Dominion Energy®

Application, Appendix, DEQ Supplement, Direct Testimony and Exhibits of Virginia Electric and Power Company

Before the State Corporation Commission of Virginia

Line #235 230 kV Rebuild from Clover Substation to Structure #235/310

Application No. 327

Case No. PUR-2023-00141

Filed: August 10, 2023

Volume 2 of 2

BEFORE THE
STATE CORPORATION COMMISSION
OF VIRGINIA

APPLICATION OF
VIRGINIA ELECTRIC AND POWER COMPANY
FOR APPROVAL OF ELECTRIC TRANSMISSION FACILITIES

Line #235 230 kV Rebuild from Clover

Substation to Structure #235/310

Application No. 327

DEQ Supplement

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Based upon consultations with the Virginia Department of Environmental Quality ("DEQ"), Virginia Electric and Power Company ("Dominion Energy Virginia" or the "Company") has developed this DEQ Supplement to facilitate review and analysis of the proposed Line #235 230 kV Rebuild from Clover Substation to Structure #235/310 ("Rebuild Project") by DEQ and other relevant agencies.

1. Rebuild Project Description

To resolve potential criteria violations of mandatory North American Electric Reliability Corporation ("NERC") Reliability Standards and consistent with sound engineering judgment, Virginia Electric and Power Company ("Dominion Energy Virginia" or the "Company") proposes the following rebuild project located within existing right-of-way or on Company-owned property in Halifax, Mecklenburg, and Charlotte Counties in Virginia (collectively the "Rebuild Project"):

(i) Rebuild approximately 16 miles of 230 kV Line #235 between Clover Substation and Structure #235/310 using higher capacity conductor to achieve an expected summer emergency rating of 1573 MVA, and renumber the rebuilt line segment to Line #2226; and

(ii) Complete work at Clover Substation to support the new line rating.

In summary, the proposed Rebuild Project is necessary to comply with mandatory NERC Reliability Standards and to maintain reliable service to accommodate overall growth in the area. The Rebuild Project is needed to resolve overloading issues PJM identified as part of the 2026 Do No Harm Generator Deliverability analysis. The loss of Line #556 (Clover-Rawlings) leads to overloading of Line #235[1] from Clover to Easters at 101%.

The total length of the existing right-of-way and Company-owned property to be used for the Rebuild Project is approximately 16 miles. The proposed Rebuild Project will remove existing Structures #235/311 through #235/435 which are predominantly single circuit 230 kV wood H-frame structures and weathering steel. The Company proposes to replace the existing structures with 125 single circuit H-frame structures constructed of weathering steel and one single circuit 3-Pole structure constructed of weathering steel. Because the existing right-of-way and Company-owned property are adequate to construct the proposed Rebuild Project, no new rights-of-way are necessary. Given the availability of existing rights-of-way, the statutory preference to use existing rights-of-way, and the additional costs and environmental impacts that would be associated with the acquisition and construction of new rights-of-way, the Company did not consider any alternate routes requiring new rights-of-way for the Rebuild Project. The desired in-service date for the Rebuild Project is June 30, 2026.

[1] Throughout this Supplement, the Company refers to Line #235, which is the current number for the line extending from Clover Substation to Easters Substation. In the future, this segment of Line #235 will be renumbered to Line #2226. Some of the Attachments to the Application, particularly those prepared for and submitted to PJM, refer to Line #235 by its future number, Line #2226.

2. Environmental Analysis

The Company originally solicited comments from all relevant state and local agencies on July 5, 2023. An additional letter was sent to the U.S. Army Corps of Engineers, Wilmington District Operations Division on July 11, 2023, due to their jurisdiction over the Kerr Reservoir floodway. Copies of these letters are included as Attachment 2.1. The DEQ provided a Scoping Response Letter dated July 6, 2023 (see Attachment 2.2).

As part of Dominion Energy Virginia's environmental compliance program, the Company has a comprehensive Environmental Management System Manual in place that ensures it is committed to complying with environmental laws and regulations, reducing risk, minimizing adverse environmental impacts, setting environmental goals, and achieving improvements in its environmental performance, consistent with the Company's core values.

A. Air Quality

For the Rebuild Project, the Company will control fugitive dust during construction in accordance with DEQ regulations. During construction, if the weather is dry for an extended period of time, there may be airborne particles from the use of vehicles and equipment within the transmission line corridor. However, minimal earth disturbance will take place and vehicle speed, which is often a factor in airborne pollution, will be kept to a minimum. Erosion and sediment control is addressed in Section 2.H, below. Gasoline and diesel-powered vehicles and equipment will be used during line construction, which will result in additional emissions from their exhaust.

The entire width of the existing transmission corridor is currently maintained for transmission line operations; however, the Rebuild Project may require some trimming of tree limbs along the existing transmission line corridor edges to support construction activities. Because the existing right-of-way and Company-owned property are adequate to construct the proposed Rebuild Project, no additional property or right-of-way is necessary. The Company does not expect to burn cleared material but, if necessary, the Company will coordinate with the responsible locality to ensure all local ordinances are met. The Company's tree clearing methods are described in Section 2.L.

B. Water Sources (No water source is required for transmission lines so this discussion will focus on potential waterbodies to be crossed by the proposed transmission line rebuild.)

The Rebuild Project is located within the Middle Roanoke (Hydrologic Unit Code 03010102) watershed. According to the U.S. Geological Survey ("USGS") topographic quadrangles for Clover, VA (2022), Wylliesburg, VA (2022), and Chase City, VA (2022), the existing transmission line corridor crosses Clover Creek, the Staunton River, Buffalo Creek, Bruce Spring Branch, Tanyard Branch,

and Moody Creek as well as numerous other unnamed perennial and intermittent waterways.

The transmission line structures are located to span these waterbodies with no foundations being located below ordinary high water. Any clearing, if required, in the vicinity of streams will be performed by hand within 100 feet of both sides.

Section 28.2-1203 of the Code of Virginia was recently amended by the Virginia General Assembly through the passage of House Bill 2181 ("HB 2181"), which was signed into law by Governor Glenn Youngkin, effective July 1, 2023.[2] With the passage of HB 2181 and in accordance with the Memorandum of Agreement between the Virginia Marine Resources Commission ("VMRC") and DEQ, signed on June 23, 2023, activities conducted in non-tidal waters are not required to obtain a permit issued by the VMRC provided that a Virginia Water Protection Permit ("VWP") is obtained and all requirements of the Virginia Water Resources and Wetlands Protection Program are complied with. However, when DEQ determines that a VWP individual or general permit is not required, VMRC shall continue to issue subaqueous land permits for projects that encroach under or over state-owned submerged lands in non-tidal waters in accordance with current regulations, guidance, and practices. The Company will actively monitor this regulatory change and pursue the required permits as needed for this Rebuild Project at the time of permitting.

Based on the Company's review, waters regulated by the United States Army Corps of Engineers ("Corps") and DEQ are present within the Rebuild Project area. If aerial crossings or impacts to waters are proposed, a JPA will be submitted for review by the VMRC, DEQ, and Corps for authorization under Sections 404/401 of the Clean Water Act. Discussion of this coordination is included in the non-tidal wetlands section (Section D) below.

The Company solicited comments from the Corps and VMRC regarding the proposed Rebuild Project in July 2023. Comments, if received prior to filing, will be included in Attachment 2.B.1.

C. Discharge of Cooling Waters

No discharge of cooling waters is associated with the Rebuild Project.

D. Tidal and Non-tidal Wetlands

No tidal wetlands were identified within the proposed Rebuild Project area.

[2] *See* Chapter 258 of the 2023 Session of the Virginia Acts of Assembly (effective July 1, 2023) available at *https://lis.virginia.gov/cgi-bin/legp604.exe?231+ful+CHAP0258*.

Non-Tidal Wetlands Impact Consultation

Within the Rebuild Project corridor, the Company performed an off-site analysis of wetlands and other potential waters of the United States (WOTUS) using current and historic aerial imagery, topographic quadrangles, U.S. Fish and Wildlife Service (USFWS) National Wetland Inventory (NWI), and the Natural Resources Conservation Service (NRCS) Soil Survey. The study determined the approximate locations and extents of potential WOTUS. These areas were assigned a probability ranking ranging from high probability to low probability using criteria described below.

- Low probability: Areas that demonstrate positive indicators for potential wetlands based on one of the above-mentioned off-site resources.
- Medium probability: Areas that demonstrate positive indicators for potential wetlands based on two or three of the above-mentioned off-site resources.
- High probability: Areas that demonstrate positive indicators for potential wetlands based on all four of the above-mentioned off-site resources.

Detailed delineations of WOTUS were available for portions of the proposed Rebuild Project corridor from separate, unrelated projects whose boundaries overlap with the Rebuild Project. Approximate wetlands and other surface waters within the proposed Rebuild Project corridor are provided in the table below and include the limits of those resources within the Rebuild Project corridor from the detailed delineations described above. See Attachment 2.D.1.

Table 1. Summary of Potential Jurisdictional Resources Within the Rebuild Project Right of Way

Desktop Analysis	**Totals**
PEM/PSS Wetland - High Probability	17.79 Acres ±
PEM/PSS Wetland - Medium Probability	10.53 Acres ±
PEM/PSS Wetland - Low Probability	23.19 Acres ±
Open Waters	1.99 Acres ±
Stream Channels	2.33 Acres ± (11,421 L.F. ±)
Previously Confirmed	
PEM Wetlands	0.80 Acre ±
Upper Perennial Stream Channels (R3)	0.007 Acre ± (109 L.F. ±)
Intermittent Stream Channels (R4)	0.003 Acre ± (26 L.F. ±)
Ephemeral Stream Channels (R6)	0.001 Acre ± (149 L.F. ±)
Total Potential Wetlands and Surface Waters	
Wetlands	52.31 Acres ±
Open Waters	1.99 Acres ±
Stream Channels	2.34 Acres ± (11,705 L.F. ±)

Prior to construction, the Company will conduct a detailed delineation of wetlands and other WOTUS using the Routine Determination Method, as outlined in the *1987 Corps of Engineers Wetland Delineation Manual* and methods described in the *2012 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Eastern Mountains and Piedmont Region* (Version 2.0). The Company will conduct the delineation using the latest guidance provided by the Corps and EPA, and coordinate with DEQ if needed.

As with waters, if impacts to wetlands are proposed, a JPA will be submitted for review by the VMRC, DEQ, and Corps for authorization under Sections 404/401 of the Clean Water Act. The Company solicited comments from the DEQ Office of Wetlands and Stream Protection and the Corps in July 2023. Comments were received on July 26, 2023, and are included as Attachment 2.D.2. DEQ recommendations among others include that prior to commencing the Rebuild Project work, delineate all surface waters by a qualified professional; wetland and stream impacts should be avoided and minimized to the maximum extent practicable; and temporary impacts to surface waters should be restored to pre-existing conditions. Based on DEQ's review, the Rebuild Project may require a VWP individual or general permit.

E. Floodplains

As depicted on the Federal Emergency Management Agency's ("FEMA") online Flood Insurance Rate Maps #51083C0350D (effective date 10/15/2009), #51037C0350C (effective date 7/19/2009), #51037C0375C (effective 7/19/2009), #51117C0070C (effective 9/10/2009), and #51117C0086C (effective date 9/10/2009), the majority of the Rebuild Project area lies within Zone X, which is an area of minimal flood hazard, outside of the 100-year floodplain. Several perpendicular branches of the Staunton River, near structures 235/418, 235/414, 235/399-235/393, 235/362, 235/358 and 235/357, are within Zone A, which is identified as a flood hazard area without base flood elevation. The Company will coordinate with the local floodplain coordinators as required.

F. Solid and Hazardous Waste

On behalf of the Company, Stantec Consulting Services Inc. ("Stantec") conducted database searches for solid and hazardous wastes and petroleum release sites within a 0.5-mile radius (the "search radius") of the proposed Rebuild Project to identify sites that may impact the proposed Rebuild Project. This report is included as Attachment 2.F.1.

Publicly available data from the U.S. Environmental Protection Agency's ("EPA") Facility Registry System was obtained, which provides information about facilities, sites, or places subject to environmental regulation or of environmental interest. Although this data set contains all sites subject to environmental regulation by the EPA or other regulatory authorities, including sites that fall under air emissions or wastewater programs, the results reported here only include those sites which fall under the EPA's hazardous waste, solid

waste, remediation, and underground storage tank programs (i.e., Comprehensive Environmental Response, Compensation and Liability Act ("CERCLA"), Resource Conservation and Recovery Act ("RCRA"), or brownfield sites).

DEQ records show one solid waste permit site was identified within 0.5 miles of the Rebuild Project. The Dominion/ODEC Clover Power Station solid waste active permit site is located 1,220 feet from the Rebuild Project right-of-way ("ROW"). The power station ash ponds associated with the solid waste permit are approximately 1,990 feet from the ROW and are not situated upgradient of the Rebuild Project and would have no effect on the Rebuild Project. The Dominion/ODEC Clover Power Station is also an active RCRA site but is not in the Rebuild Project ROW or expected to impact the Rebuild Project.

A total of three petroleum release sites (PC Numbers: 20162357, 19964209, 20112116) were identified within 0.5 miles of the Rebuild Project. All sites are closed and the closest site to the Rebuild Project area is the Jones James Ray Residence (PC Number: 20162357). This site was closed in 2016 and is located 1,290 ft from the Rebuild Project ROW. The Company has a procedure in place to manage petroleum contaminated soil, if encountered. However, because all the release sites are closed and located outside of the Rebuild Project ROW, none of the petroleum release sites are expected to have an impact on the proposed Rebuild Project.

Five state-registered storage tanks are located within a 0.5-mile radius of the Rebuild Project site with three of the sites listed as active. The active facilities include: Facility ID Numbers: 7037789, 7030411, and 7012340, and are located 450, 1,500, and 2,210 feet from the Rebuild Project ROW, respectively. The closest of these state registered petroleum facilities is the Headwaters Resources, Inc. Dominion Clover Plant (ID Number 7037789). No EPA registered brownfield sites or CERCLA/Superfund sites are located within 0.5 miles of the Rebuild Project area.

G. Natural Heritage, Threatened and Endangered Species

On behalf of the Company, Stantec conducted online database searches for threatened and endangered species in the vicinity of the Rebuild Project, including the USFWS Information, Planning, and Conservation ("IPaC") system, the Virginia Department of Wildlife Resources' ("DWR") Virginia Fish and Wildlife Information Service ("VAFWIS"), the DWR Northern Long-eared Bat ("NLEB") Winter Habitat and Roost Trees Map, the Virginia Department of Conservation and Recreation's ("DCR") Natural Heritage Data Explorer ("NHDE"), the National Oceanographic and Atmospheric Administration ("NOAA") National Marine Fisheries Service ("NMFS") Endangered Species Act ("ESA") Critical Habitat Mapper, and the Center for Conservation Biology's ("CCB") Bald Eagle Nest Locator. The results are included as Attachment 2.G.1 and are summarized in the table below.

Table 2. Threatened and Endangered Species Within the Rebuild Project Vicinity

Species	Status	Database	Results
Northern long-eared bat *(Myotis septentrionalis)*	FE ST	USFWS	No hibernacula or maternity roost trees identified in the vicinity of the Rebuild Project.
Tri-colored bat (*Perimyotis subflavus*)	FP FE SE	USFWS, DWR	No hibernacula or maternity roost trees identified in the vicinity of the Rebuild Project.
Carolina darter *(Etheostomia collis)*	ST	DWR	May be present within the subwatershed. Confirmed occurrences near the Rebuild Project in Roanoke Creek and Sandy Creek. No in-stream work is proposed and erosion and sediment controls will be used as appropriate throughout construction; therefore, no adverse effects are expected.
Whitemouth shiner (*Notropis alborus*)	ST	DWR, DCR	Potentially occurring near the Rebuild Project with suitable habitat, but no confirmed occurrences. No in-stream work is proposed and erosion and sediment controls will be used as appropriate throughout construction; therefore, no adverse effects are expected.
Bald eagle *(Haliaeetus leucocephalus)*	Protected	USFWS, CCB	The closest documented nest is 2.1 miles away from the Rebuild Project. Therefore, no adverse effects are expected.

FE: federally endangered, FP: federally proposed as endangered, FT: federally threatened, SE: state endangered, ST: state threatened, FC: federal candidate, BGEPA: Bald and Golden Eagle Protection Act

Bats

The USFWS IPaC database identified the northern long eared bat ("NLEB") and Tri-colored bat as potentially occurring within or near the Rebuild Project area. However, the DWR NLEB Winter Habitat and Roost Tree Application and Little Brown Bat and Tri-colored Bat Winter Habitat and Roosts Application maps show no known hibernacula or maternity roost trees within the Rebuild Project vicinity. All proposed line construction work will take place within existing cleared and maintained transmission line ROW where tree limbing and removal would be limited to danger trees. Please see Section K (Wildlife Resources) for additional information concerning bats.

Aquatic Species

Construction access will avoid stream crossings where practical or use crane mats to span stream crossings with no in-stream work required. Erosion and sediment controls will be used as appropriate throughout the Rebuild Project. No

anadromous fish streams will be crossed by construction access. Under these conditions, impacts to listed aquatic species or anadromous fish within or downstream of streams in the proposed Rebuild Project corridor is not anticipated. Therefore, there should be no effect to the state threatened Carolina darter and whitemouth shiner.

Bald Eagle

The USFWS Virginia Bald Eagle Concentration Area Map confirms that the proposed Rebuild Project area does not intersect with bald eagle concentration areas. No bald eagle concentration areas are located within the Rebuild Project area. Based upon a review of the "CCB" Bald Eagle Nest Locator for Virginia, the nearest bald eagle nest (HF0901) is located approximately 2.1miles to the north of the Rebuild Project area. Since no work is occurring within 660 ft of an active eagle nest, the Company does not anticipate any adverse effects to bald eagles in the area.

Natural Heritage Resources

The Company submitted a Project Review request to DCR on May 24, 2023. On June 20, 2023, the Company received a response from DCR that existing right-of-way is adjacent to both the Kerr East Conservation Site and the Kerr Northwest Conservation Site. The Kerr East Conservation Site contains natural heritage resources such as Stalkless yellow cress, Northern Coastal Plain and Piedmont Mesic Mixed Hardwood Forest. The Kerr Northwest Conservation Site is classified with higher significance than that of the Kerr East Conservation Site and contains natural heritage resources such as Straw Sedge and Yadkin hedge-nettle. Comments are included in Attachment 2.G.2. In addition, the Company received comments from the Virginia Outdoors Foundation ("VOF") as discussed in Section L, Recreation, Agricultural and Forest Resources. The VOF identified the state-rare Heller's cudweed as documented near the northeast boundary of the Rebuild Project site.

DCR's comments in response to the Company's Project Review request also recommend that the Company develop and implement and invasive species plan to be included as part of the maintenance practices for the entirety of the right-of-way for the Rebuild Project. Based on a discussion between Company and DCR DNH representatives in August 2022, and again in February 2023, the Company is continuing to review its Integrated Vegetation Management Plan ("IVMP") for application to both woody and herbaceous species, based on the species list available on the DCR website. The Company continues to work to provide DCR an addendum to the IVMP, which further explains how the Company's operations and maintenance Forestry program addresses invasive species. The Company is actively compiling an addendum draft to provide to DCR for review and continued discussions. Once all discussions are complete and the addendum is final, the Company will report on the results of its communications with DCR in future transmission certificate of public convenience and necessity filings. At this

time, the Company anticipates providing a draft of the addendum to DCR during the third quarter of 2023.[3]

New and updated information is continually added to DCR's Biotics database. Following the DCR Natural Heritage Program ("NHP") Commission planning stage project review, the Company will re-submit project information with a completed information services order form and a map or submit the project on-line through the Natural Heritage Data Explorer. This review will occur during the final stage of engineering and upon any major modifications of the project during construction (i.e., deviations, permanent, or temporary, from the original study area and/or the relocation of a structure(s) into sensitive areas) for an update on natural heritage information and coordination of potential project modifications to avoid and minimize impacts to natural heritage resources.

Because the Company will obtain all necessary permits prior to construction, such as authorization from the Corps, coordination with the USFWS, DWR, and DCR will take place through the respective permit processes to avoid and minimize impacts to listed species.

Additionally, the Company requested comments from the USFWS and DWR regarding the proposed Rebuild Project in July 2023. Agency comments, if received prior to filing, will be included as Attachment 2.G.3.

H. Erosion and Sediment Control

The DEQ approved the Company's Annual *Standards & Specification for Erosion & Sediment Control and Stormwater Management for Construction of Linear Electric Transmission Facilities (TE VEP 8000)* in August 2019. These specifications are given to the Company's contractors and require erosion and sediment control measures to be in place before construction of the proposed Rebuild Project begins and specify the requirements for rehabilitation of the transmission corridor. A copy of the current DEQ approval letter dated August 13, 2019, is provided as Attachment 2.H.1. According to the approval letter, coverage

[3] *See, Application of Virginia Electric and Power Company, For approval and certification of electric transmission facilities: 230 kV Line #293 and 115 kV Line #83 Rebuild Project*, Case No. PUR-2021-00272, Final Order at 9-11 (Aug. 31, 2022) *(The Commission agreed with the Chief Hearing Examiner and declined to adopt DCR DNH's recommendation regarding an invasive species management plan ("ISMP"), but directed the Company to meet with DCR-DNH and to report on the status of the meetings in the Company's next transmission certificate of public convenience and necessity ("CPCN") filing)*; *see also* Report of Alexander F. Skirpan, Jr., Chief Hearing Examiner (Jun. 22, 2022) at 22 *(agreeing with the Company that, with its IVMP, the Company should not be required to undergo the additional cost of DCR-DNH's ISMP; however, recommending that the Company meet with DCR-DNH regarding its IVMP and report the results of the meeting in the next transmission CPCN filing)*.

was effective through August 12, 2020. The Company submitted the renewal application on August 3, 2020, and is awaiting approval.

I. Archaeological, Historic, Scenic, Cultural or Architectural Resources

The Company solicited comments from the Virginia Department of Historic Resources ("VDHR)" in April and July 2023. Comments from the VDHR were received on May 2 and August 2, 2023, and are included in Attachment 2.I.1. Additional comments, if received prior to filing, will be included in Attachment 2.I.1. VDHR recommended the Company follow the *Guidelines for Assessing Impacts of Proposed Electric Transmission Lines and Associated Facilities on Historic Resources in the Commonwealth of Virginia* to minimize impacts to historic resources. Stantec was retained by the Company to conduct a Stage I Pre-Application Analysis for the Rebuild Project, which is included as Attachment 2.I.2. VDHR's response, if received prior to filing, will be included as Attachment 2.I.3. As detailed by VDHR guidance, consideration was given to: National Historic Landmark ("NHL") properties located within a 1.5-mile radius of the Rebuild Project centerline; National Register of Historic Places ("NRHP") listed properties, battlefields, and historic landscapes located within a 1.0-mile radius of the Rebuild Project centerline; NRHP-eligible sites located within a 0.5-mile radius of the Rebuild Project centerline; and archaeological sites located within the Rebuild Project corridor.

Archaeological Resources

Three previously recorded archaeological resources were identified within the Rebuild Project ROW. Site 44HA0119 is a Woodland Camp, Site 44HA0380 is a multi-component site comprising Pre-Contact and nineteenth century artifact scatters, and Site 44HA0381 is an indeterminate artifact scatter. All three of the resources are currently not evaluated for NRHP eligibility by DHR. It is recommended that archaeological sites located within the ROW be investigated and evaluated as appropriate during future investigations.

Table 3. Previously Recorded Archaeological Resources Considered under the Stage I Pre-Application Guidelines

VDHR #	Resource Name	VDHR/NRHP Status	Distance to ROW (Feet)	Impact
44HA0119	Woodland Camp	Not Evaluated	0	Investigate During Archaeological Survey
44HA0380	Pre-Contact and 19th Century Artifact Scatter	Not Evaluated	0	Investigate During Archaeological Survey
44HA0381	Indeterminate Artifact Scatter	Not Evaluated	0	Investigate During Archaeological Survey

Architectural Resources

No NHL architectural resources were located within a 1.5-mile radius of the Rebuild Project centerline. Two NRHP-listed resources and two NRHP-listed historic districts were located within 1.0 mile of the centerline. Additionally, the NRHP potentially eligible Staunton River Bridge Battlefield (DHR #019-5190) was also identified within 1.0 mile of the centerline and also crosses the Clover Substation property. The table below details the recommendations for the Rebuild Project. Because the study was completed prior to filing this Application with the Commission, all digital images were taken from public ROW, unless permission from the landowner was granted at the time of the survey, and/or Dominion Energy easements.

Based on the proposed changes to structure heights, it is proposed that the Rebuild Project would have No Visual Impact to Black Walnut (DHR #041-0006), the Chase City High School/Maple Manor Apartments (DHR #186-0002), Chase City Warehouse and Commercial Historic District (DHR #186-5005), and the MacCallum More and Hudgins House Historic District (DHR #186-5020). The proposed Rebuild Project, based on the visual effects evaluation, is recommended to have a Minimal Impact to the Staunton River Bridge Battlefield (DHR #019-5190), as shown in the table below. Consistent with its customary practice, the Company will coordinate with VDHR regarding the findings of the Stage I Pre-Application Analysis.

Table 4. Previously Recorded Architectural Resources Considered under the Stage I Pre-Application Guidelines

VDHR #	Resource Name	DHR/NRHP Status	Distance to Centerline (Feet)	Impact
019-5190	Staunton River Bridge Battlefield	Potentially Eligible	699	Minimal
041-0006	Black Walnut, Black Walnut Road	NRHP-Listed	3,156	None
186-0002	Chase City High School/Maple Manor Apartments, 136 Endley Street	NRHP-Listed	4,476	None
186-5005	Chase City Warehouse and Commercial Historic District	NRHP-Listed	3,392	None
186-5020	MacCallum More and Hudgins House Historic District, 439 Walker Street/603 Hudgins Street	NRHP-Listed	4,930	None

J. Chesapeake Bay Preservation Areas

The proposed Rebuild Project is located in Halifax, Charlotte, and Mecklenburg Counties and is not subject to the Chesapeake Bay Preservation Act.

K. Wildlife Resources

Relevant agency databases were reviewed and requests for comments from the USWFS, DWR, DCR, and the Virginia Department of Agriculture and Consumer Services ("VDACS") were submitted to determine if the proposed Rebuild Project has the potential to affect any threatened or endangered species, as described in Section 2.G and included as Attachment 2.G.2. As discussed in Section 2.G and identified in Attachment 2.G.1, certain Federal and state listed species were identified as potentially occurring in the Rebuild Project area. The Company will coordinate with the USFWS, DWR, and DCR as appropriate to determine whether surveys are necessary and to minimize impacts on wildlife resources. The Rebuild Project is located within existing, maintained transmission line corridor and minimal tree limbing and removal of danger trees may be necessary for work within existing transmission ROW. Accordingly, no loss of wildlife habitat is anticipated.

Based on recommendations by DWR, to the extent necessary, the Company will endeavor to adhere to the TOYRs for cutting trees and vegetations favorable to winged animals from March 15 – November 15, to the extent practicable. This

includes further minimizing potential effects by avoiding trees favorable for bat maternity roosting locations and nesting bird habitat, to the extent practicable.

In addition, the Company is actively monitoring the regulatory changes and requirements associated with NLEB and how it could potentially impact construction timing associated with TOYRs. The existing interim guidance from the USFWS for the NLEB expires on March 31, 2024. The Company is also monitoring potential regulatory changes associated with the potential listing of the Tri-colored bat. On September 14, 2022, the Tri-colored bat was proposed to be listed to Endangered, with an estimated announcement of a final decision within 12 months. Regulatory guidance on the Tri-colored bat will be available upon listing. The Company's construction window described above may require adjustment based upon the regulatory guidance and potential TOYRs associated with these two bat species.

L. Recreation, Agricultural and Forest Resources

The Rebuild Project is not expected to impact recreational, agricultural, or forestry resources due to the location of the Rebuild Project within an existing, maintained transmission line corridor.

Prime farmland, as defined by the U.S. Department of Agriculture, is land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops and is available for these uses. There are 137.4 acres of land designated as prime farmland within the Rebuild Project corridor. Land that does not meet the criteria for prime farmland can be considered "farmland of statewide importance." The criteria for defining and delineating farmland of statewide importance are determined by the Virginia Department of Agriculture and Consumer Services. Generally, this land includes areas of soils that nearly meet the requirements for prime farmland and that economically produce high yields of crops when treated and managed according to acceptable farming methods. There are 158.3 acres designated as farmland of statewide importance within the Rebuild Project area. Other areas that are not identified as having national or statewide importance can be considered to be "farmland of local importance." This farmland is identified by the appropriate local agencies. Farmland of local importance may include tracts of land that have been designated for agriculture by local ordinance. Halifax County, Charlotte County, and Mecklenburg County do not have designated farmlands of local importance.

Farming operations currently exist within the Rebuild Project's right-of-way; however, the Company utilizes timber mats to access transmission structures within agricultural fields, and pads for structure erection. These will minimize the impact to the soil to result in only a temporary impact, thereby avoiding permanent impacts to farmlands from construction access. The Company will work with landowners on final structure placement to minimize the effect on farming operations. As such, prime farmland and agricultural and forestal

districts should not be incrementally impacted by the construction of the Rebuild Project. Therefore, the Rebuild Project is not expected to affect agricultural land.

Under the Virginia Open-Space Land Act, any public body can acquire title or rights to real property to provide means of preservation of open-space land. Such conservation easements must be held for no less than five years in duration and can be held in perpetuity. In July 2023, the Company solicited the VOF and the Virginia Department of Forestry ("VDOF") for comments on the proposed Rebuild Project. The existing right-of-way intersects a VOF easement (HAL-VOF-4047) established in 2015 for approximately 0.8 miles, and a Blue Ridge Land Conservancy easement established in 2020 for 1.16 miles. Comments from VOF are included in Attachment 2.L.1. The VOF encouraged the Company to coordinate with DCR Division of Natural Heritage ("DNH"), VOF, and landowners to ensure two rare plant species (Hellers's cudweed and Yadkin hedge-nettle) are protected from any impacts associated with the proposed Rebuild Project. Comments from VDOF, if received prior to filing, will be included in Attachment 2.L.2.

The existing right-of-way extends through 0.77 miles of the John H. Kerr Reservoir lands, managed by the Corps, which was established prior to the Company's construction of Line #235. Of this 0.77 miles, 0.48 miles has been designated by the Corps as the Buffalo on the Staunton Federal Wildlife Management Area. The company solicited comments from the Corps in July 2023. Comments from the Corps, if received prior to filing, will be included in Attachment 2.L.3.

The Virginia Scenic Rivers Act seeks to identify, designate, and protect rivers and streams that possess outstanding scenic, recreational, historic, and natural characteristics of statewide significance for future generations. The Rebuild Project area contains a portion of the Staunton River, which is a designated scenic river.

The Rebuild Project does not cross any scenic Virginia byways. Highway 47 is part of a scenic byway and is located approximately 0.5 miles northeast of the Rebuild Project, however, no impacts will occur to the resource.

The existing transmission corridor is currently cleared and maintained for 230 kV transmission line operations. Trimming of tree limbs along the edge of the right-of-way may be conducted to support construction activities for the Rebuild Project. Trees located outside of the right-of-way that are tall enough to potentially impact the transmission facilities, commonly referred to as "danger trees," may also need to be cut. The Company's Forestry Coordinator will field inspect the right-of-way and designate any danger trees present. Qualified contractors working in accordance with the Company's Electric Transmission specifications will perform all danger tree cutting. The Rebuild Project is expected to have minimal, if any, impact on forest resources because the proposed Rebuild Project involves rebuilding portions of existing transmission lines, the corridor of

which is already cleared and maintained for existing transmission line operation and no additional right-of-way is required.

M. Use of Pesticides and Herbicides

Of the techniques available, selective foliar is the preferred method of herbicide application. The Company typically maintains transmission line rights-of-way and spaces for transmission line operation on Company property by means of selective, low volume applications of EPA approved, non-restricted use herbicides. The goal of this method is to exclude tall growing brush species from the right-of-way by establishing early successional plant communities of native grasses, forbs, and low growing woody vegetation. "Selective" application means the Company sprays only the undesirable plant species (as opposed to broadcast applications). "Low volume" application means the Company uses only the volume of herbicide necessary to remove the selected plant species. The mixture of herbicides used varies from one cycle to the next to avoid the development of resistance by the targeted plants. There are four means of dispersal available to the Company, including by-hand application, backpack, fixed nozzle-radiarc, and aerial. However, very little right-of-way maintenance incorporates aerial equipment. The Company uses licensed contractors to perform this work that are either certified applicators or registered technicians in the Commonwealth of Virginia.

DEQ has previously requested that only herbicides approved for aquatic use by the EPA or the USFWS be used in or around any surface water; the Company intends to comply with this request.

Additionally, as described above in Section G, the Company is continuing to review its Integrated Vegetation Management Plan ("IVMP") for application to both woody and herbaceous species, based on the species list available on the DCR website. The Company continues to work to provide DCR an addendum to the IVMP, which further explains how the Company's operations and maintenance Forestry program addresses invasive species. At this time, the Company anticipates providing a draft of the addendum to DCR during the third quarter of 2023.

N. Geology and Mineral Resources

According to the Division of Geology and Mineral Resources Interactive Geologic Map, the Rebuild Project is situated over portions of the Mylonite, Aaron slate, Red Oak pluton, felsic metavolcanic rock, Buffalo granite, and gabbro formations. These consist of gneiss, schist, slate, granite, and felsic volcanic rock. Based upon a review of Natural Resources Conservation Service (NRCS) mapped soil units, soils situated atop these layers can be described as loams, sandy loams, sandy clay loam, silt loams, and clays.

According to the USGS topographic maps and aerial imagery, there are no active mines or stone quarries within the proposed Rebuild Project area. A search of the Virginia Department of Energy online map confirms there are no active or abandoned mines within the transmission line corridor or within one mile of the corridor. Therefore, it is not anticipated that the Rebuild Project will result in negative impacts on the geology or mineral resources. Furthermore, there are no karst formations within the Rebuild Project vicinity.

O. Transportation Infrastructure

The existing corridor for Line #235 crosses multiple roads in Halifax, Charlotte, and Mecklenburg Counties. While the majority of these are low to moderate traffic volume roads, there are three major roads including James D. Hagood Highway (Highway 360) in Halifax County as well as Barnesville Highway (Highway 15) and Jeb Stuart Highway (Route 92) in Charlotte County. The Company plans to apply for land use permits from the Virginia Department of Transportation ("VDOT") for any aerial crossings of VDOT maintained roads and any construction entrances from the VDOT right-of-way. All permits will be obtained prior to construction. In July 2023, the Company solicited comments from VDOT regarding the proposed Rebuild Project. Comments were received on July 31, 2023, and are included in Attachment 2.O.1.

The Chase City Municipal Airport (CXE) is located approximately one mile from the Rebuild Project and Structure #235/324. The design of the proposed Rebuild Project must not prevent interference with pilots' safe ingress and egress at the airport. Such hazard or impediments include interference with navigation and communication equipment and glare from materials and external lights. The Company solicited comments from the Virginia Department of Aviation ("DOAv") regarding the proposed Rebuild Project on July 5, 2023. Comments were received on July 11, 2023 and are included in Attachment 2.O.2. Due to the proximity of the Rebuild Project to the Chase City Municipal Airport and information contained within the FAA Notice Criteria Tool, the Company will file with the FAA for any required structures.

There are no railroad crossings within the proposed Rebuild Project corridor. It is not anticipated that the proposed Rebuild Project will affect nearby railroad facilities or conflict with their operation.

The Company will secure all necessary permits from VDOT, DOAv, and FAA prior to construction in the respective rights-of-way.

P. Drinking Water Wells

In July 2023, the Company solicited comments on the proposed Rebuild Project from various DEQ entities. DEQ forwarded the Company's request to VDH–ODW, which responded on July 18, 2023, regarding the proximity of the Rebuild Project to public drinking water sources (groundwater wells, springs and surface

water intakes). VDH-ODW stated that there are two public groundwater wells within a one-mile radius of the Rebuild Project, no surface water intakes located within a five-mile radius of the Rebuild Project, that the Rebuild Project is within the watershed of two public surface water intakes, and that potential impacts to public water distribution systems or sanitary sewage collection systems due to this Rebuild Project must be verified by the local utility. VDH-ODW recommended to employ Best Management Practices, including Erosion and Sedimentation controls and Spill Prevention Controls and Countermeasures, and mark and protect wells within a 1,000-foot radius from the Rebuild Project site from accidental damage during construction. A copy of that correspondence is included as Attachment 2.P.1.

As a general matter, water wells within 1,000 feet of the Rebuild Project may be outside of the right-of-way and located on private property. The Company does not have the ability or right to field mark the wells on private property. In August 2021, the Company contacted the Virginia Department of Health's ("VDH") Office of Drinking Water ("ODW") to propose a method of well protection, including plotting and calling out the wells on the Rebuild Project's Erosion and Sediment Control Plan, to which VDH-ODW indicated that the Company's proposed method is reasonable. A copy of that correspondence is included as Attachment 2.P.2. The Company intends to follow this same approach in this proceeding, as it has in other cases, and will coordinate with VDH-ODW, as needed.

Q. Pollution Prevention

Generally, as to pollution prevention, as part of Dominion Energy Virginia's commitment to environmental compliance, the Company has a comprehensive Environmental Management System Manual in place that ensures it is complying with environmental laws and regulations, reducing risk, minimizing adverse environmental impacts, setting environmental goals, and achieving improvements in its environmental performance, consistent with the Company's core values. Accordingly, any recommendation by the DEQ to consider development of an effective environmental management system has already been satisfied.

Attachments

From:	Christiaanna C Mcdonald (Services - 6)
To:	roger.kirchen@dhr.virginia.gov
Cc:	Adam M Swift (Services - 6); Lucas A Dupont (Services - 6); Presgraves, Kenny; Gray, Corey; Annie C Larson (Services - 6); McHugh, Tim; De Las Casas, Viktoriia A.; Sample, John B.; West, Kadeisha A.; Valerie M Chafee (Services - 6)
Subject:	Dominion Energy Virginia"s Proposed Line #235 230 kV Rebuild from Clover Substation to Structure #235/310 - SCC Project Notification for CPCN
Date:	Wednesday, July 5, 2023 6:02:39 PM
Attachments:	TL2226 DHR Letter.pdf appx_project_limits.zip image001.png

Dear Mr. Kirchen,

Please see the attached project agency notification for Dominion Energy Virginia's Certification of Public Convenience and Necessity (CPCN) application with the State Corporation Commission (SCC), associated project location map, and a shapefile of the proposed project alignment for the Dominion Energy Virginia Proposed Line #235 230 kV Rebuild from Clover Substation to Structure #235/310 in Halifax, Mecklenburg, and Charlotte Counties, Virginia.

If you have any questions, please feel free to contact me directly.

Thank you,
Christa

Christa McDonald
Siting and Permitting Specialist
Electric Transmission

Dominion Energy Virginia
5000 Dominion Blvd, 3.SW3051
Glen Allen, VA 23060

C: 571-319-2582
Email: C.McDonald@dominionenergy.com
Website: https://www.dominionenergy.com

Dominion Energy

From:	Christiaanna C Mcdonald (Services - 6)
To:	frederick.johnson@vdot.virginia.gov
Cc:	Adam M Swift (Services - 6); Lucas A Dupont (Services - 6); Presgraves, Kenny; Gray, Corey; Annie C Larson (Services - 6); McHugh, Tim; De Las Casas, Viktoriia A.; Sample, John B.; West, Kadeisha A.; Valerie M Chafee (Services - 6)
Subject:	RE: Dominion Energy Virginia"s Proposed Line #235 230 kV Rebuild from Clover Substation to Structure #235/310 - SCC Project Notification for CPCN
Date:	Wednesday, July 5, 2023 6:06:44 PM
Attachments:	TL2226 VDOT Letter.pdf appx_project_limits.zip image001.png

Dear Mr. Johnson,

Please see the attached project agency notification for Dominion Energy Virginia's Certification of Public Convenience and Necessity (CPCN) application with the State Corporation Commission (SCC), associated project location map, and a shapefile of the proposed project alignment for the Dominion Energy Virginia Proposed Line #235 230 kV Rebuild from Clover Substation to Structure #235/310 in Halifax, Mecklenburg, and Charlotte Counties, Virginia.

If you have any questions, please feel free to contact me directly.

Thank you,
Christa

Christa McDonald
Siting and Permitting Specialist
Electric Transmission

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Glen Allen, VA 23060

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Dominion Energy

From:	Christiaanna C Mcdonald (Services - 6)
To:	scott.denny@doav.virginia.gov
Cc:	Adam M Swift (Services - 6); Lucas A Dupont (Services - 6); Presgraves, Kenny; Gray, Corey; Annie C Larson (Services - 6); McHugh, Tim; De Las Casas, Viktoriia A.; Sample, John B.; West, Kadeisha A.; Valerie M Chafee (Services - 6)
Subject:	RE: Dominion Energy Virginia"s Proposed Line #235 230 kV Rebuild from Clover Substation to Structure #235/310 - SCC Project Notification for CPCN
Date:	Wednesday, July 5, 2023 6:04:49 PM
Attachments:	TL2226 DOAV Letter.pdf appx_project_limits.zip image001.png

Dear Mr. Denny,

Please see the attached project agency notification for Dominion Energy Virginia's Certification of Public Convenience and Necessity (CPCN) application with the State Corporation Commission (SCC), associated project location map, and a shapefile of the proposed project alignment for the Dominion Energy Virginia Proposed Line #235 230 kV Rebuild from Clover Substation to Structure #235/310 in Halifax, Mecklenburg, and Charlotte Counties, Virginia.

If you have any questions, please feel free to contact me directly.

Thank you,
Christa

Christa McDonald
Siting and Permitting Specialist
Electric Transmission

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Website: https://www.dominionenergy.com

Dominion Energy

From:	Christiaanna C Mcdonald (Services - 6)
To:	mlittle@vof.org
Cc:	Adam M Swift (Services - 6); Lucas A Dupont (Services - 6); Presgraves, Kenny; Gray, Corey; Annie C Larson (Services - 6); McHugh, Tim; De Las Casas, Viktoriia A.; Sample, John B.; West, Kadeisha A.; Valerie M Chafee (Services - 6)
Subject:	RE: Dominion Energy Virginia"s Proposed Line #235 230 kV Rebuild from Clover Substation to Structure #235/310 - SCC Project Notification for CPCN
Date:	Wednesday, July 5, 2023 6:08:32 PM
Attachments:	image001.png TL2226 VOF Letter.pdf appx_project_limits.zip

Dear Ms. Little,

Please see the attached project agency notification for Dominion Energy Virginia's Certification of Public Convenience and Necessity (CPCN) application with the State Corporation Commission (SCC), associated project location map, and a shapefile of the proposed project alignment for the Dominion Energy Virginia Proposed Line #235 230 kV Rebuild from Clover Substation to Structure #235/310 in Halifax, Mecklenburg, and Charlotte Counties, Virginia.

If you have any questions, please feel free to contact me directly.

Thank you,
Christa

Christa McDonald
Siting and Permitting Specialist
Electric Transmission

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C: 571-319-2582
Email: C.McDonald@dominionenergy.com
Website: https://www.dominionenergy.com

Dominion Energy

From:	Lucas A Dupont (Services - 6)
To:	michael.t.womack@usace.army.mil
Cc:	Goodwin, Keith R CIV USARMY CENAO (USA); shannon.l.crews@usace.army.mil; Christiaanna C Mcdonald (Services - 6); Adam M Swift (Services - 6); Presgraves, Kenny; Corey Gray; Annie C Larson (Services - 6); McHugh, Tim; De Las Casas, Viktoriia A.; Sample, John B.; West, Kadeisha A.; Valerie M Chafee (Services - 6)
Subject:	Dominion Energy Virginia"s Proposed Line #235 230 kV Rebuild from Clover Substation to Structure #235/310 - SCC Project Notification for CPCN
Date:	Wednesday, July 12, 2023 11:07:00 AM
Attachments:	appx_project_limits.zip image001.png SAW_408 Agency Letter for TL 2226.pdf

Dear Mr. Womack:

Please see the attached project agency notification for Dominion Energy Virginia's (Dominion) Certification of Public Convenience and Necessity (CPCN) application with the State Corporation Commission (SCC), associated project location map, and a shapefile of the proposed project alignment for the Dominion Energy Virginia Proposed Line #235 230 kV Rebuild from Clover Substation to Structure #235/310 in Halifax, Mecklenburg, and Charlotte Counties, Virginia. The proposed rebuild project crosses the Kerr Reservoir floodway approximately 1.6 miles southeast of the Route 360 crossing. This letter is strictly a solicitation of comments on the project. Dominion will not enter the permitting process until the CPCN is issued.

Thank you,
Luke

Lucas (Luke) DuPont
Environmental Specialist
Cell (434) 981-0483
Dominion Energy Environmental Services
120 Tredegar Street, Richmond, VA 23219
Lucas.a.dupont@dominionenergy.com

Dominion Energy®

From:	Lucas A Dupont (Services - 6)
To:	"bettina.rayfield@deq.virginia.gov"; "Rene.hypes@dcr.virginia.gov"; "envreview@dcr.virginia.gov"; "amy.martin@dwr.virginia.gov"; "keith.tignor@vdacs.virginia.gov"; "karl.didier@dof.virginia.gov"; "scoping@mrc.virginia.gov"; "troy_andersen@fws.gov"; Goodwin, Keith R CIV USARMY CENAO (USA); "Arlene.Warren@vdh.virginia.gov"
Cc:	Christiaanna C Mcdonald (Services - 6); Adam M Swift (Services - 6); Presgraves, Kenny; Corey Gray; Annie C Larson (Services - 6); McHugh, Tim; De Las Casas, Viktoriia A.; Sample, John B.; West, Kadeisha A.; Valerie M Chafee (Services - 6)
Subject:	Dominion Energy Virginia"s Proposed Line #235 230 kV Rebuild from Clover Substation to Structure #235/310 - SCC Project Notification for CPCN
Date:	Wednesday, July 5, 2023 4:17:00 PM
Attachments:	image001.png Agency Letter for TL 2226.pdf appx_project_limits.zip

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To Whom It May Concern:

Please see the attached project agency notification for Dominion Energy Virginia's Certification of Public Convenience and Necessity (CPCN) application with the State Corporation Commission (SCC), associated project location map, and a shapefile of the proposed project alignment for the Dominion Energy Virginia Proposed Line #235 230 kV Rebuild from Clover Substation to Structure #235/310 in Halifax, Mecklenburg, and Charlotte Counties, Virginia.

If you have any questions, please feel free to contact me directly.

Thank you,
Luke

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From:	Lucas A Dupont (Services - 6)
To:	"Michelle.henicheck@deq.virginia.gov"
Cc:	Christiaanna C Mcdonald (Services - 6); Adam M Swift (Services - 6); Presgraves, Kenny; Corey Gray; Annie C Larson (Services - 6); McHugh, Tim; De Las Casas, Viktoriia A.; Sample, John B.; West, Kadeisha A.; Valerie M Chafee (Services - 6)
Subject:	Dominion Energy Virginia"s Proposed Line #235 230 kV Rebuild from Clover Substation to Structure #235/310 - SCC Project Notification for CPCN
Date:	Wednesday, July 5, 2023 4:16:00 PM
Attachments:	image001.png DEQ Wetland Letter for TL 2226 Rebuild.pdf appx_project_limits.zip

Dear Ms. Henicheck:

Please see the attached project notification for Dominion Energy Virginia's Certification of Public Convenience and Necessity (CPCN) application with the State Corporation Commission (SCC), associated Wetland Desktop Review, Project Overview Map, and a shapefile of the proposed project alignment for the Dominion Energy Virginia Proposed Line #235 230 kV Rebuild from Clover Substation to Structure #235/310 in Halifax, Mecklenburg, and Charlotte Counties, Virginia.

If you have any questions, please feel free to contact me directly.

Thank you,
Luke

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120 Tredegar Street, Richmond, VA 23219
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July 5, 2023

SCC ELECTRIC TRANSMISSION PROJECT NOTIFICATION
Project: Dominion Energy Virginia's Line #235 230 kV Rebuild from Clover Substation to Structure #235/310

To Whom it May Concern:

Dominion Energy Virginia (the "Company") is proposing to rebuild approximately 16 miles of the existing 230 kV Line #235 between the existing Clover Substation and existing Structure #235/310 using higher capacity conductors, renumber the rebuilt line segment to Line #2226, and complete work at Clover Substation to support the higher capacity conductor (the "Rebuild Project"). The Rebuild Project is located within Halifax, Mecklenburg, and Charlotte Counties in Virginia.

The Company proposes to locate the Rebuild Project entirely within the existing Line #235 rights-of-way or on Company-owned property. No additional right-of-way is necessary, as shown on the attached map.

The Rebuild Project is needed to accommodate significant increased load growth in the area over recent years and to offset any unplanned outages of the nearby Line #556, which would overload existing Line #235. The higher capacity conductors would ensure compliance with mandatory North American Electric Reliability Corporation Reliability Standards.

The Company is preparing to file an application for a certificate of public convenience and necessity ("CPCN") with the State Corporation Commission of Virginia (the "Commission"). At this time, in advance of filing an application with the Commission, the Company respectfully requests a scoping review of the Rebuild Project. Any comments or additional information you can provide would be beneficial to the Rebuild Project. Please submit comments within 30 days of the date of this letter.

Enclosed is a Project Overview Map and associated GIS shapefile depicting the proposed Rebuild Project, as well as its general location. Please note that the Project Overview Map and route description depicted therein are preliminary in nature and subject to final engineering. Please refer to the CPCN application for any updates to the Rebuild Project description and/or routes. If there are any questions, please do not hesitate to contact Lucas DuPont at (434) 981-0483 or lucas.a.dupont@dominionenergy.com.

The Company appreciates your assistance with this project review and looks forward to any additional information you may have to offer.

Thank you,

Jason P. Ericson, Authorized Representative on behalf of
Elizabeth "Tibby" L. Hester
Authorized Representative
Manager, Environmental Services

Enclosure: Project Overview Map

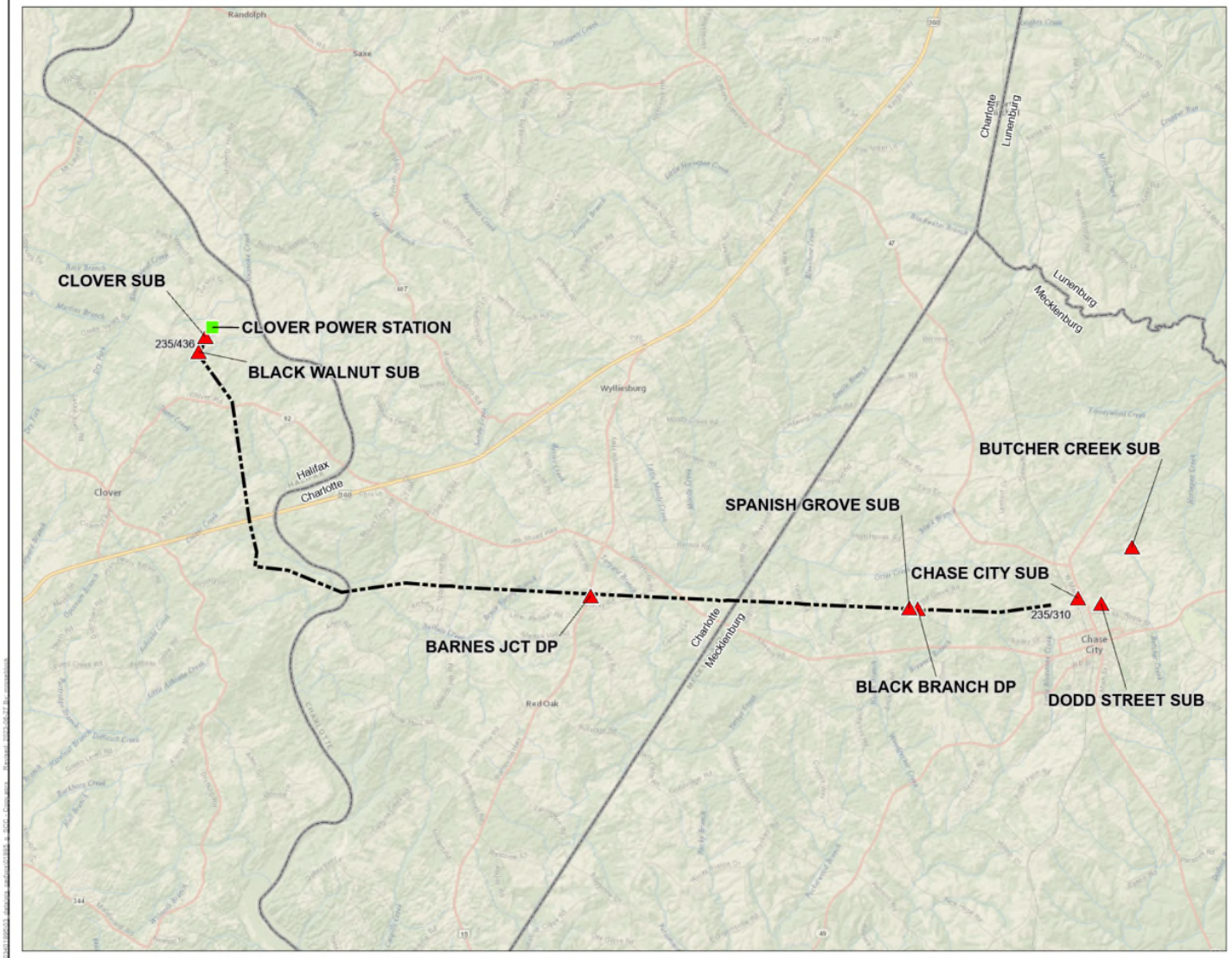

Figure No.
I.A.1

Title
Project Overview Map

Client/Project
Dominion Energy Virginia
Line #235 230kV Rebuild from
Clover Substation to Structure #235/310

203401995

Project Location
Halifax, Charlotte, and Mecklenburg Counties, Virginia

Prepared by MER on 2023-05-24
TR by CDC on 2023-03-28
IR by KHP on 2023-05-22

N

0 8,000 16,000 Feet

(At original document size of 11x17)
1:96,000

- Substation
- Existing Power Station
- Project Centerline

Notes
1. Coordinate System: NAD 1983 StatePlane Virginia South FIPS 4502 Feet
2. Data Sources: Dominion Energy Virginia, DCR, Ventyx, Stantec
3. Background: © National Geographic

Stantec

Dominion Energy

Page 1 of 1

Dominion Energy Services, Inc.
120 Tredegar Street, Richmond, VA 23219
DominionEnergy.com

July 5, 2023

Ms. Michelle Henicheck
Office of Wetlands and Streams
Department of Environmental Quality
1111 East Main Street, Suite 1400
Richmond, Virginia 23219

SCC ELECTRIC TRANSMISSION PROJECT NOTIFICATION
Project: Dominion Energy Virginia's Line #235 230 kV Rebuild from Clover Substation to Structure #235/310

Dear Ms. Henicheck:

Dominion Energy Virginia (the "Company") is proposing to rebuild approximately 16 miles of the existing 230 kV transmission Line #235 between the existing Clover Substation and existing Structure #235/310 using higher capacity conductors, renumber the rebuilt line segment to Line #2226, and complete work at Clover Substation to support the higher capacity conductor (the "Rebuild Project"). The Rebuild Project is located within Halifax, Mecklenburg, and Charlotte Counties in Virginia.

The Company proposes to locate the Rebuild Project entirely within the existing Line #235 right-of-way or on Company-owned property. No additional right-of-way is necessary, as shown on the attached map.

The Rebuild Project is needed to accommodate significant increased load growth in the area over recent years and to offset any unplanned outages of the nearby Line #556, which would overload existing Line #235. The higher capacity conductors would ensure compliance with mandatory North American Electric Reliability Corporation Reliability Standards.

The Company Is preparing to file an application for a certificate of public convenience and necessity ("CPCN") with the State Corporation Commission of Virginia (the "Commission"). Pursuant to the July 2003 Memorandum of Agreement between the Commission and the Department of Environmental Quality (the "DEQ") regarding Wetlands Impact Consultation, the Company is sending this letter to initiate consultation with the DEQ prior to filing the CPCN application.

A jurisdictional wetland and waters delineation has not been conducted at this time; however, Stantec conducted a wetland desktop study to identify probable wetlands based on a review of multiple data sources. Table 1 below provides a summary of the wetlands that could be affected by the Rebuild Project right-of-way. The full Wetland Desktop Study is attached for review as well as corresponding shapefiles. A wetland delineation will be conducted, and the limits of jurisdictional wetlands and waters will be submitted to the United States Army Corps of Engineers for confirmation once the final order has been approved.

Table 1. Estimate of Jurisdictional Wetlands and Waters within the Project Right-of-Way

Resource Type	Low	Medium	High	Previously Confirmed	Total
Palustrine Emergent and Scrub/Shrub Wetlands	23.19 Acres	10.53 Acres	17.79 Acres	0.80 Acres	52.31 Acres
Open Water	N/A	N/A	1.99 Acres	N/A	1.99 Acres
Stream	N/A	N/A	2.33 Acres (11,421 LF)	0.01 Acres (283 LF)	2.34 Acres (11,704 LF)

At this time, in advance of filing an application with the Commission, the Company respectfully requests that you submit any comments or additional information that would have bearing on the proposed Rebuild Project within 30 days of the date of this letter. Attached is a GIS shapefile of the proposed route to assist in the project review. If there are any questions, please do not hesitate to contact Lucas DuPont at (434) 981-0483 or lucas.a.dupont@dominionenergy.com.

The Company appreciates your assistance with this project review and looks forward to any additional information you may have to offer.

Thank you,

Jason P. Ericson, Authorized Representative on behalf of
Elizabeth "Tibby" L. Hester
Authorized Representative
Manager, Environmental Services

Enclosures: Line #235 230 kV Rebuild from Clover Substation to Structure #235/310 Wetland Desktop Study

Project GIS Shapefile

Project Overview Map

Stantec Consulting Services Inc.
5209 Center Street, Williamsburg Virginia 23188-2680

June 23, 2023
File: 203401769

Mr. Luke DuPont
Dominion Energy Environmental Services
120 Tredegar Street
Richmond, VA 23219

RE: Desktop Wetland Review
Line #235 230 kV Rebuild from Clover Substation to Structure #235/310
Halifax, Charlotte, and Mecklenburg Counties, Virginia
Start: Latitude: 36.865164° Terminus: Latitude: 36.807804°
Longitude: -78.707354° Longitude: -78.472370°

Dear Mr. DuPont:

The following report presents the results of a desktop wetland review conducted by Stantec Consulting Services Inc. (Stantec) for the Line #235 230 kV Rebuild from Clover Substation to Structure #235/310 Project (Project) located in Halifax, Charlotte, and Mecklenburg Counties, Virginia (Figure 1). The purpose of this study is to determine the approximate location and extent of areas that have the potential of containing jurisdictional wetlands and other surface using available off-site resources.

The project area (approximately 367.57 acres) consists of an existing, variable width transmission line right-of-way (ROW) beginning at the Clover substation in Halifax County, Virginia and extends approximately 15.94 miles south and east to structure #235/310 near the Chase City substation in Mecklenburg County, Virginia. The site can be accessed via Red Level Church Road (Route 715), Tobacco Hill Road Route 608), Route 15, Hawker Lane, Rocky Road, Allgood Road (Route 600), Tinker Road (Route 609), Spanish Grove Road (Route 684), Godseys Lane, Jeb Stuart Highway (Route 92), Barnesville Highway (Route 15), Keillysville Road (Route 631), Shelton Hall Road (Route 627), Rivers Bend Road, Route 715, James D Hagood Highway (Hwy 360), and Route 608.

Due to the preliminary nature of this study, the field methods outlined in the *1987 Corps of Engineers Delineation Manual* and the 2012 *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Eastern Mountain and Piedmont Region (version 2.0)* were not applied to determine the limits of wetlands and other water features on-site. Rather, U.S. Geological Survey (USGS) Quadrangle Maps, current and historical web-based aerial imagery, wetland photo interpretation techniques, soil surveys, and the National Wetlands Inventory (NWI) were used to ascertain the approximate limits of wetlands other surface waters. For an evaluation of this type, the dimensions of WOUS are difficult to determine using even the highest resolution and most recent off-site reference materials. Large floodplains containing broad, flat topography can be assessed fairly accurately using aerial photography. However, smaller secondary drainages containing lower order streams and headwater wetlands are more difficult to evaluate and could contain a high degree of deviation when compared to field conditions. Therefore, all site conditions predicted as a part of this analysis and in the mapping provided are considered preliminary, and without site reconnaissance should only be utilized for early-stage planning purposes.

Multiple off-site resources were reviewed to determine areas that have the potential to contain jurisdictional WOUS, including wetlands, within the study area described above. These materials include the U.S. Geological Survey 7.5-minute Topographic Quadrangle Maps (Quads) for Clover, Virginia (2022 revision); Wylliesburg, Virginia (2022 revision); Chase City, Virginia (2022 revision); the National Wetlands Inventory Interactive Mapper (NWI), administered by the U.S. Fish and Wildlife Service (USFWS); the SSURGO Soils Survey, administered by the Natural Resources Conservation Service (NRCS); and web-based aerial images.

USGS Quads

The Quads depict the majority of the study area as an existing transmission line traversing through gently sloping to moderately sloping terrain. Named drainageways within the study area include the following: Clover Creek, the Staunton River, Buffalo Creek, Bruce Spring Branch, Tanard Branch and Moody Creek. Numerous unnamed perennial and non-perennial systems are also mapped within the study area.

NWI Maps

The NWI maps administered by USFWS are useful in the identification of potential wetland areas. The maps are compiled through photo interpretation techniques with limited field verification. Large floodplain and regularly inundated wetlands are easily illustrated and are often mapped reasonably accurately, while certain forested wetlands (e.g., seasonally saturated, groundwater driven, and evergreen dominated) and other drier-end wetlands tend to be either conservatively mapped or not shown at all.

The NWI maps depict multiple freshwater forested/shrub wetlands, freshwater emergent wetlands, riverine, and freshwater pond within the study area. It should be noted that all wetlands within the study area are presumed to be scrub shrub or emergent due to regular maintenance of the ROW. The NWI identifies all wetlands within the proposed project area as palustrine, which includes all non-tidal wetlands and wetlands that occur in tidal areas where salinity due to ocean derived salts is below 0.05%.

Digital Aerial Imagery

Web-based aerial images of the project area were reviewed to determine the approximate location and extent of areas that have the potential of containing jurisdictional wetlands other surface waters. Historical and current aerial imagery can be compared across seasons and year-over-year to determine the potential occurrence of jurisdictional features. Seasonal variations in deciduous vegetation and the presence of stream channels, as well as inundated or saturated areas were all evaluated for their resource potential.

Based on this review of current and historical digital aerial imagery, jurisdictional features are likely present at most Quad mapped stream crossings, NWI mapped wetland features, and are potentially present in some of the secondary drainage features within the easement, as shown on the attached Wetland and Surface Water Desktop Analysis Maps (Figure 1).

Soil Survey

The Natural Resources Conservation Service (NRCS) Web Soil Survey shows numerous soil types within the Project study area. For the purpose of this report, the location of hydric and partially hydric soils within

the easement are of particular interest, as areas mapped with these soils generally have a high potential to contain jurisdictional features. It should be noted that areas mapped with non-hydric soils could also contain jurisdictional features.

A significant portion of the soils mapped within the study area are classified by the NRCS as non-hydric or predominately non-hydric. The hydric soils present include Roanoke silt loam, Wehadkee fine sandy loam, Wehadkee silt loam, Worsham, and Worsham fine sandy loam. The only partially hydric soil listed within the project area is Wehadkee-Chewacla complex.

Results

The following table presents the approximate dimensions of potential jurisdictional features based on the desktop wetland review for the Project. These features are shown on the attached Wetland and Surface Water Desktop Analysis Maps (Figure 1). As discussed above, all wetland features present within the study limits would likely be classified in the field as palustrine emergent (PEM) or scrub shrub (PSS) due to regular maintenance within the ROW. However, it should be noted that the distinction between emergent wetlands and scrub-shrub wetlands is often very difficult to ascertain using even the highest resolution aerial images and have been combined for this analysis.

PEM/PSS (Acres)	**Open Water** (Acres)	**Stream Channels** Acres (LF)
52.31	1.99	2.34 (11,705)

In addition, the probability of wetland occurrence was determined based upon the number of off-site resources giving a positive indication within a given area. The off-site resources considered for this probability analysis include current and historical aerial imagery, NWI mapping, hydric soil data, and Quad mapping/topography. The probability was determined as follows and results are summarized in the table below:

- High probability: Areas that demonstrate positive indicators for potential wetlands on all four of the above-mentioned off-site resources.
- Medium probability: Areas that demonstrate positive indicators for potential wetlands on two or three of the above-mentioned off-site resources.
- Low probability: Areas that demonstrate positive indicators for potential wetlands on one of the above-mentioned off-site resources.

High Probability (acres)	**Medium Probability** (acres)	**Low Probability** (acres)
17.79	10.53	23.19

Stantec

Reference: Line #235 230 kV Rebuild from Clover Substation to Structure #235/310

It should be noted that in addition to the desktop wetland review, the limits of known wetland and surface water delineations with current jurisdictional determinations within the Project limits have been included in this analysis and are depicted on the Wetland and Surface Water Desktop Analysis Maps. The table below presents the area calculations for the previously confirmed delineations within the Project area.

PEM (acres)	**R3 Stream Channels** (LF)	**R4 Stream Channels** (LF)	**R6 Stream Channels** (LF)
0.80	0.007 (109)	0.003 (26)	0.001 (149)

Conclusion

Based on Stantec's interpretation of the above-mentioned off-site resources, the potential exists for jurisdictional features to occur in association with all major drainage features (including floodplains) and some secondary drainages within the project area as depicted in the attached Desktop Wetland Review Map.

In order to verify the findings described in this report, Stantec recommends a detailed delineation of wetlands and other WOUS be performed within the final, approved project area followed by confirmation by the U.S. Army Corps of Engineers.

If you have any questions regarding the findings presented in this report, please feel free to contact me at your convenience.

