

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

Before the State Corporation Commission of Virginia

230 kV Lines #2113 and #2154 Transmission Line Rebuilds and Related Projects

Application No. 303

Case No. PUR-2021-00010

Filed: January 20, 2021

Volume 2 of 2

COMMONWEALTH OF VIRGINIA

STATE CORPORATION COMMISSION

APPLICATION OF)	
VIRGINIA ELECTRIC AND POWER COMPANY)	Case No. PUR-2021-00010
)	
For approval and certification of electric transmission)	
facilities: 230 kV Lines #2113 and #2154)	
Transmission Line Rebuilds and Related Projects)	

IDENTIFICATION, SUMMARIES AND TESTIMONY OF DIRECT WITNESSES OF <u>VIRGINIA ELECTRIC AND POWER COMPANY</u>

Khan M. Adnan

Witness Direct Testimony Summary

Direct Testimony

Appendix A: Background and Qualifications

Sherrill A. Crenshaw

Witness Direct Testimony Summary

Direct Testimony

Appendix A: Background and Qualifications

Mohammad M. Othman

Witness Direct Testimony Summary

Direct Testimony

Appendix A: Background and Qualifications

Lane E. Carr

Witness Direct Testimony Summary

Direct Testimony

Appendix A: Background and Qualifications

WITNESS DIRECT TESTIMONY SUMMARY

Witness: Khan M. Adnan

<u>Title</u>: Area Planning Engineer – Electric Transmission Planning

Summary:

Company Witness Khan M. Adnan sponsors those portions of the Appendix describing the Company's transmission system and need for, and benefits of, the proposed Rebuild Projects, as follows:

- <u>Section I.B</u>: This section details the engineering justifications for the proposed project.
- <u>Section I.C</u>: This section describes the present system and details how the proposed project will effectively satisfy present and projected future load demand requirements.
- <u>Section I.D</u>: Although not applicable to the proposed project, this section describes critical contingencies and associated violations due to the inadequacy of the system.
- <u>Section I.E</u>: This section explains feasible project alternatives.
- <u>Section I.H</u>: This section provides the desired in-service date of the proposed project and the estimated construction time.
- <u>Section I.J.</u>: This section provides information about the proposed project if approved by the RTO.
- <u>Section I.K</u>: Although not applicable to the proposed project, this section provides outage history and maintenance history for existing transmission lines if the proposed project is a rebuild and is due in part to reliability issues.
- <u>Section I.M</u>: Although not applicable to the proposed project, this section contains information for transmission lines interconnecting a non-utility generator.
- <u>Section I.N</u>: Although not applicable to the proposed project, this section, when applicable, provides the proposed and existing generating sources, distribution circuits or load centers planned to be served by all new substations, switching stations, and other ground facilities associated with the proposed project.
- <u>Section II.A.10</u>: This section provides details of the construction plans for the proposed project, including requested and approved line outage schedules.

Additionally, Company Witness Adnan co-sponsors the following portions of the Appendix:

- <u>Section I.A (co-sponsored with Company Witness Sherrill A. Crenshaw</u>): This section details the primary justifications for the proposed project.
- <u>Section I.F (co-sponsored with Company Witness Sherrill A. Crenshaw)</u>: This section describes any lines or facilities that will be removed, replaced or taken out of service upon completion of the proposed project, including the number of circuits and normal and emergency ratings of the facilities.
- <u>Section I.G (co-sponsored with Company Witness Lane E. Carr)</u>: This section provides a system map for the affected area.
- <u>Section II.A.3 (co-sponsored with Company Witness Lane E. Carr)</u>: This section provides color maps of existing or proposed rights-of-way in the vicinity of the proposed project.

A statement of Mr. Adnan's background and qualifications is attached to his testimony as Appendix A.

DIRECT TESTIMONY

OF NADN

KHAN ADNAN ON BEHALF OF

VIRGINIA ELECTRIC AND POWER COMPANY BEFORE THE

STATE CORPORATION COMMISSION OF VIRGINIA CASE NO. PUR-2021-00010

1	Q.	Please state your name, business address and position with Virginia Electric and				
2		Power Company ("Dominion Energy Virginia" or the "Company").				
3	A.	My name is Khan M. Adnan, and I am an Area Planning Engineer in the Electric				
4		Transmission Planning Department for the Company. My business address is 10900				
5		Nuckols Road, Glen Allen, Virginia 23060. A statement of my qualifications and				
6		background is provided as Appendix A.				
7	Q.	Please describe your areas of responsibility with the Company.				
8	A.	I am responsible for planning the Company's electric transmission system for voltages of				
9		69 kilovolt ("kV") through 500 kV.				
10	Q.	What is the purpose of your testimony in this proceeding?				
11	A.	In order to maintain the structural integrity and reliability of its transmission system in				
12		compliance with mandatory North American Electric Reliability Corporation ("NERC")				
13		Reliability Standards, the Company proposes in York and James City Counties and the				
14		City of Williamsburg, Virginia, the following (collectively, the "Rebuild Projects"):				
15		Line #2113 Rebuild Project:				
16 17		(i) Rebuild approximately 3.8 miles of 230 kV Line #2113 on single circuit steel structures between Lightfoot Substation and Waller Substation;				
18						

1		(iii)	Related substation work at Lanexa, Lightfoot, and Waller Substations.
2		Line #2154 R	tebuild Project:
3 4		(i)	Rebuild approximately 6.1 miles of 230 kV Line #2154 on single circuit steel structures between Waller Substation and Kingsmill Substation;
5 6		(ii)	Rebuild approximately 1.5 miles of 230 kV Line #2154 on double circuisteel structures between Kingsmill Substation and Structure #2154/482;
7 8		(iii)	Remove approximately 6.1 miles of idle 115 kV Line #58 between Waller Substation and Kingsmill Substation;
9 10		(iv)	Rebuild approximately 1.5 miles of 115 kV Line #19 on double circuit stee structures between Kingsmill Substation and Structure #2154/482; and
11 12		(v)	Related substation work at Waller, Penniman, and Kingsmill Substations and Skiffes Creek Switching Station.
13		The purpose	of my testimony is to describe the Company's transmission system and the
14		need for, and	benefits of, the proposed Rebuild Projects. I am sponsoring Sections I.B,
15		I.C, I.D, I.E,	I.H, I.J, I.K, I.M, I.N, and II.A.10 of the Appendix. Additionally, I co-
16		sponsor Secti	ons I.A and I.F with Company Witness Sherrill A. Crenshaw, and Sections
17		I.G and II.A.3	3 with Company Witness Lane E. Carr.
18	Q.	Does this cor	nclude your pre-filed direct testimony?
19	A.	Yes, it does.	

BACKGROUND AND QUALIFICATIONS OF KHAN ADNAN

Khan M. Adnan received a Bachelor of Engineering and a Master of Engineering degree in Electrical Engineering from the City University of New York. Before joining Dominion Energy Virginia in 2020, Mr. Adnan worked with multiple electric utility companies in the Northeast and Midwest regions from 2016 to 2020 as a Burns & McDonnell Consultant. Prior to joining Burns & McDonnell Mr. Adnan worked as a Transmission Planning Engineer from 2015 to 2016 for the Electric Reliability Council of Texas (ERCOT).

WITNESS DIRECT TESTIMONY SUMMARY

Witness: Sherrill A. Crenshaw

<u>Title:</u> Consulting Engineer – Electric Transmission Line Engineering

Summary:

Company Witness Sherrill A. Crenshaw will sponsor those portions of the Appendix providing an overview of the design characteristics of the overhead transmission facilities for the proposed Rebuild Projects, and discussing electric and magnetic field levels, as follows:

- <u>Section I.L</u>: This section provides photographs illustrating the deterioration of structures and associated equipment as applicable.
- <u>Section II.A.5</u>: This section provides drawings of the right-of-way cross section showing typical transmission lines structure placements.
- <u>Section II.B.1 to II.B.3</u>: These sections provide the line design and operational features of the proposed project.
- <u>Section II.B.4</u>: Although not applicable to the proposed project, this section provides the structure heights for all feasible alternate routes.
- <u>Section IV</u>: This section provides analysis on the health aspects of electric and magnetic field levels.

Additionally, Company Witness Sherrill A. Crenshaw co-sponsors the following portions of the Appendix:

- <u>Section I.A (co-sponsored with Company Witness Khan M. Adnan)</u>: This section details the primary justifications for the proposed project.
- Section I.F (co-sponsored with Company Witness Khan M. Adnan): This section describes any lines or facilities that will be removed, replaced or taken out of service upon completion of the proposed project, including the number of circuits and normal and emergency ratings of the facilities.
- <u>Section I.I (co-sponsored with Company Witness Mohammad M. Othman)</u>: This section provides the estimated total cost of the proposed project.
- <u>Section II.B.5 (co-sponsored with Company Witness Lane E. Carr)</u>: This section provides the mapping and structure heights for the existing overhead structures.

A statement of Mr. Crenshaw's background and qualifications is attached to his testimony as Appendix A.

DIRECT TESTIMONY

\mathbf{OF}

SHERRILL A. CRENSHAW ON BEHALF OF

VIRGINIA ELECTRIC AND POWER COMPANY BEFORE THE

STATE CORPORATION COMMISSION OF VIRGINIA CASE NO. PUR-2021-00010

1	Q.	Please state your name, business address and position with Virginia Electric and								
2		Power Company ("Dominion Energy Virginia" or the "Company").								
3	A.	My name is Sherrill A. Crenshaw, and I am a Consulting Engineer in the Electric								
4		Transmission Line Engineering Department of the Company. My business address is								
5		10900 Nuckols Road, Glen Allen, Virginia 23060. A statement of my qualifications and								
6		background is provided as Appendix A.								
7	Q.	Please describe your areas of responsibility with the Company.								
8	A.	I am responsible for the estimating and conceptual design of high voltage transmission								
9		line projects from 69 kilovolt ("kV") to 500 kV.								
10	Q.	What is the purpose of your testimony in this proceeding?								
11	A.	In order to maintain the structural integrity and reliability of its transmission system in								
12		compliance with mandatory North American Electric Reliability Corporation ("NERC")								
13		Reliability Standards, the Company proposes in York and James City Counties and the								
14		City of Williamsburg, Virginia, the following (collectively, the "Rebuild Projects"):								
15		Line #2113 Rebuild Project:								
16 17		(i) Rebuild approximately 3.8 miles of 230 kV Line #2113 on single circuit steel structures between Lightfoot Substation and Waller Substation;								

1		(iii)	Related substation work at Lanexa, Lightfoot, and Waller Substations.
2		Line #2154 R	Rebuild Project:
3 4		(i)	Rebuild approximately 6.1 miles of 230 kV Line #2154 on single circuit steel structures between Waller Substation and Kingsmill Substation;
5 6		(ii)	Rebuild approximately 1.5 miles of 230 kV Line #2154 on double circuit steel structures between Kingsmill Substation and Structure #2154/482;
7 8		(iii)	Remove approximately 6.1 miles of idle 115 kV Line #58 between Waller Substation and Kingsmill Substation;
9 10		(iv)	Rebuild approximately 1.5 miles of 115 kV Line #19 on double circuit steel structures between Kingsmill Substation and Structure #2154/482; and
11 12		(v)	Related substation work at Waller, Penniman, and Kingsmill Substations and Skiffes Creek Switching Station.
13		The purpose	of my testimony is to describe the design characteristics of the transmission
14		facilities for t	the proposed Rebuild Projects, and also to discuss electric and magnetic field
15		("EMF") leve	els. I sponsor Sections I.L, II.A.5, II.B.1 to II.B.4, and IV of the Appendix.
16		I also co-spor	nsor Sections I.A and I.F of the Appendix with Company Witness Khan M.
17		Adnan; Section	on I.I of the Appendix with Company Witness Mohammad M. Othman; and
18		Section II.B.5	5 with Company Witness Lane E. Carr.
19	Q.	Does this cor	nclude your pre-filed direct testimony?
20	A.	Yes, it does.	

BACKGROUND AND QUALIFICATIONS OF SHERRILL A. CRENSHAW

Sherrill A. Crenshaw graduated from Virginia Polytechnic Institute and State University in 1985 with a Bachelor of Science in Civil Engineering. He joined the Company in 1986 and has held various engineering titles within the Electric Transmission Engineering department, where he currently works as a Consulting Engineer. Mr. Crenshaw is a licensed engineer in the Commonwealth of Virginia.

Mr. Crenshaw has previously testified before the Virginia State Corporation Commission.

WITNESS DIRECT TESTIMONY SUMMARY

Witness: Mohammad M. Othman

<u>Title</u>: Engineer III – Substation Engineering

Summary:

Company Witness Mohammad M. Othman sponsors or co-sponsors the following portions of the Appendix describing the work to be performed at the existing substation for the proposed Rebuild Projects, as follows:

- <u>Section I.I (co-sponsored with Company Witnesses Sherrill A. Crenshaw)</u>: This section provides the estimated total cost of the proposed project.
- <u>Section II.C</u>: This section describes impacts to substations and substation locations associated with the proposed project.

A statement of Mr. Othman's background and qualifications is attached to his testimony as Appendix A.

DIRECT TESTIMONY

OF

MOHAMMAD M. OTHMAN ON BEHALF OF

VIRGINIA ELECTRIC AND POWER COMPANY BEFORE THE

STATE CORPORATION COMMISSION OF VIRGINIA CASE NO. PUR-2021-00010

1	Q.	Please state your name, business address and position with Virginia Electric and
2		Power Company ("Dominion Energy Virginia" or the "Company").
3	A.	My name is Mohammad M. Othman, and I am an Engineer III in the Substation
4		Engineering section of the Electric Transmission group of the Company. My business
5		address is 2400 Grayland Avenue, Richmond, Virginia 23220. A statement of my
6		qualifications and background is provided as Appendix A.
7	Q.	What are your responsibilities as an Engineer III?
8	A.	I am responsible for evaluation of the substation project requirements, conceptual
9		physical design, scope development, preliminary engineering and cost estimating for high
10		voltage transmission and distribution substations.
11	Q.	What is the purpose of your testimony in this proceeding?
12	A.	In order to maintain the structural integrity and reliability of its transmission system in
13		compliance with mandatory North American Electric Reliability Corporation ("NERC")
14		Reliability Standards, the Company proposes in York and James City Counties and the
15		City of Williamsburg, Virginia, the following (collectively, the "Rebuild Projects"):
16		Line #2113 Rebuild Project:
17 18		(i) Rebuild approximately 3.8 miles of 230 kV Line #2113 on single circuit steel structures between Lightfoot Substation and Waller Substation;

1 2		(ii)	Remove approximately 3.8 miles of idle 115 kV Line #58 between Lightfoot Substation and Waller Substation; and
3		(iii)	Related substation work at Lanexa, Lightfoot, and Waller Substations.
4		Line #2154 R	<u>tebuild Project</u> :
5 6		(i)	Rebuild approximately 6.1 miles of 230 kV Line #2154 on single circuit steel structures between Waller Substation and Kingsmill Substation;
7 8		(ii)	Rebuild approximately 1.5 miles of 230 kV Line #2154 on double circuit steel structures between Kingsmill Substation and Structure #2154/482;
9 10		(iii)	Remove approximately 6.1 miles of idle 115 kV Line #58 between Waller Substation and Kingsmill Substation;
11 12		(iv)	Rebuild approximately 1.5 miles of 115 kV Line #19 on double circuit steel structures between Kingsmill Substation and Structure #2154/482; and
13 14		(v)	Related substation work at Waller, Penniman, and Kingsmill Substations and Skiffes Creek Switching Station.
15		The purpose of	of my testimony is to describe the work to be performed at the proposed
16		Rebuild Proje	ects' various substations. I sponsor Section II.C of the Appendix and co-
17		sponsor Secti	on I.I of the Appendix with Company Witness Sherrill A. Crenshaw,
18		specifically, a	as it pertains to substation work.
19	Q.	Does this cor	nclude your pre-filed direct testimony?
20	A.	Yes, it does.	

BACKGROUND AND QUALIFICATIONS OF MOHAMMAD M. OTHMAN

Mohammad M. Othman received a Bachelor of Science degree in Electrical Engineering from Virginia Commonwealth University in 2008. Mr. Othman's responsibilities include the evaluation of the substation project requirements, development of scope documents and schedules, preparation of estimates and proposals, preparation of specifications and bid documents, material procurement, design substation physical layout, development of detailed physical drawings, bill of materials, electrical schematics and wiring diagrams. Mr. Othman joined the Dominion Energy Virginia Substation Engineering department in 2010 as an Engineer III and was later promoted to Engineer III, the title he currently holds.

Mr. Othman has previously submitted pre-filed testimony to the Virginia State Corporation Commission.

WITNESS DIRECT TESTIMONY SUMMARY

Witness: Lane E. Carr

<u>Title</u>: Siting and Permitting Specialist I

Summary:

Company Witness Lane E. Carr sponsors those portions of the Appendix providing an overview of the design of the route for the proposed Rebuild Projects, and related permitting, as follows:

- <u>Section II.A.1</u>: This section provides the length of the proposed corridor and viable alternatives to the proposed project.
- <u>Section II.A.2</u>: This section provides a map showing the route of the proposed project in relation to notable points close to the proposed project.
- <u>Section II.A.4</u>: This section explains why the existing right-of-way is not adequate to serve the need, to the extent applicable.
- <u>Sections II.A.6 to II.A.8</u>: These sections provide detail regarding the right-of-way for the proposed project.
- <u>Section II.A.9</u>: This section describes the proposed route selection procedures and details alternative routes considered.
- <u>Section II.A.11</u>: This section details how the construction of the proposed project follows the provisions discussed in Attachment 1 of the Transmission Appendix Guidelines.
- <u>Section II.A.12</u>: This section identifies the counties and localities through which the proposed project will pass and provides General Highway Maps for these localities.
- <u>Section II.B.6</u>: This section provides photographs of existing facilities, representations of proposed facilities, and visual simulations.
- <u>Section III</u>: This section details the impact of the proposed project on scenic, environmental, and historic features.
- <u>Section V</u>: This section provides information related to public notice of the proposed project.

Additionally, Ms. Carr co-sponsors the following portion of the Appendix:

- <u>Section I.G (co-sponsored with Company Witness Khan M. Adnan)</u>: This section provides a system map for the affected area.
- <u>Section II.A.3 (co-sponsored with Company Witness Khan M. Adnan)</u>: This section provides color maps of existing or proposed rights-of-way in the vicinity of the proposed project.
- <u>Section II.B.5 (co-sponsored with Company Witness Sherrill A. Crenshaw)</u>: This section provides the mapping and structure heights for the existing overhead structures.

Finally, Ms. Carr sponsors the DEQ Supplement filed with the Application. A statement of Ms. Carr's background and qualifications is attached to her testimony as Appendix A.

DIRECT TESTIMONY

OF LANE E. CARR

ON BEHALF OF

VIRGINIA ELECTRIC AND POWER COMPANY BEFORE THE

STATE CORPORATION COMMISSION OF VIRGINIA CASE NO. PUR-2021-00010

1	Q.	Please state your name, business address and position with Virginia Electric and
2		Power Company ("Dominion Energy Virginia" or the "Company").
3	A.	My name is Lane E. Carr, and I am a Siting and Permitting Specialist for the Company.
4		My business address is 10900 Nuckols Road, Glen Allen, Virginia 23060. A statement
5		of my qualifications and background is provided as Appendix A.
6	Q.	Please describe your areas of responsibility with the Company.
7	A.	I am responsible for identifying appropriate routes for transmission lines and obtaining
8		necessary federal, state, and local approvals and environmental permits for those
9		facilities. In this position, I work closely with government officials, permitting agencies
10		property owners, and other interested parties, as well as with other Company personnel,
11		to develop facilities needed by the public so as to reasonably minimize environmental
12		and other impacts on the public in a reliable, cost-effective manner.
13	Q.	What is the purpose of your testimony in this proceeding?
14	A.	In order to maintain the structural integrity and reliability of its transmission system in
15		compliance with mandatory North American Electric Reliability Corporation ("NERC")
16		Reliability Standards, the Company proposes in York and James City Counties and the
17		City of Williamsburg, Virginia, the following (collectively, the "Rebuild Projects"):
18		

1		<u>Line #2113 R</u>	ebuild Project:
2 3		(i)	Rebuild approximately 3.8 miles of 230 kV Line #2113 on single circuit steel structures between Lightfoot Substation and Waller Substation;
4 5		(ii)	Remove approximately 3.8 miles of idle 115 kV Line #58 between Lightfoot Substation and Waller Substation; and
6		(iii)	Related substation work at Lanexa, Lightfoot, and Waller Substations.
7		Line #2154 R	ebuild Project:
8 9		(i)	Rebuild approximately 6.1 miles of 230 kV Line #2154 on single circuit steel structures between Waller Substation and Kingsmill Substation;
10 11		(ii)	Rebuild approximately 1.5 miles of 230 kV Line #2154 on double circuit steel structures between Kingsmill Substation and Structure #2154/482;
12 13		(iii)	Remove approximately 6.1 miles of idle 115 kV Line #58 between Waller Substation and Kingsmill Substation;
14 15		(iv)	Rebuild approximately 1.5 miles of 115 kV Line #19 on double circuit steel structures between Kingsmill Substation and Structure #2154/482; and
16 17		(v)	Related substation work at Waller, Penniman, and Kingsmill Substations and Skiffes Creek Switching Station.
18		The purpose of	of my testimony is to provide an overview of the route and permitting for
19		the proposed	Rebuild Projects. As it pertains to routing and permitting, I sponsor
20		Sections II.A.	1, II.A.2, II.A.4, II.A.6, II.A.7, II.A.8, II.A.9, II.A.11, II.A.12, II.B.6, III,
21		and V of the	Appendix. I also sponsor the DEQ Supplement filed with the Application,
22		and co-sponso	or Sections I.G and II.A.3 with Company Witness Khan M. Adnan, and
23		Section II.B.5	of the Appendix with Company Witness Sherrill A. Crenshaw.
24	Q.	Has the Com	pany complied with Va. Code § 15.2-2202 E?
25	A.	Yes. In accor	dance with § 15.2-2202 E of the Code of Virginia, letters dated November
26		25, 2020, wer	e delivered to Mr. Scott Stevens, County Administrator of James City
27		County, Mr. N	Neil Morgan, County Administrator of York County, and Mr. Andrew O.

- 1 Trivette, City Manager of the City of Williamsburg, Virginia, advising of the Company's
- 2 intention to file this Application and inviting the localities to consult with the Company
- 3 about the Rebuild Projects. Copies of the letters are included as Appendix Attachment
- 4 V.D.1.
- 5 Q. Does this conclude your pre-filed direct testimony?
- 6 A. Yes, it does.

BACKGROUND AND QUALIFICATIONS OF LANE E. CARR

Lane E. Carr graduated from California Polytechnic State University in 1992 with a Bachelor of Science in Agricultural Business. She also obtained a Master of Science from California Polytechnic State University, San Luis Obispo in 1997. Ms. Carr joined the Company's Transmission Right-of-Way group in January 2019 as a Siting and Permitting Specialist, the position she presently holds. Prior to working for the Company, Ms. Carr worked as an Environmental Inspector for the County of Henrico.

Ms. Carr has previously submitted pre-filed testimony to the Virginia State Corporation Commission.

BEFORE THE STATE CORPORATION COMMISSION OF VIRGINIA

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

230 kV Lines # 2113 and #2154 Transmission Line Rebuilds and Related Projects

Application No. 303

DEQ Supplement

Case No. PUR-2021-00010

Table of Contents

1.	P	roject Description	Page
2.		nvironmental Analysis	
	A.	Air Quality	
-	В.	Water Source	2
(C.	Discharge of Cooling Waters	3
	D.	Tidal and Non-tidal Wetlands	3
]	E.	Solid and Hazardous Waste	4
]	F.	Natural Heritage, Threatened and Endangered Species	4
(G.	Erosion and Sediment Control	8
]	H.	Archaeological, Historic, Scenic, Cultural or Architectural Resources	9
	I.	Chesapeake Bay Preservation Areas	12
	J.	Wildlife Resources	12
	K.	Recreation, Agricultural and Forest Resources	12
]	L.	Use of Pesticides and Herbicides	15
	M.	Geology and Mineral Resources	15
]	N.	Transportation Infrastructure	15
A	tacl	amonts	10

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 Rebuild Projects by DEQ and other relevant agencies.

1. Project Description

In order to maintain the structural integrity and reliability of its transmission system in compliance with mandatory North American Electric Reliability Corporation ("NERC") Reliability Standards, Virginia Electric and Power Company ("Dominion Energy Virginia" or the "Company") proposes in York and James City Counties and the City of Williamsburg, Virginia, the following:

Line #2113 Rebuild Project

- Rebuild approximately 3.8 miles of 230 kV Line #2113 on single circuit steel structures between Lightfoot Substation and Waller Substation;
- Remove approximately 3.8 miles of idle 115 kV Line #58 between Lightfoot Substation and Waller Substation; and
- Related substation work at Lanexa, Lightfoot, and Waller Substations.

Line #2154 Rebuild Project

- Rebuild approximately 6.1 miles of 230 kV Line #2154 on single circuit steel structures between Waller Substation and Kingsmill Substation;
- Rebuild approximately 1.5 miles of 230 kV Line #2154 on double circuit steel structures between Kingsmill Substation and Structure #2154/482;
- Remove approximately 6.1 miles of idle 115 kV Line #58 between Waller Substation and Kingsmill Substation;
- Rebuild approximately 1.5 miles of 115 kV Line #19 on double circuit steel structures between Kingsmill Substation and Structure #2154/482;
- Related substation work at Waller, Penniman, and Kingsmill Substations and Skiffes Creek Switching Station.

Collectively, the Line #2113 Rebuild Project and the Line #2154 Rebuild Project are referred to as the "Rebuild Projects."

2. Environmental Analysis

The Company solicited comments from all relevant state and local agencies about the proposed Rebuild Projects in December 2020. Copies of these letters are included as <u>Attachment 2</u>. The DEQ provided a letter in response to the Company's scoping request for the proposed Rebuild Projects on December 2, 2020. A copy of this letter is included as Attachment 2.1.

A. Air Quality

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 will be airborne particles from the use of vehicles and equipment within the right-of-way. However, minimal earth disturbance will take place and vehicle speed, which is often a factor in airborne particulate, will be kept to a minimum. Erosion and sediment control is addressed in Section 2.G, below. Equipment and vehicles that are powered by gasoline or diesel motors will also be used during the construction of the line so there will be exhaust from those motors.

The entire width of the existing transmission corridor is currently maintained for transmission facility operations. However, the Rebuild Projects may require some trimming of tree limbs along the right-of-way edges to support construction activities. 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.K.

B. Water Source (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 Projects are located within the Lower James River watershed, Hydrologic Unit Code 02080206, and the York watershed, Hydrologic Unit Code 02080107. According to the U.S. Geological Survey ("USGS") topographic quadrangles (Yorktown [2019], Williamsburg [2019], Norge [2019], and Toano [2019]) the existing transmission line crosses two named perennial streams, one reservoir, and one pond. Named waterbodies crossed by the individual segments are provided below. Any clearing required in the vicinity of streams will be performed by hand within 100 feet of both sides, and vegetation less than three inches in diameter will be left undisturbed.

Line #2154 Rebuild Project

This segment crosses Skiffes Creek, King Creek, and Whiteman Swamp.

Line #2113 Rebuild Project

This segment crosses a portion of Waller Mill Reservoir, Chisel Run, and Long Hill Swamp, which flows from Scotts Pond.

The Company solicited comments from the Virginia Marine Resources Commission ("VMRC") regarding the proposed Rebuild Projects in December 2020. VMRC responses have typically noted a subaqueous encroachment permit would be required for any stream crossings with a drainage area of five square miles or greater at the crossing location. If necessary, a Joint Permit Application will be submitted for review by the VMRC, DEQ, and the U.S. Army Corps of Engineers (the "Corps") to authorize jurisdictional crossings and for any impacts to jurisdictional features.

C. Discharge of Cooling Waters

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

D. Tidal and Non-tidal Wetlands

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

Wetlands Impact Consultation

Within the Rebuild Projects corridor, the Company delineated wetlands and other waters of the United States using the *Routine Determination Method* as outlined in the 1987 Corps of Engineers Wetland Delineation Manual and methods described in the 2010 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Atlantic and Gulf Coastal Plain Region (Version 2.0). The Company submitted the results of this delineation to the Corps in December 2020 for confirmation. A copy of the delineation map is included as Attachment 2.D.1. Total preliminary jurisdictional resources within the proposed Rebuild Projects right-of-way and Company-owned property per segment is provided in Tables 1 and 2 and detailed in Attachment 2.D.1.

Table 1. Jurisdictional resources within Line #2154 Rebuild Project Right-of-Way

Preliminary JD Project Area	Preliminary JD Project Length	Approved JD Project Area	Approved JD Project Length	Palustrine Scrub- Shrub Wetlands (PSS)	Palustrine Emergent Wetlands (PEM)	Upper Perennial Stream Channels (R3)	Intermittent Stream Channels (R4)	Ephemeral Stream Channels (R6)	Open Waters (PUB)
196.46	7.56 Miles ±	5.71	0.24 Miles	0.34 Acres	12.31	0.35	0.13 Acres ±	0.01 ±	2.16
Acres ±		Acres ±	±	±	Acres ±	Acres ±	(2,199 L.F.	(232 L.F ±)	Acres ±
						(2,934	±)		
						L.F. ±)			

Table 2. Jurisdictional resources within Line #2113 Rebuild Project Right-of-Way

Preliminary	Preliminary	Approved	Approved	Palustrine	Palustrine	Upper	Intermittent	Open
JD Project	JD Project	JD	JD	Scrub-	Emergent	Perennial	Stream	Waters
Area	Length	Project	Project	Shrub	Wetlands	Stream	Channels	(PUB)
		Area	Length	Wetlands	(PEM)	Channels	(R4)	
				(PSS)		(R3)		
100.74	3.60 Miles ±	4.97	0.17 Miles	0.42 Acres	3.93 Acres	0.12 Acres ±	0.03 Acres ±	2.16
Acres ±		Acres ±	±	±	±	$(1,215 \text{ L.F. }\pm)$	(265 L.F. ±)	Acres ±

The Company solicited comments from the Corps and the DEQ Office of Wetlands and Stream Protection in December 2020. The Company received a response from the Corps on December 3, 2020, which recommended a wetland delineation of the Rebuild Projects area and that a permit from the Corps will be required if there will be any discharge of fill into wetlands. The Company also received a response on December 15, 2020 from the DEQ Office of Wetlands and Streams Protection, which recommended that the structures should be sited to avoid wetlands to the extent practicable and should be sited outside of stream channels. See Attachments 2.D.2 and 2.D.3, respectively.

Prior to construction, the Company will obtain any necessary permits to impact jurisdictional resources.

E. 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 Projects to identify sites that may impact the project. This report is included as Attachment 2.E.1. Publicly available data from the U.S. Environmental Protection Agency ("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). According to this database, 19 registered RCRA sites are present within the 0.5mile radius of the Rebuild Projects. The majority of the sites are small quantity generators and one site is an electrical equipment and component manufacturing business that accepts waste for disposal and reports to the Toxics Release Inventory; all sites are located outside of the right-of-way of the proposed Rebuild Projects. A table identifying RCRA sites as falling within 0.5-mile radius of the Rebuild Projects is included as part of Attachment 2.E.1.

DEQ records were also searched for the presence of solid waste management facilities, Voluntary Remediation Program sites and petroleum releases. DEQ identified 37 petroleum release sites within the search radius, none of which fall within the right-of-way of the Rebuild Projects. These petroleum release sites may include aboveground and underground storage tank releases, as well as aboveground spills. The Company has a procedure in place to handle petroleum contaminated soil, if encountered; however, as all of the release sites are located outside of the area of the Rebuild Project, none of the petroleum release sites are expected to impact the Rebuild Projects. A table listing these sites is included in Attachment 2.E.1.

Results specific to individual projects are provided below.

Line #2154 Rebuild Project

Fourteen registered RCRA sites are within 0.5 mile of this project. A review of the EPA Facility Registry System ("FRS") forms has determined that nine RCRA sites are small quantity generators and one is a large quantity generator. Due to the sites' proximity to the project right-of-way, none of these sites are expected to be a concern for the Line #2154 Rebuild Project.

Eighteen petroleum release sites are located within 0.5 mile of this project. The closest of these (PC Number: 20155034) is located approximately 347 linear feet from the project area and has been closed. Additionally, this site falls outside of the transmission line right-of-way. All of the identified petroleum release sites are closed; as such, none of the petroleum release sites are expected to have an impact on the proposed Line #2154 Rebuild Project.

Line #2113 Rebuild Project

Five registered RCRA sites are within 0.5 mile of this project. A review of the EPA FRS forms has determined that four of the RCRA sites are small quantity generators. Due to the sites' proximity to the project right-of-way, none of these sites are expected to be a concern for the Line #2113 Rebuild Project.

