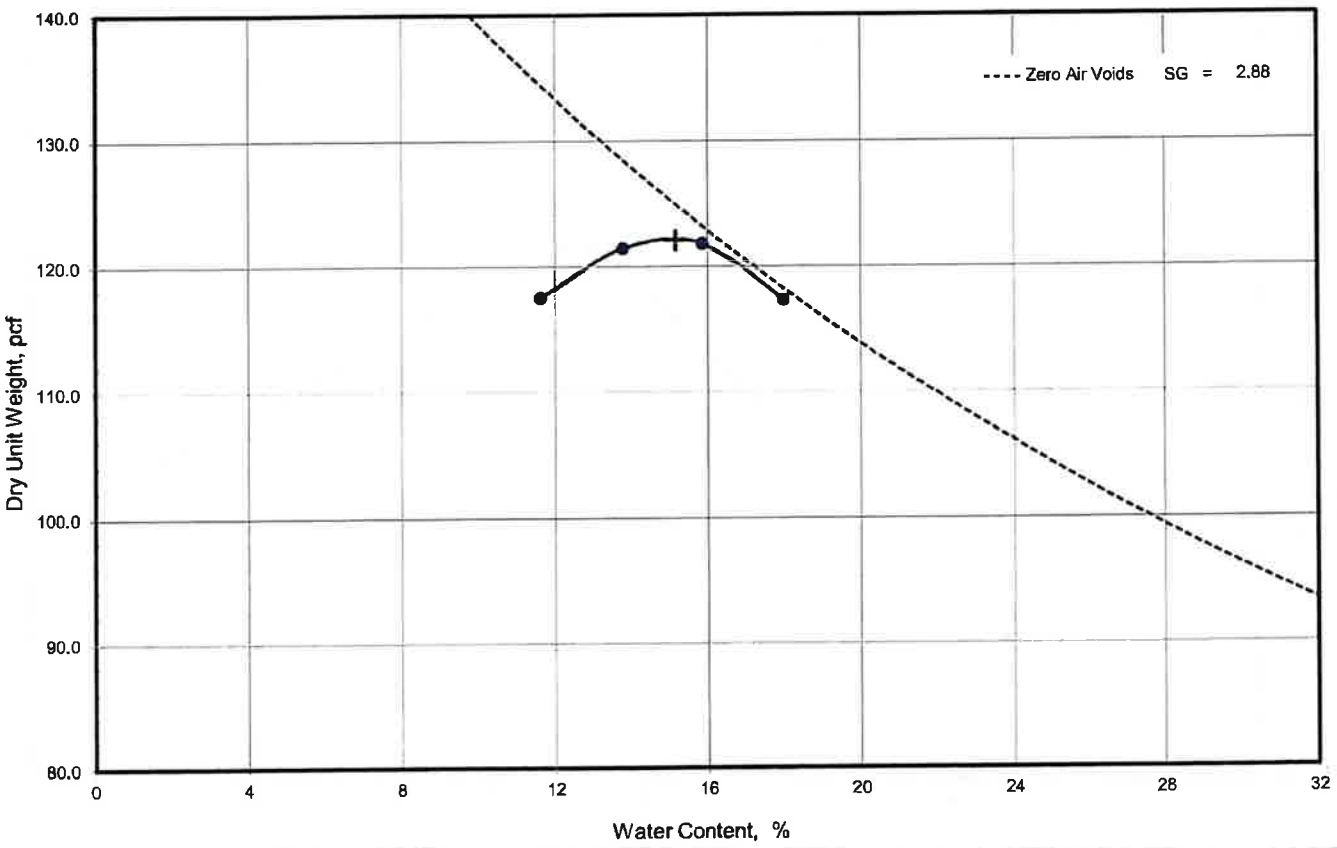
Project: Warrenton Data Center
Client:
Sample / Source B-19
Test Reference/No.:

Project No.: 01:31153
Depth (ft.): 1 - 6
Sample No.: D3S-190
Date Reported:

Office / Lab	Address	Office Number / Fax
ECS Mid-Atlantic LLC - Chantilly	14026 Thunderbolt Place Suite 100 Chantilly, VA 20151-3232	(703)471-8400 (703)834-5527

Tested by	Checked by	Approved by		Remarks
jvong	Htran	Dtran		

Laboratory Compaction Characteristics of Soil Using Standard Effort



Optimum Moisture Content		**15.2**	%
Maximum Dry Unit Weight		**122.1**	pcf
Cumulative material retained on:	3/4 in. sieve	0.0	%
	3/8 in. sieve	0.0	%
	#4 sieve	0.0	%

Preparation	ASTM moist preparation
Type of rammer	Manual - 5.5lbf (24.5N)
Test Specfication / Method	ASTM D698-12e2-method A
Specific gravity - D854 water pycnometer	2.88 Historical
Coarse Aggregate Specific Gravity -	

Soil Description	Nat. Moist. %	Liquid Limit	Plasticity Index	%< #200	USCS	AASHTO
Lean Clay Yellowish Brown	11.7	39	21	85.6	CL	A-6

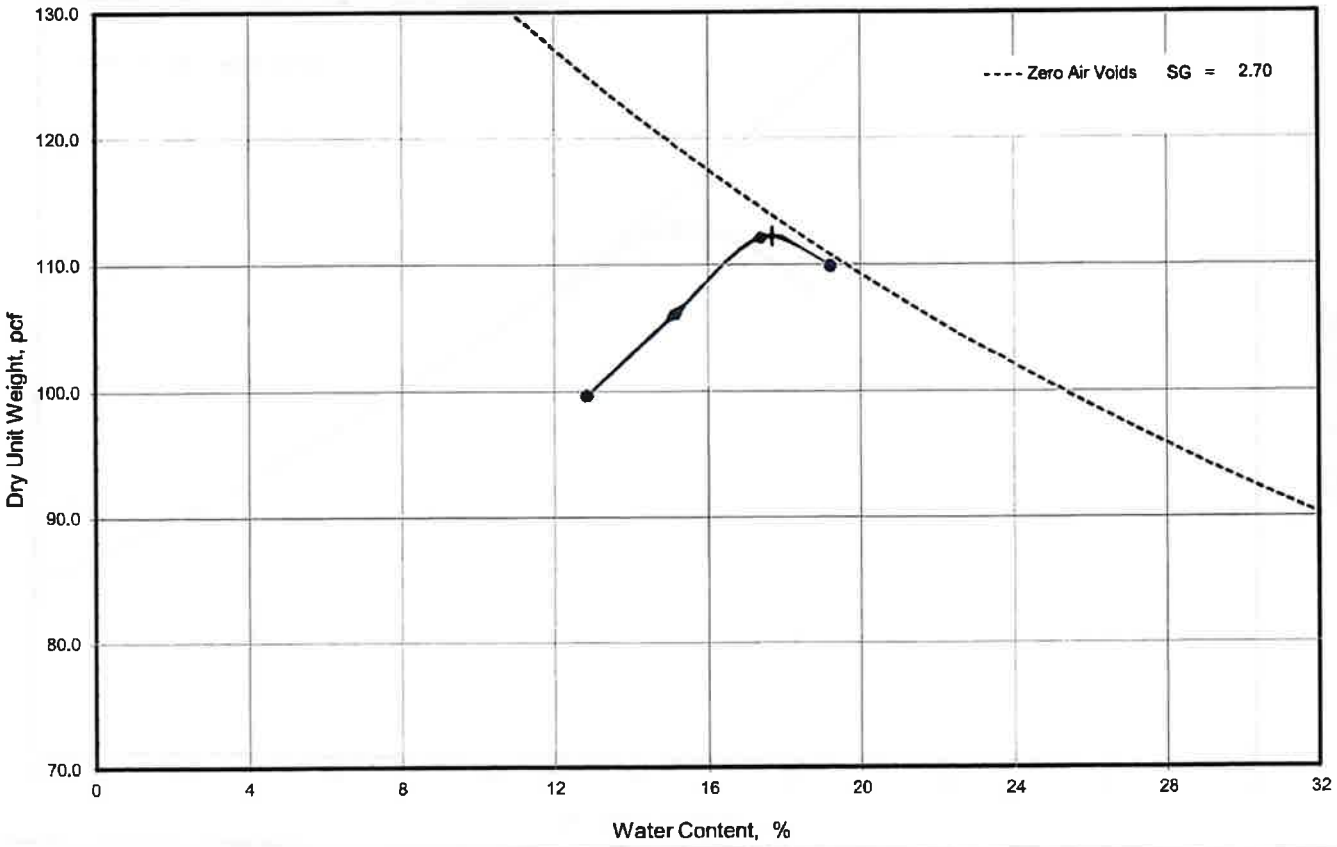
Project: Warrenton Data Center
Client:
Sample / Source B-02
Test Reference/No.:

Project No.: 01:31153
Depth (ft.): 1 - 6
Sample No.: D3S-191
Date Reported:

Office / Lab	Address	Office Number / Fax
ECS Mid-Atlantic LLC - Chantilly	14026 Thunderbolt Place Suite 100 Chantilly, VA 20151-3232	(703)471-8400 (703)834-5527

Tested by	Checked by	Approved by		Remarks
jvong	Htran	Dtran		

Laboratory Compaction Characteristics of Soil Using Standard Effort



Optimum Moisture Content		**17.7**	%
Maximum Dry Unit Weight		**112.2**	pcf
Cumulative material retained on:	3/4 in. sieve	0.0	%
	3/8 in. sieve	0.0	%
	#4 sieve	0.0	%

Preparation	ASTM moist preparation
Type of rammer	Manual - 5.5lbf (24.5N)
Test Specfication / Method	
Specific gravity - D854 water pycnometer	2.70 Historical
Coarse Aggregate Specific Gravity -	

Soil Description	Nat. Moist. %	Liquid Limit	Plasticity Index	%< #200	USCS	AASHTO
Lean Clay Trace Mica Brown	2.6	37	18	86.5	CL	A-6

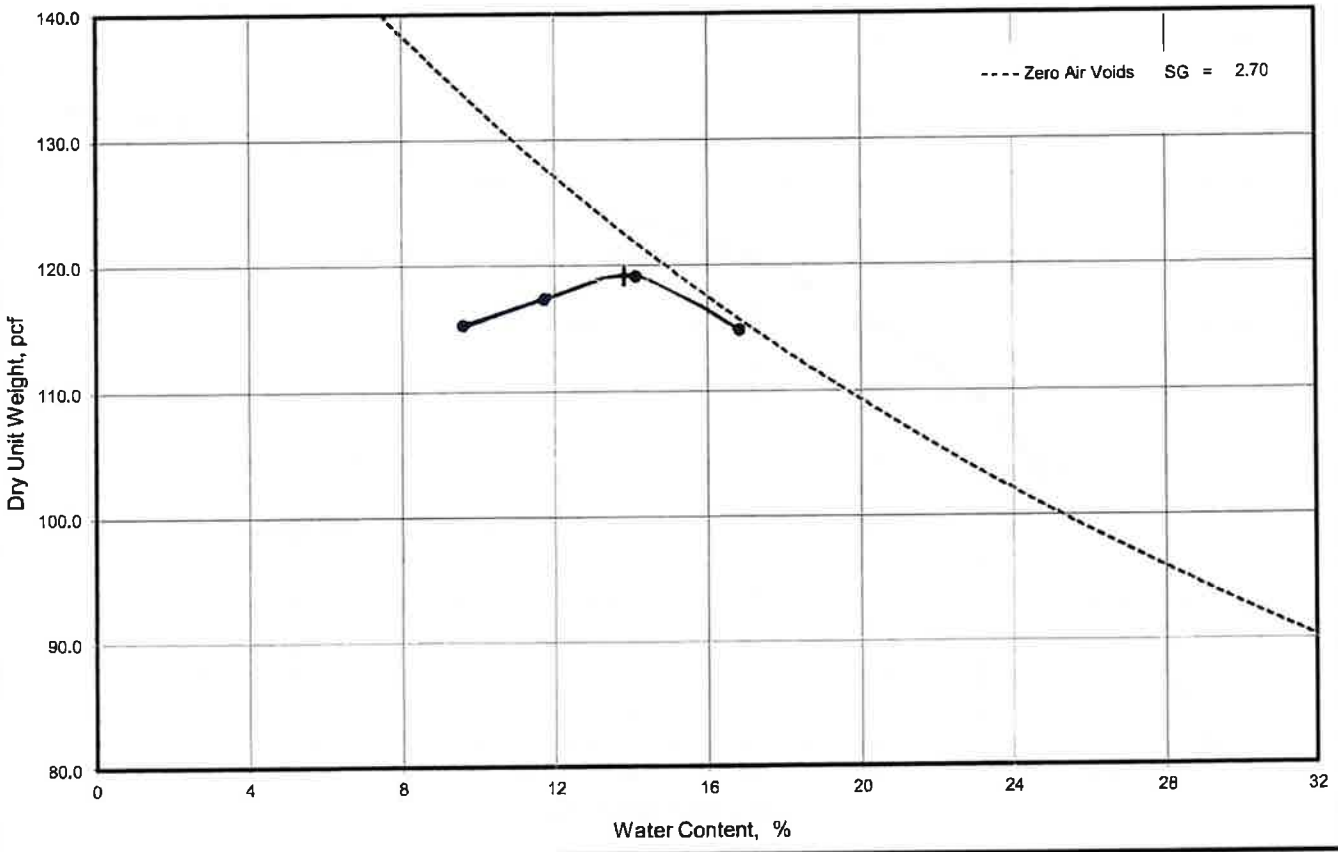
Project: Warrenton Data Center
Client:
Sample / Source B-07
Test Reference/No.:

Project No.: 01:31153
Depth (ft.): 1 - 6
Sample No.: D3S-193
Date Reported:

Office / Lab	Address	Office Number / Fax
ECS Mid-Atlantic LLC - Chantilly	14026 Thunderbolt Place Suite 100 Chantilly, VA 20151-3232	(703)471-8400 (703)834-5527

Tested by	Checked by	Approved by		Remarks
jvong	Htran	Dtran		

Laboratory Compaction Characteristics of Soil Using Standard Effort



Optimum Moisture Content		**13.8**	%
Maximum Dry Unit Weight		**119.2**	pcf
Cumulative material retained on:	3/4 in. sieve	0.0	%
	3/8 in. sieve	0.0	%
	#4 sieve	0.0	%

Preparation	ASTM moist preparation
Type of rammer	
Test Specification / Method	ASTM D698-12e2-method A
Specific gravity - D854 water pycnometer	2.70 Historical
Coarse Aggregate Specific Gravity -	

Soil Description	Nat. Moist. %	Liquid Limit	Plasticity Index	%< #200	USCS	AASHTO
Silt with Sand Trace Mica Yellowish Brown	2.1	41	14	82.5	ML	A-7-6

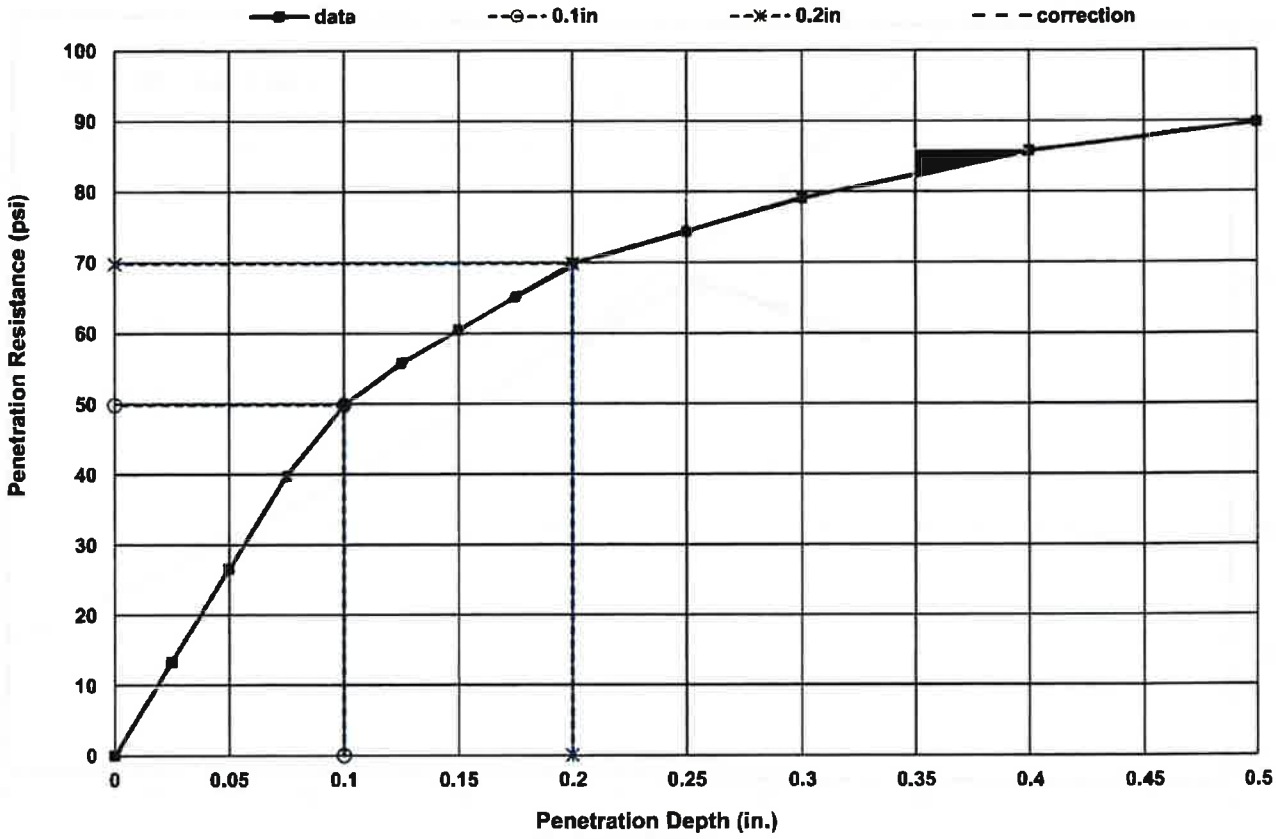
Project: Warrenton Data Center
Client:
Sample / Source B-11
Test Reference/No.:

Project No.: 01:31153
Depth (ft.): 1 - 6
Sample No.: D3S-194
Date Reported:

Office / Lab	Address	Office Number / Fax
ECS Mid-Atlantic LLC - Chantilly	14026 Thunderbolt Place Suite 100 Chantilly, VA 20151-3232	(703)471-8400 (703)834-5527

Tested by	Checked by	Approved by		Remarks
jvong	Htran	Dtran		

California Bearing Ratios (CBR) of Laboratory-Compacted Soils



TEST RESULTS (ASTM D1883-16)

Molded			Soaked			CBR (%)		Linearty Correction (in.)	Surcharge (lbs.)		Swell (%)	
Density (pcf)	Percent of Max. Dens.	Moisture (%)	Density (pcf)	Percent of Max. Dens.	Moisture (%)	0.1 in.	0.2 in.					
101.8	99.5	22.3	91.1	89.1	33.8	5.0	4.7	0.00	10		2.22	
Material Description					AASHTO	USCS	MAX. Dens. (pcf)	Optimum Moisture (%)	LL	PI	% Fines	% Gravel
Lean Clay with Sand Yellowish Brown					A-7-6	CL	102.3	22.4	49	22	85.7	0.0

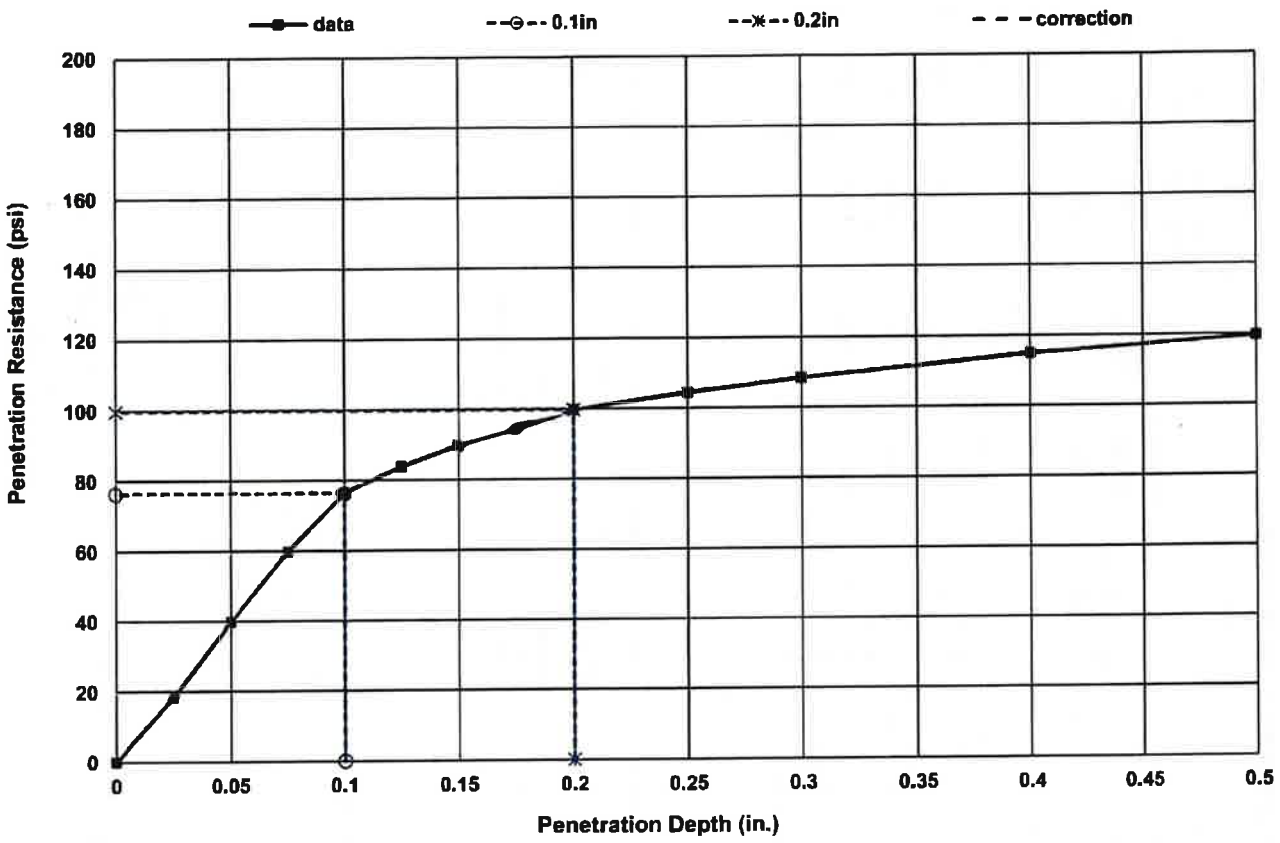
Project: Warrenton Data Center
Client:
Sample / Source B-14
Test Reference/No.: 1

Project No.: 01:31153
Depth (ft.): 1 - 6
Sample No.: D3S-186
Date Reported:

Office / Lab	Address	Office Number / Fax
ECS Mid-Atlantic LLC - Chantilly	14026 Thunderbolt Place Suite 100 Chantilly, VA 20151-3232	(703)471-8400 (703)834-5527

Tested by	Checked by	Approved by		Remarks
jvong	Htran	Dtran		

California Bearing Ratios (CBR) of Laboratory-Compacted Soils



TEST RESULTS (ASTM D1883-16)

Molded			Soaked			CBR (%)		Linearity Correction (in.)	Surcharge (lbs.)		Swell (%)	
Density (pcf)	Percent of Max. Dens.	Moisture (%)	Density (pcf)	Percent of Max. Dens.	Moisture (%)	0.1 in.	0.2 in.					
110.5	99.5	17.6	100.2	90.3	27.3	7.6	6.6	0.00	10		1.85	
Material Description					AASHTO	USCS	MAX. Dens. (pcf)	Optimum Moisture (%)	LL	PI	% Fines	% Gravel
Lean Clay with Sand Yellowish Brown					A-7-6	CL	111	17.7	45	24	81.6	0.0

Project: Warrenton Data Center
Client:
Sample / Source B-15
Test Reference/No.: 1

Project No.: 01:31153
Depth (ft.): 1 - 6
Sample No.: D3S-187
Date Reported:

Office / Lab	Address	Office Number / Fax
ECS Mid-Atlantic LLC - Chantilly	14026 Thunderbolt Place Suite 100 Chantilly, VA 20151-3232	(703)471-8400 (703)834-5527

Tested by	Checked by	Approved by		Remarks
jvong	Htran	Dtran		

Determination of thermal properties using a thermal needle probe

Thermal Conductivity of Soil/Soft Rock ASTM D5334

Test Point	Moisture Content %	Corrected Conductivity									Average Conductivity	Average Resistivity
		1st Reading			2nd Reading			3rd Reading				
		K=W/mK	Error Value	Initial Temp	K=W/mK	Error Value	Initial Temp	K=W/mK	Error Value	Initial Temp	K=W/mK	Rho=°C·cm/W
Dry Point	0.39	0.450	0.0024	21.3	0.467	0.0042	20.8	0.476	0.0042	20.9	0.464	215.471
Moist Point 1	5.60	0.836	0.0017	21.6	0.849	0.0026	21.3	0.845	0.0018	21.1	0.843	118.624
Moist Point 2	10.30	1.238	0.0020	19.4	1.294	0.0016	19.3	1.283	0.0015	19.3	1.272	78.642
Moist Point 3	12.41	1.353	0.0012	19.2	1.382	0.0013	19.1	1.359	0.0011	19.1	1.365	73.286
Moist Point 4	14.36	1.593	0.0029	19.1	1.480	0.0012	19	1.485	0.0012	19	1.519	65.821
Moist Point 5	16.26	1.534	0.0015	18.9	1.516	0.0013	18.9	1.473	0.0010	18.8	1.508	66.332
Moist Point 6												
Moist Point 7												
Moist Point 8												
Moist Point 9												

K Material (Standard)	0.2730
K Measured	0.2980
Calibration Factor	0.9161

Volume of Mold (cf)	0.0333
Volume of Mold (M^3)	0.00094
Weight of Test Sample (lb)	3.888
Mass of Dry Soil (kg)	1.764

LL	39
PI	21
USCS Symbol	CL

Test Material screened with #4 sieve.

Needle Insertion Metho Pre-drill

Test performed at: 95 % compactive effort @ blows per layer.

Project: Warrenton Data Center

Client:

Sample / Source: B-02

Project No.: 01:31153

Depth (ft.): 1 - 6

Sample No.: D3S-191

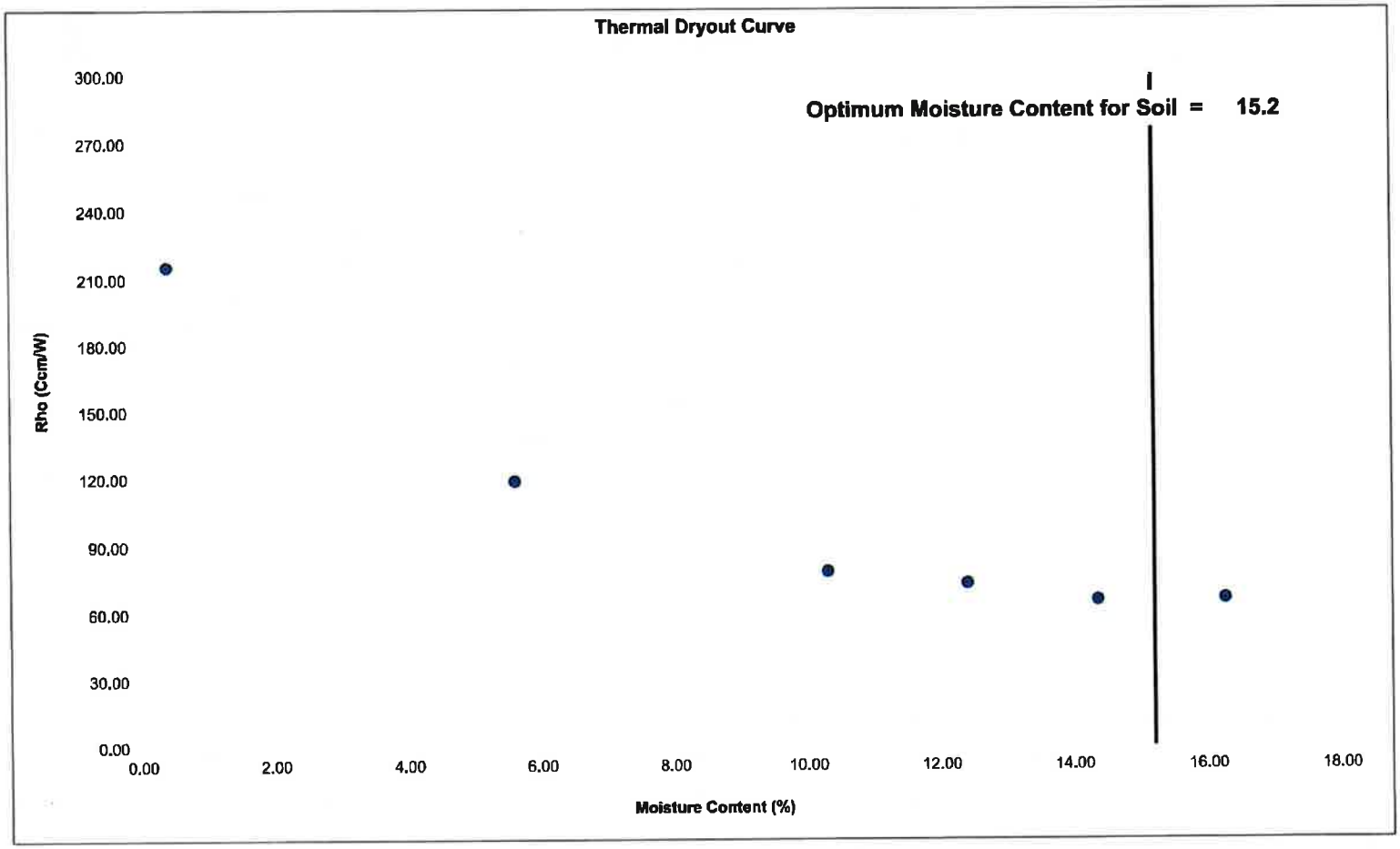
Date Reported:

Office / Lab	Address	Office Number / Fax
ECS Mid-Atlantic LLC - Chantilly	026 Thunderbolt Place Suite 100 Chantilly, VA 20151-32	(703)471-8400 (703)834-5527

Tested by	Checked by	Approved by		Remarks
jvong	Htran	Dtran		

Determination of thermal properties using a thermal needle probe

Thermal Conductivity of Soil/Soft Rock ASTM D5334



Project: Warrenton Data Center

Client:

Sample / Source: B-02

Project No.: 01:31153

Depth (ft.): 1 - 6

Sample No.: D3S-191

Date Reported:

Office / Lab	Address	Office Number / Fax
ECS Mid-Atlantic LLC - Chantilly	026 Thunderbolt Place Suite 100 Chantilly, VA 20151-32	(703)471-8400 (703)834-5527

Tested by	Checked by	Approved by		Remarks
jvong	Htran	Dtran		

Determination of thermal properties using a thermal needle probe

Thermal Conductivity of Soil/Soft Rock ASTM D5334

Test Point	Moisture Content %	Corrected Conductivity									Average Conductivity	Average Resistivity
		1st Reading			2nd Reading			3rd Reading				
		K=W/mK	Error Value	Initial Temp	K=W/mK	Error Value	Initial Temp	K=W/mK	Error Value	Initial Temp	K=W/mK	Rho=°C-cm/W
Dry Point	0.00	0.548	0.0045	22	0.531	0.0030	20.8	0.535	0.0035	20.8	0.538	185.874
Moist Point 1	6.39	1.010	0.0012	20.8	1.058	0.0018	20.4	1.068	0.0019	20.4	1.045	95.668
Moist Point 2	13.78	1.625	0.0013	19.5	1.572	0.0014	19.5	1.580	0.0015	19.5	1.593	62.786
Moist Point 3	15.45	1.692	0.0032	18.8	1.692	0.0016	18.6	1.637	0.0012	18.6	1.674	59.751
Moist Point 4	17.15	1.909	0.0016	18.7	1.852	0.0016	18.7	1.772	0.0010	18.7	1.845	54.214
Moist Point 5	19.24	1.936	0.0013	18.7	1.895	0.0012	18.7	1.867	0.0011	18.7	1.899	52.648
Moist Point 6												
Moist Point 7												
Moist Point 8												
Moist Point 9												

K Material (Standard)	0.2730
K Measured	0.2980
Calibration Factor	0.9161

Volume of Mold (cf)	0.0333
Volume of Mold (M^3)	0.00094
Weight of Test Sample (lb)	3.573
Mass of Dry Soil (kg)	1.621

LL	37
PI	18
USCS Symbol	CL

Test Material screened with #4 sieve.

Needle Insertion Metho: Pre-drill

Test performed at: 95 % compactive effort @ blows per layer.