Regards,

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Enclosures: Figures 1, 2

cc. Ms. Christa McDonald – Dominion Energy Virginia

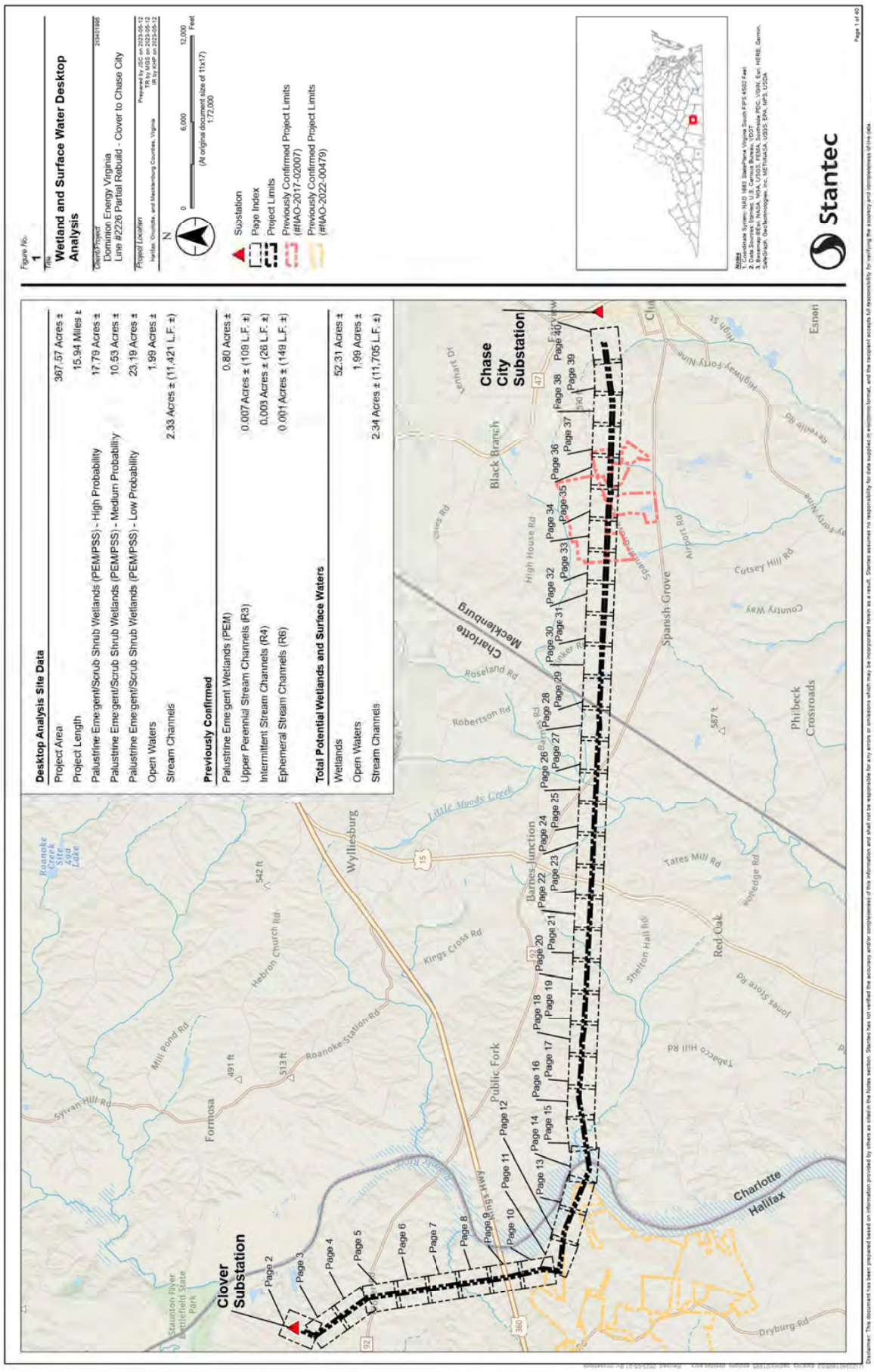

Figure No.
1

Title
Wetland and Surface Water Desktop Analysis

Client/Project
Dominion Energy Virginia
Line #2226 Partial Rebuild - Clover to Chase City

203401995

Project Location
Halifax, Charlotte, and Mecklenburg Counties, Virginia

Prepared by JSC on 2023-05-12
TR by MGS on 2023-05-12
IR by KHP on 2023-05-12

0 200 400 Feet
(At original document size of 11x17)
1:2,400

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- Approximate PEM/PSS Wetland - Low Probability
- Approximate Open Water
- Approximate Stream
- 2-Foot Contour

Notes
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2. Data Sources: Stantec, U.S. Census Bureau, VDOT, Topography generated from digital elevation model derived from USGS Lidar Point Cloud
3. Orthoimagery © Earthstar Geographics, Virginia Geographic Information Network (VGIN)
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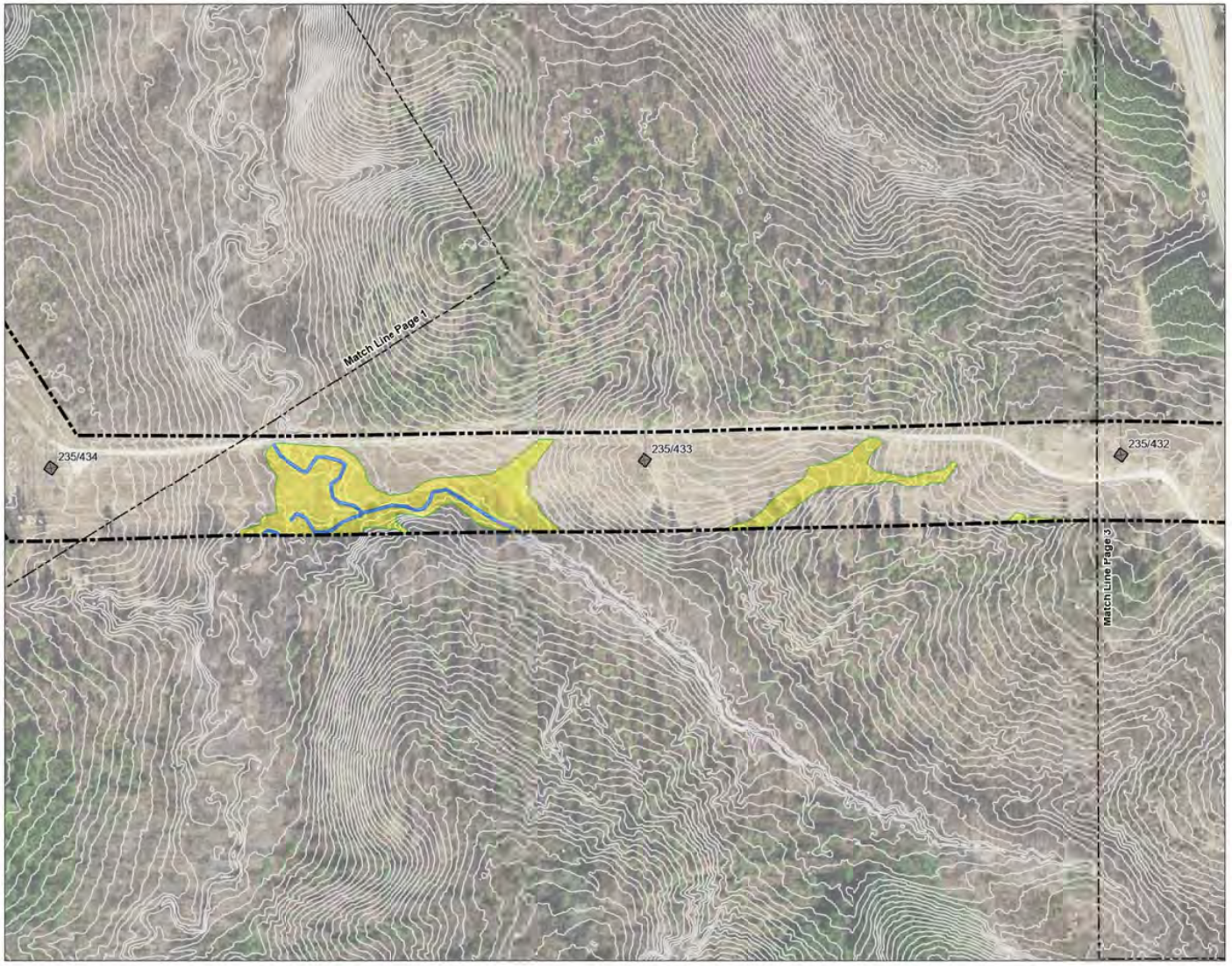

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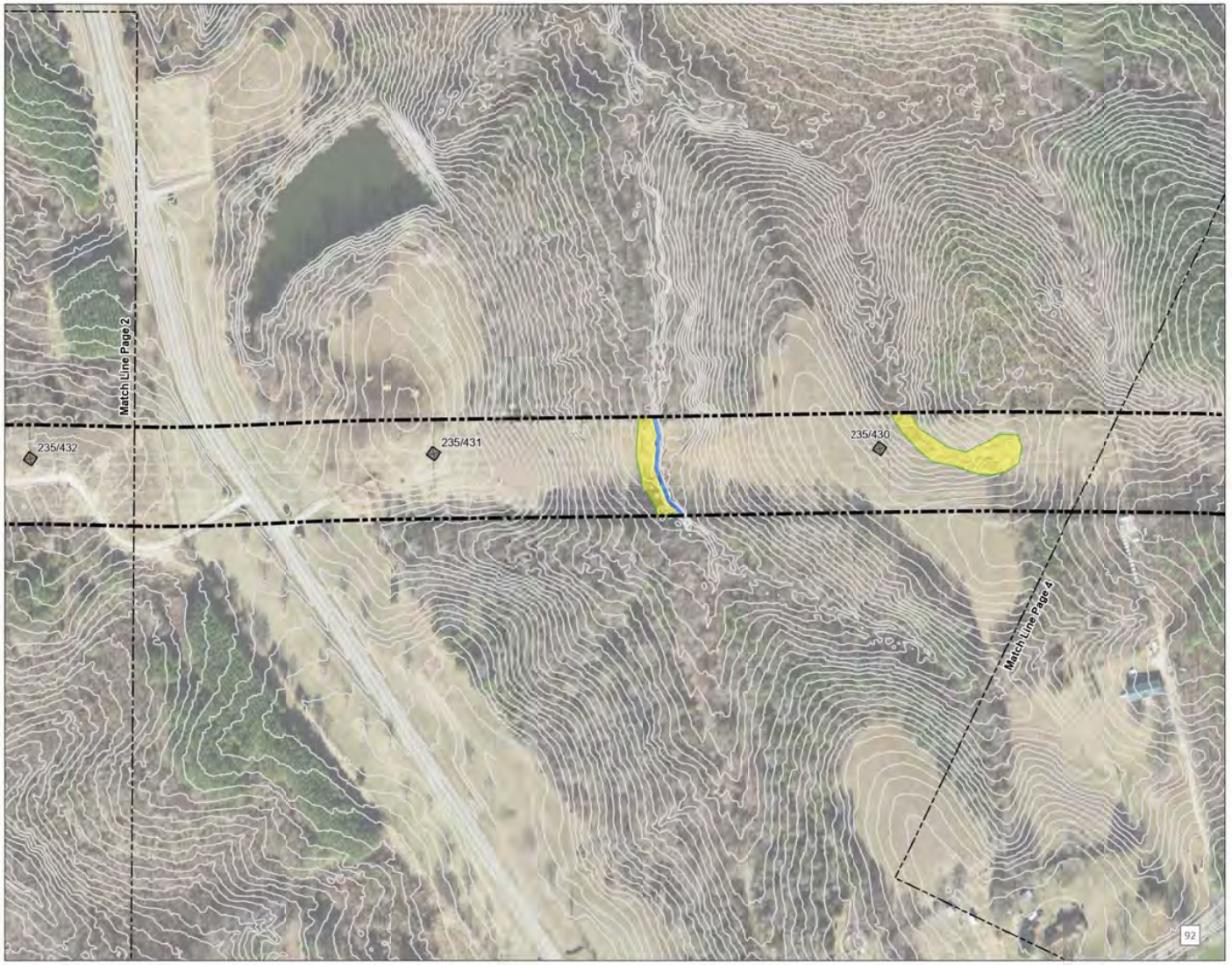

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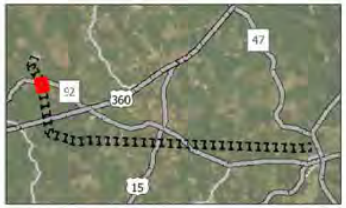

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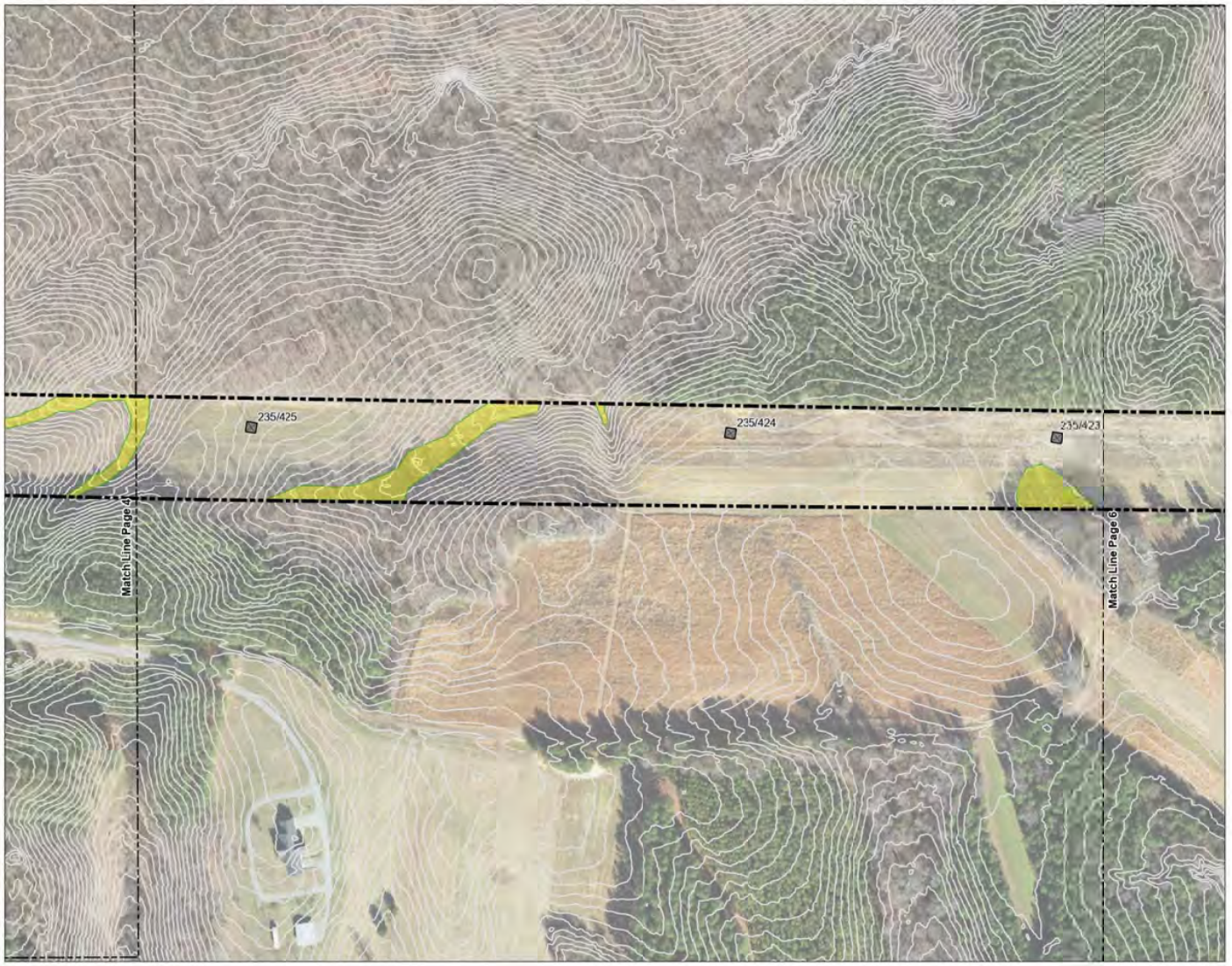

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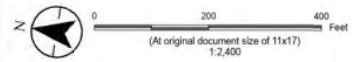

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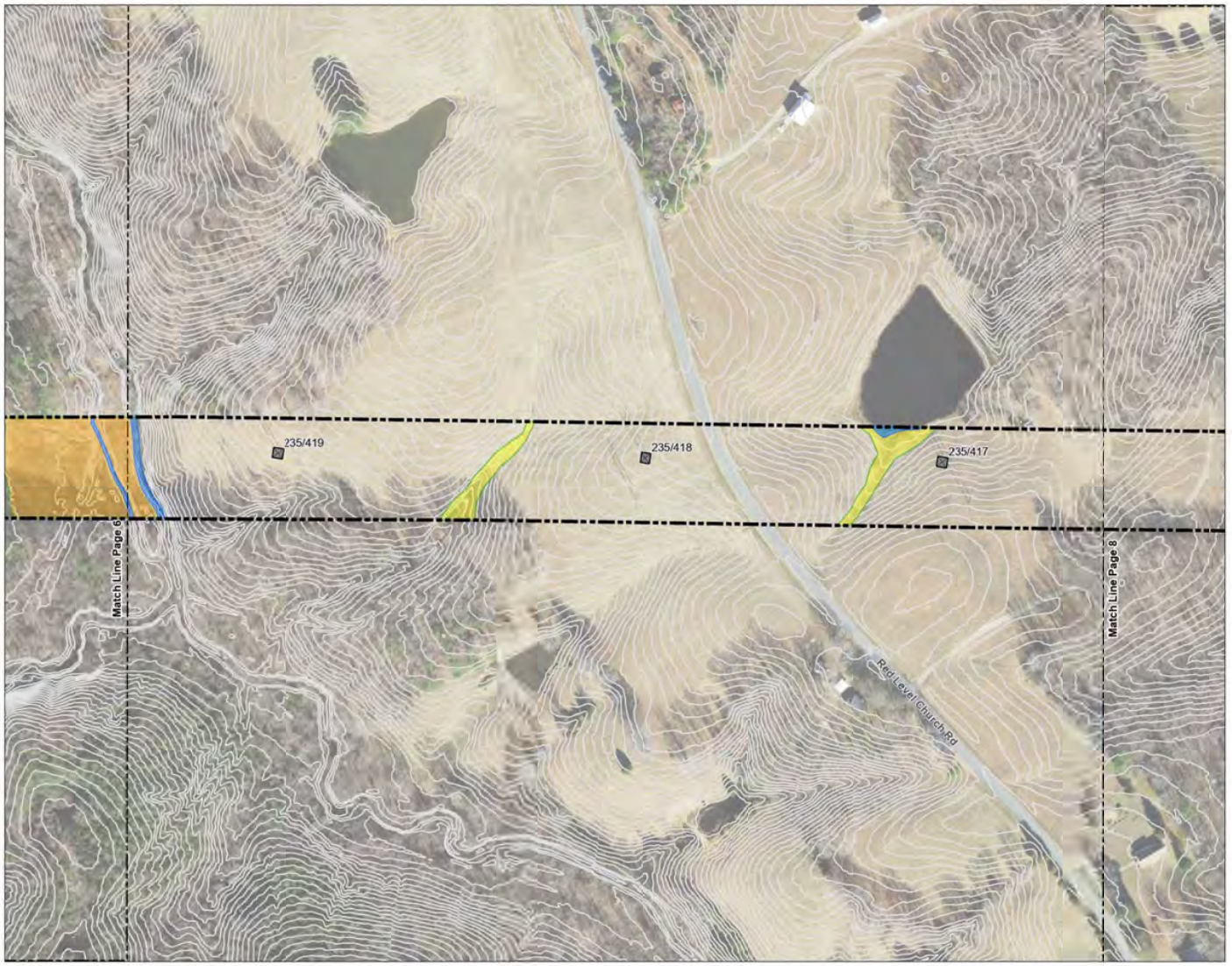

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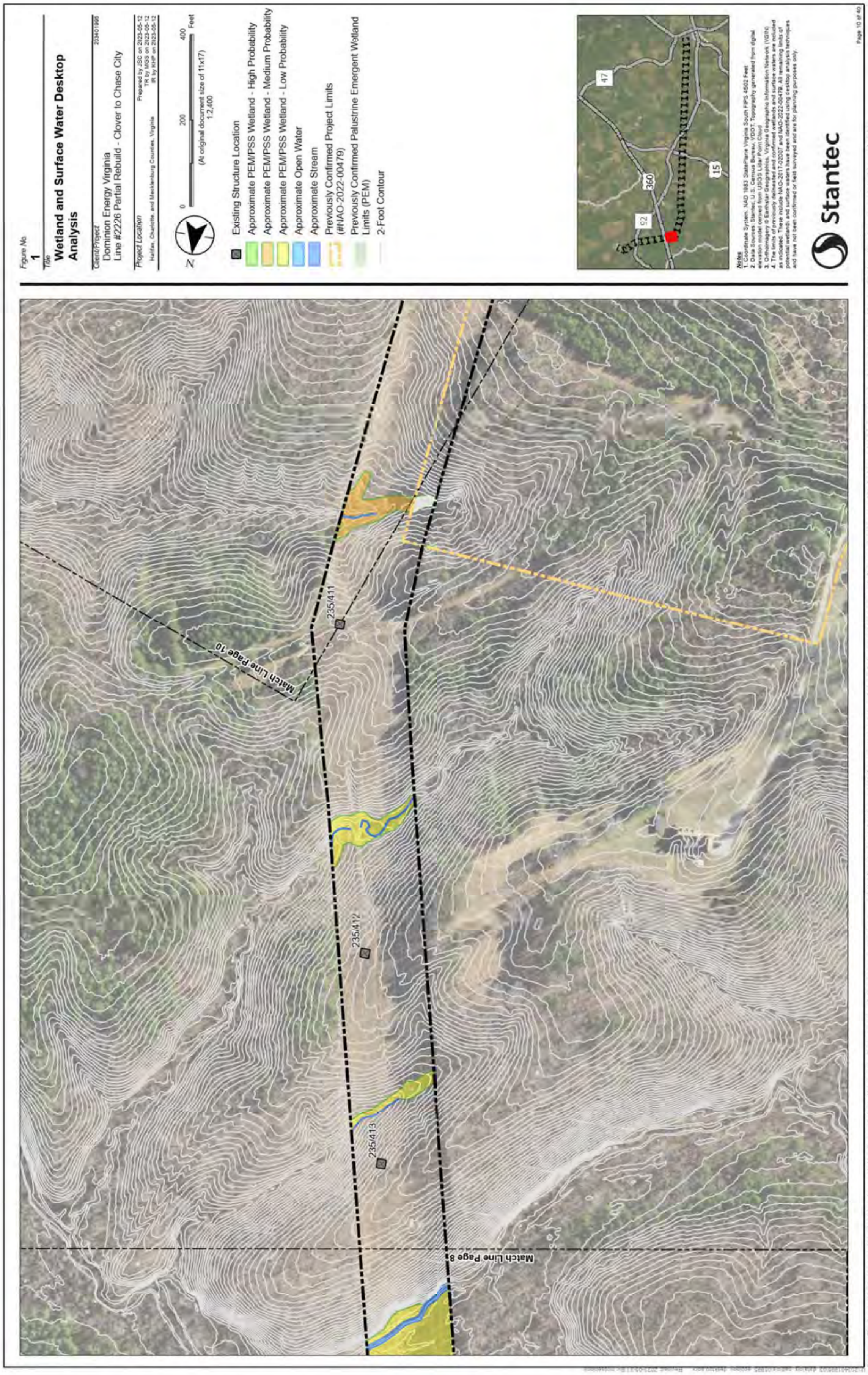
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Previously Confirmed Palustrine Emergent Wetland Limits (PEM)
2-Foot Contour
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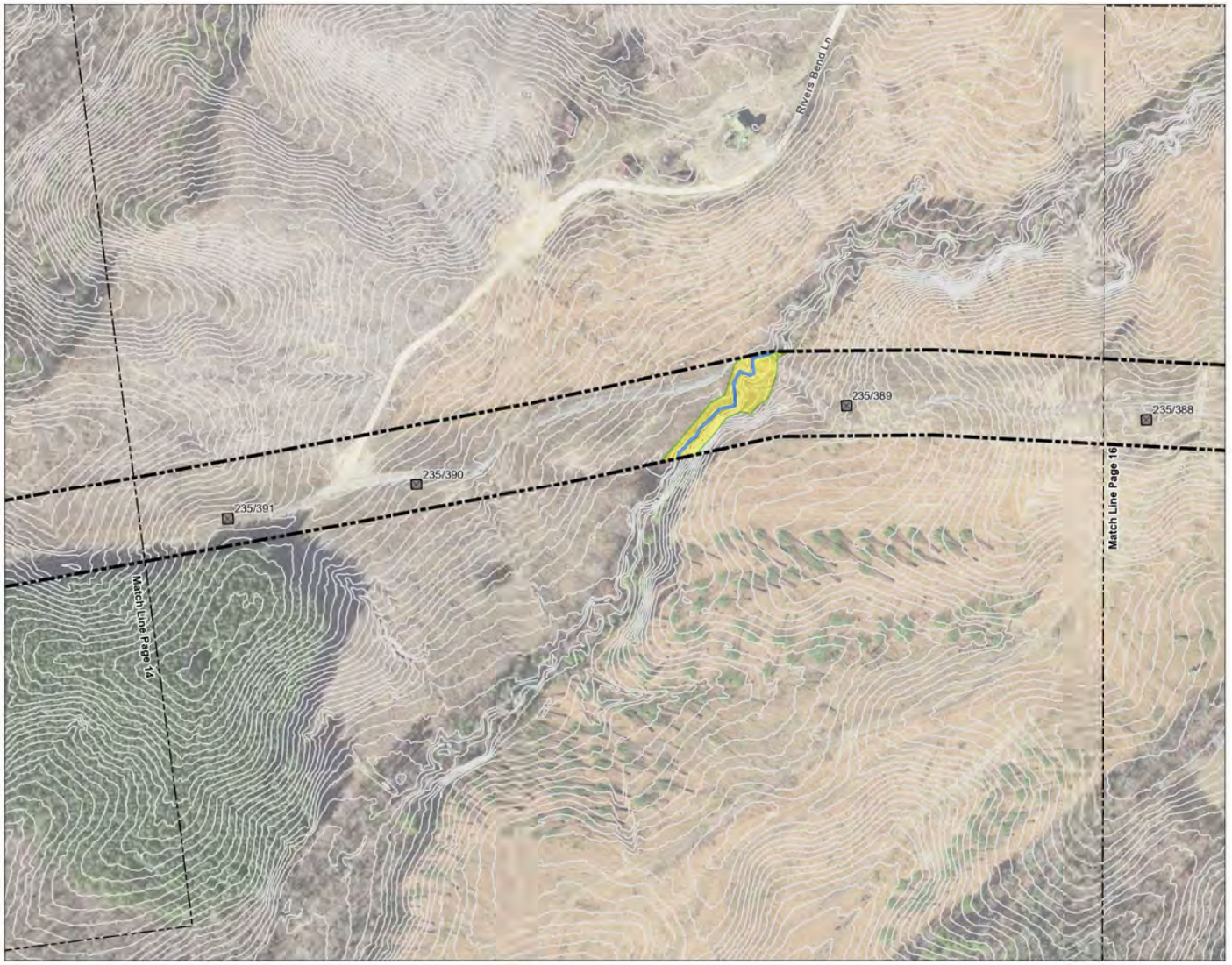
Stantec
Page 15 of 40



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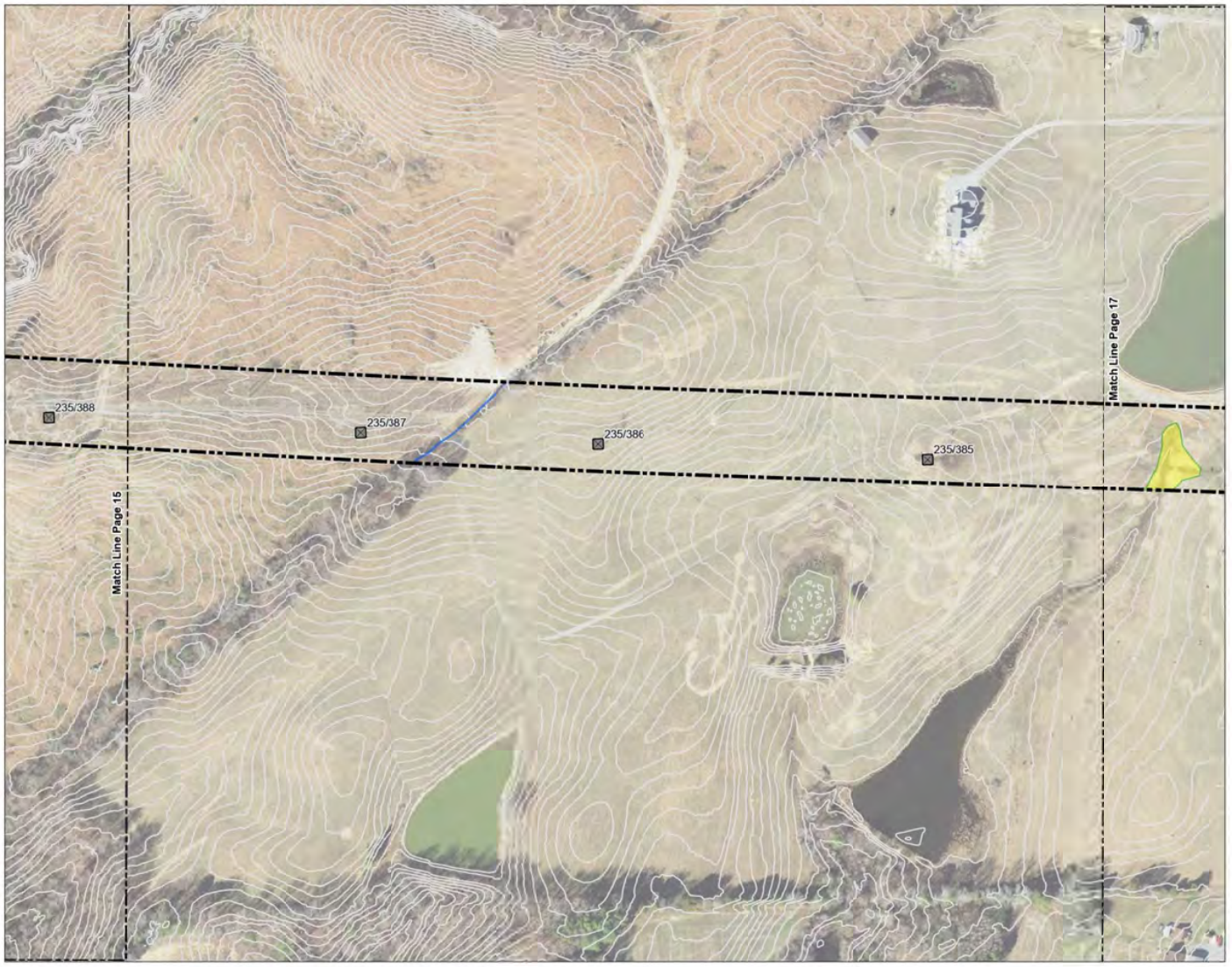

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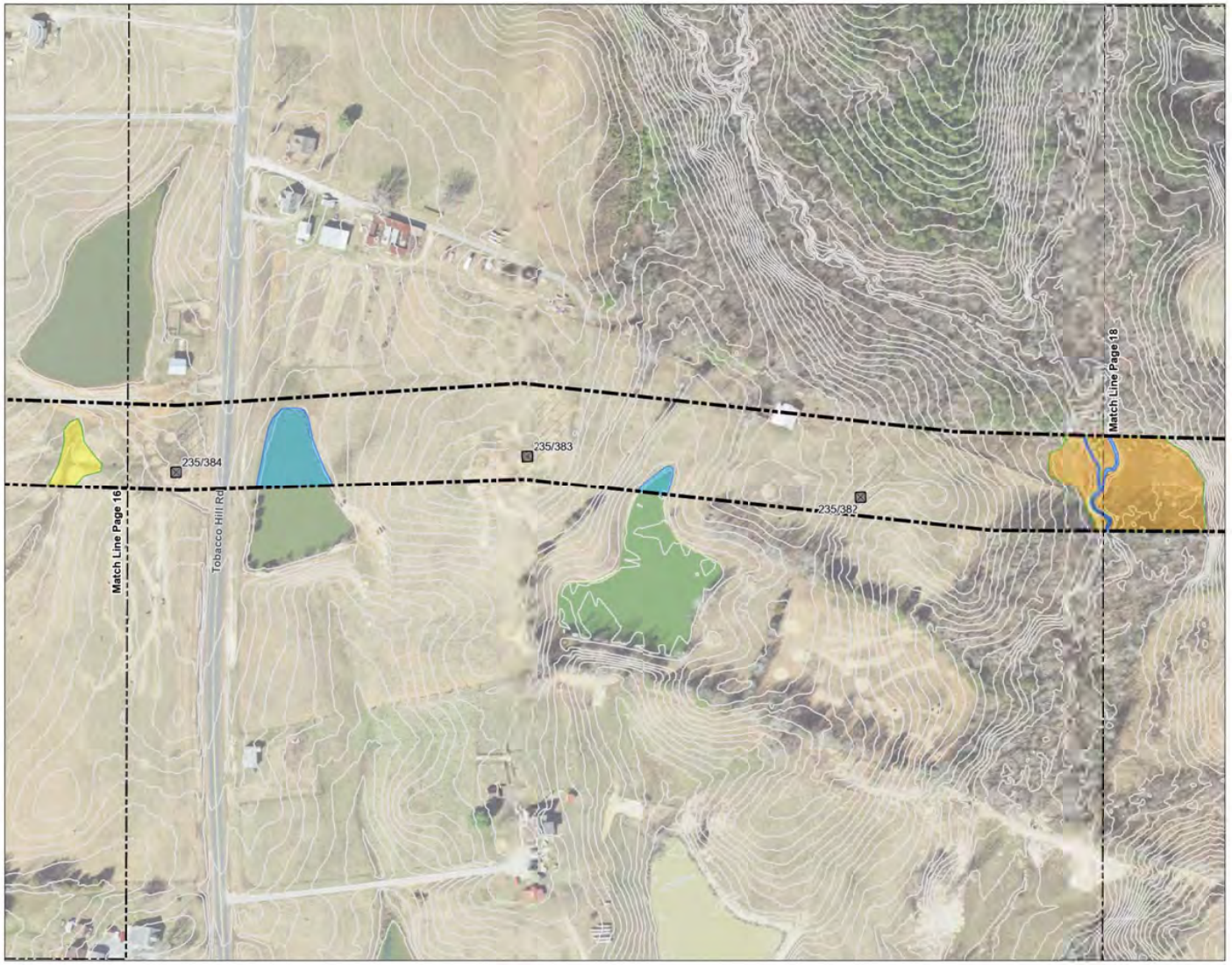

Figure No.
1

Title
Wetland and Surface Water Desktop Analysis

Client/Project
Dominion Energy Virginia
Line #2226 Partial Rebuild - Clover to Chase City

203401995

Project Location
Halifax, Charlotte, and Mecklenburg Counties, Virginia

Prepared by JSC on 2023-05-12
TR by MGS on 2023-05-12
IR by KHP on 2023-05-12

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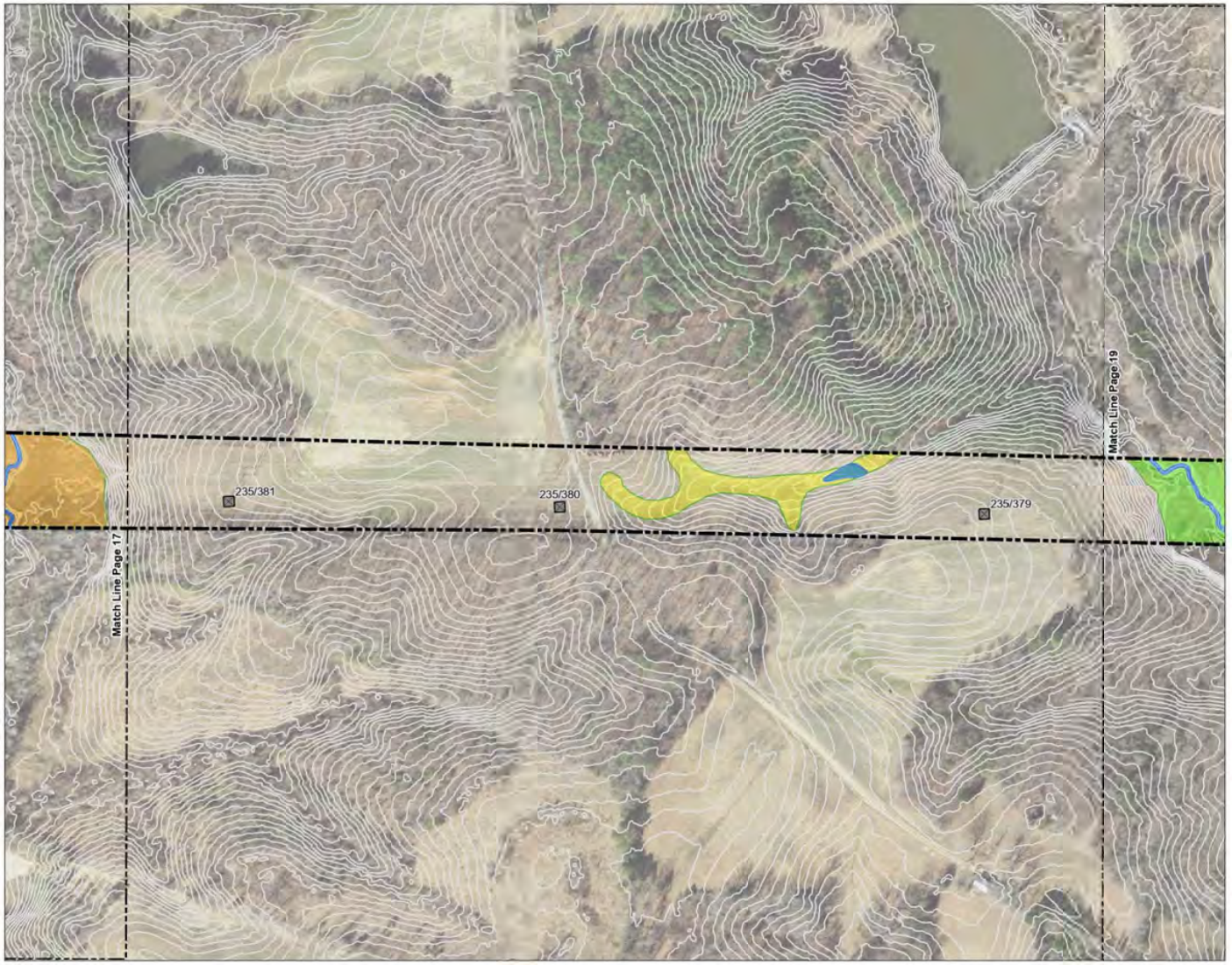

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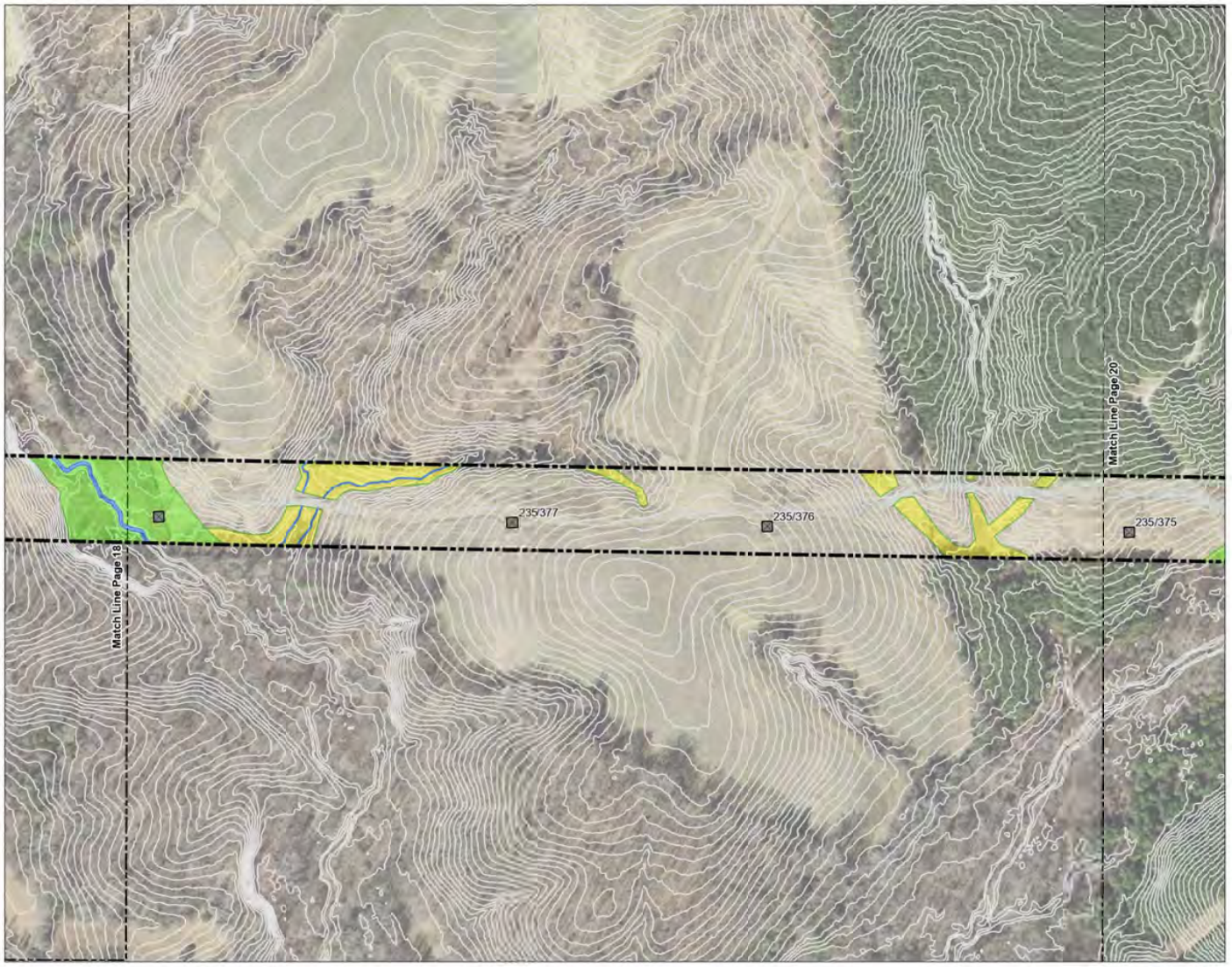

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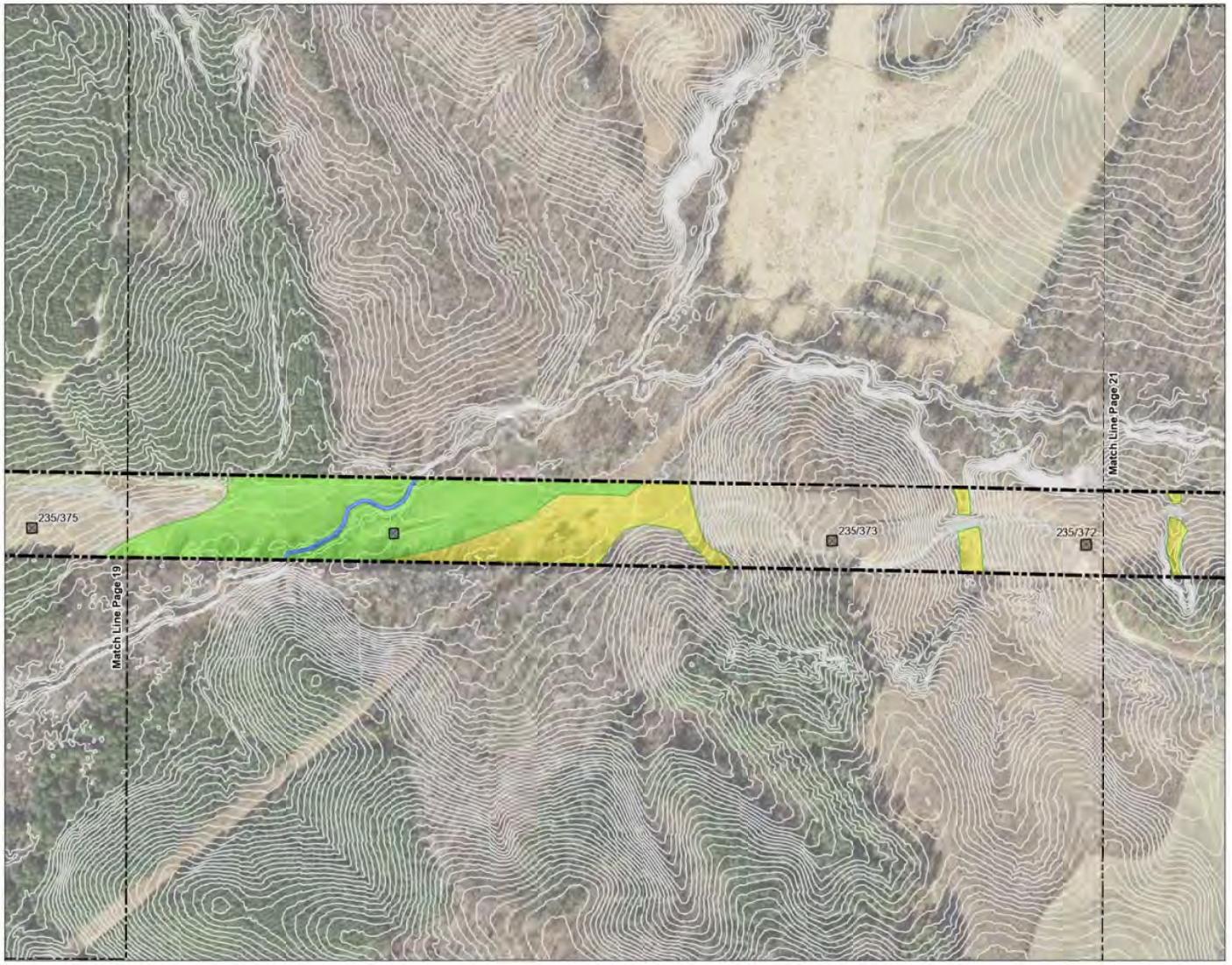

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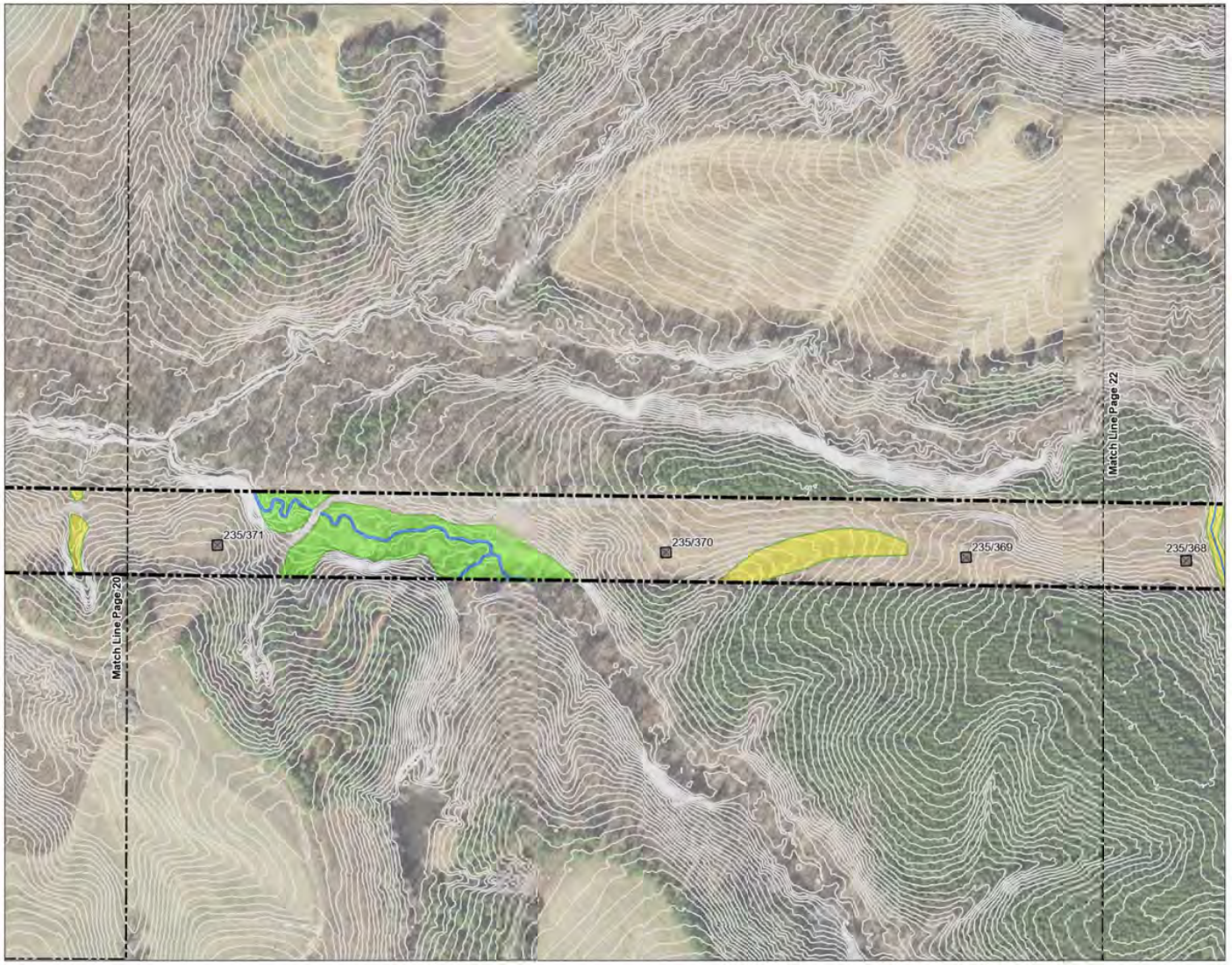

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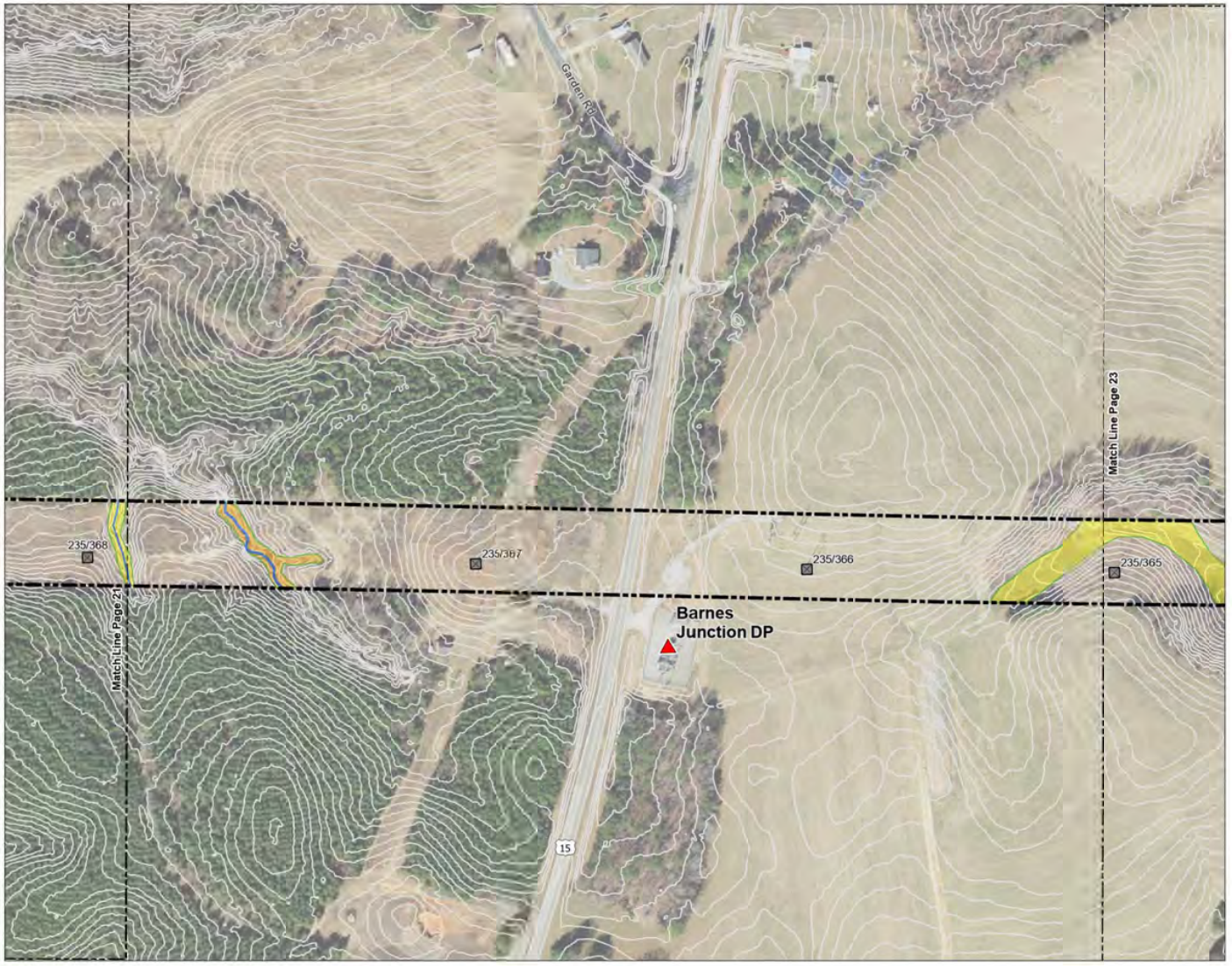

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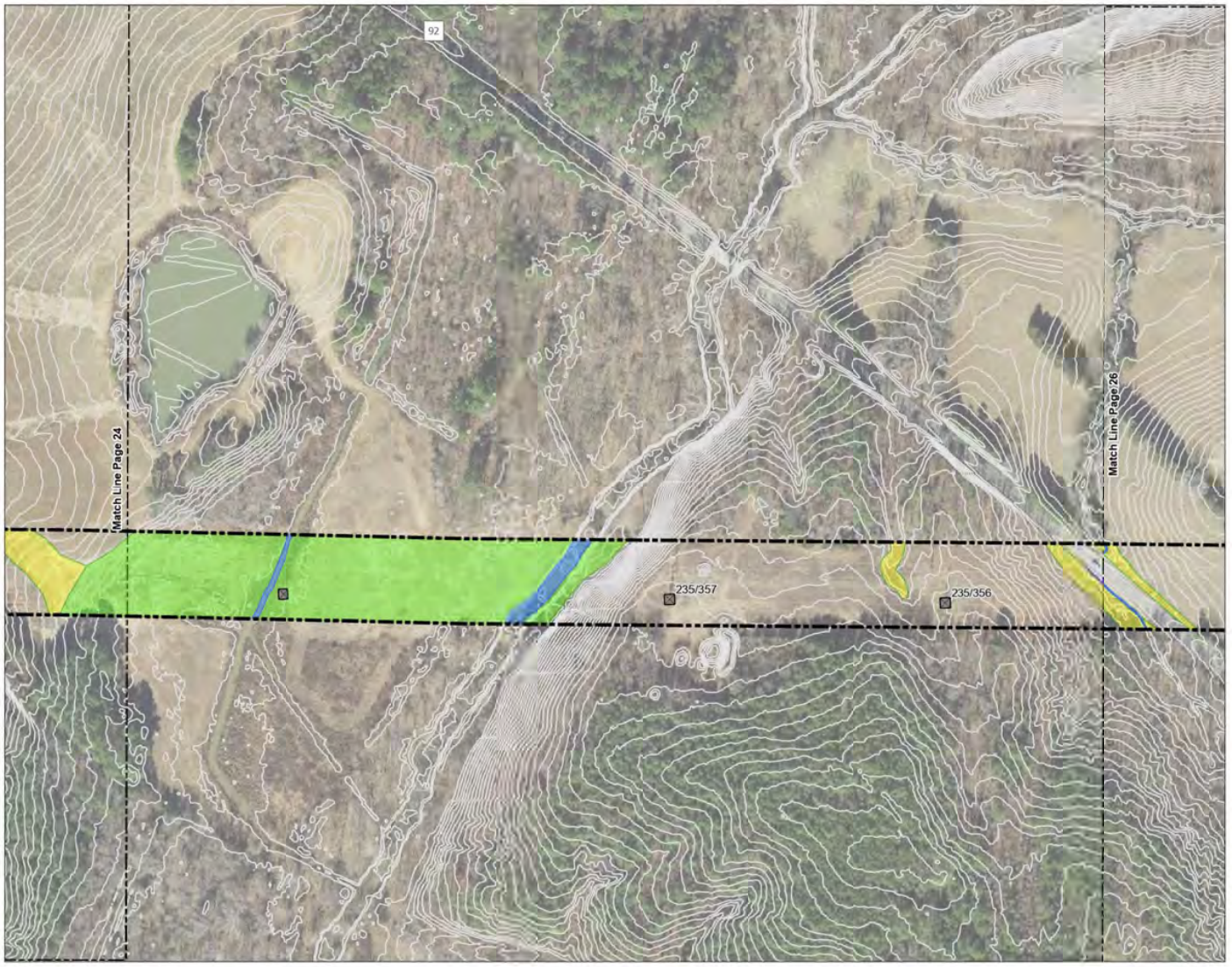

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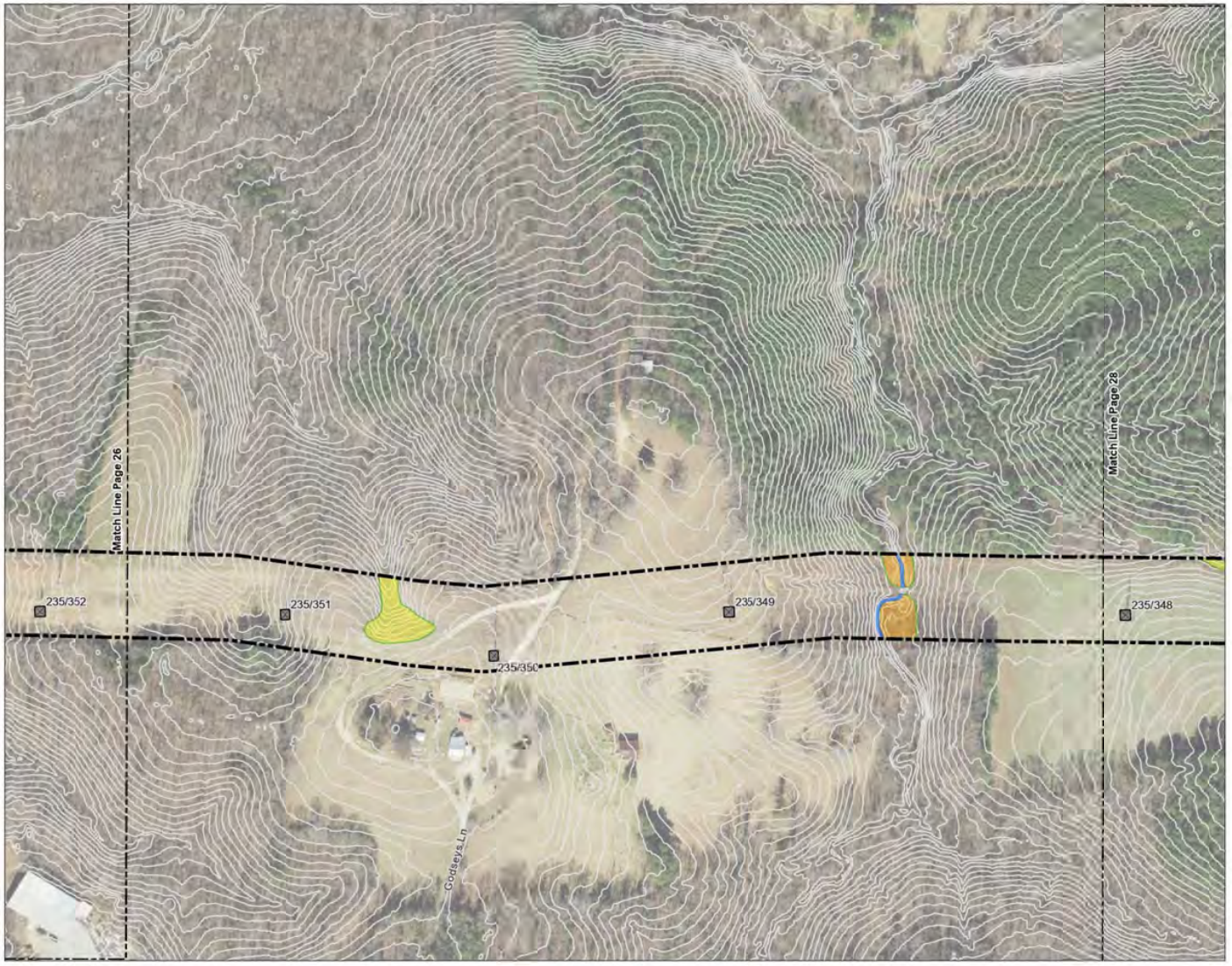
Page 27 of 40



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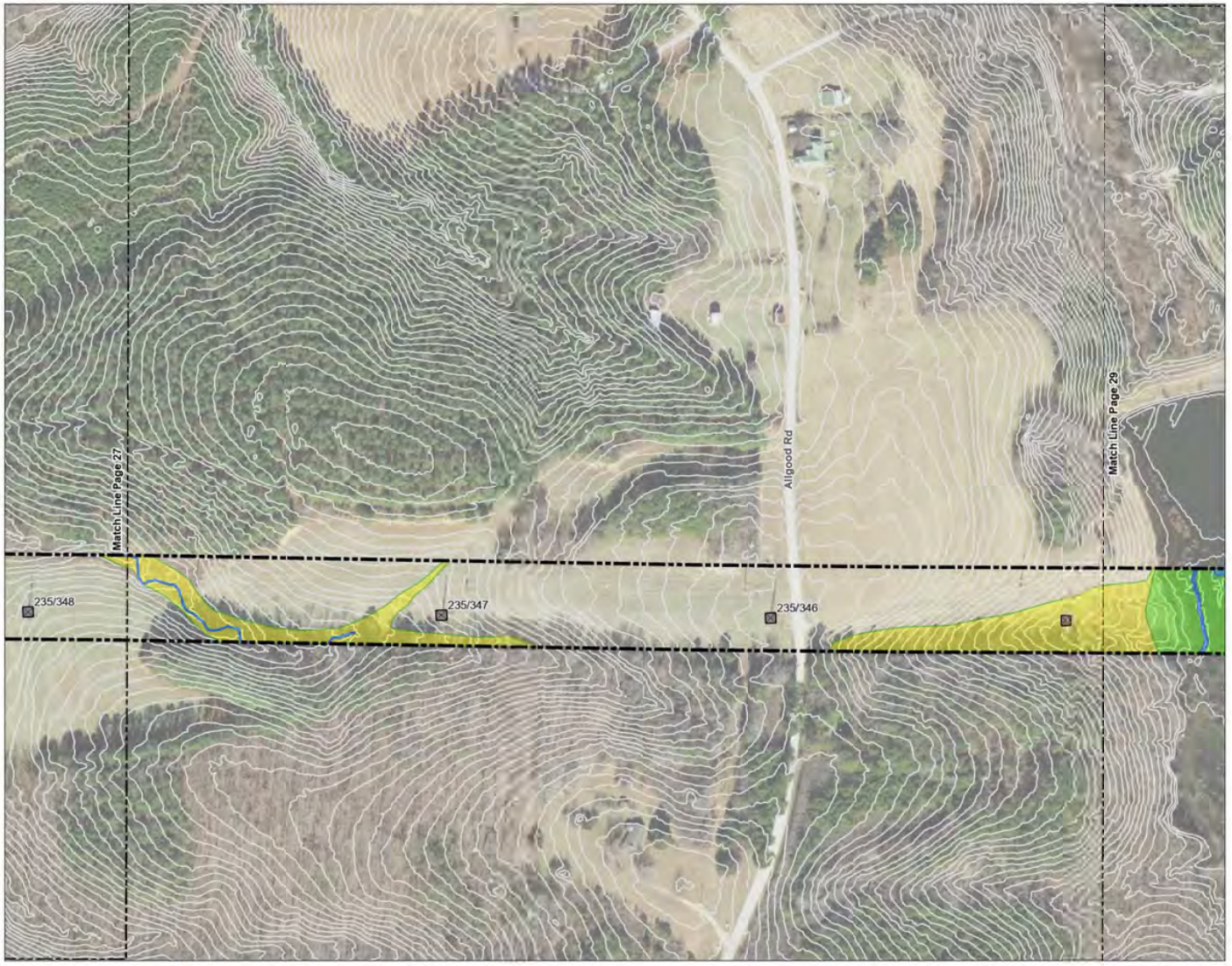

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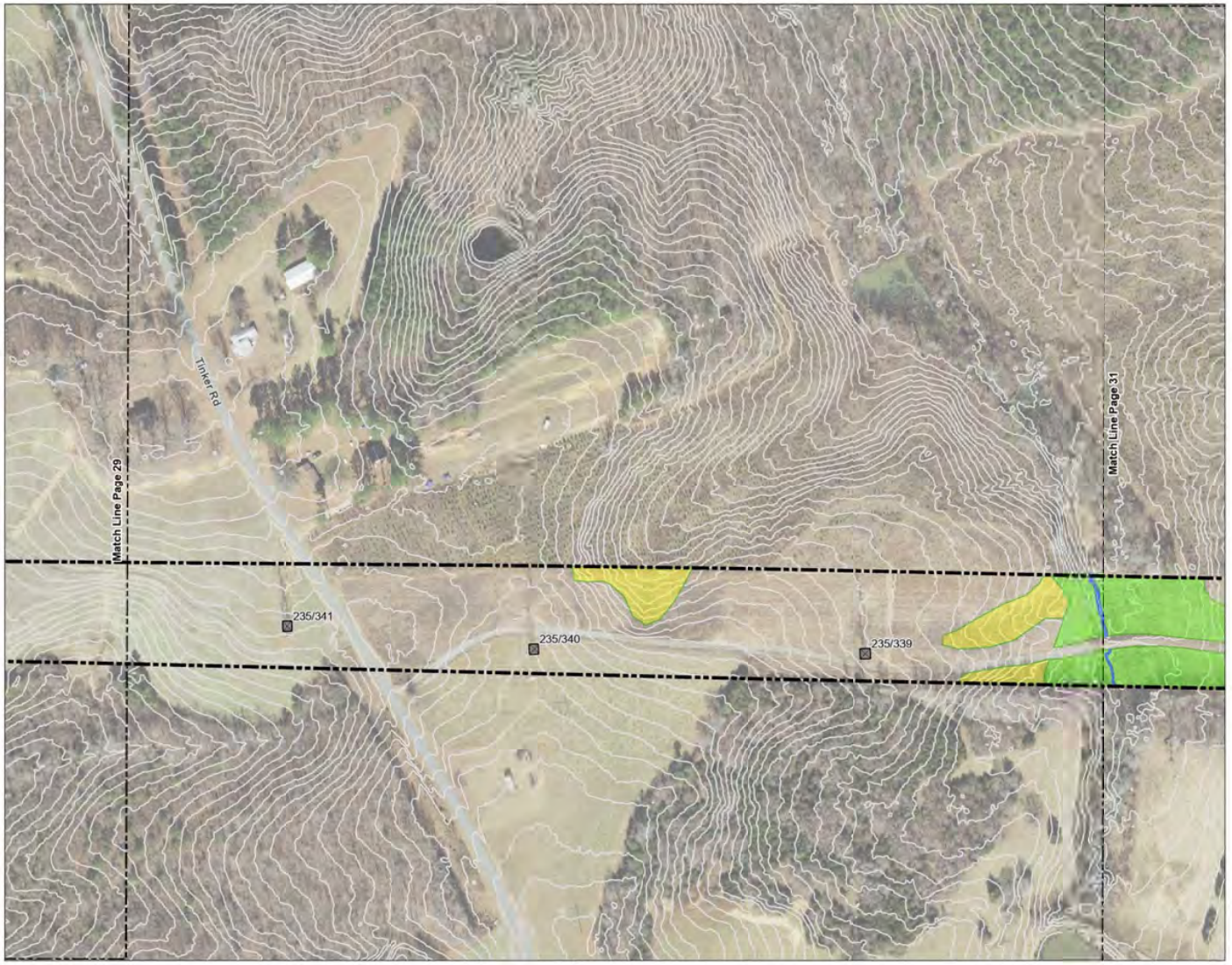

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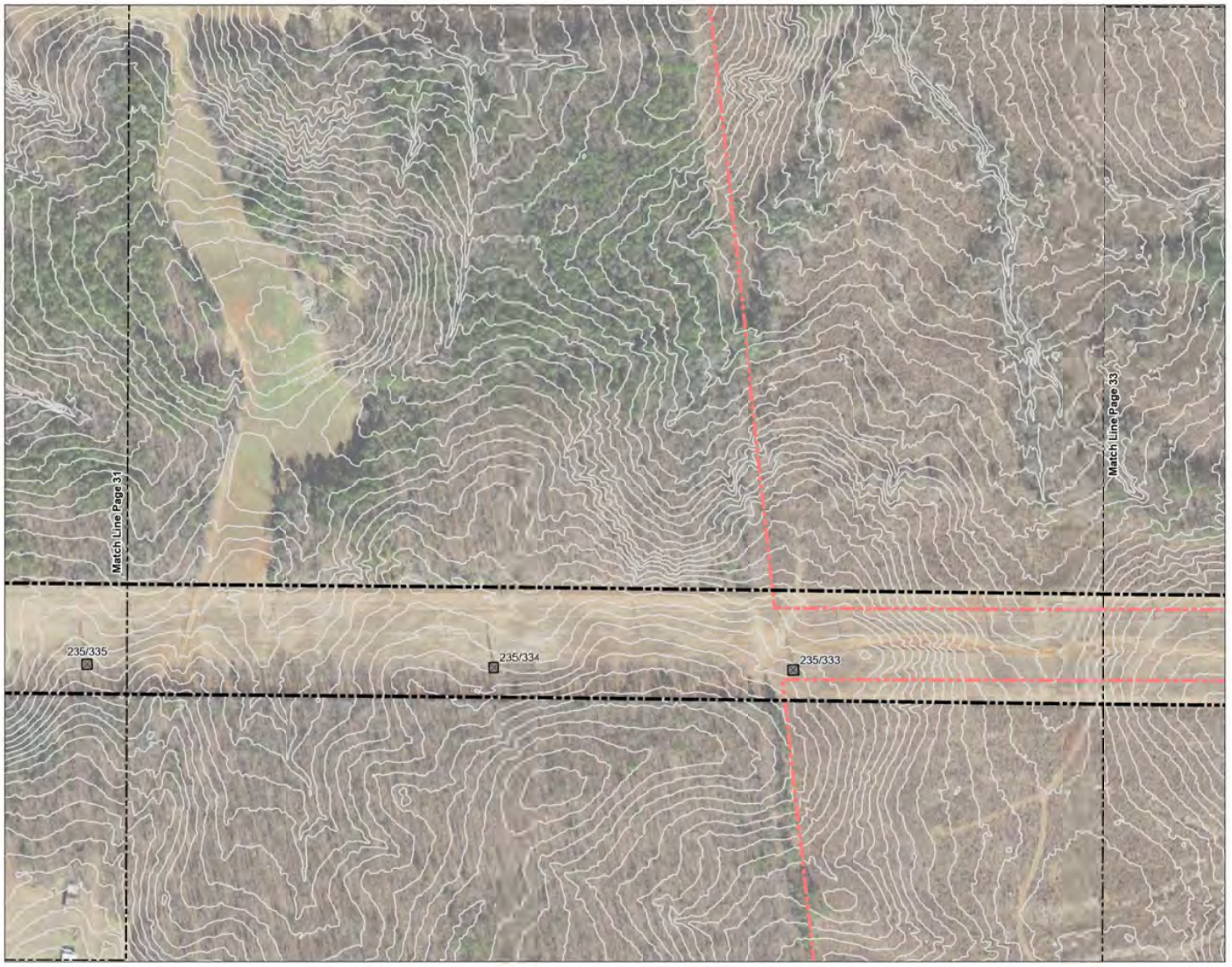

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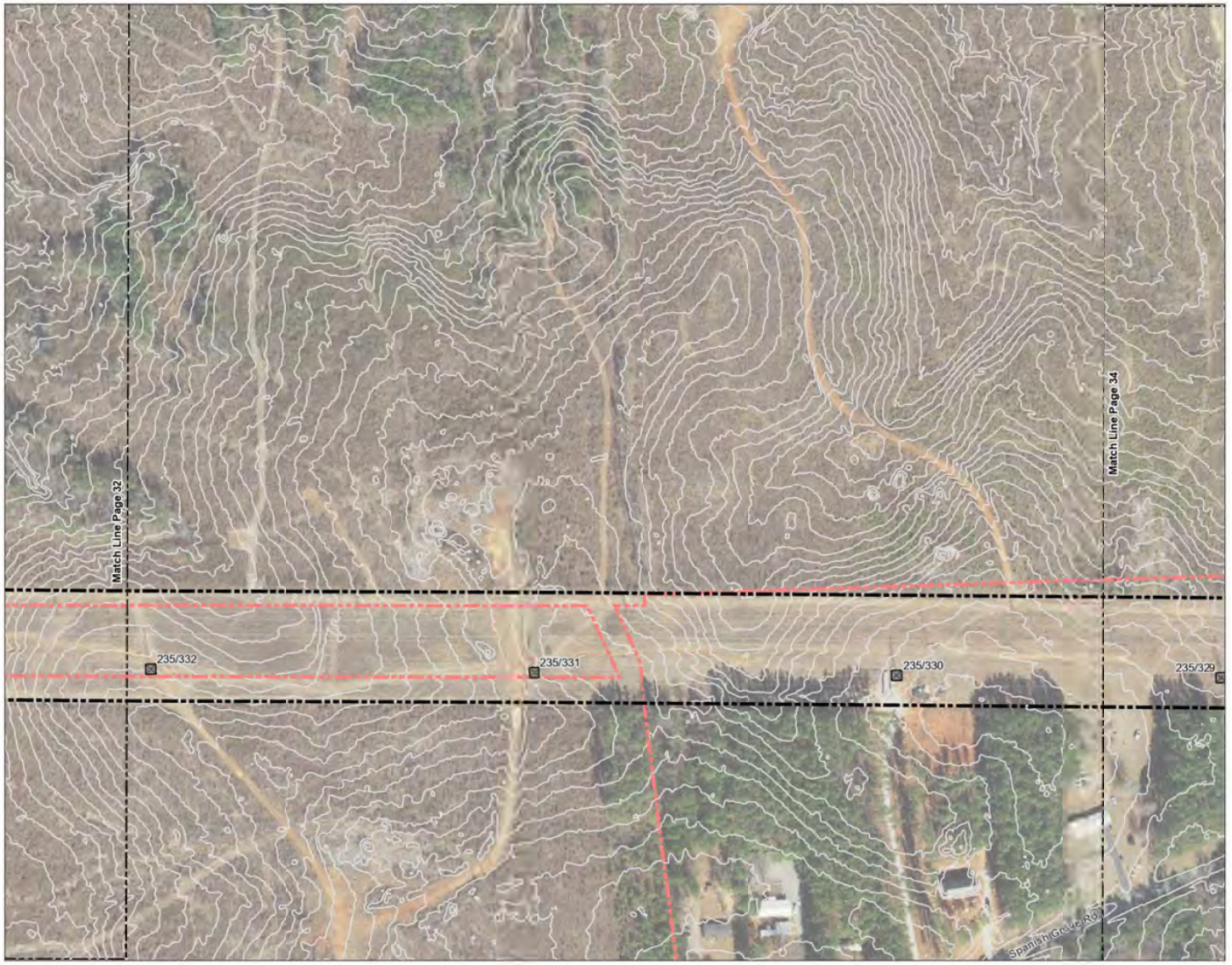

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4. The limits of previously delineated and confirmed wetlands and surface waters are included as indicated. These include NAO-2017-02007 and NAO-2022-00478. All remaining limits of potential wetlands and surface waters have been identified using desktop analysis techniques and have not been confirmed or field surveyed and are for planning purposes only.