Twenty-one petroleum release sites are located within 0.5 mile of this project. The closest of these (PC Number: 20115096) is located approximately 547 linear feet from the project area and has been closed. Additionally, this site falls outside of the transmission line right-of-way. All of the identified petroleum release sites are closed; as such, none of the petroleum release sites are expected to have an impact on the proposed Line #2113 Rebuild Project.

F. 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 Projects, including the U.S. Fish and Wildlife Service ("USFWS") Information, Planning, and Conservation system, the Virginia Department of Wildlife Resources ("DWR") Virginia Fish and Wildlife Information Service ("VAFWIS"), Virginia Department of Conservation and Recreation ("DCR"), Natural Heritage Data Explorer ("NHDE"), and the Center for Conservation Biology ("CCB") Bald Eagle Nest Locator. The results are summarized in a report, included as <u>Attachment 2.F.1</u>, and are presented in Table 3 below. Below the table, additional information about the potential impacts of the Rebuild Projects on the species noted in the table is discussed.

Table 3. Threatened, Endangered, and Natural Heritage species within the vicinity of the Rebuild Projects

Species	Results
Northern long-eared bat	
(Myotis septentrionalis)	Identified as potentially occurring in the Rebuild Projects
Ctatan ET CT	vicinity. No known hibernacula or maternity roost trees in
Status: FT, ST Database: USFWS-IPaC, DWR VAFWIS, DWR-	the vicinity of the Rebuild Projects.
NLEB Winter Habitat and Roost Tree Map	
<u> </u>	
Small whorled pogonia	
(Isotria medeoloides)	Identified as potentially occurring in the Rebuild Projects
Status: FT, SE	vicinity.
Database: USFWS-IPaC, DCR-NHDE	
New Jersey rush *	
(Juncus caesariensis)	Identified as potentially occurring in the Rebuild Projects
	vicinity.
Status: ST	
Database: DCR-NHDE	
Virginia least trillium * (Trillium pusillum var. virginianum)	
(17mmum pusmum var. virgimanum)	Identified as potentially occurring in the Rebuild Projects
Status: SOC	vicinity.
Database: DCR-NHDE	
Mabee's salamander **	
(Ambystoma mabeei)	Identified as confirmed within a 2-miles radius of the
	Rebuild Projects area.
Status: ST	
Database: DWR-VAFWIS Little brown bat **	
(Myotis lucifugus)	Identified as confirmed within a 2-miles radius of the
(Myotis tucijugus)	Rebuild Projects. No known hibernaculum or roost trees
Status: SE	were identified in the vicinity of the Rebuild Projects.
Database: DWR-VAFWIS	
Tri-colored bat	
(Perimyotis subflavus)	Identified as confirmed within a 2-mile radius of the
G. A. GE	Rebuild Projects. No known hibernaculum or roost trees
Status: SE Database: DWR-VAFWIS, DWR MYLU PESU	were identified in the vicinity of the Rebuild Projects.
Winter Habitat and Roosts Application	
Atlantic sturgeon	
(Acipenser oxyrinchus)	Identified as occurring in the James and York Rivers.
, , ,	James and York Rivers designated as critical habitat.
Status: FE, SE	8
Database: DCR-NHDE, NOAA-Critical Habitat	
Bald eagle	
(Haliaeetus leucocephalus)	No nests in Rebuild Projects vicinity. The closest Bald
Status: BGEPA	eagle nest (YK0703) is approximately 0.43 mile (2,293
Database: CCB, USFWS-Bald Eagle Concentration	feet) away from the Rebuild Projects.
Area Map	
	e threatened SE: state endangered SOC: federal species of con

FT: federally threatened, FE: federally endangered, ST: state threatened, SE: state endangered, SOC: federal species of concern, BGEPA: Bald and Golden Eagle Protection Act

^{*} Species appeared only in database searches for the Line # 2113 Rebuild Project

^{**} Species appeared only in database searches for the Line #2154 Rebuild Project

Northern Long-eared Bat

The federally and state threatened northern long-eared bat has been identified by USFWS-IPaC as potentially occurring within the vicinity of the Rebuild Projects; however, DWR records indicate that no known hibernacula or maternity roost trees occur within the vicinity of the Rebuild Projects. The northern long-eared bat is typically found in intact forest habitats with mixed hardwoods and often nests in and breeds in tree hollows and in woody debris (Source: NatureServe). The Rebuild Projects will occur within an existing maintained transmission line right-of-way; however, additional tree removal may be required. Given that no northern long-eared bat hibernacula or maternity roost trees occur in the vicinity of the Rebuild Projects, no impacts are expected. To the extent that impact may be possible, the Company would plan to rely upon and comply with the 4(d) Rule.

Small Whorled Pogonia and Virginia Least Trillium

The federally threatened and state endangered small whorled pogonia and the federal species of concern Virginia least trillium were identified by the DCR-NHDE database as potentially occurring with the watershed of the Rebuild Projects. These plants require mixed, damp woods. Potential habitat for these species is not present within the area of the Rebuild Projects. Adverse impacts to these species are not anticipated.

New Jersey Rush

The state threatened New Jersey rush has been identified by the DCR-NHDE database as potentially occurring within the Line #2113 Rebuild Project watershed. The plant requires forested wetlands with a stable source of flowing water. The Line #2113 Rebuild Project will occur within existing maintained transmission easement; therefore, no potential habitat is within the project area. The New Jersey rush is not expected to be adversely affected by the Rebuild Projects.

Mabee's Salamander

The DWR-VAFWIS identified that state threatened Mabee's salamander as confirmed within a 2-mile radius of the Rebuild Projects. The species prefers lowland deciduous forest and is found near ponds. Erosion and sediment controls will be used as appropriate throughout the Rebuild Projects to protect wetlands and water resources. The database records identified known occurrences of Mabee's salamander across I-64 from the Rebuild Projects at the Yorktown Naval Weapons Station and is not known to occur in the Rebuild Projects right-of-way. Therefore, the Mabee's salamander is not expected to be adversely affected by the Rebuild Projects.

Little Brown Bat

The DWR-VAFWIS identified the state endangered little brown bat as confirmed occurring within a 2-mile radius of the Rebuild Projects. The species roosts in heavily forested areas with tall trees. The proposed Rebuild Projects will take place within existing, cleared and maintained transmission line right of way. No roosts or hibernacula have been identified in James City County, York County, or the City of Williamsburg. As such, no adverse impacts to this species are anticipated.

Tri-colored Bat

The DWR VAFWIS identified that state endangered tri-colored bat as confirmed within a 2-mile radius of the Rebuild Projects. The species roosts in heavily forested areas with tall trees. No roosts or hibernacula have been identified in James City County, York County, or the City of Williamsburg. As such, no adverse impacts to this species are expected.

Atlantic Sturgeon

The federally and state endangered Atlantic sturgeon has been identified by DCR-NHDE as potentially occurring within the watershed of the Rebuild Projects. The NOAA National Marine Fisheries Service has designated both the James River and York River as critical habitat for the Atlantic sturgeon. However, these rivers are greater than 2 miles downstream from the proposed Rebuild Projects. Erosion and sediment control measures will be utilized throughout the Rebuild Projects to prevent sedimentation of downstream waters; as such, no adverse effects are anticipated to the Atlantic sturgeon and no adverse modification is expected of the designated critical habitat.

Bald Eagle

According to the CCB Bald Eagle Nest Locator database, no known nests or roost areas are located near the Rebuild Projects. The closest Bald eagle nest, YK0703, is approximately 0.43 mile from the Rebuild Projects. Therefore, no adverse impacts to this species is expected.

The Company requested comments from the USFWS, DWR, and DCR regarding the proposed Rebuild Projects in December 2020. The response from DCR is included as Attachment 2.F.2.

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

New and updated information is continually added to the DCR's Biotics database. Following the DCR-DNH SCC planning stage project review, the Company shall resubmit project information with completed information services order form and a map to DCR-DNH or submit the project on-line through the Natural Heritage Data Explorer. This review shall occur during the final stage of engineering and upon any major modifications of the project during construction (e.g., deviations, permanent or temporary, from the original study area and/or the relocation of a tower(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.

G. Erosion and Sediment Control

The DEQ approved the Company's Standards & Specification for Erosion & Sediment Control and Stormwater Management for Construction of Linear Electric

Transmission Facilities (TE VEP 8000). These specifications are given to the Company's contractors and require erosion and sediment control measures to be in place before construction of the line begins and specifies the requirements for rehabilitation of the right-of-way. A copy of the current DEQ approval letter dated August 13, 2019 is provided as <u>Attachment 2.G.1</u>. According to the approval letter, coverage was effective through August 12, 2020. The Company submitted the renewal application on August 3, 2020 and is awaiting approval.

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

Stantec was retained by the Company to conduct a Stage I Pre-Application Analysis for the proposed Rebuild Projects. This analysis was completed in December 2020 and submitted to Virginia Department of Historic Resources ("VDHR") on January 6, 2021. The report is included as Attachment 2.H.1. Preliminary background research 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* (VDHR 2008) for proposed transmission line improvements. As detailed by VDHR guidance, consideration was given to: National Historic Landmark ("NHL") properties located within a 1.5-mile radius of the centerline of the Rebuild Projects; National Register of Historic Places ("NRHP") listed properties, battlefields, and historic landscapes located within a 1.0-mile radius of the centerline of the Rebuild Projects; NRHP-eligible sites located within a 0.5-mile radius of the centerline of the Rebuild Projects; and archaeological sites located within the Rebuild Project right-of-way corridor.

Archaeological Resources

Line #2154 Rebuild Project

Twelve previously recorded archaeological resources were identified during the background research. Two sites, a Middle Woodland camp and eighteenth-century farmstead (44JC1044) and a dam/road (44YO0541), have been determined potentially eligible for listing on the NRHP by VDHR. A third site, a seventeenth century gallows (44WB0066), has been determined eligible by VDHR for listing on the NRHP. The remaining nine sites have not been evaluated for NRHP eligibility. Archaeological resources are listed in Table 4, below.

Line #2113 Rebuild Project

Five previously recorded archaeological resources were identified during the background research. Two sites, a Woodland site (44JC0369) and an indeterminate prehistoric site (44JC0466), were determined potentially eligible for listing on the NRHP. The remaining three sites, an indeterminate prehistoric site (44JC1304) and two sections of a late eighteenth-century camp site (44JC0133-0001 and 44JC0133-0002), have not been evaluated for listing on the NRHP by VDHR.

Table 4. Previously Recorded Archaeological Resources within the Existing Right-of-Way of the Rebuild Projects

VDHR#	Resource Name	Affected Project	VDHR/NRHP Status
44JC0369	Woodland Site; Indeterminate	Line #2113	Determined Potentially Eligible for Listing on the NRHP by VDHR in 1988
44JC0466	Prehistoric; Indeterminate	Line #2113	Determined Potentially Eligible for Listing on the NRHP by VDHR in 1988
44JC1044	Middle Woodland Camp and Artifact Scatter; 18 th Century Farmstead	Line #2154	Determined Potentially Eligible for Listing on the NRHP by VDHR in 2001
44JC1301	18th Century Domestic Site	Line #2154	Not Evaluated
44JC1303	Indeterminate Woodland Site; Indeterminate 20 th Century Site	Line #2154	Not Evaluated
44JC1304	Prehistoric; Indeterminate	Line #2113	Not Evaluated
44WB0066	17 th Century Gallows Site	Line #2154	Determined Eligible for Listing on the NRHP by VDHR in 1992
44WB0133-0001	4 th Quarter of the 18 th Century Camp	Line #2113	Not Evaluated
44WB0133-0002	4th Quarter of the 18th Century Camp	Line #2113	Not Evaluated
44YO0220	Indeterminate 18 ^{th,} 19 th and 20 th Century Site; Civil War Site	Line #2154	Not Evaluated
44YO0524	19 th Century Dwelling Site	Line #2154	Not Evaluated
44YO0541	Dam/Road; Indeterminate Date	Line #2154	Determined Potentially Eligible for Listing on the NRHP by VDHR in 2006
44YO0757	19 th Century Dwelling Site	Line #2154	Not Evaluated
44YO1137	1st Half of the 20th Century Dwelling Site	Line #2154	Not Evaluated
44YO1138	20 th Century Transportation Site	Line #2154	Not Evaluated
44YO1139	18th Century Dwelling Site	Line #2154	Not Evaluated
44YO1140	19th Century Dwelling Site	Line #2154	Not Evaluated

Architectural Resources

Line #2154 Rebuild Project

Seven NHL-listed architectural resources are located within the 1.5-mile buffer and include Carter's Grove Plantation (VDHR 047-0001), Bruton Parish Church (VDHR #137-0007), Old College Yard Historic District (VDHR #137-0013), Peachy House (VDHR #137-0032), James Semple House (VDHR #137-0033), Williamsburg Historic District (VDHR #137-0050), and the George Wythe House (VDHR #137-0058). Four of the NHL-listed resources are also contributing resources to the NHL-listed Williamsburg Historic District. Two NRHP-listed resources, Colonial Parkway (VDHR #047-0002) and the Colonial National Historic Park (VDHR #099-5241), were

identified within the 1.0-mile buffer, and three NRHP-eligible resources, Confederate Redoubt #9 (VDHR #099-0040), Chesapeake & Ohio Railroad (VDHR #121-5134), and Capitol Landing (VDHR #137-0056), were identified within the 0.5-mile buffer. A single battlefield was also identified, the NRHP-potentially eligible Battle of Fort Magruder/Battle of Williamsburg (VDHR #099-5282), which also falls within 1.0 mile. Additionally, one NRHP listed resource, Bryan Manor Plantation (VDHR #099-0065), located within 1.0 mile of the centerline, and one NRHP-eligible resource, Confederate Redoubt #9, located within 0.5 mile of the centerline, have been demolished. Four resources cross the project limits: Colonial Parkway, Colonial National Historic Park, Battle of Fort Magruder/Battle of Williamsburg, and the Chesapeake & Ohio Railroad. One resource, Capitol Landing (VDHR #137-0056), was identified within 0.5-mile of the Line #2154 Rebuild Project centerline; however, the resource is significant as an archaeological site and therefore no visual effects assessment was conducted. Distances of architectural resources to the proposed Rebuild Projects are provided in Table 5, below.

Line #2113 Rebuild Project

One NHL-listed architectural resource, the Williamsburg Historic District (VDHR #137-0050), was located within the 1.5-mile buffer. No NRHP-listed resources were identified within 1.0 mile of the transmission line centerline. One NRHP-eligible resource, the Chesapeake & Ohio Railroad (VDHR #121-5134), was identified within 0.5 mile and also crosses the project right-of-way. A single battlefield, the NRHP-potentially eligible Battle of Fort Magruder/Battle of Williamsburg (VDHR #099-5282), was also identified within 1.0 mile of the centerline. Distances of architectural resources to the proposed Rebuild Projects are provided in the table below.

Table 5. Architectural Resources within the Vicinity of the Rebuild Projects

VDHR#	Resource Name	VDHR/NRHP Status	Rebuild Project	Distance to Line (Feet)	Impact
047-0001	Carter's Grove Plantation, 8797 Pocahontas Trail	Listed on the NHL in 1970; Listed on the NRHP in 1969	Line #2154	2,474	None
047-0002	Colonial Parkway	Listed on the NRHP in 1966; Addendum 2001	Line #2154	0	Minimal
099-0040	Confederate Redoubt #9	Determined Eligible by VDHR in 2009 (demolished)	Line #2154	N/A	N/A
099-0065	Bryan Manor	Listed on the NRHP in 1978 (demolished)	Line #2154	N/A	N/A
099-5241	Colonial National Historic Park	Listed on the NRHP in 1966	Line #2154	0	Minimal
000 5202	Battle of Fort	Determined Potentially	Line #2154	0	Minimal
099-5282	Magruder/Battle of Williamsburg	Eligible by VDHR in 2007, 2013, 2015 and 2019	Line #2113	4,531	None
	C1 1 0	Determined Eligible for	Line #2154	0	Minimal
121-5134	Chesapeake & Ohio Railroad	Listing on the NRHP by VDHR in 2015, 2019, and 2020	Line #2113	0	Minimal

VDHR#	Resource Name	VDHR/NRHP Status	Rebuild Project	Distance to Line (Feet)	Impact
137-0007	Bruton Parish Church, Duke of Gloucester Street	Listed on the NHL and on the NRHP in 1970	Line #2154	6,456	None
137-0013	Old College Yard (College of William & Mary) Historic District, 111 Jamestown Road	Listed on the NHL in 1960; Listed on the NRHP in 1966	Line #2154	7,620	None
137-0032	Peachy House/Peyton Randolph House, Nicolson & North England Streets	Listed on the NHL and on the NRHP in 1970	Line #2154	5,451	None
137-0033	James Semple House, 506 Francis Street	Listed on the NHL and on the NRHP in 1970	Line #2154	5,073	None
137-0050	Williamsburg	Listed on the NHL in 1960;	Line #2154	4,029	None
137 0030	Historic District	Listed on the NRHP in 1966	Line #2113	7,479	None
137-0056	Capitol Landing, Capitol Landing Road	Determined Eligible by VDHR in 1977 (archaeology site)	Line #2154	N/A	N/A
137-0058	George Wythe House, Palace Green	Listed on the NHL and on the NRHP in 1970	Line #2154	6,309	None

I. Chesapeake Bay Preservation Areas

Construction, installation, operation, and maintenance of electric transmission lines are conditionally exempt from the Chesapeake Bay Preservation Act as stated in the exemption for public utilities, railroads, public roads, and facilities in 9 VAC 25-830-150. The Company will meet those conditions.

J. Wildlife Resources

Agency databases were reviewed and agency consultations initiated with the USFWS, DWR, and DCR to determine if the proposed Rebuild Projects have the potential to affect any threatened or endangered species. As discussed in Section 2.F, certain federal and state listed species were identified as potentially occurring in the area of the Rebuild Projects. 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. Since the proposed project is a rebuild of a transmission line within existing right-of-way, no loss of wildlife habitat is anticipated.

K. Recreation, Agricultural and Forest Resources

The Rebuild Projects are expected to have minimal permanent impacts on recreational, agricultural, and forest resources since no additional right-of-way is required. The

general character of the area of the Rebuild Projects is predominantly rural with open spaces and scattered residential uses.

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. Land that does not meet the criteria for prime farmland can be considered to be "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. 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. Acreages of prime farmland and farmland of statewide importance within each segment are provided in the following table.

Table 6. Farmland within the Rebuild Projects

Rebuild Projects	Prime Farmland (ac)	Farmland of Statewide Importance (ac)
Line #2154	70.65	57.88
Line #2113	54.22	24.00

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. Two existing conservation easements are located within the right-of-way on either side of State Route 132 in York County. Both open space easements are closed to the public and held by the Historic Virginia Land Conservancy. Both easements were established October 2006. The initial construction and acquisition of Company easements for the right-of-way preceded the designation of these conservation easements. The proposed Rebuild Projects are the rebuild of an existing transmission line and no additional right-of-way is required. The Company solicited comments from the Virginia Outdoors Foundation ("VOF") and the Historic Virginia Land Conservancy in letters sent in December 2020. In a letter dated December 4, 2020, the VOF noted that the proposed rebuild projects will not negatively impact any existing VOF easements or easements under development. (Attachment 2.K.1).

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. No scenic rivers occur within the vicinity of the Rebuild Projects.

The existing right-of-way for Line #2154 crosses U.S. Bicycle Route 76, which runs from Yorktown, Virginia to Missouri. The existing right-of-way to be used for Line #2154 also crosses the Colonial Parkway. The Colonial Parkway is an All-American Road and both a national and state Scenic Parkway. All-American Roads are considered nationally significant and contain unique features that do not exist elsewhere. Use of the existing right-of-way minimizes additional impacts at any road crossings; however, the Company will meet with stakeholders of the Colonial Parkway and will explore mitigation measures if necessary. The existing Line #2154 does not cross any national or state scenic byways.

The Rebuild Projects cross through two municipal parks: Waller Mill Park, which is owned and operated by the City of Williamsburg, and Warhill Sports Complex, which is owned and operated by James City County. Since the projects are rebuilds of existing transmission lines, no permanent impacts to the parks are anticipated to occur. The Company will coordinate with the municipal park staff to address any temporary impacts during construction. A third park, the Colonial Parkway unit of Colonial National Historical Park managed by the National Park Service, is also crossed by the aerial transmission line. Table 7 provides parks within one half-mile of the Rebuild Projects.

Table 7. Parks within 0.5 mile of the Rebuild Projects

Park	Managing Authority	Distance to Line #2154 (mi)	Distance to Line #2113 (mi)
Waller Mill Park	City of Williamsburg	0	0
Warhill Sports Complex	James City County	0	0.1
Colonial National Historic Park	National Park Service	0.2	>0.5

In December 2020, the Company solicited DCR for comments on the proposed Rebuild Projects. In an email dated December 2, 2020, DCR stated that the proposed project would not impact any scenic resources or other recreation resources that they track (Attachment 2.K.2).

The entire width of the existing transmission corridor is currently cleared and maintained for transmission facility operations. However, the Rebuild Projects may require some trimming of tree limbs along the right-of-way edges to support construction activities. Trees and brush located within 100 feet of streams will be cleared by hand in accordance with the Company approved Erosion and Sediment Control specifications.

Any tree along the right-of-way that is tall enough to endanger the conductors if it were to break at the stump or uproot and fall directly towards the conductors and exhibits signs or symptoms of disease or structural defect that make it an elevated risk for falling will be designated as a "danger tree" and may be removed. The Company's

arborist will contact the property owner if possible before any danger trees are cut, except in emergency situations. 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 Projects are expected to have minimal, if any, impact on agricultural or forest resources as the proposed Rebuild Projects involve rebuilding a portion of an existing line which is already cleared and maintained for existing facility operation and no additional right-of-way is required.

L. Use of Pesticides and Herbicides

Of the techniques available, selective foliar is the preferred method of herbicide application. The Company typically maintains transmission line right-of-way 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.

M. Geology and Mineral Resources

According to the Division of Geology and Mineral Resources Interactive Geologic Map, the area of the Rebuild Projects consists primarily of sands, silts, gravels, and clays. According to the USGS topographic maps and aerial imagery, there are no active mines or stone quarries within the limits of the Rebuild Projects. A search of the Virginia Department of Mines, Minerals, and Energy online map indicates four abandoned sand and gravel mines within the right-of-way. There are no additional active, released, or orphaned sand and gravel mines within a 1.0-mile radius of the right-of-way. Coordinates of these mines are provided in Table 8. The Company does not anticipate that the rebuild of the existing transmission lines will result in negative impacts on the geology or mineral resources.

Table 8. Mines within 1.0-Mile of Centerline of the Rebuild Projects

Project Segment	Mine ID	Mineral	Status	Latitude	Longitude
Line #2154	DMM98181	Sand	Abandoned	37.21611	-76.62778
Line #2154	DMM06018	Sand & Gravel	Abandoned	37.289083	-76.671889
Line #2154	DMM06017	Sand & Gravel	Abandoned	37.25875	-76.645278
Line #2113	DMM06019	Sand & Gravel	Abandoned	37.31547	-76.74535

N. Transportation Infrastructure

The existing variable width transmission line corridor extends approximately 12 miles beginning at the Skiffes Creek Switching Station in York County, traverses through the City of Williamsburg, and continues into James City County where it terminates at the Lightfoot Substation. The Line #2113 Rebuild Project will cross eight public and private roads. Line #2154 will cross 26 public and private roads; out of 26, eight are on/off exit ramps to I-64. Roads within the Rebuild Project areas range from low traffic volume county roads to urban arterials to limited access highways. Major roads crossed by the right-of-way include:

- Humelsine Parkway (Route 199),
- Williamsburg Road (Route 60), and
- Several exit ramps of Interstate 64

Line #2154 Rebuild Project

The existing 230 kV electric transmission line is within an existing transmission line corridor that begins at the Structure #2154/482 in York County, traverses through the City of Williamsburg and terminates at the Waller Mill Substation. This segment parallels several different electric transmission lines along the majority of the corridor (Line #169/2146 double circuit) to Kingsmill Substation then (Line #134/2146) to Structure #2154/482. Approximately 3.1 miles of the proposed Rebuild Projects parallels Interstate 64 and 1.8 miles parallels a railroad operated by CSX Transportation, Inc. ("CSX"). It currently crosses, and will continue to cross, the CSX railroad right-of-way, as well as I-64 west exit 243b; I-64 east exits 242, 242a, 243, and 243a; and State Highway 60.

Line #2113 Rebuild Project

The existing 230 kV electric transmission line is within an existing transmission line corridor that begins at the Waller Mill Substation in York County and traverses through the James City County where it terminates at the Lightfoot Substation. It parallels several different electric transmission lines along the majority of the corridor (Line #169/2102 double circuit). This segment currently crosses, and will continue to cross State Highway 60, and State Route 199.

The Company will apply for right-of-way permits from the City of Williamsburg for aerial crossings of all City maintained roads and construction entrances from the City of Williamsburg right-of-way. The Company plans to apply for land use permits from the Virginia Department of Transportation ("VDOT") for the aerial crossings of VDOT maintained roads and any construction entrances from the VDOT right-of-way. These are expected to be limited to the crossings of I-64, Route 199, and Route 60. All permits will be obtained prior to construction. The Company will prepare traffic control plans and submit to VDOT for approval concerning the line pull over I-64 ramps, Route 199, and Route 60. In December 2020, the Company solicited VDOT for comments on the proposed Rebuild Projects.

As noted above, the existing Line #2154 right-of-way crosses one railroad operated by CSX. The Company will coordinate with CSX as necessary to obtain permits; however, it is not anticipated that the proposed Rebuild Projects will affect railroad facilities or conflict with their operation.

The Company solicited comments from the Virginia Department of Aviation ("DOAv") regarding the proposed Rebuild Projects. The DOAv responded via a letter dated December 1, 2020 stating the requirement for the Company to submit Form 7460 to the Federal Aviation Administration ("FAA") to initiate an aeronautical study. This response is included as <u>Attachment 2.N.1</u>. The design of the proposed Rebuild Projects must 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.

Finally, the Company has reviewed the FAA's website (https://oeaaa.faa.gov/oeaaa/external/portal.jsp) to identify airports within 10 miles of the Rebuild Projects. Based on this review, five FAA-restricted airports are located within 10 miles of the Project:

Table 9. Airports within 10 nautical miles (NM)* of the Rebuild Project

Airport	Distance to Line #2154 (NM)	Distance to –Line #2113 (NM)	
Yorktown Naval Weapons Station Helipad	3.1	8.4	
Fort Eustis, Felker Army Air Field	5.0	>10	
Williamsburg- Jamestown Airport	3	3.4	
Camp Peary Landing Strip	2.3	3	
Newport News/ Williamsburg International	7.2	>10	
Airport			

^{*} Distances based upon center coordinate of airport provided by FAA.

Several private airports/helipads are located within 10 miles of the line and the Company will work with private entities as appropriate.

The Company will coordinate with VDOT, CSX, DOAv, and the FAA as necessary to obtain all appropriate permits.

Attachments



December 1, 2020

BY EMAIL

Ms. Bettina Rayfield Department of Environmental Quality, Office of Environmental Impact Review P.O Box 1105 Richmond, Virginia 23218

RE: Dominion Energy Virginia's Proposed 230 kV Lines #2113 and #2154 Transmission Line Rebuilds and Related Projects– James City County, York County, and the City of Williamsburg, Virginia

Dear Ms. Bettina Rayfield,

Dominion Energy Virginia (the "Company") is proposing to rebuild its 230 kV transmission lines, Line #2113 and Line #2154, located in York and James City Counties and the City of Williamsburg, Virginia (collectively, the "Rebuild Projects"). The Rebuild Projects will replace aging infrastructure that is nearing the end of its service life and address future reliability concerns, thereby continuing to enable the Company to maintain safe and reliable electric service to customers. Because the existing right-of-way and Company-owned property is adequate to construct the proposed Rebuild Projects, no new right-of-way is necessary. Specifically, the Rebuild Projects propose:

Line #2113 Rebuild Project

- Rebuild 3.8 miles of 230 kV Line #2113 between Lightfoot Substation and Waller Substation;
- Remove 3.8 miles of idle 115 kV Line #58 between Lightfoot Substation and Waller Substation; and
- Related substation work at Lanexa, Lightfoot, and Waller Substations.

Line #2154 Rebuild Project

- Rebuild 7.6 miles of 230 kV Line #2154 between Waller Substation and Structure #2154/482 (near Skiffes Creek Switching Station);
- Remove 6.1 miles of idle 115 kV Line #58 between Waller Substation and Kingsmill Substation;
- Rebuild 1.5 miles of 115 kV Line #19 between Kingsmill Substation and Structure #2154/482;
- Related substation work at Waller, Penniman, and Kingsmill Substations and Skiffes Creek Switching Station.

The Company is preparing an application for a Certificate of Public Convenience and Necessity ("CPCN") from the SCC. At this time, in advance of the SCC filing, the Company respectfully requests that you submit any comments or additional information that would have bearing on the proposed Rebuild Projects within 30 days of the date of this letter. Enclosed is a Project Overview Map depicting the proposed route and project location. If you would like to receive a GIS shapefile of the route to assist in your project review or if you have any questions, please do not hesitate to contact Rachel Studebaker at (804) 217-1847 or rachel.m.studebaker@dominionenergy.com. The Company appreciates your assistance with this project review and looks forward to any additional information you may have to offer.

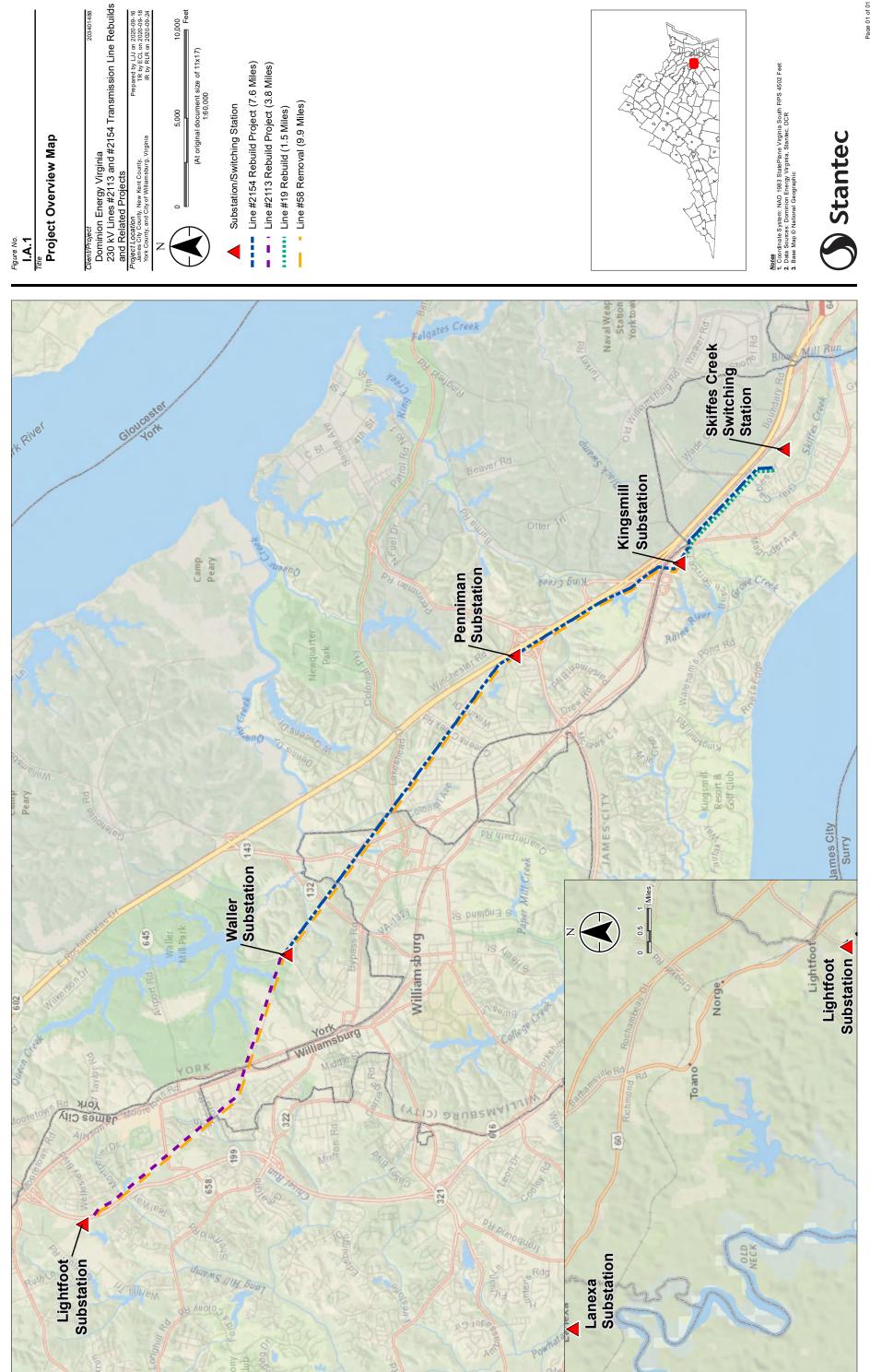
Sincerely,

Dominion Energy Virginia

Jason P. Ericson

10,000

Prepared by LJJ on 2020-09-16 TR by ECL on 2020-09-18 IR by RLR on 2020-09-24



accompleteness of this information and shall not be responsible for any errors or omissions which may be incoporated herein as a result. Stantec assumes no responsibility for data supplied in electronic format, and the recipient accessible for any errors or omissions which may be incoporated herein as a result. Stantec assumes no responsibility for werifying the accuracy and completeness of the data

U.\203401488\03_data\gis_cad\gis/01488_p_overview.mxd Revised: 2020-11-19 By: MGSanderson



December 1, 2020

BY EMAIL

Ms. Robbie Rhur Department of Conservation and Recreation, Planning Bureau 600 East Main Street, 17th Floor Richmond, Virginia 23219

RE: Dominion Energy Virginia's Proposed 230 kV Lines #2113 and #2154 Transmission Line Rebuilds and Related Projects– James City County, York County, and the City of Williamsburg, Virginia

Dear Ms. Robbie Rhur,

Dominion Energy Virginia (the "Company") is proposing to rebuild its 230 kV transmission lines, Line #2113 and Line #2154, located in York and James City Counties and the City of Williamsburg, Virginia (collectively, the "Rebuild Projects"). The Rebuild Projects will replace aging infrastructure that is nearing the end of its service life and address future reliability concerns, thereby continuing to enable the Company to maintain safe and reliable electric service to customers. Because the existing right-of-way and Company-owned property is adequate to construct the proposed Rebuild Projects, no new right-of-way is necessary. Specifically, the Rebuild Projects propose:

Line #2113 Rebuild Project

- Rebuild 3.8 miles of 230 kV Line #2113 between Lightfoot Substation and Waller Substation;
- Remove 3.8 miles of idle 115 kV Line #58 between Lightfoot Substation and Waller Substation; and
- Related substation work at Lanexa, Lightfoot, and Waller Substations.