Project: Warrenton Data Center

Client:

Sample / Source: B-07

Project No.: 01:31153

Depth (ft.): 1 - 6

Sample No.: D3S-193

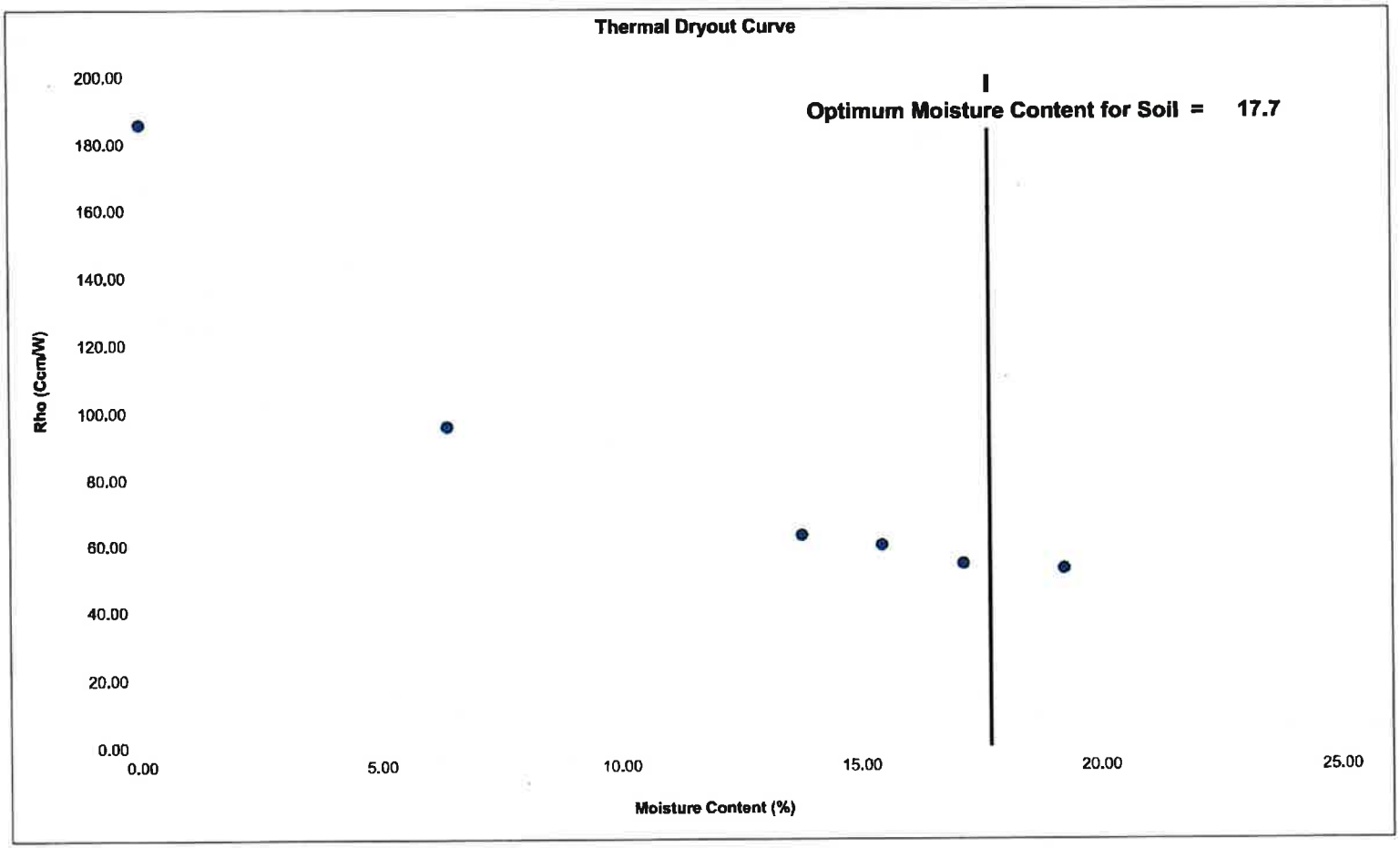
Date Reported:

Office / Lab	Address	Office Number / Fax
ECS Mid-Atlantic LLC - Chantilly	026 Thunderbolt Place Suite 100 Chantilly, VA 20151-32	(703)471-8400 (703)834-5527

Tested by	Checked by	Approved by		Remarks
jvong	Htran	Dtran		

Determination of thermal properties using a thermal needle probe

Thermal Conductivity of Soil/Soft Rock ASTM D5334



Project: Warrenton Data Center

Client:

Sample / Source: B-07

Project No.: 01:31153

Depth (ft.): 1 - 6

Sample No.: D3S-193

Date Reported:

Office / Lab	Address	Office Number / Fax
ECS Mid-Atlantic LLC - Chantilly	026 Thunderbolt Place Suite 100 Chantilly, VA 20151-32	(703)471-8400 (703)834-5527

Tested by	Checked by	Approved by		Remarks
jvong	Htran	Dtran		

Determination of thermal properties using a thermal needle probe

Thermal Conductivity of Soil/Soft Rock ASTM D5334

Test Point	Moisture Content %	Corrected Conductivity									Average Conductivity	Average Resistivity
		1st Reading			2nd Reading			3rd Reading				
		K=W/mK	Error Value	Initial Temp	K=W/mK	Error Value	Initial Temp	K=W/mK	Error Value	Initial Temp	K=W/mK	Rho=°C·cm/W
Dry Point	0.04	0.494	0.0025	22	0.485	0.0033	22	0.489	0.0050	21.8	0.490	204.274
Moist Point 1	6.58	0.919	0.0026	20.3	0.916	0.0018	20.3	0.895	0.0019	20.5	0.910	109.864
Moist Point 2	9.60	1.332	0.0015	19.6	1.322	0.0015	19.5	1.355	0.0018	19.7	1.337	74.812
Moist Point 3	11.77	1.471	0.0022	18.8	1.481	0.0031	18.9	1.471	0.0022	18.5	1.474	67.835
Moist Point 4	14.23	1.741	0.0018	18.5	1.723	0.0018	18.7	1.731	0.0020	18.6	1.732	57.749
Moist Point 5	16.89	1.837	0.0015	18.8	1.843	0.0015	18.6	1.838	0.0012	18.5	1.839	54.365
Moist Point 6												
Moist Point 7												
Moist Point 8												
Moist Point 9												

K Material (Standard)	0.2730
K Measured	0.2935
Calibration Factor	0.9302

Volume of Mold (cf)	0.0333
Volume of Mold (M^3)	0.00094
Weight of Test Sample (lb)	4.326
Mass of Dry Soil (kg)	1.962

LL	41
PI	14
USCS Symbol	ML

Test Material screened with #4 sieve.

Needle Insertion Metho Pre-drill

Test performed at: 95 % compactive effort @ blows per layer.

Project: Warrenton Data Center

Client:

Sample / Source: B-11

Project No.: 01:31153

Depth (ft.): 1 - 6

Sample No.: D3S-194

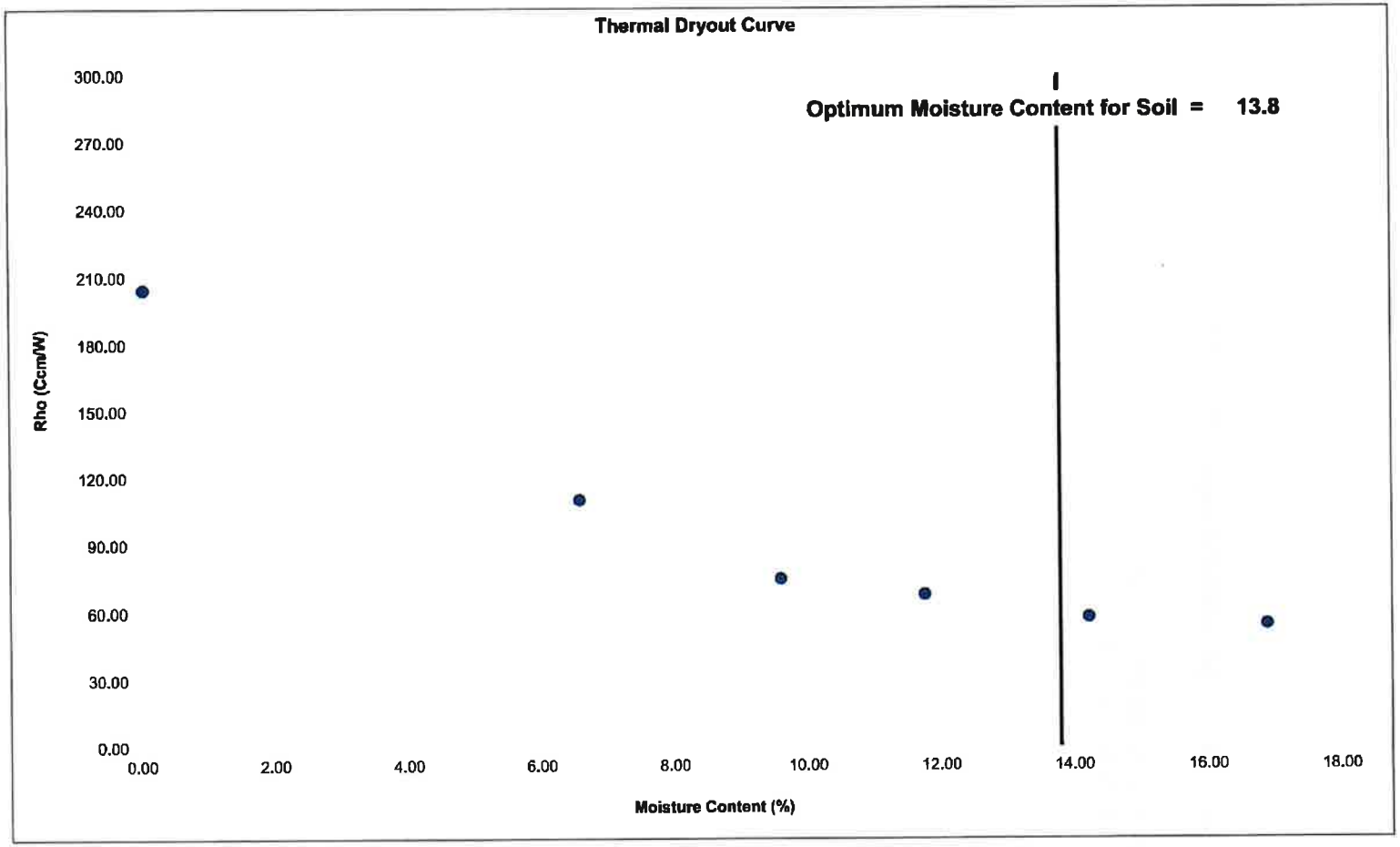
Date Reported:

Office / Lab	Address	Office Number / Fax
ECS Mid-Atlantic LLC - Chantilly	026 Thunderbolt Place Suite 100 Chantilly, VA 20151-32	(703)471-8400 (703)834-5527

Tested by	Checked by	Approved by		Remarks
jvong	Htran	Dtran		

Determination of thermal properties using a thermal needle probe

Thermal Conductivity of Soil/Soft Rock ASTM D5334



Project: Warrenton Data Center

Client:

Sample / Source: B-11

Project No.: 01:31153

Depth (ft.): 1 - 6

Sample No.: D3S-194

Date Reported:

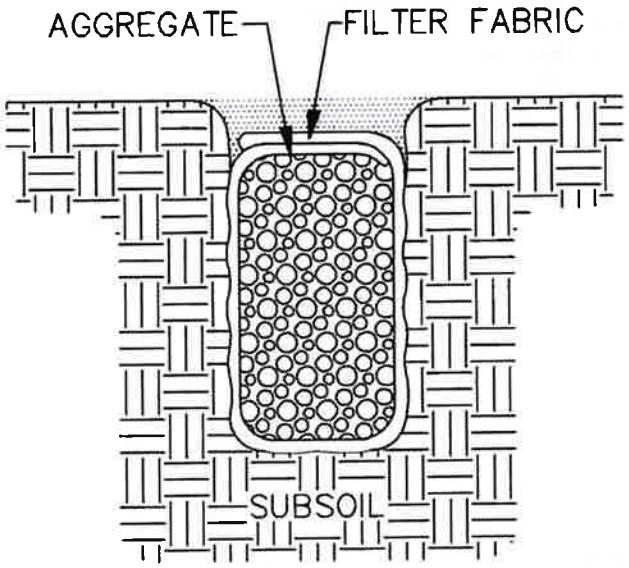
Office / Lab	Address	Office Number / Fax
ECS Mid-Atlantic LLC - Chantilly	025 Thunderbolt Place Suite 100 Chantilly, VA 20151-32	(703)471-8400 (703)834-5527

Tested by	Checked by	Approved by		Remarks
jvong	Htran	Dtran		

APPENDIX D – Supplemental Report Documents

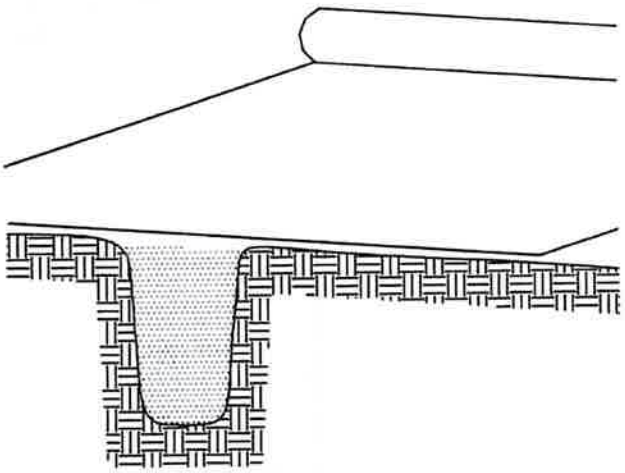
French Drain Installation Procedure
Zone of Influence Diagram

FINAL CONFIGURATION



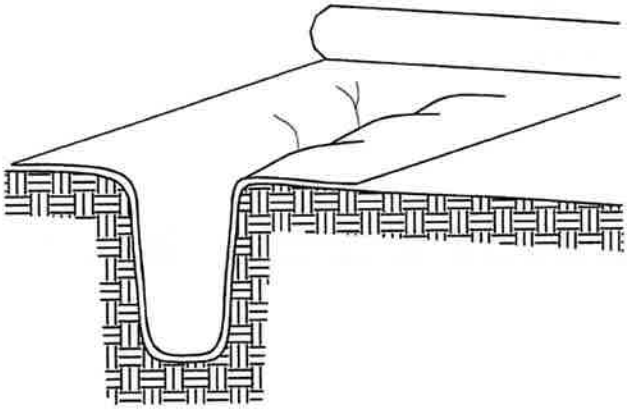
SUBDRAIN USING FILTER FABRIC

STEP 1



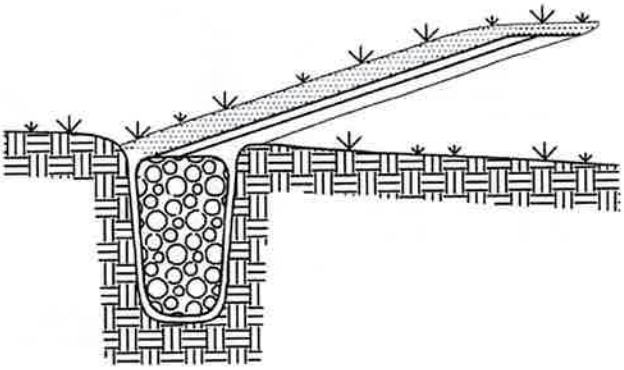
FABRIC IS UNROLLED
DIRECTLY OVER TRENCH

STEP 2



THE TRENCH IS FILLED
WITH AGGREGATE

STEP 3



THE FABRIC IS LAPPED CLOSED
AND COVERED WITH SOIL

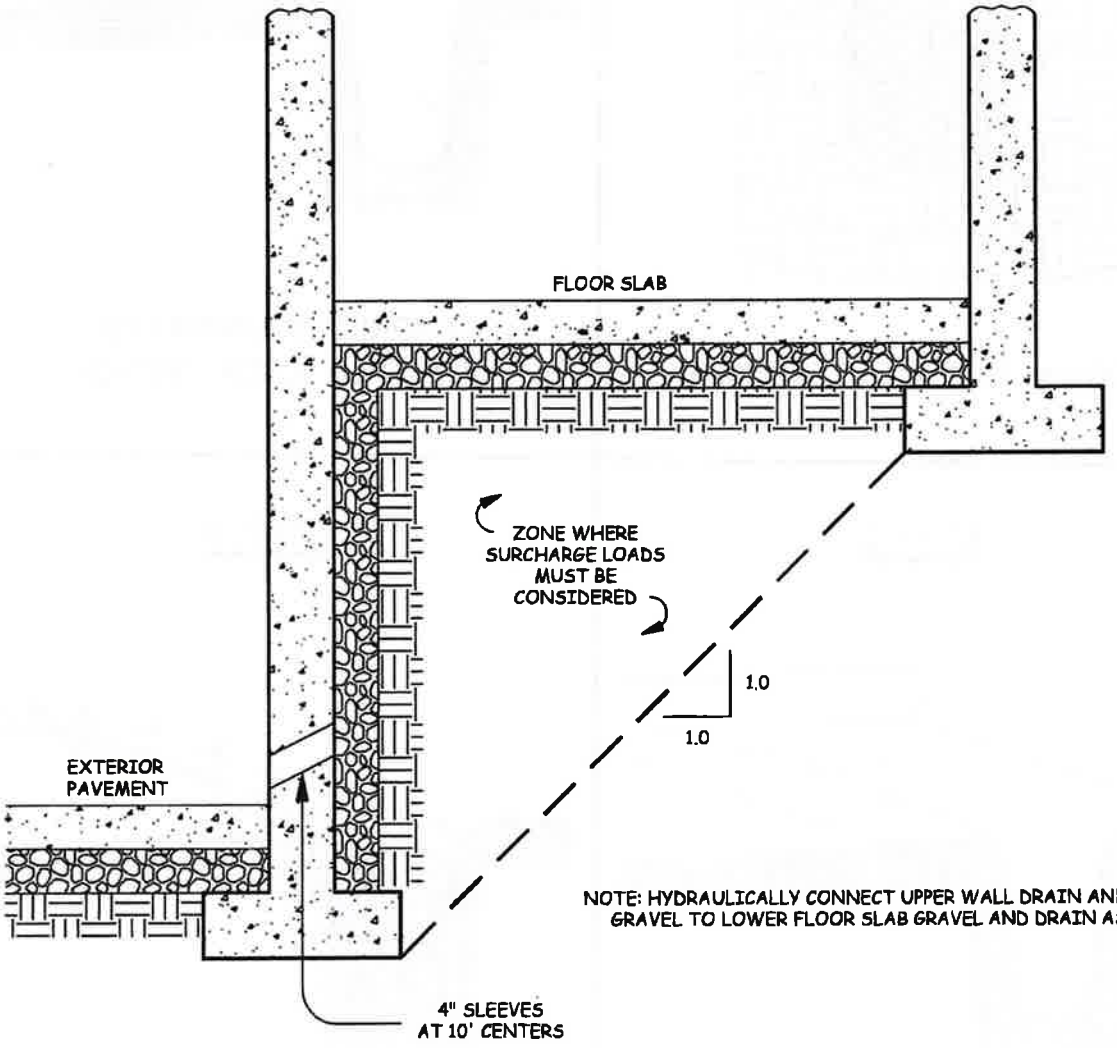
ECS LLC
MID-ATLANTIC
9409 Innovation Drive
Manassas, Virginia 20110
703-396-6259
Fax 703-396-6298