Stantec

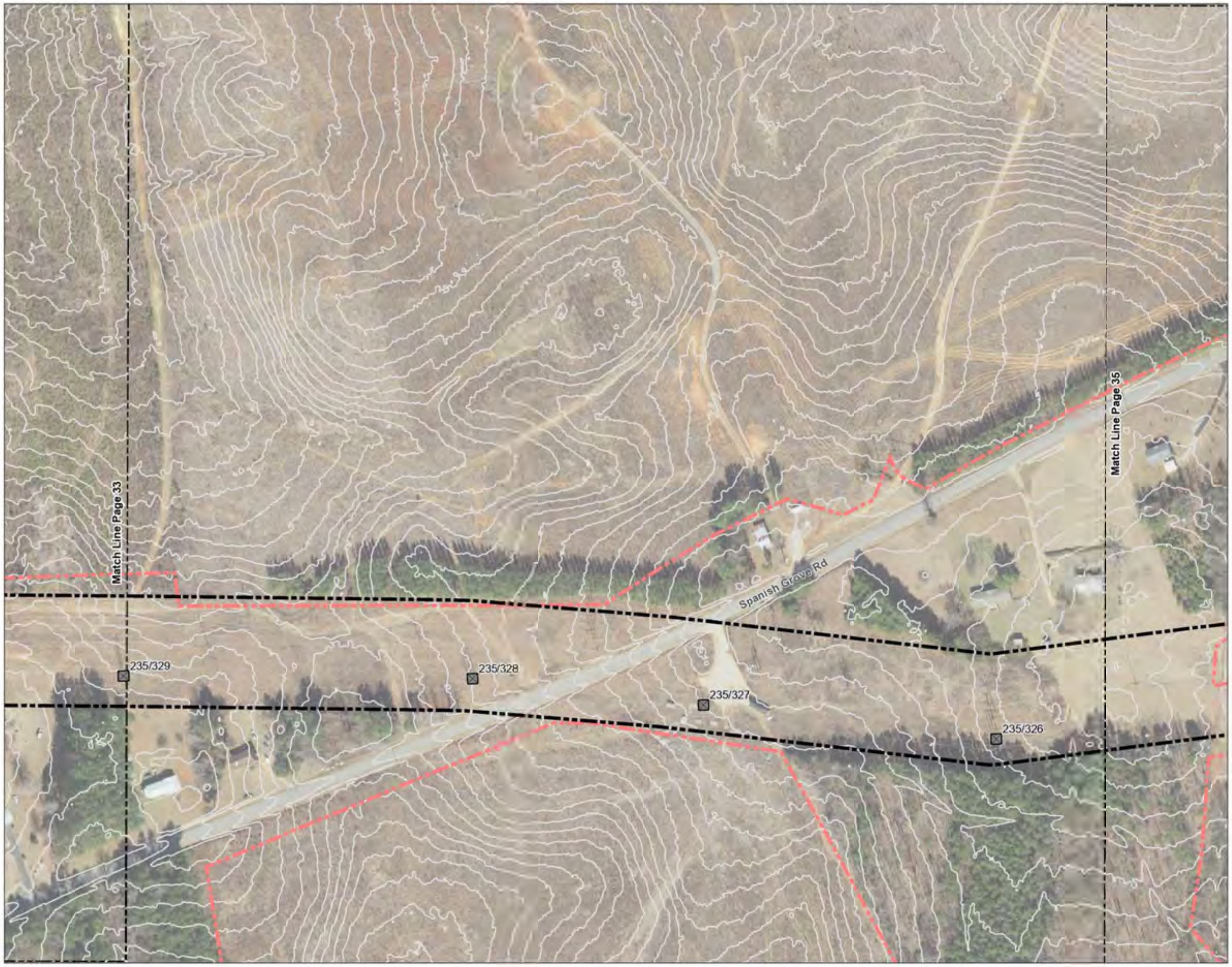

Figure No.
1

Title
Wetland and Surface Water Desktop Analysis

Client/Project
Dominion Energy Virginia
Line #2226 Partial Rebuild - Clover to Chase City
203401995

Project Location
Halifax, Charlotte, and Mecklenburg Counties, Virginia

Prepared by JSC on 2023-05-12
TR by MGS on 2023-05-12
IR by KHP on 2023-05-12

N
0 200 400 Feet
(At original document size of 11x17)
1:2,400

- Existing Structure Location
- Approximate PEM/PSS Wetland - High Probability
- Approximate PEM/PSS Wetland - Medium Probability
- Approximate PEM/PSS Wetland - Low Probability
- Approximate Open Water
- Approximate Stream
- Previously Confirmed Project Limits (#NAO-2017-02007)
- 2-Foot Contour

Notes
1. Coordinate System: NAD 1983 StatePlane Virginia South FIPS 4502 Feet
2. Data Sources: Stantec, U.S. Census Bureau, VDOT, Topography generated from digital elevation model derived from USGS Lidar Point Cloud
3. Orthoimagery © Earthstar Geographics, Virginia Geographic Information Network (VGIN)
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Stantec

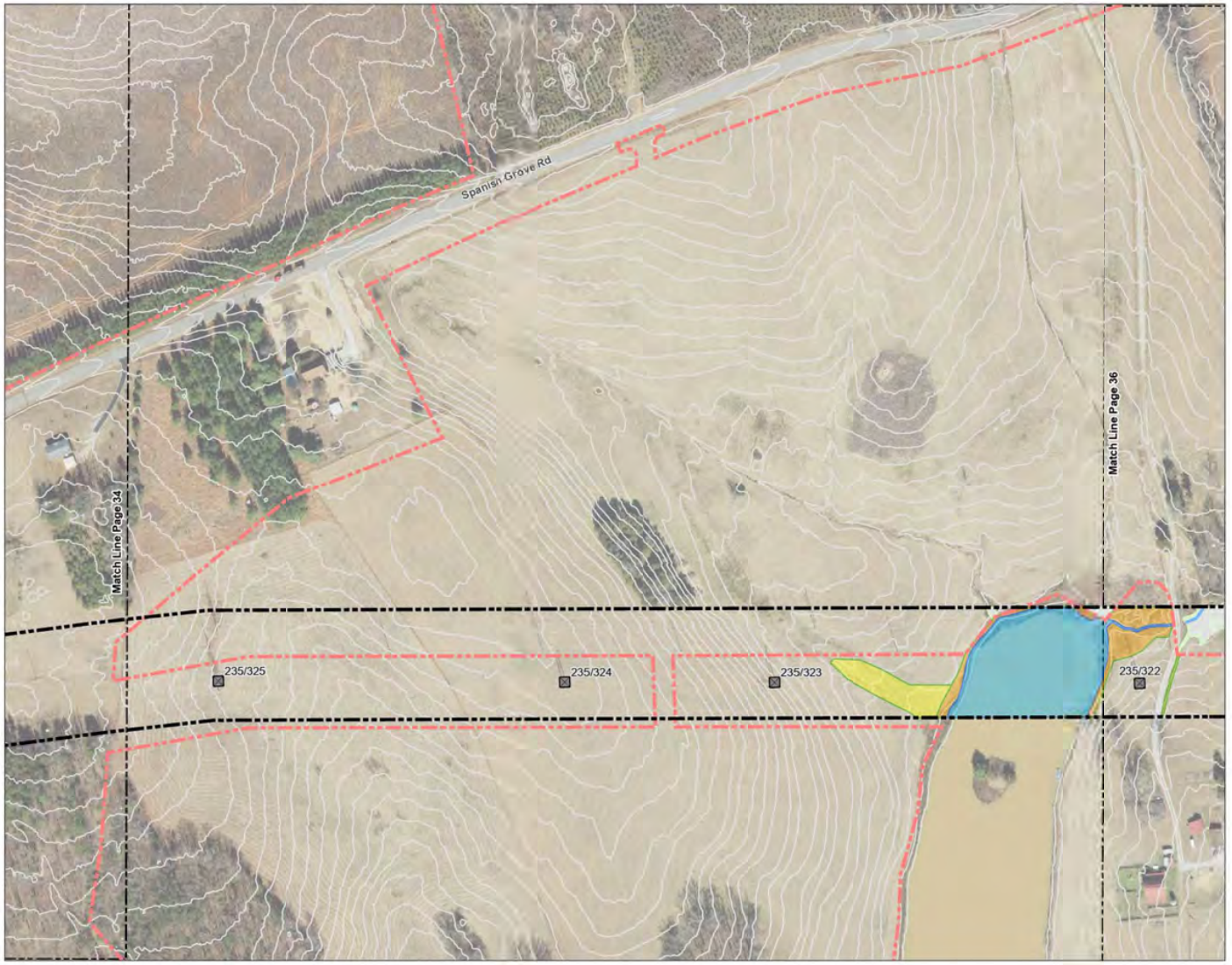

Figure No.
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Client/Project
Dominion Energy Virginia
Line #2226 Partial Rebuild - Clover to Chase City

203401995

Project Location
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Prepared by JSC on 2023-05-12
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- Approximate Stream
- Previously Confirmed Project Limits (#NAO-2017-02007)
- Previously Confirmed Palustrine Emergent Wetland Limits (PEM)
- Previously Confirmed Upper Perennial Stream Channel Limits (R3)
- 2-Foot Contour

Notes
1. Coordinate System: NAD 1983 StatePlane Virginia South FIPS 4502 Feet
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Stantec

Figure No.
1

Title
Wetland and Surface Water Desktop Analysis

Client/Project
Dominion Energy Virginia
Line #2226 Partial Rebuild - Clover to Chase City
213401995

Project Location
Halifax, Charlotte, and Mecklenburg Counties, Virginia

Prepared by JSC on 2023-05-12
TR by MGS on 2023-05-12
IR by KHP on 2023-05-12

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- Approximate Stream
- Previously Confirmed Project Limits (#NAO-2017-02007)
- Previously Confirmed Palustrine Emergent Wetland Limits (PEM)
- Previously Confirmed Upper Perennial Stream Channel Limits (R3)
- 2-Foot Contour

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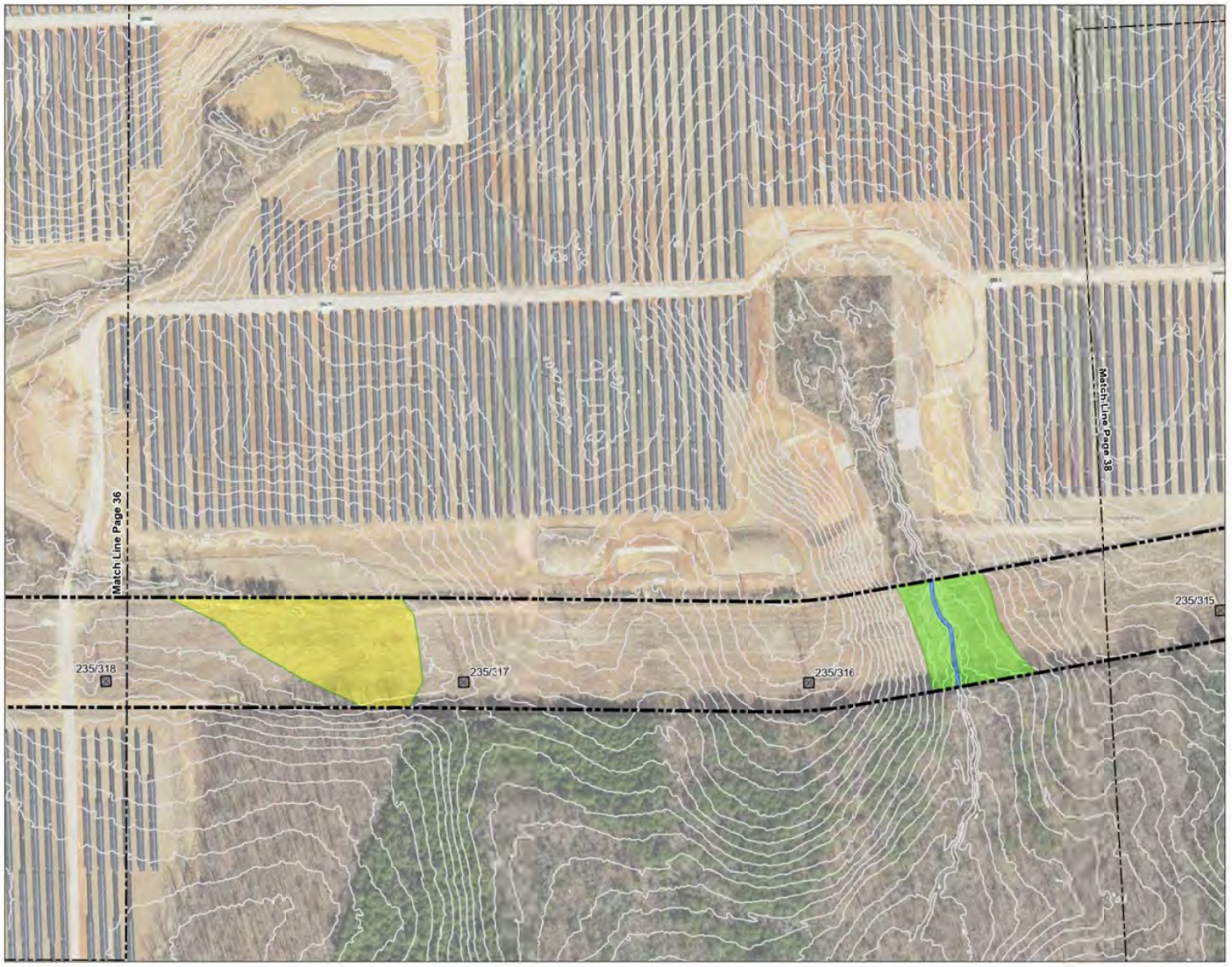

Figure No.
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Title
Wetland and Surface Water Desktop Analysis

Client/Project
Dominion Energy Virginia
Line #2226 Partial Rebuild - Clover to Chase City

213401995

Project Location
Halifax, Charlotte, and Mecklenburg Counties, Virginia

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Client/Project
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Line #2226 Partial Rebuild - Clover to Chase City

203401995

Project Location
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Stantec

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Wetland and Surface Water Desktop Analysis

Client/Project
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Line #2226 Partial Rebuild - Clover to Chase City

213401995

Project Location
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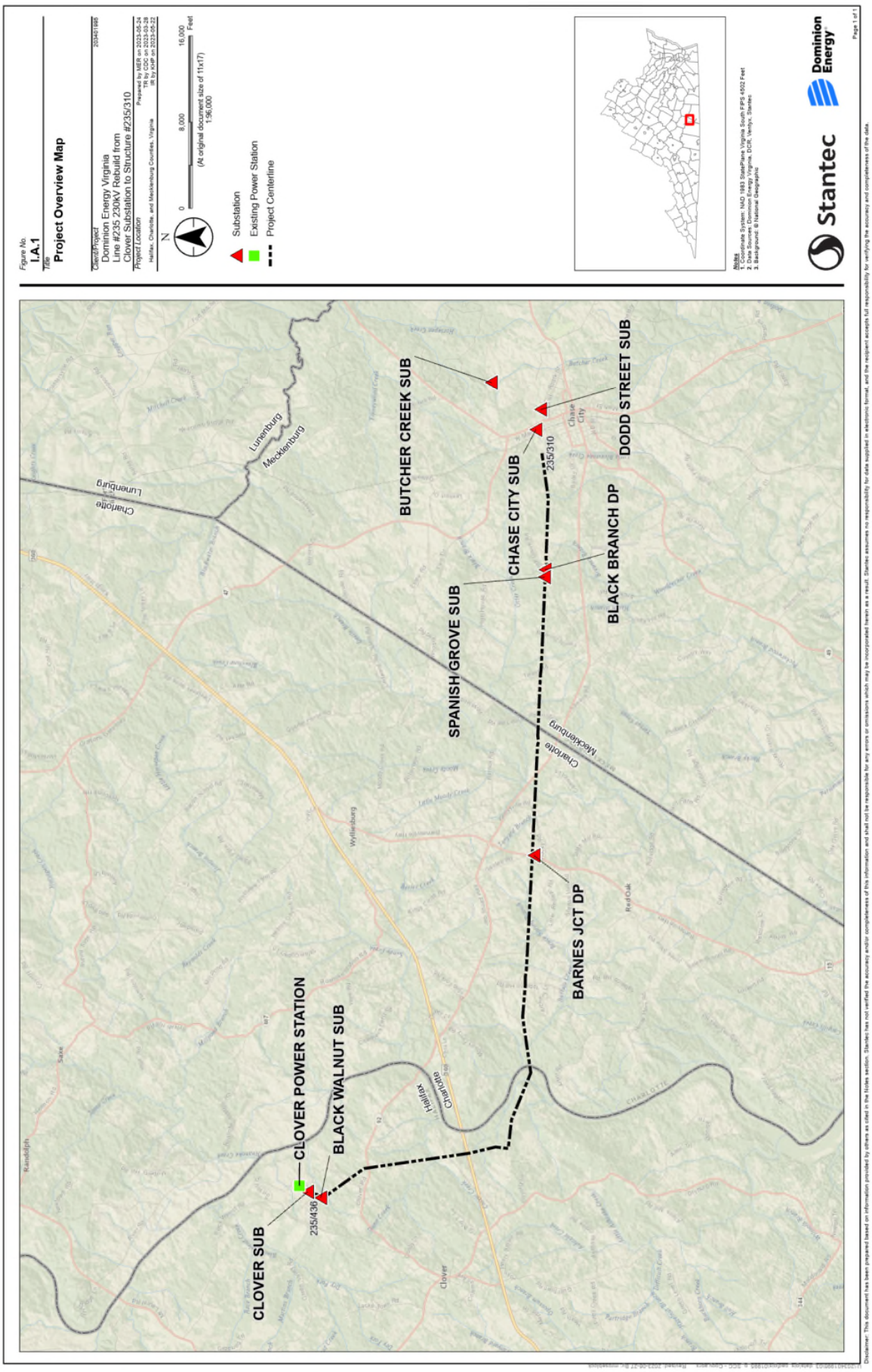
Figure No.
I.A.1
Title
Project Overview Map
Client/Project
Dominion Energy Virginia
Line #235 230kV Rebuild from
Clover Substation to Structure #235/310
Project Location
Halifax, Charlotte, and Mecklenburg Counties, Virginia
Prepared by MER on 2023-05-24
TR by CDP on 2023-05-26
IR by KHP on 2023-05-22
N
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8,000
16,000
Feet
(At original document size of 11x17)
1:96,000
Substation
Existing Power Station
Project Centerline
Notes
1. Coordinate System: NAD 1983 StatePlane Virginia South FIPS 4502 Feet
2. Data Sources: Dominion Energy Virginia; DCR; Vendys; Stantec
3. Background: © Maxar Geographics
Stantec
Dominion Energy
CLOVER SUB
CLOVER POWER STATION
235/436
BLACK WALNUT SUB
BARNES JCT DP
SPANISH GROVE SUB
BUTCHER CREEK SUB
CHASE CITY SUB
235/310
BLACK BRANCH DP
DODD STREET SUB
Charlotte
Lunenburg
Mecklenburg
Halifax
Disclaimer: This document has been prepared based on information provided by others as cited in the Notes section. Stantec has not verified the accuracy and/or completeness of this information and shall not be responsible for any errors or omissions which may be incorporated herein as a result. Stantec assumes no responsibility for data supplied in electronic format, and the recipient accepts full responsibility for verifying the accuracy and completeness of the data.

Dominion Energy Services, Inc.
120 Tredegar Street, Richmond, VA 23219
DominionEnergy.com

July 5, 2023

BY EMAIL
Mr. Roger Kirchen
Department of Historic Resources
Review and Compliance Division
2801 Kensington Avenue
Richmond, Virginia 23221

SCC ELECTRIC TRANSMISSION PROJECT NOTIFICATION
Project: Dominion Energy Virginia's Line #235 230 kV Rebuild from Clover Substation to Structure #235/310

Dear Mr. Kirchen:

Dominion Energy Virginia (the "Company") is proposing to rebuild approximately 16 miles of the existing 230 kV Line #235 between the existing Clover Substation and existing Structure #235/310 using higher capacity conductors, renumber the rebuilt line segment to Line #2226, and complete work at Clover Substation to support the higher capacity conductor (the "Rebuild Project"). The Rebuild Project is located within Halifax, Mecklenburg, and Charlotte Counties in Virginia.

The Company proposes to locate the Rebuild Project entirely within the existing Line #235 rights-of-way or on Company-owned property. No additional right-of-way is necessary, as shown on the attached map.

The Rebuild Project is needed to accommodate significant increased load growth in the area over recent years and to offset any unplanned outages of the nearby Line #556, which would overload existing Line #235. The higher capacity conductors would ensure compliance with mandatory North American Electric Reliability Corporation Reliability Standards.

The Company is preparing to file an application for a certificate of public convenience and necessity ("CPCN") with the State Corporation Commission of Virginia (the "Commission"). At this time, in advance of filing an application with the Commission, the Company respectfully requests a scoping review of the Rebuild Project. Any comments or additional information you can provide would be beneficial to the Rebuild Project. Please submit comments within 30 days of the date of this letter.

Enclosed is a Project Overview Map and associated GIS shapefile depicting the proposed Rebuild Project, as well as its general location. Please note that the Project Overview Map and route description depicted therein are preliminary in nature and subject to final engineering. Please refer to the CPCN application for any updates to the Rebuild Project description and/or routes. If there are any questions, please do not hesitate to contact me at (571) 319-2582 or c.mcdonald@dominionenergy.com.

The Company appreciates your assistance with this project review and looks forward to any additional information you may have to offer.

Thank you,

Christa McDonald

Christiaanna McDonald
Siting and Permitting Specialist
Electric Transmission Services

Enclosure: Project Overview Map

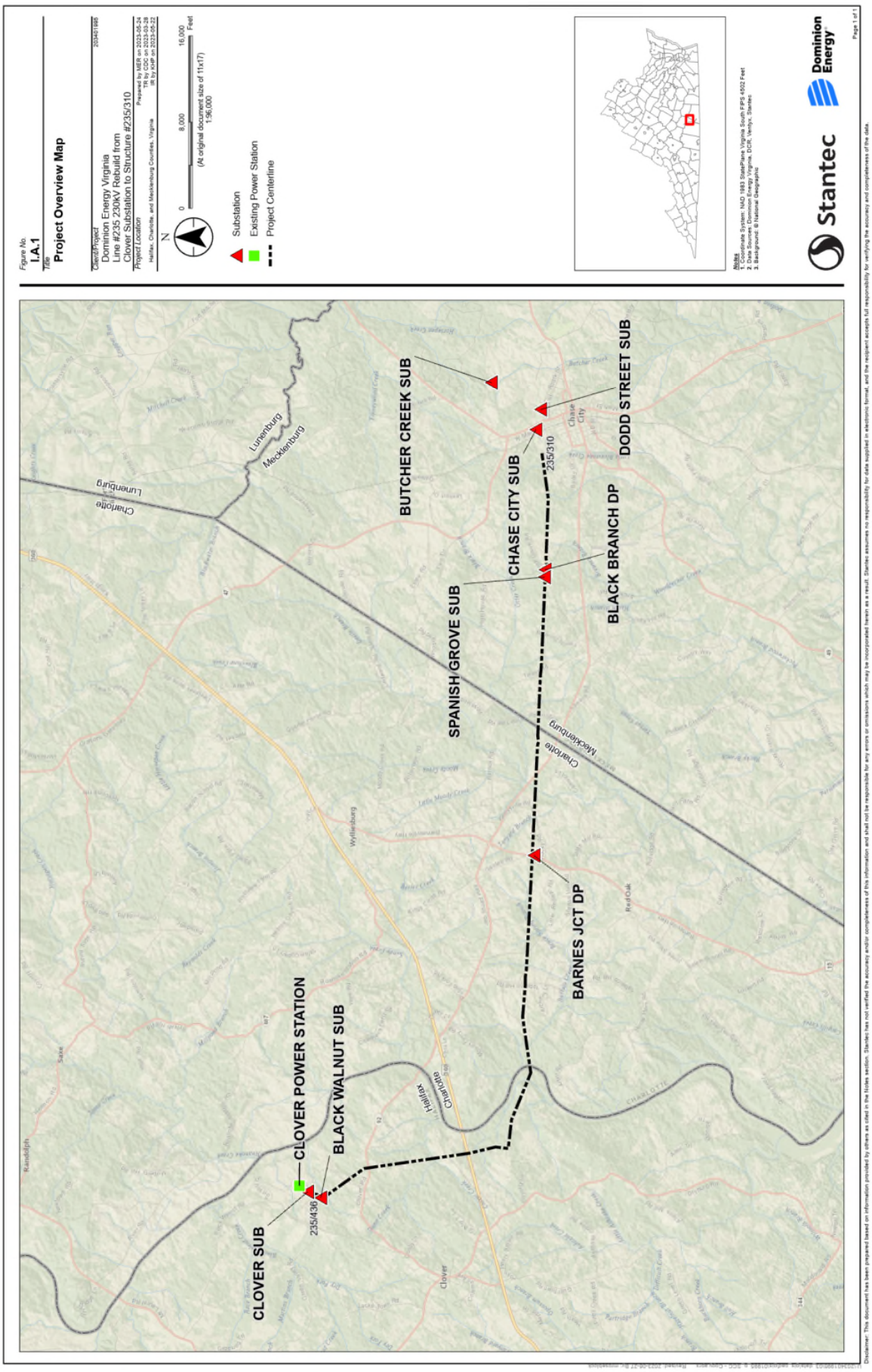
Figure No.
I.A.1
Title
Project Overview Map
Client/Project
Dominion Energy Virginia
Line #235 230kV Rebuild from
Clover Substation to Structure #235/310
Project Location
Halifax, Charlotte, and Mecklenburg Counties, Virginia
Prepared by MER on 2023-05-24
TR by CDP on 2023-05-30
IR by KHP on 2023-05-31
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8,000
16,000
Feet
(At original document size of 11x17)
1:96,000
Substation
Existing Power Station
Project Centerline
Notes
1. Coordinate System: NAD 1983 StatePlane Virginia South FIPS 4502 Feet
2. Data Sources: Dominion Energy Virginia; DCR; Vendys; Stantec
3. Background: © Maxar Geographics
Stantec
Dominion Energy
CLOVER SUB
CLOVER POWER STATION
235/436
BLACK WALNUT SUB
BARNES JCT DP
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BUTCHER CREEK SUB
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Charlotte
Lunenburg
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Halifax
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Dominion Energy Services, Inc.
120 Tredegar Street, Richmond, VA 23219
DominionEnergy.com

July 5, 2023

BY EMAIL
Martha Little
Deputy Director
Virginia Outdoors Foundation
600 East Main Street, Suite 402
Richmond, Virginia 23219

SCC ELECTRIC TRANSMISSION PROJECT NOTIFICATION
Project: Dominion Energy Virginia's Line #235 230 kV Rebuild from Clover Substation to Structure #235/310

Dear Ms. Little:

Dominion Energy Virginia (the "Company") is proposing to rebuild approximately 16 miles of the existing 230 kV Line #235 between the existing Clover Substation and existing Structure #235/310 using higher capacity conductors, renumber the rebuilt line segment to Line #2226, and complete work at Clover Substation to support the higher capacity conductor (the "Rebuild Project"). The Rebuild Project is located within Halifax, Mecklenburg, and Charlotte Counties in Virginia.

The Company proposes to locate the Rebuild Project entirely within the existing Line #235 rights-of-way or on Company-owned property. No additional right-of-way is necessary, as shown on the attached map.

The Rebuild Project is needed to accommodate significant increased load growth in the area over recent years and to offset any unplanned outages of the nearby Line #556, which would overload existing Line #235. The higher capacity conductors would ensure compliance with mandatory North American Electric Reliability Corporation Reliability Standards.

The Company is preparing to file an application for a certificate of public convenience and necessity ("CPCN") with the State Corporation Commission of Virginia (the "Commission"). At this time, in advance of filing an application with the Commission, the Company respectfully requests a scoping review of the Rebuild Project. Any comments or additional information you can provide would be beneficial to the Rebuild Project. Please submit comments within 30 days of the date of this letter.

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Thank you,

Christa McDonald

Christiaanna McDonald
Siting and Permitting Specialist
Electric Transmission Services

Enclosure: Project Overview Map

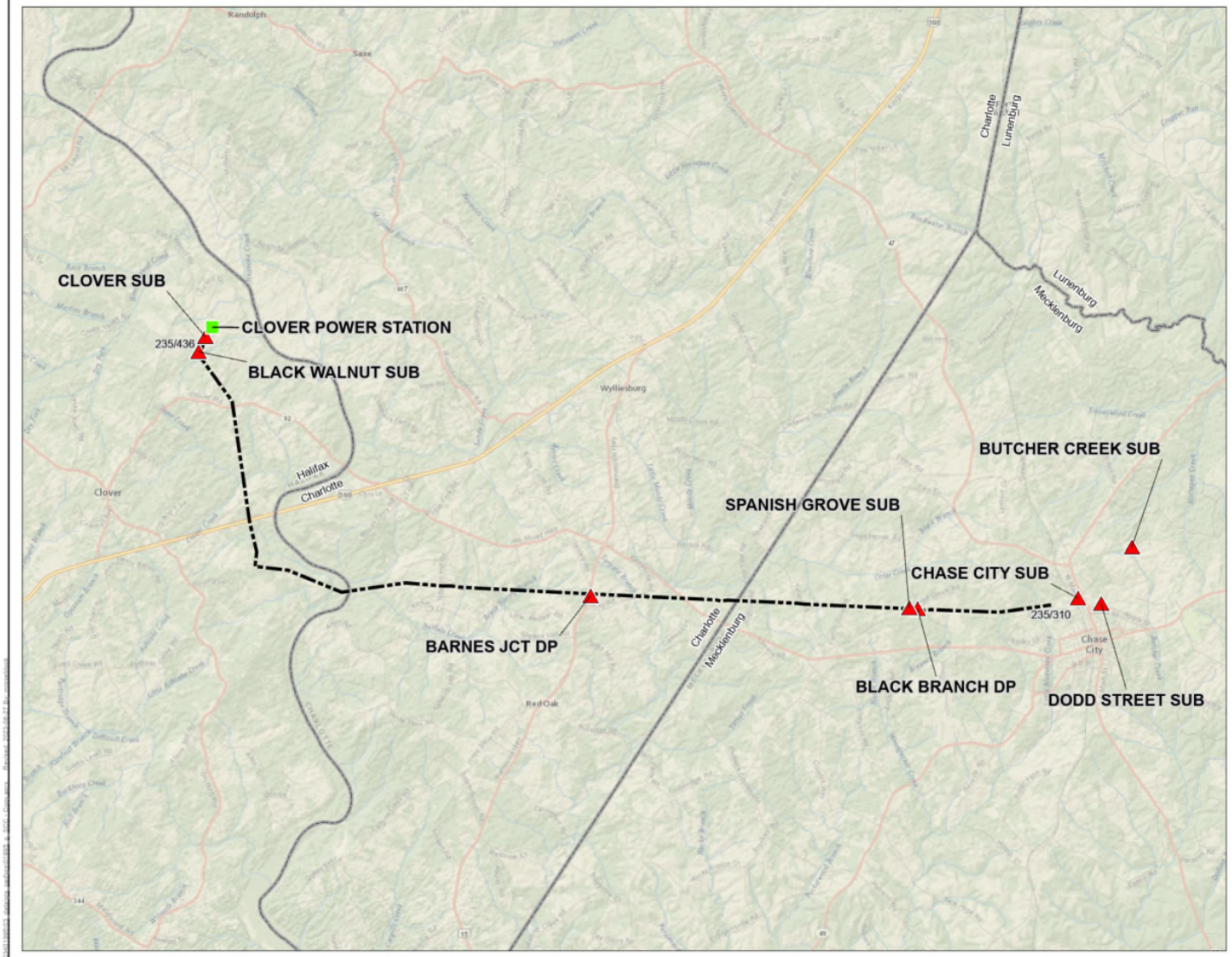

Figure No.
I.A.1

Title
Project Overview Map

Client/Project 203401995
Dominion Energy Virginia
Line #235 230kV Rebuild from
Clover Substation to Structure #235/310

Project Location
Halifax, Charlotte, and Mecklenburg Counties, Virginia

Prepared by MER on 2023-05-24
TR by CDC on 2023-03-28
IR by KHP on 2023-05-22

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(At original document size of 11x17)
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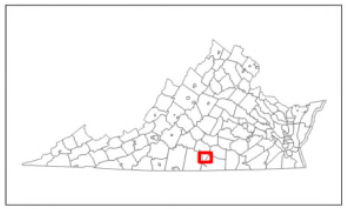
- Substation
- Existing Power Station
- Project Centerline



Notes
1. Coordinate System: NAD 1983 StatePlane Virginia South FIPS 4502 Feet
2. Data Sources: Dominion Energy Virginia, DCR, Ventyx, Stantec
3. Background: © National Geographic

Stantec

Dominion Energy

Page 1 of 1

Dominion Energy Services, Inc.
120 Tredegar Street, Richmond, VA 23219
DominionEnergy.com

July 5, 2023

BY EMAIL
Mr. Tommy Johnson
Residency Administrator
Virginia Department of Transportation
1013 West Atlantic St.
P.O. Box 249
South Hill, Virginia 23970

SCC ELECTRIC TRANSMISSION PROJECT NOTIFICATION
Project: Dominion Energy Virginia's Line #235 230 kV Rebuild from Clover Substation to Structure #235/310

Dear Mr. Johnson:

Dominion Energy Virginia (the "Company") is proposing to rebuild approximately 16 miles of the existing 230 kV Line #235 between the existing Clover Substation and existing Structure #235/310 using higher capacity conductors, renumber the rebuilt line segment to Line #2226, and complete work at Clover Substation to support the higher capacity conductor (the "Rebuild Project"). The Rebuild Project is located within Halifax, Mecklenburg, and Charlotte Counties in Virginia.

The Company proposes to locate the Rebuild Project entirely within the existing Line #235 rights-of-way or on Company-owned property. No additional right-of-way is necessary, as shown on the attached map.

The Rebuild Project is needed to accommodate significant increased load growth in the area over recent years and to offset any unplanned outages of the nearby Line #556, which would overload existing Line #235. The higher capacity conductors would ensure compliance with mandatory North American Electric Reliability Corporation Reliability Standards.

The Company is preparing to file an application for a certificate of public convenience and necessity ("CPCN") with the State Corporation Commission of Virginia (the "Commission"). At this time, in advance of filing an application with the Commission, the Company respectfully requests a scoping review of the Rebuild Project. Any comments or additional information you can provide would be beneficial to the Rebuild Project. Please submit comments within 30 days of the date of this letter.

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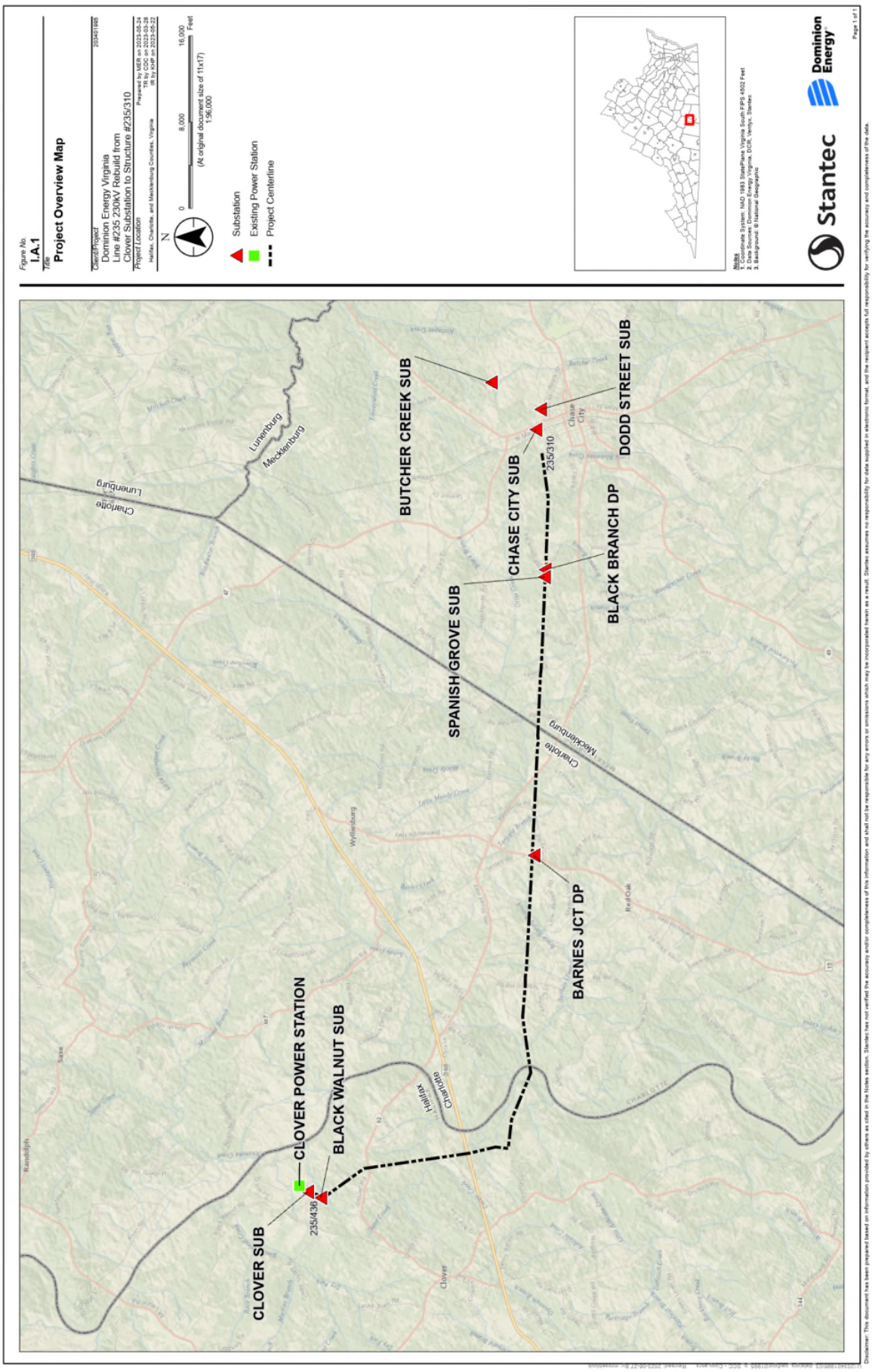
Figure No.
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Project Overview Map
Client/Project
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Project Location
Halifax, Charlotte, and Mecklenburg Counties, Virginia
Prepared by MER on 2023-05-24
TR by CDP on 2023-05-26
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Feet
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Project Centerline
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3. Background: © Maxar Geographics
Stantec
Dominion Energy
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BLACK WALNUT SUB
BARNES JCT DP
SPANISH GROVE SUB
BUTCHER CREEK SUB
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235/310
BLACK BRANCH DP
DODD STREET SUB
Charlotte
Lunenburg
Mecklenburg
Halifax
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Commonwealth of Virginia

VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY

1111 E. Main Street, Suite 1400, Richmond, Virginia 23219
P.O. Box 1105, Richmond, Virginia 23218
(800) 592-5482 FAX (804) 698-4178
www.deq.virginia.gov

Travis A. Voyles
Secretary of Natural and Historic Resources

Michael S. Rolband, PE, PWD, PWS Emeritus
Director
(804) 698-4020

July 6, 2023

Lucas DuPont
Dominion Energy
Via email: lucas.a.dupont@dominionenergy.com

RE: Dominion Energy Virginia's Line #235 250kV Rebuild from Clover Substation to Structure #235/10, Halifax, Meclenburg, and Charlotte Counties, Virginia

Dear Mr. DuPont:

This letter is in response to the scoping request for the above-referenced project.

As you may know, the Department of Environmental Quality, through its Office of Environmental Impact Review (DEQ-OEIR), is responsible for coordinating Virginia's review of environmental impacts for electric power generating projects and power line projects in conjunction with the licensing process of the State Corporation Commission.

DOCUMENT SUBMISSIONS

In order to ensure an effective coordinated review of the environmental impact analysis may be sent directly to OEIR. We request that you submit one electronic to eir@deq.virginia.gov (25 MB maximum) or make the documents available for download at a website, file transfer protocol (ftp) site or the VITA LFT file share system (Requires an "invitation" for access. An invitation request should be sent to eir@deq.virginia.gov.). The required "Wetlands Impact Consultation" can be sent directly to Michelle Henicheck at michelle.henicheck @deq.virginia.gov or at the address above.

ENVIRONMENTAL REVIEW UNDER VIRGINIA CODE 56-46.1

While this Office does not participate in scoping efforts beyond the advice given herein, other agencies are free to provide scoping comments concerning the preparation of the environmental impact analysis document. Accordingly, we have coordinated your request with the following state agencies and those localities and Planning District Commissions, including but not limited to:

Department of Environmental Quality:

- DEQ Regional Office
- Air Division

- Office of Wetlands and Stream Protection
- Office of Local Government Programs
- Division of Land Protection and Revitalization
- Office of Stormwater Management

Department of Conservation and Recreation
Department of Health
Department of Agriculture and Consumer Services
Department of Wildlife Resources
Virginia Marine Resources Commission
Department of Historic Resources
Department of Mines, Minerals, and Energy
Department of Forestry
Department of Transportation

DATA BASE ASSISTANCE

Below is a list of databases that may assist you in the preparation of a NEPA document:

- DEQ Online Database: Virginia Environmental Geographic Information Systems

  Information on Permitted Solid Waste Management Facilities, Impaired Waters, Petroleum Releases, Registered Petroleum Facilities, Permitted Discharge (Virginia Pollution Discharge Elimination System Permits) Facilities, Resource Conservation and Recovery Act (RCRA) Sites, Water Monitoring Stations, National Wetlands Inventory:
  - www.deq.virginia.gov/ConnectWithDEQ/VEGIS.aspx

- DEQ Virginia Coastal Geospatial and Educational Mapping System (GEMS)

  Virginia's coastal resource data and maps; coastal laws and policies; facts on coastal resource values; and direct links to collaborating agencies responsible for current data:
  - https://www.deq.virginia.gov/?splash=https%3a%2f%2fgaia.vcu.edu%2fportal%2fapps%2fsites%2f%23%2fgemsmaps&____isexternal=true

- MARCO Mid-Atlantic Ocean Data Portal

  The Mid-Atlantic Ocean Data Portal is a publicly available online toolkit and resource center that consolidates available data and enables users to visualize and analyze ocean resources and human use information such as fishing grounds, recreational areas, shipping lanes, habitat areas, and energy sites, among others.

  - http://portal.midatlanticocean.org/visualize/#x=-73.24&y=38.93&z=7&logo=true&controls=true&basemap=Ocean&tab=data&legends=false&layers=true

- DHR Data Sharing System.

  Survey records in the DHR inventory:

  - www.dhr.virginia.gov/archives/data_sharing_sys.htm

- DCR Natural Heritage Search

  Produces lists of resources that occur in specific counties, watersheds or physiographic regions:
  - www.dcr.virginia.gov/natural_heritage/dbsearchtool.shtml

- Wetland Condition Assessment Tool (WetCAT)
  - https://www.deq.virginia.gov/our-programs/water/wetlands-streams/wetcat

- DWR Fish and Wildlife Information Service

  Information about Virginia's Wildlife resources:
  - http://vafwis.org/fwis/

- Total Maximum Daily Loads Approved Reports
  - https://www.deq.virginia.gov/programs/water/waterqualityinformationtmdls/tmdl/tmdldevelopment/approvedtmdlreports.aspx

- Virginia Outdoors Foundation: Identify VOF-protected land
  - http://vof.maps.arcgis.com/home/index.html

- Environmental Protection Agency (EPA) Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) Database: Superfund Information Systems

  Information on hazardous waste sites, potentially hazardous waste sites and remedial activities across the nation, including sites that are on the National Priorities List (NPL) or being considered for the NPL:
  - www.epa.gov/superfund/sites/cursites/index.htm

- EPA RCRAInfo Search

  Information on hazardous waste facilities:
  - www.epa.gov/enviro/facts/rcrainfo/search.html

- Total Maximum Daily Loads Approved Reports
  - https://www.deq.virginia.gov/our-programs/water/water-quality/tmdl-development/approved-tmdls

- EPA Envirofacts Database

  EPA Environmental Information, including EPA-Regulated Facilities and Toxics Release Inventory Reports:
  - www.epa.gov/enviro/index.html

- EPA NEPAssist Database

  Facilitates the environmental review process and project planning:
  http://nepaassisttool.epa.gov/nepaassist/entry.aspx

If you have questions about the environmental review process, please feel free to contact me (telephone (804) 659-1915 or e-mail bettina.rayfield@deq.virginia.gov).

I hope this information is helpful to you.

Sincerely,

Bettina Rayfield, Program Manager
Environmental Impact Review and
Long-Range Priorities

COMMONWEALTH of VIRGINIA

Marine Resources Commission
380 Fenwick Road
Bldg 96
Fort Monroe, VA 23651-1064

Travis A. Voyles
Secretary of Natural and Historic Resources

Jamie L. Green
Commissioner

August 4, 2023

Dominion Energy Services, Inc.
Attn: Lucas DuPont
120 Tredegar Street
Richmond, VA 23219

Re: Dominion Energy Virginia's Proposed Line #235 230 kV Rebuild from Clover Substation to Structure #235/310

Dear Mr. DuPont,

This will respond to the request for comments regarding the State Corporation Commission Application for the Dominion Energy Virginia's Proposed Line #235 230 kV Rebuild from Clover Substation to Structure #235/310 Project (DEQ #21-114S), prepared by Dominion Energy. Specifically, Dominion has proposed to rebuild 16 miles of the existing 230 kV Line #235 between the existing Clover Substation and existing Structure #235/310 using higher capacity conductors, renumber the rebuilt line segment to Line #2226, and complete work at Clover Substation in Halifax, Mecklenburg, and Charlotte counties in Virginia. We reviewed the provided project documents and found the proposed project is within the jurisdictional areas of the Virginia Marine Resources Commission (VMRC) and may require a permit from this agency.

Please be advised that the VMRC, pursuant to §28.2-1200 et seq of the Code of Virginia, has jurisdiction over encroachments in, on, or over the beds of the bays, ocean, rivers, streams, or creeks which are the property of the Commonwealth. Accordingly, if any portion of the subject project involves encroachments channelward of ordinary high water along non-tidal, natural rivers and streams with a drainage area greater than 5-square miles, a permit may be required from our agency or the Department of Environmental Quality. Should the proposed project change, a new review by this agency may be required relative to these jurisdictional areas.

Please contact me at (757) 247-2254 or by email at tiffany.birge@mrc.virginia.gov if you have questions. Thank you for the opportunity to comment.

Sincerely,

Tiffany L Birge

Tiffany Birge
Environmental Engineer, Habitat Management

TB/cg
HM

Stantec Consulting Services Inc.
5209 Center Street, Williamsburg Virginia 23188-2680

June 23, 2023
File: 203401995

Mr. Luke DuPont
Dominion Energy Environmental Services
120 Tredegar Street
Richmond, VA 23219

RE: Desktop Wetland Review
Line #235 230 kV Rebuild from Clover Substation to Structure #235/310
Halifax, Charlotte, and Mecklenburg Counties, Virginia
Start: Latitude: 36.865164° Terminus: Latitude: 36.807804°
Longitude: -78.707354° Longitude: -78.472370°

Dear Mr. DuPont:

The following report presents the results of a desktop wetland review conducted by Stantec Consulting Services Inc. (Stantec) for the Line #235 230 kV Rebuild from Clover Substation to Structure #235/310 Project (Project) located in Halifax, Charlotte, and Mecklenburg Counties, Virginia (Figure 1). The purpose of this study is to determine the approximate location and extent of areas that have the potential of containing jurisdictional wetlands and other surface using available off-site resources.

The project area (approximately 367.57 acres) consists of an existing, variable width transmission line right-of-way (ROW) beginning at the Clover substation in Halifax County, Virginia and extends approximately 15.94 miles south and east to structure #235/310 near the Chase City substation in Mecklenburg County, Virginia. The site can be accessed via Red Level Church Road (Route 715), Tobacco Hill Road Route 608), Route 15, Hawker Lane, Rocky Road, Allgood Road (Route 600), Tinker Road (Route 609), Spanish Grove Road (Route 684), Godseys Lane, Jeb Stuart Highway (Route 92), Barnesville Highway (Route 15), Keillysville Road (Route 631), Shelton Hall Road (Route 627), Rivers Bend Road, Route 715, James D Hagood Highway (Hwy 360), and Route 608.

Due to the preliminary nature of this study, the field methods outlined in the *1987 Corps of Engineers Delineation Manual* and the 2012 *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Eastern Mountain and Piedmont Region (version 2.0)* were not applied to determine the limits of wetlands and other water features on-site. Rather, U.S. Geological Survey (USGS) Quadrangle Maps, current and historical web-based aerial imagery, wetland photo interpretation techniques, soil surveys, and the National Wetlands Inventory (NWI) were used to ascertain the approximate limits of wetlands other surface waters. For an evaluation of this type, the dimensions of WOUS are difficult to determine using even the highest resolution and most recent off-site reference materials. Large floodplains containing broad, flat topography can be assessed fairly accurately using aerial photography. However, smaller secondary drainages containing lower order streams and headwater wetlands are more difficult to evaluate and could contain a high degree of deviation when compared to field conditions. Therefore, all site conditions predicted as a part of this analysis and in the mapping provided are considered preliminary, and without site reconnaissance should only be utilized for early-stage planning purposes.

Reference: Line #235 230 kV Rebuild from Clover Substation to Structure #235/310

Multiple off-site resources were reviewed to determine areas that have the potential to contain jurisdictional WOUS, including wetlands, within the study area described above. These materials include the U.S. Geological Survey 7.5-minute Topographic Quadrangle Maps (Quads) for Clover, Virginia (2022 revision); Wylliesburg, Virginia (2022 revision); Chase City, Virginia (2022 revision); the National Wetlands Inventory Interactive Mapper (NWI), administered by the U.S. Fish and Wildlife Service (USFWS); the SSURGO Soils Survey, administered by the Natural Resources Conservation Service (NRCS); and web-based aerial images.

USGS Quads

The Quads depict the majority of the study area as an existing transmission line traversing through gently sloping to moderately sloping terrain. Named drainageways within the study area include the following: Clover Creek, the Staunton River, Buffalo Creek, Bruce Spring Branch, Tanard Branch and Moody Creek. Numerous unnamed perennial and non-perennial systems are also mapped within the study area.

NWI Maps

The NWI maps administered by USFWS are useful in the identification of potential wetland areas. The maps are compiled through photo interpretation techniques with limited field verification. Large floodplain and regularly inundated wetlands are easily illustrated and are often mapped reasonably accurately, while certain forested wetlands (e.g., seasonally saturated, groundwater driven, and evergreen dominated) and other drier-end wetlands tend to be either conservatively mapped or not shown at all.

The NWI maps depict multiple freshwater forested/shrub wetlands, freshwater emergent wetlands, riverine, and freshwater pond within the study area. It should be noted that all wetlands within the study area are presumed to be scrub shrub or emergent due to regular maintenance of the ROW. The NWI identifies all wetlands within the proposed project area as palustrine, which includes all non-tidal wetlands and wetlands that occur in tidal areas where salinity due to ocean derived salts is below 0.05%.

Digital Aerial Imagery

Web-based aerial images of the project area were reviewed to determine the approximate location and extent of areas that have the potential of containing jurisdictional wetlands other surface waters. Historical and current aerial imagery can be compared across seasons and year-over-year to determine the potential occurrence of jurisdictional features. Seasonal variations in deciduous vegetation and the presence of stream channels, as well as inundated or saturated areas were all evaluated for their resource potential.

Based on this review of current and historical digital aerial imagery, jurisdictional features are likely present at most Quad mapped stream crossings, NWI mapped wetland features, and are potentially present in some of the secondary drainage features within the easement, as shown on the attached Wetland and Surface Water Desktop Analysis Maps (Figure 1).

Soil Survey

The Natural Resources Conservation Service (NRCS) Web Soil Survey shows numerous soil types within the Project study area. For the purpose of this report, the location of hydric and partially hydric soils within

Stantec

Reference: Line #235 230 kV Rebuild from Clover Substation to Structure #235/310

the easement are of particular interest, as areas mapped with these soils generally have a high potential to contain jurisdictional features. It should be noted that areas mapped with non-hydric soils could also contain jurisdictional features.

A significant portion of the soils mapped within the study area are classified by the NRCS as non-hydric or predominately non-hydric. The hydric soils present include Roanoke silt loam, Wehadkee fine sandy loam, Wehadkee silt loam, Worsham, and Worsham fine sandy loam. The only partially hydric soil listed within the project area is Wehadkee-Chewacla complex.

Results

The following table presents the approximate dimensions of potential jurisdictional features based on the desktop wetland review for the Project. These features are shown on the attached Wetland and Surface Water Desktop Analysis Maps (Figure 1). As discussed above, all wetland features present within the study limits would likely be classified in the field as palustrine emergent (PEM) or scrub shrub (PSS) due to regular maintenance within the ROW. However, it should be noted that the distinction between emergent wetlands and scrub-shrub wetlands is often very difficult to ascertain using even the highest resolution aerial images and have been combined for this analysis.

PEM/PSS (Acres)	**Open Water** (Acres)	**Stream Channels** Acres (LF)
52.31	1.99	2.34 (11,705)

In addition, the probability of wetland occurrence was determined based upon the number of off-site resources giving a positive indication within a given area. The off-site resources considered for this probability analysis include current and historical aerial imagery, NWI mapping, hydric soil data, and Quad mapping/topography. The probability was determined as follows and results are summarized in the table below:

- High probability: Areas that demonstrate positive indicators for potential wetlands on all four of the above-mentioned off-site resources.
- Medium probability: Areas that demonstrate positive indicators for potential wetlands on two or three of the above-mentioned off-site resources.
- Low probability: Areas that demonstrate positive indicators for potential wetlands on one of the above-mentioned off-site resources.

High Probability (acres)	**Medium Probability** (acres)	**Low Probability** (acres)
17.79	10.53	23.19

Stantec

June 23, 2023
Mr. Luke DuPont

Reference: Line #235 230 kV Rebuild from Clover Substation to Structure #235/310

It should be noted that in addition to the desktop wetland review, the limits of known wetland and surface water delineations with current jurisdictional determinations within the Project limits have been included in this analysis and are depicted on the Wetland and Surface Water Desktop Analysis Maps. The table below presents the area calculations for the previously confirmed delineations within the Project area.

PEM (acres)	**R3 Stream Channels** (LF)	**R4 Stream Channels** (LF)	**R6 Stream Channels** (LF)
0.80	0.007 (109)	0.003 (26)	0.001 (149)

Conclusion

Based on Stantec's interpretation of the above-mentioned off-site resources, the potential exists for jurisdictional features to occur in association with all major drainage features (including floodplains) and some secondary drainages within the project area as depicted in the attached Desktop Wetland Review Map.

In order to verify the findings described in this report, Stantec recommends a detailed delineation of wetlands and other WOUS be performed within the final, approved project area followed by confirmation by the U.S. Army Corps of Engineers.

If you have any questions regarding the findings presented in this report, please feel free to contact me at your convenience.