Line #2154 Rebuild Project

- Rebuild 7.6 miles of 230 kV Line #2154 between Waller Substation and Structure #2154/482 (near Skiffes Creek Switching Station);
- Remove 6.1 miles of idle 115 kV Line #58 between Waller Substation and Kingsmill Substation;
- Rebuild 1.5 miles of 115 kV Line #19 between Kingsmill Substation and Structure #2154/482;
- Related substation work at Waller, Penniman, and Kingsmill Substations and Skiffes Creek Switching Station.

The Company is preparing an application for a Certificate of Public Convenience and Necessity ("CPCN") from the SCC. At this time, in advance of the SCC filing, the Company respectfully requests that you submit any comments or additional information that would have bearing on the proposed Rebuild Projects within 30 days of the date of this letter. Enclosed is a Project Overview Map depicting the proposed route and project location. If you would like to receive a GIS shapefile of the route to assist in your project review or if you have any questions, please do not hesitate to contact Rachel Studebaker at (804) 217-1847 or rachel.m.studebaker@dominionenergy.com. The Company appreciates your assistance with this project review and looks forward to any additional information you may have to offer. Sincerely,

Dominion Energy Virginia

Jason P. Ericson



December 1, 2020

BY EMAIL

Ms. S. Rene Hypes Virginia Department of Conservation and Recreation, Division of Natural Heritage 600 East Main Street, 24th Floor Richmond, Virginia 23219

RE: Dominion Energy Virginia's Proposed 230 kV Lines #2113 and #2154 Transmission Line Rebuilds and Related Projects- James City County, York County, and the City of Williamsburg, Virginia

Dear Ms. S. Rene Hypes

Dominion Energy Virginia (the "Company") is proposing to rebuild its 230 kV transmission lines, Line #2113 and Line #2154, located in York and James City Counties and the City of Williamsburg, Virginia (collectively, the "Rebuild Projects"). The Rebuild Projects will replace aging infrastructure that is nearing the end of its service life and address future reliability concerns, thereby continuing to enable the Company to maintain safe and reliable electric service to customers. Because the existing right-of-way and Company-owned property is adequate to construct the proposed Rebuild Projects, no new right-of-way is necessary. Specifically, the Rebuild Projects propose:

Line #2113 Rebuild Project

- Rebuild 3.8 miles of 230 kV Line #2113 between Lightfoot Substation and Waller Substation;
- Remove 3.8 miles of idle 115 kV Line #58 between Lightfoot Substation and Waller Substation; and
- Related substation work at Lanexa, Lightfoot, and Waller Substations.

Line #2154 Rebuild Project

- Rebuild 7.6 miles of 230 kV Line #2154 between Waller Substation and Structure #2154/482 (near Skiffes Creek Switching Station);
- Remove 6.1 miles of idle 115 kV Line #58 between Waller Substation and Kingsmill Substation;
- Rebuild 1.5 miles of 115 kV Line #19 between Kingsmill Substation and Structure #2154/482;
- Related substation work at Waller, Penniman, and Kingsmill Substations and Skiffes Creek Switching Station.

The Company is preparing an application for a Certificate of Public Convenience and Necessity ("CPCN") from the SCC. At this time, in advance of the SCC filing, the Company respectfully requests that you submit any comments or additional information that would have bearing on the proposed Rebuild Projects within 30 days of the date of this letter. Enclosed is a Project Overview Map depicting the proposed route and project location. If you would like to receive a GIS shapefile of the route to assist in your project review or if you have any questions, please do not hesitate to contact Rachel Studebaker at (804) 217-1847 or rachel.m.studebaker@dominionenergy.com. The Company appreciates your assistance with this project review and looks forward to any additional information you may have to offer.

Sincerely,

Dominion Energy Virginia

Jason P. Ericson



December 1, 2020

BY EMAIL

Ms. Amy M. Ewing Virginia Department of Wildlife Resources 7870 Villa Park, Suite 400 Henrico, Virginia 23228

RE: Dominion Energy Virginia's Proposed 230 kV Lines #2113 and #2154 Transmission Line Rebuilds and Related Projects—James City County, York County, and the City of Williamsburg, Virginia

Dear Ms. Amy M. Ewing,

Dominion Energy Virginia (the "Company") is proposing to rebuild its 230 kV transmission lines, Line #2113 and Line #2154, located in York and James City Counties and the City of Williamsburg, Virginia (collectively, the "Rebuild Projects"). The Rebuild Projects will replace aging infrastructure that is nearing the end of its service life and address future reliability concerns, thereby continuing to enable the Company to maintain safe and reliable electric service to customers. Because the existing right-of-way and Company-owned property is adequate to construct the proposed Rebuild Projects, no new right-of-way is necessary. Specifically, the Rebuild Projects propose:

Line #2113 Rebuild Project

- Rebuild 3.8 miles of 230 kV Line #2113 between Lightfoot Substation and Waller Substation;
- Remove 3.8 miles of idle 115 kV Line #58 between Lightfoot Substation and Waller Substation; and
- Related substation work at Lanexa, Lightfoot, and Waller Substations.

Line #2154 Rebuild Project

- Rebuild 7.6 miles of 230 kV Line #2154 between Waller Substation and Structure #2154/482 (near Skiffes Creek Switching Station);
- Remove 6.1 miles of idle 115 kV Line #58 between Waller Substation and Kingsmill Substation;
- Rebuild 1.5 miles of 115 kV Line #19 between Kingsmill Substation and Structure #2154/482;
- Related substation work at Waller, Penniman, and Kingsmill Substations and Skiffes Creek Switching Station.

The Company is preparing an application for a Certificate of Public Convenience and Necessity ("CPCN") from the SCC. At this time, in advance of the SCC filing, the Company respectfully requests that you submit any comments or additional information that would have bearing on the proposed Rebuild Projects within 30 days of the date of this letter. Enclosed is a Project Overview Map depicting the proposed route and project location. If you would like to receive a GIS shapefile of the route to assist in your project review or if you have any questions, please do not hesitate to contact Rachel Studebaker at (804) 217-1847 or rachel.m.studebaker@dominionenergy.com. The Company appreciates your assistance with this project review and looks forward to any additional information you may have to offer.

Sincerely,

Dominion Energy Virginia

Jason P. Ericson



December 1, 2020

BY EMAIL

Mr. Keith Tignor Virginia Department of Agriculture and Consumer Affairs 102 Governor Street Richmond, Virginia 23219

RE: Dominion Energy Virginia's Proposed 230 kV Lines #2113 and #2154 Transmission Line Rebuilds and Related Projects– James City County, York County, and the City of Williamsburg, Virginia

Dear Mr. Keith Tignor,

Dominion Energy Virginia (the "Company") is proposing to rebuild its 230 kV transmission lines, Line #2113 and Line #2154, located in York and James City Counties and the City of Williamsburg, Virginia (collectively, the "Rebuild Projects"). The Rebuild Projects will replace aging infrastructure that is nearing the end of its service life and address future reliability concerns, thereby continuing to enable the Company to maintain safe and reliable electric service to customers. Because the existing right-of-way and Company-owned property is adequate to construct the proposed Rebuild Projects, no new right-of-way is necessary. Specifically, the Rebuild Projects propose:

Line #2113 Rebuild Project

- Rebuild 3.8 miles of 230 kV Line #2113 between Lightfoot Substation and Waller Substation;
- Remove 3.8 miles of idle 115 kV Line #58 between Lightfoot Substation and Waller Substation; and
- Related substation work at Lanexa, Lightfoot, and Waller Substations.

Line #2154 Rebuild Project

- Rebuild 7.6 miles of 230 kV Line #2154 between Waller Substation and Structure #2154/482 (near Skiffes Creek Switching Station);
- Remove 6.1 miles of idle 115 kV Line #58 between Waller Substation and Kingsmill Substation;
- Rebuild 1.5 miles of 115 kV Line #19 between Kingsmill Substation and Structure #2154/482;
- Related substation work at Waller, Penniman, and Kingsmill Substations and Skiffes Creek Switching Station.

The Company is preparing an application for a Certificate of Public Convenience and Necessity ("CPCN") from the SCC. At this time, in advance of the SCC filing, the Company respectfully requests that you submit any comments or additional information that would have bearing on the proposed Rebuild Projects within 30 days of the date of this letter. Enclosed is a Project Overview Map depicting the proposed route and project location. If you would like to receive a GIS shapefile of the route to assist in your project review or if you have any questions, please do not hesitate to contact Rachel Studebaker at (804) 217-1847 or rachel.m.studebaker@dominionenergy.com. The Company appreciates your assistance with this project review and looks forward to any additional information you may have to offer.

Sincerely,

Dominion Energy Virginia

Jason P. Ericson



December 1, 2020

BY EMAIL

Mr. Terrance Lasher Virginia Department of Forestry, Forestland Conservation Division 900 Natural Resources Drive, Suite 800 Charlottesville, Virginia 22903

RE: Dominion Energy Virginia's Proposed 230 kV Lines #2113 and #2154 Transmission Line Rebuilds and Related Projects– James City County, York County, and the City of Williamsburg, Virginia

Dear Mr. Terrance Lasher,

Dominion Energy Virginia (the "Company") is proposing to rebuild its 230 kV transmission lines, Line #2113 and Line #2154, located in York and James City Counties and the City of Williamsburg, Virginia (collectively, the "Rebuild Projects"). The Rebuild Projects will replace aging infrastructure that is nearing the end of its service life and address future reliability concerns, thereby continuing to enable the Company to maintain safe and reliable electric service to customers. Because the existing right-of-way and Company-owned property is adequate to construct the proposed Rebuild Projects, no new right-of-way is necessary. Specifically, the Rebuild Projects propose:

Line #2113 Rebuild Project

- Rebuild 3.8 miles of 230 kV Line #2113 between Lightfoot Substation and Waller Substation;
- Remove 3.8 miles of idle 115 kV Line #58 between Lightfoot Substation and Waller Substation; and
- Related substation work at Lanexa, Lightfoot, and Waller Substations.

Line #2154 Rebuild Project

- Rebuild 7.6 miles of 230 kV Line #2154 between Waller Substation and Structure #2154/482 (near Skiffes Creek Switching Station);
- Remove 6.1 miles of idle 115 kV Line #58 between Waller Substation and Kingsmill Substation;
- Rebuild 1.5 miles of 115 kV Line #19 between Kingsmill Substation and Structure #2154/482;
- Related substation work at Waller, Penniman, and Kingsmill Substations and Skiffes Creek Switching Station.

The Company is preparing an application for a Certificate of Public Convenience and Necessity ("CPCN") from the SCC. At this time, in advance of the SCC filing, the Company respectfully requests that you submit any comments or additional information that would have bearing on the proposed Rebuild Projects within 30 days of the date of this letter. Enclosed is a Project Overview Map depicting the proposed route and project location. If you would like to receive a GIS shapefile of the route to assist in your project review or if you have any questions, please do not hesitate to contact Rachel Studebaker at (804) 217-1847 or rachel.m.studebaker@dominionenergy.com. The Company appreciates your assistance with this project review and looks forward to any additional information you may have to offer.

Sincerely,

Dominion Energy Virginia

Jason P. Ericson



December 1, 2020

BY EMAIL

Mr. Tony Watkinson Virginia Marine Resources Commission, Habitat Management Division Building 96, 380 Fenwick Road Ft. Monroe, Virginia 23651

RE: Dominion Energy Virginia's Proposed 230 kV Lines #2113 and #2154 Transmission Line Rebuilds and Related Projects– James City County, York County, and the City of Williamsburg, Virginia

Dear Mr. Tony Watkinson,

Dominion Energy Virginia (the "Company") is proposing to rebuild its 230 kV transmission lines, Line #2113 and Line #2154, located in York and James City Counties and the City of Williamsburg, Virginia (collectively, the "Rebuild Projects"). The Rebuild Projects will replace aging infrastructure that is nearing the end of its service life and address future reliability concerns, thereby continuing to enable the Company to maintain safe and reliable electric service to customers. Because the existing right-of-way and Company-owned property is adequate to construct the proposed Rebuild Projects, no new right-of-way is necessary. Specifically, the Rebuild Projects propose:

Line #2113 Rebuild Project

- Rebuild 3.8 miles of 230 kV Line #2113 between Lightfoot Substation and Waller Substation;
- Remove 3.8 miles of idle 115 kV Line #58 between Lightfoot Substation and Waller Substation; and
- Related substation work at Lanexa, Lightfoot, and Waller Substations.

Line #2154 Rebuild Project

- Rebuild 7.6 miles of 230 kV Line #2154 between Waller Substation and Structure #2154/482 (near Skiffes Creek Switching Station);
- Remove 6.1 miles of idle 115 kV Line #58 between Waller Substation and Kingsmill Substation;
- Rebuild 1.5 miles of 115 kV Line #19 between Kingsmill Substation and Structure #2154/482;
- Related substation work at Waller, Penniman, and Kingsmill Substations and Skiffes Creek Switching Station.

The Company is preparing an application for a Certificate of Public Convenience and Necessity ("CPCN") from the SCC. At this time, in advance of the SCC filing, the Company respectfully requests that you submit any comments or additional information that would have bearing on the proposed Rebuild Projects within 30 days of the date of this letter. Enclosed is a Project Overview Map depicting the proposed route and project location. If you would like to receive a GIS shapefile of the route to assist in your project review or if you have any questions, please do not hesitate to contact Rachel Studebaker at (804) 217-1847 or rachel.m.studebaker@dominionenergy.com. The Company appreciates your assistance with this project review and looks forward to any additional information you may have to offer.

Sincerely,

Dominion Energy Virginia

Jason P. Ericson



December 1, 2020

BY EMAIL

Mr. Troy Andersen US Fish and Wildlife Service Virginia Field Office, Ecological Services 6669 Short Lane Gloucester, Virginia 23061

RE: Dominion Energy Virginia's Proposed 230 kV Lines #2113 and #2154 Transmission Line Rebuilds and Related Projects– James City County, York County, and the City of Williamsburg, Virginia

Dear Mr. Troy Andersen,

Dominion Energy Virginia (the "Company") is proposing to rebuild its 230 kV transmission lines, Line #2113 and Line #2154, located in York and James City Counties and the City of Williamsburg, Virginia (collectively, the "Rebuild Projects"). The Rebuild Projects will replace aging infrastructure that is nearing the end of its service life and address future reliability concerns, thereby continuing to enable the Company to maintain safe and reliable electric service to customers. Because the existing right-of-way and Company-owned property is adequate to construct the proposed Rebuild Projects, no new right-of-way is necessary. Specifically, the Rebuild Projects propose:

Line #2113 Rebuild Project

- Rebuild 3.8 miles of 230 kV Line #2113 between Lightfoot Substation and Waller Substation;
- Remove 3.8 miles of idle 115 kV Line #58 between Lightfoot Substation and Waller Substation; and
- Related substation work at Lanexa, Lightfoot, and Waller Substations.

Line #2154 Rebuild Project

- Rebuild 7.6 miles of 230 kV Line #2154 between Waller Substation and Structure #2154/482 (near Skiffes Creek Switching Station);
- Remove 6.1 miles of idle 115 kV Line #58 between Waller Substation and Kingsmill Substation;
- Rebuild 1.5 miles of 115 kV Line #19 between Kingsmill Substation and Structure #2154/482;
- Related substation work at Waller, Penniman, and Kingsmill Substations and Skiffes Creek Switching Station.

The Company is preparing an application for a Certificate of Public Convenience and Necessity ("CPCN") from the SCC. At this time, in advance of the SCC filing, the Company respectfully requests that you submit any comments or additional information that would have bearing on the proposed Rebuild Projects within 30 days of the date of this letter. Enclosed is a Project Overview Map depicting the proposed route and project location. If you would like to receive a GIS shapefile of the route to assist in your project review or if you have any questions, please do not hesitate to contact Rachel Studebaker at (804) 217-1847 or rachel.m.studebaker@dominionenergy.com. The Company appreciates your assistance with this project review and looks forward to any additional information you may have to offer.

Sincerely,

Dominion Energy Virginia

Jason P. Ericson



December 1, 2020

BY EMAIL

Mr. Todd Miller US Army Corps of Engineers Norfolk District- Southern Section 803 Front Street Norfolk, Virginia 23510

RE: Dominion Energy Virginia's Proposed 230 kV Lines #2113 and #2154 Transmission Line Rebuilds and Related Projects– James City County, York County, and the City of Williamsburg, Virginia

Dear Mr. Todd Miller,

Dominion Energy Virginia (the "Company") is proposing to rebuild its 230 kV transmission lines, Line #2113 and Line #2154, located in York and James City Counties and the City of Williamsburg, Virginia (collectively, the "Rebuild Projects"). The Rebuild Projects will replace aging infrastructure that is nearing the end of its service life and address future reliability concerns, thereby continuing to enable the Company to maintain safe and reliable electric service to customers. Because the existing right-of-way and Company-owned property is adequate to construct the proposed Rebuild Projects, no new right-of-way is necessary. Specifically, the Rebuild Projects propose:

Line #2113 Rebuild Project

- Rebuild 3.8 miles of 230 kV Line #2113 between Lightfoot Substation and Waller Substation;
- Remove 3.8 miles of idle 115 kV Line #58 between Lightfoot Substation and Waller Substation; and
- Related substation work at Lanexa, Lightfoot, and Waller Substations.

Line #2154 Rebuild Project

- Rebuild 7.6 miles of 230 kV Line #2154 between Waller Substation and Structure #2154/482 (near Skiffes Creek Switching Station);
- Remove 6.1 miles of idle 115 kV Line #58 between Waller Substation and Kingsmill Substation;
- Rebuild 1.5 miles of 115 kV Line #19 between Kingsmill Substation and Structure #2154/482;
- Related substation work at Waller, Penniman, and Kingsmill Substations and Skiffes Creek Switching Station.

The Company is preparing an application for a Certificate of Public Convenience and Necessity ("CPCN") from the SCC. At this time, in advance of the SCC filing, the Company respectfully requests that you submit any comments or additional information that would have bearing on the proposed Rebuild Projects within 30 days of the date of this letter. Enclosed is a Project Overview Map depicting the proposed route and project location. If you would like to receive a GIS shapefile of the route to assist in your project review or if you have any questions, please do not hesitate to contact Rachel Studebaker at (804) 217-1847 or rachel.m.studebaker@dominionenergy.com. The Company appreciates your assistance with this project review and looks forward to any additional information you may have to offer.

Sincerely,

Dominion Energy Virginia

Jason P. Ericson



December 1, 2020

BY EMAIL

Ms. Kym Hall
US Department of the Interior, National Park Service
Colonial National Historic Park
P.O. Box 210
Yorktown, Virginia 23690

RE: Dominion Energy Virginia's Proposed 230 kV Lines #2113 and #2154 Transmission Line Rebuilds and Related Projects- James City County, York County, and the City of Williamsburg, Virginia

Dear Ms. Kym Hall,

Dominion Energy Virginia (the "Company") is proposing to rebuild its 230 kV transmission lines, Line #2113 and Line #2154, located in York and James City Counties and the City of Williamsburg, Virginia (collectively, the "Rebuild Projects"). The Rebuild Projects will replace aging infrastructure that is nearing the end of its service life and address future reliability concerns, thereby continuing to enable the Company to maintain safe and reliable electric service to customers. Because the existing right-of-way and Company-owned property is adequate to construct the proposed Rebuild Projects, no new right-of-way is necessary. Specifically, the Rebuild Projects propose:

Line #2113 Rebuild Project

- Rebuild 3.8 miles of 230 kV Line #2113 between Lightfoot Substation and Waller Substation;
- Remove 3.8 miles of idle 115 kV Line #58 between Lightfoot Substation and Waller Substation; and
- Related substation work at Lanexa, Lightfoot, and Waller Substations.

Line #2154 Rebuild Project

- Rebuild 7.6 miles of 230 kV Line #2154 between Waller Substation and Structure #2154/482 (near Skiffes Creek Switching Station);
- Remove 6.1 miles of idle 115 kV Line #58 between Waller Substation and Kingsmill Substation;
- Rebuild 1.5 miles of 115 kV Line #19 between Kingsmill Substation and Structure #2154/482;
- Related substation work at Waller, Penniman, and Kingsmill Substations and Skiffes Creek Switching Station.

The Company is preparing an application for a Certificate of Public Convenience and Necessity ("CPCN") from the SCC. At this time, in advance of the SCC filing, the Company respectfully requests that you submit any comments or additional information that would have bearing on the proposed Rebuild Projects within 30 days of the date of this letter. Enclosed is a Project Overview Map depicting the proposed route and project location. If you would like to receive a GIS shapefile of the route to assist in your project review or if you have any questions, please do not hesitate to contact Rachel Studebaker at (804) 217-1847 or rachel.m.studebaker@dominionenergy.com. The Company appreciates your assistance with this project review and looks forward to any additional information you may have to offer.

Sincerely,

Dominion Energy Virginia

Jason P. Ericson



December 1, 2020

BY EMAIL

Ms. Michelle Henicheck Virginia Department of Environmental Quality Northern Regional Office P.O. Box 1105 Richmond, Virginia 23218

RE: Dominion Energy Virginia's Proposed 230 kV Lines #2113 and #2154 Transmission Line Rebuilds and Related Projects—James City County, York County, and the City of Williamsburg, Virginia

Dear Ms. Michelle Henicheck,

Dominion Energy Virginia (the "Company") is proposing to rebuild its 230 kV transmission lines, Line #2113 and Line #2154, located in York and James City Counties and the City of Williamsburg, Virginia (collectively, the "Rebuild Projects"). The Rebuild Projects will replace aging infrastructure that is nearing the end of its service life and address future reliability concerns, thereby continuing to enable the Company to maintain safe and reliable electric service to customers. Because the existing right-of-way and Company-owned property is adequate to construct the proposed Rebuild Projects, no new right-of-way is necessary. Specifically, the Rebuild Projects propose:

Line #2113 Rebuild Project

- Rebuild 3.8 miles of 230 kV Line #2113 between Lightfoot Substation and Waller Substation;
- Remove 3.8 miles of idle 115 kV Line #58 between Lightfoot Substation and Waller Substation; and
- Related substation work at Lanexa, Lightfoot, and Waller Substations.

Line #2154 Rebuild Project

- Rebuild 7.6 miles of 230 kV Line #2154 between Waller Substation and Structure #2154/482 (near Skiffes Creek Switching Station);
- Remove 6.1 miles of idle 115 kV Line #58 between Waller Substation and Kingsmill Substation;
- Rebuild 1.5 miles of 115 kV Line #19 between Kingsmill Substation and Structure #2154/482;
- Related substation work at Waller, Penniman, and Kingsmill Substation and Skiffes Creek Switching Station.

As the Project involves proposed work to existing 230 kV transmission lines, Dominion Energy is preparing an application for a certificate of public convenience and necessity from the State Corporation Commission (SCC). Pursuant to the July 2003 Memorandum of Agreement between the SCC and the Department of Environmental Quality (DEQ) regarding Wetlands Impact Consultation, Dominion Energy is sending this letter to initiate consultation with the DEQ prior to filing an application with the SCC.

Stantec Consulting Services, Inc. delineated wetlands and other waters of the United States using the Routine Determination Method as outlined in the 1987 Corps of Engineers Wetland Delineation Manual and methods described in the 2010 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Atlantic and Gulf Coastal Plain Region (Version 2.0). The limits of these features are illustrated on the attached Delineation Map and a breakdown of features is provided below in Table 1. Delineation Map will be provided once finalized. The limits of wetlands of other waters of the United States will be submitted to the U.S. Army Corps of Engineers for confirmation.

Table 1. Jurisdictional Features Identified within the ROW

12/1/2020 Page 2 of 2

Transmission Line Segment	PSS (Acres)	PEM (Acres)	PUB (Acres)	Stream Channels (R3) Acres (LF)	Stream Channels (R4) Acres (LF)	Stream Channels (R6) Acres (LF)
Skiffes – Waller Mill	0.34	12.31	1.59	0.35 (2,934)	0.13 (2,199)	0.01 (232)
Waller Mill – Lightfoot	0.42	3.93	2.16	0.12 (1,215)	0.03 (265)	-

At this time, in advance of the SCC filing, we respectfully request that you submit any comments or additional information you feel would have bearing on the Rebuild Projects within 30 days of the date of this letter. Enclosed is a Project Overview Map depicting the proposed route and project location. If you would like to receive a GIS shapefile of the route to assist in your project review or if you have any questions, please do not hesitate to contact Rachel Studebaker at (804) 217-1847 or Rachel.M.Studebaker@dominionenergy.com.

Dominion Energy Virginia appreciates your assistance with this project review and looks forward to any additional information you may have to offer.

Sincerely,

Dominion Energy Virginia

Jason P. Ericson

Director, Environmental Services

Enclosure: Project Overview Map

Wetland Delineation Memo

BY EMAIL

Ms. Patrice Sadler Historic Virginia Land Conservancy 5000 New Point Road, Suite 2202 Williamsburg, Virginia 23188

RE: Dominion Energy Virginia's Proposed 230 kV Lines #2113 and #2154 Transmission Line Rebuilds and Related Projects– James City County, York County, and the City of Williamsburg, Virginia

Dear: Ms. Patrice Sadler,

Dominion Energy Virginia (the "Company") is proposing to rebuild its 230 kV transmission lines, Line #2113 and Line #2154, located in York and James City Counties and the City of Williamsburg, Virginia (collectively, the "Rebuild Projects"). The Rebuild Projects will replace aging infrastructure that is nearing the end of its service life and address future reliability concerns, thereby continuing to enable the Company to maintain safe and reliable electric service to customers. Because the existing right-of-way and Company-owned property is adequate to construct the proposed Rebuild Projects, no new right-of-way is necessary. Specifically, the Rebuild Projects propose:

Line #2113 Rebuild Project

- Rebuild 3.8 miles of 230 kV Line #2113 between Lightfoot Substation and Waller Substation;
- Remove 3.8 miles of idle 115 kV Line #58 between Lightfoot Substation and Waller Substation;
 and
- Related substation work at Lanexa, Lightfoot, and Waller Substations.

Line #2154 Rebuild Project

- Rebuild 7.6 miles of 230 kV Line #2154 between Waller Substation and Structure #2154/482 (near Skiffes Creek Switching Station);
- Remove 6.1 miles of idle 115 kV Line #58 between Waller Substation and Kingsmill Substation;
- Rebuild 1.5 miles of 115 kV Line #19 between Kingsmill Substation and Structure #2154/482;
- Related substation work at Waller, Penniman, and Kingsmill Substations and Skiffes Creek Switching Station.

The Company is preparing an application for a Certificate of Public Convenience and Necessity ("CPCN") from the SCC. At this time, in advance of the SCC filing, the Company respectfully requests that you submit any comments or additional information that would have bearing on the proposed Rebuild Projects within 30 days of the date of this letter. Enclosed is a Project Overview Map depicting the proposed route and project location. If you would like to receive a GIS shapefile of the route to assist in your project review or if you have any questions, please do not hesitate to contact me at (804) 310-9658 or lane.e.carr@dominionenergy.com. The Company appreciates your assistance with this project review and looks forward to any additional information you may have to offer.

Sincerely,

Lane E. Carr

Lane Carr

Siting and Permitting Specialist

BY EMAIL

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

RE: Dominion Energy Virginia's Proposed 230 kV Lines #2113 and #2154 Transmission Line Rebuilds and Related Projects– James City County, York County, and the City of Williamsburg, Virginia

Dear: Mr. Roger Kirchen,

Dominion Energy Virginia (the "Company") is proposing to rebuild its 230 kV transmission lines, Line #2113 and Line #2154, located in York and James City Counties and the City of Williamsburg, Virginia (collectively, the "Rebuild Projects"). The Rebuild Projects will replace aging infrastructure that is nearing the end of its service life and address future reliability concerns, thereby continuing to enable the Company to maintain safe and reliable electric service to customers. Because the existing right-of-way and Company-owned property is adequate to construct the proposed Rebuild Projects, no new right-of-way is necessary. Specifically, the Rebuild Projects propose:

Line #2113 Rebuild Project

- Rebuild 3.8 miles of 230 kV Line #2113 between Lightfoot Substation and Waller Substation;
- Remove 3.8 miles of idle 115 kV Line #58 between Lightfoot Substation and Waller Substation;
- Related substation work at Lanexa, Lightfoot, and Waller Substations.

Line #2154 Rebuild Project

- Rebuild 7.6 miles of 230 kV Line #2154 between Waller Substation and Structure #2154/482 (near Skiffes Creek Switching Station);
- Remove 6.1 miles of idle 115 kV Line #58 between Waller Substation and Kingsmill Substation;
- Rebuild 1.5 miles of 115 kV Line #19 between Kingsmill Substation and Structure #2154/482;
- Related substation work at Waller, Penniman, and Kingsmill Substations and Skiffes Creek Switching Station.

The Company is preparing an application for a Certificate of Public Convenience and Necessity ("CPCN") from the SCC. At this time, in advance of the SCC filing, the Company respectfully requests that you submit any comments or additional information that would have bearing on the proposed Rebuild Projects within 30 days of the date of this letter. Enclosed is a Project Overview Map depicting the proposed route and project location. If you would like to receive a GIS shapefile of the route to assist in your project review or if you have any questions, please do not hesitate to contact me at (804) 310-9658 or lane.e.carr@dominionenergy.com. The Company appreciates your assistance with this project review and looks forward to any additional information you may have to offer.

Sincerely,

Lane E. Carr

Lane Carr

Siting and Permitting Specialist

BY EMAIL

Mr. Mike Helvey Federal Aviation Administration, Obstruction Evaluation Group FAA Eastern Regional Office 800 Independence Ave, SW, Room 400 East Washington, D.C. 20591

RE: Dominion Energy Virginia's Proposed 230 kV Lines #2113 and #2154 Transmission Line Rebuilds and Related Projects– James City County, York County, and the City of Williamsburg, Virginia

Dear: Mr. Mike Helvey,

Dominion Energy Virginia (the "Company") is proposing to rebuild its 230 kV transmission lines, Line #2113 and Line #2154, located in York and James City Counties and the City of Williamsburg, Virginia (collectively, the "Rebuild Projects"). The Rebuild Projects will replace aging infrastructure that is nearing the end of its service life and address future reliability concerns, thereby continuing to enable the Company to maintain safe and reliable electric service to customers. Because the existing right-of-way and Company-owned property is adequate to construct the proposed Rebuild Projects, no new right-of-way is necessary. Specifically, the Rebuild Projects propose:

Line #2113 Rebuild Project

- Rebuild 3.8 miles of 230 kV Line #2113 between Lightfoot Substation and Waller Substation;
- Remove 3.8 miles of idle 115 kV Line #58 between Lightfoot Substation and Waller Substation;
- Related substation work at Lanexa, Lightfoot, and Waller Substations.