FRENCH DRAIN © INSTALLATION PROCEDURE

ZONE OF INFLUENCE DIAGRAM

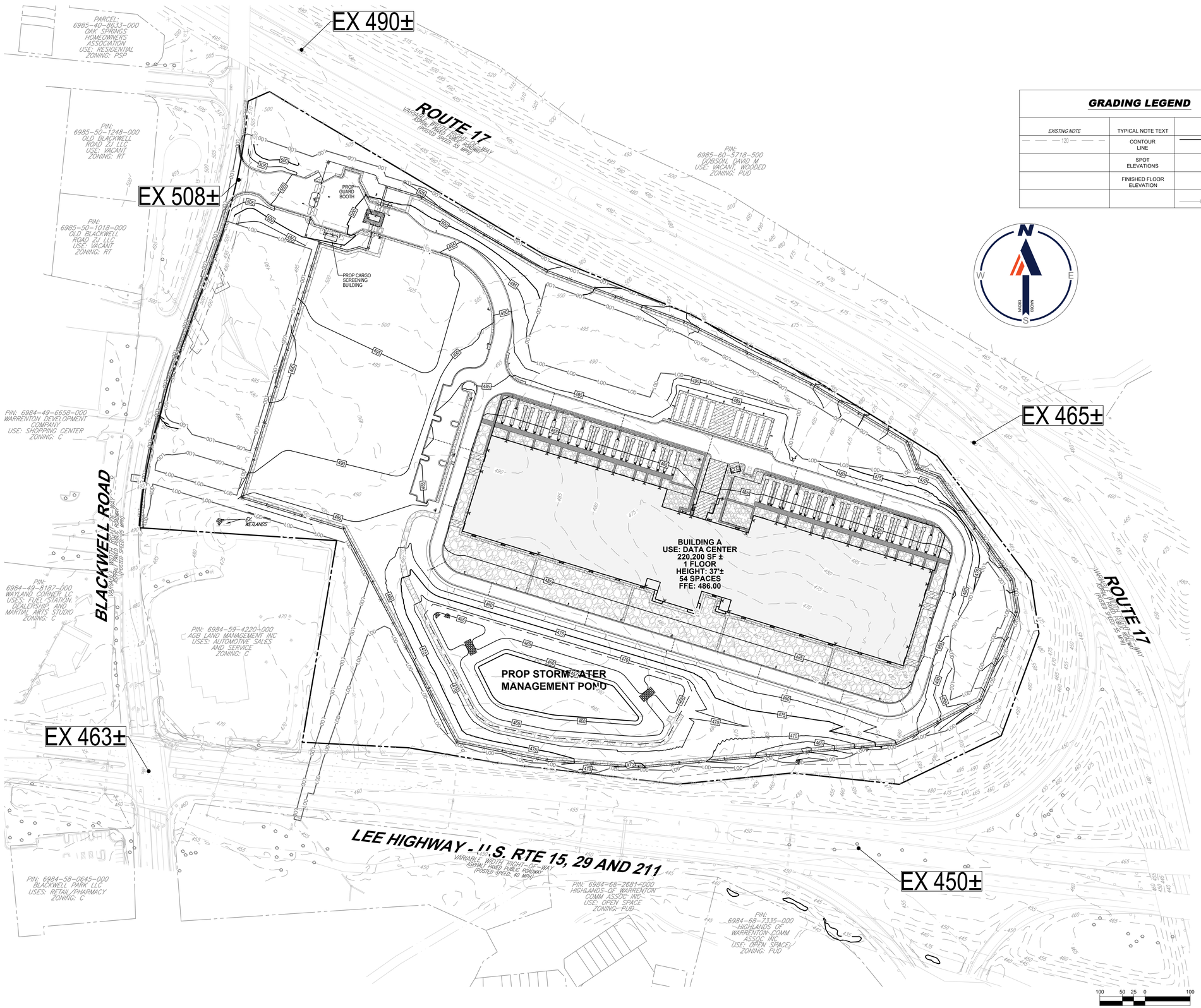
(EXTERIOR WALLS)

NOT TO SCALE



NOTE: HYDRAULICALLY CONNECT UPPER WALL DRAIN AND UNDERSLAB GRAVEL TO LOWER FLOOR SLAB GRAVEL AND DRAIN AS SHOWN.

ECS LLC MID-ATLANTIC



GRADING LEGEND

EXISTING NOTE	TYPICAL NOTE TEXT	PROPOSED NOTE
120	CONTOUR LINE	120
	SPOT ELEVATIONS	TC 516.00
	FINISHED FLOOR ELEVATION	FFE:
		LOD LOD

BOHLER

SITE CIVIL AND CONSULTING ENGINEERING
LAND SURVEYING
PROGRAM MANAGEMENT
LANDSCAPE ARCHITECTURE
LAND PLANNING DESIGN
PERMITTING SERVICES
TRANSPORTATION SERVICES

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REVISIONS

REV	DATE	COMMENT	DRAWN BY / CHECKED BY

811 Know what's below. Call before you dig.

ALWAYS CALL 811

It's fast. It's free. It's the law.

FOR EXHIBIT PURPOSES ONLY

THIS DRAWING IS INTENDED FOR MUNICIPAL AND/OR AGENCY REVIEW AND APPROVAL. IT IS NOT INTENDED AS A CONSTRUCTION DOCUMENT UNLESS INDICATED OTHERWISE.

PROJECT No.:	V212093
DRAWN BY:	DSH
CHECKED BY:	JCW
DATE:	10/28/2022
CAD I.D.:	EXHK - 0

PROJECT:

EXHIBIT

FOR

AMAZON DATA SERVICES, INC.

PROPOSED DEVELOPMENT

BLACKWELL ROAD & LEE HIGHWAY
TOWN OF WARRENTON
FAUQUIER COUNTY, VIRGINIA 20186

BOHLER

28 BLACKWELL PARK LANE, SUITE 201
WARRENTON, VIRGINIA 20186
Phone: (540) 349-4500
Fax: (540) 349-0321
VA@BohlerEng.com

SHEET TITLE:

GRADING EXHIBIT

SHEET NUMBER:

1

ORG. DATE - 10/28/2022

Oct 28, 2022
11:21 V:\212093\CAD\DRAWINGS\EXHIBITS\PLANNING COMMISION GRADING EXHIBIT\V212093 - EXHK - 0---LAYOUT 1 - GRADING EXHIBIT

WALSH COLUCCI
LUBELEY & WALSH PC

John H. Foote
(703) 680-4664
jfoote@thelandlawyers.com
Fax: (703) 680-6067

October 28, 2022

Via Hand Delivery and E-mail

Denise M. Harris, Planning Manager
Community Development Department
21 Main Street
Warrenton, VA 20186

Re: Special Use Permit #SUP2022-00003, Warrenton Data Center

Dear Mrs. Harris:

As a follow-up to the Planning Commission work session on October 25th, enclosed please find seven (7) complete packages of the following documents:

1. One (1) copy of the Land Development Application. *Please note that this is in the process of being executed by the owner and will be provided to you as soon as it is executed;*

2. One (1) copy of the Land Use Application: Affidavit. *Please note that this is in the process of being executed by the owner and will be provided to you as soon as it is executed;*

3. One (1) copy of the Statement of Justification, revised as of October 28, 2022;

4. One (1) copy of the revised draft Special Use Permit Conditions, dated October 28, 2022, for your consideration

5. One (1) 11"x17" copy of the building renderings entitled "Illustrative Building Elevations," prepared by Corgan, dated October 28, 2022;

6. One (1) full size copy and a reduction of the special use permit plan entitled "Special Use Permit for Warrenton Data Center," prepared by

Bohler Engineering, dated April 1, 2022, last revised October 28, 2022**,** and consisting of three sheets;

7. One (1) 11"x17" copy of the plan entitled "Illustrative Plan," prepared by Bohler Engineering, dated October 28, 2022; and

8. One (1) full size copy and a reduction of the existing conditions plan entitled "Existing Conditions Plan for Warrenton Data Center," prepared by Bohler Engineering, dated October 28, 2022.

This list does not include the geotechnical report entitled "Geotechnical Engineering Report – Warrenton Data Center," prepared by ECS Mid-Atlantic, LLC, revised August 15, 2022, because this document has not changed. Also, the noise study that was previously submitted, was you are now aware, only a preliminary version of that document and not a final report, but is in any event out of date, as the Applicant is seeking a zoning determination related to noise and has included a specific condition to address noise ordinance compliance. With the changes to the Special Use Permit Plan, the Tree Study is out of date and the Special Use Permit Plan should be used for these purposes.

As the cover letter with this submission observes, there are some additional conditions to the SUP proposed. Perhaps the most significant is a commitment from the Applicant that while it will still be necessary to clear a portion of the area formerly reserved for Future Use for security fencing, as shown on the revised SUP Plan, **the Applicant proposes a condition that there be no electric substation permitted on the site. It also proposes to request and pay for the undergrounding of all electrical lines extending from the off-site substation serving the Facility to the Facility itself.** Although final decision on this rests with others, the Applicant is committed to seeking a resolution that is acceptable to the community.

AWS, as the Applicant for this Special Use Permit, has compiled responses to the 32 criteria that the Town's Zoning Ordinance indicates are relevant for consideration in connection with a Special Use Permit application. Much of this information has already been provided to the Town in the submissions made, but this is a summary of those responses and in some cases additional information.

1. Whether the proposed Special Use Permit is consistent with the Comprehensive Plan.	The Applicant has addressed this question, in its September 9, 2022 letter. The Applicant also provided explanation to the Planning Commission at the September 27th Work Session that there were two Future Land Use Maps on the Town's website. One is found as the "Future Land Use Plan" on the page containing the link to Plan Warrenton 2040, and the second is found deep in the Plan itself,

	and we erroneously used the one on the website page. The property is correctly shown on the Future Land Use Map as New Town Mixed Use, is zoned Industrial, and the Town has one Industrial zoning classification. The New Town District contemplates Class A Office, a Future University satellite campus, and an Employment Center. The site remains, however, located within the Lee Highway Urban Development Area (UDA). The Plan also anticipates direct access to Route 29 for such uses, though the subject property does not provide any such access, and traffic analysis has suggested that no such access would be desirable. One of the explicit Goals and Policies of the Lee Highway UDA is to evaluate development incentives that stimulate private investment and new development. This data center will be a new development on vacant industrial land and will put the land to a productive use that has escaped every other potential purchaser that has evaluated it over the last three plus decades. <u>A Comprehensive Plan cannot be evaluated solely by looking at colored land use maps.</u> It is a compilation of policies. The New Town Warrenton Character District, covering a substantial area is, among other things, intended to create a mix of uses, green space and public amenities, as well as provide a location for a major employer. No individual site can be expected to meet all objectives in the Plan, and the New Town District is a place in which the Town seeks a signature job center. The Applicant in this case is indeed a major employer. Traffic burden when the facility is fully operational will be very low. The physical design of the data center is intended to have

	the least possible impact on those residential areas in the vicinity, with substantial screening and buffering areas as depicted on the Landscape Plan, and where the facility itself is situated on the Property. A degree of that design must accept the requirements of form following function, so the applicant has provided significantly enhanced architecture in response to staff and Planning Commission input, and to satisfy the purpose and intent of § 9-26.1(F) of the Town Zoning Ordinance with respect to Building Facades at data center developments. The 2040 Plan has significant economic and fiscal goals that seek to achieve a strong, diversified, and resilient economy that supports both residents and businesses and increases the employment base. The Town proposes that it be proactive in its own economic development, and this unique development advances each of these goals. **** Please note that the Applicant has proposed new conditions that are directed at employment opportunities for residents of the Town and for coordination with the local schools and community college for training programs. These conditions have been added at the express request of the Planning Commission. **** The local tax revenues generated by a data center will assist in promoting a diverse, equitable, and stable tax base to maintain a healthy economy, with exceptionally little impact on Town services. While there were comments presented at the Work Session to the effect that the new Plan envisioned the development of the site with a greater mix of uses than that which is sought in this Application, the data center will, as have other such centers, provide indirect jobs and new business.

	The site has previously been evaluated by at least two major retailers. Projects did not materialize because Blackwell Road cannot handle a significant, sustained, traffic burden that would come with any mixed use project at the site. There is insufficient right-of-way, and it would be exceptionally difficult and costly, to improve it. An estimate for the reconstruction of the intersection of Blackwell and Lee Highway alone is set at a high end of $3.5M. Furthermore, Blackwell Road at the site is identified as a Signature Street in the Complete Streets Recommendations, a classification that does not contemplate significant reconstruction. The proposed data center is a light industrial use. This corresponds to the fact that the proposed use with SUP is compatible with the economic goals outlined in the 2040 Plan. Additionally, there is a very limited supply of industrially zoned land in the Town.
2. Whether the proposed Special Use Permit will adequately provide for safety from fire hazards and have effective measures of fire control.	The facility is designed to provide fire protection by the use of sprinklers and fire extinguishers. Significantly, the Applicant has proposed conditions of the special use permit that it will coordinate training between the Town's fire and rescue companies and those other companies and departments that have experience with data centers and will do so when convenient for the first responders locally when operations commence. Upon commencement of operations the Applicant will provide the Town's first responders its "Data Center Response Manual" for use in training for emergencies at its Facility, and shall assist in advising those first responders how to implement its provisions.

	The Applicant must ensure as a condition of site development plan approval that the water line systems at the Facility have sufficient fire flows, as determined by the Town Fire Marshal and it will maintain Facility security personnel 24 hours a day, each day of the year.
3. The level and impact of any noise emanating from the site, including that generated by the proposed use, in relation to the uses in the immediate area.	The Applicant is aware of the concerns over noise, and legitimate response to the "noise study" initially submitted. As we advised the Planning Commission, that "study" was only a preliminary draft that did not include descriptive information or complete data. Unfortunately, neither the Applicant nor this firm were told this, and thought it to be the "report." Staff's and commission concerns as to the data caused the Applicant and its consultants to engage in further analysis and the research further the Town's noise ordinance provisions, which are not self-explanatory. As you are aware, the Applicant has submitted a zoning determination request as to how certain aspects of the ordinance are to be applied and interpreted. Because of this confluence of factors, the Applicant cannot at this submission confirm compliance with the ordinance, given that what compliance means in some cases is yet to be determined. But the Applicant is committed to that compliance once it is determined and to the community's assurance that applicable operating standards are met. To that end, it has proposed a condition of the SUP that requires that it provide a sound study that demonstrates the operation of the data center will meet the requirements of the Town's applicable noise ordinance as a condition of approval of a site development plan. In addition, however, in order to ensure operational compliance, the Applicant would have to conduct a separate sound study one

	month after commencement of business operations to ensure the ordinance is met in real time and if noise levels at any point where a measurement is required do not so comply, the Applicant would have a period of time to undertake such further mitigation measures as are required to achieve compliance. The sound studies contemplated by the proposed condition would be done by a company approved by the Director of Community Development.
4. The glare or light that may be generated by the proposed use in relation to uses in the immediate area.	The Applicant has proposed a condition of the special use permit that it will submit a Lighting Plan pursuant to the provisions of § 9-8 et seq. of the Warrenton Zoning Ordinance in connection with its Site Development Plan, and that all exterior lighting shall utilize LED and be designed and constructed with cutoff and fully shielded fixtures that direct light downward and into the interior of the property and away from adjacent roads and adjacent properties. All building mounted lighting shall have a maximum height of 25', and the Applicant shall install controls on the site fixtures such that they dim to 50% output between 11 PM and dawn.
5. The proposed location, lighting and type of signs in relation to the proposed use, uses in the area, and the sign requirements of this Ordinance.	The Applicant confirms that there is no signage associated with the proposed use, with the possible exception of an address sign on the building.
6. The compatibility of the proposed use with other existing or proposed uses in the neighborhood, and adjacent parcels.	The surrounding area consists of a significant highway, a good deal of existing and much older retail and commercial, and residential uses. It is bordered on the southwest by a car dealership, and on the east by a major interchange. The building will be screened to the extent possible by existing and added landscaping.

	While new plantings will require time to establish anticipated coverage, this is true of every newly developed property, and there will be more landscaping on this site than any other in the vicinity. It is possible, moreover, that with the elimination of the substation site it is now possible to preserve more of the existing vegetation on the Blackwell Road side of the building. The building cannot be entirely screened from view, but the Applicant has sought to soften the visual impact in material ways. Thus, the proposed renderings for the building greatly improve the exterior look of the structure, and to the extent that it can be seen the Applicant submits that it is different from, and more visually attractive than, any other similar facility in the region. Aesthetics, of course, are in the eye of the beholder, and so the Applicant asks only that it be viewed without bias. The data center, once in operation, will have little traffic and almost no demand on public services. Once in operation it will produce revenue for the Town and the County.
7. The location and area footprint with dimensions (all drawn to scale), nature and height of existing or proposed buildings, structures, walls, and fences on the site and in the neighborhood.	Please see the SUP Plan dated October 28, 2022, that has been submitted today. Changes have been made in response to comments that have been received from staff and Commissioners.
8. The nature and extent of existing or proposed landscaping, screening and buffering on the site and in the neighborhood.	Please see the Landscape Plan that is part of the SUP Plan submitted with this application.
9. The timing and phasing of the proposed development and the duration of the proposed use.	The building will be constructed in a single phase once all of the necessary permits have been obtained. It will take approximately 18 months to complete.