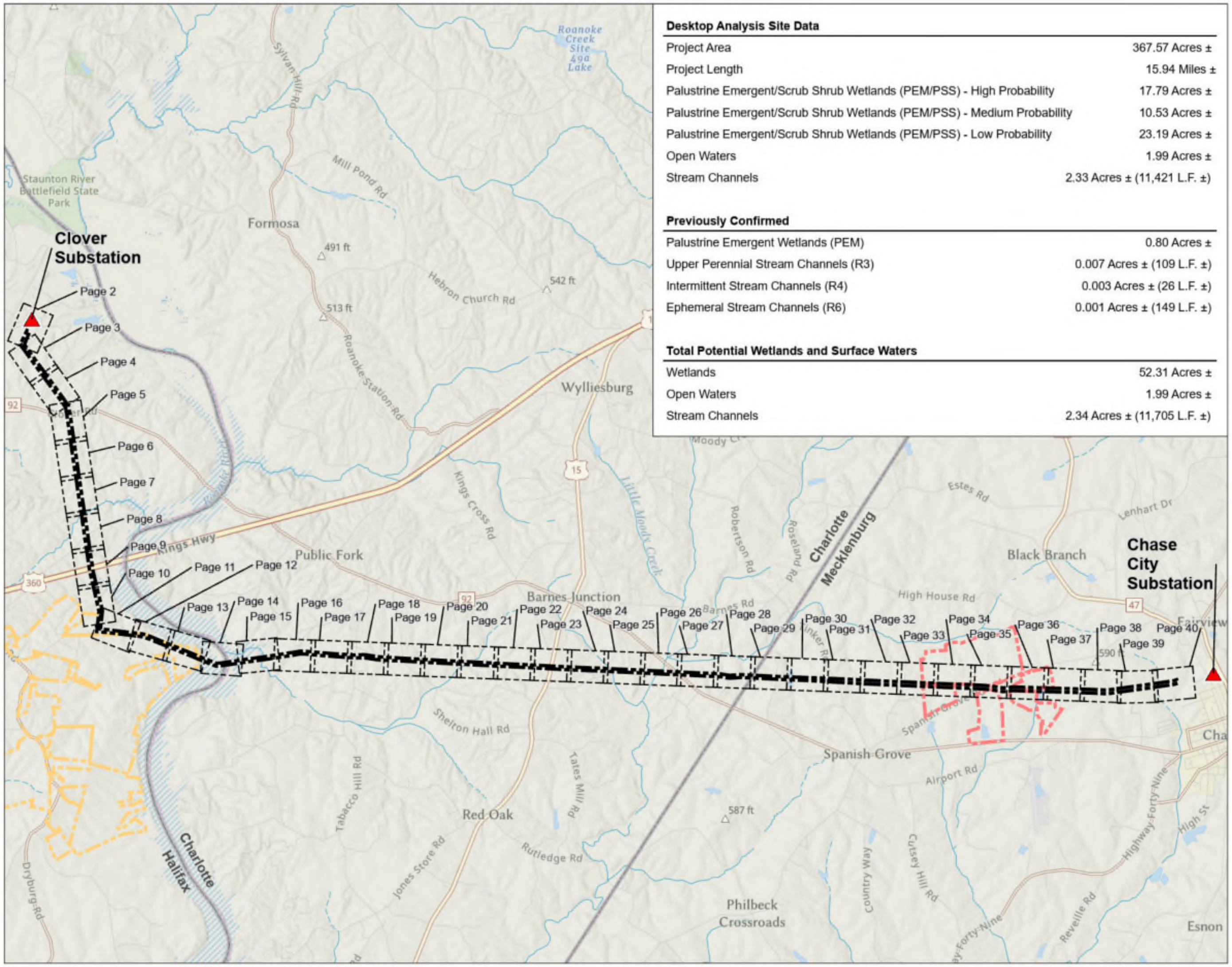
Regards,

Justin Carey
Ecologist
Phone: (757) 968-6126
Fax: (757) 229-4507
justin.carey@stantec.com

Kenrick Presgraves, PWD
Senior Ecologist
Phone: (757) 810-1464
Fax: (757) 229-4507
kenny.presgraves@stantec.com

Enclosures: Figures 1, 2

cc. Ms. Christa McDonald – Dominion Energy Virginia



Desktop Analysis Site Data	
Project Area	367.57 Acres ±
Project Length	15.94 Miles ±
Palustrine Emergent/Scrub Shrub Wetlands (PEM/PSS) - High Probability	17.79 Acres ±
Palustrine Emergent/Scrub Shrub Wetlands (PEM/PSS) - Medium Probability	10.53 Acres ±
Palustrine Emergent/Scrub Shrub Wetlands (PEM/PSS) - Low Probability	23.19 Acres ±
Open Waters	1.99 Acres ±
Stream Channels	2.33 Acres ± (11,421 L.F. ±)
Previously Confirmed	
Palustrine Emergent Wetlands (PEM)	0.80 Acres ±
Upper Perennial Stream Channels (R3)	0.007 Acres ± (109 L.F. ±)
Intermittent Stream Channels (R4)	0.003 Acres ± (26 L.F. ±)
Ephemeral Stream Channels (R6)	0.001 Acres ± (149 L.F. ±)
Total Potential Wetlands and Surface Waters	
Wetlands	52.31 Acres ±
Open Waters	1.99 Acres ±
Stream Channels	2.34 Acres ± (11,705 L.F. ±)

Figure No.
1

Title
Wetland and Surface Water Desktop Analysis

Client/Project 203401995
Dominion Energy Virginia
Line #2226 Partial Rebuild - Clover to Chase City

Project Location
Halifax, Charlotte, and Mecklenburg Counties, Virginia

Prepared by JSC on 2023-05-12
TR by MGS on 2023-05-12
IR by KHP on 2023-05-12

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(At original document size of 11x17)
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- Substation
- Page Index
- Project Limits
- Previously Confirmed Project Limits (#NAO-2017-02007)
- Previously Confirmed Project Limits (#NAO-2022-00479)

Notes
1. Coordinate System: NAD 1983 StatePlane Virginia South FIPS 4502 Feet
2. Data Sources: Stantec, U.S. Census Bureau, VDOT
3. Basemap ©Esri, NASA, NGA, USGS, FEMA, Southside PDC, VGIN, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, USDA

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Page 1 of 40

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203401995

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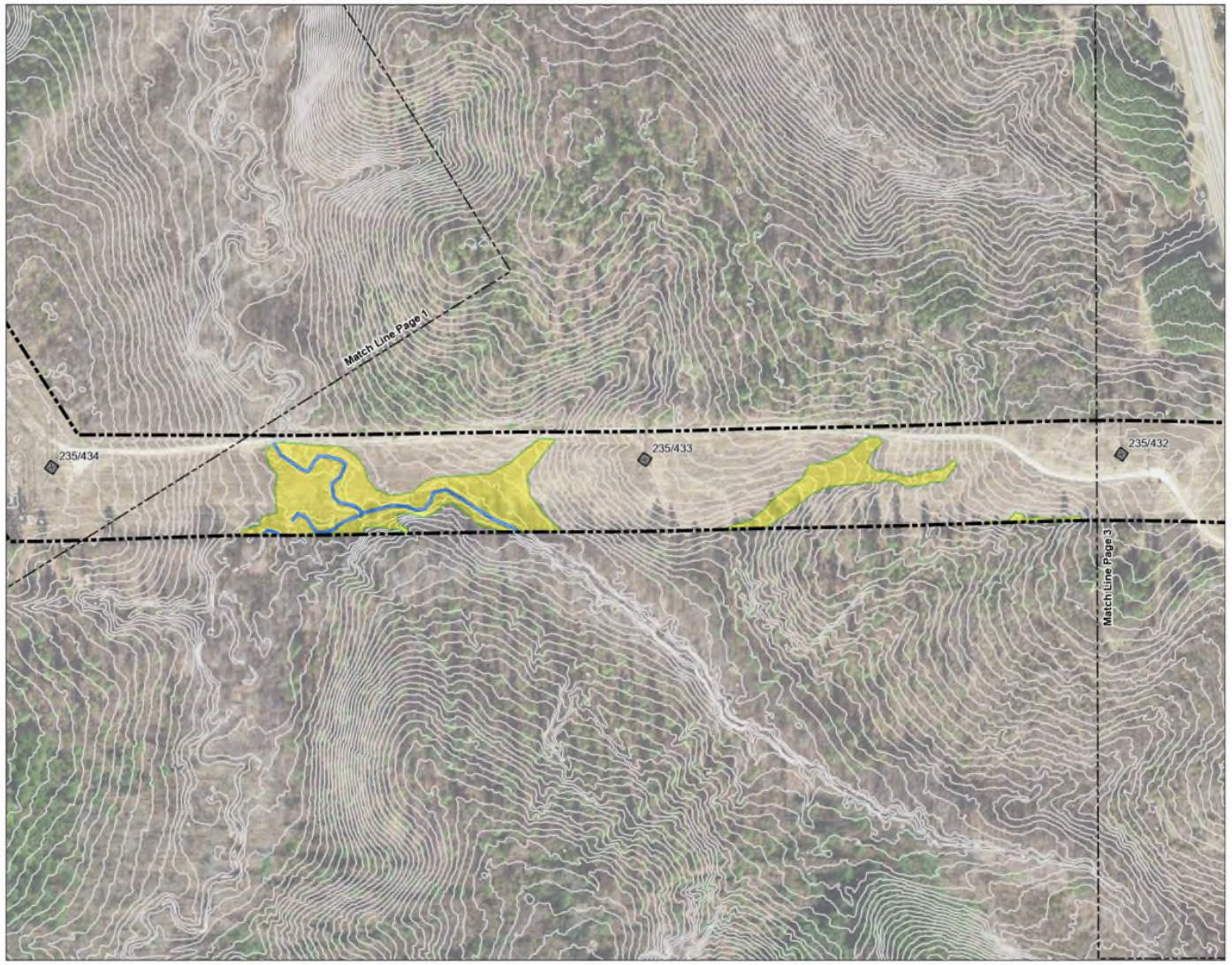
Stantec



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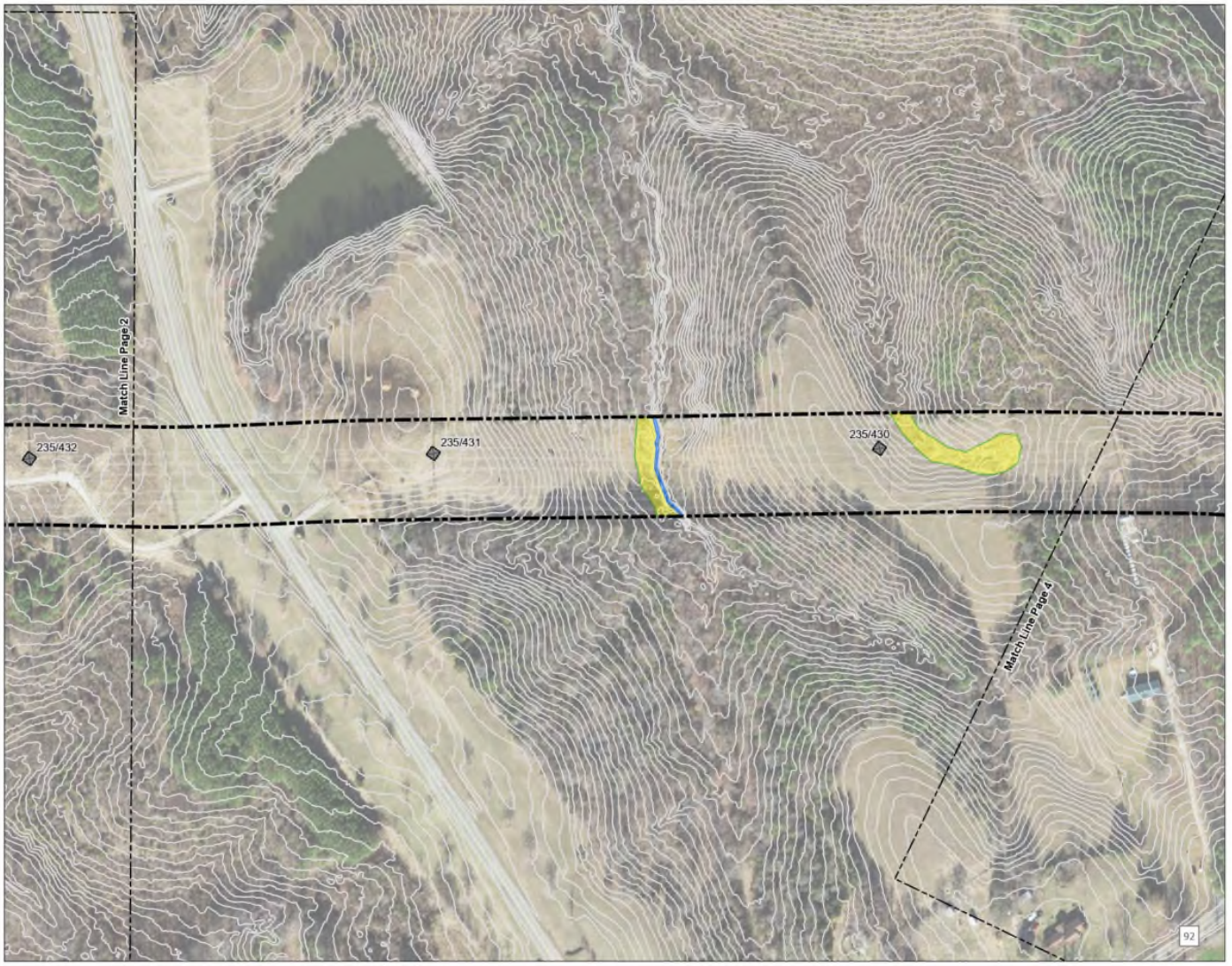

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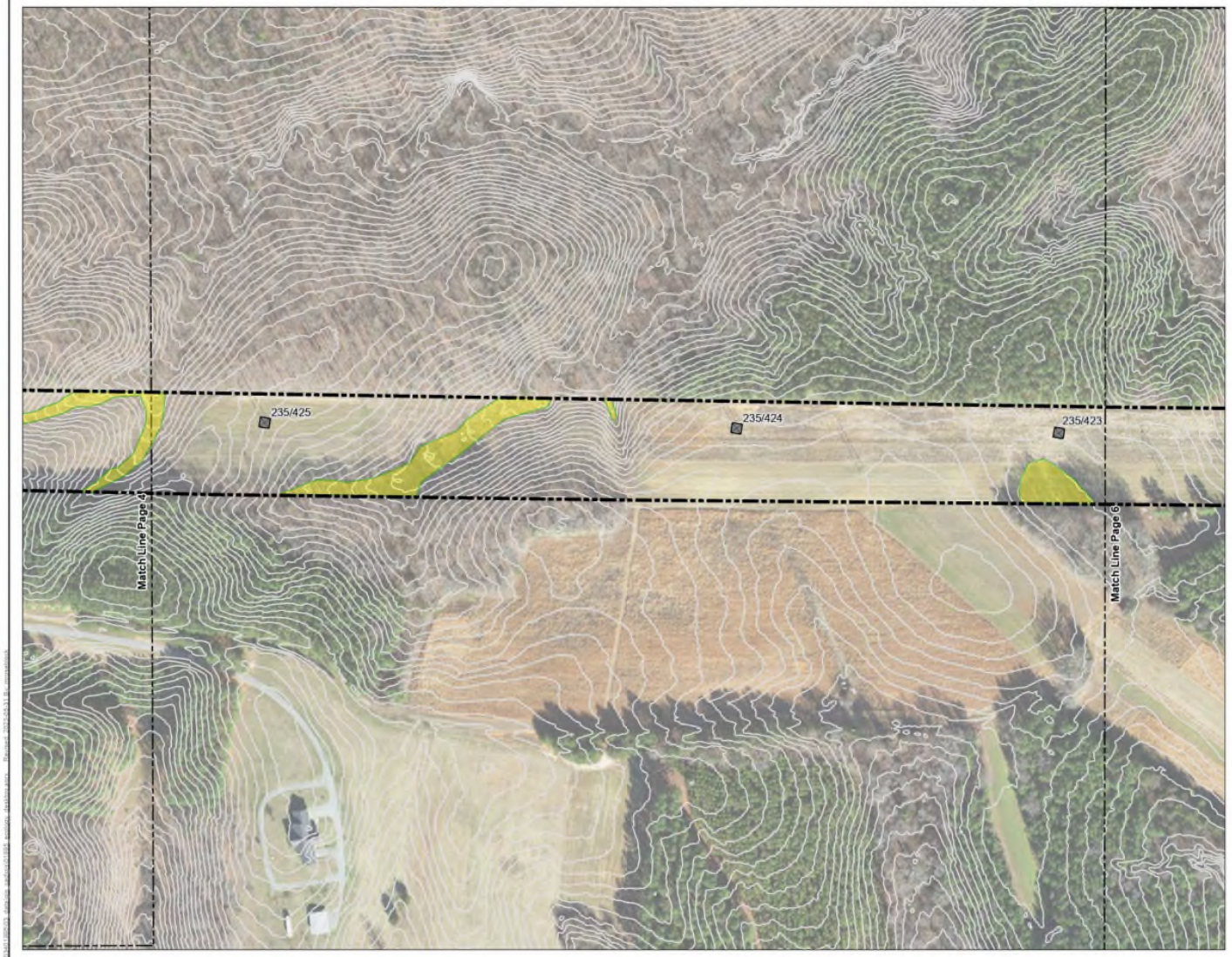

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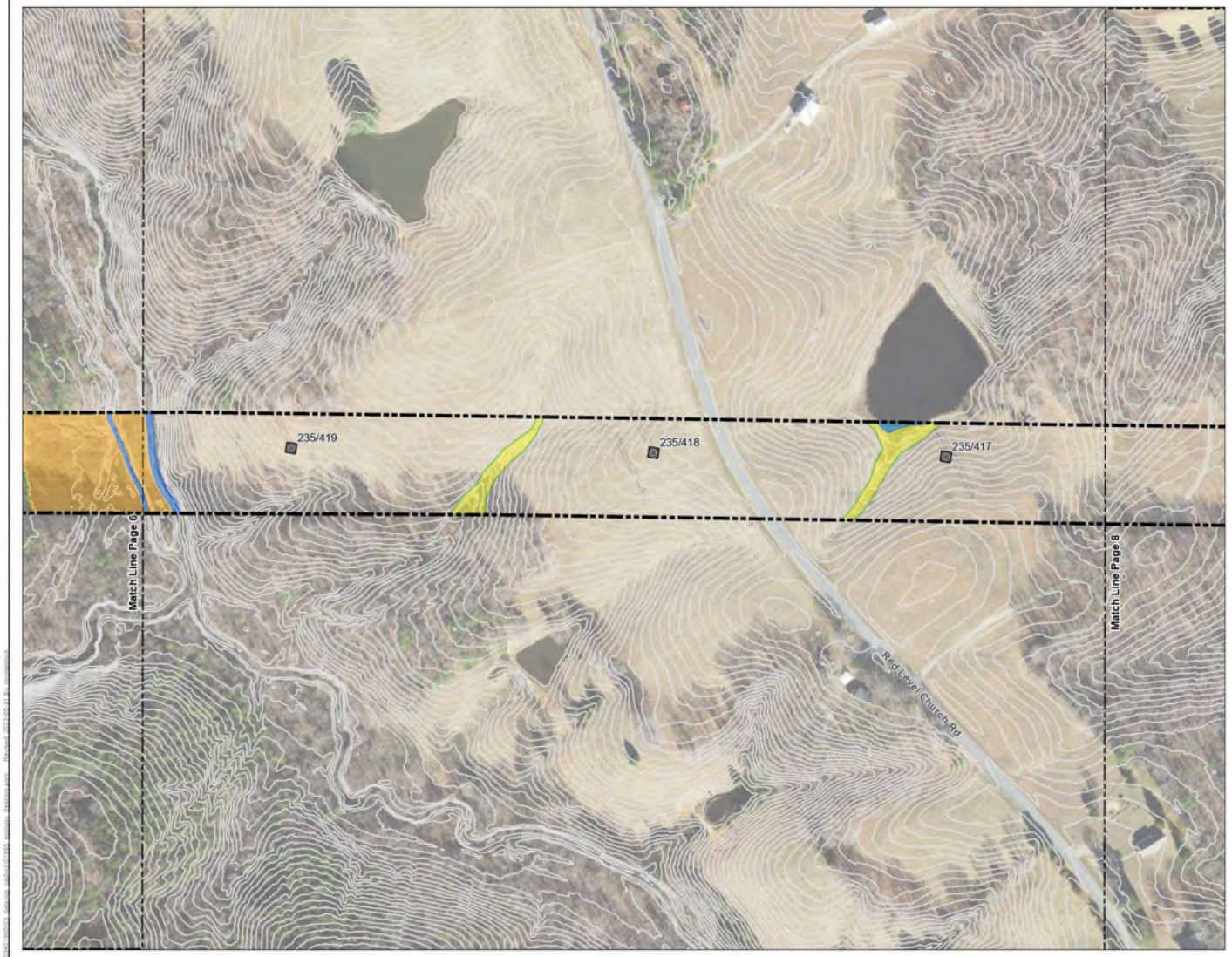

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- Previously Confirmed Palustrine Emergent Wetland Limits (PEM)
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Project Location
Halifax, Charlotte, and Mecklenburg Counties, Virginia

Prepared by JSC on 2023-05-12
TR by MGS on 2023-05-12
IR by KHP on 2023-05-12

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- Previously Confirmed Project Limits (#NAO-2022-00479)
- Previously Confirmed Palustrine Emergent Wetland Limits (PEM)
- 2-Foot Contour

Notes
1. Coordinate System: NAD 1983 StatePlane Virginia South FIPS 4502 Feet
2. Data Sources: Stantec, U.S. Census Bureau, VDOT. Topography generated from digital elevation model derived from USGS Lidar Point Cloud
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Stantec

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Wetland and Surface Water Desktop Analysis

Client/Project
Dominion Energy Virginia
Line #2226 Partial Rebuild - Clover to Chase City
203401995

Project Location
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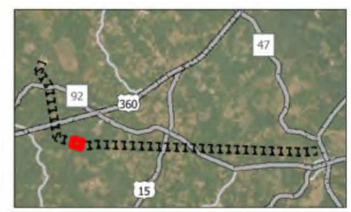

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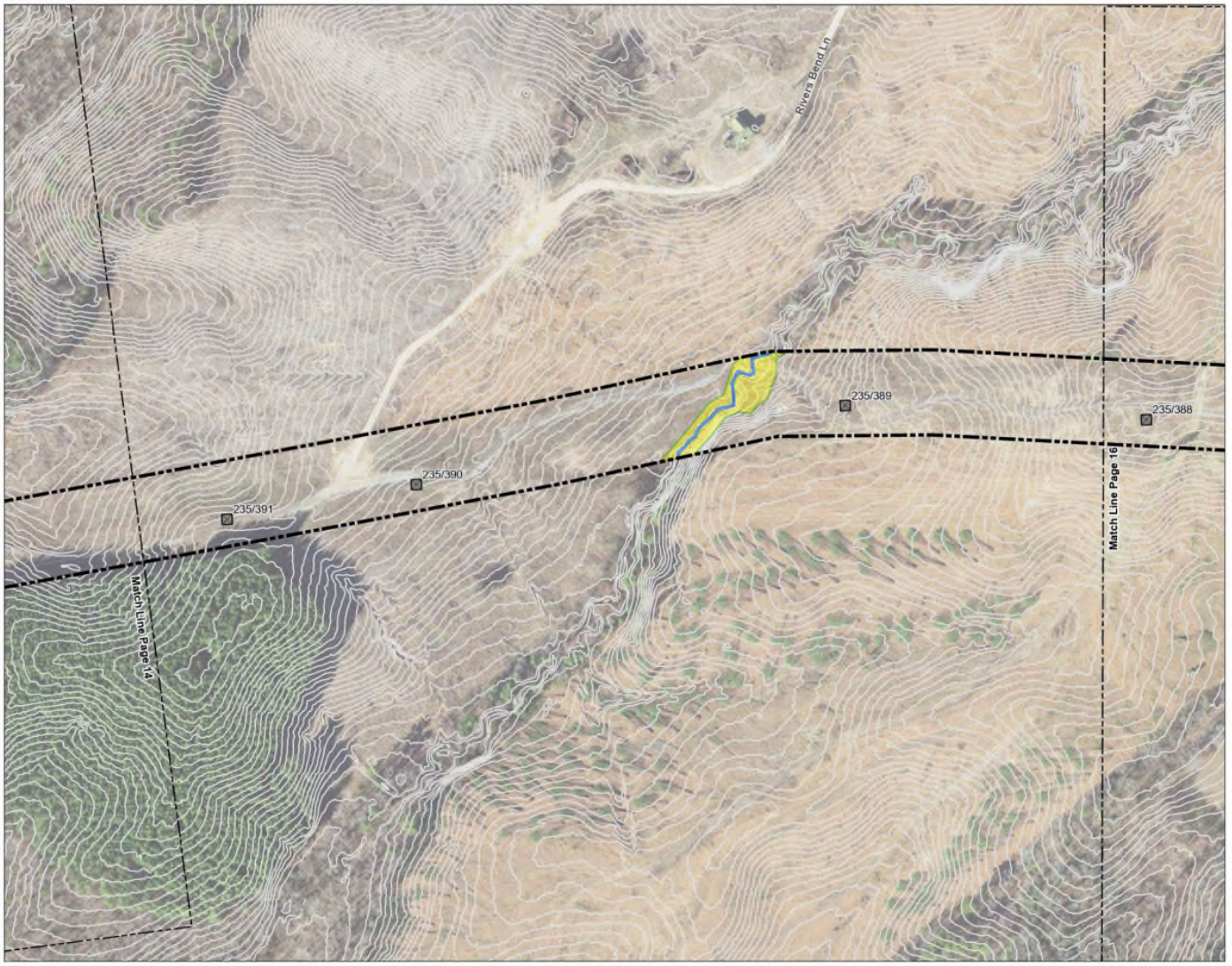

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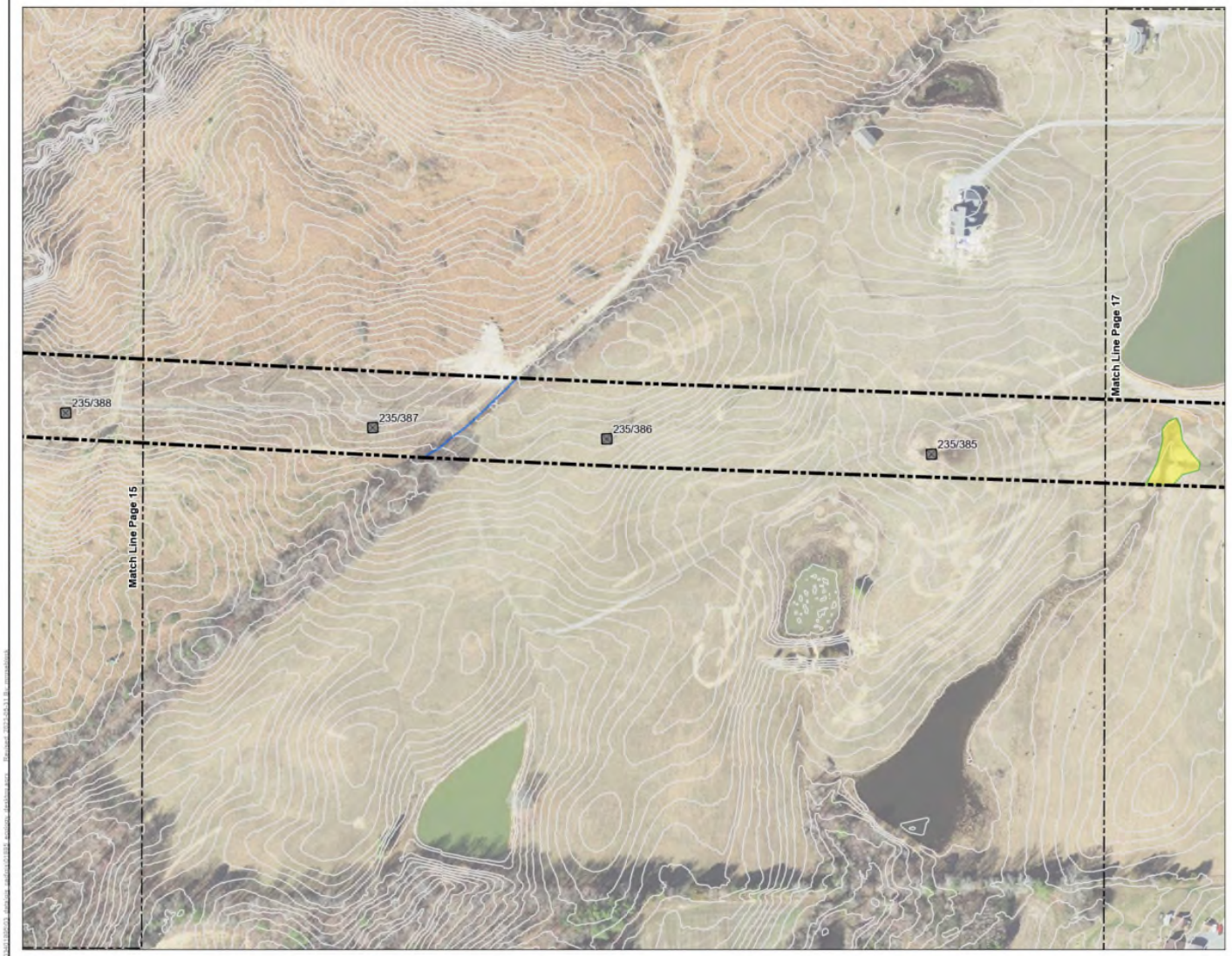

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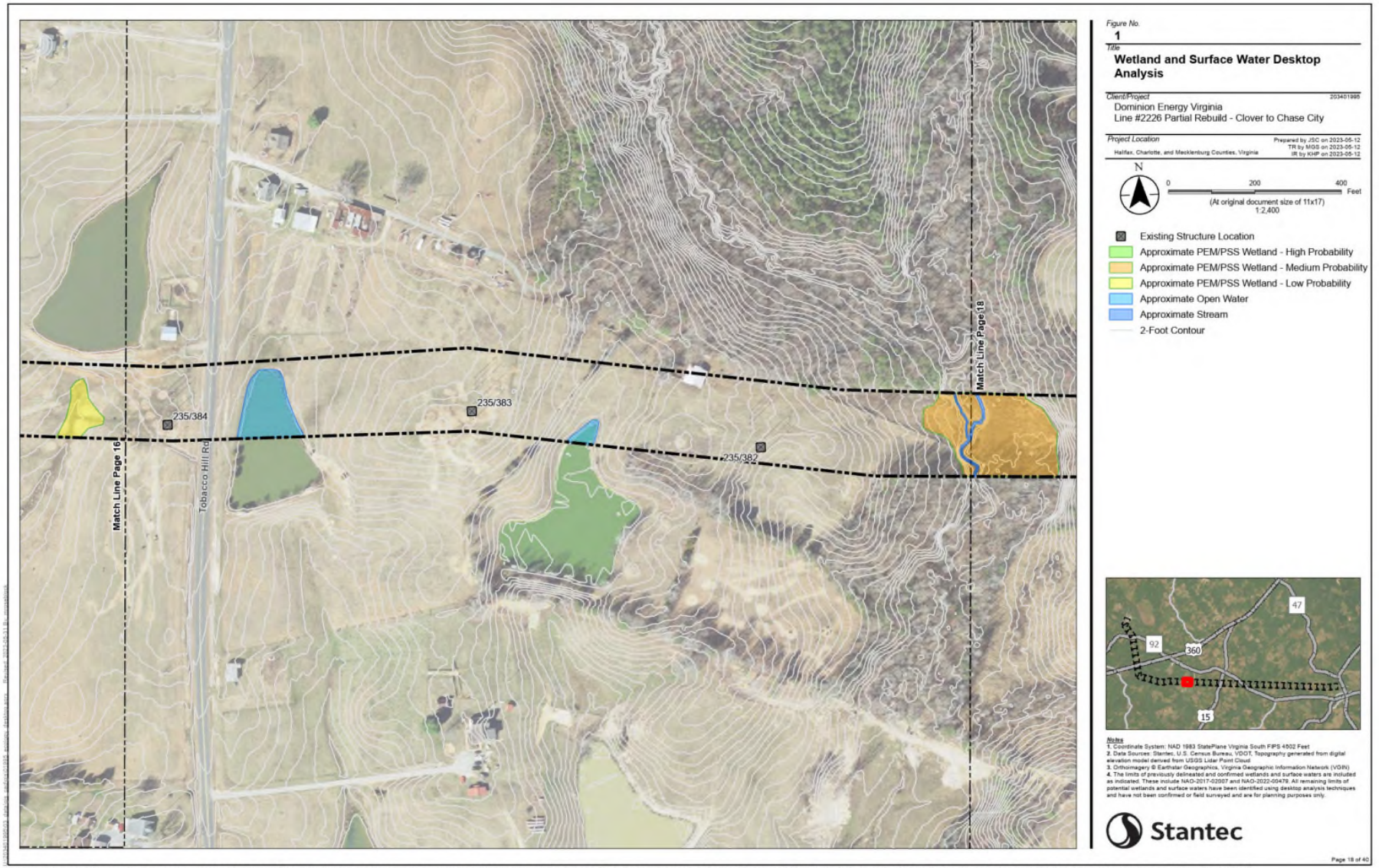

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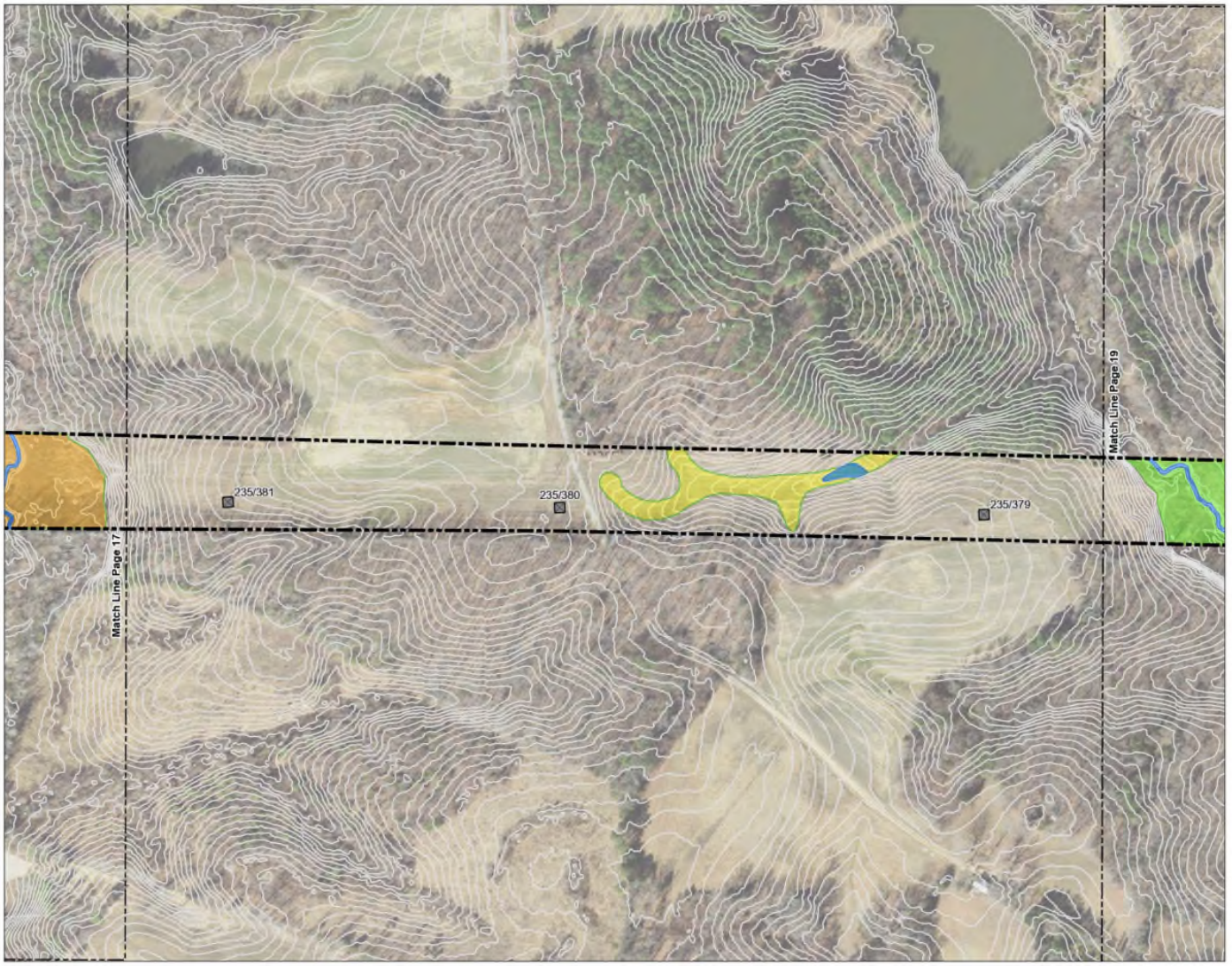

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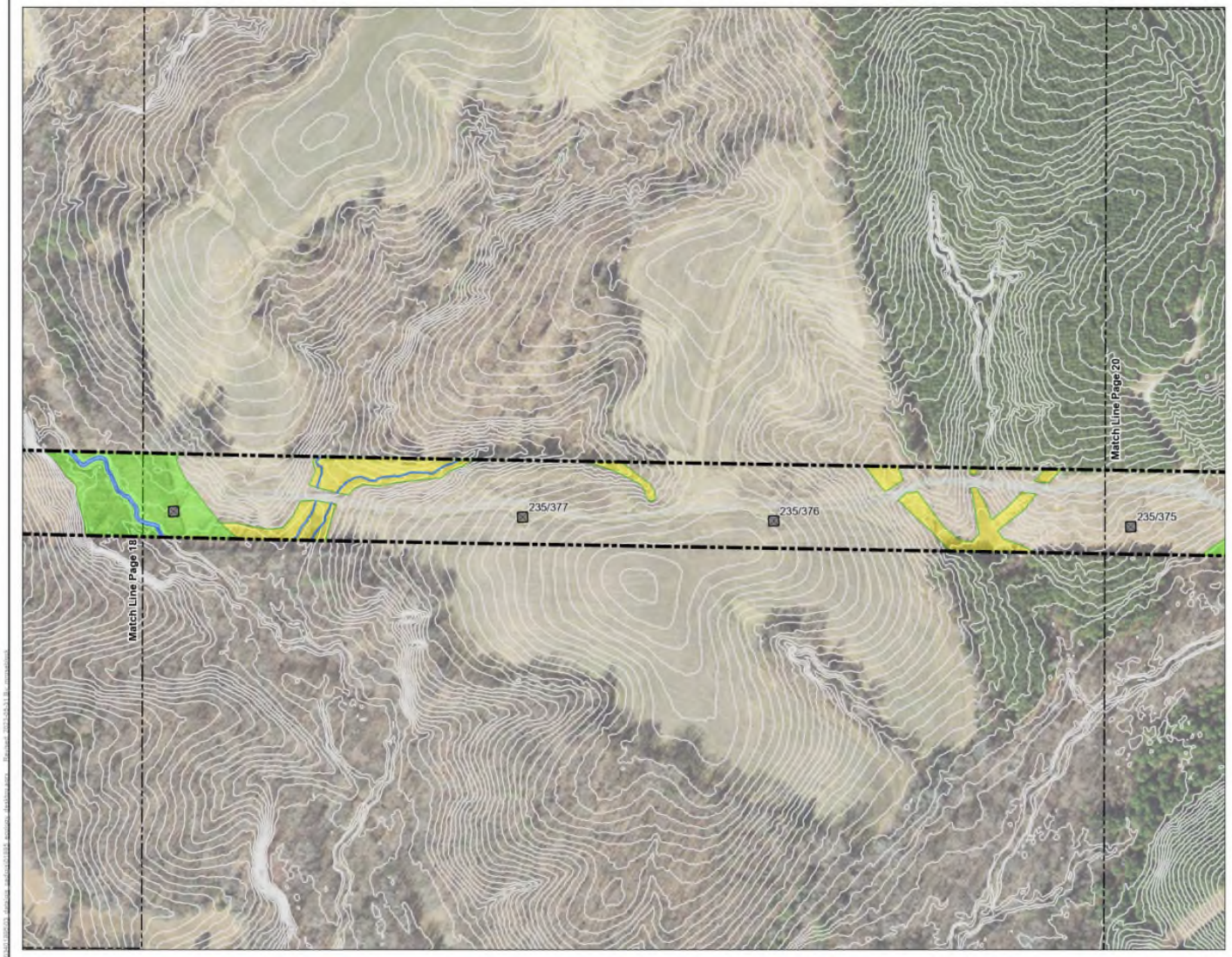

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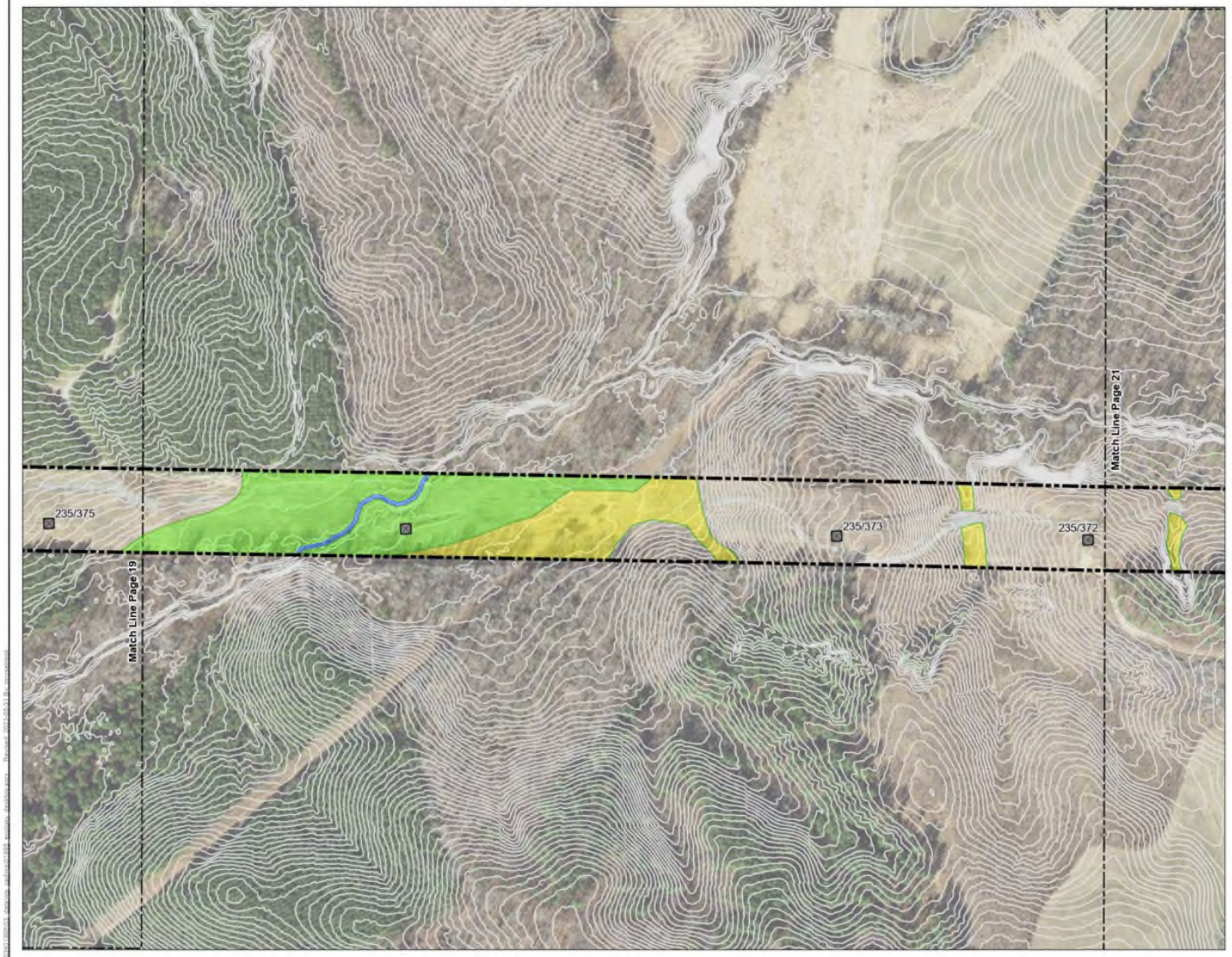

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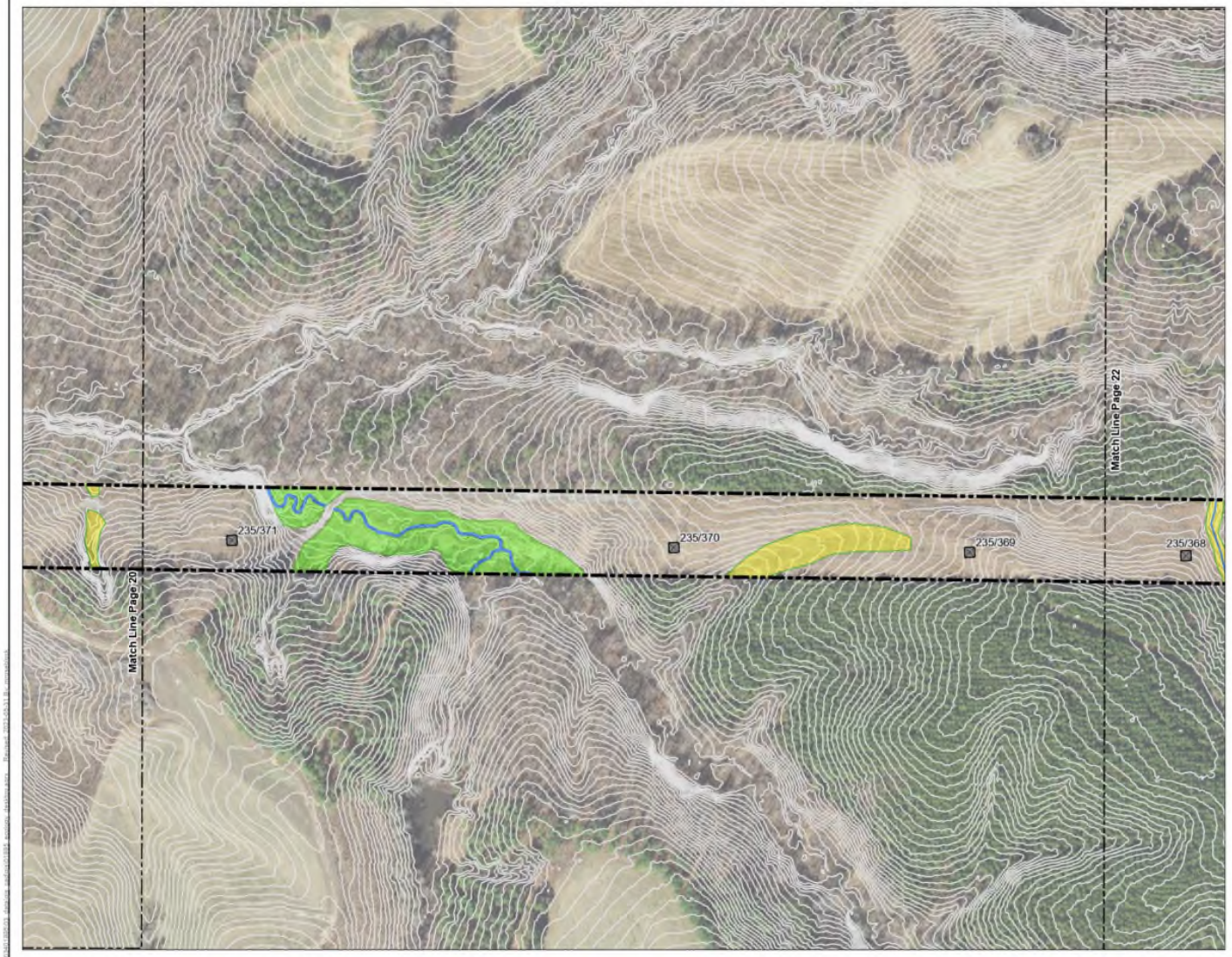

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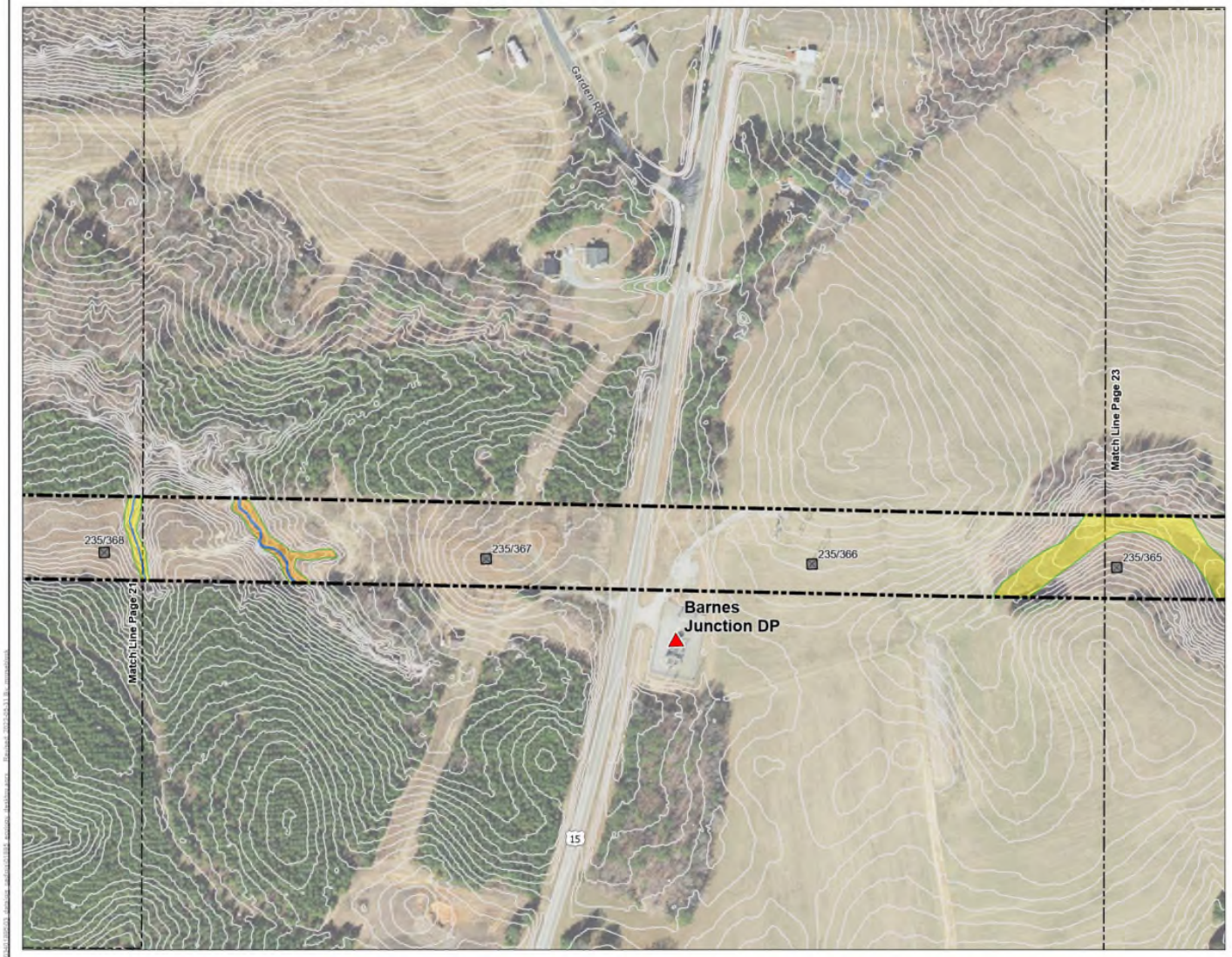

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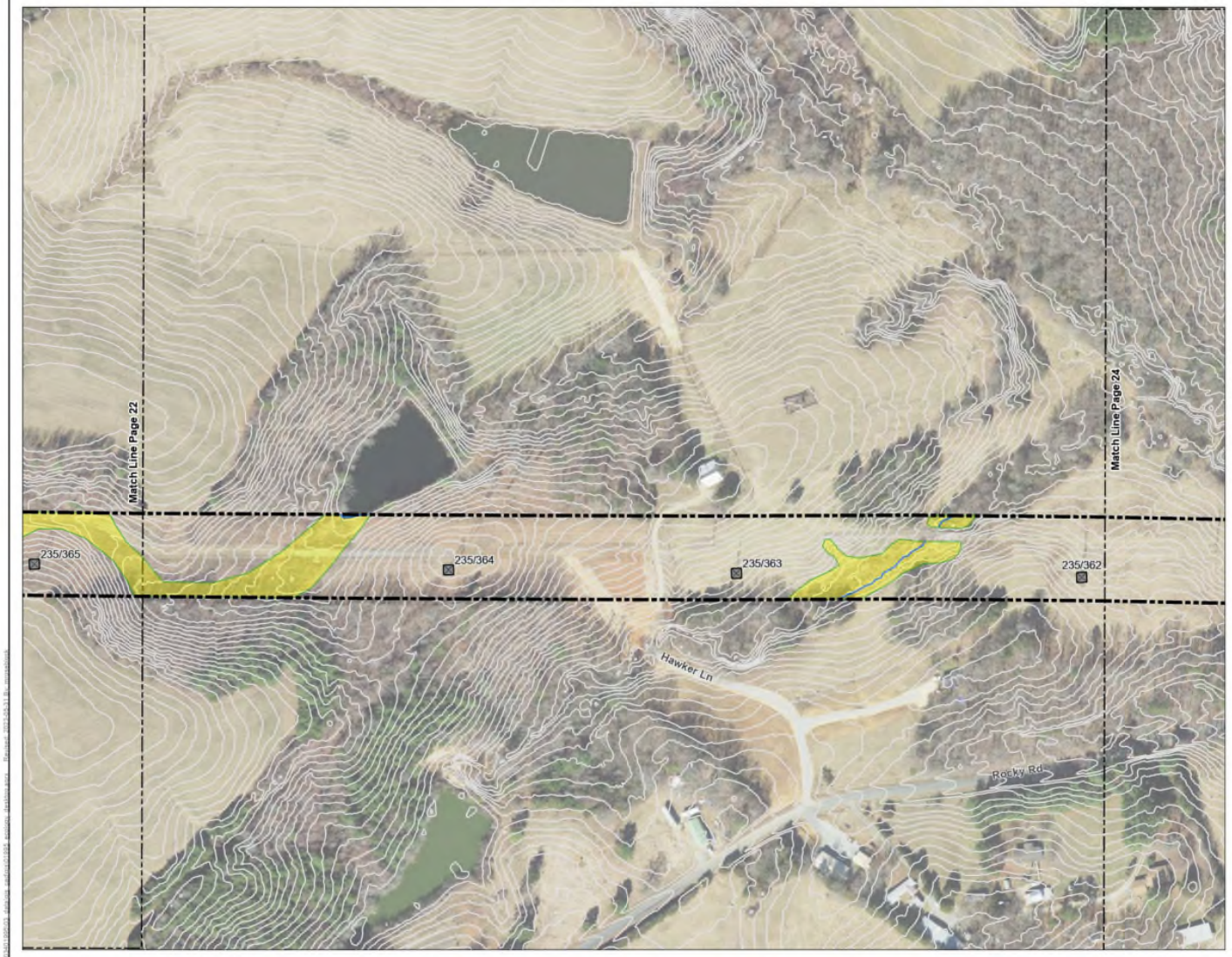

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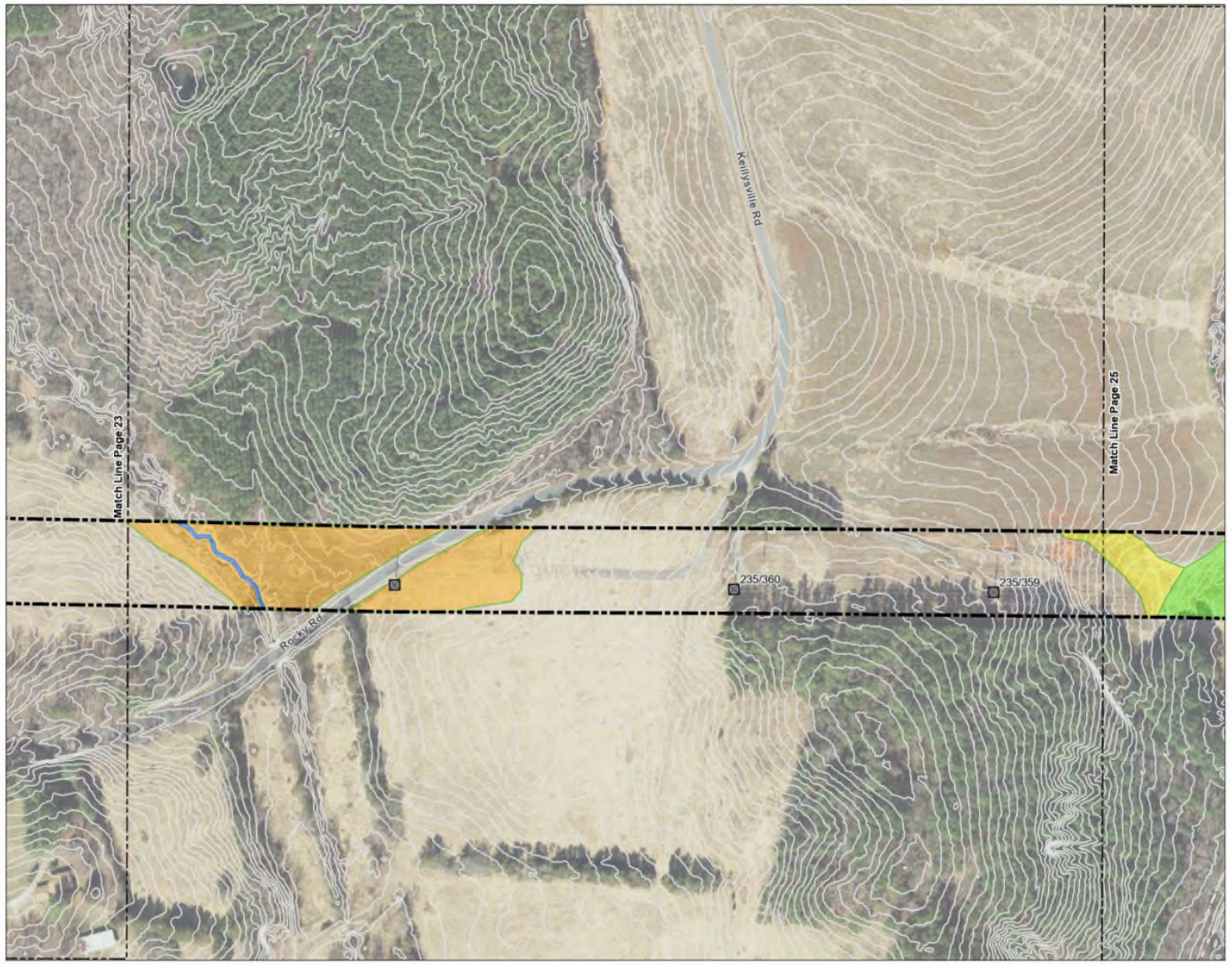

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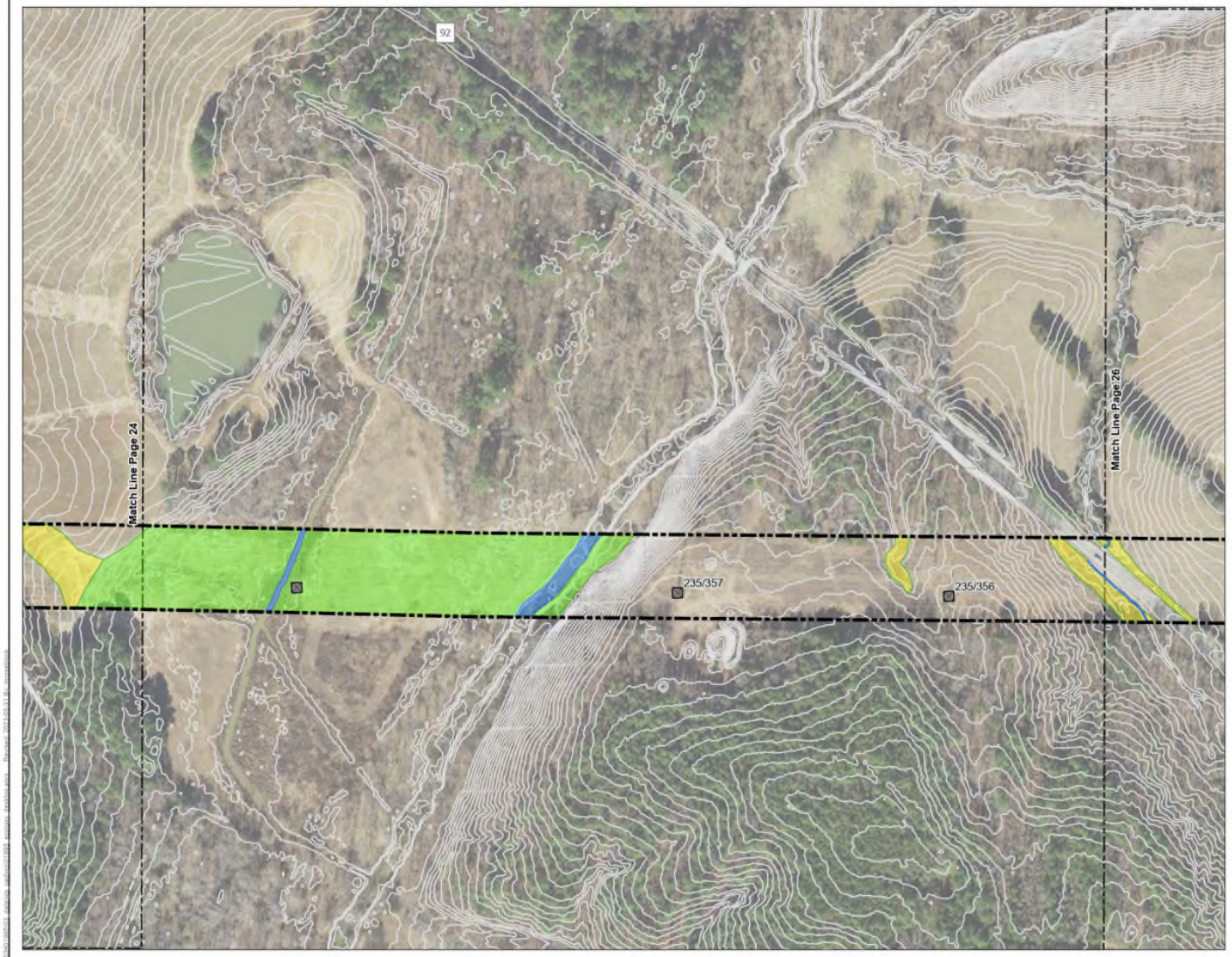

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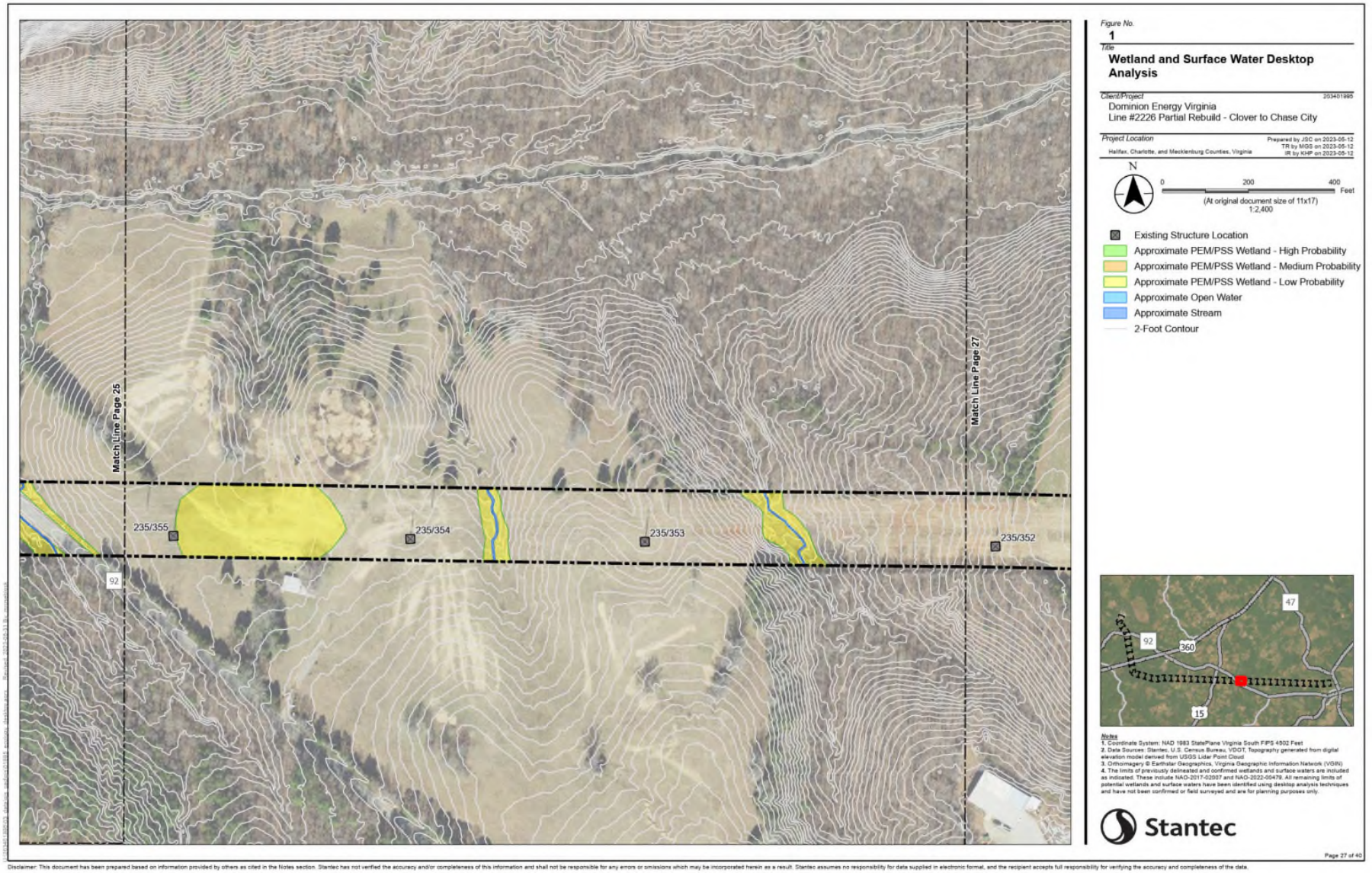

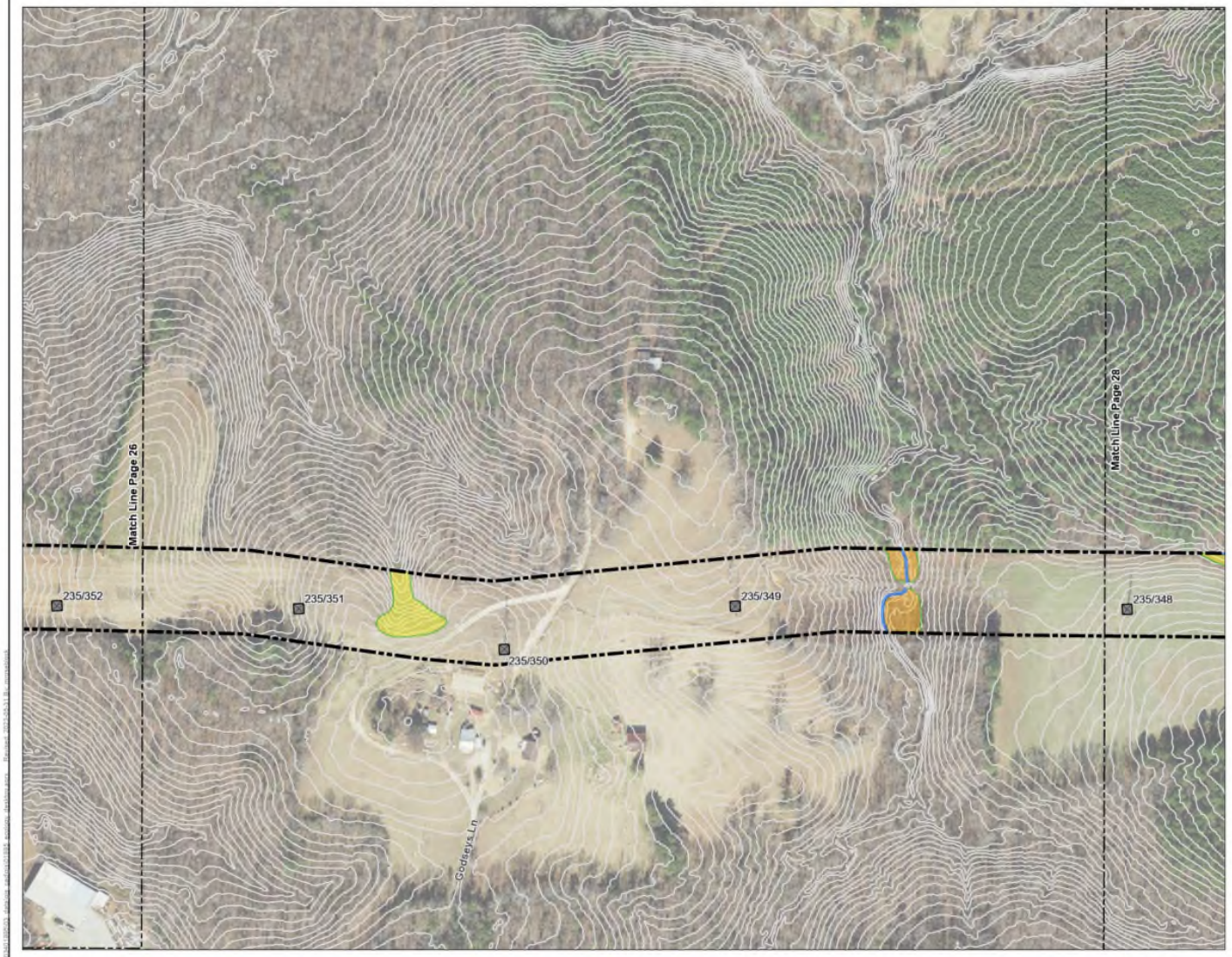

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Page 28 of 40

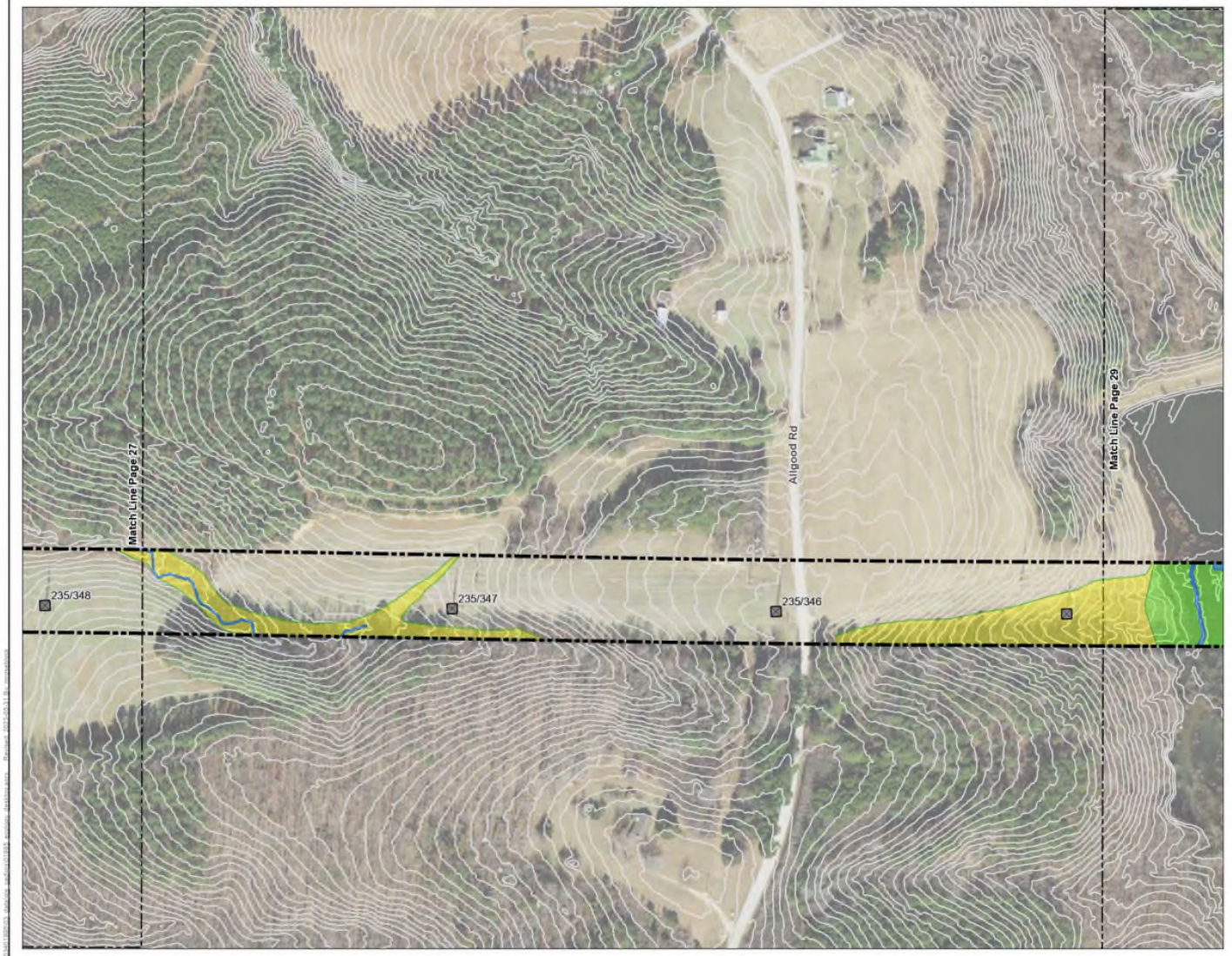

Figure No.
1

Title
Wetland and Surface Water Desktop Analysis

Client/Project
Dominion Energy Virginia
Line #2226 Partial Rebuild - Clover to Chase City