Line #2154 Rebuild Project

- Rebuild 7.6 miles of 230 kV Line #2154 between Waller Substation and Structure #2154/482 (near Skiffes Creek Switching Station);
- Remove 6.1 miles of idle 115 kV Line #58 between Waller Substation and Kingsmill Substation;
- Rebuild 1.5 miles of 115 kV Line #19 between Kingsmill Substation and Structure #2154/482;
- Related substation work at Waller, Penniman, and Kingsmill Substations and Skiffes Creek Switching Station.

The Company is preparing an application for a Certificate of Public Convenience and Necessity ("CPCN") from the SCC. At this time, in advance of the SCC filing, the Company respectfully requests that you submit any comments or additional information that would have bearing on the proposed Rebuild Projects within 30 days of the date of this letter. Enclosed is a Project Overview Map depicting the proposed route and project location. If you would like to receive a GIS shapefile of the route to assist in your project review or if you have any questions, please do not hesitate to contact me at (804) 310-9658 or lane.e.carr@dominionenergy.com. The Company appreciates your assistance with this project review and looks forward to any additional information you may have to offer.

Sincerely,

Lane E. Carr

Lane Carr

Siting and Permitting Specialist

BY EMAIL

Mr. Scott Denny Virginia Department of Aviation, Airport Services Division 5702 Gulfstream Road Richmond, Virginia 23250

RE: Dominion Energy Virginia's Proposed 230 kV Lines #2113 and #2154 Transmission Line Rebuilds and Related Projects– James City County, York County, and the City of Williamsburg, Virginia

Dear: Mr. Scott Denny,

Dominion Energy Virginia (the "Company") is proposing to rebuild its 230 kV transmission lines, Line #2113 and Line #2154, located in York and James City Counties and the City of Williamsburg, Virginia (collectively, the "Rebuild Projects"). The Rebuild Projects will replace aging infrastructure that is nearing the end of its service life and address future reliability concerns, thereby continuing to enable the Company to maintain safe and reliable electric service to customers. Because the existing right-of-way and Company-owned property is adequate to construct the proposed Rebuild Projects, no new right-of-way is necessary. Specifically, the Rebuild Projects propose:

Line #2113 Rebuild Project

- Rebuild 3.8 miles of 230 kV Line #2113 between Lightfoot Substation and Waller Substation;
- Remove 3.8 miles of idle 115 kV Line #58 between Lightfoot Substation and Waller Substation;
 and
- Related substation work at Lanexa, Lightfoot, and Waller Substations.

Line #2154 Rebuild Project

- Rebuild 7.6 miles of 230 kV Line #2154 between Waller Substation and Structure #2154/482 (near Skiffes Creek Switching Station);
- Remove 6.1 miles of idle 115 kV Line #58 between Waller Substation and Kingsmill Substation;
- Rebuild 1.5 miles of 115 kV Line #19 between Kingsmill Substation and Structure #2154/482;
- Related substation work at Waller, Penniman, and Kingsmill Substations and Skiffes Creek Switching Station.

The Company is preparing an application for a Certificate of Public Convenience and Necessity ("CPCN") from the SCC. At this time, in advance of the SCC filing, the Company respectfully requests that you submit any comments or additional information that would have bearing on the proposed Rebuild Projects within 30 days of the date of this letter. Enclosed is a Project Overview Map depicting the proposed route and project location. If you would like to receive a GIS shapefile of the route to assist in your project review or if you have any questions, please do not hesitate to contact me at (804) 310-9658 or lane.e.carr@dominionenergy.com. The Company appreciates your assistance with this project review and looks forward to any additional information you may have to offer.

Sincerely,

Lane E. Carr

Lane Carr

Siting and Permitting Specialist

BY EMAIL

Ms. Martha Little Virginia Outdoors Foundation 600 East Main Street, Suite 402 Richmond, Virginia 23219

RE: Dominion Energy Virginia's Proposed 230 kV Lines #2113 and #2154 Transmission Line Rebuilds and Related Projects- James City County, York County, and the City of Williamsburg, Virginia

Dear: Ms. Martha Little,

Dominion Energy Virginia (the "Company") is proposing to rebuild its 230 kV transmission lines, Line #2113 and Line #2154, located in York and James City Counties and the City of Williamsburg, Virginia (collectively, the "Rebuild Projects"). The Rebuild Projects will replace aging infrastructure that is nearing the end of its service life and address future reliability concerns, thereby continuing to enable the Company to maintain safe and reliable electric service to customers. Because the existing right-of-way and Company-owned property is adequate to construct the proposed Rebuild Projects, no new right-of-way is necessary. Specifically, the Rebuild Projects propose:

Line #2113 Rebuild Project

- Rebuild 3.8 miles of 230 kV Line #2113 between Lightfoot Substation and Waller Substation;
- Remove 3.8 miles of idle 115 kV Line #58 between Lightfoot Substation and Waller Substation;
 and
- Related substation work at Lanexa, Lightfoot, and Waller Substations.

Line #2154 Rebuild Project

- Rebuild 7.6 miles of 230 kV Line #2154 between Waller Substation and Structure #2154/482 (near Skiffes Creek Switching Station);
- Remove 6.1 miles of idle 115 kV Line #58 between Waller Substation and Kingsmill Substation;
- Rebuild 1.5 miles of 115 kV Line #19 between Kingsmill Substation and Structure #2154/482;
- Related substation work at Waller, Penniman, and Kingsmill Substations and Skiffes Creek Switching Station.

The Company is preparing an application for a Certificate of Public Convenience and Necessity ("CPCN") from the SCC. At this time, in advance of the SCC filing, the Company respectfully requests that you submit any comments or additional information that would have bearing on the proposed Rebuild Projects within 30 days of the date of this letter. Enclosed is a Project Overview Map depicting the proposed route and project location. If you would like to receive a GIS shapefile of the route to assist in your project review or if you have any questions, please do not hesitate to contact me at (804) 310-9658 or lane.e.carr@dominionenergy.com. The Company appreciates your assistance with this project review and looks forward to any additional information you may have to offer.

Sincerely,

Lane E. Carr

Lane Carr

Siting and Permitting Specialist

BY EMAIL

Mr. Christopher Hall, P.E. Virginia Department of Transportation, Hampton Roads District 7511 Burbage Drive Suffolk, Virginia 23435

RE: Dominion Energy Virginia's Proposed 230 kV Lines #2113 and #2154 Transmission Line Rebuilds and Related Projects– James City County, York County, and the City of Williamsburg, Virginia

Dear: Mr. Christopher Hall,

Dominion Energy Virginia (the "Company") is proposing to rebuild its 230 kV transmission lines, Line #2113 and Line #2154, located in York and James City Counties and the City of Williamsburg, Virginia (collectively, the "Rebuild Projects"). The Rebuild Projects will replace aging infrastructure that is nearing the end of its service life and address future reliability concerns, thereby continuing to enable the Company to maintain safe and reliable electric service to customers. Because the existing right-of-way and Company-owned property is adequate to construct the proposed Rebuild Projects, no new right-of-way is necessary. Specifically, the Rebuild Projects propose:

Line #2113 Rebuild Project

- Rebuild 3.8 miles of 230 kV Line #2113 between Lightfoot Substation and Waller Substation;
- Remove 3.8 miles of idle 115 kV Line #58 between Lightfoot Substation and Waller Substation;
 and
- Related substation work at Lanexa, Lightfoot, and Waller Substations.

Line #2154 Rebuild Project

- Rebuild 7.6 miles of 230 kV Line #2154 between Waller Substation and Structure #2154/482 (near Skiffes Creek Switching Station);
- Remove 6.1 miles of idle 115 kV Line #58 between Waller Substation and Kingsmill Substation;
- Rebuild 1.5 miles of 115 kV Line #19 between Kingsmill Substation and Structure #2154/482;
- Related substation work at Waller, Penniman, and Kingsmill Substations and Skiffes Creek Switching Station.

The Company is preparing an application for a Certificate of Public Convenience and Necessity ("CPCN") from the SCC. At this time, in advance of the SCC filing, the Company respectfully requests that you submit any comments or additional information that would have bearing on the proposed Rebuild Projects within 30 days of the date of this letter. Enclosed is a Project Overview Map depicting the proposed route and project location. If you would like to receive a GIS shapefile of the route to assist in your project review or if you have any questions, please do not hesitate to contact me at (804) 310-9658 or lane.e.carr@dominionenergy.com. The Company appreciates your assistance with this project review and looks forward to any additional information you may have to offer.

Sincerely,

Lane E. Carr

Lano Carr

Siting and Permitting Specialist

BY EMAIL

Mr. Dan Clayton Public Works and Utilities Department, City of Williamsburg 401 Lafayette Street Williamsburg, Virginia 23185

RE: Dominion Energy Virginia's Proposed 230 kV Lines #2113 and #2154 Transmission Line Rebuilds and Related Projects– James City County, York County, and the City of Williamsburg, Virginia

Dear: Mr. Dan Clayton,

Dominion Energy Virginia (the "Company") is proposing to rebuild its 230 kV transmission lines, Line #2113 and Line #2154, located in York and James City Counties and the City of Williamsburg, Virginia (collectively, the "Rebuild Projects"). The Rebuild Projects will replace aging infrastructure that is nearing the end of its service life and address future reliability concerns, thereby continuing to enable the Company to maintain safe and reliable electric service to customers. Because the existing right-of-way and Company-owned property is adequate to construct the proposed Rebuild Projects, no new right-of-way is necessary. Specifically, the Rebuild Projects propose:

Line #2113 Rebuild Project

- Rebuild 3.8 miles of 230 kV Line #2113 between Lightfoot Substation and Waller Substation;
- Remove 3.8 miles of idle 115 kV Line #58 between Lightfoot Substation and Waller Substation;
 and
- Related substation work at Lanexa, Lightfoot, and Waller Substations.

Line #2154 Rebuild Project

- Rebuild 7.6 miles of 230 kV Line #2154 between Waller Substation and Structure #2154/482 (near Skiffes Creek Switching Station);
- Remove 6.1 miles of idle 115 kV Line #58 between Waller Substation and Kingsmill Substation;
- Rebuild 1.5 miles of 115 kV Line #19 between Kingsmill Substation and Structure #2154/482;
- Related substation work at Waller, Penniman, and Kingsmill Substations and Skiffes Creek Switching Station.

The Company is preparing an application for a Certificate of Public Convenience and Necessity ("CPCN") from the SCC. At this time, in advance of the SCC filing, the Company respectfully requests that you submit any comments or additional information that would have bearing on the proposed Rebuild Projects within 30 days of the date of this letter. Enclosed is a Project Overview Map depicting the proposed route and project location. If you would like to receive a GIS shapefile of the route to assist in your project review or if you have any questions, please do not hesitate to contact me at (804) 310-9658 or lane.e.carr@dominionenergy.com. The Company appreciates your assistance with this project review and looks forward to any additional information you may have to offer.

Sincerely,

Lane E. Carr

Lane Carr

Siting and Permitting Specialist



COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

Street address: 629 East Main Street, Richmond, Virginia 23219 Mailing address: P.O. Box 1105, Richmond, Virginia 23218 www.deq.virginia.gov

December 2, 2020

David K. Paylor Director

(804) 698-4000 1-800-592-5482

Rachel Studebaker Environmental Specialist II Dominion Energy Services 120 Tredegar Street Richmond, VA 23219

Matthew J. Strickler

Secretary of Natural Resources

RE: Proposed 230 kV Lines #2113 and #2154 Transmission Line

Rebuilds and Related Projects- James City County, York County, and the City of Williamsburg,

Virginia

Dear Ms. Studebaker:

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, Dominion should coordinate with the following state agencies and those localities and Planning District Commissions, including but not limited to:

Department of Environmental Quality:

- o DEQ Regional Office
- o Air Division

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

Department of Conservation and Recreation

Department of Health

Department of Agriculture and Consumer Services

Department of Game and Inland Fisheries

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:

- o 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:

- o http://128.172.160.131/gems2/
- 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:

o 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:

- o www.dcr.virginia.gov/natural heritage/dbsearchtool.shtml
- DGIF Fish and Wildlife Information Service

Information about Virginia's Wildlife resources:

- o 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
 - o 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:

- o www.epa.gov/superfund/sites/cursites/index.htm
- EPA RCRAInfo Search

Information on hazardous waste facilities:

- o www.epa.gov/enviro/facts/rcrainfo/search.html
- Total Maximum Daily Loads Approved Reports
 - https://www.deq.virginia.gov/programs/water/waterqualityinformationtmdls/tmdl/tmdlde velopment/approvedtmdlreports.aspx
- EPA Envirofacts Database

EPA Environmental Information, including EPA-Regulated Facilities and Toxics Release Inventory Reports:

- o 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) 698-4204 or e-mail bettina.rayfield@deq.virginia.gov).

I hope this information is helpful to you.

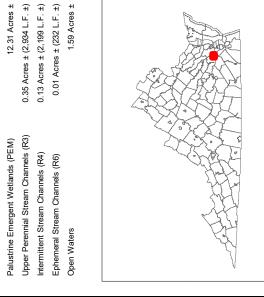
Sincerely,

Bettina Rayfield, Program Manager Environmental Impact Review and

Bute Ray

Long-Range Priorities

196.46 Acres ± 7.56 Miles ± 0.24 Miles ± 0.34 Acres ± Prepared by ECL on 2020-10-19 TR by TPS on 2020-10-24 IR by RSB on 2020-10-20 5.71 Acres ± ClientProject Dominion Energy Virginia 230 kV Line #2154 Rebuild and Related Projects (At original document size of 11x17) 1:42,000 Delineation Map for Preliminary Jurisdictional Determination Preliminary JD Project Limits 3,500 Approved JD Project Limits Palustrine Scrub-Shrub Wetlands (PSS) Upper Perennial Stream Channels (R3) Palustrine Emergent Wetlands (PEM) Intermittent Stream Channels (R4) Ephemeral Stream Channels (R6) Preliminary JD Project Length Project Location
York and James City Counties
and City of Williamsburg, Virginia Preliminary JD Project Area Approved JD Project Length Approved JD Project Area Substation Open Waters



Motes

Locardinate System: NAD 1983 StatePlane Virginia South FIPS 4502 Feet
2. Data Cources: ESRI, Dominion Energy Virginia, Stantec
3. Basemap@ National Geographic



2154/413

2154/412

2154/411

0

\rightarrow

Area Excluded from Preliminary Jurisdictional Request

Stantec

Occordinate System: NAD 1983 StatePlane Virginia South FIPS 4502 Feet
Data Sources: ESRI, Dominion Energy Virginia, Sannec
Topography generated from USGS 1/3 arc second digital elevation model raster dataset, wo-foot confours do not meet blational Map Accuracy Standards and are for planning Imposes only.

Impose solly in limit of virginia sold the U.S., including wetlands, shown on this map have been field deated by means of sub-meter capable GPS technology and are for planning purposes on

Match Line

the data supplied the accuracy and this information and shall not be responsible for any errors or omissions which may be incorporated herein as a result. Startlec assumes no responsibility for data supplied in electronic format, and the recipient accepts full responsibility for verifying the accuracy and completeness of the data

Wetlands Excluded From Preliminary Jurisdictional Determination Request 400 Approximate Palustrine Emergent Wetland Limits (PEM) Prepared by ECL on 2020-10-19 TR by TPS on 2020-10-24 IR by RSB on 2020-10-20 Approximate Intermittent Stream Channel Limits Approximate Ephemeral Stream Channel Limits (R6) Approximate Upper Perennial Stream Channel Limits (R3) Approximate Palustrine Scrub-Shrub Wetland Limits (PSS) (At original document size of 11x17) 1:2,400 ClientProject Dominion Energy Virginia 230 KV Line #2154 Rebuild and Related Projects Approximate Open Water Limits (PUBx) Delineation Map for Preliminary Jurisdictional Determination Preliminary JD Project Limits Approved JD Project Limits 200 Existing Structure Photo Location 2-Foot Contour Flag Location Project Location
York and James City Counties
and City of Williamsburg, Virginia Substation Data Point

1. Coordinate System: NAD 1983 StatePlane Virginia South FIPS 4502 Feet
1. Coordinate System: NAD 1983 StatePlane Virginia Santer
2. Data Sources: ESR. Loominion Energy Virginia, Santer
3. Topography generated from USGS 1/3 arc second digital elevation model raster dataset.

Two-foot contours do not meet National Map Accuracy Standards and are for planning purposes only.

4. The limits of waters of the U.S., induding wetlands, shown on this map have been field located by means of sub-meter rapable GPS technology and are for planning purposes only.

5. Orthomagery@ ESR!

7. Microsoft product screen shot(s) reprinted with permission from Microsoft Corporation

Standard S

assumes no responsbilly for data supplied in electronic format, and the recipient accepts full responsibility for verifying the accuracy and completeness of the i

Wetlands Excluded From Preliminary Jurisdictional Determination Request 400 Approximate Palustrine Emergent Wetland Limits (PEM) Prepared by ECL on 2020-10-19 TR by TPS on 2020-10-24 IR by RSB on 2020-10-20 Approximate Intermittent Stream Channel Limits Approximate Ephemeral Stream Channel Limits (R6) Approximate Upper Perennial Stream Channel Limits (R3) Approximate Palustrine Scrub-Shrub Wetland Limits (PSS) (At original document size of 11x17) 1:2,400 Jien/Project Dominion Energy Virginia 230 kV Line #2154 Rebuild and Related Projects Approximate Open Water Limits (PUBx) Delineation Map for Preliminary Jurisdictional Determination Preliminary JD Project Limits Approved JD Project Limits 200 Existing Structure Photo Location Flag Location 2-Foot Contour Project Location
York and James City Counties
and City of Williamsburg, Virginia Data Point Substation

Data Sources: ESRI, Dominion Energy Virginia, Stantee floor graphy generated from USGS 1/3 are second digital elevation model raster datase floor graphy generated from USGS 1/3 are second digital elevation model raster datase process only.

poses only, minist of the U.S. induding wellands, shown on this map have been field atted by means of sub-meter capable GPS technology and are for planning purposes on

Stantec

1.\203401488\03_data\gis_cad\gis\01488_e_delin_skiffes_waller_pages.mxd Revised: 2020-11-17 By: Iljones



Wetlands Excluded From Preliminary Jurisdictional Determination Request 400 Approximate Palustrine Emergent Wetland Limits (PEM) Prepared by ECL on 2020-10-19 TR by TPS on 2020-10-24 IR by RSB on 2020-10-20 Approximate Ephemeral Stream Channel Limits (R6) Approximate Intermittent Stream Channel Limits Approximate Upper Perennial Stream Channel Limits (R3) Approximate Palustrine Scrub-Shrub Wetland Limits (PSS) (At original document size of 11x17) 1:2,400 ClientProject Dominion Energy Virginia 230 KV Line #2154 Rebuild and Related Projects Approximate Open Water Limits (PUBx) Preliminary JD Project Limits Approved JD Project Limits 200 Existing Structure Photo Location Flag Location 2-Foot Contour Project Location
York and James City Counties
and City of Williamsburg, Virginia Data Point Substation BMP (R4)

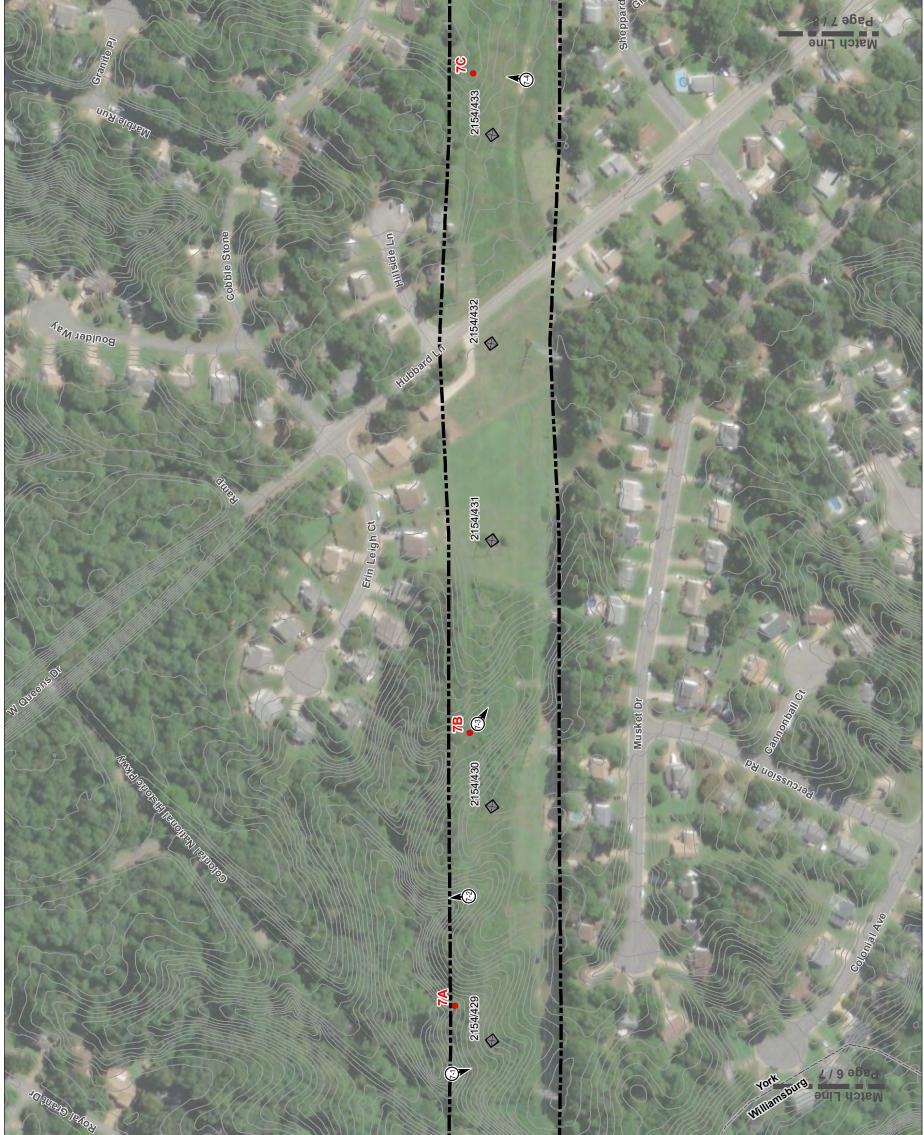
Coordnate System: NAD 1983 StatePlane Virginia South FIPS 4502 Feet
Data Sources: ESRI, Dominion E Fergy Virginia, Samel Sees
Sees. ESRI, Dominion E Fergy Virginia, Samel Sees
Vo-foot contours do not meet National Map Accuracy Sandards and are for planning
impasse only.
Thoses only. In first of waters of the U.S., including wetlands, shown on this map have been field
cated by means of sub-meter capable GPS technology and are for planning purposes on

Stantec

Wetlands Excluded From Preliminary Jurisdictional Determination Request 400 Approximate Palustrine Emergent Wetland Limits (PEM) Prepared by ECL on 2020-10-19 TR by TPS on 2020-10-24 IR by RSB on 2020-10-20 Approximate Ephemeral Stream Channel Limits (R6) Approximate Intermittent Stream Channel Limits Approximate Upper Perennial Stream Channel Limits (R3) Approximate Palustrine Scrub-Shrub Wetland Limits (PSS) (At original document size of 11x17) 1:2,400 ClientProject Dominion Energy Virginia 230 KV Line #2154 Rebuild and Related Projects Approximate Open Water Limits (PUBx) Delineation Map for Preliminary Jurisdictional Determination Preliminary JD Project Limits Approved JD Project Limits 200 Existing Structure Photo Location Flag Location 2-Foot Contour Project Location
York and James City Counties
and City of Williamsburg, Virginia Data Point Substation

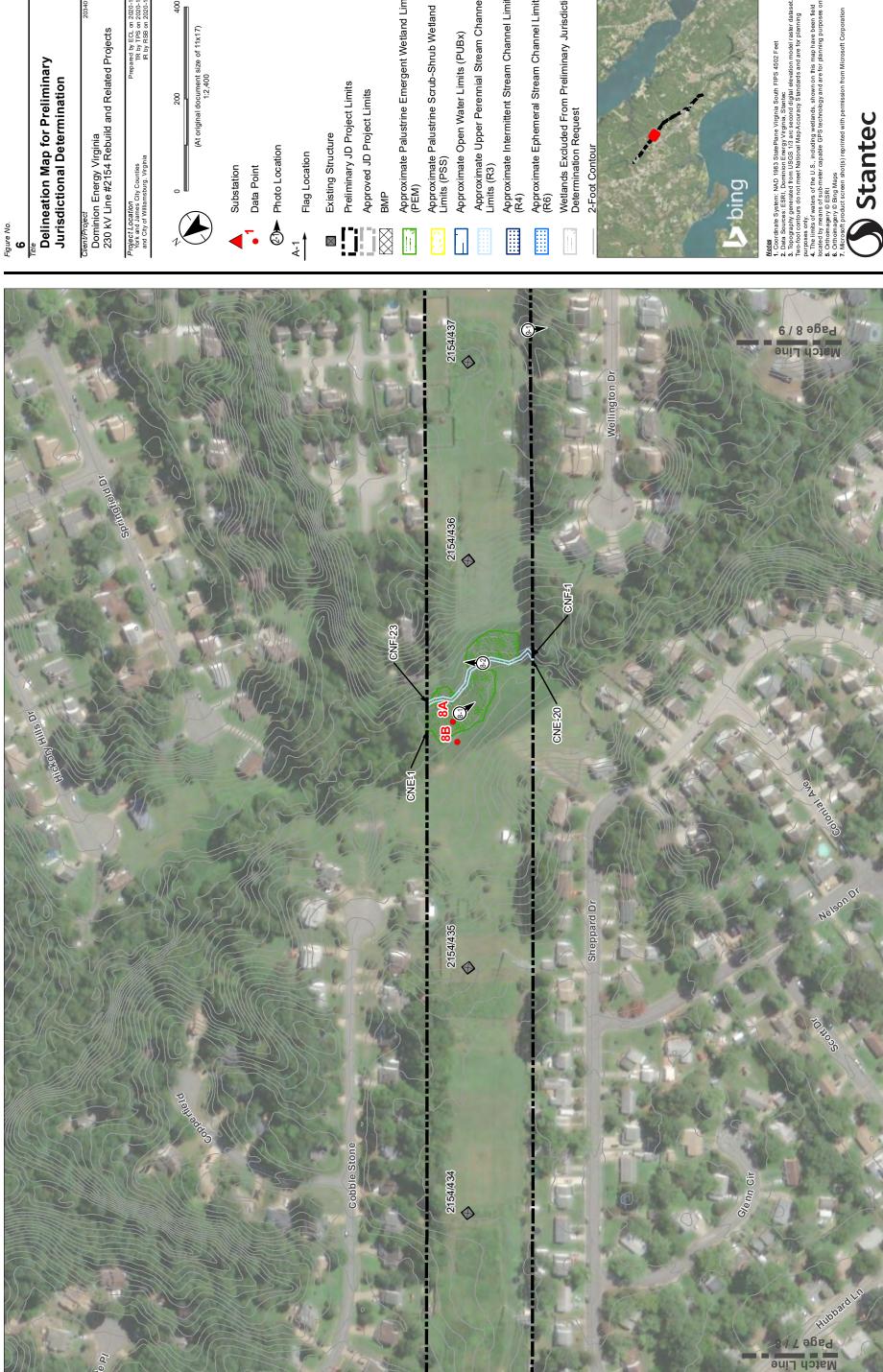
Stantec

U:203401488/03_data/gis_cad/gis/01488_e_delin_skiffes_waller_pages.mxd Revised: 2020-11-17 By: Iljones



nas not verified the accuracy and/or completeness of this information and shall not be responsibility for verifying the accuracy and vor completeness of this information and shall not be responsibility for verifying the accuracy and completeness of this

Stantec



a result. Stanted as a result of the responsible for any errors or omissions which may be incoporated herein as a result. Stanted as a result. Stanted as a result where the accuracy and/or completeness of this information and shall responsibility for verifying the accuracy and completeness of the data Stantec

400

(G)

2154/437

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 this

Page 8 / 9 Match Line

Shea Ln

Wetlands Excluded From Preliminary Jurisdictional Determination Request 400 Approximate Palustrine Emergent Wetland Limits (PEM) Prepared by ECL on 2020-10-19 TR by TPS on 2020-10-24 IR by RSB on 2020-10-20 Approximate Intermittent Stream Channel Limits Approximate Ephemeral Stream Channel Limits (R6) Approximate Upper Perennial Stream Channel Limits (R3) Occordinate System: NAD 1983 StatePlane Virginia South FIPS 4502 Feet
Data Sources: ESRI, Dominion Energy Virginia, Sannec
Topography generated from USGS 1/3 arc second digital elevation model raster dataset, wo-foot confours do not meet blational Map Accuracy Standards and are for planning Imposes only.