10. Whether the proposed Special Use Permit will result in the preservation or destruction, loss or damage of any significant topographic or physical, natural, scenic, archaeological or historic feature.	The approval of this Special Use Permit will not result either in the preservation or the destruction, loss or damage of any such feature. The site is unused and has been for decades. Where trees can be saved, they will be, as shown on the Landscape Plan. The elimination of the substation permits the retention of trees along Blackwell Road.
11. Whether the proposed Special Use Permit at the specified location will contribute to or promote the welfare or convenience of the public.	The security that will be provided will benefit surrounding area (a data center is a vigilant neighbor). Compared to other uses it will not increase the burden of local law enforcement. It will be convenient for employment opportunities given the newly proposed conditions regarding employment for residents of the Town and education programs in the schools servicing the Town. The Applicant is also extending the sidewalk along its entire frontage on Blackwell Road.
12. The traffic expected to be generated by the proposed use, the adequacy of access roads and the vehicular and pedestrian circulation elements (on and off-site) of the proposed use, all in relation to the public's interest in pedestrian and vehicular safety, efficient traffic movement and access in case of fire or catastrophe.	Data centers generate very little traffic after construction is completed. The Applicant is extending sidewalk on the east side of Blackwell Road. The site will be accessible to first responders in the event of a fire or other catastrophe. Access will be provided at the single point shown on the SUP Plan, with a construction access that will be closed once construction is finished.
13. Whether the proposed use will facilitate orderly and safe road development and transportation.	The low level of traffic after operations commence that is associated with the use means that it will have essentially no impact on the Town’s roads and streets.
14. Whether, in the case of existing structures proposed to be converted to uses requiring a Special Use Permit, the structures meet all code requirements of the Town of Warrenton.	Not applicable.

15. Whether the proposed Special Use Permit will be served adequately by essential public facilities, services and utilities.	The Applicant has been advised by the Town's Public Works and Utilities Department that it can be served adequately by public sewer and water and that there is adequate capacity to do so.
16. The effect of the proposed Special Use Permit on environmentally sensitive land or natural features, wildlife habitat and vegetation, water quality and air quality.	The western side of the site was operated as a junkyard from 1963-1997 and has been vacant since. The central portion of the site was operated as agricultural since 1952. The site does have contaminated soils (petroleum, not heavy metals) and the Applicant will remove, characterize, and effect the appropriate disposal of those soils as part of its development plan. Except for these contaminated soils there are no environmentally sensitive land or natural features, wildlife habitat and vegetation on the site and the use will have no adverse effect on water or air quality. The Applicant has identified the area of potentially jurisdictional wetlands. All stormwater must be managed consistently with State requirements and reviewed by the Town.
17. Whether the proposed Special Use Permit use will provide desirable employment and enlarge the tax base by encouraging economic development activities consistent with the Comprehensive Plan.	The Applicant will invest approximately $550,000,000 in this facility and thus in the community. It paid a very substantial sum for the site itself, which increases its taxable value. The use of the property for data centers is indeed a use that generates income for its employees and tax revenue for the jurisdictions. Please see our letter to the County dated September 9, 2022, for more on the issue of taxation of data center property. With respect to employment specifically, the Applicant now proposes a condition of the special use permit in response to a request

	from the Planning Commission to make job opportunities directly available to Warrenton residents.
18. The effect of the proposed Special Use Permit use in enhancing affordable shelter opportunities for residents of the Town, if applicable.	Not applicable.
19. The location, character, and size of any outdoor storage.	No outdoor storage is planned.
20. The proposed use of open space.	All open space on the property will be used for security fencing, or left as open space following construction.
21. The location of any major floodplain and steep slopes.	There is no floodplain, but there is a small area of steep slope that has been identified by the engineers on the eastern end of the site, and that will require a retaining wall.
22. The location and use of any existing non-conforming uses and structures.	There are no existing nonconforming structures.
23. The location and type of any fuel and fuel storage.	There will be 10 diesel fuel storage tanks on site as shown on the SUP Plan. AWS Data Centers (DC) adhere to the Federal Spill Prevention and Control Countermeasure Plan (SPCC) Regulations, as well as State and County rules for oil spill prevention, preparedness, and response to prevent oil discharges to navigable waters and adjoining shorelines. *See* 40 CFR Part 112. AWS DC's SPCC Plans are certified by a professional engineer, who assures that all passive and active control measures for oil containment, storage, and discharge comply with Local, State and Federal regulations. AWS DC's SPCC Plans list a combination of active and passive containment measures needed to meet the requirements of 40 CFR 112.7(c). All affected AWS employees are trained annually on the SPCC mitigation

	measures. AWS DC's double-walled storage tanks have inner and outer tank walls that meet the definition of secondary containment under the DEQ LPR-SRR-2019-03 - Storage Tank Program Compliance Manual, Volume V - AST Guidance, and under 40 CFR Part 112, Section 8.1.2.2; therefore, tertiary containment is not required. AWS's fuel oil loading and unloading operations fall under the general secondary containment requirements of 40 CFR Part 112.7(c). Oil water separators are not required under 40 CFR 112.7(c) of the SPCC Rule, and at the State and County level are only mentioned as a recommendation, not a mandate.
24. The location and use of any anticipated accessory uses and structures.	The only accessory structure is the guardhouse shown on the SUP Plan.
25. The area of each proposed use.	This is shown on the SUP Plan.
26. The proposed days/hours of operation.	The facility will operate twenty-four hours a day, each day of the year.
27. The location and screening of parking and loading spaces and/or areas.	All parking is shown on the SUP Plan.
28. The location and nature of any proposed security features and provisions.	The site is secure facility, with fencing on all sides, which will be patrolled by professional security personnel. It is gated and access will be through the guardhouse area only. Specific features and provisions consist of security lights and cameras but the Applicant has agreed to conditions of the SUP that mitigate the offsite impact of any such equipment.
29. The number of employees.	At full buildout there will be approximately 52 employees, but an average of 32 employees will be present at any given time, primarily during shift changes. Overlap could occur at shift change. Employees are comprised of engineering technicians, data center operators, security personnel, and

	logistics personnel. The estimated number of visitors, including vendors and subcontractors, is 5-10 persons per day.
30. The location of any existing and/or proposed adequate on and off-site infrastructure.	Eventually, the Applicant will require additional power from Dominion Energy, but it has advised the Town that it can commence operations with the existing power that is available to it. As noted, there will be no substation on site.
31. Any anticipated odors which may be generated by the uses on site.	No odors are associated with this use.
32. Refuse and service areas.	There is no more than domestic refuse generated at the site, and there is a shielded site shown on the SUP Plan for the location of one or more roll off boxes. Refuse will be removed on a regular schedule so that there is no on-site accumulation.

Please do not hesitate to contact me should you have any questions or need additional information.

Very truly yours,

WALSH, COLUCCI, LUBELEY & WALSH, P.C.

John H. Foote

John H. Foote, Esq.

Enclosures
cc: Jay Reinke
Taylor Hicks
Umar Shahid
John Wright/Connor Hedges
Mike Halls

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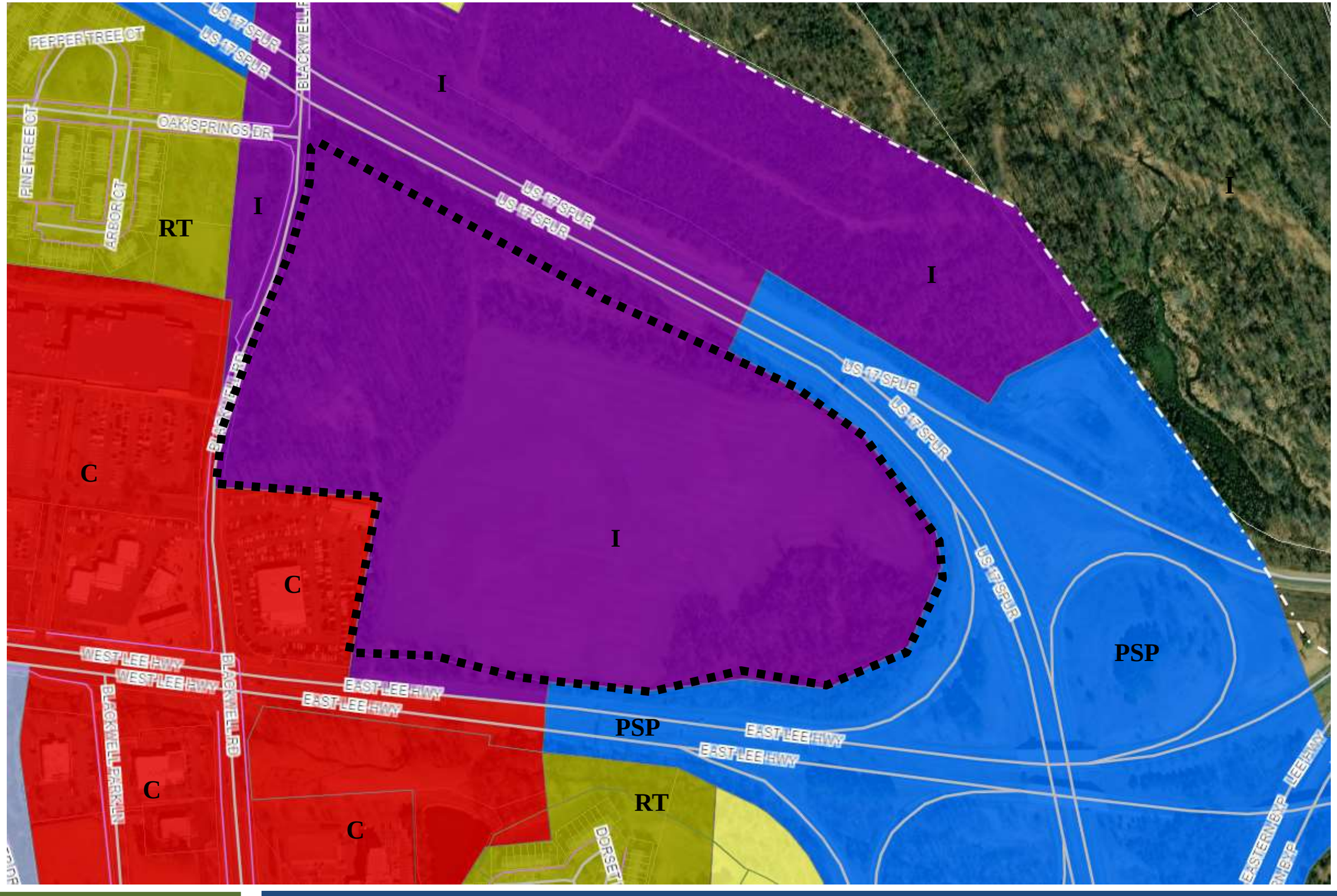
Special Use Permit #SUP2022-00003, Warrenton Data Center

November 15, 2022

PLANNING COMMISSION HEARING



PROPERTY LOCATION


PEPPER TREE CT
US 17 SPUR
US 17 SPUR
BLACKWELL RD
I
OAK SPRINGS DR
PINE TREE CT
ARBOR CT
RT
I
US 17 SPUR
US 17 SPUR
I
US 17 SPUR
US 17 SPUR
C
I
C
WEST LEE HWY
WEST LEE HWY
BLACKWELL RD
EAST LEE HWY
EAST LEE HWY
PSP
EAST LEE HWY
EAST LEE HWY
BLACKWELL PARK LN
C
C
RT
US 17 SPUR
PSP
EASTERN BYP
LEE HWY

ZONING



Future Land Use

- Greenway and Wellness Mixed Use
- Health and Wellness Mixed Use
- Old Town Mixed Use
- New Town Mixed Use
- Office
- Re-Planned Commercial
- Commercial
- Light Industrial
- Low Density Residential
- Medium Density Residential
- High Density Residential
- Park
- Public/Semi-Public Non-Intensive
- Public/Semi-Public Intensive

FUTURE LAND USE PLAN

3-4.12.2 Permitted Uses (by-right)

- Accessory buildings
- Active and Passive Recreation and Recreational Facilities
- Banks and savings and loan offices
- Broadcasting studios and offices
- Business and office supply establishments
- Cabinet, upholstery, and furniture shops
- Cafeteria or snack bar for employees
- Clinics, medical or dental
- Commercial uses constituting up to 15% of permitted site or building area
- Conference Centers
- Contractor's office and warehouse without outdoor storage
- Crematory
- Dwellings for resident watchmen and caretakers employed on the premises
- Employment service or agency
- Flex Office and Industrial uses
- Health and Fitness Facilities
- Institutional buildings
- Janitorial service establishment
- Laboratories, research, experimental or testing, but not testing explosives, rockets, or jet engines
- Light manufacturing uses which do not create danger to health and safety in surrounding areas and which do not create offensive noise, vibration, smoke, dust, lint, odor, heat, glare, or electrical impulse than that which is generally associated with light industries
- Mobile Food Vendors subject to Article 9-24
- Monument sales establishments with incidental processing to order but not including shaping of headstones
- Motion picture studio
- Nurseries and greenhouses
- Offices- business, professional, or administrative
- Off-street parking and loading subject to Article 7
- Open space subject to Article 9
- Printing, publishing, and engraving establishment; photographic processing; blueprinting; photocopying; and similar uses
- Private club, lodge, meeting hall, labor union, or fraternal organization or sorority
- Rental service establishment
- Retail or wholesale sales and service incidental to a permitted manufacturing, processing, storing, or distributing use
- Rug and carpet cleaning and storage with incidental sales of rugs and carpets
- Security service office or station
- Sign fabricating and painting
- Signs, subject to Article 6
- Studios
- Transmission and receiving towers of height not exceeding one hundred twenty-five (125) feet
- Utilities related to and necessary for service within the Town, including poles, wires, transformers, telephone booths, and the like for electrical power distribution or communication service, and underground pipelines or conduits for local electrical, gas, sewer, or water service, but not those facilities listed as requiring a special use permit
- Wholesale establishment, storage warehouse, or distribution center. furniture moving

INDUSTRIAL DISTRICT PERMITTED USES

- Special Use Permit Pre-Application Meeting - November 21, 2021
- Special Use Permit Pre-Application Follow-up Meeting - December 17, 2021
- Special Use Permit Submission - April 8, 2022
- Notice of Completeness - May 6, 2022
- Special Use Permit Agency Comments Received by Applicant - June 7, 2022
- Post Submission Meeting - July 11, 2022
- Resubmission - July 18, 2022
- Planning Commission Work Session - July 26, 2022
- Post Work Session Submission - September 9, 2022
- Balloon Test - September 15, 2022
- Meeting regarding Noise Ordinance - October 3, 2022
- Zoning Determination Letter Submitted - October 18, 2022
- Planning Commission Work Session - October 25, 2022
- Final Submission for Planning Commission Hearing - October 28, 2022
- Planning Commission Hearing - November 15, 2022

PUBLIC PROCESS TIMELINE – 12+ MONTHS

- Condition #3 – No electric substation on the Property
- Condition #4 – Undergrounding of Electrical Lines
- Condition #15 – Installation of Sidewalk on Blackwell Road
- Conditions #16 – Noise Compliance Assurances
- Condition #17 – Lighting Assurances
- Condition #18 – Tree Save Commitments
- Condition #21 – Employment Opportunities
- Condition #22 – Programs for Local Schools

KEY CONDITIONS

3. Electric Substation: There shall be no electric substation constructed on the Property.

4. Undergrounding of Electrical Lines from a Substation to the Facility: Pursuant to Warrenton Zoning Ordinance § 9-26.1(C), the distribution lines from the off-site substation serving the data center are required to be underground. Applicant will ensure payment of the undergrounding of these distribution lines with the utility company in accordance with its requirements.

KEY CONDITIONS

16. Noise: The Applicant shall provide a sound study prepared by a qualified party or company approved by the Director of Community Development that demonstrates the operation of the data center will meet the requirements of § 9-14.2 of the Town of Warrenton Zoning Ordinance relating to noise, as a condition of approval of a site development plan. In addition, the Applicant shall conduct a separate sound study one month after commencement of business operations to ensure compliance with the aforesaid Section. If noise levels at any point where a measurement is required by the Ordinance to be taken do not so comply, the Applicant shall forthwith undertake such further mitigation measures as are required to achieve compliance within a reasonable time not to exceed 60 days, or, if 60 days is insufficient to achieve compliance, the Applicant shall promptly begin and diligently pursue mitigation until compliance has been achieved.

21. Employment Opportunities: The Applicant shall provide outreach to qualified persons residing in the Town of Warrenton who may be interested in employment at the data center through a variety of media such as the conduct of a job fair, the inclusion of a direct link to potential opportunities on the Town website, or on other websites for the purpose. Such outreach shall be made reasonably in advance of the construction of the Project so that interested persons may make application for positions, not less than six months prior to the anticipated completion of construction.