203401995

Project Location
Halifax, Charlotte, and Mecklenburg Counties, Virginia

Prepared by JSC on 2023-05-12
TR by MGS on 2023-05-12
IR by KHP on 2023-05-12

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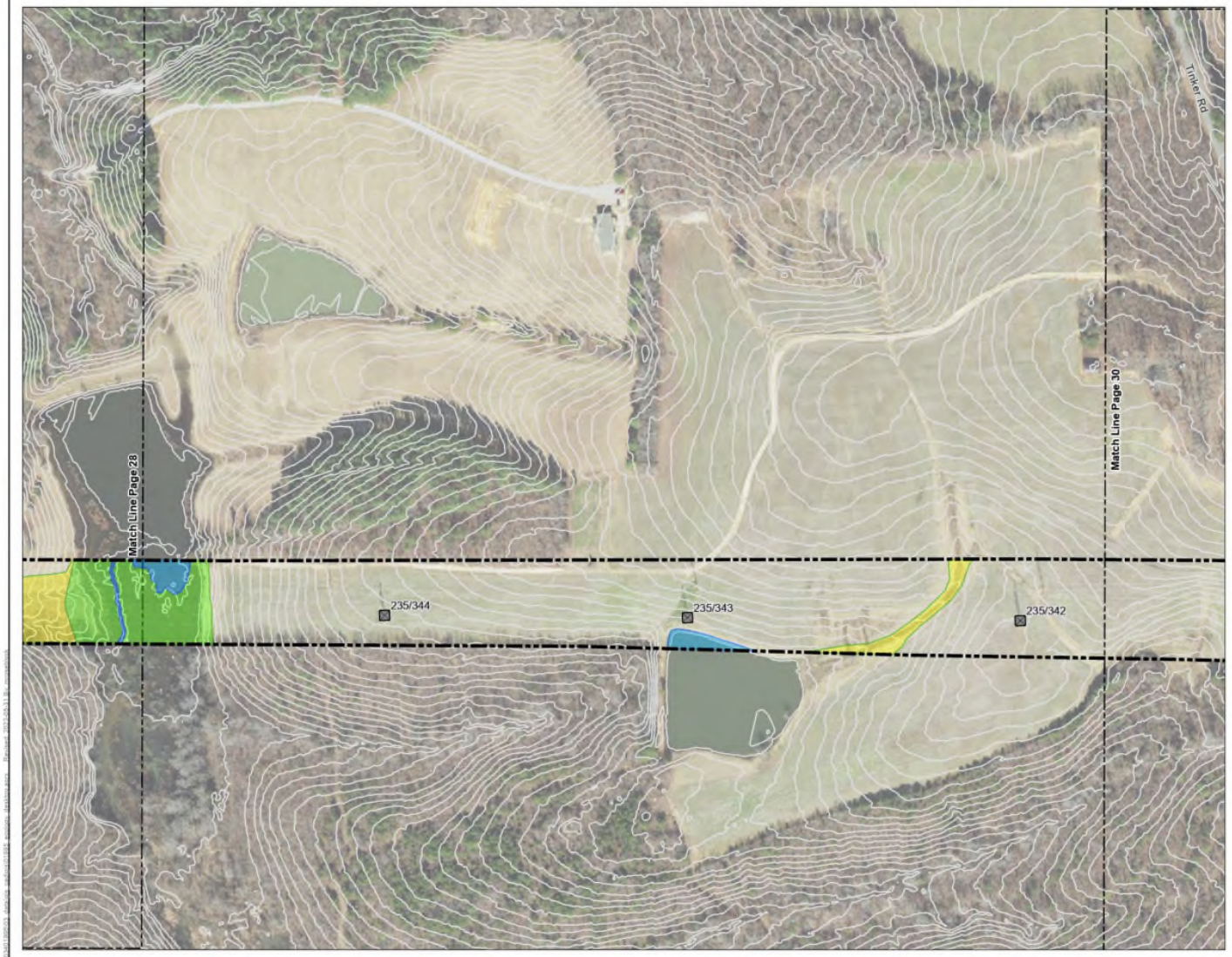

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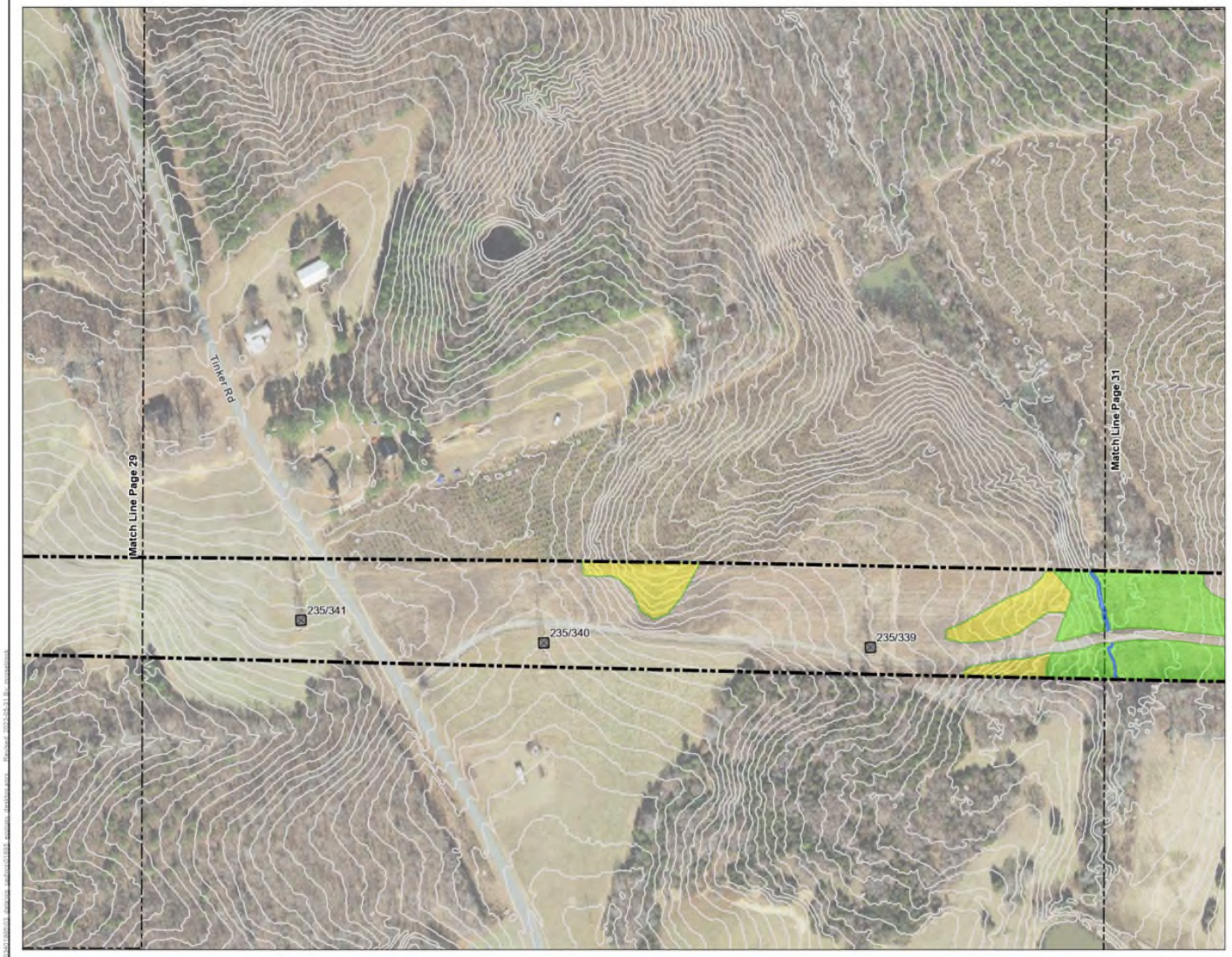

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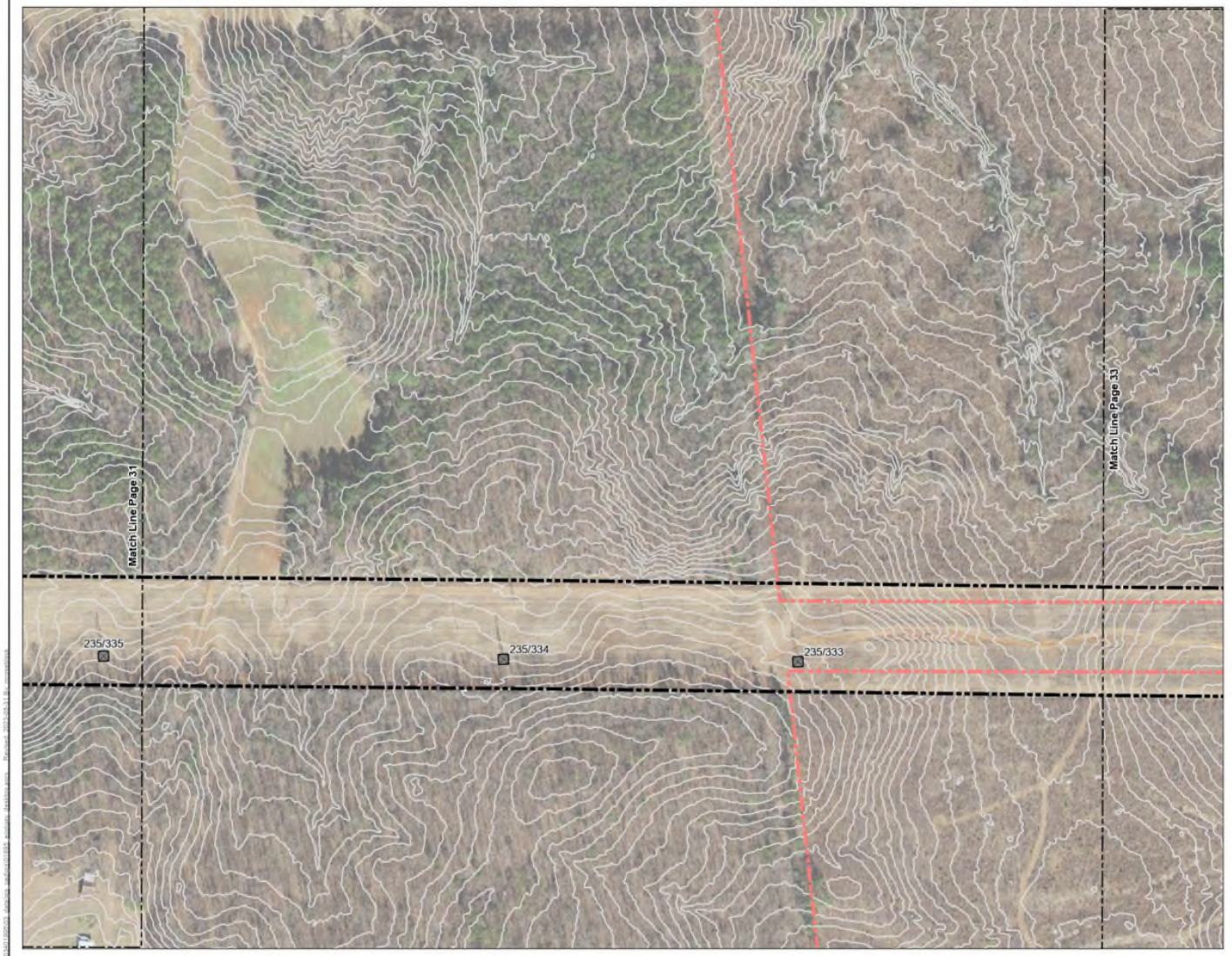

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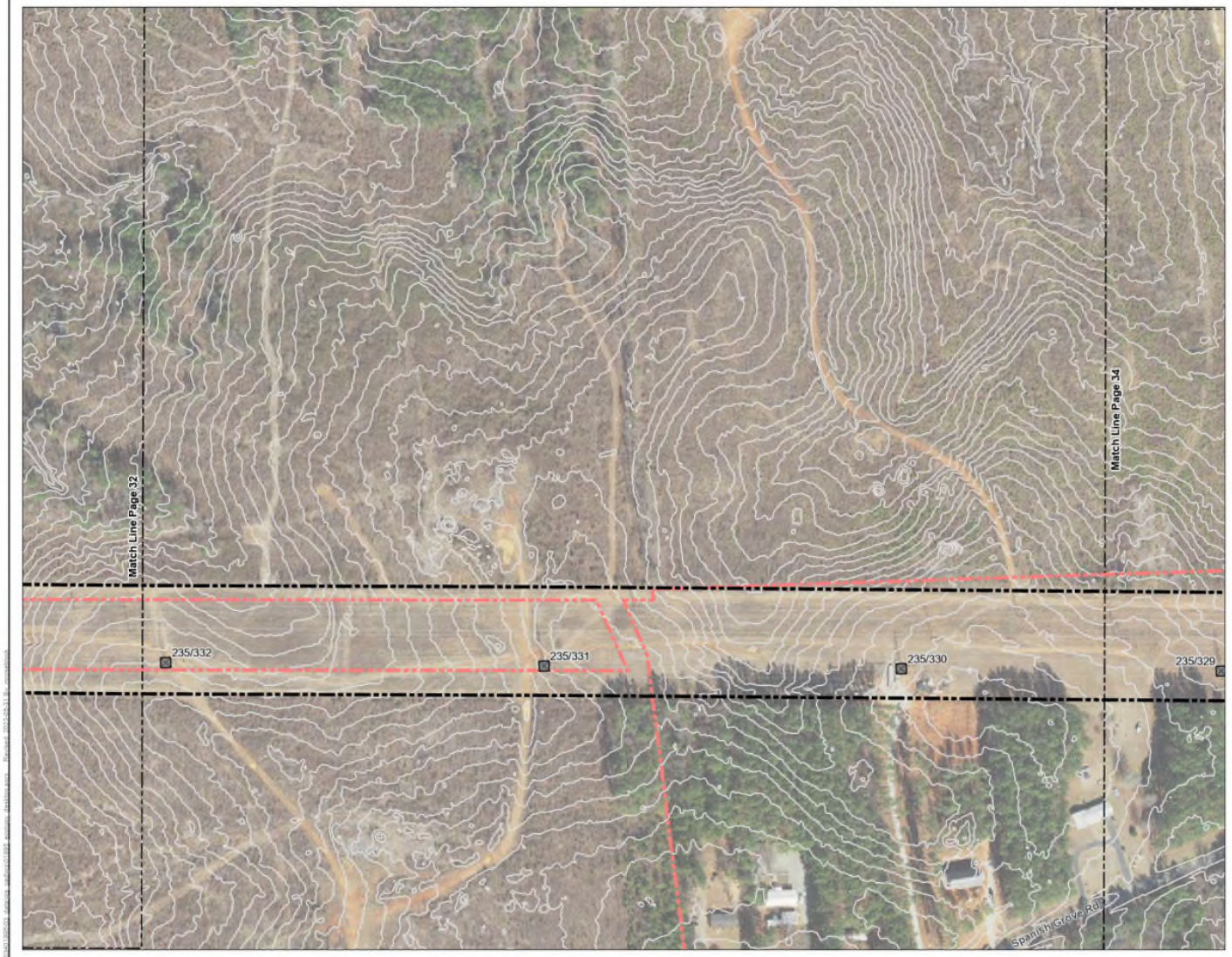

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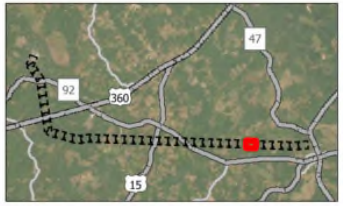

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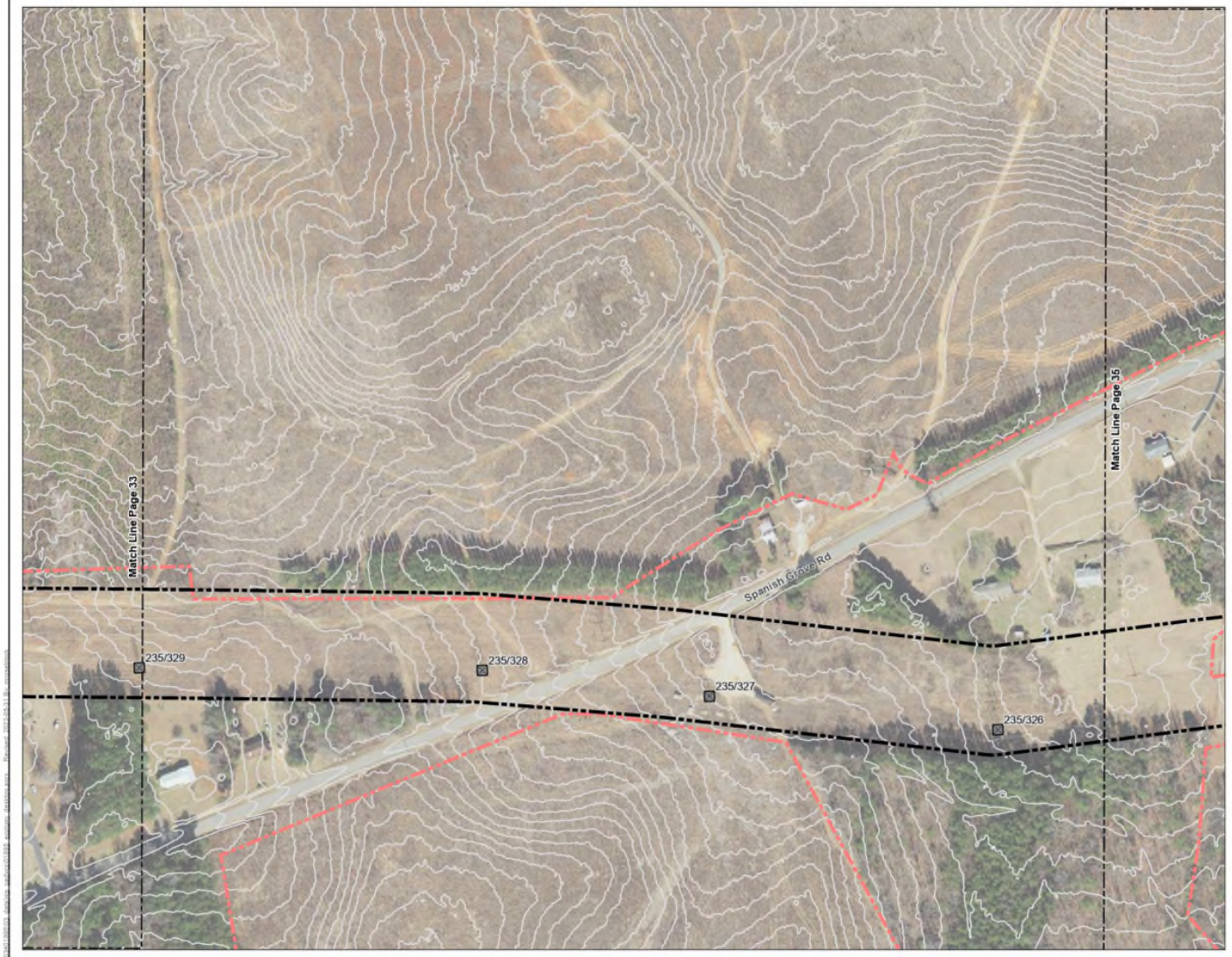

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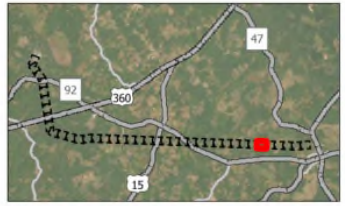

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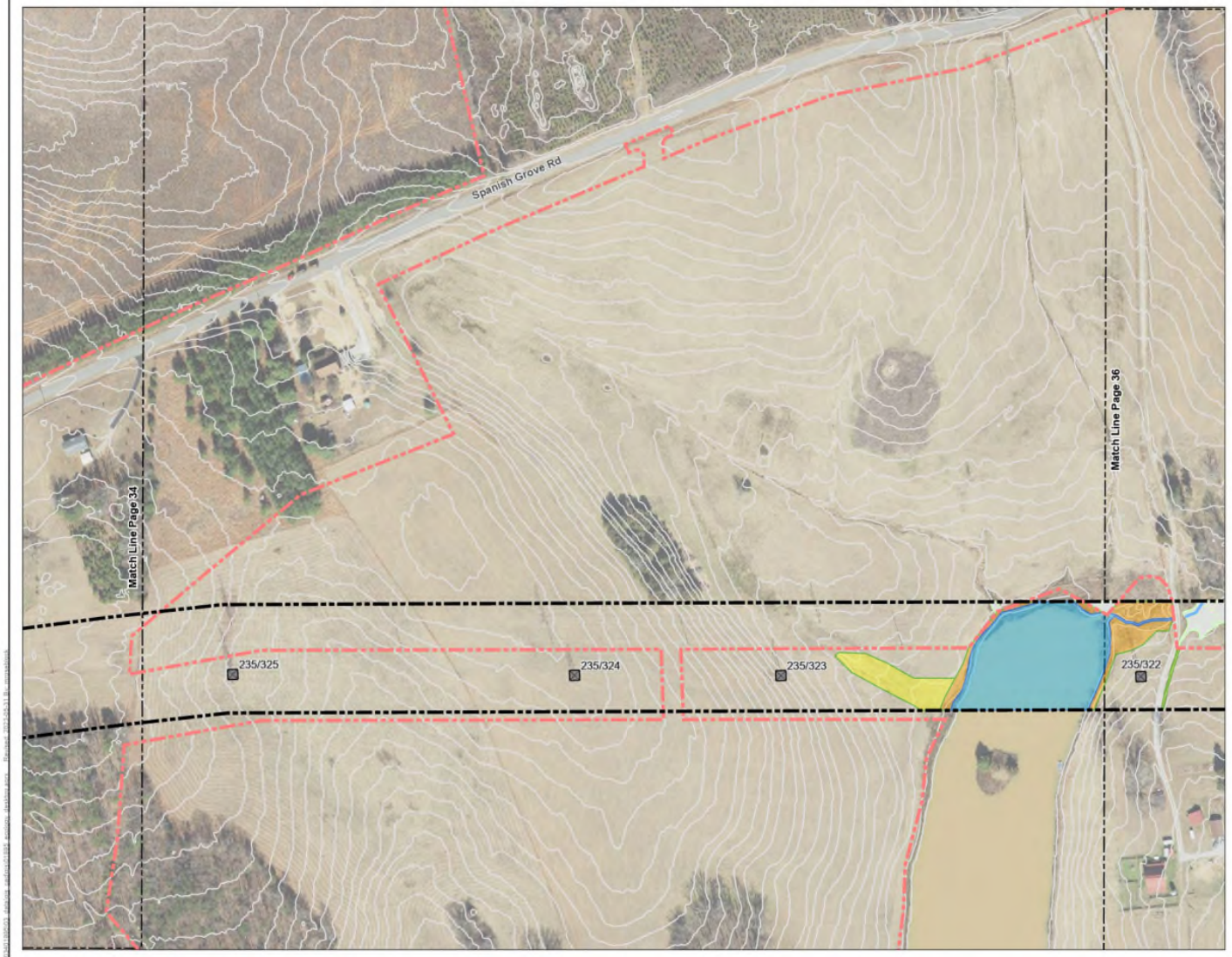

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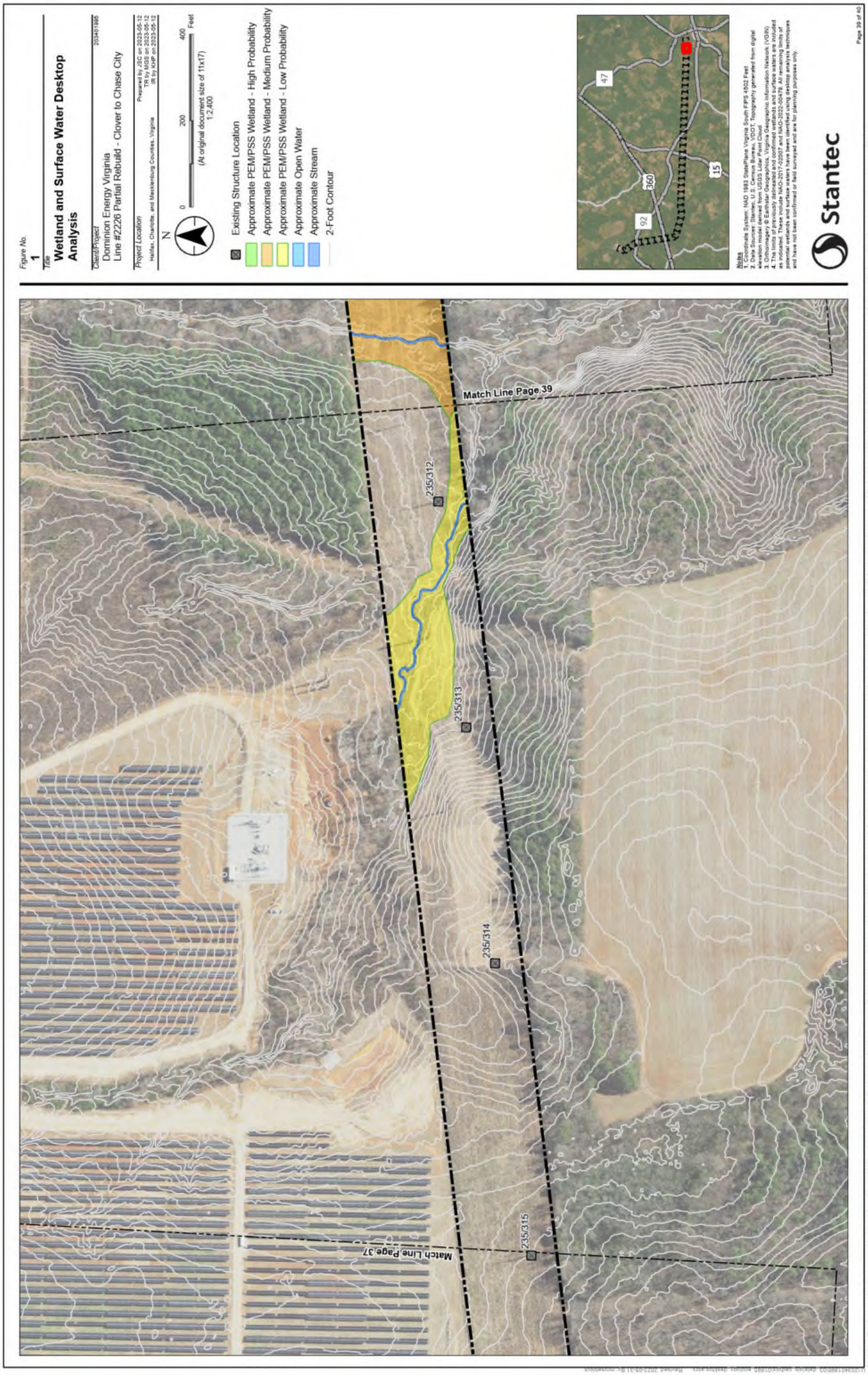
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Commonwealth of Virginia

VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY

1111 E. Main Street, Suite 1400, Richmond, Virginia 23219
P.O. Box 1105, Richmond, Virginia 23218
(800) 592-5482 FAX (804) 698-4178
www.deq.virginia.gov

Travis A. Voyles
Secretary of Natural and Historic Resources

Michael S. Rolband, PE, PWD, PWS Emeritus
Director
(804) 698-4020

July 26, 2023

Jason P. Ericson
Dominion Energy
120 Tredegar Street
Richmond, VA 23219

RE: Dominion Energy Virginia's Line #235 230 kV Rebuild from Clover Substation to Structure #235/310; Halifax, Mecklenburg, and Charlotte Counties, Virginia

Dear Mr. Ericson:

In accordance with the Department of Environmental Quality-State Corporation Commission *Memorandum of Agreement Regarding Wetland Impact Consultation* (July 2003), we have reviewed the information submitted by Dominion Energy Virginia. Dominion is proposing to rebuild approximately 16 miles of the existing 230 kV transmission Line #235 between the existing Clover Substation and existing Structure #235/310 using higher capacity conductors, renumber the rebuilt line segment to Line #2226, and complete work at Clover Substation to support the higher capacity conductor (the "Rebuild Project"). The Rebuild Project is located within Halifax, Mecklenburg, and Charlotte Counties in Virginia.

The Company proposes to locate the Rebuild Project entirely within the existing Line #235 right-of-way or on Company-owned property. No additional right-of-way is necessary.

Summary of Findings

A jurisdictional wetland and waters delineation has not been conducted at this time; however, Stantec conducted a wetland desktop study to identify probable wetlands based on a review of multiple data sources. Table 1 below provides a summary of the wetlands that could be affected by the Rebuild Project right-of-way. A wetland delineation will be conducted, and the limits of jurisdictional wetlands and waters will be submitted to the United States Army Corps of Engineers for confirmation once the final order has been approved.

Table 1. Estimate of Jurisdictional Wetlands and Waters within the Project Right-of-Way

Resource Type	Low	Medium	High	Previously Confirmed	Total
Palustrine Emergent and Scrub/Shrub Wetlands	**23.19 Acres**	**10.53 Acres**	**17.79 Acres**	**0.80 Acres**	**52.31 Acres**
Open Water	**N/A**	**N/A**	**1.99 Acres**	**N/A**	**1.99 Acres**
Stream	**N/A**	**N/A**	**2.33 Acres (11,421 LF)**	**0.01 Acres (283 LF)**	**2.34 Acres (11,704 LF)**

Water Quality and Wetlands. Measures such as but not limited to Best Management Practices (BMPs) must be taken to avoid and minimize impacts to surface waters during construction activities, including potential water quality impacts resulting from construction site runoff. The disturbance of land and surface waters, which include wetlands, open water, and streams, may require prior approval by DEQ; the U.S. Army Corps of Engineers; the Virginia Marine Resources Commission (VMRC); and/or local government wetlands boards (generally in the northern and piedmont regions of Virginia). The Army Corps of Engineers and DEQ work in conjunction to provide official confirmation of whether there are federal and/or state jurisdictional surface waters that may be impacted by the proposed project. VMRC provides its own review to determine its agency jurisdiction. Review of National Wetland Inventory maps or topographic maps for locating wetlands, open waters, or streams may not be sufficient; there may need to be a site-specific review by a qualified professional. If construction activities will occur in or along any streams (perennial, intermittent, or ephemeral), open water or wetlands, the applicant should contact the DEQ-VWP managers at our Blue Ridge and Piedmont Regional Offices to determine the need for any permits prior to commencing work that could impact surface waters. DEQ's permit need decisions neither replace nor supersede requirements set forth by other local, state, federal, and Tribal laws, nor eliminate the need to obtain additional permits, approvals, consultations, or authorizations as required by law before proposed activities may commence.

Recommendations and Potential Permits

DEQ offers the following recommendations:

1. Prior to commencing project work, all surface waters on the project site should be delineated by a qualified professional and verified by the U.S. Army Corps of Engineers (the Corps) for federal jurisdictional waters and by DEQ for state jurisdictional waters.
2. Wetland and stream impacts should be avoided and minimized to the maximum extent practicable.
3. If the scope of the project changes, additional review will be necessary by one or more offices in the Commonwealth's Secretariat of Natural Resources and/or the Corps.
4. At a minimum, any required compensation for impacts to State Waters, including the compensation for permanent conversion of forested wetlands to emergent wetlands, should be in accordance with all applicable state regulations and laws. Consider mitigating impacts to forested or converted wetlands by establishing new forested wetlands within the impacted watershed.
5. Any temporary impacts to surface waters associated with this project should be restored to pre-existing conditions.

6. No activity may substantially disrupt the movement of aquatic life indigenous to the water body, including those species, which normally migrate through the area, unless the primary purpose of the activity is to impound water. Culverts placed in streams must be installed to maintain low flow conditions. No activity may cause more than minimal adverse effect on navigation. Furthermore the activity must not impede the passage of normal or expected high flows and the structure or discharge must withstand expected high flows.
7. Erosion and sedimentation controls should be designed in accordance with the Virginia Erosion and Sediment Control Handbook, Third Edition, 1992. These controls should be placed prior to clearing and grading and maintained in good working order to minimize impacts to state waters. These controls should remain in place until the area is stabilized and should then be removed. Any exposed slopes and streambanks should be stabilized immediately upon completion of work in each permitted area. All denuded areas should be properly stabilized in accordance with the Virginia Erosion and Sediment Control Handbook, Third Edition, 1992.
8. No machinery may enter surface waters, unless authorized by a Virginia Water Protection (VWP) individual permit, general permit, or general permit coverage.
9. Heavy equipment in temporarily impacted surface waters should be placed on mats, geotextile fabric, or other suitable material, to minimize soil disturbance to the maximum extent practicable. Equipment and materials should be removed immediately upon completion of work.
10. Activities should be conducted in accordance with any Time-of-Year restriction(s) as recommended by the Department of Wildlife Resources, the Department of Conservation and Recreation, or the Virginia Marine Resources Commission. The permittee should retain a copy of the agency correspondence concerning the Time-of-Year restriction(s), or the lack thereof, for the duration of the construction phase of the project.
11. All construction, construction access, and demolition activities associated with this project should be accomplished in a manner that minimizes construction materials or waste materials from entering surface waters, unless authorized by a Virginia Water Protection (VWP) individual permit, general permit, or general permit coverage. Wet, excess, or waste concrete should be prohibited from entering surface waters.
12. Herbicides used in or around any surface water should be approved for aquatic use by the United States Environmental Protection Agency (EPA) or the U.S. Fish & Wildlife Service. These herbicides should be applied according to label directions by a licensed herbicide applicator. A non-petroleum based surfactant should be used in or around any surface waters.

Permits:
Based on DEQ's review of the information provided by Dominion dated July 5, 2023, the proposed project may require a Virginia Water Protection (VWP) individual permit or general permit coverage. The applicant may submit a Joint Permit Application (JPA) in accordance with form instructions for further evaluation and final permit need determination by DEQ.

Should you have any questions, please don't hesitate to contact me at 804-965-4329 or at **michelle.henicheck@deq.virginia.gov.**

Sincerely,

Michelle Henicheck

Michelle Henicheck, PWS
Senior Wetland Ecologist
Office of Wetlands & Stream Protection

Cc: Jay Roberts, DEQ-BRRO

Bryan Jones, DEQ-PRO
Bettina Rayfield, DEQ - Office of Environmental Review

Stantec

Memo

To:	Mr. Lucas Dupont Dominion Energy Virginia 10900 Nuckols Road, Fourth Floor Glen Allen, VA 23060	From:	Kenrick Presgraves Stantec Consulting Services, Inc. 5209 Center Street Williamsburg, VA 23188
File:	203401995	Date:	May 19, 2023

Reference: Line #2226 Partial Rebuild – Clover to Chase City: Halifax, Charlotte, and Mecklenburg Counties, VA: Solid & Hazardous Waste Search

Stantec conducted database searches (Appendix A) for solid and hazardous wastes and petroleum release sites within a 0.5-mile radius of the Line #2226 Partial Rebuild Project – Clover to Chase City (Project). The Project will involve a wreck and rebuild of an approximately 16-mile section of 230 kV transmission line currently numbered Line #235. This section of transmission line will be rebuilt within the existing right-of-way (ROW) beginning at the Clover substation in Halifax County and ending at structure #235/310 near the Chase City substation in Mecklenburg County. All line construction work will take place within the existing, cleared, and maintained transmission line ROW, with no additional ROW proposed. This line will be renumbered as Line #2226.

Stantec obtained publicly available data from the Environmental Protection Agency (EPA) Facility Registry System (FRS), which provides information about facilities, sites, or places subject to environmental regulation or of environmental interest. Although this dataset includes all sites subject to environmental regulation by the EPA or other state authority, such as sites that fall under air emissions or wastewater programs, the results reported here only include those sites which fall under the EPA's hazardous waste, solid waste, remediation, and underground storage tank programs. These sites include Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)/Superfund; Resource Conservation and Recovery Act (RCRA); and brownfield sites. Per this database, there is one registered RCRA site present within a 0.5-mile radius of the Project (Table 1). The Dominion Clover Power Station is an active site located approximately 1,220 ft away from the ROW. No sites are documented within the project ROW.

The Virginia Department of Environmental Quality (DEQ) records were also searched for the presence of solid waste management facilities, Voluntary Remediation Program sites, and petroleum releases within 0.5 mile of the proposed project. Only one solid waste permit site was identified within 0.5-mile of the Project (Permit Number: 900000005394) (Table 2). This is the Dominion/ODEC Clover Power Station solid waste active permit site and is located 1,220 feet from the ROW. Furthermore, the power station ash ponds associated with the solid waste permit are not located in or upgradient of the Project and would have no effect on the Project.

A total of 3 petroleum release sites (PC Numbers: 20162357, 19964209, 20112116) were identified within 0.5 mile of the Project (Table 3). All the sites are closed and the closest site to the Project area is the Jones James Ray Residence (PC Number: 20162357). This site was closed in 2016 and is located 1,290 ft from the ROW. Dominion Energy has a procedure in place to handle petroleum contaminated soil, if encountered. However, as all of the release sites are closed and located outside of the ROW, none of the petroleum release sites are expected to have an impact on the proposed Project.

The Virginia DEQ records were also searched for state registered petroleum tank facilities occurring within a 0.5-mile radius of the proposed Project. This search revealed a total of 5 state registered petroleum tank facilities, with 3 of the sites listed as active (Table 4). The active facilities include: Facility ID Numbers: 7037789, 7030411, and 7012340, and are located 450, 1,500, and 2,210 feet from the ROW, respectively. The closest of these state registered petroleum facilities is the Headwaters Resources, Inc. Dominion Clover Plant (ID Number 7037789).

May 19, 2023

Mr. Lucas Dupont
Page 2 of 5

Reference: **Line #2226 Partial Rebuild – Clover to Chase City: Halifax, Charlotte, and Mecklenburg Counties, VA: Solid & Hazardous Waste Search**

In summary, one RCRA sites, one solid waste permit sites, three petroleum release sites, and five state-registered storage tanks are located within a 0.5-mile radius of the Project. No petroleum release sites are documented as being located within the project ROW and all sites within the vicinity of the project have been closed and are not anticipated to have an impact on the proposed project. No EPA registered brownfield sites, or CERCLA/Superfund sites are located within 0.5 mile of the project area.

If there are any questions regarding the results of these database searches or the contents of this memo please feel free to contact me at your convenience.

Stantec Consulting Services Inc.

Kenrick Presgraves
Senior Ecologist

Phone: 757-220-6869
Kenny.Presgraves@stantec.com

c. Stantec Consulting Services Inc.

Hazardous Waste Tables for the Line #2226 Partial Rebuild Project

Table 1. RCRA sites identified by the EPA as occurring within 0.5 mile of the Line #2226 Partial Rebuild Project.

Site Name	Permit Number	Interest Type	Location	Latitude	Longitude	Status	Generator Type	Proximity to Centerline
Clover Power Station	VAD988187589	RCRA	Clover	36.8691	-78.7048	Active	Small Quantity Generator	1,300 ft

Table 2. Solid waste sites identified by the DEQ as occurring within 0.5 mile of the Line #2226 Partial Rebuild Project.

Site Name	Permit Number	Interest Type	Location	Latitude	Longitude	Status	Proximity to Centerline
Dominion/ODEC Clover Power Station	900000005394	Solid Waste Permit	Clover	36.8691	-78.7048	Active	1,300 ft

Table 3. Petroleum releases identified by the DEQ as occurring within 0.5 mile of the Line #2226 Partial Rebuild Project.

Site Name	PC Number	Location	Latitude	Longitude	Status	Type of Release	Federally Registered Tank?	Proximity to Centerline
Jones James Ray Residence	20162357	Red Oak	36.806378	-78.597304	Closed	Confirmed	No	1,290 ft
B and L Grocery	19964209	Chase City	36.812154	-78.465525	Closed	Confirmed	Yes	2,600 ft
Pallet One	20112116	Chase City	36.810127	-78.465568	Closed	Confirmed	No	2,210 ft

Table 4. State registered storage tanks identified to occur within 0.5 mile of the Line #2226 Partial Rebuild Project.

Facility ID Number	Site Name	AST or UST	Location	Latitude	Longitude	Status	Proximity to Centerline
7037789	Headwaters Resources, Inc. Dom. Clover Plant	AST	Randolph	36.866390	-78.708400	Active	450 ft
7030411	Dominion – Clover Power Station	AST	Clover	36.85278	-78.7057	Active	1,220 ft
7002250	Gholsons Grocery	UST	Red Oak	36.81234	-78.6405	Inactive	230 ft
7017157	Stuarts Grocery	UST	Red Oak	36.806692	-78.601468	Inactive	1,250 ft
7012340	Pallet One of Virginia	AST, UST	Chase City	36.810416	-78.465182	Active AST only	2,210 ft

USFWS-IPaC

Database Search

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Virginia Ecological Services Field Office
6669 Short Lane
Gloucester, VA 23061-4410
Phone: (804) 693-6694 Fax: (804) 693-9032

In Reply Refer To:
Project Code: 2023-0077158
Project Name: Line 2226 Partial Rebuild - Clover to Easters

May 03, 2023

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*). Any activity proposed on National Wildlife Refuge lands must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts see https://www.fws.gov/birds/policies-and-regulations.php.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures see https://www.fws.gov/birds/bird-enthusiasts/threats-to-birds.php.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit https://www.fws.gov/birds/policies-and-regulations/executive-orders/e0-13186.php.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Project Code in the header of this

letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List
- USFWS National Wildlife Refuges and Fish Hatcheries
- Migratory Birds

OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

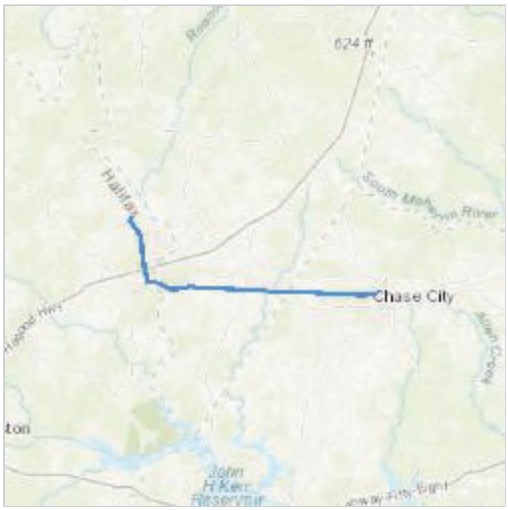
This species list is provided by:

Virginia Ecological Services Field Office
6669 Short Lane
Gloucester, VA 23061-4410
(804) 693-6694

PROJECT SUMMARY

Project Code: 2023-0077158
Project Name: Line 2226 Partial Rebuild - Clover to Easters
Project Type: Distribution Line - Maintenance/Modification - Above Ground
Project Description: Transmission line rebuild.
Project Location:

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@36.83647115,-78.69627576106618,14z



Counties: Charlotte , Halifax , and Mecklenburg counties, Virginia

ENDANGERED SPECIES ACT SPECIES

There is a total of 3 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

MAMMALS

NAME	STATUS
Northern Long-eared Bat *Myotis septentrionalis* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045	Endangered
Tricolored Bat *Perimyotis subflavus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/10515	Proposed Endangered

INSECTS

NAME	STATUS
Monarch Butterfly *Danaus plexippus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743	Candidate

CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

USFWS NATIONAL WILDLIFE REFUGE LANDS AND FISH HATCHERIES

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.

MIGRATORY BIRDS

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

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1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

The birds listed below are birds of particular concern either because they occur on the USFWS Birds of Conservation Concern (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ below. This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the E-bird data mapping tool (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found below.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle *Haliaeetus leucocephalus* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.	Breeds Sep 1 to Jul 31
Chimney Swift *Chaetura pelagica* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Mar 15 to Aug 25
Eastern Whip-poor-will *Antrostomus vociferus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 1 to Aug 20

NAME	BREEDING SEASON
Kentucky Warbler *Oporornis formosus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Apr 20 to Aug 20
Prairie Warbler *Dendroica discolor* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 1 to Jul 31
Prothonotary Warbler *Protonotaria citrea* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Apr 1 to Jul 31
Red-headed Woodpecker *Melanerpes erythrocephalus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 10 to Sep 10
Rusty Blackbird *Euphagus carolinus* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds elsewhere
Wood Thrush *Hylocichla mustelina* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 10 to Aug 31

PROBABILITY OF PRESENCE SUMMARY

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.

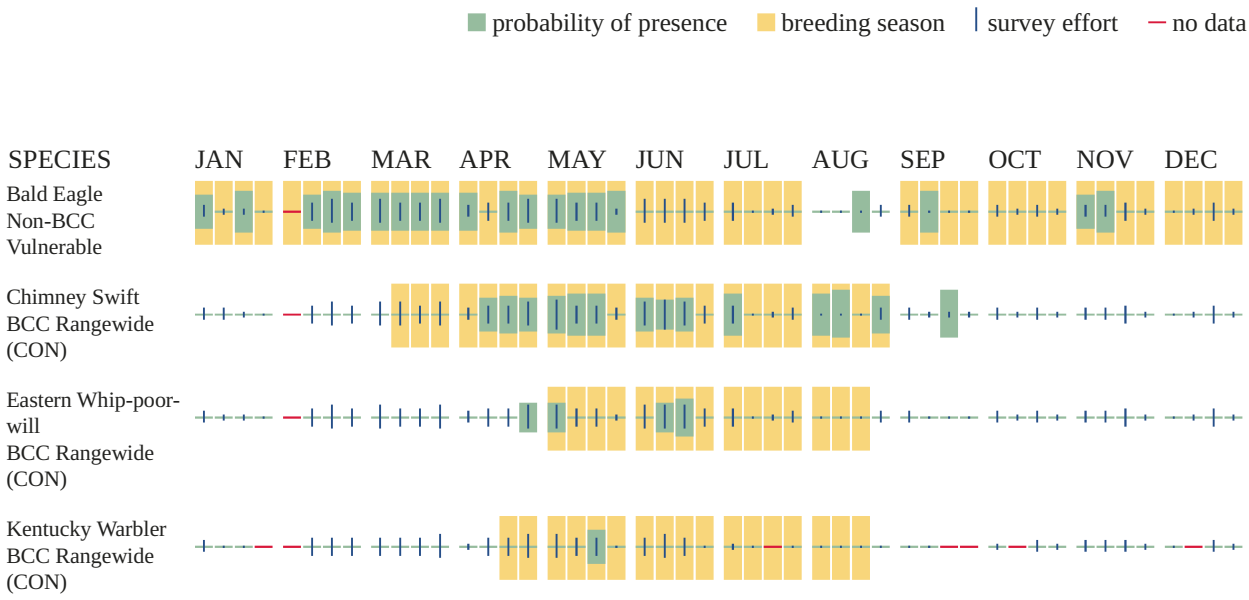
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

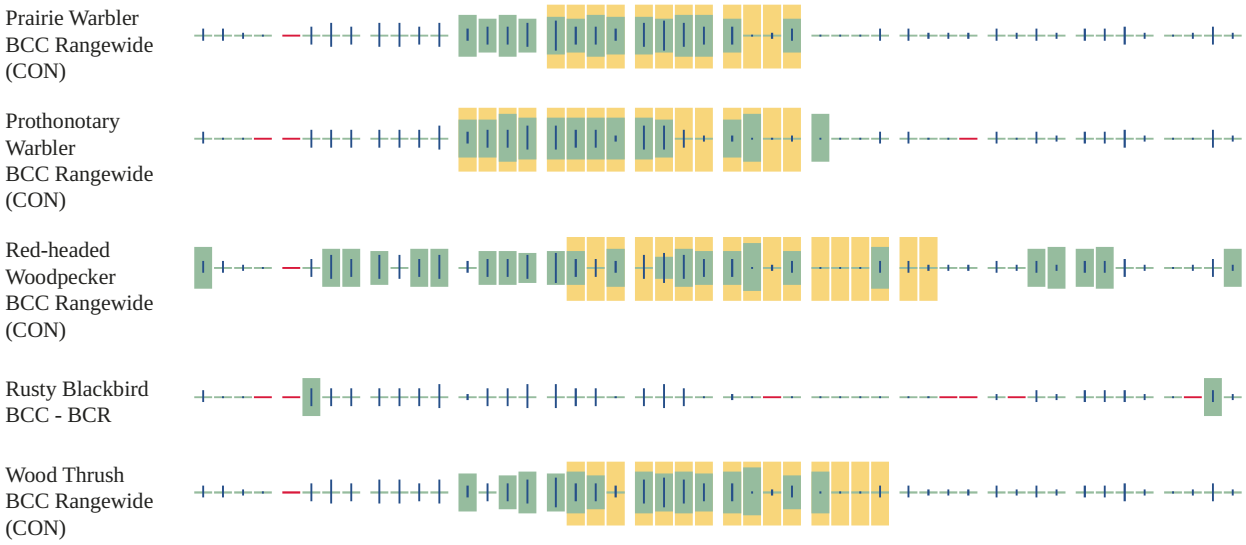
Breeding Season (■)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

No Data (–)
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.





Additional information can be found using the following links:

- Birds of Conservation Concern https://www.fws.gov/program/migratory-birds/species
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide conservation measures for birds https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf

MIGRATORY BIRDS FAQ

Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

Nationwide Conservation Measures describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. Additional measures or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the list of migratory birds that potentially occur in my specified location?

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as

warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the Rapid Avian Information Locator (RAIL) Tool.

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?
The probability of presence graphs associated with your migratory bird list are based on data provided by the Avian Knowledge Network (AKN). This data is derived from a growing collection of survey, banding, and citizen science datasets.

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering or migrating in my area?
To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may query your location using the RAIL Tool and look at the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?
Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are Birds of Conservation Concern (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the Eagle Act requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects
For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the Diving Bird Study and the nanotag studies or contact Caleb Spiegel or Pam Loring.

What if I have eagles on my list?
If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report
The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

IPAC USER CONTACT INFORMATION

Agency: Stantec Consulting Services
Name: Mitch Dannon
Address: 5209 Center Street
City: Williamsburg
State: VA
Zip: 23188
Email mitch.dannon@stantec.com
Phone: 7572206869

DWR VAFWIS

Database Search

VaFWIS Initial Project Assessment Report Compiled on 3/17/2023, 4:31:19 PM

Help

Known or likely to occur within a **2 mile buffer around polygon; center 36.8653000 -78.7075499** in **037 Charlotte County, 083 Halifax County, 117 Mecklenburg County, VA**

View Map of Site Location

466 Known or Likely Species ordered by Status Concern for Conservation
(displaying first 25) (25 species with Status* or Tier I** or Tier II**)

BOVA Code	Status*	Tier**	Common Name	Scientific Name	Confirmed	Database(s)
010214	FESE	IIa	Logperch, Roanoke	Percina rex		BOVA
050022	FTST	Ia	Bat, northern long-eared	Myotis septentrionalis		BOVA
060173	FTST	Ia	Pigtoe, Atlantic	Fusconaia masoni		BOVA
060029	FTST	IIa	Lance, yellow	Elliptio lanceolata		BOVA
050020	SE	Ia	Bat, little brown	Myotis lucifugus		BOVA
050027	FPSE	Ia	Bat, tri-colored	Perimyotis subflavus		BOVA
040293	ST	Ia	Shrike, loggerhead	Lanius ludovicianus		BOVA
040385	ST	Ia	Sparrow, Bachman's	Peucaea aestivalis		BOVA
040379	ST	Ia	Sparrow, Henslow's	Centronyx henslowii		BOVA
010353	ST	IIc	Darter, Carolina	Etheostoma collis	Yes	BOVA,TEWaters,Habitat,SppObs
010070	ST	IIc	Shiner, whitemouth	Notropis alborus	Yes	BOVA,TEWaters,Habitat,SppObs
040292	ST		Shrike, migrant loggerhead	Lanius ludovicianus migrans		BOVA
030063	CC	IIIa	Turtle, spotted	Clemmys guttata		BOVA
030031	CC	IIIc	Kingsnake, scarlet	Lampropeltis elapsoides	Yes	SppObs
010174		Ia	Bass, Roanoke	Ambloplites cavifrons		BOVA
020023		IIa	Salamander, mole	Ambystoma talpoideum		BOVA
040052		IIa	Duck, American black	Anas rubripes		BOVA
040036		IIa	Night-heron, yellow-crowned	Nyctanassa violacea violacea		BOVA
040181		IIa	Tern, common	Sterna hirundo		BOVA
040320		IIa	Warbler, cerulean	Setophaga cerulea		BOVA
040140		IIa	Woodcock, American	Scolopax minor		BOVA
060071		IIa	Lampmussel, yellow	Lampsilis cariosa		BOVA
040203		IIb	Cuckoo, black-billed	Coccyzus erythropthalmus		BOVA
040105		IIb	Rail, king	Rallus elegans		BOVA
060175		IIb	Slabshell, Roanoke	Elliptio roanokensis		BOVA,Habitat

To view **All 466 species** View 466

*FE=Federal Endangered; FT=Federal Threatened; SE=State Endangered; ST=State Threatened; FP=Federal Proposed; FC=Federal Candidate; CC=Collection Concern

**I=VA Wildlife Action Plan - Tier I - Critical Conservation Need; II=VA Wildlife Action Plan - Tier II - Very High Conservation Need; III=VA Wildlife Action Plan - Tier III - High Conservation Need; IV=VA Wildlife Action Plan - Tier IV - Moderate Conservation Need
Virginia Widlife Action Plan Conservation Opportunity Ranking:
a - On the ground management strategies/actions exist and can be feasibly implemented.; b - On the ground actions or research needs have been identified but cannot feasibly be implemented at this time.; c - No on the ground actions or research needs have been identified or all identified conservation opportunities have been exhausted.

Bat Colonies or Hibernacula: **Not Known**

Anadromous Fish Use Streams

N/A

Colonial Water Bird Survey

N/A

Threatened and Endangered Waters (24 Reaches - displaying first 20)

View Map of All Threatened and Endangered Waters

Stream Name	T&E Waters Species						View Map
	Highest TE*	BOVA Code, Status*, Tier**, Common & Scientific Name					
Bluestone Creek (0218814)	ST	010070	ST	IIc	Shiner, whitemouth	Notropis alborus	Yes
Bluestone Creek (0220128)	ST	010070	ST	IIc	Shiner, whitemouth	Notropis alborus	Yes
Bluestone Creek (0221814)	ST	010070	ST	IIc	Shiner, whitemouth	Notropis alborus	Yes
Bluestone Creek (0227616)	ST	010070	ST	IIc	Shiner, whitemouth	Notropis alborus	Yes
Bluestone Creek (0235895)	ST	010070	ST	IIc	Shiner, whitemouth	Notropis alborus	Yes
Bluestone Creek (0242057)	ST	010070	ST	IIc	Shiner, whitemouth	Notropis alborus	Yes
Bluestone Creek (0246652)	ST	010070	ST	IIc	Shiner, whitemouth	Notropis alborus	Yes

Bluestone Creek (0246653)	ST	010070	ST	IIc	Shiner, whitemouth	Notropis alborus	Yes
Bluestone Creek (0246779)	ST	010070	ST	IIc	Shiner, whitemouth	Notropis alborus	Yes
Butcher Creek (0241076)	ST	010070	ST	IIc	Shiner, whitemouth	Notropis alborus	Yes
Butcher Creek (0243814)	ST	010070	ST	IIc	Shiner, whitemouth	Notropis alborus	Yes
Butcher Creek (0244900)	ST	010070	ST	IIc	Shiner, whitemouth	Notropis alborus	Yes
Butcher Creek (0245450)	ST	010070	ST	IIc	Shiner, whitemouth	Notropis alborus	Yes
Butcher Creek (0248140)	ST	010070	ST	IIc	Shiner, whitemouth	Notropis alborus	Yes
Butcher Creek (0251573)	ST	010070	ST	IIc	Shiner, whitemouth	Notropis alborus	Yes
Butcher Creek (0253403)	ST	010070	ST	IIc	Shiner, whitemouth	Notropis alborus	Yes
Butcher Creek (0254724)	ST	010070	ST	IIc	Shiner, whitemouth	Notropis alborus	Yes
Butcher Creek (0255958)	ST	010070	ST	IIc	Shiner, whitemouth	Notropis alborus	Yes
Butcher Creek (0258261)	ST	010070	ST	IIc	Shiner, whitemouth	Notropis alborus	Yes
Butcher Creek (0259592)	ST	010070	ST	IIc	Shiner, whitemouth	Notropis alborus	Yes
Butcher Creek (0265614)	ST	010070	ST	IIc	Shiner, whitemouth	Notropis alborus	Yes
Roanoke Creek (0223951)	ST	010353	ST	IIc	Darter, Carolina	Etheostoma collis	Yes
Roanoke Creek (0225576)	ST	010353	ST	IIc	Darter, Carolina	Etheostoma collis	Yes

To view **All 24 Threatened and Endangered Waters records** View 24

Managed Trout Streams

N/A

Bald Eagle Concentration Areas and Roosts

N/A

Bald Eagle Nests

N/A

Habitat Predicted for Aquatic WAP Tier I & II Species (15 Reaches)

View Map Combined Reaches from Below of Habitat Predicted for WAP Tier I & II Aquatic Species

Stream Name	Tier Species						View Map
	Highest TE*	BOVA Code, Status*, Tier**, Common & Scientific Name					
Bluestone Creek (30101021)	ST	010070	ST	IIc	Shiner, whitemouth	Notropis alborus	Yes
		060175		IIb	Slabshell, Roanoke	Elliptio roanokensis	
Bluestone Creek (30101021)		060175		IIb	Slabshell, Roanoke	Elliptio roanokensis	Yes
Buffalo Creek (30101021)		060175		IIb	Slabshell, Roanoke	Elliptio roanokensis	Yes
Buffalo Creek (30101022)		060175		IIb	Slabshell, Roanoke	Elliptio roanokensis	Yes
Butcher Creek (30101021)	ST	010070	ST	IIc	Shiner, whitemouth	Notropis alborus	Yes
Little Moody Creek (30101021)		060175		IIb	Slabshell, Roanoke	Elliptio roanokensis	Yes
Otter Creek (30101021)		060175		IIb	Slabshell, Roanoke	Elliptio roanokensis	Yes
Roanoke Creek (30101021)	ST	010353	ST	IIc	Darter, Carolina	Etheostoma collis	Yes
Roanoke Creek (30101022)		060175		IIb	Slabshell, Roanoke	Elliptio roanokensis	Yes
Roanoke River (30101022)		060175		IIb	Slabshell, Roanoke	Elliptio roanokensis	Yes
Sandy Creek (30101021)		060175		IIb	Slabshell, Roanoke	Elliptio roanokensis	Yes
Sandy Creek (30101022)		060175		IIb	Slabshell, Roanoke	Elliptio roanokensis	Yes
tributary (30101021)		060175		IIb	Slabshell, Roanoke	Elliptio roanokensis	Yes
tributary (30101022)		060175		IIb	Slabshell, Roanoke	Elliptio roanokensis	Yes
Woodpecker Creek (30101021)		060175		IIb	Slabshell, Roanoke	Elliptio roanokensis	Yes

Habitat Predicted for Terrestrial WAP Tier I & II Species

N/A

Public Holdings: (1 names)

Name	Agency	Level
Staunton River Battlefield State Park	VA Dept. of Conservation and Recreation	State

Compiled on 3/17/2023, 4:31:20 PM I1467540.0 report=IPA searchType= P dist= 3218 poi= 36.8653000 -78.7075499 siteDD= 36.8653000 -78.7075598;36.8650500 -78.7070498;36.8643000 -78.7075198;36.8629600 -78.7080798;36.8606600 -78.7060598;36.8582900 -78.7038598;36.8529100 -78.6990698;36.8520200 -78.6988698;36.8388400 -78.6963898;36.8372700 -78.6961398;36.8304200 -78.6948798;36.8261500 -78.6940898;36.8192000 -78.6920898;36.8163300 -78.6925098;36.8154400 -78.6833598;36.8107100 -78.6687298;36.8122200 -78.6552498;36.8127900 -78.6515298;36.8123400 -78.6458698;36.8115900 -78.6305498;36.8107900 -78.6119398;36.8104400 -78.6022098;36.8101700 -78.5969598;36.8099300 -78.5885098;36.8098400 -78.5868898;36.8097200 -78.5812398;36.8091700 -78.5694198;36.8090100 -78.5650998;36.8088500 -78.5643898;36.8087900 -78.5634098;36.8089500 -78.5621298;36.8087700 -78.5583398;36.8086600 -78.5544198;36.8084500 -78.5481798;36.8081900 -78.5394198;36.8078700 -78.5311198;36.8077000 -78.5259398;36.8075200 -78.5213298;36.8074300 -78.5183198;36.8072600 -78.5136398;36.8070900 -78.5098298;36.8067600 -78.4988798;36.8066000 -78.4920098;36.8064200 -78.4865898;36.8067200 -78.4840498;36.8073000 -78.4786398;36.8079400 -78.4730998;36.8081100 -78.4725298;36.8075300 -78.4720698;36.8073900 -78.4724098;36.8073000 -78.4732698;36.8070500 -78.4752598;36.8064500 -78.4807198;36.8057900 -78.4866098;36.8059000 -78.4892898;36.8061200 -78.4975998;36.8063000 -78.5063698;36.8061500 -78.5076298;36.8063000 -78.5091398;36.8065800 -78.5114798;36.8069200 -78.5221398;36.8072400 -78.5309498;36.8074300 -78.5363998;36.8075900 -78.5395798;36.8079700 -78.5476698;36.8079900 -78.5482098;36.8081800 -78.5543798;36.8084000 -78.5584398;36.8084400 -78.5603198;36.8085100 -78.5617398;36.8084500 -78.5619698;36.8083300 -78.5637098;36.8084900 -78.5648298;36.8086300 -78.5658798;36.8087200 -78.5685998;36.8089000 -78.5740998;36.8090000 -78.5789798;36.8092700 -78.5846398;36.8093900 -78.5878098;36.8095300 -78.5905698;36.8095600 -78.5924698;36.8097200 -78.5968798;36.8099200 -78.6021598;36.8100400 -78.6050498;36.8102500 -78.6105298;36.8103000 -78.6118098;36.8104000 -78.6137798;36.8105300 -78.6169898;36.8105700 -78.6182598;36.8106600 -78.6206698;36.8108100 -78.6245898;36.8108600 -78.6257498;36.8109000 -78.6265398;36.8109900 -78.6285298;36.8111100 -78.6312698;36.8112900 -78.6353798;36.8119700 -78.6465398;36.8122000 -78.6505498;36.8122400 -78.6512098;36.8122200 -78.6516498;36.8121300 -78.6522098;36.8120300 -78.6528198;36.8117900 -78.6552298;36.8115400 -78.6571898;36.8112200 -78.6596598;36.8109500 -78.6621598;36.8107400 -78.6638398;36.8106500 -78.6644998;36.8104900 -78.6657598;36.8102900 -78.6670998;36.8101600 -78.6689798;36.8105800 -78.6701698;36.8113700 -78.6726398;36.8119800 -78.6744298;36.8124200 -78.6758798;36.8129100 -78.6772698;36.8135300 -78.6793098;36.8138100 -78.6800898;36.8145300 -78.6822698;36.8150100 -78.6837398;36.8152000 -78.6856998;36.8154800 -78.6887798;36.8157500 -78.6918198;36.8158900 -78.6933298;36.8163900 -78.6932098;36.8170900 -78.6931298;36.8191100 -78.6928198;36.8210800 -78.6933898;36.8259100 -78.6948198;36.8264200 -78.6948698;36.8298600 -78.6955098;36.8327900 -78.6960298;36.8369000 -78.6967798;36.8394700 -78.6972698;36.8421000 -78.6977298;36.8442100 -78.6981598;36.8473500 -78.6987198;36.8506500 -78.6993298;36.8517700 -78.6993998;36.8525800 -78.6996798;36.8537700 -78.7006698;36.8543400 -78.7011998;36.8552000 -78.7019798;36.8564900 -78.7031598;36.8572600 -78.7039398;36.8581800 -78.7046698;36.8590300 -78.7054698;36.8596800 -78.7060398;36.8598100 -78.7061798;36.8607200 -78.7069798;36.8617000 -78.7078898;36.8629900 -78.7089898;36.8637300 -78.7085498;36.8644800 -78.7081298;36.8653000 -78.7075598;

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Site Location

36,51,55.0 -78,42,27.1
is **the Search Point**

Show Position Rings
○ Yes ◉ No
4 miles and 1 mile at the **Search Point**

Show Search Area
◉ Yes ○ No
2 Search distance miles buffer

Display at center | **Search Point** is not at map center

Base Map Choices
Topography

Map Overlay Choices
Current List: Search, BECAR, BAEANests, TEWaters, TierII, Habitat, Trout, Anadromous

Map Overlay Legend

T & E Waters
Federal
State

Predicted Habitat WAP Tier I & II
Aquatic
Terrestrial

Trout Waters
Class I - IV
Class V - VI

Anadromous Fish Reach
Confirmed
Potential

J23 Impediment

2 mile radius Search Area

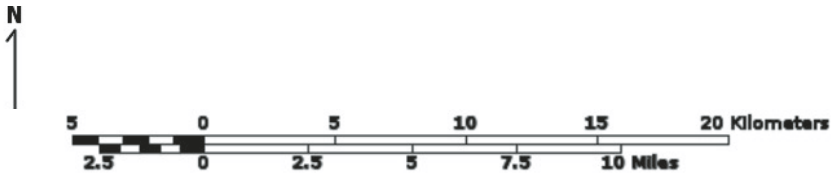
Bald Eagle Concentration Areas and Roosts

Bald Eagle Nests

Data Observation Site

back | Refresh Browser Page | Help

Map Click: Pan | Id | M
Map Scale: In | Zoom | Out
Screen Size: Small | Size | Big



Point of Search 36,51,55.0 -78,42,27.1
Map Location 36,48,51.7 -78,35,24.1

Select **Coordinate System:**
◉ Degrees,Minutes,Seconds Latitude - Longitude
○ Decimal Degrees Latitude - Longitude
○ Meters UTM NAD83 East North Zone
○ Meters UTM NAD27 East North Zone

Base Map source: USGS 1:250,000 topographic maps (see Microsoft terraserver-usa.com for details)

Map projection is UTM Zone 17 NAD 1983 with left 700014 and top 4091941. Pixel size is 49. . Coordinates displayed are Degrees, Minutes, Seconds North and West. Map is currently displayed as 600 columns by 600 rows for a total of 360000 pixles. The map display represents 29904.000000000004 meters east to west by 29904.000000000004 meters north to south for a total of 894.2 square kilometers. The map display represents 98126 feet east to west by 98126 feet north to south for a total of 345.3 square miles.