Impose solly in limit of virginia sold the U.S., including wetlands, shown on this map have been field deated by means of sub-meter capable GPS technology and are for planning purposes on Approximate Palustrine Scrub-Shrub Wetland Limits (PSS) (At original document size of 11x17) 1:2,400 ClientProject Dominion Energy Virginia 230 KV Line #2154 Rebuild and Related Projects Approximate Open Water Limits (PUBx) Delineation Map for Preliminary Jurisdictional Determination Preliminary JD Project Limits Approved JD Project Limits 200 Existing Structure Photo Location Flag Location 2-Foot Contour Project Location
York and James City Counties
and City of Williamsburg, Virginia Data Point Substation BMP



Wetlands Excluded From Preliminary Jurisdictional Determination Request 400 Approximate Palustrine Emergent Wetland Limits (PEM) Prepared by ECL on 2020-10-19 TR by TPS on 2020-10-24 IR by RSB on 2020-10-20 Approximate Ephemeral Stream Channel Limits (R6) Approximate Intermittent Stream Channel Limits Approximate Upper Perennial Stream Channel Limits (R3) Approximate Palustrine Scrub-Shrub Wetland Limits (PSS) (At original document size of 11x17) 1:2,400 ClientProject Dominion Energy Virginia 230 KV Line #2154 Rebuild and Related Projects Approximate Open Water Limits (PUBx) Delineation Map for Preliminary Jurisdictional Determination Preliminary JD Project Limits Approved JD Project Limits 200 Existing Structure Photo Location 2-Foot Contour Flag Location Project Location
York and James City Counties
and City of Williamsburg, Virginia Data Point Substation BMP (R4)

1. Coordinate System: NAD 1983 StatePlane Virginia South FIPS 4502 Feet
1. Coordinate System: NAD 1983 StatePlane Virginia South FIPS 4502 Feet
2. Data Sources: ESRI, Dominion Energy (Viginia, State)
3. Propography generated from USGS 1/3 arc second digital elevation model raster datase
1. Two-foot contours do not meet National Map Accuracy Standards and are for planning purposes only.
4. The limits of waters of the U.S., induding wetlands, shown on this map have been field located by means of sub-meet capable GPS technology and are for planning purposes of Cortionnagery © ESRI
6. Orthomagery © EIRI
7. Microsoft product screen shot(s) reprinted with permission from Microsoft Corporation

400

2154/449

Match Line

U:\203401488\03_data\gis_cad\gis\01488_e_delin_skiffes_waller_pages.mxd

2154/455 0

2154/454

0

2154/453

SBAG-9

SBAK-1

164E

SBAG-1

SBAF-1

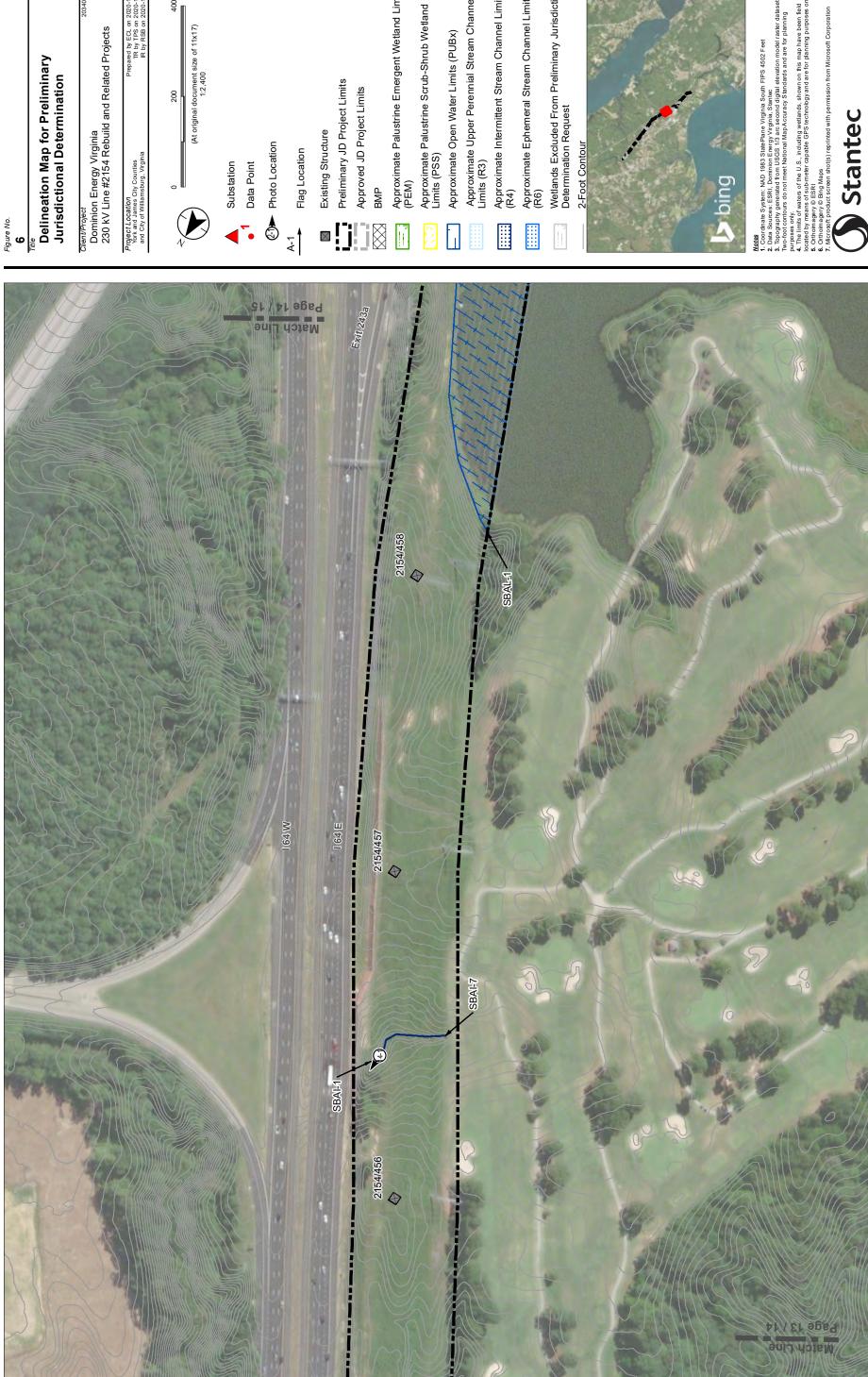
164W

Occordinate System: NAD 1983 StatePlane Virginia South FIPS 4502 Feet Coordinate System: NAD 1983 StatePlane Virginia South FIPS 4502 Feet Data Sources; ESRI, Dominlon Erergy Virginia, Stantec Topography generated from USGS 1/3 arc second digital elevation model raster dataset, wo-foot confours do not meet National Map Accuracy Standards and are for planning Imposes only in this or so the U.S., including wellands, shown on this map have been field cared by means of sub-meter capable GPS technology and are for planning purposes on

Page 13 / 14

Stantec

Page 12/13 Match Line



Wetlands Excluded From Preliminary Jurisdictional Determination Request 400 Approximate Palustrine Emergent Wetland Limits (PEM) Prepared by ECL on 2020-10-19 TR by TPS on 2020-10-24 IR by RSB on 2020-10-20 Approximate Ephemeral Stream Channel Limits (R6) Approximate Intermittent Stream Channel Limits Approximate Upper Perennial Stream Channel Limits (R3) Approximate Palustrine Scrub-Shrub Wetland Limits (PSS) ClientProject Dominion Energy Virginia 230 kV Line #2154 Rebuild and Related Projects (At original document size of 11x17) 1:2,400 Approximate Open Water Limits (PUBx) Delineation Map for Preliminary Jurisdictional Determination Preliminary JD Project Limits Approved JD Project Limits 200 Existing Structure Photo Location Flag Location 2-Foot Contour Project Location
York and James City Counties
and City of Williamsburg, Virginia Data Point Substation BMP (R4)

2154/462

2154/461 0

2154/460

2154/459

Area Excluded from Preliminary Jurisdictional Request

(E.M. 243)

SBAN-8

164W

Connecting Road

Page 14 / 15 Match Line

0

Stantec

1. Coordinate System: NAD 1983 StatePlane Virginia South FIPS 4502 Feet
1. Coordinate System: NAD 1983 StatePlane Virginia South FIPS 4502 Feet
2. Data Soutees, ESRI, Dominion E frengy Virginia, Santer
3. Topogaphy generated from USGS 113 arc second digital elevation model raster dataset, two-foot contours do not meet National Map Accuracy Standards and are for planning two-foot contours do not meet National Map Accuracy Standards and are for planning two-contours of the U.S., induding wetlands, shown on this map have been field coated by the map have been field to coated by the map of the U.S., induding wetlands, shown on this map have been field to coated by the map of the U.S., induding wetlands, shown on this map have been field to coated by the map of the U.S., induding wetlands, shown on this map have been field to coated by the map of the U.S., induding wetlands, shown on this map have been field to coated by the map of the U.S., induding wetlands, shown on this map have been field to coated by the U.S. induding wetlands, shown on this map have been field to coated by the U.S., induding wetlands, shown on this map have been field to coated by the U.S. induding wetlands, shown on this map have been field to coated by the U.S. induding wetlands, shown on this map have been field to coated by the U.S. induding wetlands, shown on this map to the U.S. induding wetlands and the U.S. induding wetlands are used to the U.S. induding wetlands and the U.S. induding wetlands are used to the U.S. induding wetlands and the U.S. induding wetlands are used to t

Page 15 / 16 Match Line

Co Cant SO THO Seller

Ramp

the data supplied the accuracy and 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 this data.

Wetlands Excluded From Preliminary Jurisdictional Determination Request 400 Approximate Palustrine Emergent Wetland Limits (PEM) Prepared by ECL on 2020-10-19 TR by TPS on 2020-10-24 IR by RSB on 2020-10-20 Approximate Ephemeral Stream Channel Limits (R6) Approximate Intermittent Stream Channel Limits Approximate Upper Perennial Stream Channel Limits (R3) Approximate Palustrine Scrub-Shrub Wetland Limits (PSS) (At original document size of 11x17) 1:2,400 ClientProject Dominion Energy Virginia 230 KV Line #2154 Rebuild and Related Projects Approximate Open Water Limits (PUBx) Delineation Map for Preliminary Jurisdictional Determination Preliminary JD Project Limits Approved JD Project Limits 200 Existing Structure Photo Location Flag Location 2-Foot Contour Project Location
York and James City Counties
and City of Williamsburg, Virginia Data Point Substation BMP

Notes

Notes

Locardiale System: NAD 1983 StatePlane Virginia South FIPS 4502 Feet

2. Data Sources; ESRI, Domnion Fengy Virginia, Stantee

2. Data Sources; ESRI, Domnion Fengy Virginia, Stantee

3. Topogaphy generated from USGS 1/3 arc second digital elevation model rester dataset.

Two-foot contours do not meet National Map Accuracy Standards and are for planning purposes only.

4. The limits of waters of the U.S., induding wetlands, shown on this map have been field closed by means of sub-meter capable GPS technology and are for planning purposes only.

6. Othorimagery © Brig Maps

7. Microsoft product screen shot(s) reprinted with permission from Microsoft Corporation

are accuracy and/or completeness of this information and shall not be responsible for any errors or ormissions which may be incorporated herein as a result. Stander exsumes no responsibility for data supplied in electronic formal, and the responsibility for verifying the accuracy and completeness of this information and shall not be responsibility for verifying the accuracy and completeness of the data

Yorktown Naval Weapons Sta

Connecting Road

cheesesesto

2154/471

2154/470

2154/469 (

James City

York

State Hwy 143

164E

Area Excluded from Preliminary Jurisdictional Request

0

of <u>ordes</u>

Coordinate System: NAD 1983 StatePlane Virginia South FIPS 4502 Feet

Coordinate System: NaD 1983 StatePlane Virginia Stantes

Topography generated from URSS 1/3 arc second digital elevation model raster dataset, we-look contours do not meet National Map Accuracy Standards and are for planning triposes only.

The limits of waters of the U.S., including wellands, shown on this map have been field called by means of sub-meter capable GPS technology and are for planning purposes only.

Match Line 81/171 ags9

Howard Dr

Stantec

a resource y and or completeness of this information and shall not be responsible for any errors or omissions which may be incorporated herein as a result. Stanted as a suppleted the accuracy and/or completeness of this information and shall responsibility for verifying the accuracy and completeness of the data

2154/472

Wetlands Excluded From Preliminary Jurisdictional Determination Request 400 Approximate Palustrine Emergent Wetland Limits (PEM) Prepared by ECL on 2020-10-19 TR by TPS on 2020-10-24 IR by RSB on 2020-10-20 Approximate Intermittent Stream Channel Limits Approximate Ephemeral Stream Channel Limits (R6) Approximate Upper Perennial Stream Channel Limits (R3) Outotes

Coordinate System: NAD 1983 StatePlane Virginia South FIPS 4502 Feet

Load Sources: ESRI, Dominon Energy Virginia Stantee

Load Sources: ESRI, Dominon Energy Virginia Stantee

Load Sources: ESRI, Dominon Energy Virginia Stantee

Load System of the Coordinate of the Coordinate Stantee

Wo-foot conducts of not meet National Map Accuracy Standards and are for planning

uripose only.

In the limits of waters of the U.S., induding wetlands, shown on this map have been field

contained by means of sub-meter capable GPS technology and are for planning purposes only. Approximate Palustrine Scrub-Shrub Wetland Limits (PSS) (At original document size of 11x17) 1:2,400 ClientProject Dominion Energy Virginia 230 KV Line #2154 Rebuild and Related Projects Approximate Open Water Limits (PUBx) Delineation Map for Preliminary Jurisdictional Determination

Match Line Page 17 / 18 a resource y and or completeness of this information and shall not be responsible for any errors or omissions which may be incorporated herein as a result. Stanted as a suppleted the accuracy and/or completeness of this information and shall responsibility for verifying the accuracy and completeness of the data

Wetlands Excluded From Preliminary Jurisdictional Determination Request 400 Approximate Palustrine Emergent Wetland Limits (PEM) Prepared by ECL on 2020-10-19 TR by TPS on 2020-10-24 IR by RSB on 2020-10-20 Approximate Intermittent Stream Channel Limits Approximate Ephemeral Stream Channel Limits (R6) Approximate Upper Perennial Stream Channel Limits (R3) Approximate Palustrine Scrub-Shrub Wetland Limits (PSS) (At original document size of 11x17) 1:2,400 ClientProject Dominion Energy Virginia 230 KV Line #2154 Rebuild and Related Projects Approximate Open Water Limits (PUBx) Delineation Map for Preliminary Jurisdictional Determination Preliminary JD Project Limits Approved JD Project Limits 200 Existing Structure Photo Location 2-Foot Contour Flag Location Project Location
York and James City Counties
and City of Williamsburg, Virginia Data Point

Notes

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

2. Data Sources: ESR, Dominion Erergy Virginia, Sander

3. Topography generated from USGS 1/3 are second digital elevation model raster datest. Two-foot contours donot meet National MapA couracy Sandrads and are for planning purposes only.

4. The limits of values of the U.S., induding wetlands, shown on this map have been field located by means of sub-meter capable GPS technology and are for planning purposes only.

5. Orthoimagery © Brig Maps

7. Microsoft product screen shot(s) reprinted with permission from Microsoft Corporation

Is a result of the reaction of the 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 this information and shall not be responsibility for verifying the accuracy and completeness of this information and shall not be responsibility for weiting the accuracy and completeness of this information and shall responsibility for the accuracy and completeness of this information and shall responsibility for the accuracy and completeness of this information and shall responsibility for the accuracy and completeness of this information and shall responsibility for the accuracy and completeness of this information and shall responsibility for the accuracy and completeness of this information and shall responsibility for the accuracy and completeness of this information and shall responsibility for the accuracy and completeness of this information and shall responsibility for the accuracy and completeness of this information and shall responsibility for the accuracy and completeness of the accuracy and completeness of this information and shall responsibility for the accuracy and completeness of the accuracy and co

Wetlands Excluded From Preliminary Jurisdictional Determination Request 400 Approximate Palustrine Emergent Wetland Limits (PEM) Prepared by ECL on 2020-10-19 TR by TPS on 2020-10-24 IR by RSB on 2020-10-20 Approximate Intermittent Stream Channel Limits Approximate Ephemeral Stream Channel Limits (R6) Approximate Upper Perennial Stream Channel Limits (R3) Motes
1. Coordinate System: NAD 1983 StatePlane Virginia South FIPS 4502 Feet
1. Coordinate System: NAD 1983 StatePlane Virginia South FIPS 4502 Feet
2. Data Sources ESRI, Dominion Evergy Virginia, Stantee
2. Data Sources ESRI, Dominion Evergy Virginia, Stantee
3. Topography generated from USGS 1/3 arc second digital elevation model raster dataset.
Two-foot conflours do not meet National Map Accuracy Standards and are for planning
purposes only.
4. The limits of values of the U.S., induding wellands, shown on this map have been field
located by means of sub-meter capable GPS technology and are for planning purposes only.
5. Orthomagory © ESRI
6. Orthomagory © ESRI
7. Microsoft product screen shot(s) reprinted with permission from Microsoft Corporation Approximate Palustrine Scrub-Shrub Wetland Limits (PSS) (At original document size of 11x17) 1:2,400 ClientProject Dominion Energy Virginia 230 KV Line #2154 Rebuild and Related Projects Approximate Open Water Limits (PUBx) Delineation Map for Preliminary Jurisdictional Determination Preliminary JD Project Limits Approved JD Project Limits 200 Existing Structure Photo Location

are accuracy and/or completeness of this information and shall not be responsible for any errors or ormissions which may be incorporated herein as a result. Stander exsumes no responsibility for data supplied in electronic formal, and the responsibility for verifying the accuracy and completeness of this information and shall not be responsibility for verifying the accuracy and completeness of the data

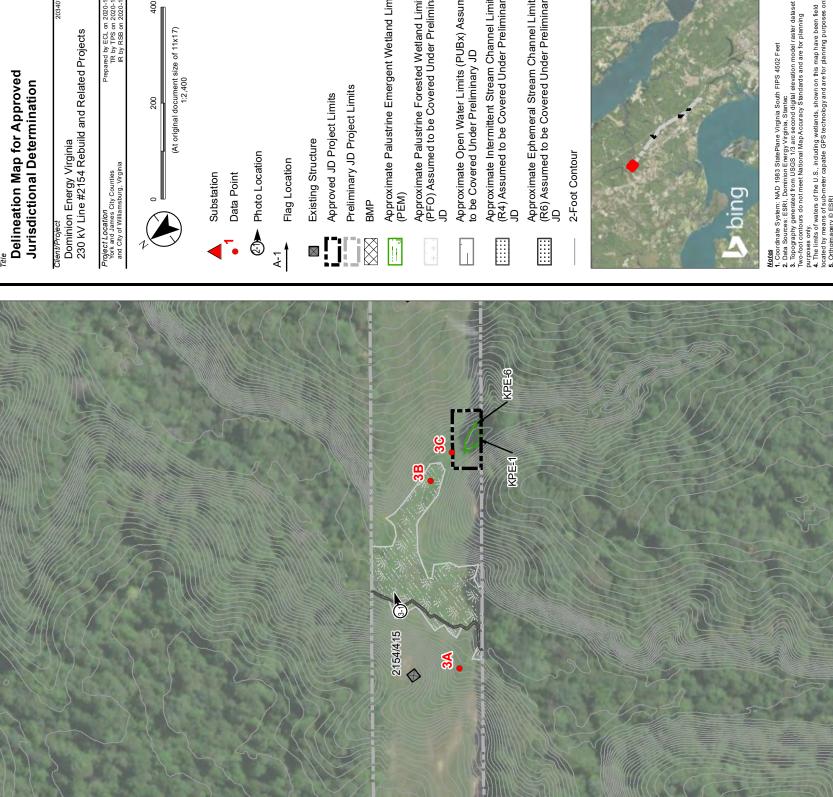
5.71 Acres ± 0.24 Miles ± 196.46 Acres ± 7.56 Miles ± 0.78 Acres ± 7,000 Prepared by ECL on 2020-10-19 TR by TPS on 2020-10-24 IR by RSB on 2020-10-20 Clent/Project Dominion Energy Virginia 230 kV Line #2154 Rebuild and Related Projects (At original document size of 11x17) 1:42,000 Motes

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

2. Data Sources: ESRI, Dominion Energy Virginia, Stantec

3. Basemap © National Geographic Delineation Map for Approved Jurisdictional Determination Approved JD Project Limits
Preliminary JD Project Limits
The Preliminary JD Project Limits
The Page Index 3,500 Palustrine Emergent Wetlands (PEM)



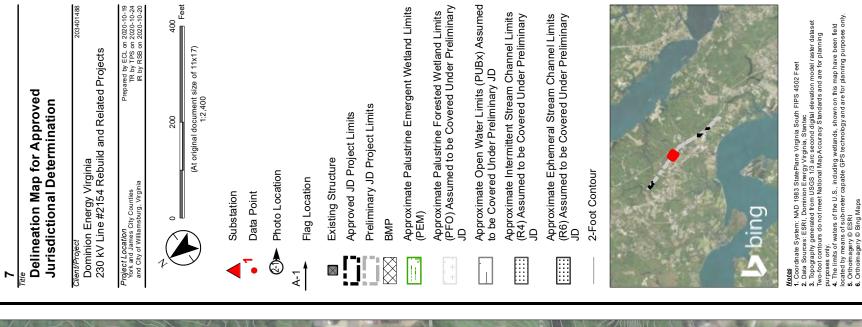


2154/414

2154/413

Stantec

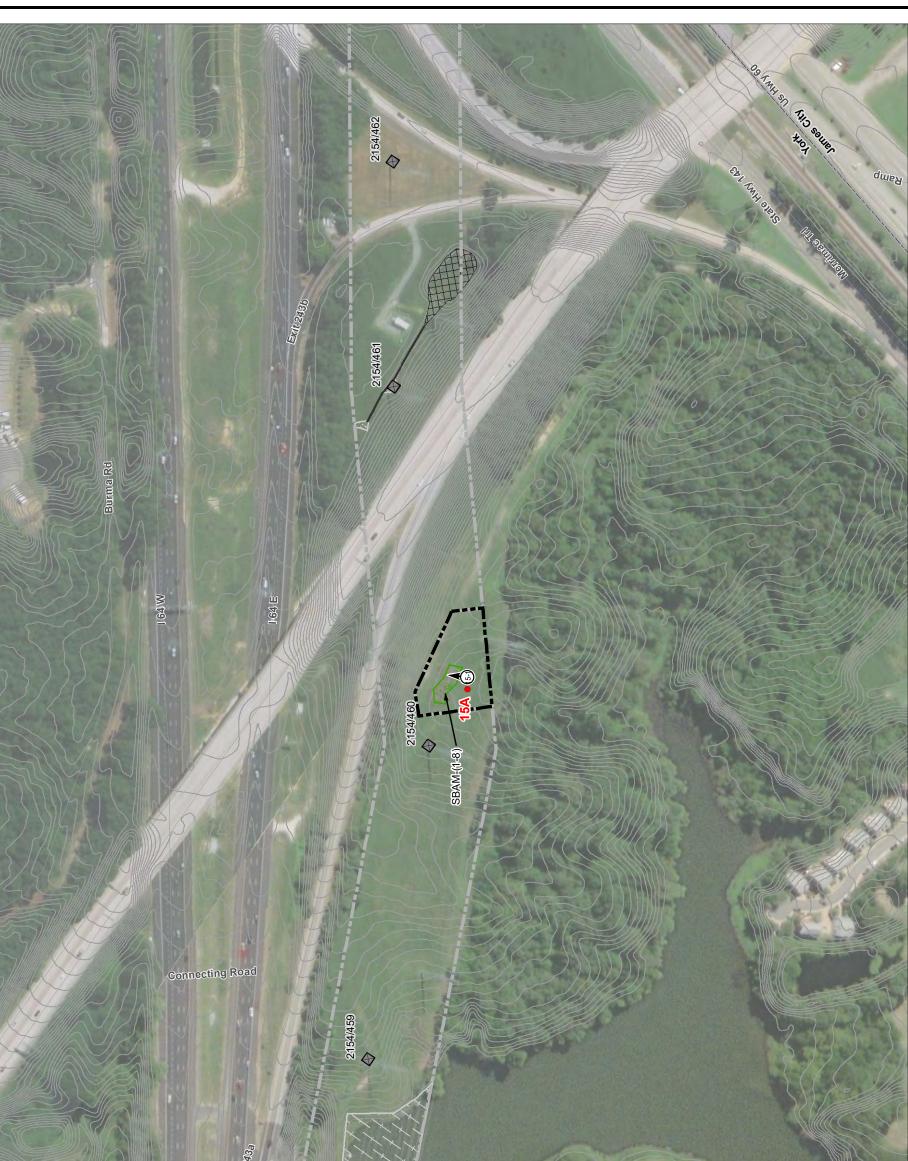




a resource y and or completeness of this information and shall not be responsible for any errors or omissions which may be incorporated herein as a result. Stanted as a suppleted the accuracy and/or completeness of this information and shall responsibility for verifying the accuracy and completeness of the data

Prepared by ECL on 2020-10-19 TR by TPS on 2020-10-24 IR by RSB on 2020-10-20 (At original document size of 11x17) 1:2,400 ClentProject Dominion Energy Virginia 230 KV Line #2154 Rebuild and Related Projects Delineation Map for Approved Jurisdictional Determination 200 Project Location York and James City Counties and City of Williamsburg, Virginia

400



Approximate Palustrine Forested Wetland Limits (PFO) Assumed to be Covered Under Preliminary JD

Approximate Palustrine Emergent Wetland Limits (PEM)

Preliminary JD Project Limits Approved JD Project Limits

BMP

Existing Structure

Flag Location

Photo Location

Data Point Substation

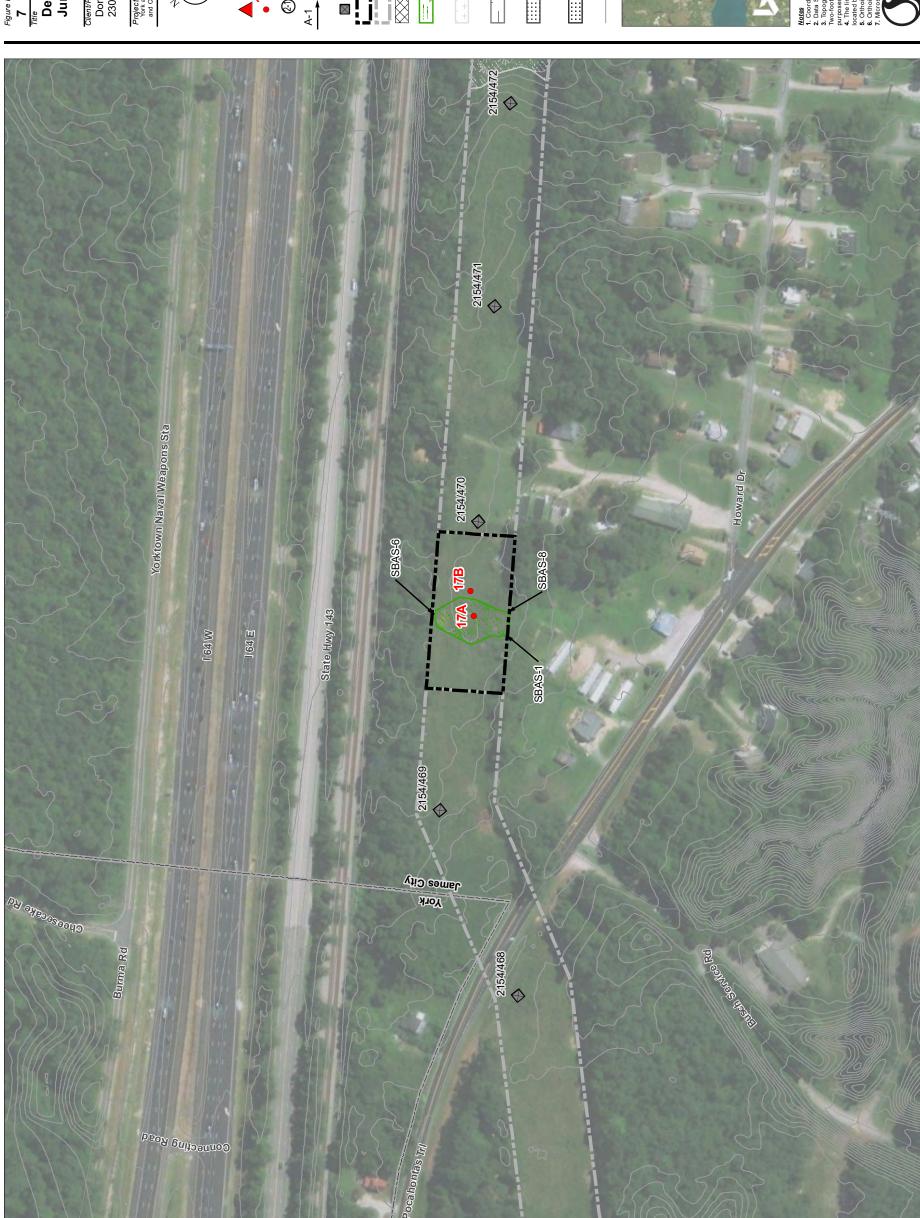
Approximate Open Water Limits (PUBx) Assumed to be Covered Under Preliminary JD

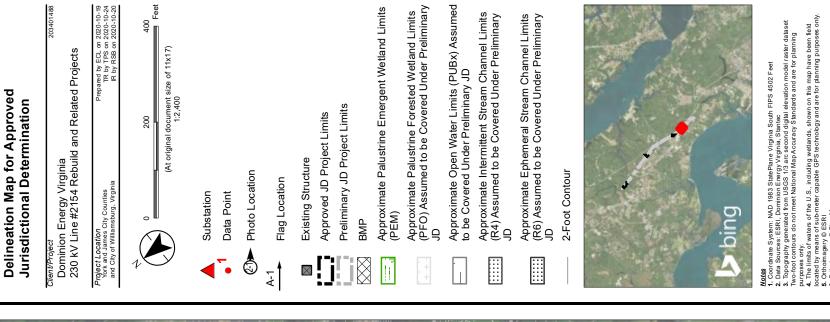
Approximate Intermittent Stream Channel Limits (R4) Assumed to be Covered Under Preliminary JD Approximate Ephemeral Stream Channel Limits (R6) Assumed to be Covered Under Preliminary JD 2-Foot Contour

Wortes
1. Coordinate System: NAD 1983 StatePlane Virginia South FIPS 4502 Feet
2. Data Sources: ESRI, Dominion Erergy Virginia, Sanice.
2. Data Sources: ESRI, Dominion Erergy Virginia, Sanice.
3. Data Sources: ESRI, Dominion Erergy Virginia, Sanice.
3. Properation model raster dataset
7. Work-foot condust do not meet National MapA couracy Sanidards and are for planning
1. Proceed of the U.S., Induding wellands, shown on this map have been field
2. The limits of waters of the U.S., Induding wellands, shown on this map have been field
3. The limits of waters of the U.S., Induding wellands, shown on this map have been field
3. The limits of waters of the U.S., Induding wellands, shown on this map have been field
3. The limits of waters of the U.S., Induding wellands, shown on this map have been field
3. The limits of waters of the U.S., Induding wellands of the U.S., Induding well the U.S., Induding wellands of the U.S., Induding well the U.S., Induding wellands of the U.S., Induding wellands of the U.S., Induding well the U.S., Induding well the U.S., Induding well the U.S., Induding wellands of the U.S., Induding well the U.S., Induding well the U.S., Induding

Stantec (

are accuracy and/or completeness of this information and shall not be responsible for any errors or ormissions which may be incorporated herein as a result. Stander exsumes no responsibility for data supplied in electronic formal, and the responsibility for verifying the accuracy and completeness of this information and shall not be responsibility for verifying the accuracy and completeness of the data





a resource y and or completeness of this information and shall not be responsible for any errors or omissions which may be incorporated herein as a result. Stanted as a suppleted the accuracy and/or completeness of this information and shall responsibility for verifying the accuracy and completeness of the data

) Stantec

Prepared by ECL on 2020-06-23 TR by TPS on 2020-10-14 IR by KHP on 2020-10-08

Stadium Po

100.74 Acres ± 3.60 Miles ± 4.97 Acres ± 0.17 Miles ± 0.42 Acres ± 3.93 Acres ± $0.12 \text{ Acres } \pm (1,215 \text{ L.F. } \pm)$ $0.03 \, \text{Acres} \pm (265 \, \text{L.F.} \pm)$ 2.16 Acres ± (At original document size of 11x17) 1:24,000 Substation

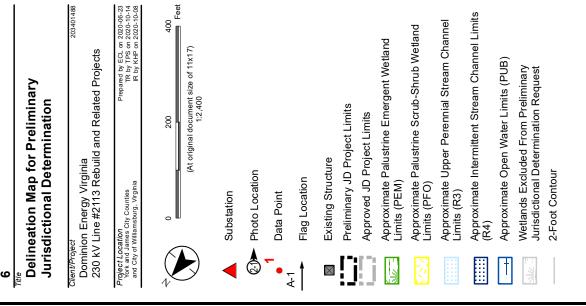
Preliminary JD Project Limits

Androved JD Project Limits 2,000 Approved JD Project Limits
Page Index Palustrine Scrub-Shrub Wetlands (PSS) Upper Perennial Stream Channels (R3) Palustrine Emergent Wetlands (PBM)

Is a recuracy 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 this information and shall not be responsibility for weifying the accuracy and completeness of this information and shall not be responsibility for weifying the accuracy and completeness of this information and shall not be responsibility for weifying the accuracy and completeness of this information and shall not be responsibility for the accuracy and completeness of this information and shall not be responsible for any performance of the accuracy and completeness of this information and shall not be responsible for any performance of the accuracy and completeness of this information and shall not be responsible for any performance of the accuracy and completeness of the accuracy and compl

U:\203401488\03_data\gis_cad\gis\01488_e_delin_waller_lightfoot_index.mxd Revised: Z020-11-17 By: Iljones



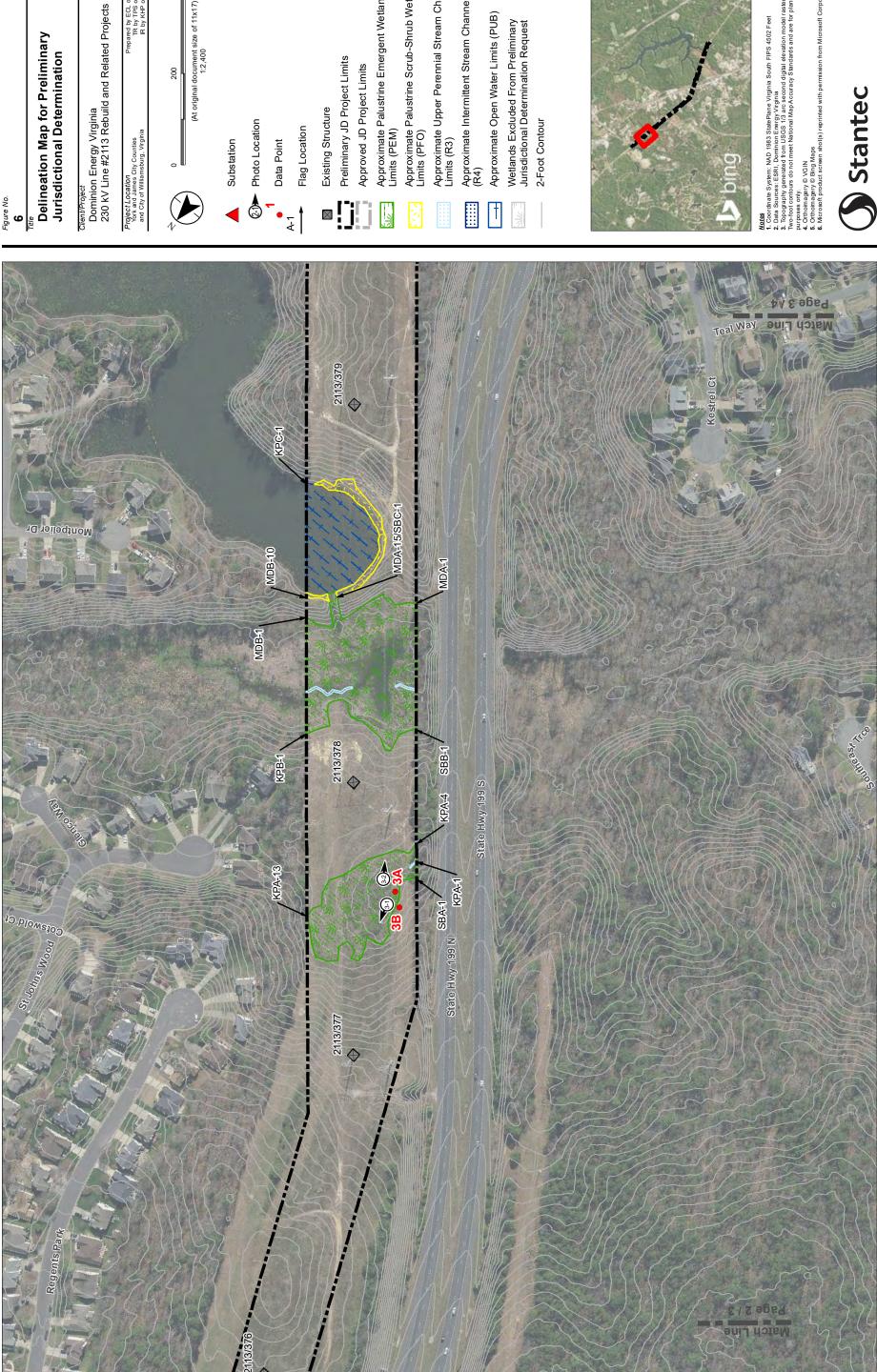


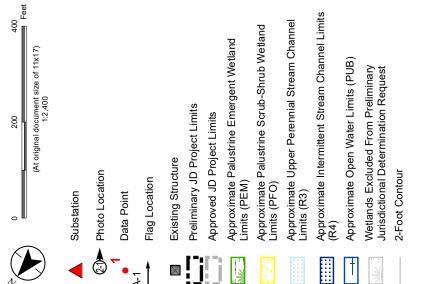


Wotese
1. Coordinate System: NAD 1983 StatePlane Virginia
2. Data Souces: ERRI, Dominion Energy Virginia
3. Topography generated from USGS 1/8 arc second digital elevation model raster dataset. Wer-foot contours do not meet National Map Accuracy Standards and are for planning purposes on Sendal Self Marc Second Self Marc Self Ma