22. Programs for Local Schools: The Applicant shall ensure coordination by the appropriate Amazon personnel with the Town of Warrenton and the Fauquier County School Division regarding the establishment and maintenance of educational programs in the K-12 grades, and with Laurel Ridge Community College, to establish and maintain workforce development programs for career pathways in data center construction and operations, and such other programs as the parties may deem mutually beneficial.

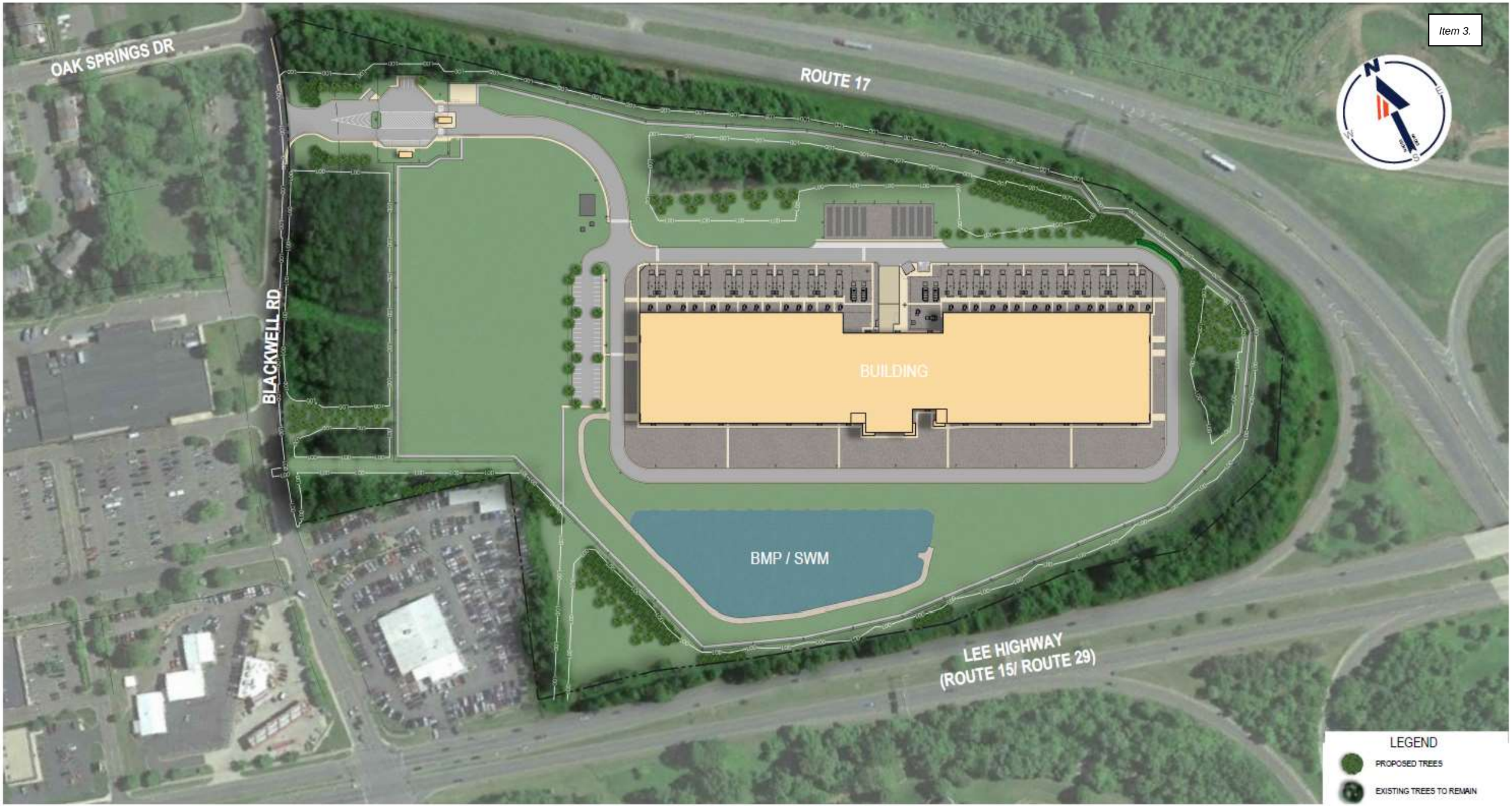


BUILDING ELEVATIONS AND RENDERINGS



BUILDING ELEVATIONS AND RENDERINGS

BUILDING ELEVATIONS AND RENDERINGS



ILLUSTRATIVE PLAN

THANK YOU

November 15, 2022

PLANNING COMMISSION HEARING


BUILDING 16

- Town Council considers data center ordinance January 2018 - no action
- WCL&W contacts Town Attorney regarding possibility of data center ordinance amendment to permit by special use permit and is advised to await completion of the new Comprehensive Plan - April 2021
- Town Council initiates consideration of Zoning Text Amendment for data centers on the night the new Plan is adopted – April 13, 2021
- Planning Commission Work Session on Data Centers – May 25, 2021 – No draft ordinance yet presented
- Draft Ordinance prepared by Town Staff based on recommended language from WCLW and Staff rewrite – June 2021
- Planning Commission Public Hearing on draft ordinance requiring SUP for a data center on I zoned property – June 15, 2021
- Second Planning Commission Public Hearing on draft Ordinance – July 18, 2021
- Town Council Public Hearing on draft Ordinance August 10, 2021 – two speakers in support, one speaker in opposition – unanimously adopted
- Special Use Permit Pre-Application Meeting - November 21, 2021
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TIMELINE

3-4.12 I Industrial District

3-4.12.1 Legislative Intent

It is the intent of this district to implement the Town's Comprehensive Plan by providing for a variety of light manufacturing, fabricating, processing, wholesale distributing, and warehousing uses appropriately located for access by highways and providing a controlled environment within which signing is limited, uses are to be conducted generally within completely enclosed buildings, and a moderate amount of landscaping is required. In order to preserve the land for industry, to reduce extraneous traffic, and avoid future conflicts between industry and other uses, business and service uses are limited primarily to those which will be useful to employees in the district and future residential uses are restricted.

INDUSTRIAL DISTRICT

EXPERIENCE WARRENTON VIRGINIA EST. 1810

Planning Commission Public Hearing
SUP 22-3 Amazon Data Center
December 20, 2022

Request

Amazon Data Center

- GPIN 6984-69-2419
- **Applicant:** Amazon Data Services, Inc.
- **Property Owner:** Amazon Data Services, Inc.
- **Zoning:** I - Industrial
- **Comprehensive Plan:** New Town District
- SUP for a 220,200 sq ft data 41.793 acres

Proposed Location

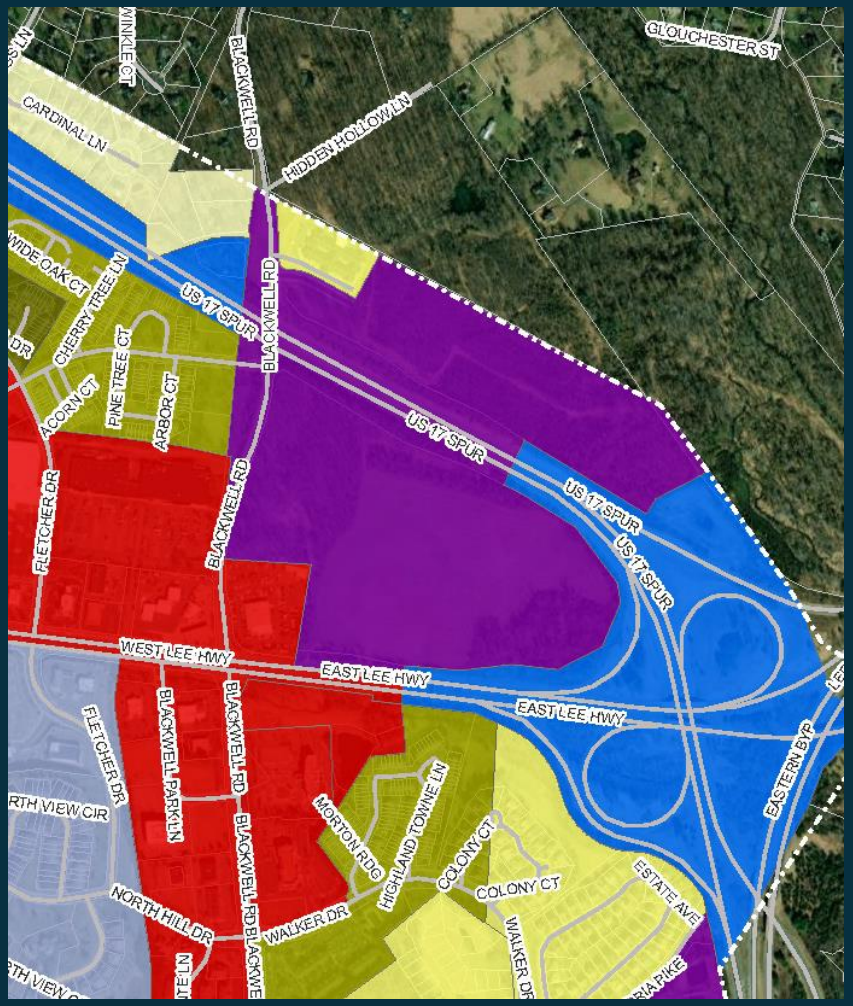


Proposal

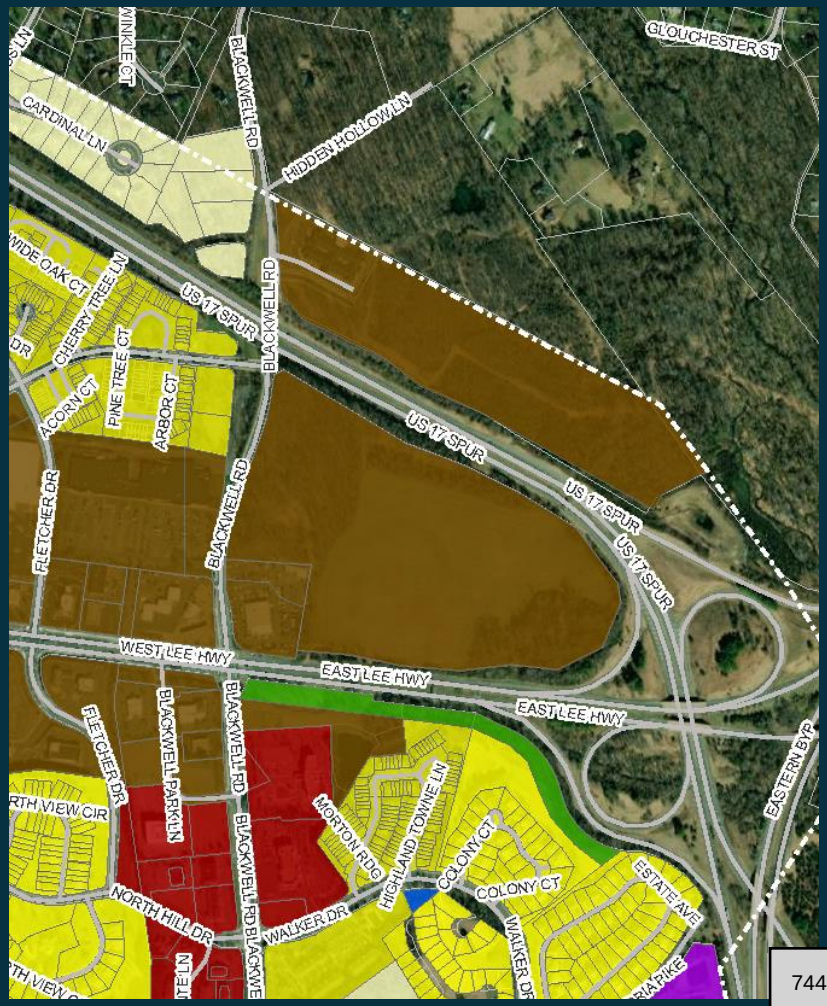
- Data Center with following specifications:
  - 220,200 SF single story (37’) building, plus mechanical
  - Security Fence
  - Guard Gate with Access of Blackwell Road
- Requesting:
  - Modification to building height allowance
  - Modification to fence height allowance max. 8’
  - Modification in loading spaces to one

Adjacent Uses

Zoning Map - Industrial



Future Land Use – New Town District



History of Site

- Fauquier County Real Estate Records 1997 No Improvements
- Late 1990s Walmart considered the Site
- 2007 Wilson Land submitted a proposed plan for a Planned Unit Development
  - Mixed use development called Warrenton Greene.
  - Planning Commission spent over a year on the application and the associated ZOTA 2008-07 to recommend approval to the Town Council on June 17, 2009.
  - Town Council approved the ZOTA 08-01 on November 10, 2009 and tabled the remaining applications.
  - The Applicant withdrew the applicants on February 7, 2011 stating the economy made the proposals no longer viable.

Zoning Ordinance

- Zoning – Industrial By-Right Uses
- Noise Performance Standards
- Lighting, Landscaping, Buffers Site Plan
- Stormwater/E&S Site Plan

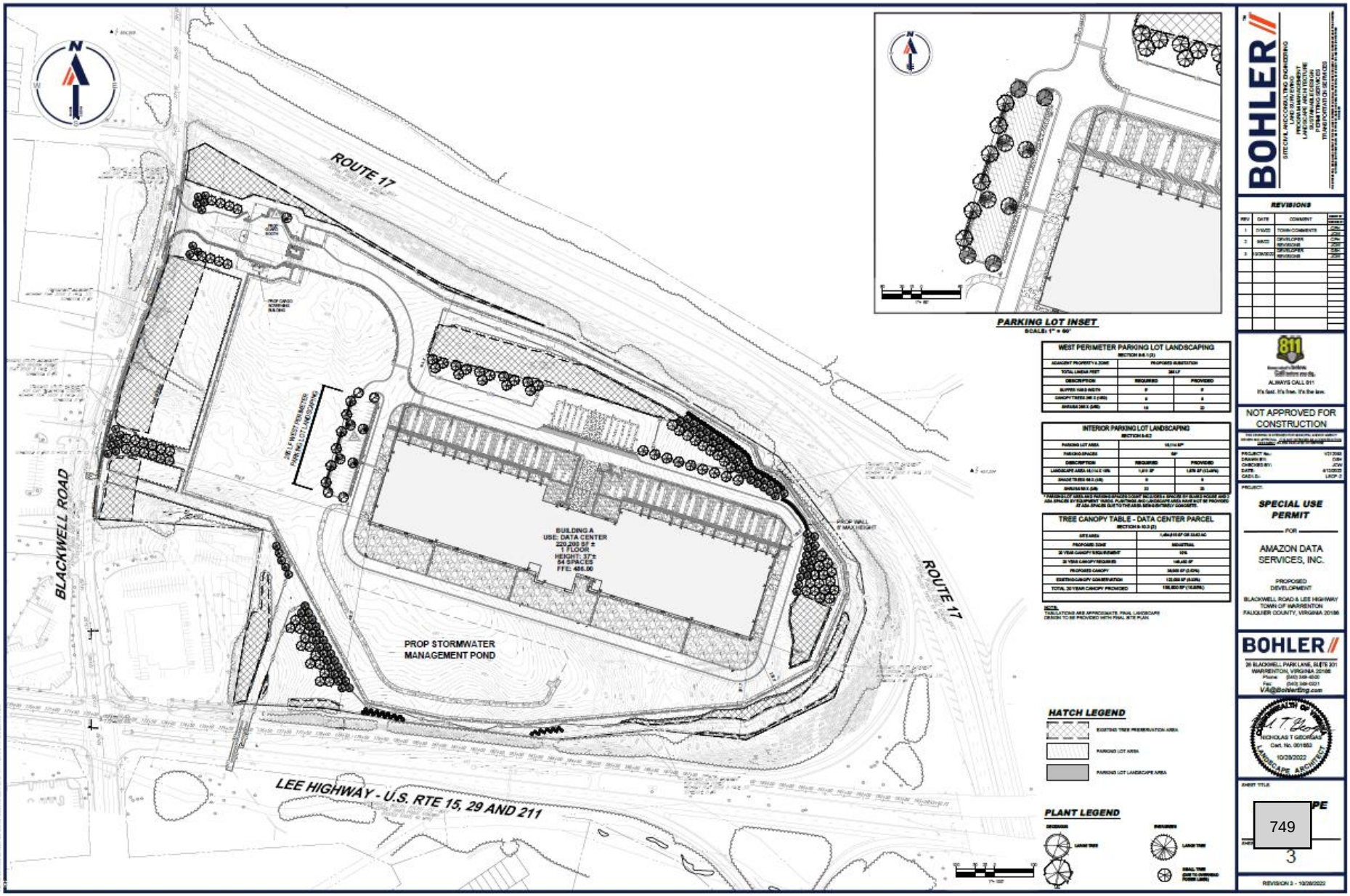
Industrial By-Right Uses

- *Accessory buildings*
- *Active and Passive Recreation and Recreational Facilities*
- *Banks and savings and loan offices*
- *Broadcasting studios and offices*
- *Business and office supply establishments*
- *Cabinet, upholstery, and furniture shops*
- *Cafeteria or snack bar for employees*
- *Clinics, medical or dental*
- *Commercial uses constituting up to 15% of permitted site or building area*
- *Conference Centers*
- *Contractor's office and warehouse without outdoor storage*
- *Crematory*
- *Dwellings for resident watchmen and caretakers employed on the premises*
- *Employment service or agency*
- *Flex Office and Industrial uses*
- *Health and Fitness Facilities*
- *Institutional buildings*
- *Janitorial service establishment*
- *Laboratories, research, experimental or testing, but not testing explosives, rockets, or jet engines*
- *Light manufacturing uses which do not create danger to health and safety in surrounding areas and which do not create offensive noise, vibration, smoke, dust, lint, odor, heat, glare, or electrical impulse than that which is generally associated with light industries*
- *Mobile Food Vendors subject to Article 9-24*
- *Monument sales establishments with incidental processing to order but not including shaping of headstones*
- *Motion picture studio*
- *Nurseries and greenhouses*
- *Offices- business, professional, or administrative*
- *Off-street parking and loading subject to Article 7*
- *Open space subject to Article 9*
- *Printing, publishing, and engraving establishment; photographic processing; blueprinting; photocopying; and similar uses*
- *Private club, lodge, meeting hall, labor union, or fraternal organization or sorority*
- *Rental service establishment*
- *Retail or wholesale sales and service incidental to a permitted manufacturing, processing, storing, or distributing use*
- *Rug and carpet cleaning and storage with incidental sales of rugs and carpets*
- *Security service office or station*
- *Sign fabricating and painting*
- *Signs, subject to Article 6*
- *Studios*
- *Transmission and receiving towers of height not exceeding 125'*
- *Utilities related to and necessary for service within the Town, including poles, wires, transformers, telephone booths, and the like for electrical power distribution or communication service, and underground pipelines or conduits for local electrical, gas, sewer, or water service, but not those facilities listed as requiring a special use permit*
- *Wholesale establishment, storage warehouse, or distribution center. Furniture moving.*