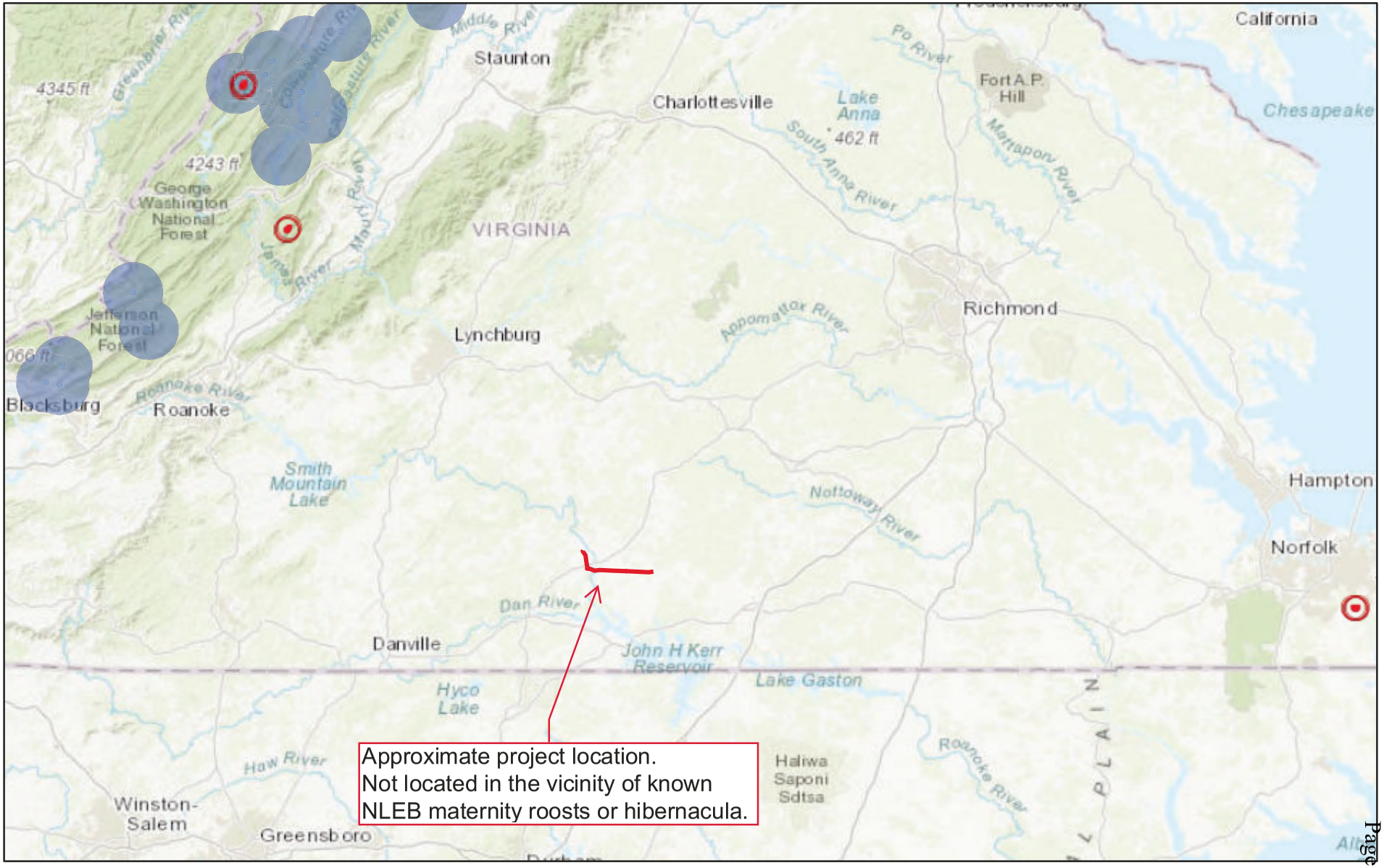
Topographic maps and Black and white aerial photography for year 1990+-
are from the United States Department of the Interior, United States Geological Survey.
Color aerial photography aquired 2002 is from Virginia Base Mapping Program, Virginia Geographic Information Network.
Shaded topographic maps are from TOPO! ©2006 National Geographic http://www.national.geographic.com/topo
All other map products are from the Commonwealth of Virginia Department of Game and Inland Fisheries.

map assembled 2023-03-17 16:33:04 (qa/qc March 21, 2016 12:20 - tn=1467540.0 dist=3218 I)
$poi=36.8653000 -78.7075499

DWR NLEB

Database Search

NLEB Locations and Roost Trees (Line 2226 Partial Rebuild)



3/20/2023, 9:07:54 AM

- NLEB Known Occupied Maternity Roost (Summer Habitat)
- NLEB Hibernaculum 5.5 Mile Buffer
- NLEB Hibernaculum Half Mile Buffer

1:2,022,271

0 12.5 25 50 mi

0 20 40 80 km

Esri, HERE, Garmin, FAO, USGS, EPA, NPS

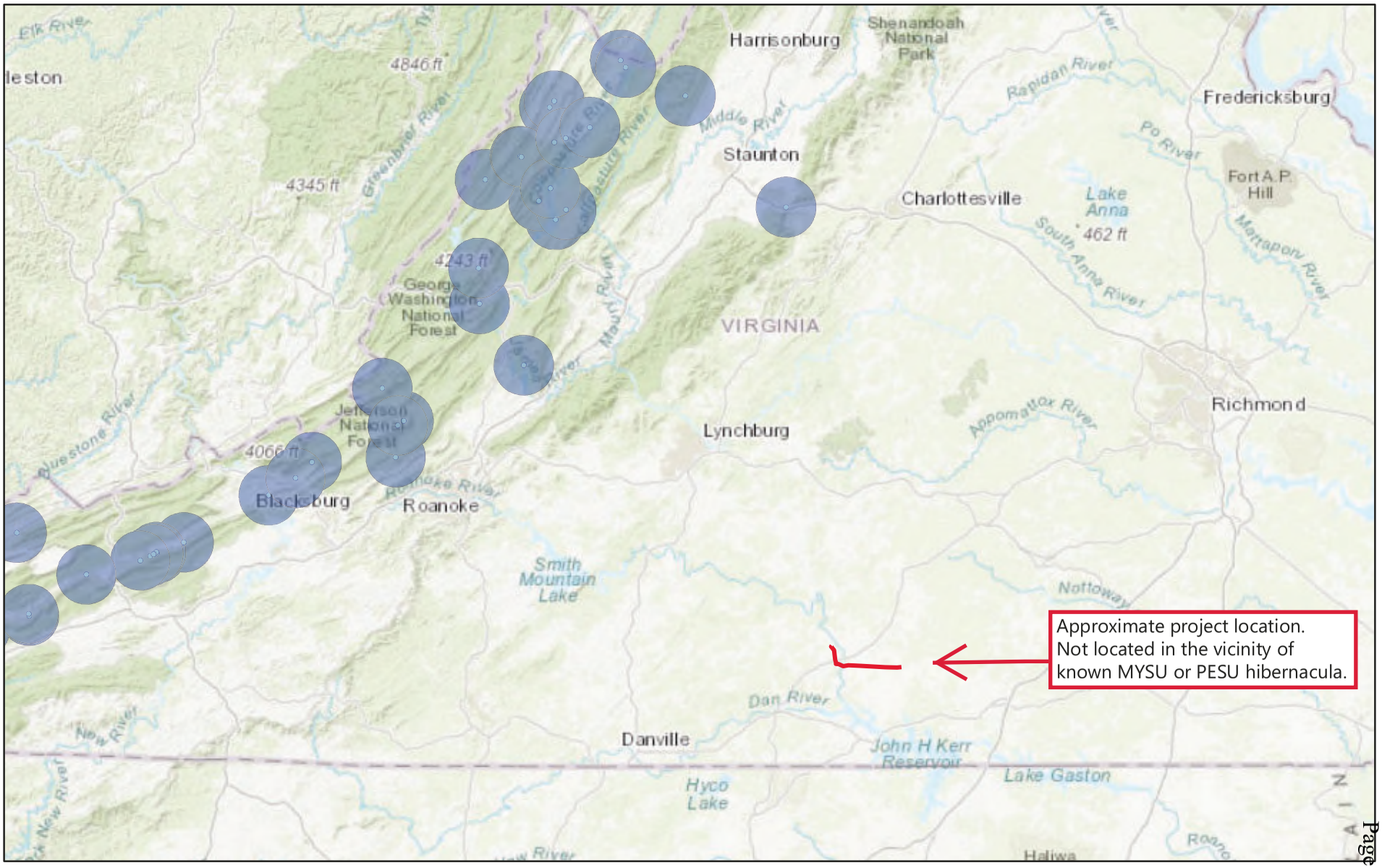
VA Dept. Game & Inland Fisheries

Esri, HERE, Garmin, FAO, USGS, NGA, EPA, NPS |

DWR MYLU/PESU

Database Search

MYLU/PESU Locations (Line 2226 Partial Rebuild)



3/20/2023, 9:21:36 AM

Tri-colored and Little Brown Hibernaculum Half Mile Buffer

Tri-colored and Little Brown Hibernaculum 5.5 Mile Buffer

1:2,022,271

0 12.5 25 50 mi

0 20 40 80 km

Esri, HERE, Garmin, FAO, USGS, EPA, NPS

Dept. Game and Inland Fisheries

Esri, HERE, Garmin, FAO, USGS, NGA, EPA, NPS |

DCR NHDE

Database Search

Natural Heritage Resources

Your Criteria

Taxonomic Group: Select All

Global Conservation Status Rank: Select All

State Conservation Status Rank: Select All

Federal Legal Status: Select All

State Legal Status: Select All

County: Charlotte,Halifax,Mecklenburg

Physiographic Province: Select All

Watershed (8 digit HUC): 03010102 - Middle Roanoke River

Subwatershed (12 digit HUC): RU87 - Roanoke River-John H Kerr Reservoir-Sandy Creek-Buffalo Creek,RU91 - Bluestone Creek-Otter Creek-Moody Creek,RU92 - Little Bluestone Creek

Search Run: 3/17/2023 19:19:00 PM

Result Summary

Total Species returned: 5

Total Communities returned: 0

Click scientific names below to go to NatureServe report.

Click column headings for an explanation of species and community ranks.

Common Name/Natural Community	Scientific Name	Scientific Name Linked	Global Conservation Status Rank	State Conservation Status Rank	Federal Legal Status	State Legal Status	Statewide Occurrences	Virginia Coastal Zone
Charlotte								
Southern Piedmont Middle Roanoke Bluestone Creek-Otter Creek-Moody Creek								
FISH								
Whitemouth Shiner	Notropis alborus	Notropis alborus	G4	S1	None	LT	5	N
VASCULAR PLANTS								
Winter Quillwort	Isoetes hyemalis	Isoetes hyemalis	G2G3	S2	SOC	None	10	N

Common Name/Natural Community	Scientific Name	Scientific Name Linked	Global Conservation Status Rank	State Conservation Status Rank	Federal Legal Status	State Legal Status	Statewide Occurrences	Virginia Coastal Zone
Halifax								
Southern Piedmont								
Middle Roanoke								
Roanoke River-John H Kerr Reservoir-Sandy Creek-Buffalo Creek								
VASCULAR PLANTS								
Yadkin hedge-nettle	Stachys matthewsii	Stachys matthewsii	G1G2	S1	SOC	None	5	N
Mecklenburg								
Southern Piedmont								
Middle Roanoke								
Bluestone Creek-Otter Creek-Moody Creek								
VASCULAR PLANTS								
Winter Quillwort	Isoetes hyemalis	Isoetes hyemalis	G2G3	S2	SOC	None	10	N
Little Bluestone Creek								
VASCULAR PLANTS								
Winter Quillwort	Isoetes hyemalis	Isoetes hyemalis	G2G3	S2	SOC	None	10	N

Note: On-line queries provide basic information from DCR's databases at the time of the request. They are NOT to be substituted for a project review or for on-site surveys required for environmental assessments of specific project areas.

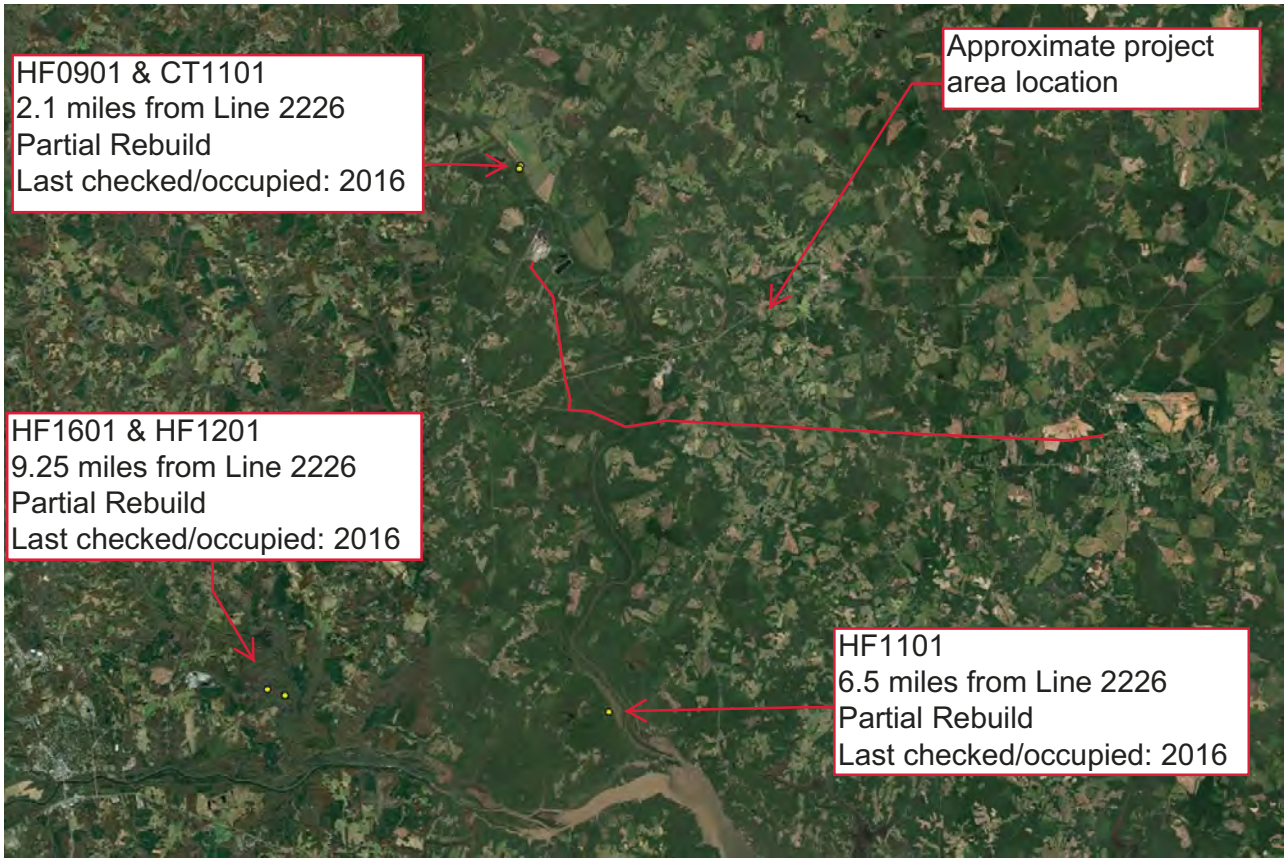
For Additional Information on locations of Natural Heritage Resources please submit an information request.

To Contribute information on locations of natural heritage resources, please fill out and submit a rare species sighting form.

CCB BALD EAGLE

Database Search

CCB Mapping Portal



Layers: VA Eagle Nest Locator

Map Center [longitude, latitude]: [-78.65421295166016, 36.8037869853087]

Map Link:
https://www.ccbbirds.org/maps/#layer=VA+Eagle+Nest+Locator&zoom=12&lat=36.8037869853087&lng=-78.65421295166016&legend=legend_tab_7c321b7e-e523-11e4-aaa0-0e0c41326911&base=World+Imagery+%28ESRI%29

Report Generated On: 03/20/2023

USFWS BALD EAGLE CONCENTRATION AREAS

Database Search

Bald Eagle Concentration Areas

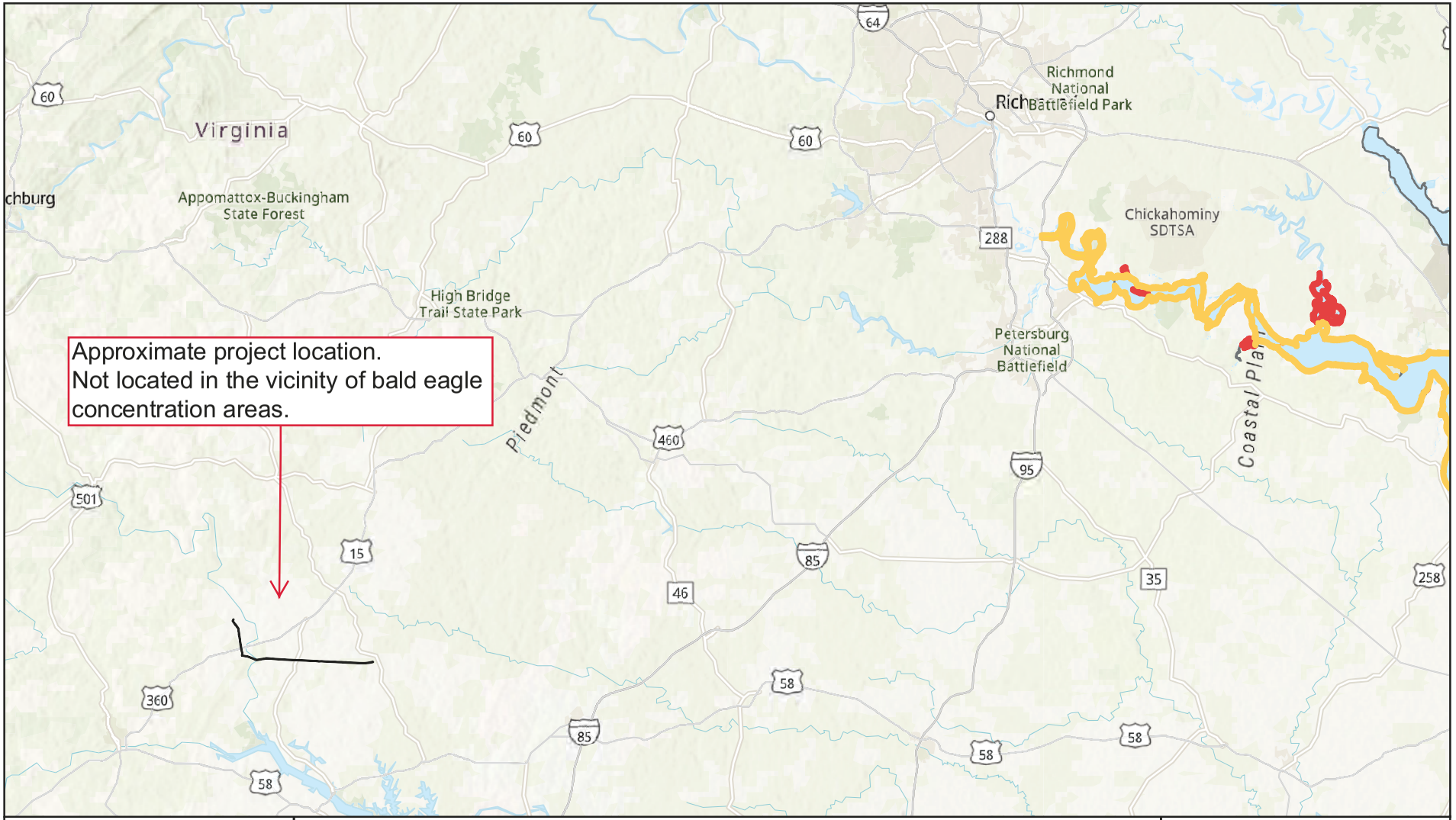
March 16, 2023

1:144,448

0 1 2 4 mi

0 1.5 3 6 km

Earthstar Geographics, County of Prince William, Stafford County GIS Office, VGIN, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA,



Legend

Bald Eagle Concentration Areas

- December 15 to March 15
- May 15 to August 31 and December 15 to March 15
- Project Limits

Bald Eagle Concentration Areas

Line #2226 Partial Rebuild Project - Clover to Easters

Esri, CGIAR, USGS, VGIN, Esri, HERE, Garmin, SafeGraph, FAO, METI/NASA, USGS, EPA, NPS, Baylor University, Texas Parks & Wildlife, Esri, HERE, Garmin, SafeGraph, FAO, METI/NASA, USGS, EPA, NPS

2023

Coordinate System: WGS 1984 Web Mercator Auxiliary Sphere

N

0 10 20 Mi

0 20 40 Km

COMMONWEALTH of VIRGINIA

DEPARTMENT OF CONSERVATION AND RECREATION

June 20, 2023

Kenrick Presgraves
Stantec Consulting Services
5209 Center Street
Williamsburg, VA 23188

Re: 203401995, Line 226 Partial Rebuild- Clover to Chase City

Dear Mr. Presgraves:

The Department of Conservation and Recreation's Division of Natural Heritage (DCR) has searched its Biotics Data System for occurrences of natural heritage resources from the area outlined on the submitted map. Natural heritage resources are defined as the habitat of rare, threatened, or endangered plant and animal species, unique or exemplary natural communities, and significant geologic formations.

According to the information in our files, the Kerr East Conservation Site and the Kerr Northwest Conservation Site are located adjacent to the right-of-way (ROW) for the power line under construction. Conservation sites are tools for representing key areas of the landscape that warrant further review for possible conservation action because of the natural heritage resources and habitat they support. Conservation sites are polygons built around one or more rare plant, animal, or natural community designed to include the element and, where possible, its associated habitat, and buffer or other adjacent land thought necessary for the element's conservation. Conservation sites are given a biodiversity significance ranking based on the rarity, quality, and number of element occurrences they contain; on a scale of 1-5, 1 being most significant. The Kerr East Conservation Site has been assigned a biodiversity rank of B5, which represents a site of general interest/open space significance. The natural heritage resources associated with this site are:

	Northern Coastal Plain / Piedmont Mesic Mixed Hardwood Forest	G5/S5/NL/NL
Rorippa sessiliflora	Stalkless yellow cress	G5/S2/NL/NL

Mixed hardwood forests are widespread in mesic to submesic, infertile habitats throughout the Coastal Plain and Piedmont. The Northern Coastal Plain / Piedmont Type encompasses some compositional variation related to geography, as well as a considerable gradient in apparent site moisture potential, from that of very mesic ravine bottoms to that of submesic, convex upper slopes and crests. Forests in this group occupy mesic uplands, ravines, lower slopes, and well-drained "flatwoods" on deep, acidic, relatively nutrient-poor soils. The most typical overstories contain mixtures of American beech (*Fagus grandifolia*), oaks (*Quercus* spp., varying by region), tulip-tree (*Liriodendron tulipifera*), and hickories (*Carya* spp.), but a wide variety of hardwood associates occur (Fleming et al. 2021). American hornbeam (*Carpinus caroliniana* ssp. *caroliniana* and ssp. *virginiana*), flowering dogwood (*Cornus florida*), American strawberry-bush (*Euonymus americanus*) and American holly (*Ilex opaca* var. *opaca*) are prominent understory plants. In mesic "flatwoods" or "swamp islands" of the southeastern Virginia Coastal Plain, silky camellia (*Stewartia malacodendron*) and big-leaf snowbell (*Styrax grandifolius*) are

characteristic small trees. These communities lack the lush herbaceous layers of Basic Mesic Forests, although species such as Christmas fern (*Polystichum acrostichoides*), New York fern (*Parathelypteris noveboracensis*), and white wood aster (*Eurybia divaricata*) may form moderately dense populations. Along with Christmas fern, downy rattlesnake-plantain (*Goodyera pubescens*), Virginia heartleaf (*Hexastylis virginica*), and partridge-berry (*Mitchella repens*) are frequent evergreen herbs in mesic mixed hardwood forests. Although mesic mixed hardwood forests still cover sizeable areas east of the mountains in Virginia, their extent and compositional integrity have been reduced by agriculture, development, and repeated logging (Fleming 2021).

The Stalkless yellow cress is a state rare biennial herb that inhabits wet areas such as gravel and sand bars of rivers, muddy banks of streams, floodplain forests, bottomland clearings and fields, wet exposed or marshy shores of ponds and lakes. This plant blooms from April to July (Weakley, in prep; Radford et al., 1968). In Virginia, stalkless yellow-cress has been documented at nine locations, three of which are historic, in the piedmont and coastal plain.

The Kerr Northwest Conservation Site has been assigned a biodiversity rank of B2, which represents a site of very high significance. The natural heritage resources associated with this site are:

Carex straminea	Straw Sedge	G5/S1/NL/NL
Stachys matthewsii	Yadkin hedge-nettle	G1G2/S1/SOC/NL

The Straw Sedge is a perennial plant that grows in dense mats or clumps with stems up to1 meter in height. This sedge is found in widely separated populations throughout its range. In Virginia the Straw Sedge is found in wet depression pools or flood-scoured bedrock terraces along the Potomac River, mostly in the Great Falls-Mather Gorge area. It has also been found in wet fields along the South River and Roanoke River. There are currently 3 documented occurrences in Virginia (Virginia Botanical Associates, 2023).

The Yadkin hedge-nettle is a member of the mint family (Lamiaceae), is a rhizomatous perennial that grows to about 1 meter tall. Like most mints, the leaves are opposite, and the stems are square. The leaves are 5-10cm long and the flowers are pink to dark pink. This plant blooms in early summer. It is shade-intolerant, occurring along forest edges in wet meadows, and in clearings of the southern Piedmont, as well as on calcareous river shores of the Coastal Plain. This rare species is known only from southern Virginia and coastal North Carolina. It was first collected in Surry County, Virginia and has been subject to much taxonomic and nomenclatural confusion until recently (Weakley et al., 2012). Please note, the Yadkin hedge-nettle has been designated as a species of concern (SOC) by US Fish and Wildlife Service (USFWS), however this designation has no official legal status.

DCR recommends avoiding ground disturbing activities, staging of equipment and tree removal outside of the existing right-of-way (ROW) when working within the conservation sites to minimize impacts to documented natural heritage resources.

DCR recommends the development and implementation of an invasive species plan to be included as part of the maintenance practices for the entirety of the ROW, but with special attention paid to areas along Kerr East and Kerr Northwest Conservation Sites. The invasive species plan should include an invasive species inventory for the project area based on the current DCR Invasive Species List (http://www.dcr.virginia.gov/natural-heritage/document/nh-invasive-plant-list-2014.pdf) and methods for treating the invasives. DCR also recommends the ROW restoration and maintenance practices planned include appropriate revegetation using native species in a mix of grasses and forbs, robust monitoring, and an adaptive management plan to provide guidance if initial revegetation efforts are unsuccessful or if invasive species outbreaks occur.

Additionally, according to DCR's predicted suitable habitat modeling, there is a potential for the Whitemouth Shiner (*Notropis alborus*, G4/S1/NL/LT) to occur in Bluestone Creek, which is crossed by the project area if suitable habitat exists on site.

The Whitemouth Shiner is known from the Roanoke River drainage in Virginia and from other Atlantic Slope drainages in North Carolina and South Carolina (NatureServe, 2009). It inhabits warm, clear, or somewhat turbid, small to medium sized creeks in the middle and lower Piedmont. This species may be found in shallow, small pools and in deep and shallow portions of long pools, in places having a silt, sand, and bedrock substrate. Please note that this species is currently classified as threatened by the Virginia Department of Wildlife (VDWR).

Impoundment, channelization, siltation, and agricultural runoff are threats to the habitat of the Whitemouth shiner (Burkhead and Jenkins, 1991).

To minimize adverse impacts to the aquatic ecosystem as a result of the proposed activities, DCR supports the implementation of and recommends strict adherence to applicable state and local erosion and sediment control/storm water management laws and regulations. If instream work becomes necessary, due to the legal status of the Whitemouth shiner, DCR recommends coordination with Virginia's regulatory authority for the management and protection of this species, the VDWR, to ensure compliance with the Virginia Endangered Species Act **(**VA ST §§ 29.1-563 – 570).

Furthermore, if tree removal occurs outside of the ROW, the proposed project will impact Ecological Cores **(C3, C4, and C5)** as identified in the Virginia Natural Landscape Assessment (https://www.dcr.virginia.gov/natural-heritage/vaconvisvnla). Mapped cores in the project area can be viewed via the Virginia Natural Heritage Data Explorer, available here: http://vanhde.org/content/map.

Ecological Cores are areas of at least 100 acres of continuous interior, natural cover that provide habitat for a wide range of species, from interior-dependent forest species to habitat generalists, as well as species that utilize marsh, dune, and beach habitats. Interior core areas begin 100 meters inside core edges and continue to the deepest parts of cores. Cores also provide the natural, economic, and quality of life benefits of open space, recreation, thermal moderation, water quality (including drinking water recharge and protection, and erosion prevention), and air quality (including sequestration of carbon, absorption of gaseous pollutants, and production of oxygen). Cores are ranked from C1 to C5 (C5 being the least significant) using nine prioritization criteria, including the habitats of natural heritage resources they contain.

Impacts to cores occur when their natural cover is partially or completely converted permanently to developed land uses. Habitat conversion to development causes reductions in ecosystem processes, native biodiversity, and habitat quality due to habitat loss; less viable plant and animal populations; increased predation; and increased introduction and establishment of invasive species.

DCR recommends avoidance of impacts to cores. When avoidance cannot be achieved, DCR recommends minimizing the area of impacts overall and concentrating the impacted area at the edges of cores, so that the most interior remains intact.

Under a Memorandum of Agreement established between the Virginia Department of Agriculture and Consumer Services (VDACS) and the DCR, DCR represents VDACS in comments regarding potential impacts on state-listed threatened and endangered plant and insect species. The current activity will not affect any documented state-listed plants or insects.

There are no State Natural Area Preserves under DCR's jurisdiction in the project vicinity. Please note this project crosses the Staunton River, which has been designated as a scenic river in the state of Virginia.

New and updated information is continually added to Biotics. Please re-submit a completed order form and project map for an update on this natural heritage information if the scope of the project changes and/or six months has passed before it is utilized.

A fee of $125.00 has been assessed for the service of providing this information. Please find attached an invoice for that amount. Please return one copy of the invoice along with your remittance made payable to the Treasurer

of Virginia, DCR Finance, 600 East Main Street, 24th Floor, Richmond, VA 23219. Payment is due within thirty days of the invoice date. Please note late payment may result in the suspension of project review service for future projects.

The Virginia Department of Wildlife Resources (VDWR) maintains a database of wildlife locations, including threatened and endangered species, trout streams, and anadromous fish waters that may contain information not documented in this letter. Their database may be accessed from http://vafwis.org/fwis/ or contact Amy Martin at 804-367-2211 or amy.martin@dwr.virginia.gov.

Should you have any questions or concerns, feel free to contact me at 804-371-2708. Thank you for the opportunity to comment on this project.

Sincerely,

S. René Hypes
Natural Heritage Project Review Coordinator

Cc: Amy Martin, VDWR

Literature Cited

Burkhead, N.M. and R.E. Jenkins. 1991. Whitemouth shiner. In Virginia's Endangered Species: Proceedings of a Symposium. K. Terwilliger ed. The McDonald and Woodward Publishing Company, Blacksburg, VA.

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Commonwealth of Virginia

VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY

1111 E. Main Street, Suite 1400, Richmond, Virginia 23219
P.O. Box 1105, Richmond, Virginia 23218
(800) 592-5482
www.deq.virginia.gov

Matthew J. Strickler
Secretary of Natural Resources

David K. Paylor
Director
(804) 698-4000

August 13, 2019

Mr. Jason E. Williams
Director Environmental Services
Dominion Energy
5000 Dominion Boulevard
Glen Allen, VA 23060

Transmitted electronically: jason.e.william@dominionenergy.com

Subject: Dominion Energy (Electric Transmission) – Annual Standards and Specifications for Erosion & Sediment Control and Stormwater Management (AS&S for ESC and SWM)

Dear Mr. Williams:

The Virginia Department of Environmental Quality ("DEQ") hereby approves the Annual Standards and Specifications for Erosion & Sediment Control and Stormwater Management for Dominion Energy (Electric Transmission) dated "May 29, 2019". This coverage is effective from August 13, 2019 to August 12, 2020.

To ensure compliance with approved specifications, the Virginia Erosion and Sediment Control Law and the Virginia Stormwater Management Act, DEQ staff will conduct random site inspections, respond to complaints, and provide on-site technical assistance with specific erosion and sediment control and stormwater management measures and plan implementation.

Please note that your approved Annual Standards and Specifications include the following requirements:

1. Variance, exception, and deviation requests must be submitted separately from this Annual Standards and Specifications submission to DEQ. DEQ may require project-specific plans associated with variance requests to be submitted for review and approval.

2. The following information must be submitted to DEQ for each project at least two weeks in advance of the commencement of regulated land-disturbing activities. Notifications shall be sent by email to: StandardsandSpecs@deq.virginia.gov
   - i: Project name or project number;
   - ii: Project location (including nearest intersection, latitude and longitude, access point);
   - iii: On-site project manager name and contact info;
   - iv: Responsible Land Disturber (RLD) name and contact info;
   - v: Project description;

vi: Acreage of disturbance for project;
vii: Project start and finish date; and
viii: Any variances/exceptions/waivers associated with this project.

3. Project tracking of all regulated land disturbing activities (LDA) must be submitted to the DEQ on a bi-annual basis. Project tracking records shall contain the same information as required in the two week e-notifications for each regulated LDA.
4. Erosion & Sediment Control and Stormwater Management plan review and approval must be conducted by DEQ-Certified plan reviewers and documented in writing.

To ensure an efficient information exchange and response to inquiries, the DEQ Central Office is your primary point of contact. Central Office staff will coordinate with our Regional Office staff as appropriate.

Thank you very much for your submission and continued efforts to conserve and protect Virginia's precious natural resources.

Sincerely,

Jaime B. Robb

Jaime B. Robb, Manager
Office of Stormwater Management

Cc: Amelia Boschen, *Amelia.h.boschen@dominionenergy.com*
Elizabeth Hester, *Elizabeth.l.hester@dominionenergy.com*
Stacey Ellis, *Stacey.t.ellis@dominionenergy.com*

Case Decision Information:
As provided by Rule 2A:2 of the Supreme Court of Virginia, you have thirty days from the date of service (the date you actually received this decision or the date it was mailed to you, whichever occurred first) within which to appeal this decision by filing a notice of appeal in accordance with the Rules of the Supreme Court of Virginia with the Director, Department of Environmental Quality. In the event that this decision is served on you by mail, three days are added to that period.

COMMONWEALTH of VIRGINIA

Travis A. Voyles
Secretary of Natural and Historic Resources

Department of Historic Resources
2801 Kensington Avenue, Richmond, Virginia 23221

Julie V. Langan
Director
Tel: (804) 367-2323
Fax: (804) 367-2391
www.dhr.virginia.gov

May 2, 2023

Roxana Demeter
Dominion Energy Virginia
Electric Transmission
P.O. Box 26666
Richmond, VA 23261

Re: Clover - Chase City 230 kV Electric Transmission Rebuild
Halifax, Charlotte, and Mecklenburg Counties Virginia
DHR File No. 2023-3660

Dear Ms. Demeter

We have received your request for comments on the project referenced above. The undertaking, as presented, involves the rebuild of 16 miles of an existing 230 kV transmission line. Our comments are provided as technical assistance to Dominion. We have not been notified by any state or federal agency of their involvement in this project; however, we reserve the right to provide additional comment pursuant to the National Historic Preservation Act, if applicable.

Based on the submission, Dominion plans to prepare an application for a certificate of public convenience and necessity (CPCN) from the State Corporation Commission (SCC). Typically, we recommend that Dominion follow the *Guidelines for Assessing Impacts of Proposed Electric Transmission Lines and Associated Facilities on Historic Resources in the Commonwealth of Virginia* developed by DHR to assist project proponents in developing transmission line projects that minimize impacts to historic resources.

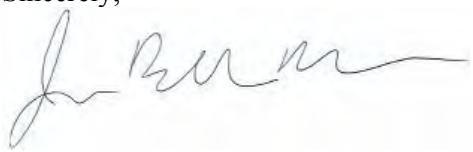
Typically, we recommend that the project proponent establish a study area for each route alternative under consideration and gather information on known resources. A qualified cultural resources consultant in the appropriate discipline should perform an assessment of impact for each known historic resource present within the proposed study area.

Once the route alternatives have been finalized, DHR recommends that full archaeological and architectural surveys be performed to determine the effect of the project on all historic resources listed in or eligible for listing in the National Register. This process involves the identification and recordation of all archaeological sites and structures greater than 50 years of age, the evaluation of those resources for listing in the National Register, determining the degree of impact of the project on eligible resources, and developing a plan to avoid, minimize, or mitigate any negative impacts. Comments received from the public or other stakeholder

regarding impacts to specific historic resources should be addressed as part of this survey and assessment process.

Thank you for seeking our comments on this project. If you have any questions at this time, please do not hesitate to contact me at jennifer.bellville-marrion@dhr.virginia.gov.

Sincerely,



Jenny Bellville-Marrion, Project Review Archaeologist
Review and Compliance Division

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August 2, 2023

Christa McDonald
Dominion Energy Virginia
Electric Transmission
P.O. Box 26666
Richmond, VA 23261

Re: Dominion Energy Virginia's Line #235 230 kV Rebuild from Clover Substation to Structure #235/310 Project
Halifax, Mecklenburg, and Charlotte Counties, Virginia
DHR File No. 2023-4578

Dear Ms. McDonald,

We have received your request for comments on the project referenced above. The undertaking, as presented, involves the rebuild of 16 miles the existing 230 kV Line #235 between the existing Clover Substation and existing Structure #235/310 using higher capacity conductors, renumber the rebuilt line segment to Line #2226, and complete work at Clover Substation to support the higher capacity conductor. Our comments are provided as technical assistance to Dominion. We have not been notified by any state or federal agency of their involvement in this project; however, we reserve the right to provide additional comment pursuant to the National Historic Preservation Act, if applicable.

Based on the notice, the proposed project does meet the requirements to be filed with the Virginia State Corporation Commission (SCC). Typically, for SCC permitted projects, we recommend that Dominion follows the *Guidelines for Assessing Impacts of Proposed Electric Transmission Lines and Associated Facilities on Historic Resources in the Commonwealth of Virginia,* developed by DHR and the SCC to assist project proponents in developing transmission line projects that minimize impacts to historic resources.

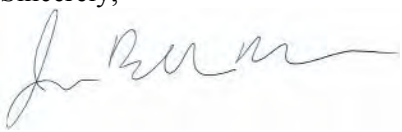
Typically, we recommend that the project proponent establish a study area for each route alternative under consideration and gather information on known resources. A qualified cultural resources consultant in the appropriate discipline should perform an assessment of impact for each known historic resource present within the proposed study area.

Once the route alternatives have been finalized, DHR recommends that full archaeological and architectural surveys be performed to determine the effect of the project on all historic resources listed in or eligible for listing in the National Register. This process involves the identification and recordation of all archaeological

sites and structures greater than 50 years of age, the evaluation of those resources for listing in the National Register, determining the degree of impact of the project on eligible resources, and developing a plan to avoid, minimize, or mitigate any negative impacts. Comments received from the public or other stakeholder regarding impacts to specific historic resources should be addressed as part of this survey and assessment process.

Thank you for seeking our comments on this project. If you have any questions at this time, please do not hesitate to contact me at jennifer.bellville-marrion@dhr.virginia.gov.

Sincerely,



Jenny Bellville-Marrion, Project Review Archaeologist
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STAGE I PRE-APPLICATION ANALYSIS FOR THE PROPOSED DOMINION ENERGY VIRGINIA LINE #235 230 kV REBUILD FROM CLOVER SUBSTATION TO STRUCTURE #235/310, CHARLOTTE, HALIFAX, AND MECKLENBURG COUNTIES, VIRGINIA

August 2, 2023

Prepared for:

Dominion Energy Virginia
Attention: Christiaanna McDonald
5000 Dominion Boulevard
Glen Allen, VA 23060
571-319-2582

Prepared by:

Sandra DeChard
Senior Architectural Historian

and

Brynn Stewart
Senior Principal Investigator

Stantec Consulting Services Inc.
1011 Boulder Springs Drive, Suite 225,
Richmond VA 23225-4951
(804) 267-3474

Sign-off Sheet

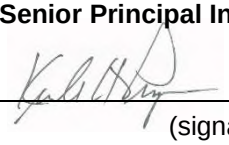
The conclusions in the Report are Stantec's professional opinion, as of the time of the Report, and concerning the scope described in the Report. The opinions in the document are based on conditions and information existing at the time the document was published and do not take into account any subsequent changes. The Report relates solely to the specific project for which Stantec was retained and the stated purpose for which the Report was prepared. The Report is not to be used or relied on for any variation or extension of the project, or for any other project or purpose, and any unauthorized use or reliance is at the recipient's own risk.

Stantec has assumed all information received from the Client and third parties in the preparation of the Report to be correct. While Stantec has exercised a customary level of judgment or due diligence in the use of such information, Stantec assumes no responsibility for the consequences of any error or omission contained therein.

This Report is intended solely for use by the Client in accordance with Stantec's contract with the Client. While the Report may be provided to applicable authorities having jurisdiction and others for whom the Client is responsible, Stantec does not warrant the services to any third party. The report may not be relied upon by any other party without the express written consent of Stantec, which may be withheld at Stantec's discretion.

Prepared by  _____
(signature)
Sandra DeChard, Senior Architectural Historian

Reviewed by  _____
(signature)
Brynn Stewart, Senior Principal Investigator

Approved by  _____
(signature)
Kenny Presgraves, Senior Ecologist

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Executive Summary

Stantec Consulting Services Inc. (Stantec) was retained by Dominion Energy Virginia (Dominion Energy) to conduct a Stage I Pre-Application Analysis for the proposed Line #235 230 kV Rebuild Project – Clover Substation to Structure #235/310 (Rebuild Project) in Charlotte, Halifax, and Mecklenburg Counties, Virginia. The Rebuild Project proposed by Dominion Energy is necessary in order to maintain the structural integrity and reliability of its transmission system and to comply with mandatory North American Electric Reliability Corporation (NERC) Reliability Standards. The project will be conducted entirely within an existing right-of-way (ROW) and consists of approximately 16 miles of existing 230 kV transmission line. The Rebuild Project will require the tear-down and replacement of 126 existing transmission structures between the Clover Substation in Halifax County and Structure #235/310 near the Easters Substation in Mecklenburg County. Structure #235/310, which is 135 feet in height, will not be replaced. The existing structures are predominantly single circuit 230 kV wood H-frame structures. Dominion Energy proposes to replace the current structures with 125 230 kV single circuit weathering steel H-frames, and one weathering steel three pole structure. The line will be redesignated from Line #235 to Line #2226. All proposed structure heights and locations provided in this report are based upon preliminary engineering and are subject to final design. Based on this information, the proposed structures, on average, will increase in height by approximately 12 feet with a maximum total height increase of 37 feet. Six structures will decrease in height with a maximum of 9 feet.

Background research for the Stage I Pre-Application Analysis was conducted in May 2023 by Stantec staff. The preliminary background research and the field study was conducted pursuant to the *Guidelines for Assessing Impacts of Proposed Electric Transmission Lines and Associated Facilities on Historic Resources in the Commonwealth of Virginia* (Virginia Department of Historic Resources [DHR] 2008) for proposed transmission line improvements.

As detailed by DHR guidance, consideration was given to National Historic Landmark (NHL) properties located within a 1.5-mile radius of the project centerline; National Register of Historic Places (NRHP)-listed properties, battlefields, and historic landscapes located within a 1.0-mile radius of the project centerline; NRHP-eligible sites located within a 0.5-mile radius of the project centerline; and archaeological sites located within the project ROW. Five previously surveyed architectural resources were identified for inclusion in the Stage I analysis. Three previously recorded archaeological resources within the existing ROW were also identified during this phase of the project.

Recommendations

Architectural Resources

No NHL architectural resources were located within a 1.5-mile radius of the Rebuild Project centerline. Two NRHP-listed resources and two NRHP-listed historic districts were located within 1.0 mile of the centerline. Additionally, the NRHP potentially eligible Staunton River Bridge Battlefield (DHR #019-5190) was also identified within 1.0 mile of the centerline and also crosses the Clover Substation property. The table below details the recommendations for the project. As the study was completed prior to filing a State Corporation Commission (SCC) application, all digital images were taken from public ROW, unless permission from the landowner was granted at the time of the survey, and/or Dominion Energy easements.

Based on preliminary proposed structure heights, the proposed Rebuild Project would increase the height of the structures, on average, by 12 feet with a maximum total height increase of 37 feet. Six structures will decrease in height. Based on the analysis of the proposed structures, it is recommended that the Rebuild Project would have No Visual Impact to Black Walnut (DHR #041-0006), the Chase City High School/Maple Manor Apartments (DHR #186-0002), Chase City Warehouse and Commercial Historic District (DHR #186-5005), and the MacCallum More and Hudgins House Historic District (DHR #186-5020). The proposed Project, based on the visual effects evaluation, is recommended to have a Minimal Impact to the Staunton River Bridge Battlefield (DHR #019-5190).

Previously Recorded Architectural Resources Considered under the Stage I Pre-Application Guidelines

DHR #	Resource Name	DHR/NRHP Status	Distance to Centerline (Feet)	Distance to the Closest Structure (Feet)	Impacts
019-5190	Staunton River Bridge Battlefield	Potentially Eligible	699	695	Minimal
041-0006	Black Walnut, Black Walnut Road	NRHP-Listed	3,156	3,156	None
186-0002	Chase City High School/Maple Manor Apartments, 136 Endley Street	NRHP-Listed	4,476	4,496	None
186-5005	Chase City Warehouse and Commercial Historic District	NRHP-Listed	3,392	3,420	None
186-5020	MacCallum More and Hudgins House Historic District, 439 Walker Street/603 Hudgins Street	NRHP-Listed	4,930	4,965	None

Archaeological Resources

Three previously recorded archaeological resources were identified within the Rebuild Project ROW. Site 44HA0119 is a Woodland Camp, Site 44HA0380 is a multi-component site comprising Pre-Contact and nineteenth century artifact scatters, and Site 44HA0381 is an indeterminate artifact scatter. All three of the resources are currently not evaluated for NRHP eligibility by DHR. ***It is recommended that archaeological sites located within the ROW be investigated and evaluated as appropriate during future investigations.***

Previously Recorded Archaeological Resources Considered under the Stage I Pre-Application Guidelines

DHR #	Resource Name	DHR/NRHP Status	Distance to ROW (Feet)	Impact
44HA0119	Woodland Camp	Not Evaluated	0	Investigate During Archaeological Survey
44HA0380	Pre-Contact and 19th Century Artifact Scatter	Not Evaluated	0	Investigate During Archaeological Survey
44HA0381	Indeterminate Artifact Scatter	Not Evaluated	0	Investigate During Archaeological Survey

Abbreviations

ABPP	American Battlefield Protection Program
DEM	Digital Elevation Model
DHR	Virginia Department of Historic Resources
Dominion Energy	Dominion Energy Virginia
DP	Delivery Point
DSM	Digital Surface Model
kV	Kilovolt
NERC	North American Electric Reliability Corporation
NHL	National Historic Landmark
NHPA	National Historic Preservation Act
NPS	National Park Service
NRHP	National Register of Historic Places
ROW	Right-of-Way
SCC	State Corporation Commission
Stantec	Stantec Consulting Services, Inc.
USDI	United States Department of the Interior
V-CRIS	Virginia Cultural Resources Information System
VLR	Virginia Landmarks Register

1.0 INTRODUCTION

1.1 OVERVIEW

Stantec Consulting Services Inc. (Stantec) was retained by Dominion Energy Virginia (Dominion Energy) to conduct a Stage I Pre-Application Analysis for the proposed Line #235 230 kV Rebuild Project – Clover Substation to Structure #235/310 (Rebuild Project) in Charlotte, Halifax, and Mecklenburg Counties, Virginia. The Rebuild Project proposed by Dominion Energy is necessary in order to maintain the structural integrity and reliability of its transmission system and to comply with mandatory North American Electric Reliability Corporation (NERC) Reliability Standards. The project will be conducted entirely within an existing right-of-way (ROW) and consists of approximately 16 miles of existing 230 kV transmission line. The Rebuild Project will require the tear-down and replacement of 126 existing transmission structures between the Clover Substation in Halifax County and Structure #235/310 near the Easters Substation in Mecklenburg County. Structure #235/310, which is 135 feet in height, will not be replaced. The existing structures are predominantly single circuit 230 kV wood H-frame structures. Dominion Energy proposes to replace the current structures with 125 230 kV single circuit weathering steel H-frames, and one weathering steel three pole structure. The line will be redesignated from Line #235 to Line #2226. All proposed structure heights and locations provided in this report are based upon preliminary engineering and are subject to final design (Table 1).

Table 1 Proposed Structure Heights for the Rebuild Project[1]

Existing Structure No.	Proposed Structure No.	Height (Feet) Existing	Height (Feet) Proposed	Approximate Change in Height (Feet)	Existing/Proposed Structure Type
235/311	2226/311	65.5	62	-3.5	Weathering Steel H-Frame/ Weathering Steel H-Frame
235/312	2226/312	74.5	84	9.5	Weathering Steel H-Frame/ Weathering Steel H-Frame
235/313	2226/313	74.5	83	8.5	Wood H-Frame/Weathering Steel H-Frame
235/314	2226/314	70	79	9	Wood H-Frame/Weathering Steel H-Frame
235/315	2226/315	70	80	10	Wood H-Frame/Weathering Steel H-Frame
235/316	2226/316	65.5	72	6.5	Wood H-Frame/Weathering Steel H-Frame
235/317	2226/317	70	79	9	Wood H-Frame/Weathering Steel H-Frame
235/318	2226/318	65.5	79	13.5	Wood H-Frame/Weathering Steel H-Frame
235/319	2226/319	56.5	66	9.5	Wood H-Frame/Weathering Steel H-Frame
235/320	2226/320	61	70	9	Wood H-Frame/Weathering Steel H-Frame

[1] Proposed heights based upon preliminary engineering and subject to change. Existing and proposed heights do not include foundation reveal.

STAGE I PRE-APPLICATION ANALYSIS FOR THE PROPOSED DOMINION ENERGY VIRGINIA LINE #235 230 KV REBUILD FROM CLOVER SUBSTATION TO STRUCTURE #235/310, CHARLOTTE, HALIFAX, AND MECKLENBURG COUNTIES, VIRGINIA

Existing Structure No.	Proposed Structure No.	Height (Feet) Existing	Height (Feet) Proposed	Approximate Change in Height (Feet)	Existing/Proposed Structure Type
235/321	2226/321	61	70	9	Wood H-Frame/Weathering Steel H-Frame
235/322	2226/322	65.5	75	9.5	Wood H-Frame/Weathering Steel H-Frame
235/323	2226/323	61	69	8	Wood H-Frame/Weathering Steel H-Frame
235/324	2226/324	56.5	70	13.5	Wood H-Frame/Weathering Steel H-Frame
235/325	2226/325	74.5	87	12.5	Wood H-Frame/Weathering Steel H-Frame
235/326	2226/326	74.5	77	2.5	Wood H-Frame/Weathering Steel H-Frame
235/327	2226/327	61	70	9	Wood H-Frame/Weathering Steel H-Frame
235/328	2226/328	61	76	15	Wood H-Frame/Weathering Steel H-Frame
235/329	2226/329	70	75	5	Wood H-Frame/Weathering Steel H-Frame
235/330	2226/330	70	74	4	Wood H-Frame/Weathering Steel H-Frame
235/331	2226/331	65.5	78	13.5	Wood H-Frame/Weathering Steel H-Frame
235/332	2226/332	70	79	9	Wood H-Frame/Weathering Steel H-Frame
235/333	2226/333	65.5	79	13.5	Wood H-Frame/Weathering Steel H-Frame
235/334	2226/334	74.5	75	0.5	Wood H-Frame/Weathering Steel H-Frame
235/335	2226/335	74.5	83	8.5	Wood H-Frame/Weathering Steel H-Frame
235/336	2226/336	70	79	9	Wood H-Frame/Weathering Steel H-Frame
235/337	2226/337	65.5	79	13.5	Wood H-Frame/Weathering Steel H-Frame
235/338	2226/338	65.5	79	13.5	Wood H-Frame/Weathering Steel H-Frame
235/339	2226/339	70	79	9	Wood H-Frame/Weathering Steel H-Frame
235/340	2226/340	79	70	-9	Wood H-Frame/Weathering Steel H-Frame
235/341	2226/341	65.5	75	9.5	Wood H-Frame/Weathering Steel H-Frame
235/342	2226/342	65.5	75	9.5	Wood H-Frame/Weathering Steel H-Frame
235/343	2226/343	65.5	74	8.5	Wood H-Frame/Weathering Steel H-Frame
235/344	2226/344	61	75	14	Wood H-Frame/Weathering Steel H-Frame
235/345	2226/345	65.5	78	12.5	Wood H-Frame/Weathering Steel H-Frame
235/346	2226/346	65.5	75	9.5	Wood H-Frame/Weathering Steel H-Frame
235/347	2226/347	74.5	78	3.5	Wood H-Frame/Weathering Steel H-Frame

STAGE I PRE-APPLICATION ANALYSIS FOR THE PROPOSED DOMINION ENERGY VIRGINIA LINE #235 230 KV REBUILD FROM CLOVER SUBSTATION TO STRUCTURE #235/310, CHARLOTTE, HALIFAX, AND MECKLENBURG COUNTIES, VIRGINIA

Existing Structure No.	Proposed Structure No.	Height (Feet) Existing	Height (Feet) Proposed	Approximate Change in Height (Feet)	Existing/Proposed Structure Type
235/348	2226/348	65.5	75	9.5	Wood H-Frame/Weathering Steel H-Frame
235/349	2226/349	56.5	68	11.5	Wood H-Frame/Weathering Steel H-Frame
235/350	2226/350	56.5	67	10.5	Wood H-Frame/Weathering Steel H-Frame
235351	2226/351	61	77	16	Wood H-Frame/Weathering Steel H-Frame
235/352	2226/352	61	70	9	Wood H-Frame/Weathering Steel H-Frame
235/353	2226/353	65.5	75	9.5	Wood H-Frame/Weathering Steel H-Frame
235/354	2226/354	61	70	9	Wood H-Frame/Weathering Steel H-Frame
235/355	2226/355	52	70	18	Wood H-Frame/Weathering Steel H-Frame
235/356	2226/356	61	70	9	Wood H-Frame/Weathering Steel H-Frame
235/357	2226/357	56.5	71	14.5	Wood H-Frame/Weathering Steel H-Frame
235/358	2226/358	61	82	21	Weathering Steel H-Frame/ Weathering Steel H-Frame
235/359	2226/359	61	70	9	Wood H-Frame/Weathering Steel H-Frame
235/360	2226/360	65.5	71	5.5	Wood H-Frame/Weathering Steel H-Frame
235/361	2226/361	65.5	79	13.5	Wood H-Frame/Weathering Steel H-Frame
235/362	2226/362	74.5	73	-1.5	Weathering Steel H-Frame/ Weathering Steel H-Frame
235/363	2226/363	65.5	70	4.5	Wood H-Frame/Weathering Steel H-Frame
235/364	2226/364	56.5	73	16.5	Wood H-Frame/Weathering Steel H-Frame
235/365	2226/365	65.5	79	13.5	Wood H-Frame/Weathering Steel H-Frame
235/366	2226/366	65.5	68	2.5	Wood H-Frame/Weathering Steel H-Frame
235/367	2226/367	61	70	9	Wood H-Frame/Weathering Steel H-Frame
235/368	2226/368	65.5	88	22.5	Wood H-Frame/Weathering Steel H-Frame
235/369	2226/369	61	91	30	Wood H-Frame/Weathering Steel H-Frame
235/370	2226/370	52	67	15	Wood H-Frame/Weathering Steel H-Frame
235/371	2226/371	56.5	69	12.5	Wood H-Frame/Weathering Steel H-Frame
235/372	2226/372	47.5	78	30.5	Wood H-Frame/Weathering Steel H-Frame
235/373	2226/373	56.5	87	30.5	Wood H-Frame/Weathering Steel H-Frame
235/374	2226/374	65.5	72	6.5	Wood H-Frame/Weathering Steel H-Frame

STAGE I PRE-APPLICATION ANALYSIS FOR THE PROPOSED DOMINION ENERGY VIRGINIA LINE #235 230 KV REBUILD FROM CLOVER SUBSTATION TO STRUCTURE #235/310, CHARLOTTE, HALIFAX, AND MECKLENBURG COUNTIES, VIRGINIA

Existing Structure No.	Proposed Structure No.	Height (Feet) Existing	Height (Feet) Proposed	Approximate Change in Height (Feet)	Existing/Proposed Structure Type
235/375	2226/375	61	70	9	Wood H-Frame/Weathering Steel H-Frame
235/376	2226/376	61	69	8	Wood H-Frame/Weathering Steel H-Frame
235/377	2226/377	61	70	9	Wood H-Frame/Weathering Steel H-Frame
235/378	2226/378	65.5	70	4.5	Wood H-Frame/Weathering Steel H-Frame
235/379	2226/379	65.5	87	21.5	Wood H-Frame/Weathering Steel H-Frame
235/380	2226/380	70	70	0	Wood H-Frame/Weathering Steel H-Frame
235/381	2226/381	61	83	22	Wood H-Frame/Weathering Steel H-Frame
235/382	2226/382	70	84	14	Wood H-Frame/Weathering Steel H-Frame
235/383	2226/383	65.5	78	12.5	Wood H-Frame/Weathering Steel H-Frame
235/384	2226/384	65.5	67	1.5	Wood H-Frame/Weathering Steel H-Frame
235/385	2226/385	56.5	77	20.5	Weathering Steel H-Frame/ Weathering Steel H-Frame
235/386	2226/386	56.5	70	13.5	Wood H-Frame/Weathering Steel H-Frame
235/387	2226/387	56.5	66	9.5	Wood H-Frame/Weathering Steel H-Frame
235/388	2226/388	61	65	4	Wood H-Frame/Weathering Steel H-Frame
235/389	2226/389	65.5	70	4.5	Wood H-Frame/Weathering Steel H-Frame
235/390	2226/390	61	77	16	Wood H-Frame/Weathering Steel H-Frame
235/391	2226/391	56.5	82	25.5	Wood H-Frame/Weathering Steel H-Frame
235/392	2226/392	47.5	70	22.5	Wood H-Frame/Weathering Steel H-Frame
235/393	2226/393	47.5	71	23.5	Wood H-Frame/Weathering Steel H-Frame
235/394	2226/394	56.5	64	7.5	Wood H-Frame/Weathering Steel H-Frame
235/395	2226/395	65.5	70	4.5	Wood H-Frame/Weathering Steel H-Frame
235/396	2226/396	65.5	77	11.5	Wood H-Frame/Weathering Steel H-Frame
235/397	2226/397	65.5	88	22.5	Wood H-Frame/Weathering Steel H-Frame
235/398	2226/398	52	87	35	Wood H-Frame/Weathering Steel H-Frame
235/399	2226/399	52	77	25	Wood H-Frame/Weathering Steel H-Frame
235/400	2226/400	61	70	9	Wood H-Frame/Weathering Steel H-Frame
235/401	2226/401	61	79	18	Wood H-Frame/Weathering Steel H-Frame

STAGE I PRE-APPLICATION ANALYSIS FOR THE PROPOSED DOMINION ENERGY VIRGINIA LINE #235 230 KV REBUILD FROM CLOVER SUBSTATION TO STRUCTURE #235/310, CHARLOTTE, HALIFAX, AND MECKLENBURG COUNTIES, VIRGINIA

Existing Structure No.	Proposed Structure No.	Height (Feet) Existing	Height (Feet) Proposed	Approximate Change in Height (Feet)	Existing/Proposed Structure Type
235/401A	2226/401A	N/A	84	N/A	N/A/Weathering Steel H-Frame
235/402	2226/402	65.5	70	4.5	Wood H-Frame/Weathering Steel H-Frame
235/403	2226/403	61	98	37	Wood H-Frame/Weathering Steel H-Frame
235/404	2226/404	56.5	77	20.5	Wood H-Frame/Weathering Steel H-Frame
235/405	2226/405	52	70	18	Wood H-Frame/Weathering Steel H-Frame
235/406	2226/406	61	94	33	Wood H-Frame/Weathering Steel H-Frame
235/407	2226/407	65.5	79	13.5	Wood H-Frame/Weathering Steel H-Frame
235/408	2226/408	70	70	0	Wood H-Frame/Weathering Steel H-Frame
235/408A	N/A	70	N/A	N/A	Concrete/N/A
235/409	2226/409	N/A	89	N/A	N/A/3-Pole Weathering Steel
235/410	2226/410	70	74	4	Wood H-Frame/Weathering Steel H-Frame
235/411	2226/411	61	77	16	Wood H-Frame/Weathering Steel H-Frame
235/412	2226/412	52	69	17	Wood H-Frame/Weathering Steel H-Frame
235/413	2226/413	61	83	22	Wood H-Frame/Weathering Steel H-Frame
235414	2226/414	65.5	89	23.5	Wood H-Frame/Weathering Steel H-Frame
235/415	2226/415	65.5	69	3.5	Wood H-Frame/Weathering Steel H-Frame
235/416	2226/416	70	83	13	Wood H-Frame/Weathering Steel H-Frame
235/417	2226/417	65.5	70	4.5	Wood H-Frame/Weathering Steel H-Frame
235/418	2226/418	65.5	70	4.5	Wood H-Frame/Weathering Steel H-Frame
235/419	2226/419	70	88	18	Wood H-Frame/Weathering Steel H-Frame
235/420	2226/420	65.5	74	8.5	Wood H-Frame/Weathering Steel H-Frame
235/421	2226/421	61	75	14	Wood H-Frame/Weathering Steel H-Frame
235/422	2226/422	56.5	65	8.5	Wood H-Frame/Weathering Steel H-Frame
235/423	2226/423	56.5	79	22.5	Wood H-Frame/Weathering Steel H-Frame
235/424	2226/424	74.5	84	9.5	Wood H-Frame/Weathering Steel H-Frame
235/425	2226/425	74.5	70	-4.5	Wood H-Frame/Weathering Steel H-Frame
235/426	2226/426	56.5	75	18.5	Wood H-Frame/Weathering Steel H-Frame

Existing Structure No.	Proposed Structure No.	Height (Feet) Existing	Height (Feet) Proposed	Approximate Change in Height (Feet)	Existing/Proposed Structure Type
235/427	2226/427	61	88	27	Wood H-Frame/Weathering Steel H-Frame
235/428	2226/428	70	69	-1	Wood H-Frame/Weathering Steel H-Frame
235/429	2226/429	65.5	77	11.5	Wood H-Frame/Weathering Steel H-Frame
235/430	2226/430	65.5	74	8.5	Wood H-Frame/Weathering Steel H-Frame
235/431	2226/431	65.5	83	17.5	Wood H-Frame/Weathering Steel H-Frame
235/432	2226/432	65.5	79	13.5	Wood H-Frame/Weathering Steel H-Frame
235/433	2226/433	65.5	79	13.5	Wood H-Frame/Weathering Steel H-Frame
235/434	2226/434	61	76.5	15.5	Weathering Steel H-Frame/ Weathering Steel H-Frame
235/435	2226/435	61	56.5	-3.5	Wood H-Frame/Weathering Steel H-Frame
235/435A	2226/435A	74.5	N/A	N/A	Weathering Steel H-Frame/ Weathering Steel H-Frame
	Minimum	**47.5**	**56.5**	**-9**	N/A
	Maximum	**79**	**98**	**37**	N/A
	Average Height	**63.6**	**75.6**	**12**	N/A

1.2 STAGE I PRE-APPLICATION ANALYSIS

The *Guidelines for Assessing Impacts of Proposed Electric Transmission Lines and Associated Facilities on Historic Resources in the Commonwealth of Virginia* (Virginia Department of Historic Resources [DHR] 2008) were developed by the DHR to assist the State Corporation Commission (SCC) and their applicants to address and minimize potential impacts to historic resources associated with the construction of large-scale transmission lines and associated facilities. In consideration to the general project design, as described above, and other elements associated with the proposed undertaking, including current ROW conditions within the proposed project area, Stantec designed the present study to identify all previously recorded architectural and archaeological resources requiring inclusion in a formal Stage I Pre-Application Analysis, as defined by the 2008 *Guidelines*.

As detailed by DHR guidance, consideration was given to National Historic Landmarks (NHL) properties located within a 1.5-mile radius of the project centerline; National Register of Historic Places (NRHP)-listed properties, battlefields, and historic landscapes located within a 1.0-mile radius of the project centerline; NRHP-eligible sites located within a 0.5-mile radius of the project centerline; and archaeological sites located within the project ROW. This document includes a viewshed analysis to address potential visual impacts to the five resources considered during the Stage I study.

This Stage I Pre-Application Analysis project was directed by Senior Ecologist Kenny Presgraves and the report authored by Senior Architectural Historian Sandra DeChard. The visual effects survey was conducted by Architectural Historian Technician Olivia McCarty under the guidance of Ms. DeChard. Ms. McCarty also photographed the resource viewsheds and Visualization Delivery Manager Anthony Labella prepared the photo simulations (Appendix C). Visual modeling and support graphics were prepared by GIS Coordinator Melissa Sanderson.

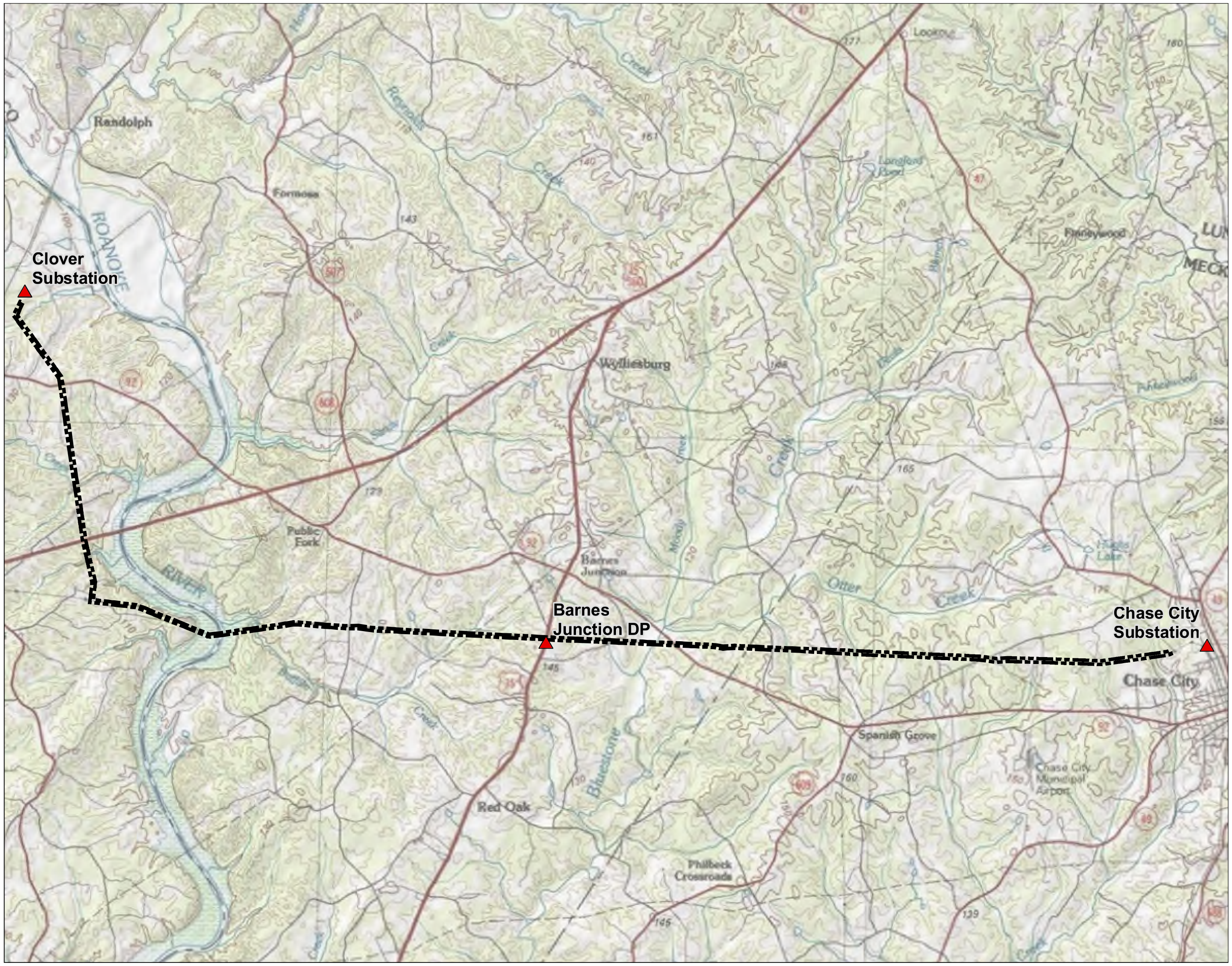


Figure No.
1

Title
Project Location Map

Client/Project 203401995
Dominion Energy Virginia
Line #235 230 kV Rebuild from Clover Substation to Structure #235/310

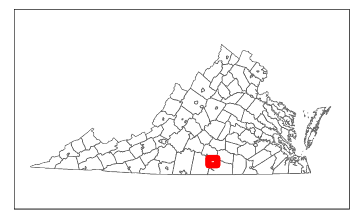
Project Location
Halifax, Charlotte, and Mecklenburg Counties, Virginia

Prepared by MGS on 2023-06-26
TR by ECL on 2023-06-30
IR by SLD on 2023-06-30

N

0 6,000 12,000 Feet
(At original document size of 11x17)
1:72,000

Substation
Project Area



Notes
1. Coordinate System: NAD 1983 StatePlane Virginia South FIPS 4502 Feet
2. Data Sources: Project Limits digitized from orthoimagery, U.S. Census Bureau
3. Topographic Map © USGS 30x60 Minute Quadrangle Map, Greensboro, NC 1966

Stantec

2.0 BACKGROUND RESEARCH

As part of the Stage I Pre-Application Analysis effort, DHR guidance recommends a four-tier study area strategy to be considered for each alternative alignment for the proposed undertaking (Table 2). Per this guidance consideration was given to: NHL properties located within a 1.5-mile radius of the project centerline; NRHP-listed properties, battlefields, and historic landscapes located within a 1.0-mile radius of the project centerline; NRHP-eligible resources located within a 0.5-mile radius of the project centerline; and archaeological sites located within the project ROW.

Table 2 Study Areas as Defined by DHR Guidelines for Transmission Lines

Radial Buffer (in miles)	Considered Resources
1.5	National Historic Landmarks
1.0	Above resources and: National Register Properties (listed), Battlefields, Historic Landscapes (e.g., Rural HD)
0.5	Above resources and: National Register-eligible (as determined by DHR)
0.0 (Within ROW)	Above resources and Archaeological Sites

The background research included a review of the DHR archives and of data collected from the DHR's Virginia Cultural Resource Information System (V-CRIS) database using the most current data as provided by the DHR. The DHR files of archaeological sites and historic structures were examined and information was retrieved on all archaeological sites located up to a 0.5-mile radius of the project area and all previously recorded architectural resources up to a 1.5-mile radius of the project. ESRI ArcGIS Online aerial photography of current conditions was examined for the entire project area. Photographs of the viewshed of each of the architectural resources under consideration were taken from the public ROW.