Stantec

Prepared by ECL on 2020-06-23 TR by TPS on 2020-10-14 IR by KHP on 2020-10-08





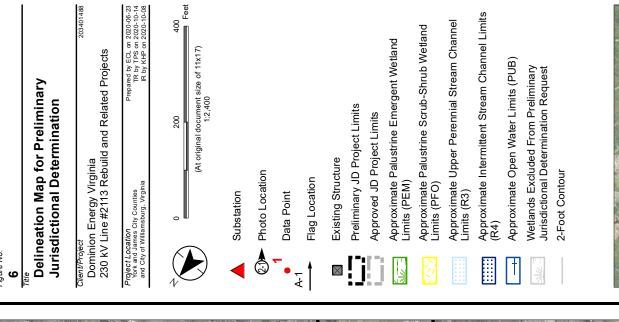


Wotese
1. Coordinate System: NAD 1983 StatePlane Virginia South FIPS 4502 Feet
2. Data Souces: ESRI, Dominion Energy Virginia
3. Topography generated from USGS 1/3 arc second digital elevation model raster dataset. Wer-foot contours do not meet National Map Accuracy Standards and are for planning purposes one Bing Maps
4. Ortholmagery © VGIN
5. Ortholmagery © Bing Maps
5. Ortholmagery © Bing Maps
6. Microsoft product screen shot(s) reprinted with permission from Microsoft Corporation

Stantec

the data supplied the accuracy and this information and shall not be responsible for any errors or omissions which may be incorporated herein as a result. Startlec assumes no responsibility for data supplied in electronic format, and the recipient accepts full responsibility for verifying the accuracy and completeness of the data

Z:203401488/03_data\gis_cad\gis\01488_e_delin_waller_lightfoot_pages.mxd Revised: Z020-11-17 By: Iljones

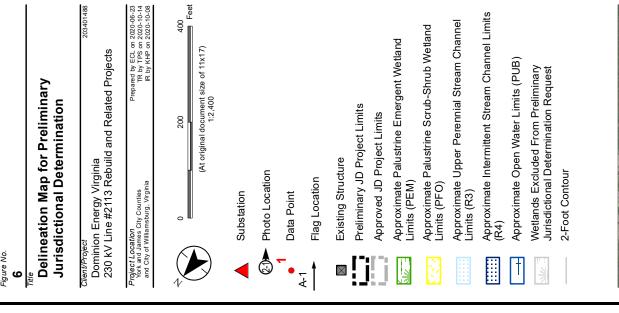




Wotese
1. Coordinate System: NAD 1983 StatePlane Virginia
2. Data Souces: ERRI, Dominion Energy Virginia
3. Topography generated from USGS 1/8 arc second digital elevation model raster dataset. Wer-foot contours do not meet National Map Accuracy Standards and are for planning purposes on Sendal Self Marc Second Self Marc Self Ma

Stantec

a result. Stanted as a result of the responsible for any errors or omissions which may be incoporated herein as a result. Stanted as a result. Stanted as a result where the accuracy and/or completeness of this information and shall responsibility for verifying the accuracy and completeness of the data





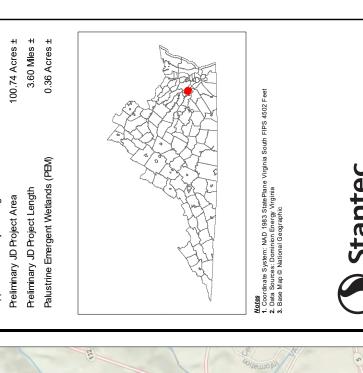
Notes

1. Coordinate System: NAD 1983 StatePlane Virginia South FIPS 4502 Feet
2. Data Sources: ESRI, Dominion E rergy Virginia
3. Topography generated from USGS 1/3 arc second digital elevation model raster dataset. Two-foot contours do not meet National Map Accuracy Standards and are for planning purposes only.
4. Orthornagery & VGIM
5. Orthornagery & Bing Maps
6. Microsoft product screen shot(s) reprinted with permission from Microsoft Corporation

Stantec

accompleteness of this information and shall not be responsible for any errors or omissions which may be incoporated herein as a result. Stantec assumes no responsibility for data supplied in electronic format, and the recipient accessible for any errors or omissions which may be incoporated herein as a result. Stantec assumes no responsibility for werifying the accuracy and completeness of the data

Natch Line Page 4 / 5



KPD-1

Trudy Ln

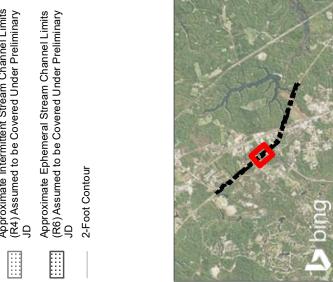
2113/389 0

2113/388

SBF-4/MDE-17

MDE-1/SBF-

Area Exluded From Preliminary Jurisdictional Determination





Notes

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

2. Data Sources: ESRI, Dominion Energy Virginia

3. Topography generated from USGS 1/3 arc second digital elevation model raster dataset. Twe-foot contours do not meet National Map Accuracy Standards and are for planning purposes only.

4. Orthomagery & VGINM

5. Orthomagery & Bing Maps

6. Microsoft product screen shol(s) reprinted with permission from Microsoft Corporation

Stantec

a resource y and or completeness of this information and shall not be responsible for any errors or omissions which may be incorporated herein as a result. Stanted as a suppleted the accuracy and/or completeness of this information and shall responsibility for verifying the accuracy and completeness of the data

2113/401

SBM-1/MDJ-1

2113/399

SBM-14/MDJ-27

York Moore town Rd

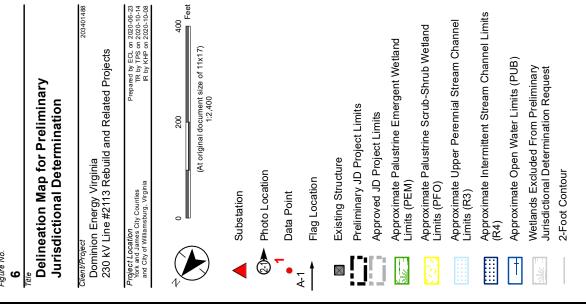
Millansburg

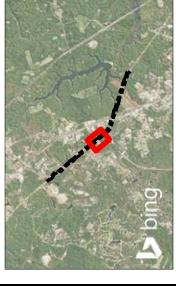
MDH-1



Motes
1. Coordinate System: NAD 1983 StatePlane Virginia South FIPS 4502 Feet
2. Data Sources: ESR. Dominon Energy Virginia
3. Topography generated from USGS 1/8 arc second digital elevation model raster dataset. Two-foot contours do not meet National Map Accuracy Standards and are for planning purposes on the Company of VGIN
4. Orthornagery © VGIN
5. Orthornagery © Bing Maps
6. Moreon (1997) For the Company of Corporation
6. Moreon (1997) For the Corporation

Stantec





Wates
1. Coordinate System: NAD 1983 StatePlane Virginia South FIPS 4502 Feet
2. Data Sources: ESRI, Dominion Energy Virginia
3. Topogaphy generated from USGS 1/3 arc second digital elevation model raster dataset. Work-foot contours do not meet National Map Accuracy Standards and are for planning purposes one Bing Maps
4. Orthomagery © VGIN
5. Orthomagery © Bing Maps
5. Orthomagery Bing Maps
6. Morrosoft product screen shot(s) reprinted with permission from Microsoft Corporation
6. Microsoft Product screen shot(s) reprinted with permission from Microsoft Corporation

Stantec

the data supplied the accuracy and this information and shall not be responsible for any errors or omissions which may be incorporated herein as a result. Startlec assumes no responsibility for data supplied in electronic format, and the recipient accepts full responsibility for verifying the accuracy and completeness of the data

400 Prepared by ECL on 2020-06-23 TR by TPS on 2020-10-14 IR by KHP on 2020-10-08 Approximate Intermittent Stream Channel Limits (R4) Approximate Upper Perennial Stream Channel Limits (R3) Approximate Palustrine Emergent Wetland Limits (PEM)
Approximate Palustrine Scrub-Shrub Wetland Limits (PFO) (At original document size of 11x17) 1:2,400 ClientProject Dominion Energy Virginia 230 KV Line #2113 Rebuild and Related Projects Approximate Open Water Limits (PUB) Wetlands Excluded From Preliminary Jurisdictional Determination Request Delineation Map for Preliminary Jurisdictional Determination Preliminary JD Project Limits Approved JD Project Limits 200 Existing Structure 2-Foot Contour Photo Location Flag Location Project Location
York and James City Counties
and City of Williamsburg, Virginia Data Point Substation



Wotese
1. Coordinate System: NAD 1983 StatePlane Virginia South FIPS 4502 Feet
2. Data Souces: ESRI, Dominion Energy Virginia
3. Topography generated from USGS 1/3 arc second digital elevation model raster dataset. Wer-foot contours do not meet National Map Accuracy Standards and are for planning purposes one Bing Maps
4. Ortholmagery © VGIN
5. Ortholmagery © Bing Maps
5. Ortholmagery © Bing Maps
6. Microsoft product screen shot(s) reprinted with permission from Microsoft Corporation

Stantec

the data supplied the accuracy and this information and shall not be responsible for any errors or omissions which may be incorporated herein as a result. Startlec assumes no responsibility for data supplied in electronic format, and the recipient accepts full responsibility for verifying the accuracy and completeness of the data

400

James City

Williams burg

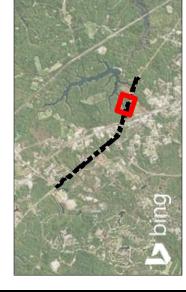
Page 7 / 8 Match Line

York James City SBG-1

Revised: 2020-11-17 By: Ijjones

U:\203401488\03_data\gis_cad\gis\01488_e_delin_waller_lightfoot_pages.mxd

a result. Stanted as a result of the responsible for any errors or omissions which may be incoporated herein as a result. Stanted as a result. Stanted as a result where the accuracy and/or completeness of this information and shall responsibility for verifying the accuracy and completeness of the data



2113/404

2113/403

MDF-1

SBK-111

Asich Line 01/16 age9

Page 8 / 9 Match Line

U:203401488/03_data\gis_cad\gis\01488_e_delin_waller_lightfoot_pages.mxd Revised: 2020-11-17 By: Iljones

Wates
1. Coordinate System: NAD 1983 StatePlane Virginia South FIPS 4502 Feet
2. Data Sources: ESRI, Dominione Tergy Virginia
3. Topogaphy generated from USGS 1/3 arc second digital elevation model raster dataset.
Wer-loot contours do not meet National Map Accuracy Standards and are for planning purposes only.
4. Orthomagery © VGIN
5. Orthomagery © Bing Maps
6. Orthomagery © Bing Maps
6. Action agery © Bing Maps
6. Microsoft product screen shot(s) reprinted with permission from Microsoft Corporation Stantec

are 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. Standed as suppressed in electronic format, and the recipient accepts full responsibility for verifying the accuracy and completeness of this data.

400



Match Line

400

200

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

Prepared by ECL on 2020-06-23 TR by TPS on 2020-10-14 IR by KHP on 2020-10-08

Approximate Intermittent Stream Channel Limits (R4) Approximate Upper Perennial Stream Channel Limits (R3) Approximate Palustrine Emergent Wetland Limits (PEM) Approximate Palustrine Scrub-Shrub Wetland Limits (PFO) JientProject Dominion Energy Virginia 230 kV Line #2113 Rebuild and Related Projects Approximate Open Water Limits (PUB) Wetlands Excluded From Preliminary Jurisdictional Determination Request Delineation Map for Preliminary Jurisdictional Determination Preliminary JD Project Limits Approved JD Project Limits **Existing Structure** 2-Foot Contour Photo Location Flag Location Project Location York and James City Counties and City of Williamsburg, Virginia Data Point Substation 2154/413 2154/412 0 2154/411 Waller Substation 2113/411 2113/410



Wotese
1. Coordinate System: NAD 1983 StatePlane Virginia South FIPS 4502 Feet
2. Data Souces: ESRI, Dominion Energy Virginia
3. Topogaphy generated from USGS 1/3 arc second digital elevation model raster dataset. Wer-forot confours do not meet National Map Accuracy Standards and are for planning purposes onlows.
4. Orthomagery © VGIN
5. Orthomagery © Bing Maps
6. Mortionagery Dodduct screen shot(s) reprinted with permission from Microsoft Corporation
6. Microsoft product screen shot(s) reprinted with permission from Microsoft Corporation

Stantec

Rachel M Studebaker (Services - 6)

From: Steffey, Randy L CIV USARMY CENAO (USA) <Randy.L.Steffey@usace.army.mil>

Sent:Thursday, December 3, 2020 9:49 AMTo:Rachel M Studebaker (Services - 6)

Cc: Miller, Todd M CIV USARMY CENAO (USA)

Subject: [EXTERNAL] NAO-2012-01079; RE: Dominion Energy Virginia's Proposed 230 kV Lines #

2113 and #2154 Transmission Line Rebuilds and Related Projects

Attachments: 20120815_NAO-2012-01097_Delin_Verif.pdf

This is an EXTERNAL email that was NOT sent from Dominion Energy. Are you expecting this message? Are you expecting a link or attachment? DO NOT click links or open attachments until you verify them

Rachel:

We are responding to your December 1, 2020 letter requesting comments from our office on Dominion's plans to rebuild Line # 2113 and Line # 2154 located in York and James City Counties and the City of Williamsburg. Outside of project location, the Dec 1st submittal lacked detailed information specific to aquatic resource impacts pursuant to Corps jurisdiction, as well as proposed work. Therefore we are unable to provide detailed comments on permitting requirements/qualification.

What we are able to share is that our records show that the ROW in question falls within a 37.62 mile study corridor for the Chickahominy – Skiffes Creek 500kV Transmission Line that received a Preliminary Jurisdictional Determination on August 15, 2012 (attached); specifically Delineation Map Sheet 8 thru 10, Figures 13 thru 18. Please note, while this expired delineation verification is helpful it is no longer valid. To ensure Dominion is aware of the current boundaries a new delineation with Corps confirmation should be completed for the proposed work area(s).

If the proposed rebuild and related projects can be performed outside of Corps jurisdiction, or in a manner that does not involve a discharge of fill material than no Corps permit(s) would be required. If that is not the case, take a look at NWP-12 as it would likely be the permitting mechanism used to authorize impacts. As mentioned above, without further details on the work to be conducted we are unable to give more useful comments.

If a Corps permit is necessary both Section 7 of the Endangered Species Act and Section 106 of the National Historic Preservation Act will be triggered. If you have not already begun doing so, you should be giving consideration to potential impacts applicable to these Act's and how they might apply to the project moving forward.

Finally as I am sure you are aware, the Chickahominy – Skiffes Creek 500kV Transmission Line is an alternative being strongly considered in the EIS process associated with the Surry-Skiffes Creek-Whealton Transmission Line project. Any action that Dominion performs in this ROW that renders this alternative no longer viable, may not be a justified argument we can support.

Hopefully these comments are somewhat useful. If you have any questions please do not hesitate to contact me.

Thanks,

Randy Steffey
Environmental Scientist / Project Manager US Army Corps of Engineers - Norfolk District
803 Front Street
Norfolk, VA 23510

Email: randy.l.steffey@usace.army.mil

Office: (757) 201-7579 Fax: (757)201-7678

CUSTOMER SATISFACTION SURVEY:

The Norfolk District is committed to providing the highest level of support to the public. In order for us to better serve you, we would appreciate you completing our Customer Satisfaction Survey located at http://corpsmapu.usace.army.mil/cm_apex/f?p=136:4:0. We value your comments and appreciate your taking the time to complete the survey.



COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

Street address: 1111 E. Main Street, Suite 1400, Richmond, Virginia 23219

Mailing address: P.O. Box 1105, Richmond, Virginia 23218

www.deq.virginia.gov

David K. Paylor

Director

(804) 698-4000 1-800-592-5482

Matthew J. Strickler Secretary of Natural Resources

December 15, 2020

Rachel Studebaker Dominion Energy Services 120 Tredegar Street, Richmond, VA 23219

RE: Dominion Energy Virginia's Proposed 230 kV Lines #2113 and #2154 Transmission Line Rebuilds and Related Projects—James City County, York County, and the City of Williamsburg, Virginia

Dear Ms. Studebaker;

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 Services (here after, Dominion) regarding potential wetland impacts on the above referenced project. Dominion is proposing to rebuild its 230 kV transmission lines, Line #2113 and Line #2154, located in York and James City Counties and the City of Williamsburg, Virginia (collectively, the "Rebuild Projects") within existing right-of-way. The Rebuild Projects will replace aging infrastructure that is nearing the end of its service life. Specifically, the Project proposes to;

Line #2113 Rebuild Project:

• Rebuild 3.8 miles of 230 kV Line #2113 between Lightfoot Substation and Waller Substation; Remove 3.8 miles of idle 115 kV Line #58 between Lightfoot Substation and Waller Substation; and Related substation work at Lanexa, Lightfoot, and Waller Substations.

Line #2154 Rebuild Project

- Rebuild 7.6 miles of 230 kV Line #2154 between Waller Substation and Structure #2154/482 (near Skiffes Creek Switching Station);
- Remove 6.1 miles of idle 115 kV Line #58 between Waller Substation and Kingsmill Substation;
- Rebuild 1.5 miles of 115 kV Line #19 between Kingsmill Substation and Structure #2154/482;
- Related substation work at Waller, Penniman, and Kingsmill Substation and Skiffes Creek Switching Station.

Summary of Findings

The Company delineated wetlands and other waters of the United States, which will be submitted to the Corps of Engineers for confirmation. All delineations were conducted using the *Routine Determination*

Method as outlined in the 1987 Corps of Engineers Wetland Delineation Manual and methods described in the 2010 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Atlantic and Gulf Coastal Plain Region (Version 2.0). Total jurisdictional resources within the proposed Project right-of-way is provided in the table below.

Table 1. Jurisdictional Features Identified within the ROW

Transmission Line Segment	PSS (Acres)	PEM (Acres)	PUB (Acres)	Stream Channels (R3) Acres (LF)	Stream Channels (R4) Acres (LF)	Stream Channels (R6) Acres (LF)
Skiffes – Waller Mill	0.34	12.31	1.59	0.35 (2,934)	0.13 (2,199)	0.01 (232)
Waller Mill – Lightfoot	0.42	3.93	2.16	0.12 (1,215)	0.03 (265)	-

According to Dominion, impacts will occur from new foundations as the structures are being replaced due to end of life criteria. DEQ recommends structures should be sited to avoid wetlands to the extent practicable and should be sited outside of stream channels. DEQ further recommends wetland and stream avoidance and minimization efforts, where practical, during project construction by: (1) spanning wetlands and streams, (2) maintaining 100-foot buffers along either side of streams, (3) placing support structure foundations outside of wetlands and streambeds, and (4) using removable mats in wetland areas to reduce compaction and rutting.

The DEQ Tidewater Regional Office (TRO) will make the final permitting decisions.

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 preexisting 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 Game and Inland Fisheries, 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 letter dated December 1, 2020 the proposed project <u>may</u> 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 804-698-4007 or at michelle.henicheck@deq.virginia.gov.

Sincerely,

Midulle Henricuck

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

Cc: Jeff Hannah, DEQ – TRO
Bettina Sullivan, DEQ - Office of Environmental Review

Stantec Consulting Services, Inc.

5209 Center Street





To: Rachel Studebaker From: Rachel Roberts

Dominion Energy Virginia 120 Tredegar Street Richmond, VA 23219

nd, VA 23219 Williamsburg, VA 23188

File: 203401488 Date: December 14, 2020

Reference: 230 kV Lines #2113 and #2154 Transmission Line Rebuilds and Related Projects Hazardous Waste Search

Stantec Consulting Services, Inc. conducted database searches for solid and hazardous waste and petroleum release sites within a 0.5-mile radius of the proposed 230 kV Lines #2113 and #2154 Transmission Line Rebuilds and Related Projects (Projects). The Rebuild Projects are described below:

Line #2113 Rebuild Project

- Rebuild approximately 3.8 miles of 230 kV Line #2113 on single circuit steel structures between Lightfoot Substation and Waller Substation;
- Remove approximately 3.8 miles of idle 115 kV Line #58 between Lightfoot Substation and Waller Substation; and
- Related substation work at Lanexa, Lightfoot, and Waller Substations.

Line #2154 Rebuild Project

- Rebuild approximately 6.1 miles of 230 kV Line #2154 on single circuit steel structures between Waller Substation and Kingsmill Substation;
- Rebuild approximately 1.5 miles of 230 kV Line #2154 on double circuit steel structures between Kingsmill Substation and Structure #2154/482;
- Remove approximately 6.1 miles of idle 115 kV Line #58 between Waller Substation and Kingsmill Substation;
- Rebuild approximately 1.5 miles of 115 kV Line #19 on double circuit steel structures between Kingsmill Substation and Structure #2154/482;
- Related substation work at Waller, Penniman, and Kingsmill Substations and Skiffes Creek Switching Station.

Results

Publicly available data from the Environmental Protection Agency (EPA) Facility Registry System (FRS) were obtained, which provide information about facilities, sites, or places subject to environmental regulation or of environmental interest. Although this data set 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.

Line #2113 Rebuild Project

Per the EPA database, there are five registered RCRA sites present within a 0.5-mile radius of Line #2113 (Table 1). A review of the FRS forms has determined that four of the RCRA sites are small

December 14, 2020 Rachel Studebaker Page 2 of 8

Reference:

230 kV Lines #2113 and #2154 Transmission Line Rebuilds and Related Projects

Hazardous Waste Search

quantity generators. Due to the sites proximity to the project ROW, none of these sites are expected to be a concern for the project.

Line #2154 Rebuild Project

Per the EPA database there are 14 registered RCRA sites present within a 0.5-mile radius of Line #2154 (Table 2). The Eaton Corporation- Williamsburg Manufacturing is cross-listed as one of the 14 RCRA sites, as well as a toxic release inventory site. A review of the FRS forms has determined that nine RCRA sites are small quantity generators and one is a large quantity generator. Due to the sites proximity to the project ROW, none of these sites are expected to be a concern for the Project.

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 Projects.

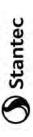
Line #2113 Rebuild Project

A total of 21 petroleum release sites were identified within the search radius (Table 3). The closest of these (PC Number: 20115096) is located approximately 547 linear feet from the project area and has been closed. Additionally, this site falls outside of the transmission line ROW. All of the identified petroleum release sites are closed. Dominion Energy Virginia has procedures in place to handle petroleum contaminated soil, if encountered; however, as all the release sites are located outside of the project area, none of the petroleum release sites are expected to have an impact on the proposed project.

Line #2154 Rebuild Project

A total of 18 petroleum release sites were identified within the search radius (Table 4). The closest of these (PC Number: 20155034) is located approximately 347 linear feet from the project area and has been closed. Additionally, this site falls outside of the transmission line ROW. All of the identified petroleum release sites are closed. Dominion Energy Virginia has procedures in place to handle petroleum contaminated soil, if encountered; however, as all the release sites are located outside of the project area, none of the petroleum release sites are expected to have an impact on the proposed project.

In summary, a total of five RCRA sites and 21 petroleum release sites are located within a 0.5-mile radius of the Line #2113 Project site, and a total of 14 RCRA sites and 18 petroleum release sites are located within a 0.5-mile radius of the Line #2154 Rebuild Project; however, none of the sites intersect with the proposed Projects rebuild lines. The Eaton Corporation- Williamsburg Manufacturing is cross-listed as one of the 20 RCRA sites, as well as a toxic release inventory site. No EPA registered Brownfield sites or CERCLA/Superfund sites are located within 0.5 mile of the Project areas.



Memo

Table 1. Hazardous waste sites identified by the EPA as occurring within 0.5-mile of the Line #2113 Rebuild Project

Site Name Interest Type Latitude Longitude Proximity to (feet (feet feet)) Exxon Co USA #20102 Small Quantity Generator 37.311563 -76.73369 2505 Star Enterprise No Information 37.311295 -76.73251 2156 East Coast Oil #57 Small Quantity Generator 37.3037 -76.72889 581 Williamsburg Chrysler Small Quantity Generator 37.3009 -76.72849 296 7-Eleven, Inc. #21612 Small Quantity Generator 37.3009 -76.72759 858	lable 1. nazardous waste sites identified by the	es identified by the EPA as occ	EFA as occurring within 0.5-mile of the Line #2115 Rebuild Project	IIIe #ZIIIS Kepalia Piojeci	
RCRA - Small Quantity Generator 37.311563 -76.73369 RCRA - No Information RCRA - Small Quantity Generator Small Quantity Generator 37.31295 -76.73251 Small Quantity Generator RCRA - Small Quantity Generator RCRA - Small Quantity Generator Small Quantity Generator Small Quantity Generator 37.3009 -76.72849	Site Name	Interest Type	Latitude	Longitude	Proximity to Centerline (feet)
RCRA - No Information 37.311295 -76.73251 RCRA - Small Quantity Generator 37.30464 -76.72889 Small Quantity Generator 37.3009 -76.72849 RCRA - Small Quantity Generator 37.30009 -76.72759	Exxon Co USA #20102	RCRA - Small Quantity Generator	37.311563	-76.73369	2505
RCRA - Small Quantity Generator RCRA- Small Quantity Generator Small Quantity Generator 37.30464 37.3009 -76.72889 -76.72849	Star Enterprise	RCRA - No Information	37.311295	-76.73251	2156
RCRA- 37.3037 -76.72849 Small Quantity Generator 37.30009 -76.72849	East Coast Oil #57	RCRA - Small Quantity Generator	37.30464	-76.72889	581
RCRA- Small Quantity Generator 37.30009 -76.72759	Williamsburg Chrysler Jeep Kia	RCRA- Small Quantity Generator	37.3037	-76.72849	296
	7-Eleven, Inc. #21612	RCRA- Small Quantity Generator	37.30009	-76.72759	828

Table 2. Hazardous waste sites identified by the EPA as occurring within 0.5-mile of the Line #2154 Rebuild Project

I able 2. Hazardous waste sites identified by the		EFA as occurring within 0.5-mile of the Line #2154 Rebuild Project	me #z ib4 Rebuild Project	
Site Name	Interest Type	Latitude	Longitude	Proximity to Centerline (feet)
International Housing Village	RCRA- Small Quantity Generator	37.28199	-76.68839	1054
VDOT Structure 6013 West Queens Drive over I- 64	RCRA- No Information	37.28347	-76.67078	2503
Advance Auto Parts #2101	RCRA- No Information	37.27376	-76.67985	1908
Ebbys Auto Paint & Collision	RCRA- Small Quantity Generator	37.27245	-76.68067	2431
Farm Fresh #6263	RCRA- Small Quantity Generator	37.27354	-76.67975	1953
Sherwin-Williams Co	RCRA- Small Quantity Generator	37.272867	-76.679444	2093
Merchants Tire & Auto #05033	RCRA- Small Quantity Generator	37.27318	-76.68216	2486
East Coast Oil #45	RCRA- Small Quantity Generator	37.27292	-76.68158	2457
Eaton Corp – Williamsburg Manufacturing	TRI Facility Report-	37.26188	-76.65774	1725

December 14, 2020

Rachel Studebaker Page 4 of 8 230 kV Lines #2113 and #2154 Transmission Line Rebuilds and Related Projects Hazardous Waste Search Reference:

Site Name	Interest Type	Latitude	Longitude	Proximity to Centerline (feet)
	Toxic releases: electrical equipment & component manufacturing			
Eaton Corporation – Marina Power & Lighting	RCRA- Small Quantity Generator	37.26236	-76.65727	1177
Target Store T2296	RCRA- Large Quantity Generator	37.25962	-76.64006	2072
Busch Gardens Williamsburg	RCRA- Small Quantity Generator	37.235833	-76.64158	2581
Virginia Natural Gas	RCRA- No Information	37.233938	-76.629121	360
7-Eleven #20129	RCRA- Small Quantity Generator	37.21555	-76.62034	2447



Memo

Table 3. Petroleum releases identified by the DEQ as occurring within 0.5 mile of the Line 2113 Rebuild Project