Comprehensive Plan

- Plan Warrenton 2040 – New Town Character District
  - "*a signature location for a regional employer and jobs center, it will contain mixed-use residential, entertainment and commercial uses organized by a compact interior street grid network and a park area that is located over an existing floodplain*,"
  - Envisioned with structures up to six stories, with a minimum of thirty-five (35) feet for a single-story commercial, and lot coverage of 80%
  - "*Evaluate development incentives that stimulate private investment and new development*,"
  - Gateway and Signature Streets; Walkability; National Scenic Byway
  - "*conserve, reuse, and promotes historic resources to enhance the Town's sense of place and grow the economy through economic activity*,"

SUP Plan


ROUTE 17
BLACKWELL ROAD
ROUTE 17
LEE HIGHWAY - U.S. RTE 15, 29 AND 211
BUILDING A
USE: DATA CENTER
220,200 SF ±
1 FLOOR
HEIGHT: 37'±
54 SPACES
FFE: 486.00
PROP STORMWATER MANAGEMENT POND
PROP WALL 8' MAX HEIGHT
PARKING LOT INSET
WEST PERIMETER PARKING LOT LANDSCAPING
INTERIOR PARKING LOT LANDSCAPING
TREE CANOPY TABLE - DATA CENTER PARCEL
HATCH LEGEND
PLANT LEGEND
BOHLER
REVISIONS
ALWAYS CALL 811
It's fast. It's free. It's the law.
NOT APPROVED FOR CONSTRUCTION
SPECIAL USE PERMIT
AMAZON DATA SERVICES, INC.
PROPOSED DEVELOPMENT
BLACKWELL ROAD & LEE HIGHWAY
TOWN OF WARRENTON
FAUQUIER COUNTY, VIRGINIA 20186
BOHLER
NICHOLAS T GEORGIAS
Cert. No. 001882
10/28/2022
LANDSCAPE ARCHITECT
REVISION 3 - 10/28/2022

Elevations



Transportation and Public Utilities

- Transportation – 52 Employees
  - 5’ Sidewalk Blackwell Road
  - No Access Lee Highway
  - 24 Hour Gated Security
- Water and Sewer
  - 2015 Water and Sewer Capacity Study 23,500 gpd
  - Initial Charging 19,000 gpd
  - Daily Domestic Use Anticipated 380.6 gpd

Waivers and Modifications

- Increase Building Height 35’ to 37’
- Increase Fence Height 6’ to 8’
- Decrease Parking Loading Space Requirement 22 spaces to 1 space

Planning Commission

- Work Session July 26, 2022
- PC Requested Balloon Test September, 2022
- Work Session October 25, 2022
- November 15, 2022 Public Hearing
- November 22, 2022 Public Hearing
- December 20, 2022 Public Hearing

Draft Conditions of Approval

- SUP Plan – No Substation on Property
- Illustrative Building Design – 37’Max
- 5’ Sidewalk on Blackwell, No Access Lee Hwy
- Electrical Lines Underground to Substation
- No Signage
- 8’ Fence, 24 hour Security Gate
- 56 Parking, 1 Loading Space
- Emergency Services Access and Training
- Domestic Use Water and Sewer

Draft Conditions of Approval

- Applicant provide noise study at time of Site Plan to demonstrate meets Zoning Ordinance.
- Separate sound study one month after commencement of use to ensure Zoning Ordinance being met.
- If noncompliant any point in future, must undertake mitigation measures within 60 days.
- Lighting dim between 50% hours 11 PM – dawn, max heights, meets Zoning Ordinance at Site Plan.

Draft Conditions of Approval

- Employment Opportunities: Job Fair and Outreach
- Programs for Local Schools: K-12/LRCC

EXPERIENCE WARRENTON VIRGINIA EST. 1810

Planning Commission Public Hearing
SUP 22-3 Amazon Data Center
December 20, 2022

Special Use Permit #SUP2022-00003, Warrenton Data Center

December 20, 2022

PLANNING COMMISSION HEARING

- Special Use Permit Pre-Application Meeting - November 21, 2021
- Special Use Permit Pre-Application Follow-up Meeting - December 17, 2021
- Special Use Permit Submission - April 8, 2022
- Notice of Completeness - May 6, 2022
- Special Use Permit Agency Comments Received by Applicant - June 7, 2022
- Post Submission Meeting - July 11, 2022
- Resubmission - July 18, 2022
- Planning Commission Work Session - July 26, 2022
- Post Work Session Submission - September 9, 2022
- Balloon Test - September 15, 2022
- Meeting regarding Noise Ordinance - October 3, 2022
- Zoning Determination Letter Submitted - October 18, 2022
- Planning Commission Work Session - October 25, 2022
- Final Submission for Planning Commission Hearing - October 28, 2022
- Planning Commission Hearing - November 15, 2022
- Planning Commission Hearing - November 22, 2022
- Zoning Determination Letter Issued - December 16, 2022
- Planning Commission Hearing - December 20, 2022

PUBLIC PROCESS TIMELINE – 12+ MONTHS

- Land Development Application
- Land Use Application Affidavit
- Noise Study
- Power
- Tree Removal Survey
- Visual/Elevation from Lee Highway

NOVEMBER 22ND MOTION

- Included with Special Use Permit Submission on April 8, 2022

TOWN OF WARRENTON

Department of Community Development

PO BOX 341
WARRENTON, VIRGINIA 20188
http://www.warrentonva.gov
Permittech@warrentonva.gov
(540) 347-2405

Land Development Application

Type of Development [select type(s) below] Permit #_____

Planning	*Zoning*			
☐ Commission Permit (§2232)	☐ Administrative Appeal	☐ Concept Plan Review	☐ Record / Vacate Plat
☐ Comprehensive Plan Amendment	☐ As-Built	☐ Easement Plat	☐ Site Development Plan
☑ Special Use Permit	☐ Bond Release/ Reduction	☐ Final Plat	☐ Variance
☐ Rezoning	☐ Bond Extension	☐ Preliminary Plat	☐ Waiver, Administrative
	☐ Boundary Adjustment	☐ Re-approval of Plat	☐ Waiver/Exception, Legislative

☐ Amendment to Existing Approved Application? If Yes, List Application_____

Project Description

Project Name: Warrenton Data Center Special Use Permit

Property Address (if no address, give closest cross street): Blackwell Road and Lee Highway

Purpose of Request: Special Use Permit for Data Center

Zoning District: Industrial Total Acres: approx. 41.793 Acres for Proposed Use: approx. 41.793

Parcel Identification Number(s): 6984-69-2419-000

LAND USE APPLICATION

- Included with Special Use Permit Submission on April 8, 2022

Date Stamp

TOWN OF WARRENTON
P.O. Drawer 341
Warrenton, VA 20188
(540) 347-1101 x106
Permittech@warrentonva.gov

LAND USE APPLICATION:
AFFIDAVIT

NO. _____

This affidavit certifies that the party listed, who is listed as the Applicant's Representative on a land use application, has been granted authorization to make an application and act on behalf of a property owner. It must be filled out completely by the property owner if another party is submitting an application(s) on the owner's behalf. This form must be notarized and must be submitted prior to issuance. Copies of affidavits are unacceptable.

I, _____ am the owner of the property listed below and I certify that I have granted, John Foote and Jessica Pfeiffer as my duly authorized agent and give permission to make a land use application and act on my behalf for the following address:
Blackwell Road and Route 29 (Parcel Identification Number 6984-69-2419-000)
for the land use application of special use permit for a data center
_____.

LAND USE APPLICATION AFFIDAVIT

- Draft Noise Study Submitted with Post Planning Commission Work Session Submission - September 9, 2022
- Zoning Determination Letter Submitted - October 18, 2022
- Condition Drafted and Included regarding Noise – October - November, 2022
- Zoning Determination Letter Issued/Received – December 16, 2022
- Condition Revised to Provide more Assurances – December, 2022

NOISE STUDY

Previous Condition:

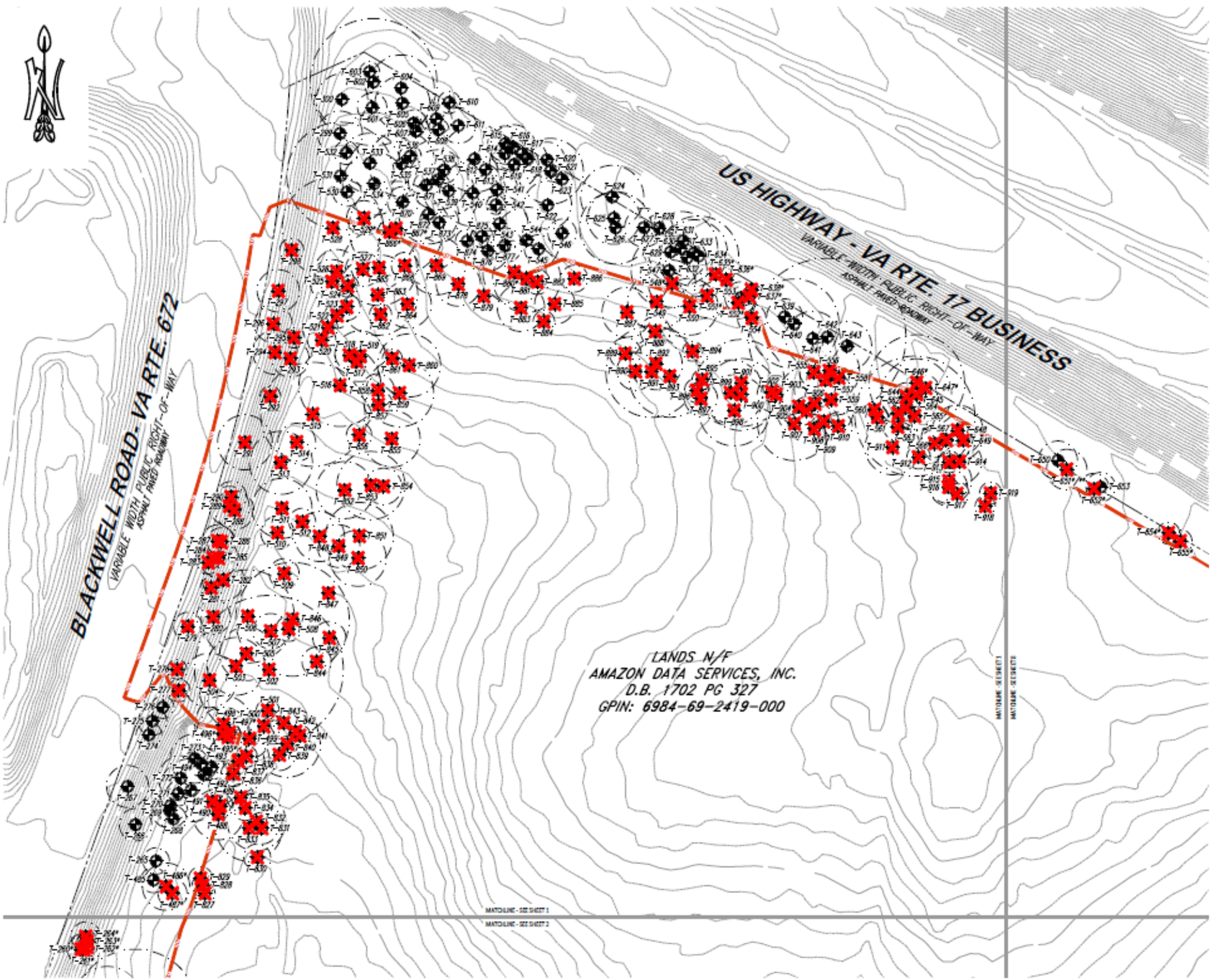
16. Noise: The Applicant shall provide a sound study prepared by a qualified party or company approved by the Director of Community Development that demonstrates the operation of the data center will meet the requirements of § 9-14.2 of the Town of Warrenton Zoning Ordinance relating to noise, as a condition of approval of a site development plan. In addition, the Applicant shall conduct a separate sound study one month after commencement of business operations to ensure compliance with the aforesaid Section. If noise levels at any point where a measurement is required by the Ordinance to be taken do not so comply, the Applicant shall forthwith undertake such further mitigation measures as are required to achieve compliance within a reasonable time not to exceed 60 days, or, if 60 days is insufficient to achieve compliance, the Applicant shall promptly begin and diligently pursue mitigation until compliance has been achieved.

Additional Commitments:

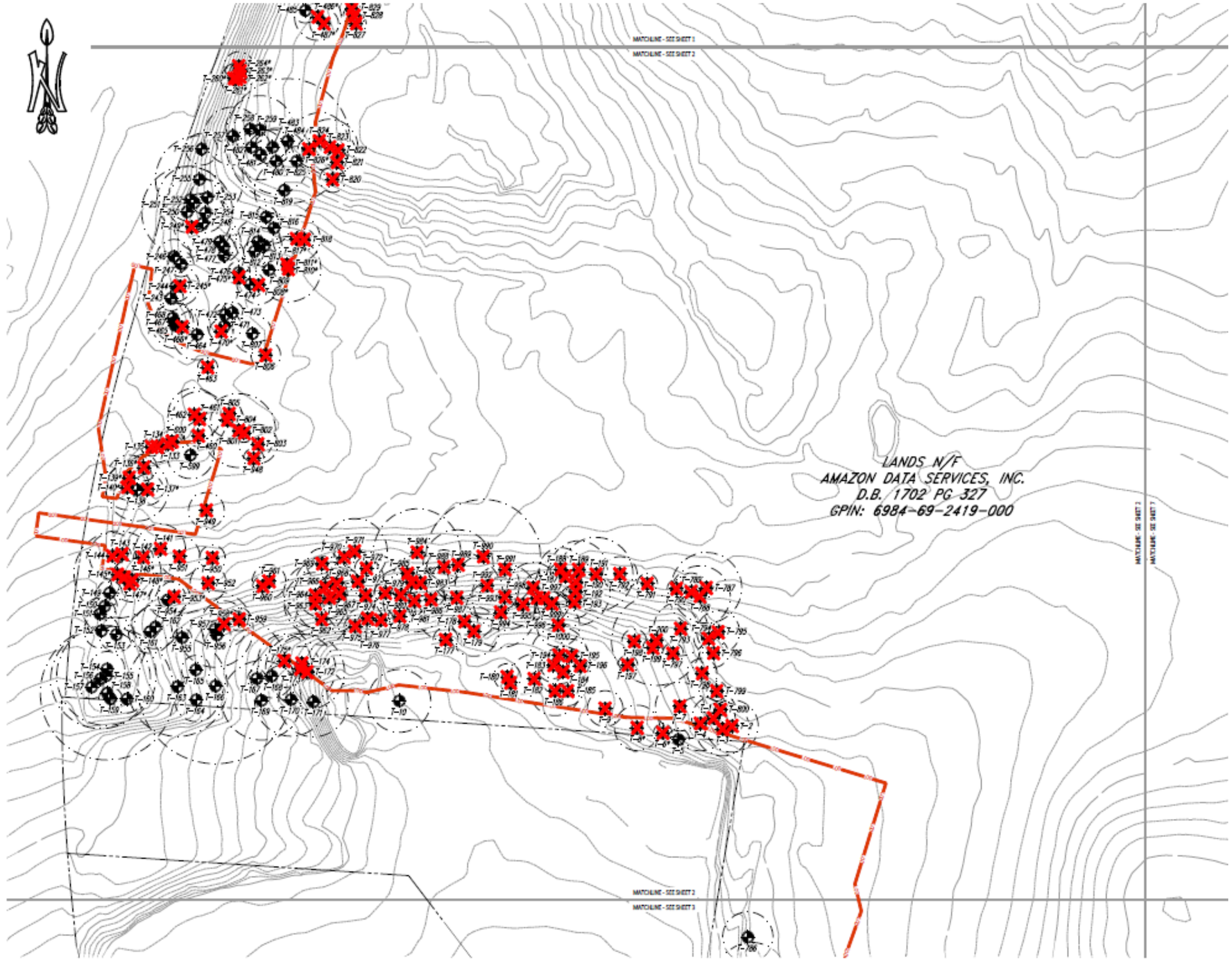
- Conduct separate sound studies after the building is 10%, 50%, 80%, 90% and 100% operational.
- If not in compliance, have a set period of time to achieve compliance.
- If compliance has not been achieved, the Certificate of Occupancy can be suspended.