2.1 RESULTS OF THE BACKGROUND RESEARCH

2.1.1 Architectural Resources

No NHL architectural resources were located within a 1.5-mile radius of the Rebuild Project centerline. Two NRHP-listed resources and two NRHP-listed historic districts were located within 1.0 mile of the centerline. Additionally, the NRHP potentially eligible Staunton River Bridge Battlefield (DHR #019-5190) was also identified within 1.0 mile of the centerline. The battlefield also crosses Dominion Energy's Clover Power Station property but not the Project Area corridor. The table below details the recommendations for the project. As the study was completed prior to filing a State Corporation Commission (SCC) application, all digital images were taken from public ROW, unless permission from the landowner was granted at the time of the survey, and/or Dominion Energy easements. See Table 3 for a listing of the architectural resources within the project area.

Table 3 Previously Recorded Architectural Resources Considered under the Stage I Pre-Application Guidelines

DHR #	Resource Name	DHR/NRHP Status	Distance to Centerline (Feet)	Distance to Closest Proposed Structure (Feet)
019-5190	Staunton River Bridge Battlefield	Potentially Eligible	699	695
041-0006	Black Walnut, Black Walnut Road	NRHP-Listed	3,156	3,156
186-0002	Chase City High School/Maple Manor Apartments, 136 Endley Street	NRHP-Listed	4,476	4,496
186-5005	Chase City Warehouse and Commercial Historic District	NRHP-Listed	3,392	3,420
186-5020	MacCallum More and Hudgins House Historic District, 439 Walker Street/603 Hudgins Street	NRHP-Listed	4,930	4,965

2.1.2 Archaeological Resources

Three previously recorded archaeological resources were identified within the Rebuild Project ROW. Site 44HA0119 is a Woodland Camp, Site 44HA0380 is a multi-component site comprising Pre-Contact and nineteenth century artifact scatters, and Site 44HA0381 is an indeterminate artifact scatter. All three of the resources are currently not evaluated for NRHP eligibility by DHR (Appendix D; Table 4).

Table 4 Previously Recorded Archaeological Resources Considered under the Stage I Pre-Application Guidelines

DHR #	Resource Name	DHR/NRHP Status	Distance to ROW (Feet)
44HA0119	Woodland Camp	Not Evaluated	0
44HA0380	Pre-Contact and 19th Century Artifact Scatter	Not Evaluated	0
44HA0381	Indeterminate Artifact Scatter	Not Evaluated	0

3.0 STAGE I PRE-APPLICATION ANALYSIS RESULTS

3.1 VISUAL EFFECTS METHODOLOGY

Fieldwork for the proposed transmission line project was undertaken by Stantec's Architectural Historian Technician Olivia McCarty on May 10, 2023. The fieldwork for the assessment entailed photographing the resources requiring viewshed analysis according to the Stage I Pre-Application guidelines and examining the potential views from the resources towards the proposed transmission line improvements. As the fieldwork was conducted prior to a formal SCC application submittal, all photographs were taken from public ROW locations with aerial photography utilized to supplement the analysis of project visibility and potential visual effects. As the proposed line is a rebuild of an existing transmission line and the proposed new line will be located within the existing alignment, the existing line was utilized to assist with the assessment of potential visual effects.

A detailed viewshed was modeled for the existing and proposed structures. This analysis required the creation of two datasets, a digital elevation model (DEM) which provided base ground elevations, and a digital surface model (DSM) which provided overall elevations for features on the terrain, such as trees and buildings. Using the existing structure heights and preliminary proposed structure heights provided by Dominion Energy, two viewshed analyses were run using these datasets to determine where the existing and proposed structures are or will be visible in the landscape surrounding the proposed transmission line improvements. The visibility is illustrated by three color shadings:

Orange - where both existing and proposed structures are/will be visible,

Burgundy - where the existing structures are visible, but the proposed structures will not be, and

Blue - where the existing structures are not visible, but the proposed structures will be.

3.2 INDIVIDUAL ARCHITECTURAL RESOURCES CONSIDERED

No NHL architectural resources were located within a 1.5-mile radius of the Rebuild Project centerline. Two individual NRHP-listed resources were located within 1.0 mile and were considered for visual effects for the proposed project. The resources are further described below along with a discussion and recommendation of potential effects as a result of the project.

3.2.1 Black Walnut (DHR #041-0006)

The two-story plantation house was constructed around 1774 in the Georgian style and features weatherboard siding and a metal-clad side gable roof. The original house appears to have been a one or one-and-a-half-story dwelling with interior chimneys and a wing off each gable end. In the early decades of the nineteenth century, the house was raised to two stories and by 1848, the two-story frame addition,

which parallels the original block, and connector were constructed. The mid-nineteenth century addition served as the main section of the dwelling. Additional architectural features include exterior end shouldered brick chimneys, modillioned cornice, six-over-six and nine-over-nine wood sash windows and a one-story, three-bay, hipped-roof porch with turned wood posts. The property, at the time of its nomination, included a slave quarters, kitchen, dairy, smokehouses, barn, c. 1770 school, the Sims family cemetery, and c. 1800 garden. Only the barn (Figure 2) and the smokehouse were visible from the public ROW. The property was listed in the NRHP in 1991 under Criterion A for its significance in eighteenth and nineteenth century agriculture and under Criterion C for its architectural merit with a Period of Significance of c. 1775 to 1928 (DHR Site Files; Pierce 1991).

Figure 2 View of Black Walnut (House is not Visible from the Public ROW; DHR #041-0006), Looking West.

3.2.1.1 Visual Effect Assessment

Black Walnut is located within 1.0 mile of the Rebuild Project centerline with the closest Rebuild Project structure approximately 3,156 feet to the east (Appendix B). The core of the buildings on the property of the Black Walnut plantation are set back from the road down a long, tree-lined gravel driveway and are not visible. The closest existing structures, Structure #235/430 (proposed Structure #2226/430) through Structure #235/435 (proposed Structure #2226/435) range in height from 61 feet to 65.5 feet. Currently, the existing transmission line is not visible from the resource. Large trees surround the house along with additional lines of trees. Additionally, dense area of woods on the northwest and east side of Black Walnut Road and to the east of the railroad tracks between the Clover Substation and existing transmission line shield the view of the resource from the proposed Project (Photo Location 1; OP2; Figure 3).

Based upon preliminary design, the proposed replacement structures will have heights ranging between approximately 56.5 and 83 feet with a maximum height difference of 17.5 feet. Viewshed modeling conducted for the resource indicated that the proposed structures would not be visible from the resource (Figure 4; Appendix C; OP 2). Based on the fieldwork, the proposed structure heights, photosimulation, and the viewshed modeling, ***it is anticipated that the Rebuild Project would have No Visual Impact on Black Walnut Plantation (DHR #041-0006).***

Figure 3 View from Black Walnut (DHR #041-0006), Looking East (Photo Location 1; OP2). Existing Transmission Line is not Visible.

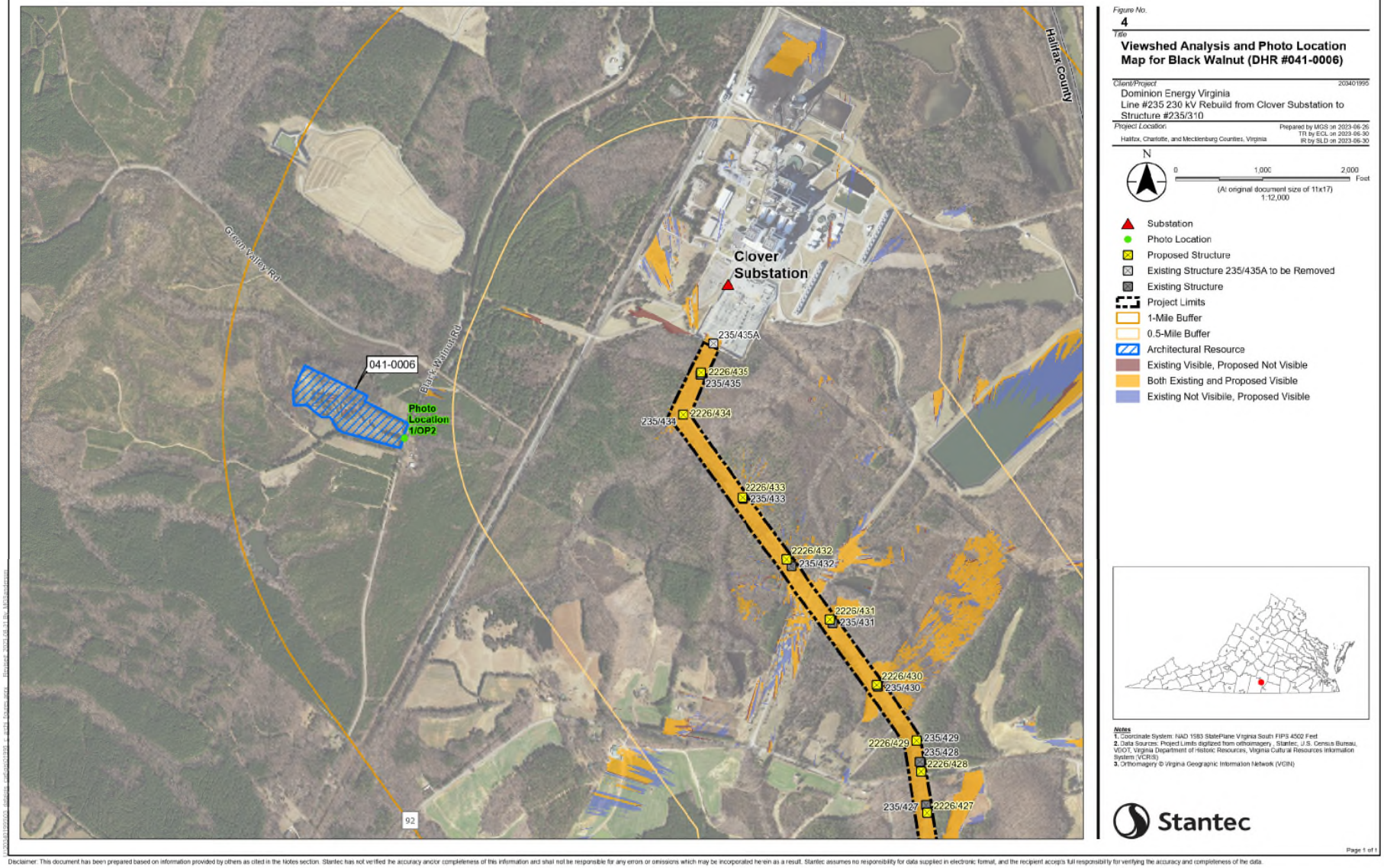


Figure No.
4

Title
Viewshed Analysis and Photo Location Map for Black Walnut (DHR #041-0006)

Client/Project 203401995
Dominion Energy Virginia
Line #235 230 kV Rebuild from Clover Substation to Structure #235/310

Project Location:
Halifax, Charlotte, and Mecklenburg Counties, Virginia

Prepared by MGS on 2023-06-26
TR by ECL on 2023-06-30
IR by SLD on 2023-06-30

3.2.2 Chase City High School/Maple Manor Apartments (DHR #186-0002)

Chase City High School was constructed around 1908 and designed by H. H. Huggins, an architect based in Roanoke, Virginia. The original building and the subsequent building added in 1917 reflect the Georgian Revival style. The two main buildings on the property are two-and-a-half stories and constructed of brick laid in a six-course American bond pattern with blond brick quoins and jack arch lintels. The buildings are supported by raised concrete foundations. The buildings also feature gable-roofed dormers centered on the front slope of the hipped roofs, bracketed cornices, and a pedimented entry porch with Doric columns (Figure 5). In 1960, a one-story building was added to the property for the purposes of connecting the two early twentieth century school buildings. Currently, the buildings serve as housing for the elderly. The Chase City High School was listed in the NRHP in 2000 under Criterion C for its architectural merit with a Period of Significance from 1908 to 1949 (DHR Site Files; Park 1997).

Figure 5 View of Chase City High School (now Apartments; DHR #186-0002), Looking Southwest.

3.2.2.1 Visual Effect Assessment

Chase City High School is located within 1.0 mile of the Rebuild Project centerline with the closest Rebuild Project structure approximately 4,496 feet to the northwest (Appendix B). The closest existing structures to the resource are Structure #235/310 (proposed Structure #2226/310) through Structure #235/316 (proposed Structure #2226/316). Structure #235/310, which is approximately 135 feet, will not be replaced. Structure #235/311 through #235/316 range in height from 65.5 feet to 74.5 feet. Currently, the existing transmission line is not visible from the resource as there are numerous areas of trees and woods as well as residential neighborhoods between the resource and the transmission line which shield the resource from view of the proposed Project (Photo Location 2; Figures 6 and 7).

Based upon preliminary design, the proposed replacement structures in the section of the transmission line closest to the resource will have heights ranging from approximately 62 to 84 feet with a maximum height difference of 10 feet. Viewshed modeling and the photosimulations indicate that the proposed structures would not be visible from the resource (Figure 8; Appendix C; OP 3). Based on the fieldwork, the proposed structure heights, photosimulation, and the viewshed modeling, ***it is anticipated that the Rebuild Project would have a No Visual Impact on the Chase City High School (DHR #186-0002).***

Figure 6 View from Chase City High School (DHR #186-0002), Looking North (Photo Location 2). Existing Transmission Line is not Visible.

Figure 7 View from Chase City High School (DHR #186-0002), Looking Northwest (Photo Location 2; OP3). Existing Transmission Line is not Visible.

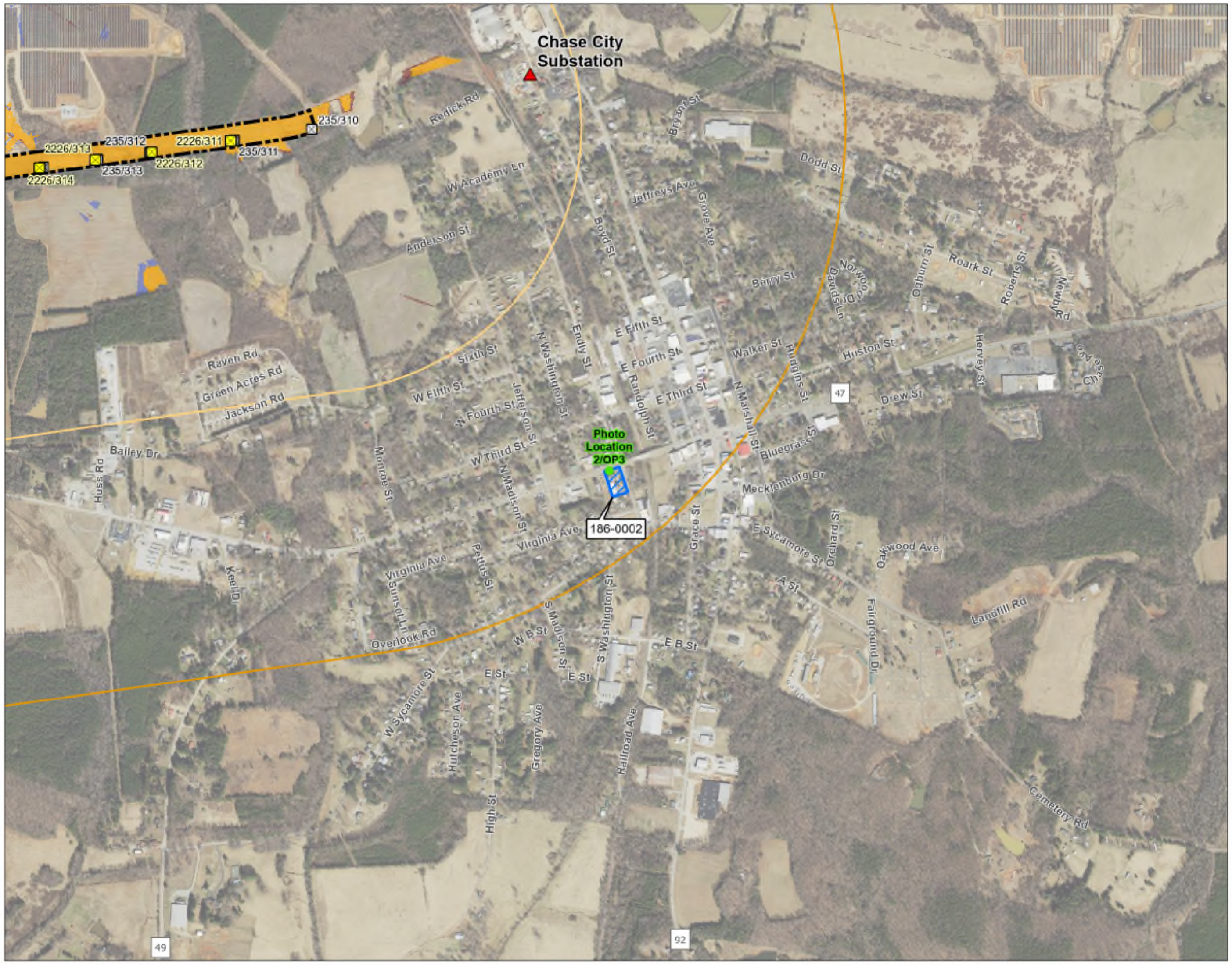


Figure No.
8

Title
Viewshed Analysis and Photo Location Map for Chase City High School (DHR #186-0002)

Client/Project
203401995
Dominion Energy Virginia
Line #235 230 kV Rebuild from Clover Substation to Structure #235/310

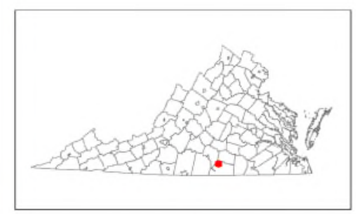
Project Location
Halifax, Charlotte, and Mecklenburg Counties, Virginia

Prepared by MGS on 2023-06-26
TR by ECL on 2023-06-30
IR by SLD on 2023-06-30

N

0 1,000 2,000 Feet
(At original document size of 11x17)
1:12,000

- Substation
- Photo Location
- Proposed Structure
- Existing Structure 235/310 to be Reconductored
- Existing Structure
- Project Limits
- 1-Mile Buffer
- 0.5-Mile Buffer
- Architectural Resource
- Existing Visible, Proposed Not Visible
- Both Existing and Proposed Visible
- Existing Not Visible, Proposed Visible



Notes
1. Coordinate System: NAD 1983 StatePlane Virginia South FIPS 4502 Feet
2. Data Sources: Project Limits digitized from orthoimagery, Stantec, U.S. Census Bureau, VDOT, Virginia Department of Historic Resources, Virginia Cultural Resources Information System (VCRIS)
3. Orthoimagery © Virginia Geographic Information Network (VGIN)

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3.3 HISTORIC DISTRICTS CONSIDERED

Two NRHP-listed historic districts, the Chase City Warehouse and Commercial Historic District (DHR #186-5005) and MacCallum More and Hudgins House Historic District (DHR #186-5020) are located within 1.0 mile of the Rebuild Project centerline and were therefore considered for visual effects per DHR guidelines. The resources are further described below along with a discussion and recommendation of potential effects as a result of the project.

3.3.1 Chase City Warehouse and Commercial Historic District (DHR #186-5005)

The Chase City Warehouse Historic District comprises approximately 24 acres and encompasses North Main Street, E. 5th Street, W. 4th Street, E. 3rd and 4th streets, Walker Street, Mecklenburg Avenue and E. Sycamore Street with portions of side streets of these main thoroughfares. The district reflects the commercial and industrial development of Chase City from 1873 to 1969. Architectural styles within the district include Italianate, Queen Anne, Gothic Revival, Art Deco, and Moderne as well as various late nineteenth to mid-twentieth century industrial and commercial building types (Figures 9 and 10). The historic district was listed on the NRHP in 2020 at a local level under Criteria A and C with 71 contributing and 28 non-contributing buildings including Shadow Lawn (DHR #186-5004) which was individually listed but beyond 1.0 mile from the Rebuild Project (DHR Site Files; Blanton and Kronau 2020).

Figure 9 View of the Chase City Warehouse and Commercial Historic District (DHR #186-5005), Looking Southwest.

Figure 10 View of the Chase City Warehouse and Commercial Historic District (DHR #186-5005) Looking East from Intersection of Railroad Tracks and W. 5th Street.

3.3.1.1 Visual Effect Assessment

The Chase City Warehouse and Commercial Historic District is located within 1.0 mile of the Rebuild Project centerline with the closest Rebuild Project structure approximately 3,392 feet to the northwest (Appendix B). The closest existing structures to the resource are Structure #235/310 (proposed Structure #2226/310) through Structure #235/316 (proposed Structure #2226/316). Structure #235/310, which is approximately 135 feet, will not be replaced. Structure #235/311 through #235/316 range in height from 65.5 feet to 74.5 feet. Currently, the existing transmission line is not visible from the resource as there are numerous areas of trees and woods as well as residential neighborhoods between the resource and the transmission line which shield the resource from view of the proposed Project (Photo Locations 3-5; Figures 11-13).

Based upon preliminary design, the proposed replacement structures in the section of the transmission line closest to the resource will have heights ranging from approximately 62 to 84 feet with a maximum height difference of 10 feet. Viewshed modeling and the photosimulations indicate that the proposed structures would not be visible from the resource (Figure 14; Appendix C; OP 4). Based on the fieldwork, the proposed structure heights, photosimulation, and the viewshed modeling, ***it is anticipated that the Rebuild Project would have No Visual Impact on the Chase City Warehouse and Commercial Historic District (DHR #186-5005).***

Figure 11 View from the Chase City Warehouse and Commercial Historic District (DHR #186-5005) Looking Northwest from the Intersection of E. 5th Street and N. Main Street (Photo Location 3). Existing Transmission Line is Not Visible.

Figure 12 View from the Chase City Warehouse and Commercial Historic District (DHR #186-5005) Looking Northwest from Intersection of Railroad Tracks and W. 5th Street (Photo Location 4; OP4). Existing Transmission Line is Not Visible.

Figure 13 View from the Chase City Warehouse and Commercial Historic District (DHR #186-5005) Looking Northwest from the Intersection of N. Main and E. 2nd Streets (Photo Location 5). Existing Transmission Line is Not Visible.

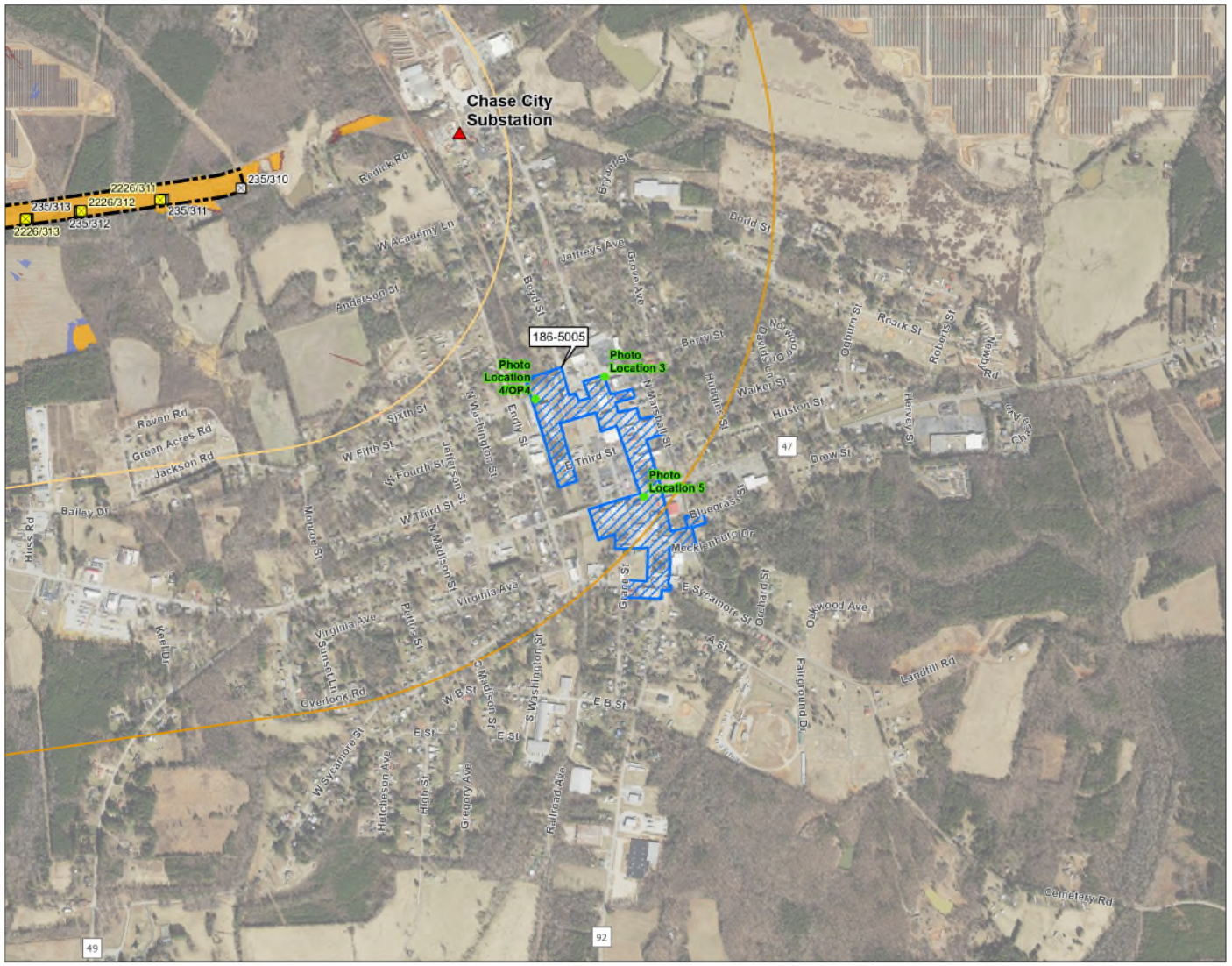


Figure No.
14

Title
Viewshed Analysis and Photo Location Map for Chase City Warehouse and Commercial Historic District (DHR #186-5005)

Client/Project
Dominion Energy Virginia
Line #235 230 kV Rebuild from Clover Substation to Structure #235/310

Project Location:
Halifax, Charlotte, and Mecklenburg Counties, Virginia

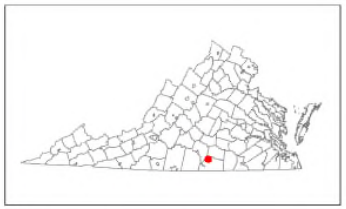
Prepared by MGS on 2023-06-26
TR by ECL on 2023-06-30
IR by SLD on 2023-06-30

N

0 1,000 2,000 Feet

(At original document size of 11x17)
1:12,000

- Substation
- Photo Location
- Proposed Structure
- Existing Structure 235/310 to be Reconductored
- Existing Structure
- Project Limits
- 1-Mile Buffer
- 0.5-Mile Buffer
- Architectural Resource
- Existing Visible, Proposed Not Visible
- Both Existing and Proposed Visible
- Existing Not Visibile, Proposed Visible



Notes
1. Coordinate System: NAD 1983 StatePlane Virginia South FIPS 4502 Feet
2. Data Sources: Project Limits digitized from orthoimagery, Stantec, U.S. Census Bureau, VDOT, Virginia Department of Historic Resources, Virginia Cultural Resources Information System (VCRIS)
3. Orthoimagery © Virginia Geographic Information Network (VGIN)

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3.3.2 MacCallum More and Hudgins House Historic District (DHR #186-5020)

The MacCallum More and Hudgins House Historic District comprises approximately 6 acres enclosed by a stone wall which includes two Colonial Revival dwellings within extensive landscaped gardens (Figure 15). The Hudgins House was constructed in 1910 followed by the construction of the MacCallum More House in 1917. The property is associated with architect Carl Max Lindner Sr. and landscape architect Charles F. Gillette as well as Supreme Court Chief Justice Edward Wren Hudgins among others. The gardens were the work of Mrs. Lucy Morton Hudgins and begun in 1927. The original garden was designed in an axial plan and contain stone walls, slate pathways, and numerous sculptural elements including a bust of a Roman senator dating to the first century. Also located on the property is a museum and guest cottage, which now functions as the gift shop and offices. The historic district was listed in the NRHP in 2010 under Criterion C for its architectural merit and for its landscape architecture with a Period of Significance from 1910 to 1959 (DHR Site Files; Chen and Moran 2010).

Figure 15 View of MacCallum More and Hudgins Historic District (DHR #186-5020) Looking East.

3.3.2.1 Visual Effect Assessment

The MacCallum More and Hudgins House Historic District is located within 1.0 mile of the Rebuild Project centerline with the closest Rebuild Project structure approximately 4,930 feet to the northwest (Appendix B). The closest existing structures to the resource are Structure #235/310 (proposed Structure #2226/310) through Structure #235/316 (proposed Structure #2226/316). Structure #235/310, which is approximately 135 feet, will not be replaced. Structure #235/311 through #235/316 range in height from 65.5 feet to 74.5 feet. Currently, the existing transmission line is not visible from the resource as there are numerous areas of trees and woods as well as residential neighborhoods between the resource and the transmission line which shield the resource from view of the proposed Project (Figure 16).

Based upon preliminary design, the proposed replacement structures in the section of the transmission line closest to the resource will have heights ranging from approximately 62 to 84 feet with a maximum height difference of 10 feet. Viewshed modeling and the photosimulations indicate that the proposed structures would not be visible from the resource (Figure 17; Appendix C; OP 5). Based on the fieldwork, the proposed structure heights, photosimulation, and the viewshed modeling, ***it is anticipated that the Rebuild Project would have No Visual Impact on the MacCallum More and Hudgins House Historic District (DHR #186-5020).***

Figure 16 View from MacCallum More and Hudgins Historic District (DHR #186-5020) Looking Northwest (Photo Location 6; OP5). Existing Transmission Line is not Visible.

Figure No.
17

Title
Viewshed Analysis and Photo Location Map for MacCallum More and Hudgins House Historic District (DHR #186-5020)

Client/Project
Dominion Energy Virginia
Line #235 230 kV Rebuild from Clover Substation to Structure #235/310

Project Location:
Halifax, Charlotte, and Mecklenburg Counties, Virginia

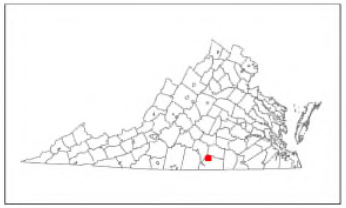
Prepared by MGS on 2023-06-26
TR by ECL on 2023-06-30
IR by SLD on 2023-06-30

N

0 500 1,000 Foot

(At original document size of 11x17)
1:7,200

- Substation
- Photo Location
- Proposed Structure
- Existing Structure 235/310 to be Reconductored
- Existing Structure
- Project Limits
- 1-Mile Buffer
- 0.5-Mile Buffer
- Architectural Resource
- Existing Visible, Proposed Not Visible
- Both Existing and Proposed Visible
- Existing Not Visibile, Proposed Visible



Notes
1. Coordinate System: NAD 1983 StatePlane Virginia South FIPS 4502 Feet
2. Data Sources: Project Limits digitized from orthoimagery, Stantec, U.S. Census Bureau, VDOT, Virginia Department of Historic Resources, Virginia Cultural Resources Information System (VCRIS)
3. Orthoimagery © Virginia Geographic Information Network (VGIN)

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3.4 BATTLEFIELD RESOURCES CONSIDERED

Battlefields and associated fortifications noted within the limits of the Stage I study area were further considered for visual effects for the proposed project. A portion of a single battlefield resource is located within the Stage I radii and is listed in Table 5. The resource is further described in the following section along with a discussion of potential effects as a result of the project.

For the assessment of battlefield resources, Stantec took into consideration the guidance and recommendations of the American Battlefield Protection Program's (ABPP's) 2009 assessment of Virginia's Civil War period resources and subsequent updates. In 2009, the ABPP revised the 1992 Civil War Sites Advisory Commission (CWSAC) boundaries for Virginia, and many of the battlefields were greatly expanded in size. For each battlefield, the ABPP defined Study Areas and Core Areas. The larger Study Area contains all resources known to relate to or contribute to the battlefield event, such as where troops maneuvered and deployed, immediately before or after combat, and where they fought during combat. Within the Study Area are Core Areas, which denote the actual fighting areas located within the larger battlefield. In addition, the ABPP defined Potential National Register (PotNR) boundaries for each battlefield. The PotNR boundary represents the ABPP's assessment of a Study Area's current integrity. The PotNR area may include all or some of the Study Area, or all or some of the Core Area, associated with a battlefield engagement. The PotNR boundary does not constitute a formal determination of eligibility by the Keeper of the NRHP; however, it is a recommendation of potential eligibility.

Table 5 Battlefield Resources Considered under the Stage I Pre-Application Guidelines

DHR #	Resource Name	Total Acreage of ABPP-Defined Battlefield	Acreage of ABPP-Defined Battlefield within the 1.0-Mile Radius
019-5190	Staunton River Bridge Battlefield	3,848	64.9

3.4.1 Staunton River Bridge Battlefield (DHR #019-5190/ABPP VA113)

The Battle of Staunton River Bridge was part of the Petersburg Campaign and part of the efforts of the Union forces to capture Richmond. Integral to this goal was the interruption of Confederate supply lines, between Petersburg and Richmond, particularly the Richmond and Danville Railroad. In an effort to sever the tracks, Union forces were sent to destroy the bridge which carried the Richmond and Danville Railroad over the Staunton River. Raiders, under the command of Brigadier Generals James H. Wilson and August Kautz, were able to dismantle the tracks on their march towards the bridge. Upon hearing of the raids and the plans to attack the bridge, General Lee sent word to Captain Benjamin Farinholt, who was guarding the bridge, to warn him about the imminent arrival of Union troops. The successful coordination and defensive measures of June 25, 1864, by Confederate troops saved the bridge and foiled Union raiders (Bates 2003; Kuranda 1996 cited in Sadler et.al. 2019:3.12; Salmon 2001 cited in Sadler et.al. 2019:3.12; DHR Site Files; DeChard 2020).

3.4.1.1 Visual Effect Assessment

The Staunton River Bridge Battlefield is located within 1.0 mile of the Rebuild Project centerline with the closest Rebuild Project structure approximately 695 feet to the southeast (Appendix B). The southeastern edge of the resource, which comprises the area of troop movements, overlaps Dominion Energy's Clover Power Station property but does not cross the project transmission line corridor. The area within the 1.0-mile radius also includes a small portion of the PotNR Area of the battlefield. The Core Area, to the northeast, is beyond 1.0 mile. The area between the resource and the transmission line corridor consists mainly of woods; however, a recent cut through this area from the substation access road to the transmission line corridor has provided a view of Structure #235/435 of the existing transmission line. The closest existing structures, Structure #235/430 (proposed Structure #2226/430) through Structure #235/435 (proposed Structure #2226/435) range in height from 65.5 feet to 74.5 feet. Currently, except for Structure #235/435, the existing transmission line is not visible from the resource. The resource also views the portion of the existing Clover Substation above the tree line (Figures 18-20).

Based upon preliminary design, the proposed replacement structures will have heights ranging between approximately 61 to 83 feet with a maximum height difference of 9 feet. Viewshed modeling and the photosimulations indicate that the proposed structures would be visible in an open area to the north of the Clover Substation and in an open area to the east of southeast of the railroad tracks and northeast of the intersecting access road (Figure 22; Appendix C; OP 1). Due to the limited areas of visibility, even with the increase in height, it is anticipated that the viewshed will not significantly change as a result of the proposed Rebuild Project. Based on the fieldwork, the proposed structure heights, photosimulation, and the viewshed modeling, ***it is anticipated that the Rebuild Project would have a Minimal Visual Impact on the Staunton River Bridge Battlefield (DHR #019-5190).***

Figure 18 View from Staunton River Bridge Battlefield (DHR #019-5190) Looking East (Photo Location 7). Existing Transmission Line is Visible.

Figure 19 View from Staunton River Bridge Battlefield (DHR #019-5190) Looking Southeast (Photo Location 7). Existing Transmission Line is not Visible.

Figure 20 View from Staunton River Bridge Battlefield (DHR #019-5190) Looking Northeast (Photo Location 7). Clover Substation is Visible. Structure in Center of Photograph is not Part of the Current Project.

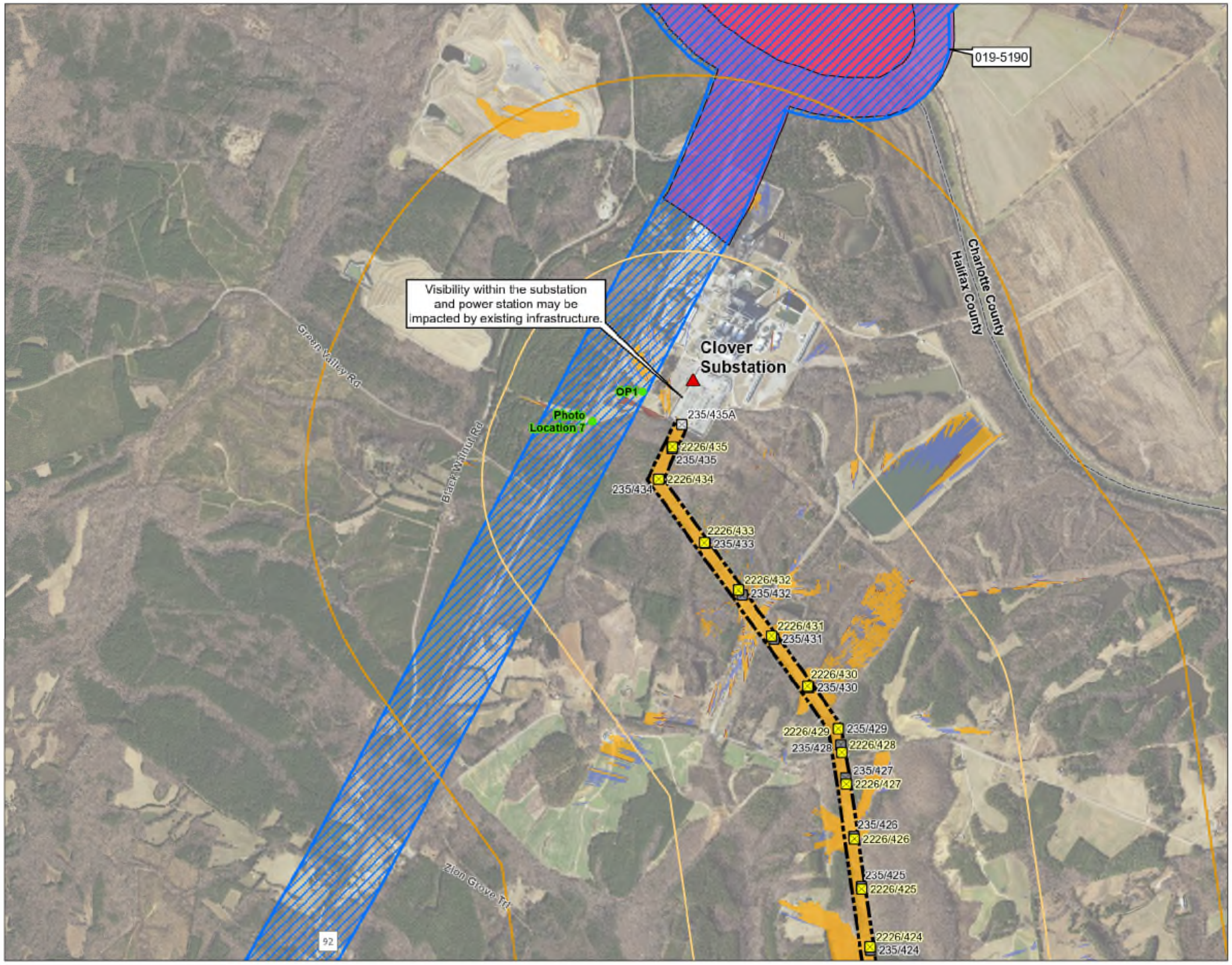


Figure No.
22

Title
Viewshed Analysis and Photo Location Map for Staunton River Bridge Battlefield (DHR #019-5190)

Client/Project 203401995
Dominion Energy Virginia
Line #235 230 kV Rebuild from Clover Substation to Structure #235/310

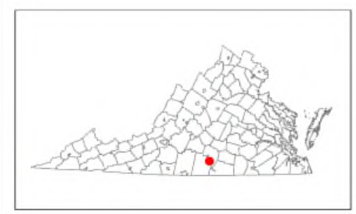
Project Location
Halifax, Charlotte, and Mecklenburg Counties, Virginia

Prepared by MGS on 2023-06-26
TR by ECL on 2023-06-30
IR by SLD on 2023-06-30

N

0 1,000 2,000 Feet
(At original document size of 11x17)
1:18,000

- Substation
- Photo Location
- Proposed Structure
- Existing Structure 235/435A to be Removed
- Existing Structure
- Project Limits
- 1-Mile Buffer
- 0.5-Mile Buffer
- Architectural Resource
- ABPP PotNR
- ABPP Core Areas
- Existing Visible, Proposed Not Visible
- Both Existing and Proposed Visible
- Existing Not Visible, Proposed Visible



Notes
1. Coordinate System: NAD 1983 StatePlane Virginia South FIPS 4502 Feet
2. Data Sources: , Stantec, U.S. Census Bureau, VDOT, Virginia Department of Historic Resources, Virginia Cultural Resources Information System (VCRIS). Battlefields and core areas data provided by American Battlefield Protection Program (ABPP) and are for planning purposes only
3. Orthoimagery © Virginia Geographic Information Network (VGIN)

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4.0 RECOMMENDATIONS AND CONCLUSIONS

4.1 OVERVIEW

Stantec was retained by Dominion Energy to conduct a Stage I Pre-Application Analysis for the proposed Line #235 230 kV Rebuild Project – Clover Substation to Structure #235/310 in Charlotte, Halifax, and Mecklenburg Counties, Virginia. The Rebuild Project proposed by Dominion Energy is necessary in order to maintain the structural integrity and reliability of its transmission system and to comply with mandatory NERC Reliability Standards. The Rebuild Project will be conducted entirely within an existing ROW and consists of approximately 16 miles of existing 230 kV transmission line. The Rebuild Project will require the tear-down and replacement of 126 existing transmission structures between the Clover Substation in Halifax County and Structure #235/310 near the Easters Substation in Mecklenburg County. The existing structures are predominantly single circuit 230 kV wood H-frame structures. Dominion Energy proposes to replace the current structures with 125 230 kV single circuit weathering steel H-frames, and one weathering steel three pole structure. The line will be redesignated from Line #235 to Line #2226. Based on this information, the proposed structures, on average, will increase in height by approximately 12 feet with a maximum total height increase of 37 feet. Six structures will decrease in height with a maximum of 9 feet.

4.1.1 Recommendations – Architectural Resources

No NHL architectural resources were located within a 1.5-mile radius of the Rebuild Project centerline. Two NRHP-listed resources and two NRHP-listed historic districts were located within 1.0 mile of the centerline. Additionally, the NRHP potentially eligible Staunton River Bridge Battlefield (DHR #019-5190) was also identified within 1.0 mile of the centerline. The battlefield also crosses Dominion Energy's Clover Power Station property but does not cross the Project Area corridor. Table 6 details the recommendations for the project. As the study was completed prior to filing a SCC application, all digital images were taken from public ROW, unless permission from the landowner was granted at the time of the survey, and/or Dominion Energy easements.

Based on preliminary proposed structure heights, the proposed Rebuild Project would increase the height of the structures, on average, by 12 feet with a maximum total height increase of 37 feet. Six structures will decrease in height. Based on the analysis of the proposed structures, it is recommended that the Rebuild Project would have No Visual Impact to Black Walnut (DHR #041-0006), the Chase City High School/Maple Manor Apartments (DHR #186-0002), Chase City Warehouse and Commercial Historic District (DHR #186-5005), and the MacCallum More and Hudgins House Historic District (DHR #186-5020). The proposed Project, based on the visual effects evaluation, is recommended to have a Minimal Impact to the Staunton River Bridge Battlefield (DHR #019-5190).

Table 6 Previously Recorded Architectural Resources Considered under the Stage I Pre-Application Guidelines

DHR #	Resource Name	DHR/NRHP Status	Distance to Centerline (Feet)	Distance to the Closest Structure (Feet)	Impacts
019-5190	Staunton River Bridge Battlefield	Potentially Eligible	699	695	Minimal
041-0006	Black Walnut, Black Walnut Road	NRHP-Listed	3,156	3,156	None
186-0002	Chase City High School/Maple Manor Apartments, 136 Endley Street	NRHP-Listed	4,476	4,496	None
186-5005	Chase City Warehouse and Commercial Historic District	NRHP-Listed	3,392	3,420	None
186-5020	MacCallum More and Hudgins House Historic District, 439 Walker Street/603 Hudgins Street	NRHP-Listed	4,930	4,965	None

4.1.2 Recommendations - Archaeological Resources

Three previously recorded archaeological resources were identified within the Rebuild Project ROW. Site 44HA0119 is a Woodland Camp, Site 44HA0380 is a multi-component site comprising Pre-Contact and nineteenth century artifact scatters, and Site 44HA0381 is an indeterminate artifact scatter. All three of the resources are currently not evaluated for NRHP eligibility by DHR. ***It is recommended that archaeological sites located within the ROW be investigated and evaluated as appropriate during future investigations*** (Appendix D; Table 7).

Table 7 Previously Recorded Archaeological Resources Considered under the Stage I Pre-Application Guidelines

DHR #	Resource Name	NRHP Status	Distance to ROW (Feet)	Impact
44HA0119	Woodland Camp	Not Evaluated	0	Investigate During Archaeological Survey
44HA0380	Pre-Contact and 19th Century Artifact Scatter	Not Evaluated	0	Investigate During Archaeological Survey
44HA0381	Indeterminate Artifact Scatter	Not Evaluated	0	Investigate During Archaeological Survey

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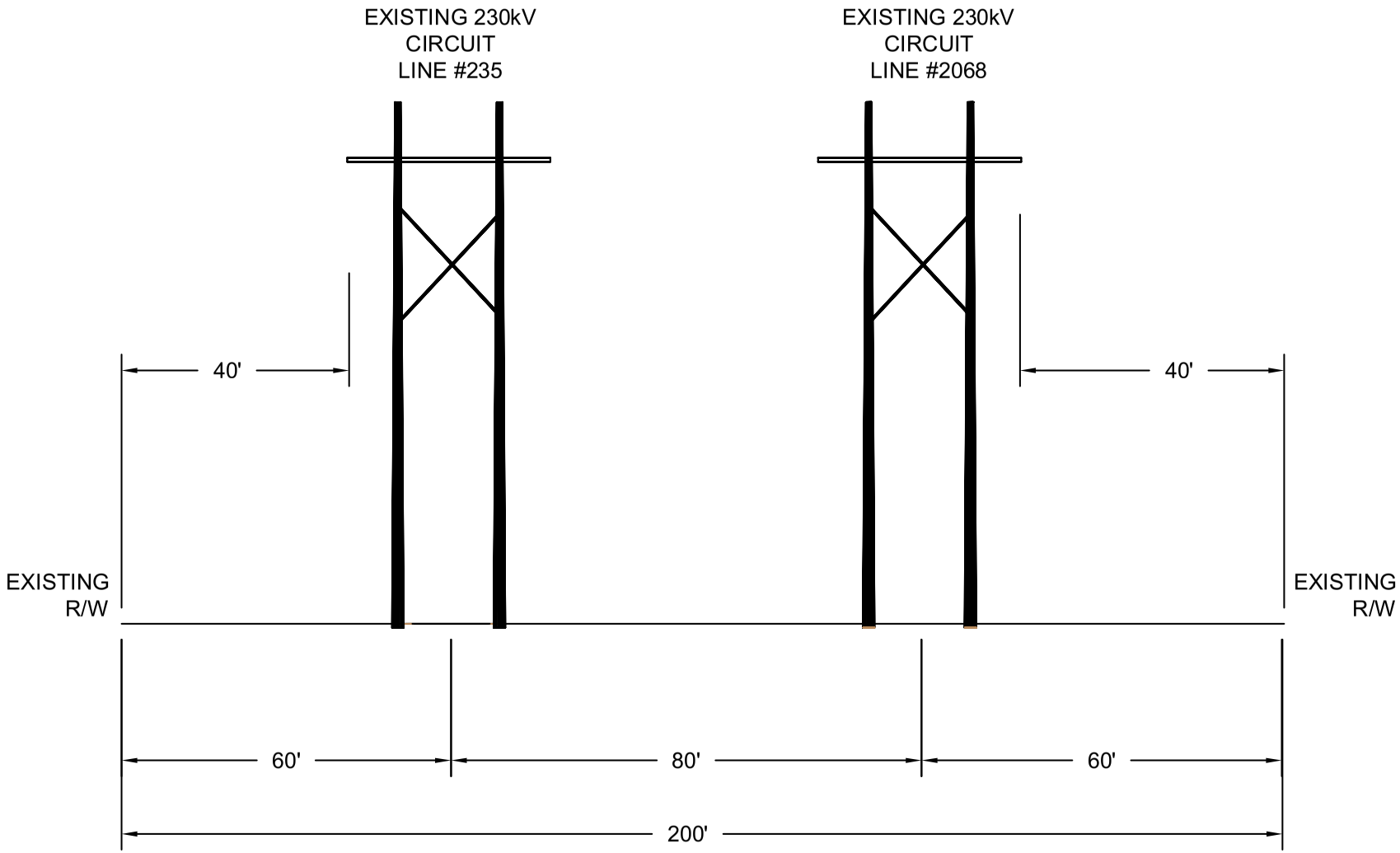
2017 *Guidelines for Historic Resources Survey in Virginia.* DHR, Richmond.

2023 DHR Archive Files.

Appendix A

A.1 STRUCTURE DETAILS

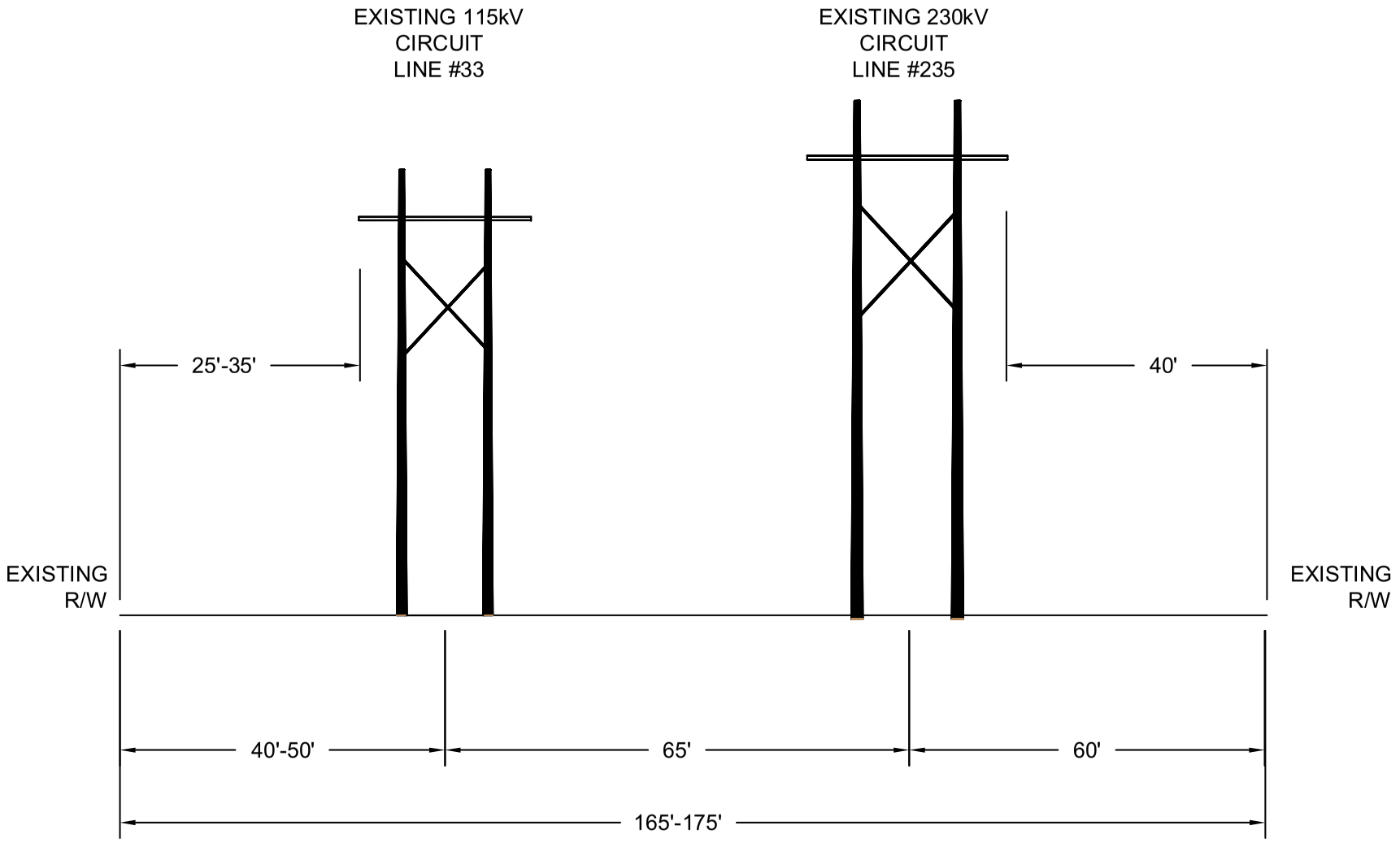
LINE #2068, 2068/386-2068/409
LINE #235, 235/431-235/408A
EXISTING CONFIGURATION



TYPICAL RIGHT OF WAY LOOKING TOWARD CHASE CITY

NOTE: INFORMATION CONTAINED ON DRAWING IS CONSIDERED PRELIMINARY IN NATURE AND SUBJECT TO CHANGE BASED ON FINAL DESIGN

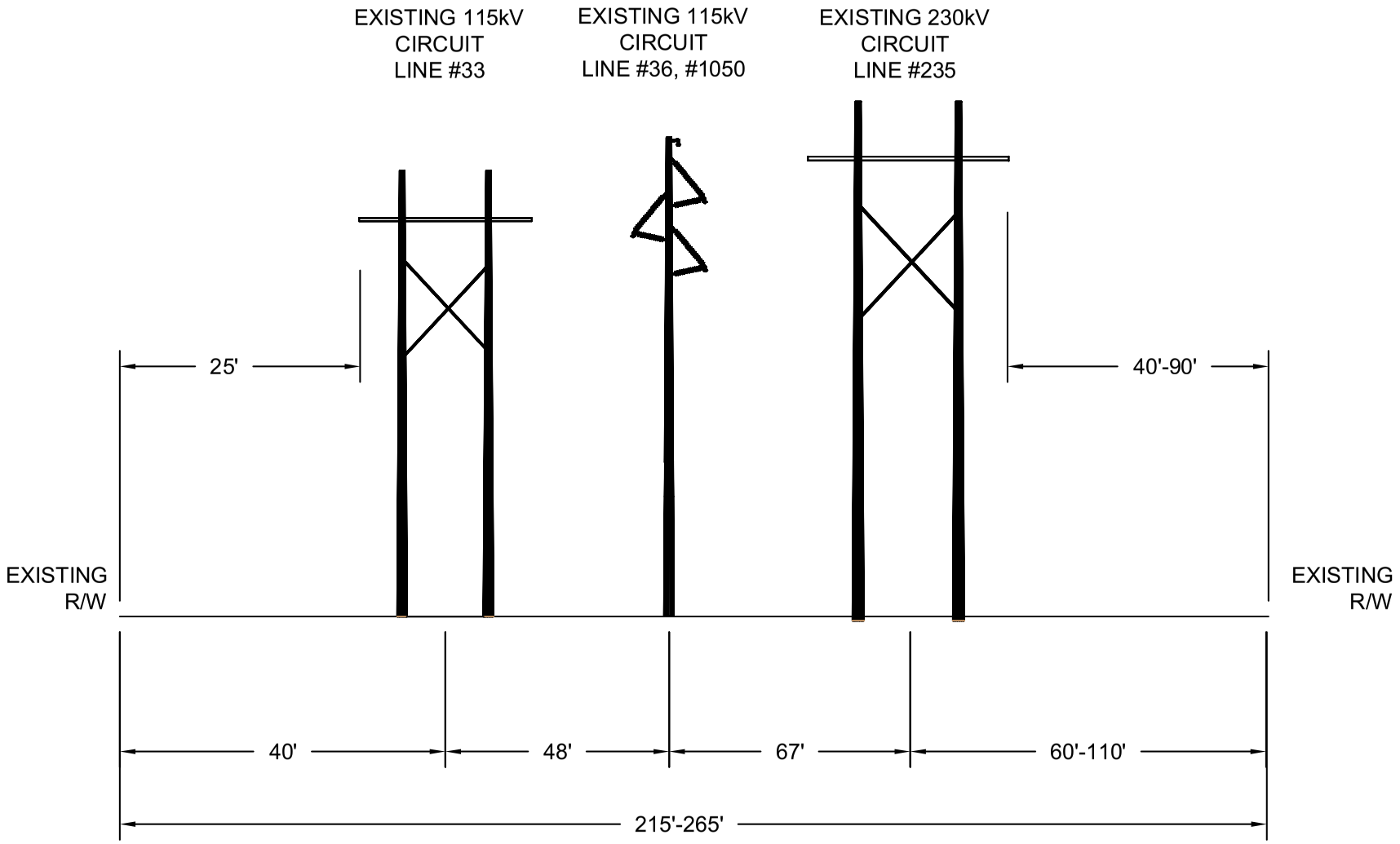
LINE #33, 33/519-33/589
LINE #235, 235/408A-235/341
EXISTING CONFIGURATION



TYPICAL RIGHT OF WAY LOOKING TOWARD CHASE CITY

NOTE: INFORMATION CONTAINED ON DRAWING IS CONSIDERED PRELIMINARY IN NATURE AND SUBJECT TO CHANGE BASED ON FINAL DESIGN

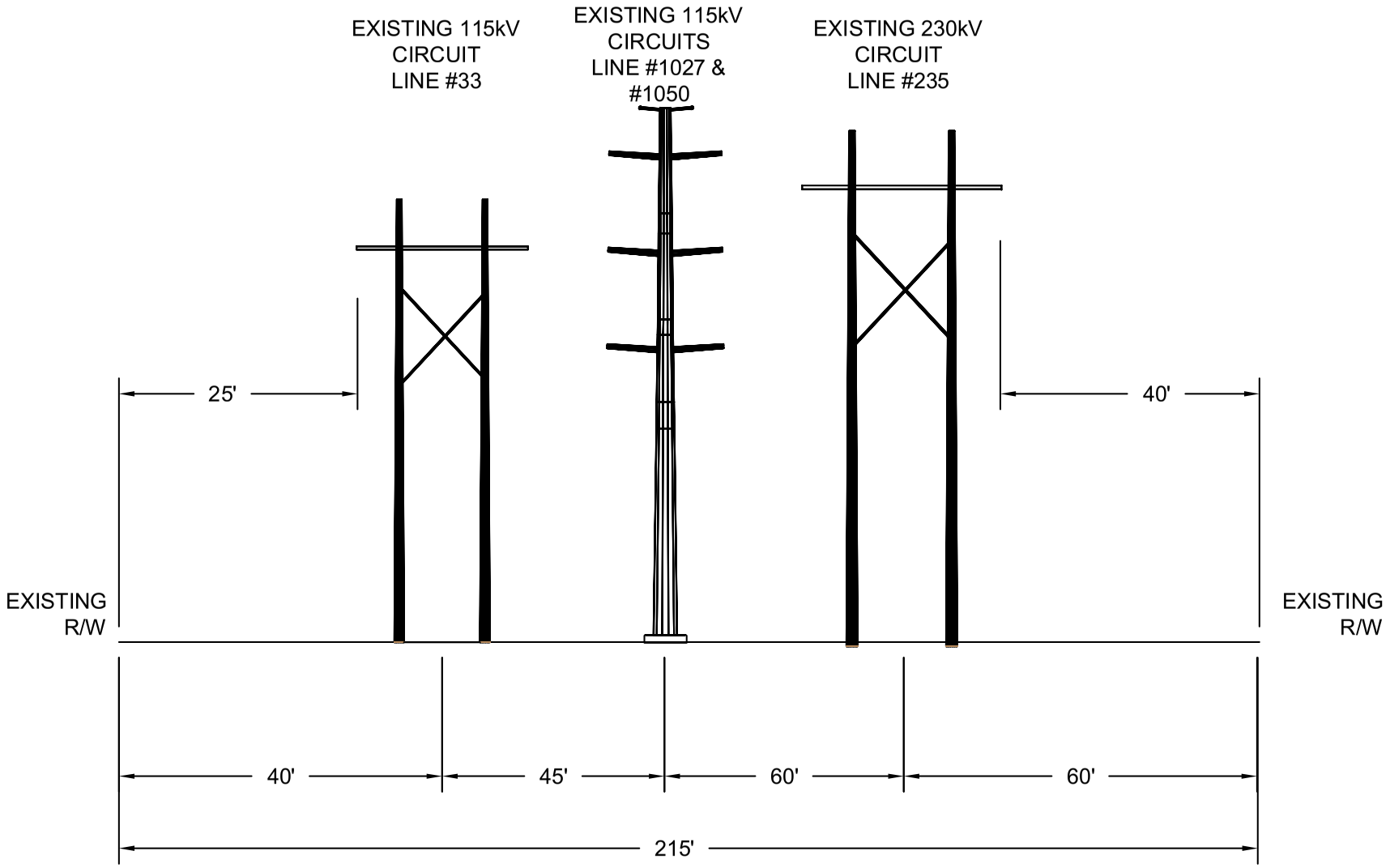
LINE #33, 33/590-33/619
LINE #36, 36/1062-33/1040
LINE #1050, 1050/1039-1050/1013
LINE #235, 235/340-235/313
EXISTING CONFIGURATION



TYPICAL RIGHT OF WAY LOOKING TOWARD CHASE CITY

NOTE: INFORMATION CONTAINED ON DRAWING IS CONSIDERED PRELIMINARY IN NATURE AND SUBJECT TO CHANGE BASED ON FINAL DESIGN

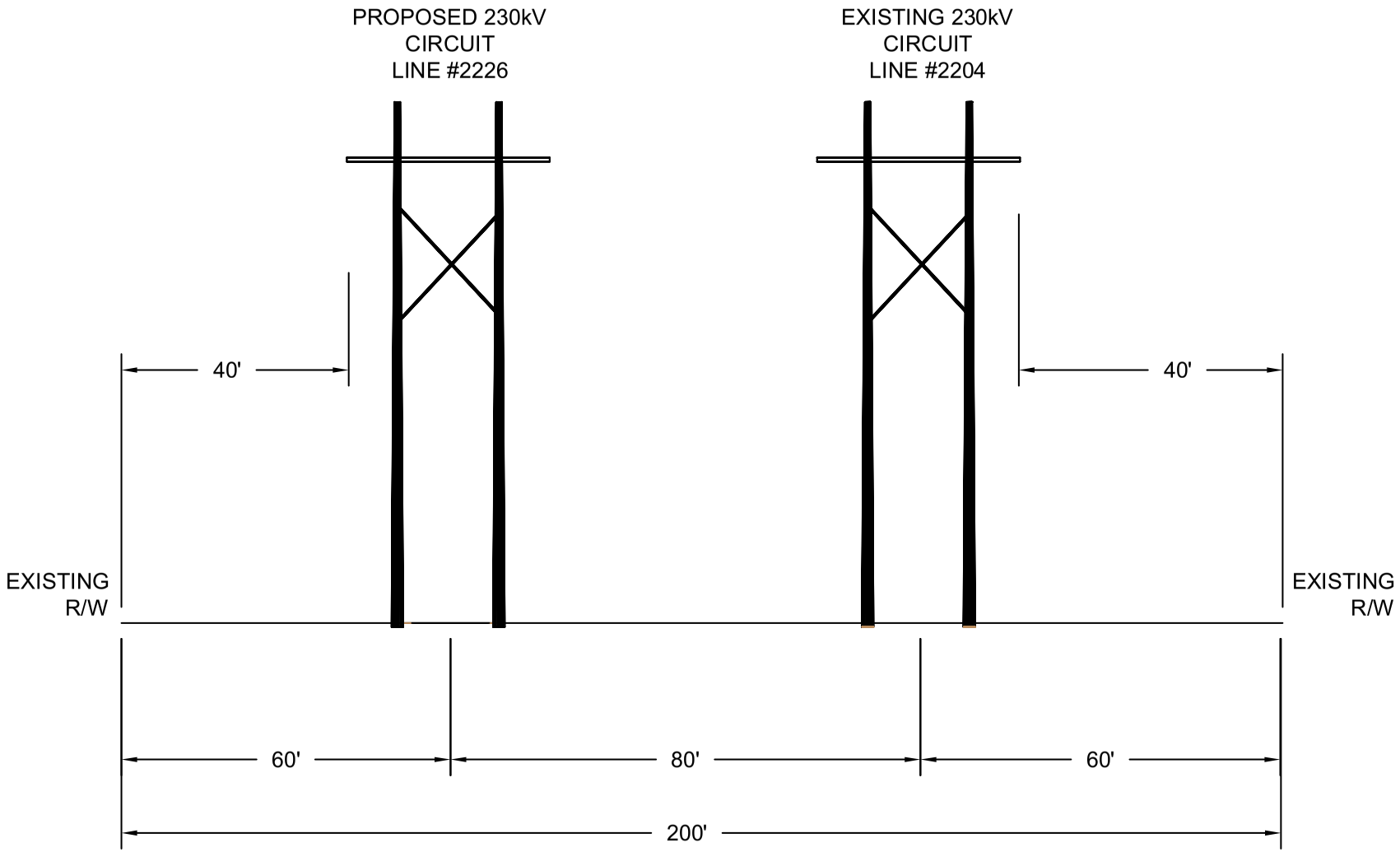
LINE #33, 33/620-33/623
LINE #1050, 1050/1012-1050/1008
LINE #1027, 1027/1012-1027/1008
LINE #235, 235/312-235/310
EXISTING CONFIGURATION



TYPICAL RIGHT OF WAY LOOKING TOWARD CHASE CITY

NOTE: INFORMATION CONTAINED ON DRAWING IS CONSIDERED PRELIMINARY IN NATURE AND SUBJECT TO CHANGE BASED ON FINAL DESIGN

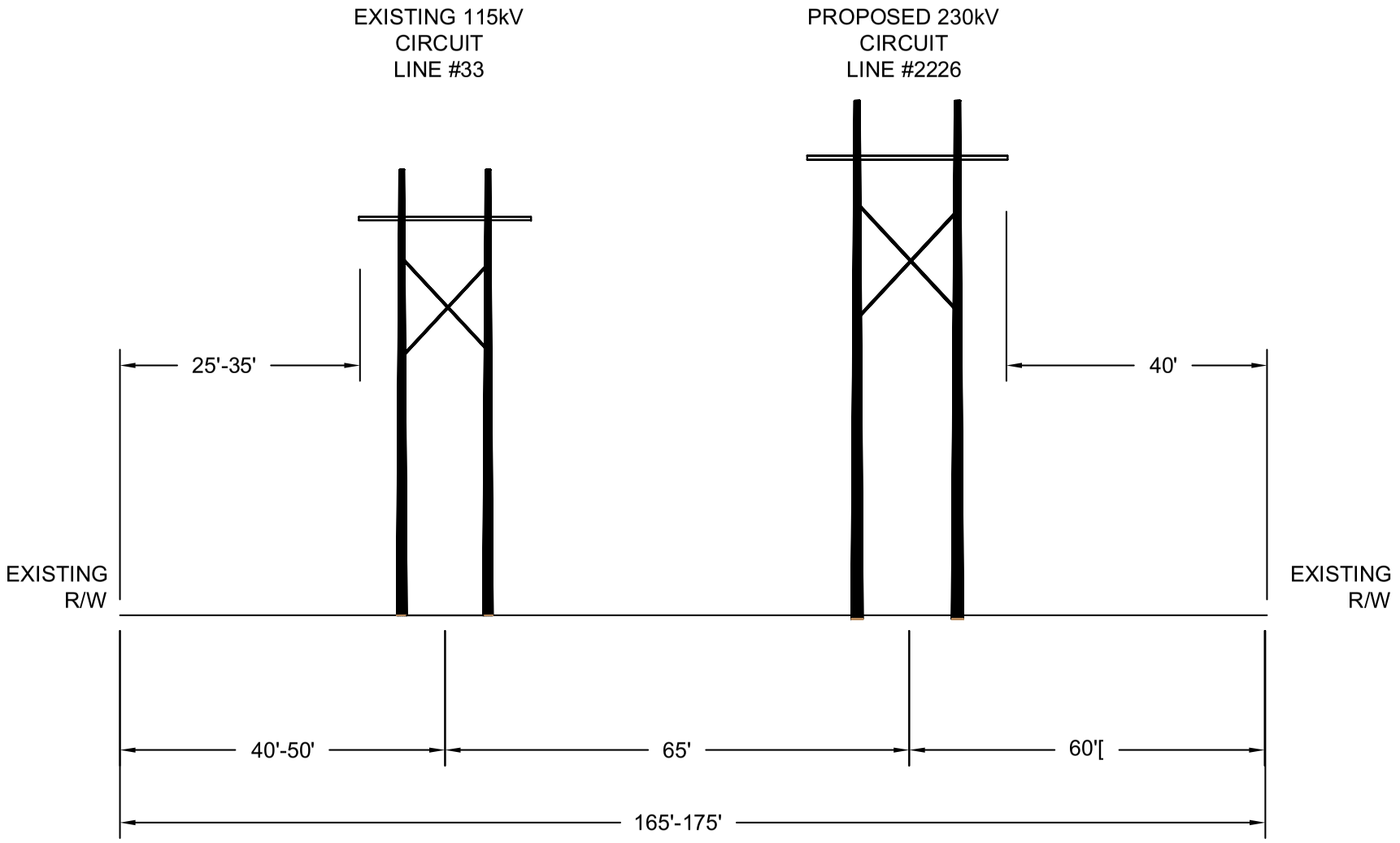
LINE #2204, 2204/386-2204/409
LINE #2226, 2226/431-2226/408A
PROPOSED CONFIGURATION