Sito Name PC Location Latitude Longitude Status Type of Release 7-Eleven Store 1003-20129 1992019B James City 37.2156032 76.62007133 Closed Confirmed Andrew Dippre Residence 2015096 York County 37.2366749 76.73129059 Closed Confirmed Bondurant Mary and Thomas 20095022 Williamsburg 37.29696982 76.73015076 Closed Confirmed Curits Residence 20105003 Williamsburg 37.29696982 76.73015076 Closed Confirmed Dorsey Scott Residence 20105003 Williamsburg 37.31687294 76.73015179 Closed Confirmed Ewell Station Shopping Center 20055111 James City 37.31687294 76.73607116 Closed Confirmed Hastings David Property 20185204 James City 37.397334 76.7380912 Closed Confirmed James Jennings Residence 20115095 Vork County 37.29830488 76.73259216 Closed Confirmed Ped Lorie Residence	I able 3. Perioleuri releases identined by the DE	ta by the dev	d as occurring within 0.5 mile of the Line 2113 Rebuild Project	unin v.a nine oi t	IIE LIIIE ZIIO RE	bulla Froj	eci		
10129 James City 37.2156032 -76.2007193 Closed County homas 2015096 York County 37.29366749 -76.70917732 Closed Closed City homas 20095022 Williamsburg City 37.29366749 -76.73129059 Closed Closed City 20125116 Williamsburg City 37.29896982 -76.73117046 Closed Closed Closed City 3 20105003 Williamsburg City 37.29810795 -76.72878226 Closed	Site Name	PC Number	Location	Latitude	Longitude	Status	Type of Release	Federally Registered Tank?	Proximity to Centerline (feet)
homas 20115096 York County 37.29366749 -76.70917732 Closed homas 20095022 Williamsburg 37.30114442 -76.73129059 Closed 20125116 Williamsburg 37.29696982 -76.73017046 Closed 20105003 Williamsburg 37.29810795 -76.73015179 Closed 3Center 20055111 James City 37.31687294 -76.73607116 Closed 4y 20185202 James City 37.31687294 -76.73413299 Closed ty 20185202 Williamsburg 37.29389137 -76.73413299 Closed ty 20185202 Uniliamsburg 37.29389137 -76.73669427 Closed 20005230 James City 37.29389188 -76.73259216 Closed 20105010 Williamsburg 37.29230703 -76.73259216 Closed 20145193 Williamsburg 37.29230703 -76.73233862 Closed 20145193 City 37.31267913 -76.73273985 Closed	7-Eleven Store 1003-20129	19920198	James City County	37.2156032	-76.62007193	Closed	Confirmed	У	2252
homas 20095022 Williamsburg City 37.30114442 -76.73129059 Closed 20125116 Williamsburg City 37.29696982 -76.73017046 Closed 19992391 James City 37.31231668 -76.73015179 Closed 20105003 Williamsburg City 37.31687294 -76.73607116 Closed 3 Center 20055111 James City 37.3154614 -76.73413299 Closed ty 20185202 Williamsburg 37.297534 -76.731079 Closed ty 20165202 Williamsburg 37.29389137 -76.731079 Closed ty 20105010 Williamsburg 37.29389137 -76.731079 Closed 20105010 Williamsburg 37.29389137 -76.731079 Closed 20105010 Williamsburg 37.29230703 -76.73259216 Closed 20145193 Williamsburg 37.29778669 -76.73232862 Closed 20145193 Williamsburg 37.31267913 -76.7323985 Closed 20005219	Andrew Dippre Residence	20115096	York County	37.29366749	-76.70917732	Closed	Confirmed	z	547
20125116 Williamsburg City County 37.29696982 -76.73017046 Closed Closed City 20105003 James City County County 37.31231668 -76.73015179 Closed Closed County 9 Center 20105003 Williamsburg City County 37.31687294 -76.73607116 Closed Closed County 4y 20185202 Williamsburg Williamsburg City County 37.29389137 -76.73413299 Closed Closed Closed Closed Closed County 4y 20165010 Williamsburg Williamsburg Williamsburg Clity Closed Close	Bondurant Mary and Thomas Property	20095022	Williamsburg City	37.30114442	-76.73129059	Closed	Confirmed	z	1456
se James City 37.31231668 -76.73015179 Closed County se 20105003 Williamsburg City 37.29810795 -76.72878226 Closed Closed Closed g Center 20055111 James City 37.31687294 -76.73607116 Closed Closed ty 19920246 James City 37.3154614 -76.73413299 Closed Closed Closed ty 20185202 Williamsburg 37.29389137 -76.73410294 Closed Closed Closed ence 20115095 York County 37.29830488 -76.74102541 Closed Closed 20105010 Williamsburg 37.29830488 -76.73259216 Closed Closed 20145107 York County 37.29830703 -76.71055539 Closed Closed 20145193 Williamsburg 37.29778669 -76.732532862 Closed Closed Closed 19952219 James City 37.31267913 -76.73273885 Closed Closed Closed	Curtis Residence	20125116	Williamsburg City	37.29696982	-76.73017046	Closed	Confirmed	Z	2541
se 20105003 Williamsburg City 37.29810795 -76.72878226 Closed Closed Closed City g Center 20055111 James City 37.31687294 -76.73607116 Closed Closed County ty 20185202 Williamsburg Williamsburg City 37.297534 -76.731079 Closed Closed Closed Closed County thence 20115095 York County 37.29389137 -76.731079 Closed Cl	Custom Concrete	19992391	James City County	37.31231668	-76.73015179	Closed	Confirmed	Y	824
g Center 20055111 James City County 37.31687294 -76.73607116 Closed Closed ty 19920246 James City County 37.3154614 -76.73413299 Closed Closed ty 20185202 Williamsburg City County 37.29389137 -76.70869427 Closed Closed tence 20115095 York County 37.29389137 -76.70869427 Closed Closed 20105010 Williamsburg 37.29830488 -76.73259216 Closed Closed 20115107 York County 37.29230703 -76.73259216 Closed Closed Closed 20145193 Williamsburg 37.29778669 -76.73232862 Closed Closed Closed Closed Closed Closed Closed County	Dorsey Scott Residence	20105003	Williamsburg City	37.29810795	-76.72878226	Closed	Confirmed	Z	2040
ty 20185202 Williamsburg 37.297534 -76.73413299 Closed County City 37.297534 -76.731079 Closed City James City 37.29389137 -76.70869427 Closed County County 37.29830488 -76.73102541 Closed City Williamsburg 37.29830488 -76.73259216 Closed City Tork County 37.29230703 -76.73259216 Closed City Williamsburg 37.29230703 -76.73232862 Closed City James City 37.31267913 -76.73233862 Closed County County 37.29778669 -76.73232862 Closed City James City 37.31267913 -76.73273985 Closed County County Sanda Sand	Ewell Station Shopping Center	20055111	James City County	37.31687294	-76.73607116	Closed	Confirmed	Z	1117
ty 20185202 Williamsburg 37.297534 -76.731079 Closed lence 20115095 York County 37.29389137 -76.70869427 Closed County Williamsburg 37.29830488 -76.73259216 Closed City 20115107 York County 37.29230703 -76.73259216 Closed City Williamsburg 37.29230703 -76.732532862 Closed City City 37.29778669 -76.73232862 Closed City James City 37.31267913 -76.73273985 Closed County County 37.31267913 -76.73273985 Closed	Exxon Loc #2-0102	19920246	James City County	37.3154614	-76.73413299	Closed	Confirmed	\	2365
lence 20115095 York County 37.29389137 -76.70869427 Closed of County County 20105010 Williamsburg 37.29830488 -76.73259216 Closed City City 37.29230703 -76.73259216 Closed City 37.29230703 -76.73259216 Closed City Milliamsburg 37.29230703 -76.73232862 Closed City City County S7.29778669 -76.73232862 Closed City James City 37.31267913 -76.73273985 Closed County County S7.31267913 -76.73273985 Closed	Hastings David Property	20185202	Williamsburg City	37.297534	-76.731079	Closed	Confirmed	Z	2041
20005230 James City 37.31679936 -76.74102541 Closed 20105010 Williamsburg 37.29830488 -76.73259216 Closed 20115107 York County 37.29230703 -76.71055539 Closed 20145193 Williamsburg 37.29778669 -76.73232862 Closed 19952219 James City 37.31267913 -76.73273985 Closed	James Jennings Residence	20115095	York County	37.29389137	-76.70869427	Closed	Confirmed	Z	1181
20105010 Williamsburg 37.29830488 -76.73259216 Closed 20115107 York County 37.29230703 -76.71055539 Closed 20145193 Williamsburg 37.29778669 -76.73232862 Closed 19952219 James City 37.31267913 -76.73273985 Closed	Lift Station 6-1	20005230	James City County	37.31679936	-76.74102541	Closed	Confirmed	Y	1304
20115107 York County 37.29230703 -76.71055539 Closed 20145193 Williamsburg 37.29778669 -76.73232862 Closed 19952219 James City 37.31267913 -76.73273985 Closed County	Ped Lorie Residence	20105010	Williamsburg City	37.29830488	-76.73259216	Closed	Confirmed	Z	1904
20145193 Williamsburg 37.29778669 -76.73232862 Closed City James City 37.31267913 -76.73273985 Closed County	Slauson Property	20115107	York County	37.29230703	-76.71055539	Closed	Confirmed	z	1954
19952219 James City 37.31267913 -76.73273985 Closed County	Stanley Residence	20145193	Williamsburg City	37.29778669	-76.73232862	Closed	Confirmed	Z	1656
	Texaco (23-508-0022)	19952219	James City County	37.31267913	-76.73273985	Closed	Confirmed	>-	853

December 14, 2020

Rachel Studebaker Page 6 of 8 230 kV Lines #2113 and #2154 Transmission Line Rebuilds and Related Projects Hazardous Waste Search Reference:

Site Name	PC Number	Location	Latitude	Longitude	Status	Type of Release	Federally Registered Tank?	Proximity to Centerline (feet)
Texaco 23 508 0022 100627	20035136	James City County	37.31266292	-76.73272145	Closed	Confirmed	\	1611
Watson Residence	20155045	Williamsburg City	37.29882266	-76.73419952	Closed	Confirmed	Z	1930
Williamsburg City- Former Williamsburg Travel Inn	20205233	James City County	37.296187	-76.726483	Closed	Suspected	z	2107
Williamsburg Memorial Park	20165049	James City County	37.31854	-76.74061	Closed	Confirmed	Z	2181
Williamsburg Motor Court – Former	20055103	Williamsburg City	37.30125538	-76.72849341	Closed	Confirmed	Z	2074
Wright Mark Property	20045036	Williamsburg City	37.2988137	-76.72921811	Closed	Confirmed	Z	2097

Table 4. Petroleum releases identified by the DEQ as occurring within 0.5 mile of the Line 2154 Rebuild Project

Site Name	PC Number	Location	Latitude	Longitude	Status	Type of Release	Federally Registered Tank?	Proximity to Centerline (feet)
7 Eleven #20129	20025058	James City County	37.21524026 -76.61985602	-76.61985602	Closed	Closed Confirmed	Y	2378
7-Eleven Store 1003-20129	19920198	James City County	37.2156032	-76.62007193	Closed	Closed Confirmed	\	2369
Anderson Barbara Residence	20165159	James City County	37.28487	-76.69028	Closed	Closed Confirmed	Z	562
Andrew Dippre Residence	20115096	York County	37.29366749	-76.70917732	Closed	Closed Confirmed	Z	1304
Bryant Annabelle Residence	20015001	York County	37.26784602 -76.67149379	-76.67149379	Closed	Closed Confirmed	z	2128

December 14, 2020

Rachel Studebaker Page 7 of 8 230 kV Lines #2113 and #2154 Transmission Line Rebuilds and Related Projects Hazardous Waste Search Reference:

Site Name	PC Number	Location	Latitude	Longitude	Status	Type of Release	Federally Registered Tank?	Proximity to Centerline (feet)
Connolly Michael and Kimberly Property	20205135	York County	37.265517	-76.658823	Closed	Confirmed	z	545
Diakun Residence	20155061	York County	37.27327204	-76.67140714	Closed	Confirmed	z	549
International Housing Village	20145168	Williamsburg City	37.28143342	-76.68642204	Closed	Confirmed	z	866
James Jennings Residence	20115095	York County	37.29389137	-76.70869427	Closed	Confirmed	z	1181
Laurin Residence	20155231	York County	37.26044515	-76.66150304	Closed	Confirmed	z	2484
Patriot Chevrolet Buick Corp	19931729	James City County	37.27448792	-76.68510338	Closed	Confirmed	>	2634
Ragsdale Katherine H Property	20195085	York County	37.264669	-76.662562	Closed	Confirmed	z	1455
Shackelford Property	20115063	York County	37.26603275	-76.65907042	Closed	Confirmed	z	441
Shelly Gary L Property	20155034	York County	37.26502451	-76.65690687	Closed	Confirmed	z	347
Shotmeyer Oil Company	19911483	Williamsburg City	37.28130927	-76.68898478	Closed	Suspected	\	1358
Skiffes Creek Area	19943704	James City County	37.21744109	-76.60628102	Closed	Suspected	\	1951
Slauson Property	20115107	York County	37.29230703	-76.71055539	Closed	Confirmed	z	1904
Terrace Grocery	20105120	James City County	37.26395954	-76.66517034	Closed	Confirmed	z	2123



Memo

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

Stantec Consulting Services Inc.

Rachel Roberts

Regulatory Specialist

Phone: (757) 298-4234 Rachel.Roberts@stantec.com

Stantec Consulting Services Inc.

5209 Center Street

Williamsburg, VA 23188

To: Rachel Studebaker From: Rachel Roberts

Dominion Energy Virginia 120 Tredegar Street Richmond, VA 23219

203401488 Date: December 14, 2020

Reference: 230 kV Lines #2113 and #2154 Transmission Line Rebuilds and Related Projects-Threatened and Endangered Species Review

Online database searches for federal and state threatened and endangered species were completed by Stantec Consulting Services Inc., for the 230 kV Lines #2113 and #2154 Transmission Line Rebuilds and Related Projects (Projects). The Rebuild Projects are described below:

Line #2113 Rebuild Project

File:

- Rebuild approximately 3.8 miles of 230 kV Line #2113 on single circuit steel structures between Lightfoot Substation and Waller Substation;
- Remove approximately 3.8 miles of idle 115 kV Line #58 between Lightfoot Substation and Waller Substation: and
- Related substation work at Lanexa, Lightfoot, and Waller Substations.

Line #2154 Rebuild Project

- Rebuild approximately 6.1 miles of 230 kV Line #2154 on single circuit steel structures between Waller Substation and Kingsmill Substation;
- Rebuild approximately 1.5 miles of 230 kV Line #2154 on double circuit steel structures between Kingsmill Substation and Structure #2154/482;
- Remove approximately 6.1 miles of idle 115 kV Line #58 between Waller Substation and Kingsmill Substation;
- Rebuild approximately 1.5 miles of 115 kV Line #19 on double circuit steel structures between Kingsmill Substation and Structure #2154/482;
- Related substation work at Waller, Penniman, and Kingsmill Substations and Skiffes Creek Switching Station.

Database searches were conducted for each project, and results are presented in the tables at the end of this document.

Results

The online database searches included the following:

- U.S. Fish & Wildlife (USFWS) Information, Planning, and Conservation (IPaC)
- USFWS Critical Habitat for Threatened and Endangered Species Mapper
- USFWS Bald Eagle Concentration Area Map
- Department of Wildlife Resources (DWR) Virginia Fish and Wildlife Information Service (VAFWIS)
- DWR Northern Long-eared Bat (NLEB) Winter Habitat and Roost Trees Map
- Virginia Department of Conservation and Recreation (DCR) Natural Heritage Data Explorer (NHDE)
- Center for Conservation Biology (CCB) Bald Eagle Nest Locator for Virginia

Species with confirmed or potential presence within the Project vicinity have been identified by database searches and are provided below in Table 1.

Species	Status	Database	Results	Appli Pro	
Орестез	Otatus	Database	Results	Line #2113	Line #2154
Northern long-eared bat (Myotis septentrionalis)	FT, ST	USFWS- IPaC, DWR-NLEB Winer Habitat and Roost Tree Map, DWR VAFWIS	Identified as confirmed within 2-mile radius of the Project. No known hibernacula or maternity roost trees within the vicinity of the Project. Work will take place within existing, cleared and maintained transmission line ROW. Limited removal of danger trees may be necessary during the Project. Stantec recommends that no tree removal occur between June 1 and July 31 in accordance with the 4(d) Rule to avoid potential adverse effects to the northern long-eared bat.	X	X
Small whorled pogonia (Isotria medeoloides)	FT, SE	USFWS- IPaC, DCR NHDE	Identified as potentially occurring near the Project site. Potential habitat not present. Species requires mixed damp woods of acidic soils of dry to mesic second-growth, deciduous or deciduous-coniferous forests with an open herb layer, although occasionally dense ferns, moderate to light shrub layer, and a relatively open canopy. Work will be within the existing cleared and maintained ROW.	х	х
Critical habitats		USFW-IPaC	No critical habitat present.	Х	Х
New Jersey rush (Juncus caesariensis)	SOC, ST	DCR NHDE	Identified as potentially occurring near the Project site. The species requires continuous source of flowing water occurring in open to shaded stream banks or saturated soil in forested wetlands. The Project will take place within the existing cleared and maintained ROW.	x	

Species	Status	Database	Results	Appli Proj	
Species	Status	Database	Results	Line #2113	Line #2154
Mabee's salamander (Ambystoma mabeei)	ST	DWR VAFWIS, DCR NHDE	Identified as confirmed within a 2-miles radius of the Project area. Species prefers pine woods, open field lowland deciduous forest. Work will be within the existing cleared and maintained ROW.		X
Little brown bat (Myotis lucifugus)	SE	DWR VAFWIS	Identified as confirmed within a 2-mile radius of the Project area. However, there are no known hibernaculum or roost trees identified in the Project area. Species prefers to inhabit caves and hollow trees. No work in caves is proposed. The Project will take place within cleared and maintained ROW. Limited removal of danger trees may be required.		X
Tri-colored bat (Perimyotis subflavus)	SE	DWR VAFWIS, DWR MYLU PESU Winter Habitat and Roosts Application	Identified as confirmed within a 2-mile radius of the Project area. Species typically inhabit caves and hollow trees. No work within caves is proposed. No known hibernaculum or roost trees were identified in the vicinity of the Project area. The Project will take place within cleared and maintained ROW. Limited removal of danger trees may be required.	х	X
Atlantic sturgeon (Acipenser oxyrinchus)	FE, SE	DCR NHDE, NOAA- Critical Habitat	Identified as potentially occurring near the Project site. Both the James and York Rivers are designated as critical habitat for this species. Work will be within the existing cleared and maintained ROW and no in-water work is proposed.		Х
Colonial Water Bird Colonies	МВТА	DWR-VaFWIS, CCB	Identified as confirmed within a 2-mile radius of the Project area. However, due to the distance to the colony and presence of screening vegetation, no impacts would be expected to nesting waterbirds.	Х	Х

Species	Status	Database	Results	Appli Pro	cable ject
орос.ос	Otatao	Butubuco	rtoculio	Line #2113	Line #2154
Bald eagle (Haliaeetus leucocephalus)	BGEPA	CCB Eagle Nest Locator, USFWS Eagle Concentration Areas	No nests in Project vicinity. The closest Bald eagle nest (YK0703) is approximately 0.43 miles away from both project segments.	X	X

FT: federally threatened, ST: state threatened, SE: state endangered, SOC: federal species of concern, MBA: Migratory Bird Treaty Act, BGEPA: Bald and Golden Eagle Protection Act

Conclusion

The following conclusions are based upon the proposed scope of work, as described by Dominion Energy Virginia (Dominion Energy). This scope of work assumes construction access will avoid stream crossings where practical, or use crane mats to span stream crossings, with no in-stream work required. The majority of the work will take place within existing cleared and maintained transmission line ROW. Additional limbing and danger tree clearing may be required within the existing ROW. Erosion and sediment controls will be used as appropriate throughout the Projects to protect wetlands and water resources.

Line #2133 Rebuild and Line #2154 Rebuild Projects

The USFWS-IPaC database identified the federally and state threatened northern long-eared bat as potentially occurring near both Projects; however, the DWR-NLEB Winter Habitat and Roost Tree Map shows no known hibernacula or maternity roost trees are within vicinity of the Projects. The northern long-eared bat is typically found in intact forest habitats with mixed hardwoods and often nests in and breeds in tree hollows and in woody debris (Source: NatureServe). The proposed Projects will take place within existing, cleared and maintained transmission line ROW; however, additional tree clearing may be required. Stantec recommends that no tree removal occur between June 1 and July 31 in accordance with the 4(d) Rule to avoid potential adverse effects to the northern long-eared bat. Dominion Energy can rely upon the findings of the 1/5/2016 Programmatic Biological Opinion for Final 4(d) Rule on the Northern Long-Eared Bat and Activities Excepted from Take Prohibitions to conclude not likely to adversely affect.

The federally threatened and state endangered small whorled pogonia was identified by the DCR-NHDE database as potentially occurring within the Project watersheds. Potential habitat for this species is not present within the Project areas. Adverse impacts to this species are not anticipated.

The DWR VAFWIS identified the state endangered tri-colored bat as confirmed within a 2-mile radius of the Projects. The species roosts in heavily forested areas with tall trees. DWR standard recommendations are to maintain a 600-foot buffer during February 15 – July 15. Due to the roost sites also being further than 600 feet away from the Projects, no adverse impacts to this species are expected.

The CCB Bald Eagle Roost and Nest Locator for Virginia identified no known nests or roost areas near the Project areas. The closest bald eagle nest, YK0703, is approximately 0.43 miles from both project segments. Therefore, no adverse impacts to this species is expected.

The CCB Colonial Waterbirds Locator for Virginia confirmed colonial waterbirds within a 2-mile radius of the Project areas. The closest colonies to both segments are found in 2013 survey. Colony Code: CW-YK-04 is approximately 1.26 miles from Line 2154 segment and Colony Code CW-JC-05 is approximately 1.9 miles from Line 2113 segment. As such, no impacts to nesting waterbirds are expected.

Line #2113 Rebuild Project

The DCR-NHDE identified the state threatened New Jersey rush as potentially occurring within the Line #2113 Rebuild Project watershed. The plant requires forested wetlands with a stable source of flowing water. The project will occur within existing maintained transmission easement; therefore, no potential habitat is within the project area. The New Jersey rush is not expected to be adversely affected by the Project.

Line #2154 Rebuild Project

The DWR VAFWIS identified that state threatened Mabee's salamander as confirmed within a 2-mile radius of the Line #2154 Rebuild Project area. The species prefers lowland deciduous forest and is found near ponds (Source: NatureServe). Erosion and sediment controls will be used as appropriate throughout the project to protect wetlands and water resources. Pending a field review of the project and dependent upon recommendations from DWR, Mabee's salamander habitat evaluations and/or survey may be necessary.

The DWR VAFWIS identified the state endangered little brown bat at as confirmed occurring within 2-mile radius of the Line #2154 Rebuild Project site. The species roosts in heavily forested areas with tall trees. The proposed project will take place within existing, cleared and maintained transmission line right of way. DWR standard recommendations are to maintain a 600-foot buffer during February 15 – July 15, and roosts are found further than that distance. As such, no adverse impacts to this species are anticipated.

The DCR-NHDE database identified the federally endangered and state endangered Atlantic sturgeon as potentially occurring in the Line #2154 Rebuild Project area. Both the James and York Rivers are designated as critical habitat for this species. However, work will be within the existing cleared and maintained ROW and no in-water work is proposed. As such, adverse impacts to this species are not anticipated.

Should you have any questions with the information provided, please do not hesitate to contact me by phone at (757) 298-4234 or by email at Rachel.Roberts@stantec.com.

Stantec Consulting Services Inc.

Lackel ARobert

Rachel Roberts, PMP Senior Regulatory Specialist Phone: (757) 298-4234 Rachel.Roberts@stantec.com

Attachment: USFWS-IPaC Database Search Results

USFWS Critical Habitat for Threatened and Endangered Species Mapper Database Search Results

USFWS Bald Eagle Concentration Area Map Database Search Results VAFWIS-DWR Database Search Results

DWR-NLEB Winter Habitat and Roost Tree Map Database Search Results

DCR Natural Heritage Data Explorer Database Search Results CCB Bald Eagle Nest Locator for Virginia Database Search Results

LINE #2113 SEGMENT



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 http://www.fws.gov/northeast/virginiafield/



In Reply Refer To: September 18, 2020

Consultation Code: 05E2VA00-2020-SLI-6227

Event Code: 05E2VA00-2020-E-17242

Project Name: Waller Mill -- Lightfoot, Line #2113 Transmission Line Rebuild Project

Subject: List of threatened and endangered species that may occur in your proposed project

location, and/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

09/18/2020

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

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (http://www.fws.gov/windenergy/) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm; http://www.towerkill.com; and http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html.

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 Consultation Tracking Number 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

Attachment 2.F.1 Page 10 of 67

Event Code: 05E2VA00-2020-E-17242

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

Consultation Code: 05E2VA00-2020-SLI-6227

Event Code: 05E2VA00-2020-E-17242

Project Name: Waller Mill -- Lightfoot, Line #2113 Transmission Line Rebuild Project

Project Type: TRANSMISSION LINE

Project Description: operation and maintenance work structures

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/place/37.31213776045334N76.74161213160562W



Counties: James City, VA | Williamsburg, VA | York, VA

Event Code: 05E2VA00-2020-E-17242

Endangered Species Act Species

There is a total of 2 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 Fisheries¹, 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.

1. <u>NOAA Fisheries</u>, 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

Threatened

No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045

Flowering Plants

NAME

Small Whorled Pogonia Isotria medeoloides

Threatened

No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1890

Critical habitats

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

Attachment 2.F.1
09/18/2020 Event Code: 05E2VA00-2020-E-17242 Page 13 of 67

USFWS National Wildlife Refuge Lands And Fish Hatcheries

Any activity proposed on lands managed by the <u>National Wildlife Refuge</u> 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.



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) 693-903

Phone: (804) 693-6694 Fax: (804) 693-9032 http://www.fws.gov/northeast/virginiafield/



IPaC Record Locator: 671-23528264 September 18, 2020

Subject: Consistency letter for the 'Waller Mill -- Lightfoot, Line #2113 Transmission Line Rebuild Project' project indicating that any take of the northern long-eared bat that may occur as a result of the Action is not prohibited under the ESA Section 4(d) rule

adopted for this species at 50 CFR §17.40(o).

Dear Meagan Moore:

The U.S. Fish and Wildlife Service (Service) received on September 18, 2020 your effects determination for the 'Waller Mill -- Lightfoot, Line #2113 Transmission Line Rebuild Project' (the Action) using the northern long-eared bat (*Myotis septentrionalis*) key within the Information for Planning and Consultation (IPaC) system. You indicated that no Federal agencies are involved in funding or authorizing this Action. This IPaC key assists users in determining whether a non-Federal action may cause "take" of the northern long-eared bat that is prohibited under the Endangered Species Act of 1973 (ESA) (87 Stat.884, as amended; 16 U.S.C. 1531 et seq.).

Based upon your IPaC submission, any take of the northern long-eared bat that may occur as a result of the Action is not prohibited under the ESA Section 4(d) rule adopted for this species at 50 CFR §17.40(o). Unless the Service advises you within 30 days of the date of this letter that your IPaC-assisted determination was incorrect, this letter verifies that the Action is not likely to result in unauthorized take of the northern long-eared bat.

Please report to our office any changes to the information about the Action that you entered into IPaC, the results of any bat surveys conducted in the Action area, and any dead, injured, or sick northern long-eared bats that are found during Action implementation.

If your Action proceeds as described and no additional information about the Action's effects on species protected under the ESA becomes available, no further coordination with the Service is required with respect to the northern long-eared bat.

The IPaC-assisted determination for the northern long-eared bat **does not** apply to the following ESA-protected species that also may occur in your Action area:

Small Whorled Pogonia, Isotria medeoloides (Threatened)

You may coordinate with our Office to determine whether the Action may cause prohibited take of the animal species listed above.

[1] Take means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct [ESA Section 3(19)].

Action Description

You provided to IPaC the following name and description for the subject Action.

1. Name

Waller Mill -- Lightfoot, Line #2113 Transmission Line Rebuild Project

2. Description

The following description was provided for the project 'Waller Mill -- Lightfoot, Line #2113 Transmission Line Rebuild Project':

operation and maintenance work structures

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/place/37.31213776045334N76.74161213160562W



Determination Key Result

This non-Federal Action may affect the northern long-eared bat; however, any take of this species that may occur incidental to this Action is not prohibited under the final 4(d) rule at 50 CFR §17.40(o).

Determination Key Description: Northern Long-eared Bat 4(d) Rule

This key was last updated in IPaC on **May 15, 2017**. Keys are subject to periodic revision.

This key is intended for actions that may affect the threatened northern long-eared bat.

The purpose of the key for non-Federal actions is to assist determinations as to whether proposed actions are excepted from take prohibitions under the northern long-eared bat 4(d) rule.

If a non-Federal action may cause prohibited take of northern long-eared bats or other ESA-listed animal species, we recommend that you coordinate with the Service.

Determination Key Result

Based upon your IPaC submission, any take of the northern long-eared bat that may occur as a result of the Action is not prohibited under the ESA Section 4(d) rule adopted for this species at 50 CFR §17.40(o).

Qualification Interview

- 1. Is the action authorized, funded, or being carried out by a Federal agency? *No*
- 2. Will your activity purposefully **Take** northern long-eared bats? *No*
- 3. [Semantic] Is the project action area located wholly outside the White-nose Syndrome Zone?

Automatically answered

No

4. Have you contacted the appropriate agency to determine if your project is near a known hibernaculum or maternity roost tree?

Location information for northern long-eared bat hibernacula is generally kept in state Natural Heritage Inventory databases – the availability of this data varies state-by-state. Many states provide online access to their data, either directly by providing maps or by providing the opportunity to make a data request. In some cases, to protect those resources, access to the information may be limited. A web page with links to state Natural Heritage Inventory databases and other sources of information on the locations of northern long-eared bat roost trees and hibernacula is available at www.fws.gov/midwest/endangered/mammals/nleb/nhisites.html.

Yes

5. Will the action affect a cave or mine where northern long-eared bats are known to hibernate (i.e., hibernaculum) or could it alter the entrance or the environment (physical or other alteration) of a hibernaculum?

No

6. Will the action involve Tree Removal?

Yes

7. Will the action only remove hazardous trees for the protection of human life or property? *Yes*

Project Questionnaire

If the project includes forest conversion, report the appropriate acreages below. Otherwise, type '0' in questions 1-3.

1. Estimated total acres of forest conversion:0
2. If known, estimated acres of forest conversion from April 1 to October 31 <i>0</i>
3. If known, estimated acres of forest conversion from June 1 to July 31 <i>0</i>
If the project includes timber harvest, report the appropriate acreages below. Otherwise, type '0' in questions 4-6.
4. Estimated total acres of timber harvest
5. If known, estimated acres of timber harvest from April 1 to October 31 <i>0</i>
6. If known, estimated acres of timber harvest from June 1 to July 31 0
If the project includes prescribed fire, report the appropriate acreages below. Otherwise, type '0' in questions 7-9.
7. Estimated total acres of prescribed fire 0
8. If known, estimated acres of prescribed fire from April 1 to October 31 <i>0</i>
9. If known, estimated acres of prescribed fire from June 1 to July 31 <i>0</i>

If the project includes new wind turbines, report the megawatts of wind capacity below. Otherwise, type '0' in question 10.