3. Electric Substation: There shall be no electric substation constructed on the Property.

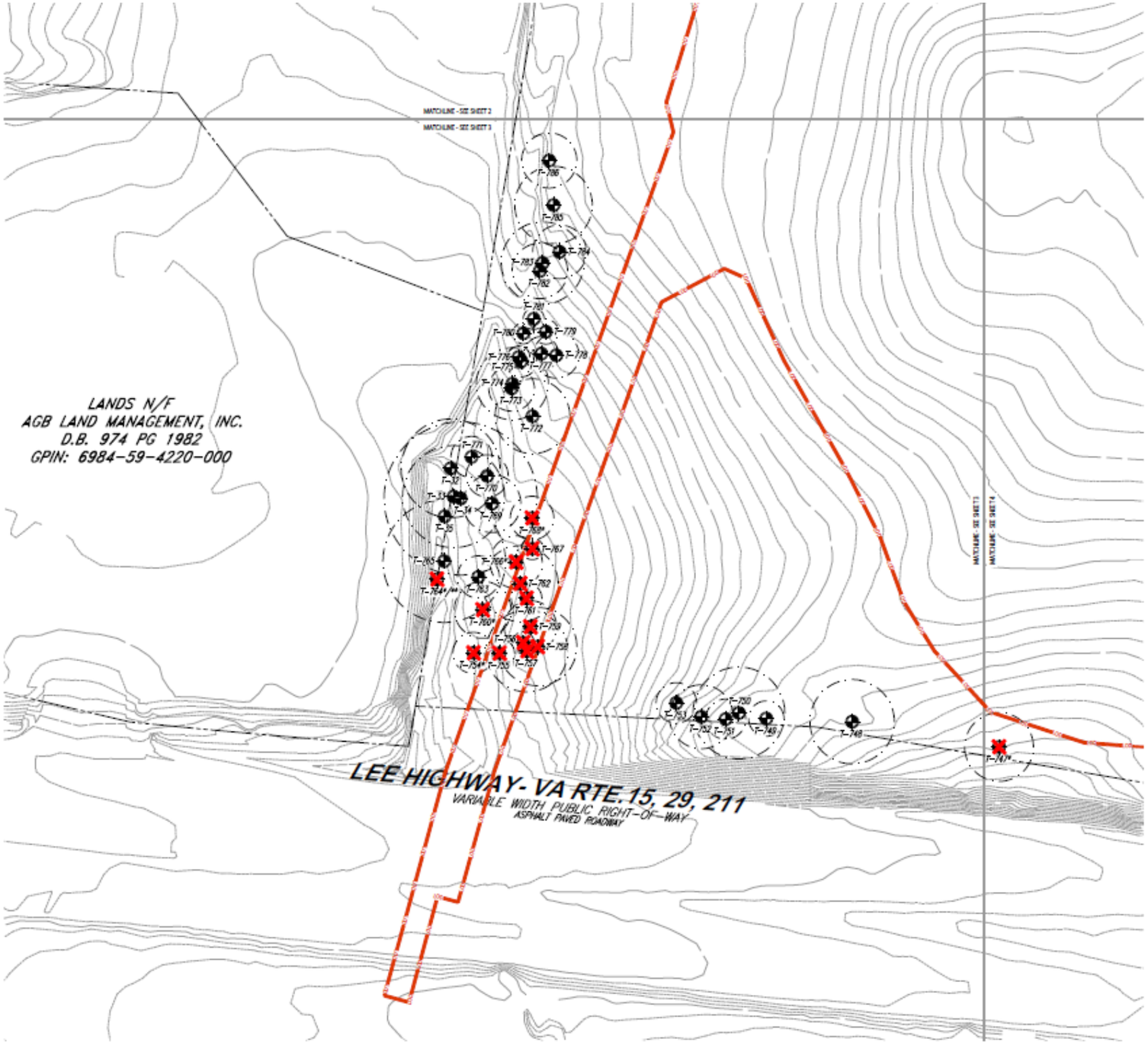
4. Undergrounding of Electrical Lines from a Substation to the Facility: Pursuant to Warrenton Zoning Ordinance § 9-26.1(C), the distribution lines from the off-site substation serving the data center are required to be underground. Applicant will ensure payment of the undergrounding of these distribution lines with the utility company in accordance with its requirements.



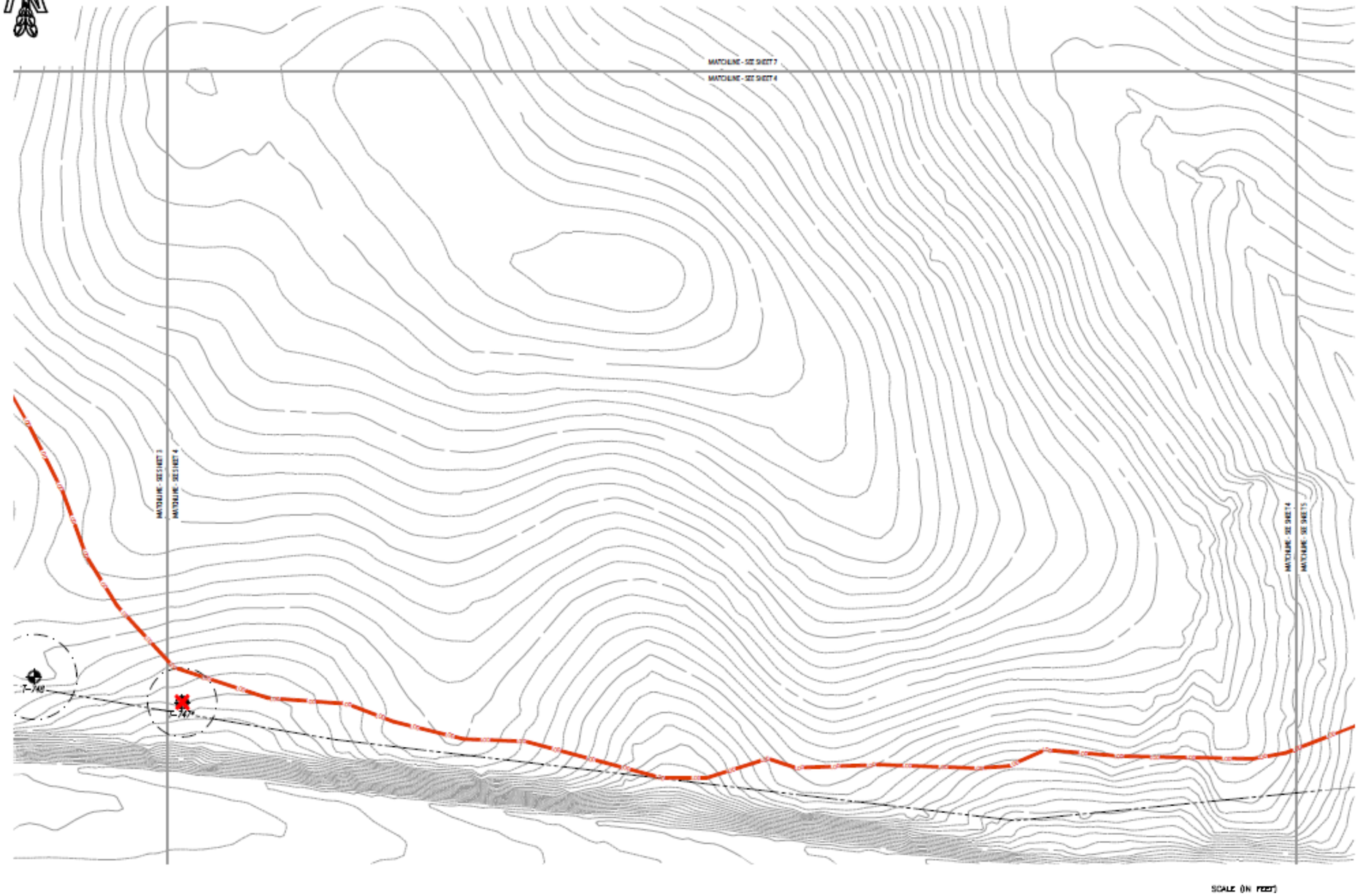
TREE REMOVAL SURVEY



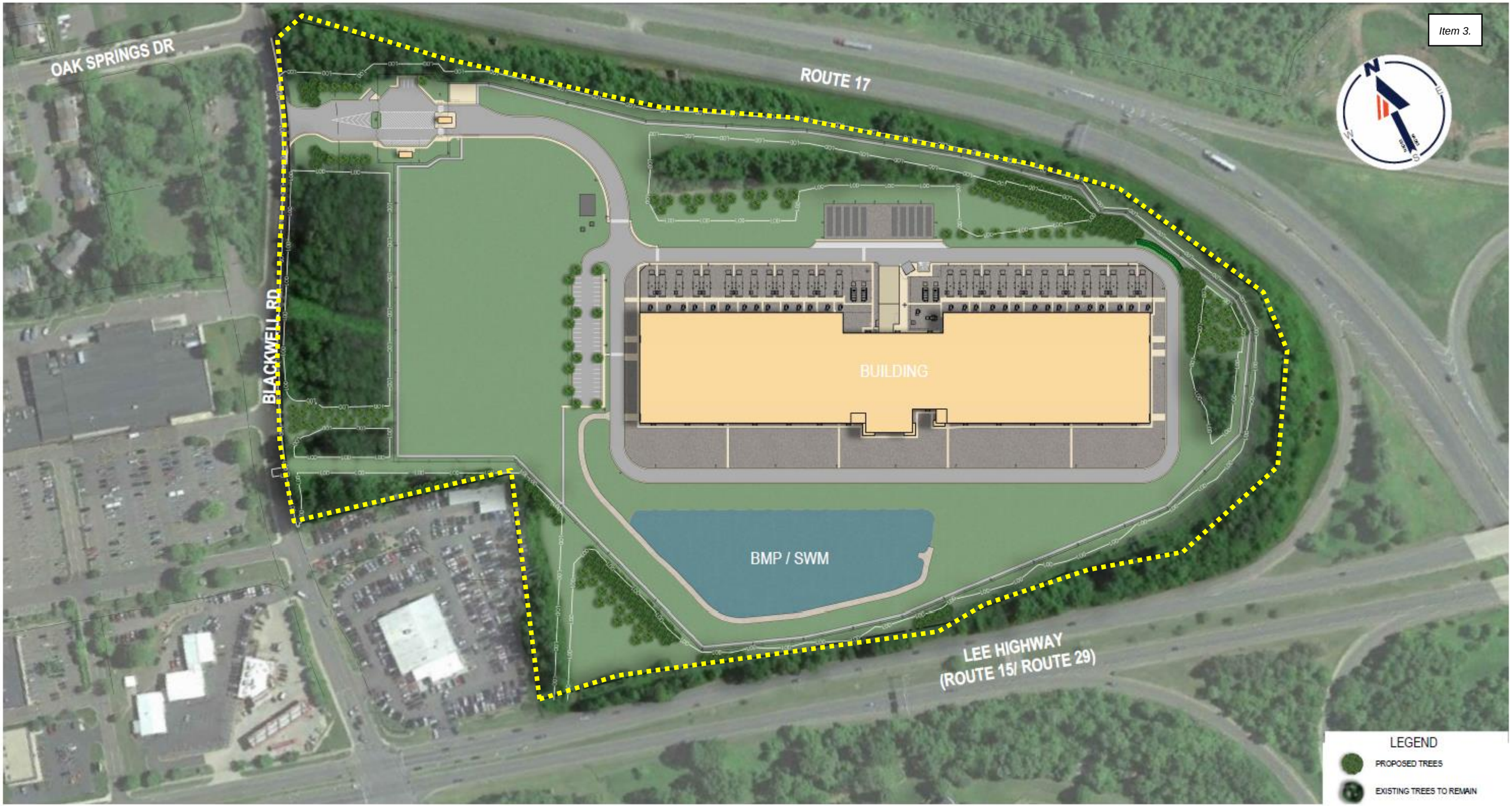
TREE REMOVAL SURVEY



TREE REMOVAL SURVEY



TREE REMOVAL SURVEY



TREE REMOVAL SURVEY

VISUAL/ELEVATION FROM LEE HIGHWAY

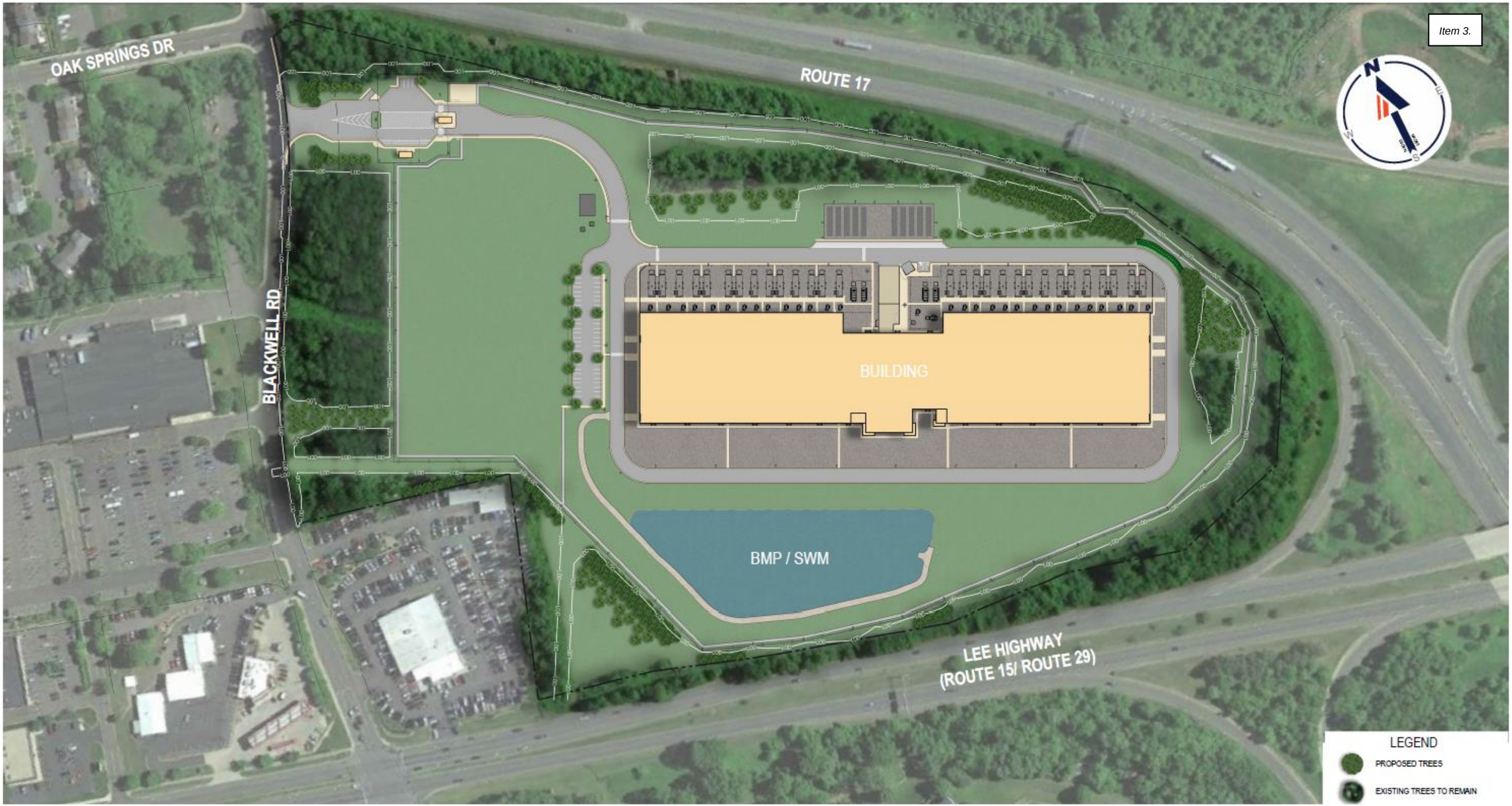
5. Building Design and Elevations:

a. The architectural design of the data center shall substantially conform to the elevations entitled "Illustrative Elevations," shown on Sheet 6 of the SUP Plan. The Elevations shall be subject to minor modification approved by the Town in connection with Site Plan review. Additional changes to the design and materials may be made provided that any such changes are approved by the Planning Director prior to the issuance of a building permit.

b. At time of Site Plan, the Applicant shall provide all elevations for the building in compliance with the Town of Warrenton Zoning Ordinance Article 9-26.1.F. In addition, the Applicant shall orient the building along Lee Highway to reduce the visible impact using architectural details such as a perceived reduction in massing and scale, fenestration and windows, exterior colors and materials, overhangs, canopy or porticos, recesses and/or projections, arcade, raised corniced parapets, and varying roof lines.

c. The Facility shall be no greater than 37 feet in height, as that term is defined in the Town Zoning Ordinance. The mechanical equipment installed on the roof of the building shall be screened with mechanical louver screens.

VISUAL/ELEVATION FROM LEE HIGHWAY



ILLUSTRATIVE PLAN

THANK YOU