TYPICAL RIGHT OF WAY LOOKING TOWARD CHASE CITY

NOTE: INFORMATION CONTAINED ON DRAWING IS CONSIDERED PRELIMINARY IN NATURE AND SUBJECT TO CHANGE BASED ON FINAL DESIGN

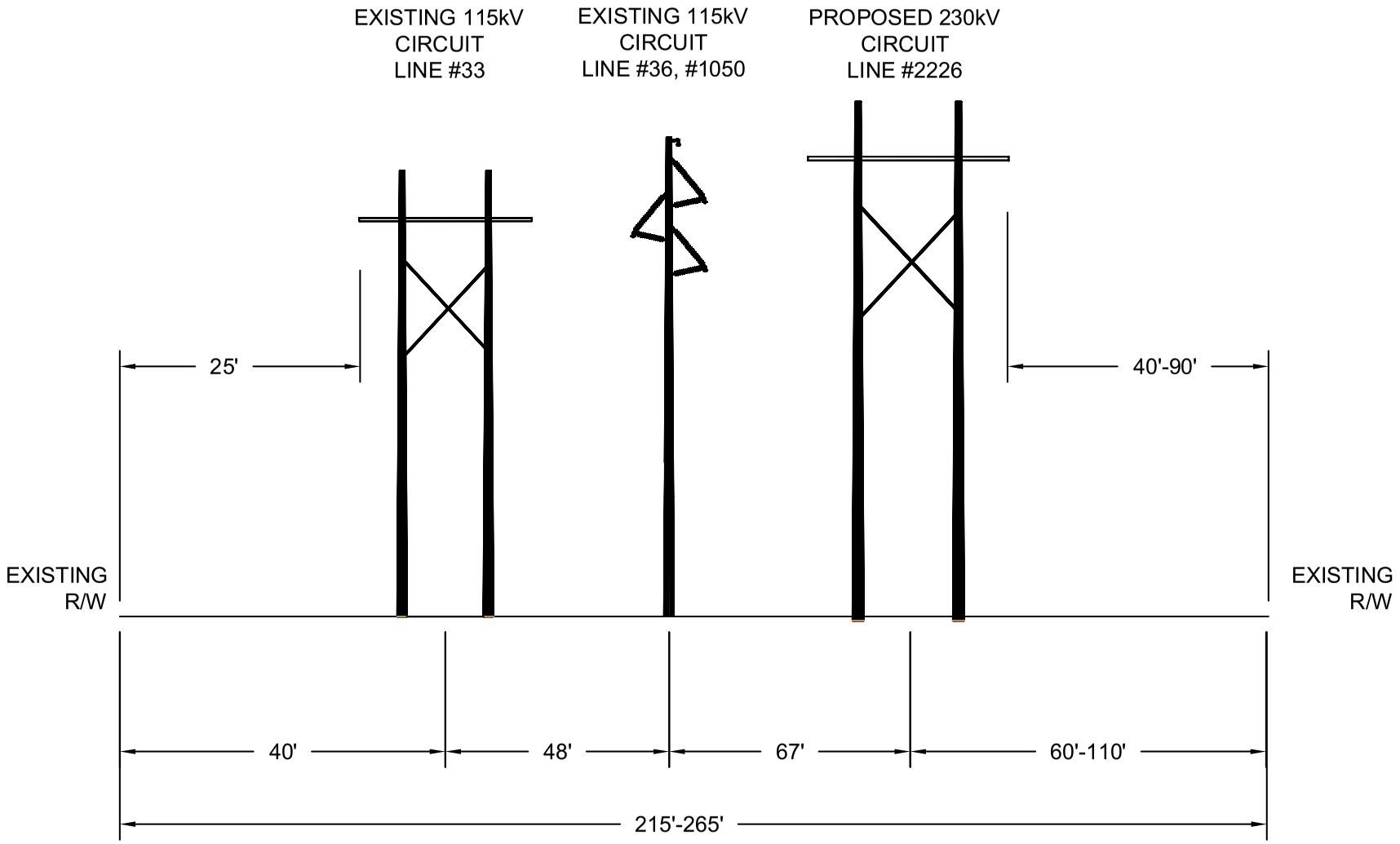
LINE #33, 33/519-33/589
LINE #2226, 2226/409-2226/341
PROPOSED CONFIGURATION



TYPICAL RIGHT OF WAY LOOKING TOWARD CHASE CITY

NOTE: INFORMATION CONTAINED ON DRAWING IS CONSIDERED PRELIMINARY IN NATURE AND SUBJECT TO CHANGE BASED ON FINAL DESIGN

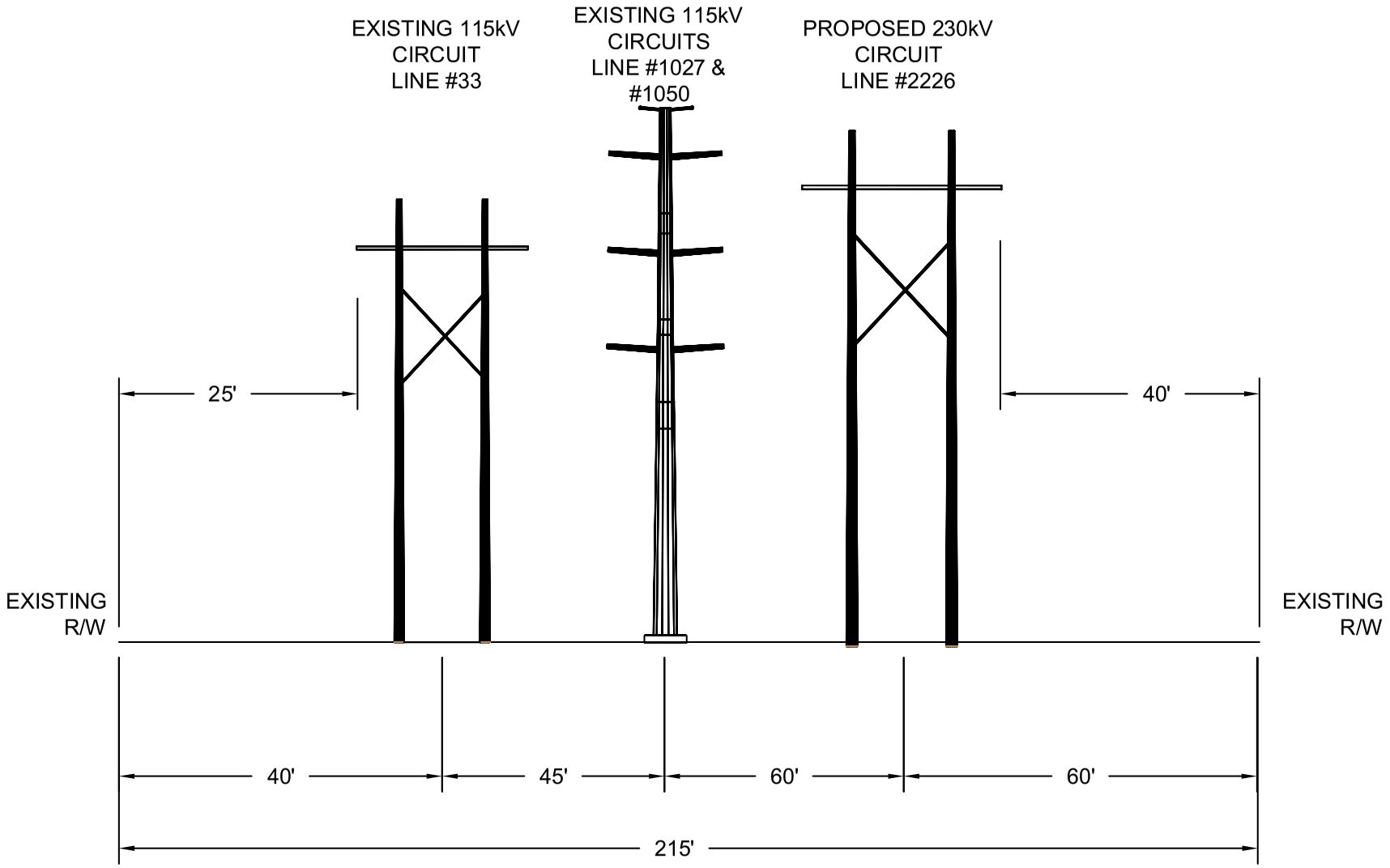
LINE #33, 33/590-33/619
LINE #36, 36/1062-33/1040
LINE #1050, 1050/1039-1050/1013
LINE #2226, 2226/340-2226/313
PROPOSED CONFIGURATION



TYPICAL RIGHT OF WAY LOOKING TOWARD CHASE CITY

NOTE: INFORMATION CONTAINED ON DRAWING IS CONSIDERED PRELIMINARY IN NATURE AND SUBJECT TO CHANGE BASED ON FINAL DESIGN

LINE #33, 33/620-33/623
LINE #1050, 1050/1012-1050/1008
LINE #1027, 1027/1012-1027/1008
LINE #2226, 2226/312-2226/310
PROPOSED CONFIGURATION



TYPICAL RIGHT OF WAY LOOKING TOWARD CHASE CITY

NOTE: INFORMATION CONTAINED ON DRAWING IS CONSIDERED PRELIMINARY IN NATURE AND SUBJECT TO CHANGE BASED ON FINAL DESIGN

Appendix B

B.1 ARCHITECTURAL RESOURCE MAPS

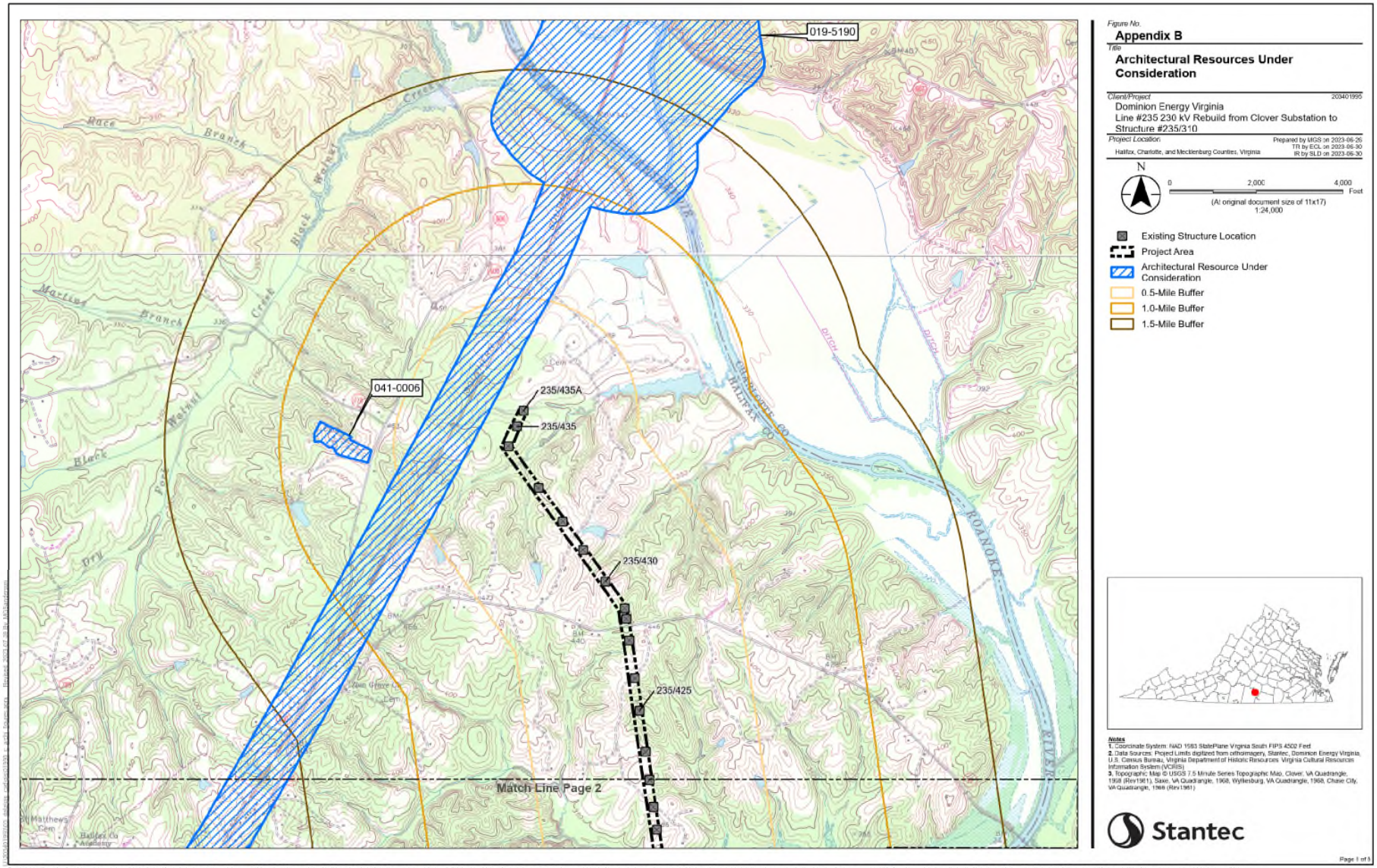


Figure No.
Appendix B

Title
Architectural Resources Under Consideration

Client/Project 203401995
Dominion Energy Virginia
Line #235 230 kV Rebuild from Clover Substation to Structure #235/310

Project Location:
Halifax, Charlotte, and Mecklenburg Counties, Virginia

Prepared by MGS on 2023-06-26
TR by ECL on 2023-06-30
IR by SLD on 2023-06-30

N

0 2,000 4,000 Feet

(At original document size of 11x17)
1:24,000

- Existing Structure Location
- Project Area
- Architectural Resource Under Consideration
- 0.5-Mile Buffer
- 1.0-Mile Buffer
- 1.5-Mile Buffer

Notes
1. Coordinate System: NAD 1983 StatePlane Virginia South FIPS 4502 Feet
2. Data Sources: Project Limits digitized from orthoimagery, Stantec, Dominion Energy Virginia, U.S. Census Bureau, Virginia Department of Historic Resources Virginia Cultural Resources Information System (VCRIS)
3. Topographic Map © USGS 7.5 Minute Series Topographic Map, Clover, VA Quadrangle, 1968 (Rev1981), Saxe, VA Quadrangle, 1968, Wyllesburg, VA Quadrangle, 1968, Chase City, VA Quadrangle, 1966 (Rev1981)

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Page 1 of 5

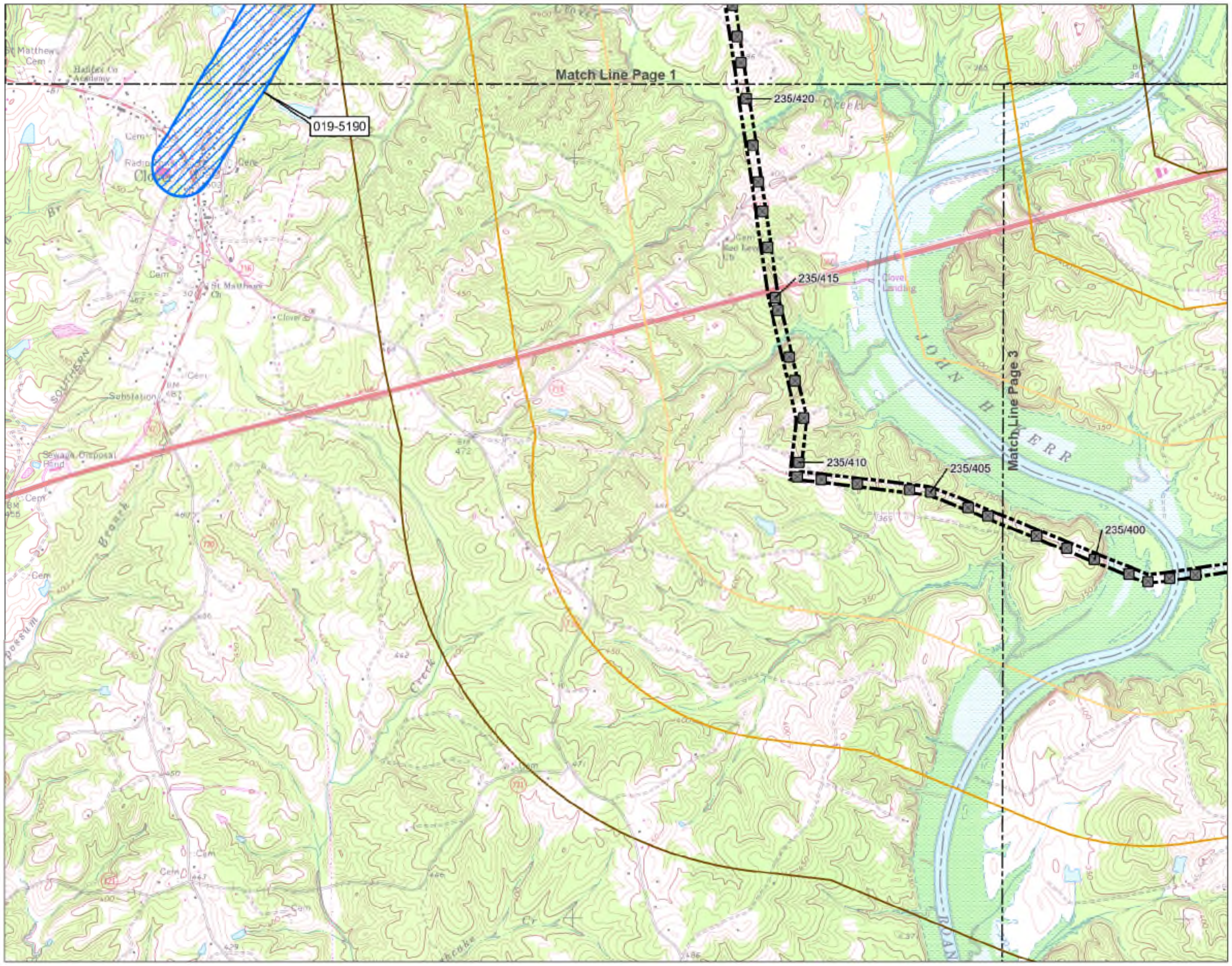


Figure No.

Appendix B

Title

Architectural Resources Under Consideration

Client/Project 203401995

Dominion Energy Virginia
Line #235 230 kV Rebuild from Clover Substation to Structure #235/310

Project Location

Halifax, Charlotte, and Mecklenburg Counties, Virginia

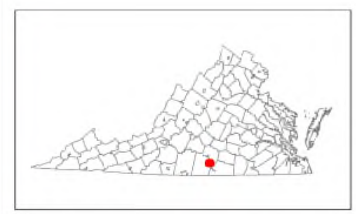
Prepared by MGS on 2023-06-26
TR by ECL on 2023-06-30
IR by SLD on 2023-06-30

N

0 2,000 4,000 Feet

(At original document size of 11x17)
1:24,000

- Existing Structure Location
- Project Area
- Architectural Resource Under Consideration
- 0.5-Mile Buffer
- 1.0-Mile Buffer
- 1.5-Mile Buffer



Notes

1. Coordinate System: NAD 1983 StatePlane Virginia South FIPS 4502 Feet
2. Data Sources: Project Limits digitized from orthoimagery, Stantec, Dominion Energy Virginia, U.S. Census Bureau, Virginia Department of Historic Resources Virginia Cultural Resources Information System (VCRIS)
3. Topographic Map © USGS 7.5 Minute Series Topographic Map, Clover, VA Quadrangle, 1968 (Rev1981), Saxe, VA Quadrangle, 1968, Wylliesburg, VA Quadrangle, 1968, Chase City, VA Quadrangle, 1968 (Rev1981)

Stantec

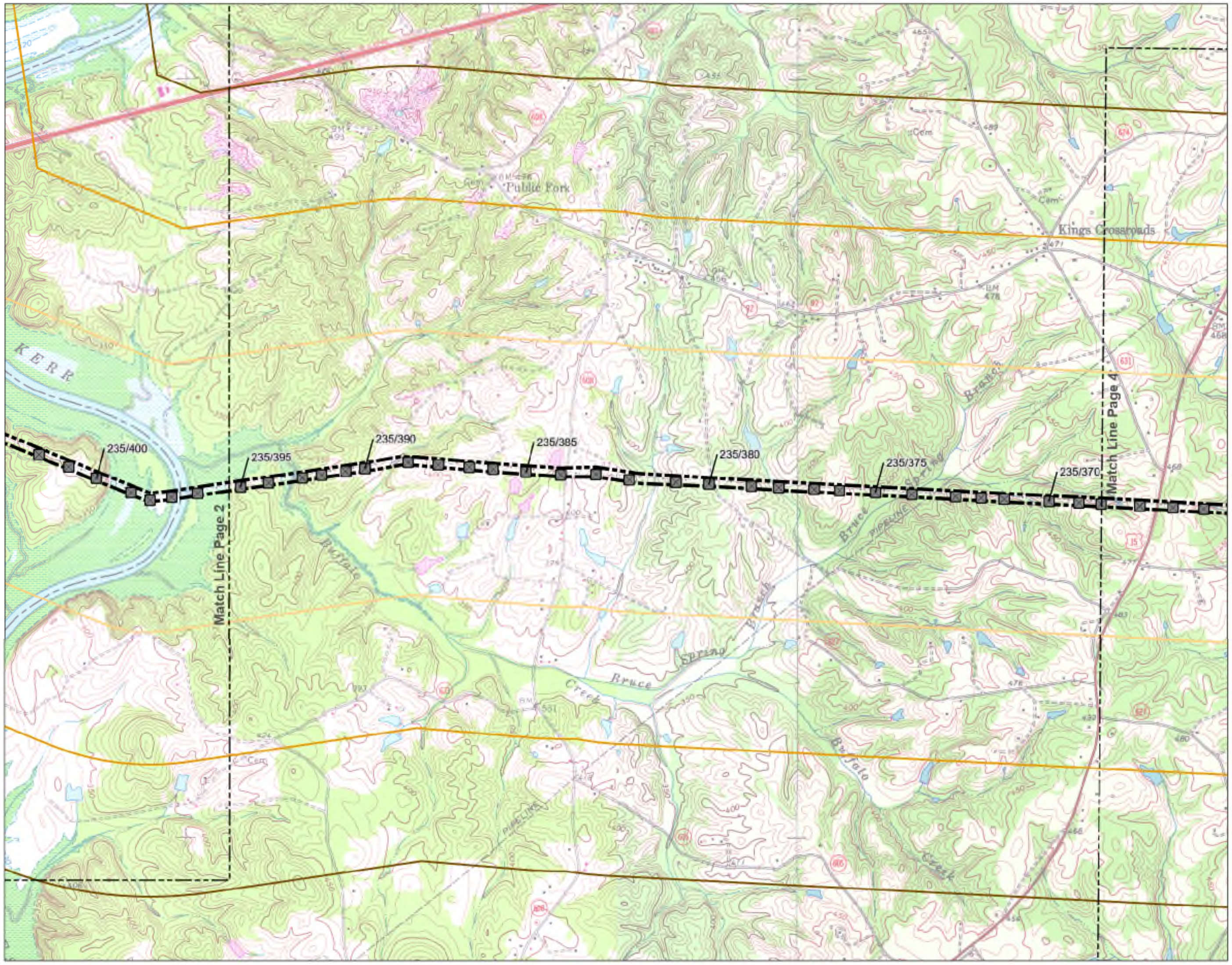


Figure No.
Appendix B

Title
Architectural Resources Under Consideration

Client/Project
203401995
Dominion Energy Virginia
Line #235 230 kV Rebuild from Clover Substation to Structure #235/310

Project Location
Halifax, Charlotte, and Mecklenburg Counties, Virginia

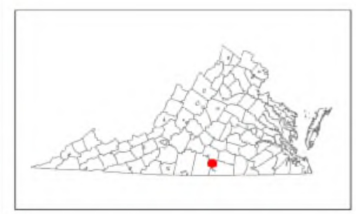
Prepared by MGS on 2023-06-26
TR by ECL on 2023-06-30
IR by SLD on 2023-06-30

N

0 | 2,000 | 4,000 Feet

(At original document size of 11x17)
1:24,000

- Existing Structure Location
- Project Area
- Architectural Resource Under Consideration
- 0.5-Mile Buffer
- 1.0-Mile Buffer
- 1.5-Mile Buffer



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1. Coordinate System: NAD 1983 StatePlane Virginia South FIPS 4502 Feet
2. Data Sources: Project Limits digitized from orthoimagery, Stantec, Dominion Energy Virginia, U.S. Census Bureau, Virginia Department of Historic Resources Virginia Cultural Resources Information System (VCRIS)
3. Topographic Map © USGS 7.5 Minute Series Topographic Map, Clover, VA Quadrangle, 1968 (Rev1981), Saxe, VA Quadrangle, 1968, Wylliesburg, VA Quadrangle, 1968, Chase City, VA Quadrangle, 1968 (Rev1981)

Stantec

Page 3 of 5

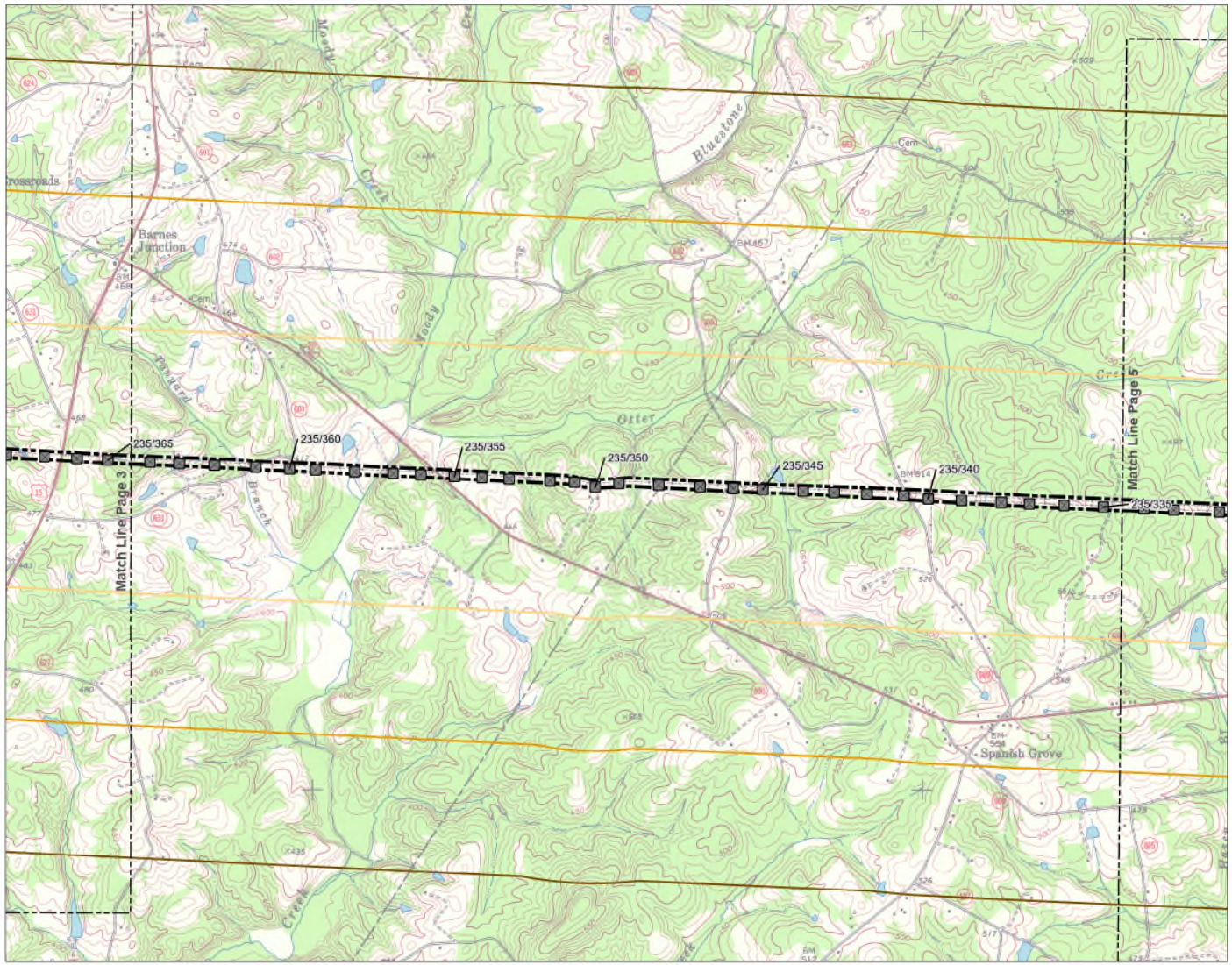


Figure No.
Appendix B

Title
Architectural Resources Under Consideration

Client/Project 203401995
Dominion Energy Virginia
Line #235 230 kV Rebuild from Clover Substation to Structure #235/310

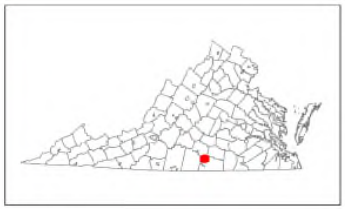
Project Location:
Halifax, Charlotte, and Mecklenburg Counties, Virginia

Prepared by MGS on 2023-06-26
TR by ECL on 2023-06-30
IR by SLD on 2023-06-30

N

0 2,000 4,000 Feet
(At original document size of 11x17)
1:24,000

- Existing Structure Location
- Project Area
- Architectural Resource Under Consideration
- 0.5-Mile Buffer
- 1.0-Mile Buffer
- 1.5-Mile Buffer



Notes
1. Coordinate System: NAD 1983 StatePlane Virginia South FIPS 4502 Feet
2. Data Sources: Project Limits digitized from orthoimagery, Stantec, Dominion Energy Virginia, U.S. Census Bureau, Virginia Department of Historic Resources Virginia Cultural Resources Information System (VCRIS)
3. Topographic Map © USGS 7.5 Minute Series Topographic Map, Clover, VA Quadrangle; 1968 (Rev1981), Saxe, VA Quadrangle; 1968, Wyllesburg, VA Quadrangle; 1968, Chase City, VA Quadrangle; 1966 (Rev1981)

Stantec

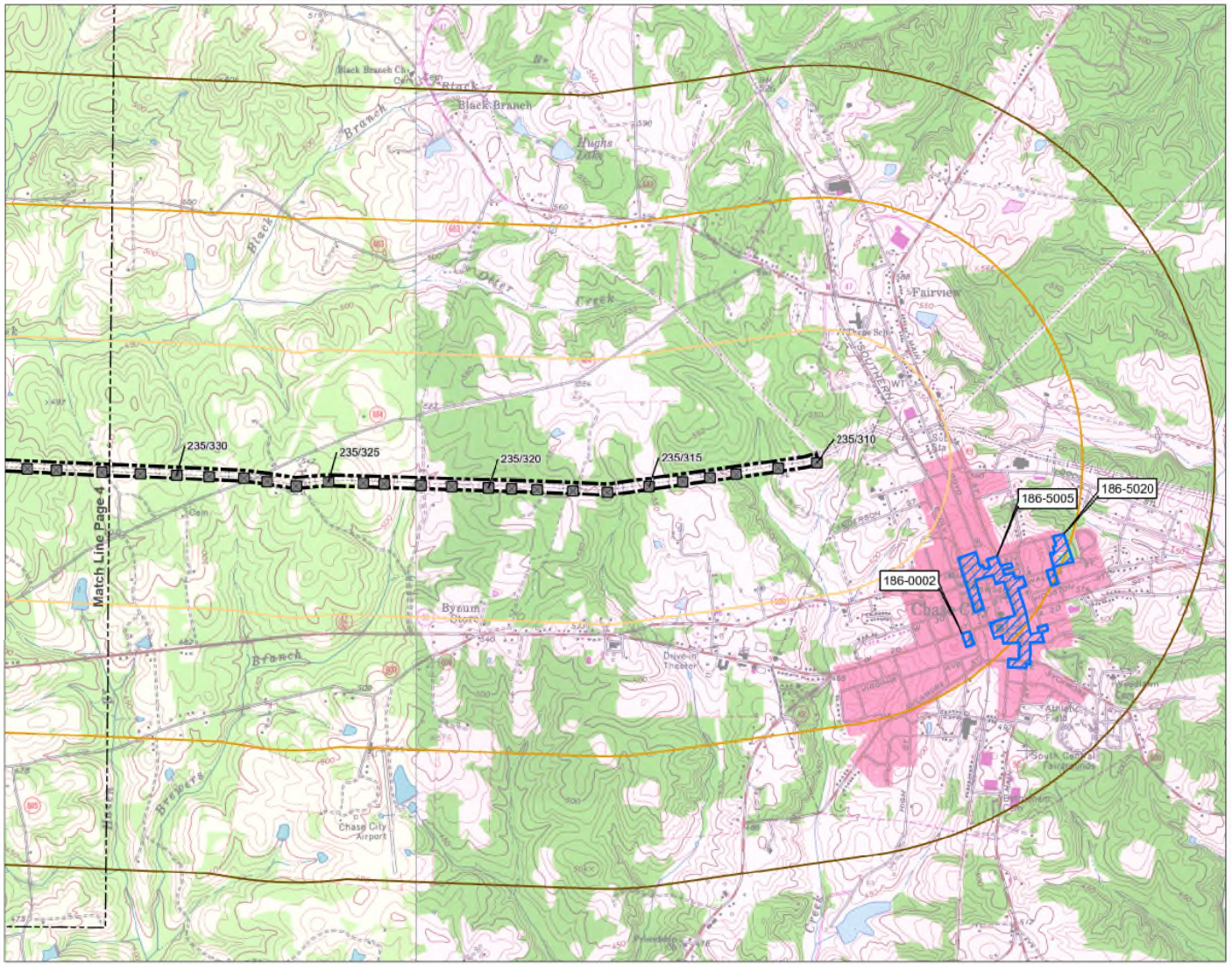


Figure No.
Appendix B

Title
Architectural Resources Under Consideration

Client/Project 203401995
Dominion Energy Virginia
Line #235 230 kV Rebuild from Clover Substation to Structure #235/310

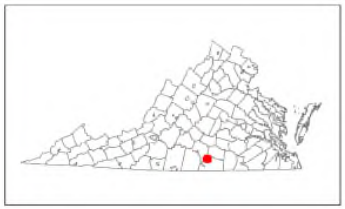
Project Location:
Halifax, Charlotte, and Mecklenburg Counties, Virginia

Prepared by MGS on 2023-06-26
TR by ECL on 2023-06-30
IR by SLD on 2023-06-30

N

0 2,000 4,000 Feet
(At original document size of 11x17)
1:24,000

- Existing Structure Location
- Project Area
- Architectural Resource Under Consideration
- 0.5-Mile Buffer
- 1.0-Mile Buffer
- 1.5-Mile Buffer



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2. Data Sources: Project Limits digitized from orthoimagery, Stantec, Dominion Energy Virginia, U.S. Census Bureau, Virginia Department of Historic Resources Virginia Cultural Resources Information System (VCRIS)
3. Topographic Map © USGS 7.5 Minute Series Topographic Map, Clover, VA Quadrangle, 1968 (Rev1981), Saxe, VA Quadrangle, 1968, Wyllesburg, VA Quadrangle, 1968, Chase City, VA Quadrangle, 1966 (Rev1981)

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APPENDIX C

C.1 PHOTOSIMULATIONS

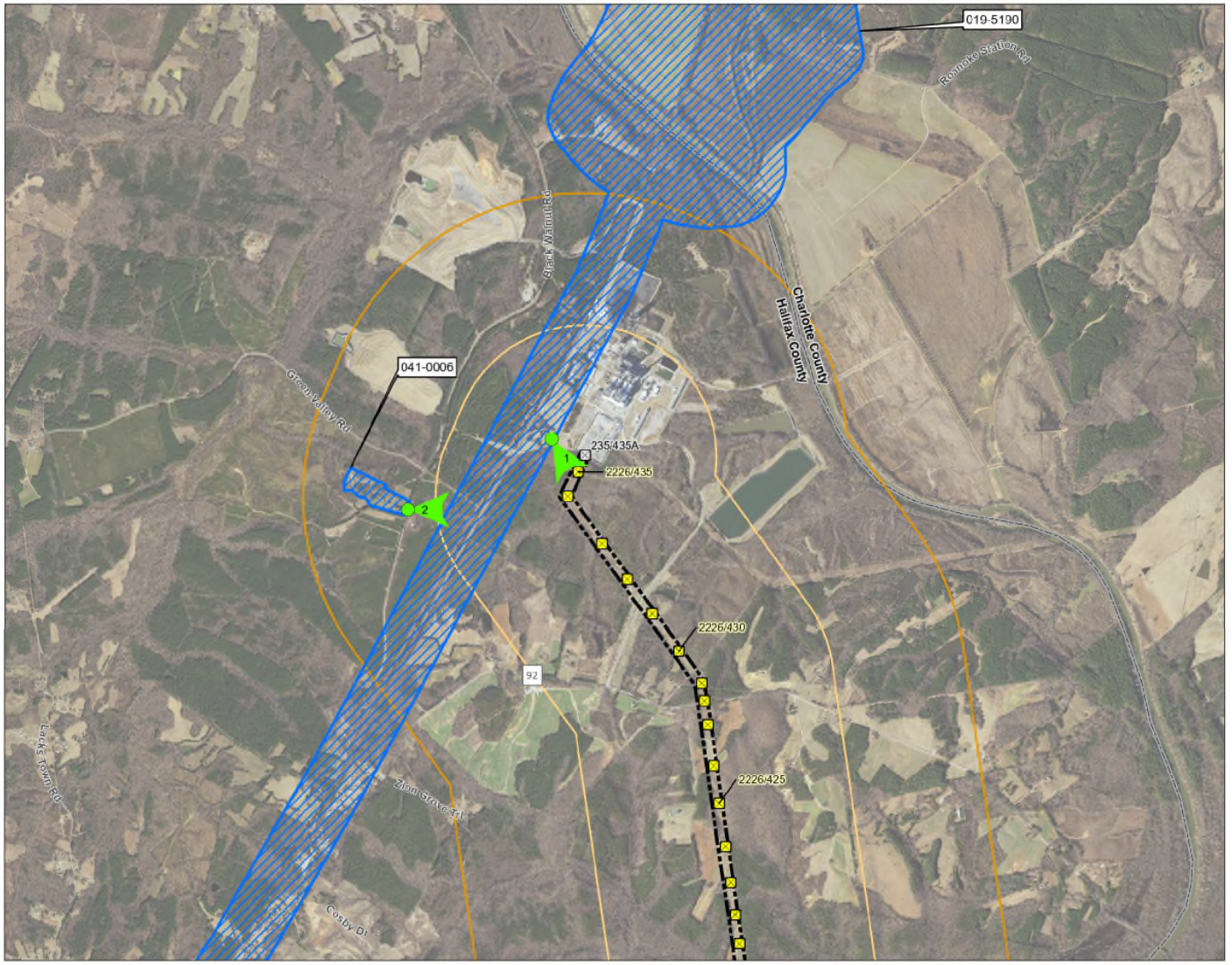


Figure No.
Appendix C

Title
Photo Simulation Points

Client/Project 203401995
Dominion Energy Virginia
Line #235 230 kV Rebuild from Clover Substation to Structure #235/310

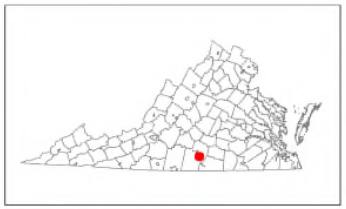
Project Location:
Halifax, Charlotte, and Mecklenburg Counties, Virginia

Prepared by JSC on 2023-07-05
TR by BJW on 2023-07-06
IR by SLD on 2023-07-05

N

0 2,000 4,000 Feet
(At original document size of 11x17)
1:24,000

- Existing Structure 235/435A to be Removed
- Proposed Structure
- Project Area
- Architectural Resource Under Consideration
- 0.5-Mile Buffer
- 1.0-Mile Buffer
- Photo Observation Point



Notes
1. Coordinate System: NAD 1983 StatePlane Virginia South FIPS 4502 Feet
2. Data Sources: Project Limits digitized from orthoimagery, Stantec, Dominion Energy Virginia, U.S. Census Bureau, Virginia Department of Historic Resources Virginia Cultural Resources Information System (VCRIS)
3. Virginia Geographic Information Network (VGIN) aerial imagery.

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Page 1 of 3

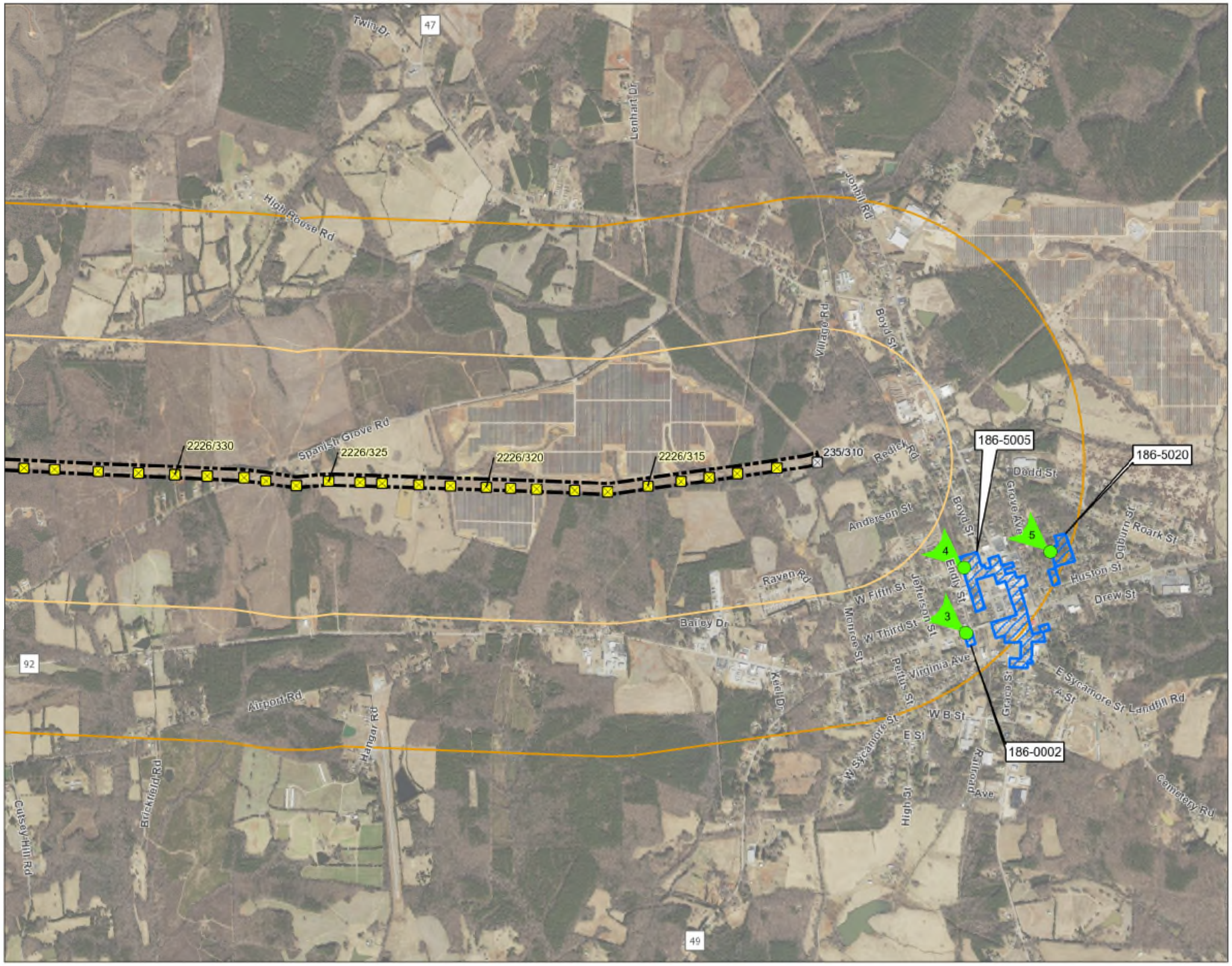


Figure No.
Appendix C
Title
Photo Simulation Points

Client/Project 203401995
Dominion Energy Virginia
Line #235 230 kV Rebuild from Clover Substation to Structure #235/310

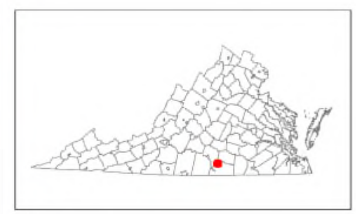
Project Location
Halifax, Charlotte, and Mecklenburg Counties, Virginia

Prepared by JSC on 2023-07-05
TR by BJW on 2023-07-05
IR by SLD on 2023-07-05

N

0 2,000 4,000 Feet
(At original document size of 11x17)
1:24,000

- Existing Structure 235/310 to be Reconductored
- Proposed Structure
- Project Area
- Architectural Resource Under Consideration
- 0.5-Mile Buffer
- 1.0-Mile Buffer
- Photo Observation Point



Notes
1. Coordinate System: NAD 1983 StatePlane Virginia South FIPS 4502 Feet
2. Data Sources: Project Limits digitized from orthoimagery, Stantec, Dominion Energy Virginia, U.S. Census Bureau, Virginia Department of Historic Resources Virginia Cultural Resources Information System (VCRIS)
3. Virginia Geographic Information Network (VGIN) aerial imagery.

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Page 2 of 3

Disclaimer: This document has been prepared based on information provided by others as cited in the Notes section. Stantec has not verified the accuracy and/or completeness of this information and shall not be responsible for any errors or omissions which may be incorporated herein as a result. Stantec assumes no responsibility for data supplied in electronic format, and the recipient accepts full responsibility for verifying the accuracy and completeness of the data.

OP01 – EXISTING

Photograph provided by Stantec

OP 1 Existing

Staunton River Bridge Battlefield (DHR #019-5190)

Stantec Dominion Energy

Simulation provided by Stantec

OP 1 Overlay
Staunton River Bridge Battlefield (DHR #019-5190)

Stantec Dominion Energy

OP01 – PROPOSED

Photograph provided by Stantec

OP 1 Proposed
Staunton River Bridge Battlefield (DHR #019-5190)

Stantec Dominion Energy

Photograph provided by Stantec

OP 2 Existing
Black Walnut, Black Walnut Road (DHR #041-0006)

Stantec Dominion Energy

Photograph provided by Stantec

OP 2 Overlay
Black Walnut, Black Walnut Road (DHR #041-0006)

Stantec Dominion Energy

Simulation by Stantec

OP 2 Proposed
Black Walnut, Black Walnut Road (DHR #041-0006)

Stantec Dominion Energy

OP03 – EXISTING

Photograph provided by Stantec

OP 3 Existing

Chase City High School/Maple Manor Apartments, 136 Endley Street (DHR #186-0002)

Stantec Dominion Energy

OP03 – OVERLAY

Photograph provided by Stantec

OP 3 Overlay

Chase City High School/Maple Manor Apartments, 136 Endley Street (DHR #186-0002)

Stantec Dominion Energy

OP03 – PROPOSED

Simulation by Stantec

OP 3 Proposed

Chase City High School/Maple Manor Apartments, 136 Endley Street (DHR #186-0002)

Stantec Dominion Energy

OP04 – EXISTING

Photograph provided by Stantec

OP 4 Existing

Chase City Warehouse and Commercial Historic District (DHR #186-5005)

Stantec Dominion Energy

OP04 – OVERLAY

Photograph provided by Stantec

OP 4 Overlay

Chase City Warehouse and Commercial Historic District (DHR #186-5005)

Stantec Dominion Energy

Simulation provided by Stantec

OP 4 Proposed

Chase City Warehouse and Commercial Historic District (DHR #186-5005)

Stantec Dominion Energy

OP05 – EXISTING

Photograph provided by Stantec

OP 5 Existing

MacCallum More/Hudgins House Historic District (DHR #186-5001) and MacCallum More and Hudgins House Historic District, 439 Walker Street/603 Hudgins Street (DHR #186-5020)

Stantec Dominion Energy

OP05 – OVERLAY

Photograph provided by Stantec

OP 5 Overlay

MacCallum More/Hudgins House Historic District (DHR #186-5001) and MacCallum More and Hudgins House Historic District, 439 Walker Street/603 Hudgins Street (DHR #186-5020)

Stantec Dominion Energy

Simulation provided by Stantec

OP 5 Proposed

MacCallum More/Hudgins House Historic District (DHR #186-5001) and MacCallum More and Hudgins House Historic District, 439 Walker Street/603 Hudgins Street (DHR #186-5020)

Stantec Dominion Energy

APPENDIX D

D.1 ARCHAEOLOGICAL RESOURCE MAPS*

FOR THE PURPOSES OF THE SCC FILING, LOCATION DATA RELATED TO ARCHAEOLOGICAL RESOURCES HAS BEEN REDACTED BUT HAVE BEEN INCLUDED IN THE STAGE 1 PRE-APPLICATION ANALYSIS SUBMITTED TO VDHR.

VIRGINIA OUTDOORS FOUNDATION

July 21, 2023

[VIA EMAIL]

Lucas DuPont
Dominion Energy
lucas.a.dupont@dominionenergy.com

RE: Dominion Energy Virginia's Line #235 250kV Rebuild from Clover Substation to Structure #235/10, Halifax, Mecklenburg, and Charlotte Counties, Virginia; pre-SCC filing comments

Dear Mr. Dupont:

The Virginia Outdoors Foundation (VOF) thanks you for the advance notice of the above-referenced project. VOF acknowledges and appreciates Dominion's efforts to work with our agency, prior to SCC filing, to identify and avoid impacts to our agency's conservation interests. According to your letter dated July 5, 2023, it is understood Dominion is proposing to rebuild approximately 16 miles of the existing 230kV Line #235 between the existing Clover Substation and Structure #235/310 and that Dominion proposes to locate the Rebuild Project entirely within the existing Line #235 right-of-way and that no additional right-of-way acquisition is necessary.

> VOF, an agency of the Commonwealth, was established by the General Assembly in 1966 to promote the preservation of Virginia's natural and cultural resources by encouraging private philanthropy in fulfillment of state policy. As a result of Virginia's commitment to ensure a vibrant natural environment for today and future generations, VOF owns thousands of acres managed for public access and holds more than 4,000 open-space easements across the Commonwealth, which protect over 860,000 acres.
>
> An open-space easement is a legal interest in real property that creates a relationship between the holders of the easement and the property owner. By means of the easement, VOF has an interest in specific conservation values of the property and a legal obligation to protect these values. VOF easements provide important public benefits by protecting in perpetuity significant tracts of mostly undeveloped land, which may contribute to the protection of water quality, productive soils, natural heritage resources, historic resources, and scenic viewsheds. VOF easements represent over $1 billion of public investment and fulfillment of Title XI of the Virginia Constitution and other public policies to ensure the conservation of natural and cultural resources.

As proposed, the Rebuild Project route currently crosses an existing VOF open-space easement in Halifax County along the Roanoke (Staunton) River, known as Project 4047, for approximately 3,900 feet (0.75 miles). Project 4047 is an open-space easement containing over 548 acres which provides protections for several perennial streams and tributaries of the Roanoke (Staunton) River,

scenic views from the adjacent publicly accessible Clover Wildlife Management Area, unique and important habitats within the Lower Roanoke (Staunton) River Conservation Site (designated by the Virginia Department of Conservation and Recreation's Division of Natural Heritage), among many other important and unique conservation attributes and values.

VOF wishes to further inform Dominion and its representatives of VDCR Division of Natural Heritage's documentation of two species of rare plants on this VOF easement property – the state-rare Heller's cudweed *(Pseudognaphalium helleri)* and the globally rare Yadkin hedge-nettle *(Stachys matthewsii),* both of which were documented in close proximity to each other near the Property's northeast boundary where the existing transmission line exists and where it adjoins the Clover Wildlife Management Area. According to Dominion's Clover to Chase City Structure Height Comparison Tool, available online, this Resource Protection Area of our Easement spans from the proposed Structure 2226/404 to Structure 2226/403 within the Rebuild Project. Please see the enclosed, Special Conditions Map, where this specific Resource Protection Area is shown in Yellow and bounded by points A, B, C, and D. We ask that Dominion work with VDCR's Division of Natural Heritage, VOF, and the landowner to ensure these unique resources are protected from any impacts associated with the proposed Rebuild Project.

VOF and our state agency partners work with utility developers across the state to try to avoid all project impacts on state conservation interests and easement interests where possible, and in areas were avoidance is not possible, to minimize and mitigate impacts to the specific conservation values of these properties to the fullest extent possible. It is always our hope that by engaging with Dominion Energy early in the process, our organizations can work together to avoid impacts to the Commonwealth's conservation and open-space easement interests.

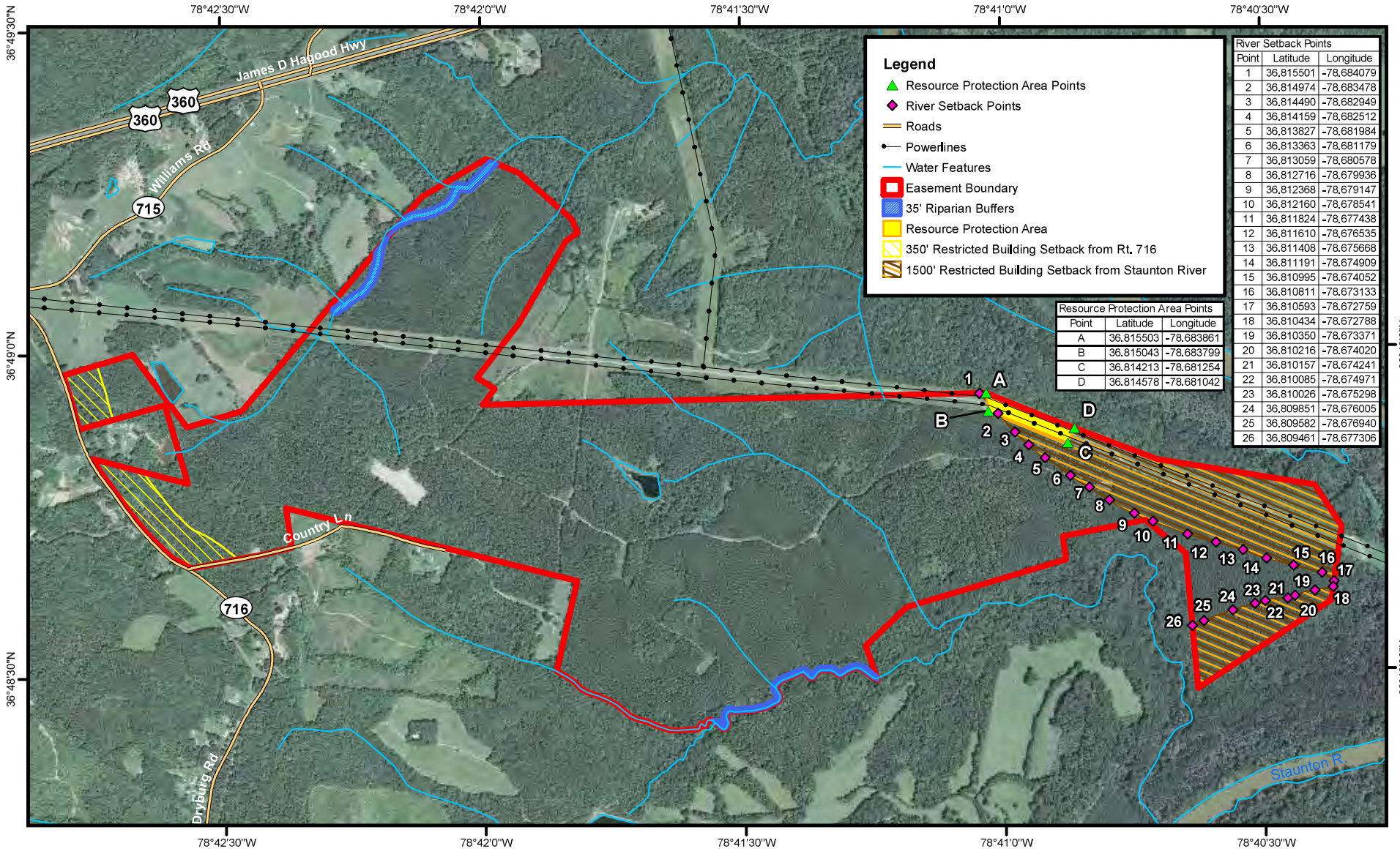
Thank you for the advanced notice, and we look forward to working you and your colleagues at Dominion Energy in the continued planning and development of this project. If you have any further questions or comments, please don't hesitate to contact me at (804) 577-3337 or via email at mlittle@vof.org.

Sincerely,

Martha Little
VOF Deputy Director

CC: DEQ Environmental Impact Review: eir@deq.virginia.gov
Christina McDonald, Dominion Energy: C.McDonald@dominionenergy.com

Enclosure: VOF Project 4047 Special Conditions Map



Resource Protection Area Points		
Point	Latitude	Longitude
A	36.815503	-78.683861
B	36.815043	-78.683799
C	36.814213	-78.681254
D	36.814578	-78.681042

River Setback Points		
Point	Latitude	Longitude
1	36.815501	-78.684079
2	36.814974	-78.683478
3	36.814490	-78.682949
4	36.814159	-78.682512
5	36.813827	-78.681984
6	36.813363	-78.681179
7	36.813059	-78.680578
8	36.812716	-78.679936
9	36.812368	-78.679147
10	36.812160	-78.678541
11	36.811824	-78.677438
12	36.811610	-78.676535
13	36.811408	-78.675668
14	36.811191	-78.674909
15	36.810995	-78.674052
16	36.810811	-78.673133
17	36.810593	-78.672759
18	36.810434	-78.672788
19	36.810350	-78.673371
20	36.810216	-78.674020
21	36.810157	-78.674241
22	36.810085	-78.674971
23	36.810026	-78.675298
24	36.809851	-78.676005
25	36.809582	-78.676940
26	36.809461	-78.677306

Projection: Lambert Conformal Conic
GCS North America 1983
Datum: D North America 1983

Map created 10/13/2015 by Anna Clayton Bullock.
Source data: Roads-VDOT; Water-VGIN 2012;
Powerlines-VEDP-2011; Other Conserved Lands-DCR-2015.
Aerial imagery acquired Spring 2014.
Aerial imagery-USDA-NAIP.

This map is for general reference and display purposes only.

Special Conditions Map

Devin Logging

548.314 acres
Halifax County

Feet
0 625 1250

1:15,000

N

VIRGINIA OUTDOORS FOUNDATION

From: Scheid, Todd (VDOT)
To: Lucas A Dupont (Services - 6); EIR Coordination (VDOT); Environmental Impact Review (DEQ)
Cc: Fulcher, Valerie (DEQ)
Subject: [EXTERNAL] Environmental Impact Review - Line #235 250kV Rebuild Clover Substation to Structure #235/10 Comments
Date: Monday, July 31, 2023 10:47:09 AM
Attachments: Outlook-go13k0xw.png

Hello Lucas,

I have reviewed this project and reached out to the South Hill VDOT Residency. Neither myself, nor the South Hill Residency have any issues or concerns with this project in relation to the transportation network or future transportation projects. However, Todd Cage would like me to remind you that a Land Use Permit is required when crossing or working within the VDOT jurisdiction.

If you have any other questions or concerns, please do not hesitate to contact me.

Respectfully,
Todd Scheid

Todd W. Scheid
Planning Specialist / Richmond District Planning Department
Virginia Department of Transportation
Office Phone: 804-524-6000
Work Cell Phone: 804-914-3446
Todd.Scheid@VDOT.Virginia.gov

From:	C.McDonald@dominionenergy.com
To:	andy.flavin@troutman.com; Tim.mchugh@troutman.com; annie.c.larson@dominionenergy.com; valerie.m.chafee@dominionenergy.com; Viktoriia.DeLasCasas@troutman.com; Adam.M.Swift@dominionenergy.com; john.sample@troutman.com; kadeisha.west@troutman.com
Cc:	lucas.a.dupont@dominionenergy.com; Gray, Corey; Presgraves, Kenny
Subject:	FW: Dominion Energy Virginia"s Proposed Line #235 230 kV Rebuild from Clover Substation to Structure #235/310 - SCC Project Notification for CPCN
Date:	Wednesday, July 12, 2023 11:54:20 AM
Attachments:	image001.png

See below comments from DOAV to be referenced in the filing.

Christa

From: Denny, S. Scott (DOAV) <Scott.Denny@doav.virginia.gov>
Sent: Tuesday, July 11, 2023 4:32 PM
To: Christiaanna C Mcdonald (Services - 6) <C.McDonald@dominionenergy.com>
Subject: [EXTERNAL] Re: Dominion Energy Virginia's Proposed Line #235 230 kV Rebuild from Clover Substation to Structure #235/310 - SCC Project Notification for CPCN

Dear Ms. McDonald:

Thank you for providing the Virginia Department of Aviation a copy of the proposed improvements to Line # 235. Following our review it appears as though the entire project is to take place within the existing right of way. However, it does appear as though a portion of the project is within 20,000 linear feet of the Chase City Airport. Therefore a 7460 must be submitted to the FAA for any portion of the project that that is within the 20,000 linear feet of the airport or for any structure, either temporary or permanent, that will reach a height of 200' above ground level.

The Department has no other comments regarding the project as it has been presented in your July 5, 2023 email. Please feel free to contact me if you have any additional questions or would like to discuss our comments in greater detail.

Sincerely,

S. Scott Denny
Senior Aviation Planner
Virginia Department of Aviation

From: C.McDonald@dominionenergy.com <C.McDonald@dominionenergy.com>
Sent: Wednesday, July 5, 2023 6:04 PM
To: Denny, S. Scott (DOAV) <Scott.Denny@doav.virginia.gov>
Cc: Adam.M.Swift@dominionenergy.com <Adam.M.Swift@dominionenergy.com>; lucas.a.dupont@dominionenergy.com <lucas.a.dupont@dominionenergy.com>; kenny.presgraves@stantec.com <kenny.presgraves@stantec.com>; Corey.gray@stantec.com <Corey.gray@stantec.com>; annie.c.larson@dominionenergy.com <annie.c.larson@dominionenergy.com>; Tim.mchugh@troutman.com <Tim.mchugh@troutman.com>; Viktoriia.DeLasCasas@troutman.com <Viktoriia.DeLasCasas@troutman.com>; john.sample@troutman.com <john.sample@troutman.com>; kadeisha.west@troutman.com <kadeisha.west@troutman.com>; valerie.m.chafee@dominionenergy.com <valerie.m.chafee@dominionenergy.com>
Subject: RE: Dominion Energy Virginia's Proposed Line #235 230 kV Rebuild from Clover Substation to Structure #235/310 - SCC Project Notification for CPCN

Dear Mr. Denny,

Please see the attached project agency notification for Dominion Energy Virginia's Certification of Public Convenience and Necessity (CPCN) application with the State Corporation Commission (SCC), associated project location map, and a shapefile of the proposed project alignment for the Dominion Energy Virginia Proposed Line #235 230 kV Rebuild from Clover Substation to Structure #235/310 in Halifax, Mecklenburg, and Charlotte Counties, Virginia.

If you have any questions, please feel free to contact me directly.

Thank you,
Christa

Christa McDonald
Siting and Permitting Specialist
Electric Transmission

Dominion Energy Virginia
5000 Dominion Blvd, 3.SW3051
Glen Allen, VA 23060

C: 571-319-2582
Email: C.McDonald@dominionenergy.com
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From: Warren, Arlene (VDH)
To: Lucas A Dupont (Services - 6)
Cc: Environmental Impact Review (DEQ)
Subject: [EXTERNAL] RE: NEW SCOPING Line #235 250kV Rebuild Clover Substation to Structure #235/10
Date: Tuesday, July 18, 2023 2:57:24 PM

Project Name: SCOPING Line #235 250kV Rebuild Clover Substation to Structure #235/10
Project #: **N/A**
UPC #: N/A
Location: Halifax, Mecklenburg, and Charlotte Counties

VDH – Office of Drinking Water has reviewed the above project. Below are our comments as they relate to proximity to **public drinking water sources** (groundwater wells, springs and surface water intakes). Potential impacts to public water distribution systems or sanitary sewage collection systems **must be verified by the local utility.**

The following public groundwater wells are located within a 1-mile radius of the project site (wells within a 1,000-foot radius are formatted in **bold):**

PWS ID Number	City/County	System Name	Facility Name
5083628	**HALIFAX COUNTY**	**ODEC / VIRGINIA POWER PLANT**	**WELL NO. 1**
5083628	HALIFAX COUNTY	ODEC / VIRGINIA POWER PLANT	WELL NO. 2

There are no surface water intakes located within a 5-mile radius of the project site.

The project is within the watershed of the following public surface water sources:

PWS ID Number	System Name	Facility Name
5117310	CLARKSVILLE, TOWN OF	KERR RESERVOIR INTAKE
5117707	ROANOKE RIVER SERVICE AUTHORITY	LAKE GASTON INTAKE

Best Management Practices should be employed, including Erosion & Sedimentation Controls and Spill Prevention Controls & Countermeasures on the project site.

Well(s) within a 1,000-foot radius from project site should be field marked and protected from accidental damage during construction.

The Virginia Department of Health – Office of Drinking Water appreciates the opportunity to provide comments. If you have any questions, please let me know.

From: Warren, Arlene
To: Rachel M Studebaker (Services - 6)
Subject: [EXTERNAL] Re: FW: SCC Case No. PUR-2021-00010/DEQ21-013S
Date: Tuesday, June 22, 2021 7:54:22 AM
Attachments: image001.png

The proposal from Dominion is reasonable and we consider it acceptable.

Best Regards,

Arlene Fields Warren

GIS Program Support Technician

Office of Drinking Water

Virginia Department of Health

109 Governor Street

Richmond, VA 23219

(804) 864-7781

On Thu, Jun 17, 2021 at 4:33 PM Rachel.M.Studebaker@dominionenergy.com <Rachel.M.Studebaker@dominionenergy.com> wrote:

> Hello Ms. Warren,
>
> I am reaching out in regard to the DEQ Report for SCC Case No. PUR-2021-00010/DEQ21-013S (230 kV lines #2113 and #2154 Transmission Line Rebuilds and Related Projects). As part of the VDH ODW review, it was recommended that all wells within a 1,000-foot radius of the project site be field marked and protected from accidental damage. It is our custom construction process to not conduct any work outside of the existing right-of-way (ROW), with the exception of entry using existing access roads, and use DEQ approved erosion and sediment controls. These well are located outside of the project area ROW on private land and Dominion Energy does not have permission to enter private property to field mark the wells.

Therefore, we are proposing to plot and call out the wells on the Erosion and Sediment control plans as a way of flagging them for the construction team for protection from accidental damage. Is this a sufficient approach to comply with the ODW recommendation?

Thank you,

Rachel Studebaker

Environmental Specialist II

Dominion Energy Services

120 Tredegar Street, Richmond, VA 23219

Office: (804) 273-4086

Cell: (804) 217-1847