10. What is the estimated wind capacity (in megawatts) of the new turbine(s)? $\it 0$

Go



Virginia Department of Game and Inland Fisheries

<u>Home</u> » <u>By Coordinates</u> » VaFWIS GeographicSelect Options

Fish and Wildlife Information Service

Options

Species Information

By Name

By Land Management

References

Geographic Search

Ву Мар

By Coordinates

By Place Name

Database Search

Help

Logout

Show This Page as **Printer Friendly**

VaFWIS Initial Project Assessment Report Compiled on 9/18/2020, 12:02:25 PM

Known or likely to occur within a 2 mile buffer around line beginning 37.2962100 -76.7054599 in 095 James City County, 199 York County, 830 Williamsburg City, VA

View Map of Site Location

561 Known or Likely Species ordered by Status Concern for Conservation (displaying first 32) (32 species with Status* or Tier I** or Tier II**)

BOVA Code	Status*	Tier**	Common Name	Scientific Name	Confirmed	Database(s)
030074	FESE	la	Turtle, Kemp's ridley sea	Lepidochelys kempii		BOVA
010032	FESE	lb	Sturgeon, Atlantic	Acipenser oxyrinchus		BOVA
040183	FESE		Tern, roseate	Sterna dougallii dougallii		BOVA
030071	FTST	la	Turtle, loggerhead sea	Caretta caretta		BOVA
040144	FTST	la	Knot, red	Calidris canutus rufa		BOVA
050022	FTST	la	Bat, northern long-eared	Myotis septentrionalis		BOVA
040120	FTST	lla	Plover, piping	Charadrius melodus		BOVA
040110	FPSE	la	Rail, eastern black	Laterallus jamaicensis jamaicensis		BOVA
050020	SE	la	Bat, little brown	Myotis lucifugus		BOVA
050027	SE	la	Bat, tri-colored	Perimyotis subflavus	<u>Yes</u>	BOVA,SppObs
020052	SE	lla	Salamander, eastern tiger	Ambystoma tigrinum		BOVA
030013	SE	lla	Rattlesnake, canebrake	Crotalus horridus		BOVA
040096	ST	la	<u>Falcon, peregrine</u>	Falco peregrinus		BOVA
040293	ST	la	Shrike, loggerhead	Lanius ludovicianus		BOVA
020044	ST	lla	Salamander, Mabee's	Ambystoma mabeei		BOVA,Habitat
020002	ST	lla	Treefrog, barking	Hyla gratiosa		BOVA
040292	ST		Shrike, migrant loggerhead	Lanius ludovicianus migrans		BOVA
030067	СС	lla	Terrapin, northern diamond-backed	Malaclemys terrapin terrapin	<u>Yes</u>	BOVA,Habitat,SppObs
030063	СС	Illa	Turtle, spotted	Clemmys guttata	<u>Yes</u>	BOVA,SppObs
010077		la	Shiner, bridle	Notropis bifrenatus		BOVA
040040		la	Ibis, glossy	Plegadis falcinellus		BOVA
040306		la	Warbler, golden-winged	Vermivora chrysoptera		BOVA
040052		lla	Duck, American black	Anas rubripes		BOVA
040033		lla	Egret, snowy	Egretta thula		BOVA
040029		lla	Heron, little blue	Egretta caerulea caerulea		BOVA
040036		lla	Night-heron, yellow-crowned	Nyctanassa violacea violacea		BOVA
040114		lla	Oystercatcher, American	Haematopus palliatus		BOVA
040181		lla	Tern, common	Sterna hirundo		BOVA
040320		lla	Warbler, cerulean	Setophaga cerulea		BOVA
040140		lla	Woodcock, American	Scolopax minor		BOVA
040203		Ilb	Cuckoo, black-billed	Coccyzus erythropthalmus		BOVA
040105		IIb	Rail, king	Rallus elegans		BOVA

To view All 561 species View 561

*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 - High Conservation Need; IV=VA Wildlife Action Plan - Tier III - High Conservation Ne

c - No on the ground actions or research needs have been identified or all identified conservation opportunities have been exhausted

View Map of All Query Results from All Observation Tables

Bat Colonies or Hibernacula: Not Known

Anadromous Fish Use Streams (1 records)

View Map of All

Anadromous Fish Use Streams

04 ID	04 N	Reach Status	Anadro			
Stream ID	Stream Name		Different Species	Highest TE*	Highest Tier**	View Map
P130	Queen creek	Potential	0			<u>Yes</u>

Impediments to Fish Passage (1 records)

View Map of All Fish Impediments

ID	Name	River	View Map
658	WALLER MILL DAM	QUEENS CREEK	<u>Yes</u>

Colonial Water Bird Survey (4 records)

View Map of All Query Results Colonial Water Bird Survey

Octom None	N Obs	Latest Date	N Species			\C NA
Colony_Name			Different Species	Highest TE*	Highest Tier**	View Map
Western Shore, Norge, James City	1	May 4 2013	1			<u>Yes</u>
Western Shore, Williamsburg, York	1	May 1 2013	1			<u>Yes</u>
Chisel Run	1	Mar 20 2003	1			<u>Yes</u>
LONGHILL SWAMP	5	Jun 1 1991	1			<u>Yes</u>

Displayed 4 Colonial Water Bird Survey

Threatened and Endangered Waters

N/A

Managed Trout Streams

N/A

Bald Eagle Concentration Areas and Roosts

N/A

Bald Eagle Nests (2 records)

View Map of All Query Results **Bald Eagle Nests**

Nest	N Obs	Latest Date	DGIF Nest Status	View Map
YK0302	2	May 1 2003	HISTORIC	<u>Yes</u>
YK0703	4	Apr 26 2008	Unknown	<u>Yes</u>

Displayed 2 Bald Eagle Nests

Habitat Predicted for Aquatic WAP Tier I & II Species

N/A

Habitat Predicted for Terrestrial WAP Tier I & II Species (2 Species)

View Map of Combined Terrestrial Habitat Predicted for 2 WAP Tier I & II Species Listed Below

BOVA Code	Status*	Tier**	Common Name	Scientific Name	View Map
020044	ST	lla	Salamander, Mabee's	Ambystoma mabeei	<u>Yes</u>
030067	CC	lla	Terrapin, northern diamond-backed	Malaclemys terrapin terrapin	<u>Yes</u>

ordered by Status Concern for Conservation

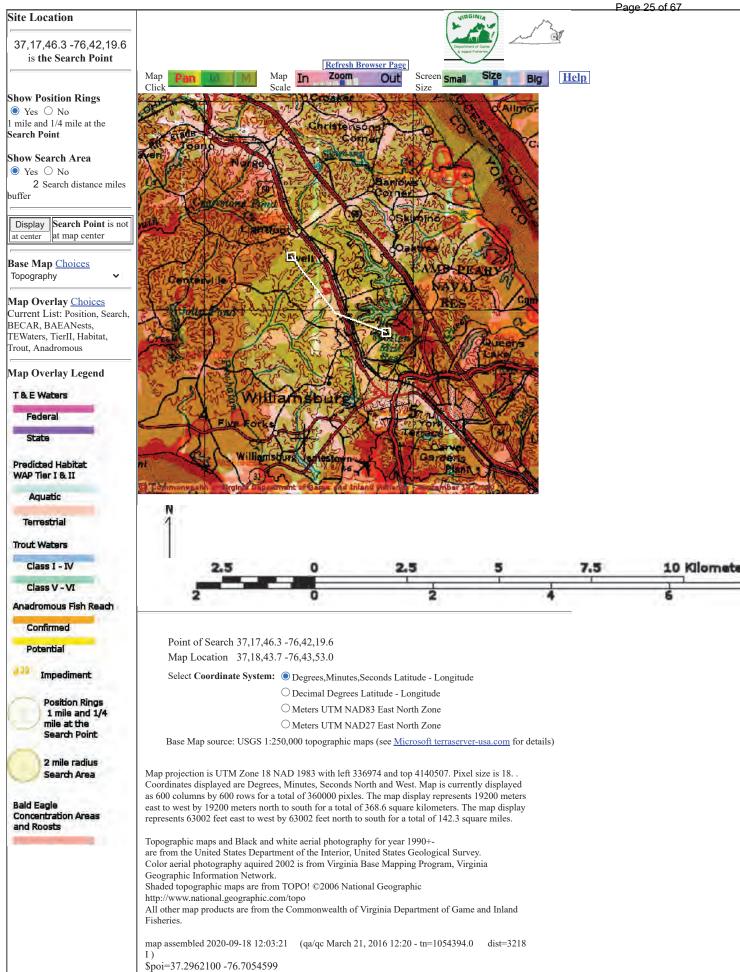
Public Holdings: (2 names)

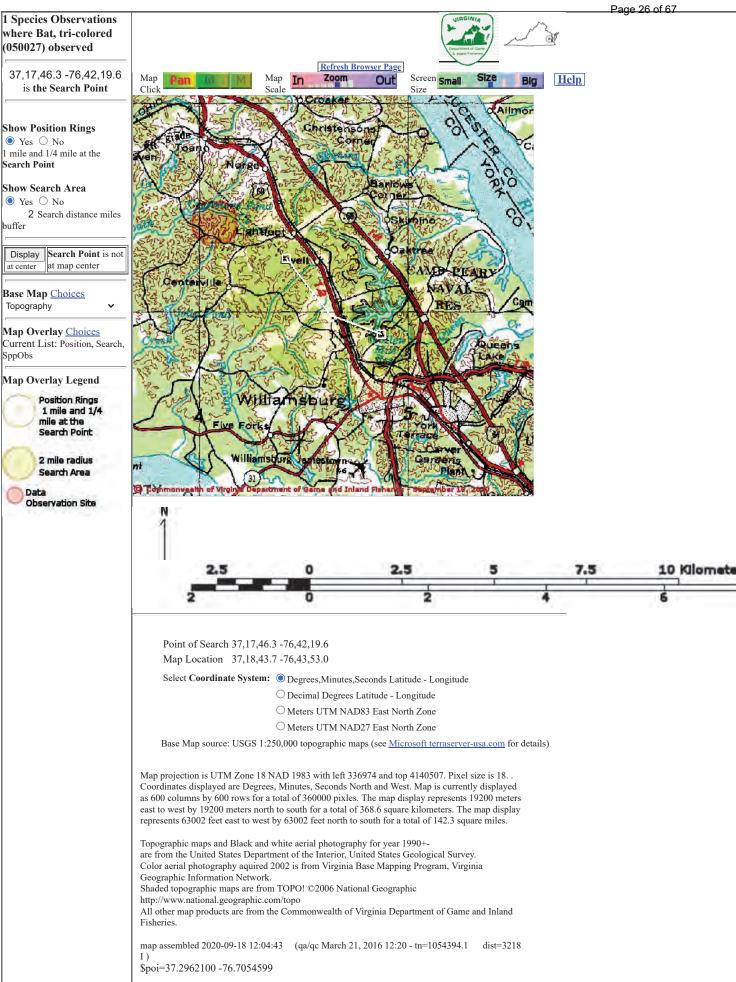
Name	Agency	Level
Colonial National Historical Park	National Park Service	Federal
Camp Peary	U.S. Dept. of Navy	Federal

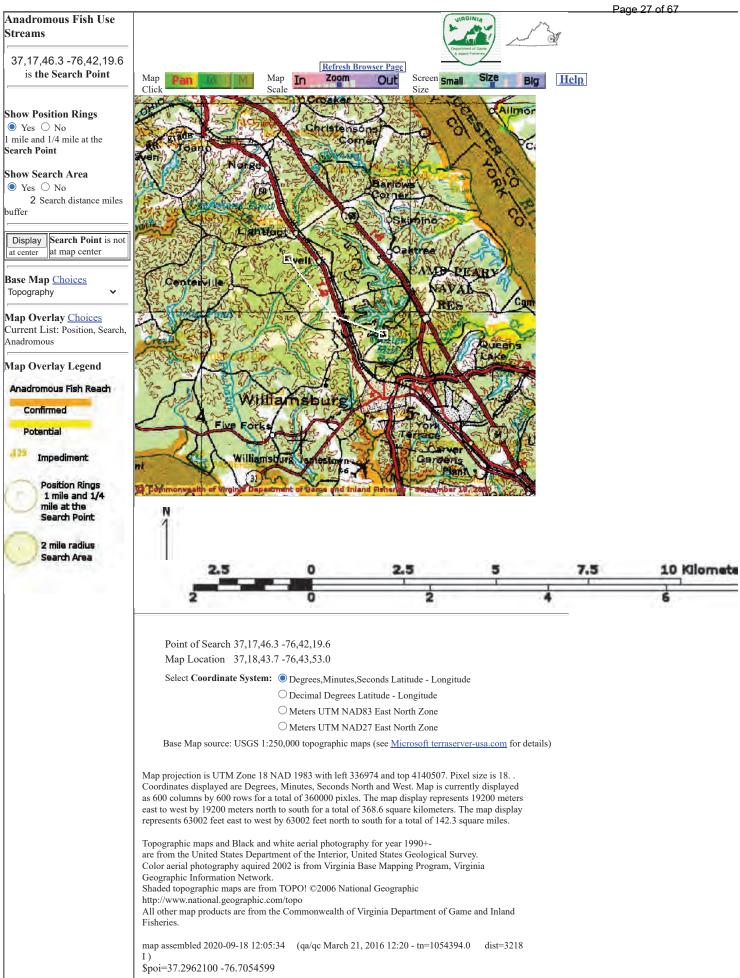
Compiled on 9/18/2020, 12:02:26 PM 1/1054394.0 report=IPA searchType= L dist= 3218 poi= 37.2862100 -76.7054599 sileDD= 37.2962100 -76.7054598;37.2966750 -76.7054598;37.2966750 -76.7054983,37.2906750 -76.7529988,37.325670 -76.7529988,37.325670 -76.7559988,37.32570 -76.7559

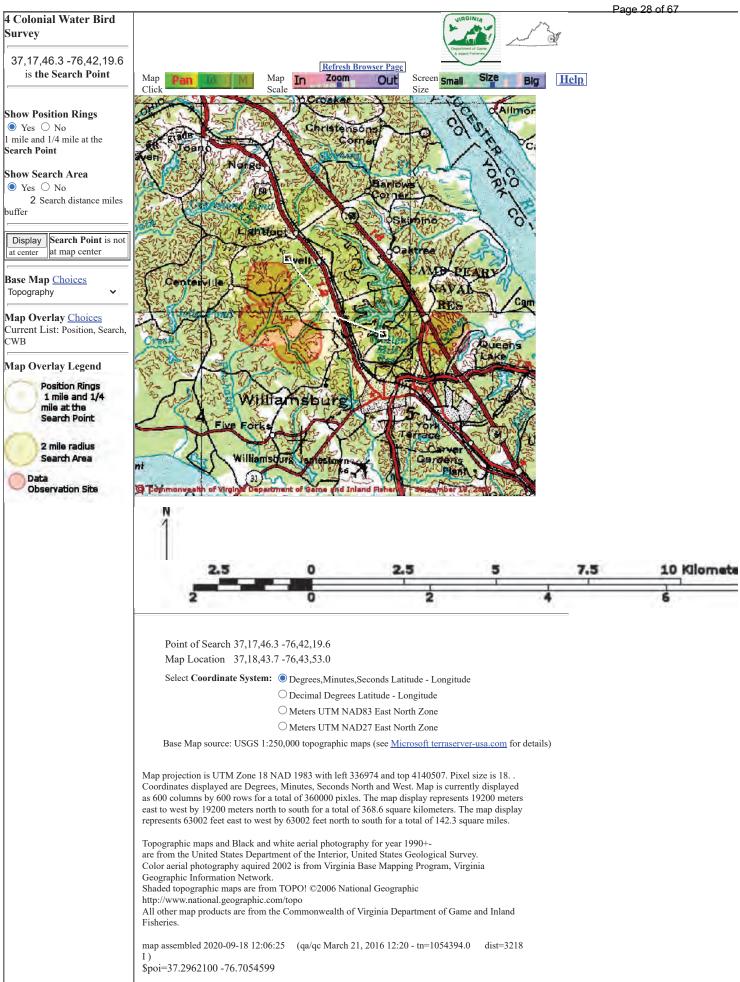
| 9/18/2020, 12:02:26 PM | <u>DGIF</u> | <u>Credits</u> | <u>Disclaimer</u> | Please view our <u>privacy policy</u> | © 1998-2020 Commonwealth of Virginia Department of Game and Inland Fisheries I 1054394

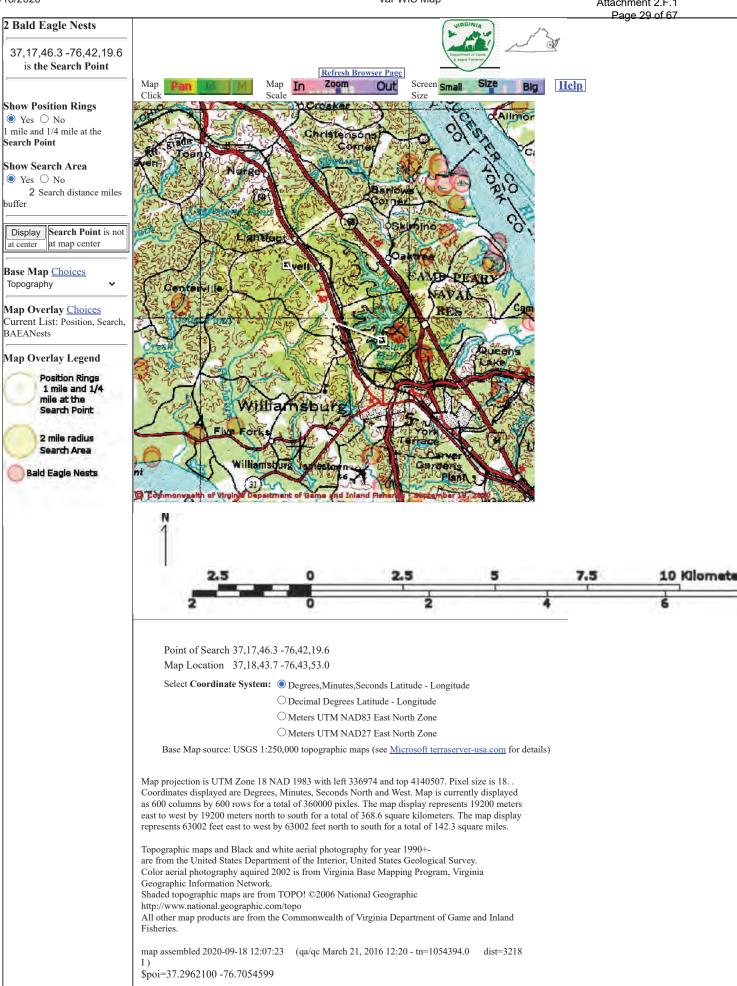
If you have difficulty reading or accessing documents, please $\underline{\textbf{Contact Us}}$ for assistance.











Natural Heritage Resources

Your Criteria

Federal Legal Status: Select All

State Legal Status: Select All

Watershed (8 digit HUC): 02080107 - York River

Subwatershed (12 digit HUC): YO67 - Queen Creek

Search Run: 12/14/2020 14:39:20 PM

Result Summary

Total Species returned: 1

Total Communities returned: 0

Click scientific names below to go to NatureServe report.

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

Virginia Coastal Zone	>-
Statewide Occurrences	09
State Legal Status	Ч
Federal Legal Status State Legal Status	5
State Conservation Status Rank	S5
Global Conservation Status Rank	6263
Scientific Name Linked	
Scientific Name	Isotria medeoloides Isotria medeoloides
Common Name/Natural Community	Queen Creek VASCULAR PLANTS Small Whorled Pogonia

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.

Natural Heritage Resources

Your Criteria

Federal Legal Status: Select All

State Legal Status: Select All

Watershed (8 digit HUC): 02080206 - Lower James River

Subwatershed (12 digit HUC): JL31 - Powhatan Creek

Search Run: 12/14/2020 14:40:55 PM

Search Kun: 12/14/2020 **Result Summary** Total Species returned: 3

Total Communities returned: 0

Click scientific names below to go to NatureServe report.

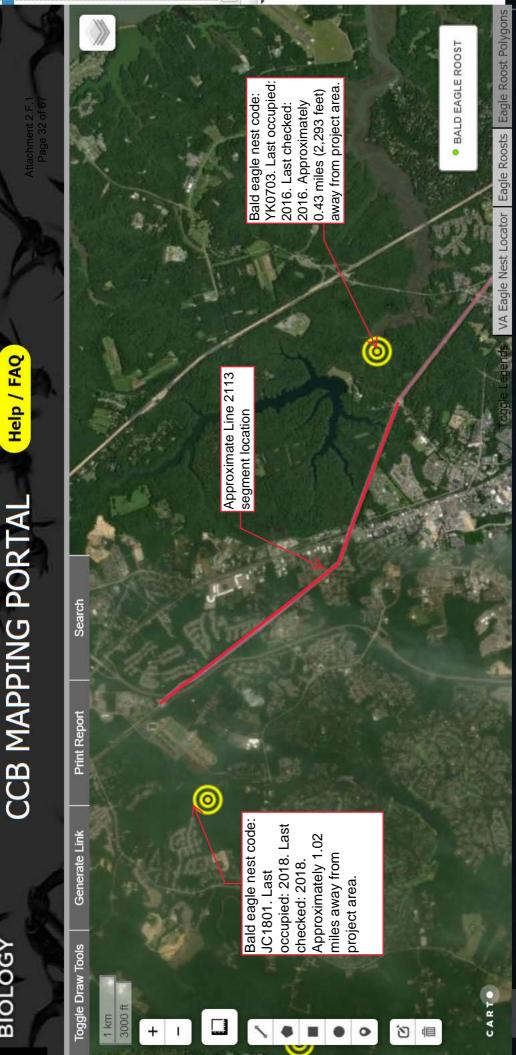
Click column headings for an explanation of species and community ranks.

Virginia Coastal Zone		>	>	>-	
Statewide Occurrences		09	13	37	
Federal Legal Status State Legal Status		E	1	None	
Federal Legal Stat		ᆸ	SOC	SOC	
State Conservation Status Rank		S2	S2	S2	
Global Conservation Status Rank		6263	G2G3	G3T2	
Scientific Name Linked		Isotria medeoloides <u>Isotria medeoloides</u>	Juncus caesariensis Juncus caesariensis G2G3	Trillium pusillum var.	<u>virginianum</u>
Scientific Name		Isotria medeoloides	Juncus caesariensis	Trillium pusillum var.	virginianum
Common Sc Name/Natural Community Lower James	Powhatan Creek VASCULAR PLANTS	Small Whorled Pogonia	New Jersey Rush	Virginia Least	Trillium

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 MAPPING PORTAL Resources What We Do About Us

News Room

Give to CCB

Help / FAQ



LINE #2154 SEGMENT



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 http://www.fws.gov/northeast/virginiafield/



In Reply Refer To: September 18, 2020

Consultation Code: 05E2VA00-2020-SLI-6225

Event Code: 05E2VA00-2020-E-17238

Project Name: Skiffes Creek -- Waller Mill, Line #2154 Transmission Line Rebuild Project

Subject: List of threatened and endangered species that may occur in your proposed project

location, and/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

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (http://www.fws.gov/windenergy/) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm; http://www.towerkill.com; and http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html.

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 Consultation Tracking Number 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

Attachment 2.F.1 Page 37 of 67

Event Code: 05E2VA00-2020-E-17238

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

Consultation Code: 05E2VA00-2020-SLI-6225

Event Code: 05E2VA00-2020-E-17238

Project Name: Skiffes Creek -- Waller Mill, Line #2154 Transmission Line Rebuild

Project

Project Type: TRANSMISSION LINE

Project Description: operation and maintenance work for structures

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/place/37.25640342867458N76.64614608529223W



Counties: James City, VA | Williamsburg, VA | York, VA

Event Code: 05E2VA00-2020-E-17238

Endangered Species Act Species

There is a total of 2 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 Fisheries¹, 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.

1. <u>NOAA Fisheries</u>, 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

Threatened

No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045

Flowering Plants

NAME STATUS

Small Whorled Pogonia Isotria medeoloides

Threatened

No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1890

Critical habitats

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

Attachment 2.F.1
09/18/2020 Event Code: 05E2VA00-2020-E-17238 Page 40 of 67

USFWS National Wildlife Refuge Lands And Fish Hatcheries

Any activity proposed on lands managed by the <u>National Wildlife Refuge</u> 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.



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

Phone: (804) 693-6694 Fax: (804) 693-9032 http://www.fws.gov/northeast/virginiafield/



IPaC Record Locator: 608-23527874 September 18, 2020

Subject: Consistency letter for the 'Skiffes Creek -- Waller Mill, Line #2154 Transmission Line Rebuild Project' project indicating that any take of the northern long-eared bat that may occur as a result of the Action is not prohibited under the ESA Section 4(d) rule

adopted for this species at 50 CFR §17.40(o).

Dear Meagan Moore:

The U.S. Fish and Wildlife Service (Service) received on September 18, 2020 your effects determination for the 'Skiffes Creek -- Waller Mill, Line #2154 Transmission Line Rebuild Project' (the Action) using the northern long-eared bat (*Myotis septentrionalis*) key within the Information for Planning and Consultation (IPaC) system. You indicated that no Federal agencies are involved in funding or authorizing this Action. This IPaC key assists users in determining whether a non-Federal action may cause "take" of the northern long-eared bat that is prohibited under the Endangered Species Act of 1973 (ESA) (87 Stat.884, as amended; 16 U.S.C. 1531 et seq.).

Based upon your IPaC submission, any take of the northern long-eared bat that may occur as a result of the Action is not prohibited under the ESA Section 4(d) rule adopted for this species at 50 CFR §17.40(o). Unless the Service advises you within 30 days of the date of this letter that your IPaC-assisted determination was incorrect, this letter verifies that the Action is not likely to result in unauthorized take of the northern long-eared bat.

Please report to our office any changes to the information about the Action that you entered into IPaC, the results of any bat surveys conducted in the Action area, and any dead, injured, or sick northern long-eared bats that are found during Action implementation.

If your Action proceeds as described and no additional information about the Action's effects on species protected under the ESA becomes available, no further coordination with the Service is required with respect to the northern long-eared bat.

The IPaC-assisted determination for the northern long-eared bat **does not** apply to the following ESA-protected species that also may occur in your Action area:

Small Whorled Pogonia, Isotria medeoloides (Threatened)

You may coordinate with our Office to determine whether the Action may cause prohibited take of the animal species listed above.

[1] Take means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct [ESA Section 3(19)].

Action Description

You provided to IPaC the following name and description for the subject Action.

1. Name

Skiffes Creek -- Waller Mill, Line #2154 Transmission Line Rebuild Project

2. Description

The following description was provided for the project 'Skiffes Creek -- Waller Mill, Line #2154 Transmission Line Rebuild Project':

operation and maintenance work for structures

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/place/37.25640342867458N76.64614608529223W



Determination Key Result

This non-Federal Action may affect the northern long-eared bat; however, any take of this species that may occur incidental to this Action is not prohibited under the final 4(d) rule at 50 CFR §17.40(o).

Determination Key Description: Northern Long-eared Bat 4(d) Rule

This key was last updated in IPaC on **May 15, 2017**. Keys are subject to periodic revision.

This key is intended for actions that may affect the threatened northern long-eared bat.

The purpose of the key for non-Federal actions is to assist determinations as to whether proposed actions are excepted from take prohibitions under the northern long-eared bat 4(d) rule.

If a non-Federal action may cause prohibited take of northern long-eared bats or other ESA-listed animal species, we recommend that you coordinate with the Service.

Determination Key Result

Based upon your IPaC submission, any take of the northern long-eared bat that may occur as a result of the Action is not prohibited under the ESA Section 4(d) rule adopted for this species at 50 CFR §17.40(o).

Qualification Interview

- Is the action authorized, funded, or being carried out by a Federal agency?

 No
- 2. Will your activity purposefully **Take** northern long-eared bats? *No*
- 3. [Semantic] Is the project action area located wholly outside the White-nose Syndrome Zone?

Automatically answered

No

4. Have you contacted the appropriate agency to determine if your project is near a known hibernaculum or maternity roost tree?

Location information for northern long-eared bat hibernacula is generally kept in state Natural Heritage Inventory databases – the availability of this data varies state-by-state. Many states provide online access to their data, either directly by providing maps or by providing the opportunity to make a data request. In some cases, to protect those resources, access to the information may be limited. A web page with links to state Natural Heritage Inventory databases and other sources of information on the locations of northern long-eared bat roost trees and hibernacula is available at www.fws.gov/midwest/endangered/mammals/nleb/nhisites.html.

Yes

5. Will the action affect a cave or mine where northern long-eared bats are known to hibernate (i.e., hibernaculum) or could it alter the entrance or the environment (physical or other alteration) of a hibernaculum?

No

6. Will the action involve Tree Removal?

Yes

7. Will the action only remove hazardous trees for the protection of human life or property? *Yes*

Project Questionnaire

If the project includes forest conversion, report the appropriate acreages below. Otherwise, type '0' in questions 1-3.

1. Estimated total acres of forest conversion:0
2. If known, estimated acres of forest conversion from April 1 to October 31 <i>0</i>
3. If known, estimated acres of forest conversion from June 1 to July 31 <i>0</i>
If the project includes timber harvest, report the appropriate acreages below. Otherwise, type '0' in questions 4-6.
4. Estimated total acres of timber harvest
5. If known, estimated acres of timber harvest from April 1 to October 31 <i>0</i>
6. If known, estimated acres of timber harvest from June 1 to July 31 0
If the project includes prescribed fire, report the appropriate acreages below. Otherwise, type '0' in questions 7-9.
7. Estimated total acres of prescribed fire <i>0</i>
8. If known, estimated acres of prescribed fire from April 1 to October 31 <i>0</i>
9. If known, estimated acres of prescribed fire from June 1 to July 31 <i>0</i>

If the project includes new wind turbines, report the megawatts of wind capacity below. Otherwise, type '0' in question 10.

10. What is the estimated wind capacity (in megawatts) of the new turbine(s)? $\it 0$

Fish and Wildlife Information Service



monwealth of Virginia Governor

Virginia Department of Game and Inland Fisheries

<u>Home</u> » <u>By Coordinates</u> » VaFWIS GeographicSelect Options

Options

Species Information

By Name

By Land Management

References

Geographic Search

Ву Мар

By Coordinates

By Place Name

Database Search

Help

Logout

Show This Page as **Printer Friendly**

VaFWIS Initial Project Assessment Report Compiled on 9/18/2020, 11:23:05 AM

Known or likely to occur within a 2 mile buffer around line beginning 37.2666600 -76.6642899 in 095 James City County, 199 York County, 700 Newport News City, 830 Williamsburg City, VA View Map of Site Location

590 Known or Likely Species ordered by Status Concern for Conservation (displaying first 35) (35 species with Status* or Tier I** or Tier II**)

BOVA Code	Status*	Tier**	Common Name	Scientific Name	Confirmed	Database(s)
030074	FESE	la	Turtle, Kemp's ridley sea	Lepidochelys kempii		BOVA
010032	FESE	lb	Sturgeon, Atlantic	Acipenser oxyrinchus		BOVA
030075	FESE	lc	Turtle, leatherback sea	Dermochelys coriacea		BOVA
040183	FESE		Tern, roseate	Sterna dougallii dougallii		BOVA
030071	FTST	la	Turtle, loggerhead sea	Caretta caretta		BOVA
040144	FTST	la	Knot, red	Calidris canutus rufa		BOVA
050022	FTST	la	Bat, northern long-eared	Myotis septentrionalis	<u>Yes</u>	BOVA,SppObs
040120	FTST	lla	Plover, piping	Charadrius melodus		BOVA
040110	FPSE	la	Rail, eastern black	Laterallus jamaicensis jamaicensis		BOVA,Habitat
050020	SE	la	Bat, little brown	Myotis lucifugus	<u>Yes</u>	BOVA,SppObs
050027	SE	la	Bat, tri-colored	Perimyotis subflavus	<u>Yes</u>	BOVA,SppObs
020052	SE	lla	Salamander, eastern tiger	Ambystoma tigrinum		BOVA
030013	SE	lla	Rattlesnake, canebrake	Crotalus horridus		BOVA
040096	ST	la	Falcon, peregrine	Falco peregrinus		BOVA
040293	ST	la	Shrike, loggerhead	Lanius Iudovicianus		BOVA
040379	ST	la	Sparrow, Henslow's	Centronyx henslowii		Habitat
020044	ST	lla	Salamander, Mabee's	Ambystoma mabeei	<u>Yes</u>	BOVA,Habitat,SppObs
020002	ST	lla	Treefrog, barking	Hyla gratiosa		BOVA
040292	ST		Shrike, migrant loggerhead	Lanius ludovicianus migrans		BOVA
030067	СС	lla	Terrapin, northern diamond-backed	Malaclemys terrapin terrapin	<u>Yes</u>	BOVA,Habitat,SppObs
030063	СС	Illa	Turtle, spotted	Clemmys guttata		BOVA
010077		la	Shiner, bridle	Notropis bifrenatus		BOVA
040040		la	Ibis, glossy	Plegadis falcinellus		BOVA
040306		la	Warbler, golden-winged	Vermivora chrysoptera		BOVA
040052		lla	Duck, American black	Anas rubripes		BOVA
040033		lla	Egret, snowy	Egretta thula		BOVA
040029		lla	Heron, little blue	Egretta caerulea caerulea		BOVA
040036		lla	Night-heron, yellow-crowned	Nyctanassa violacea violacea	<u>Yes</u>	BOVA,SppObs,CWB
040114		lla	Oystercatcher, American	Haematopus palliatus		BOVA
040192		lla	Skimmer, black	Rynchops niger		BOVA
040181		lla	Tern, common	Sterna hirundo		BOVA
040320		lla	Warbler, cerulean	Setophaga cerulea		BOVA

040140	lla	Woodcock, American	Scolopax minor	BOVA
040203	Ilb	Cuckoo, black-billed	Coccyzus erythropthalmus	BOVA
040105	IIb	Rail, king	Rallus elegans	BOVA

To view All 590 species View 590

*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 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.

View Map of All Query Results from All Observation Tables

Bat Colonies or Hibernacula: Not Known

Anadromous Fish Use Streams (6 records)

View Map of All

Anadromous Fish Use Streams

			Alludio	11003 1 1311 030 00	cumo		
			Anadro				
Stream ID	Stream Name	Reach Status	Different Species	Highest TE*	Highest Tier**	View Map	
C32	Halfway creek	Confirmed	1			<u>Yes</u>	
C92	James River 1	Confirmed	6		IV	<u>Yes</u>	
P130	Queen creek	Potential	0			<u>Yes</u>	
P145	Skiffes creek	Potential	0			<u>Yes</u>	
P84	Jones Millpond Creek	Potential	0			<u>Yes</u>	
P86	King Creek	Potential	0			<u>Yes</u>	

Impediments to Fish Passage (9 records)

View Map of All

Fish Impediments

ID	Name	River	View Map
411	BREWERY ROAD DAM	GROVE CREEK	<u>Yes</u>
410	CONFERENCE CENTER DAM	TR-JAMES RIVER	<u>Yes</u>
660	JONES MILL POND	TR-QUEEN CREEK	<u>Yes</u>
409	KINGSMILL DAM	HALFWAY CREEK	<u>Yes</u>
670	QUEENS LAKE DAM	TR-QUEENS CREEK	<u>Yes</u>
766	SKIFFS CREEK DAM	SKIFFS CREEK	<u>Yes</u>
416	TUTTERS NECK POND DAM	TR-HALFWAY CREEK	<u>Yes</u>
658	WALLER MILL DAM	QUEENS CREEK	<u>Yes</u>
668	WILLIAMSBURG COUNTRY CLUB DAM	KING CREEK	<u>Yes</u>

Colonial Water Bird Survey (2 records)

View Map of All Query Results

Colonial Water Bird Survey

Onlaws Name	N Ob -	N Obs Latest Date	N Species			View Men
Colony_Name	N ODS		Different Species	Highest TE*	Highest Tier**	View Map
Queenslake	1	May 10 2003	1		II	<u>Yes</u>
Western Shore, Williamsburg, York	1	May 1 2013	1			<u>Yes</u>

Displayed 2 Colonial Water Bird Survey

Threatened and Endangered Waters

N/A

Managed Trout Streams

N/A

Bald Eagle Concentration Areas and Roosts

are present. View Map of Bald Eagle Concentration Areas and Roosts

(5 records)

BECAR ID	Observation Year	Authority	Туре	Comments
10		Bryan Watts (Center for Conservation Biology)	Roost	Count 15

VaFWIS GeographicSelect Options

Attachment 2.F.1

24	2009	Jeannette Parker (VDGIF)	Roost Page 51 of 6	Count 8
47	2006 - 2007]	Summer Concentration Area	Eagle_use High
49	2006 - 2007]	Summer Concentration Area	Eagle_use Moderate
52	2006 - 2007	Center for Conservation Biology at the College of William and Mary/Virginia Commonwealth University	Winter Concentration Area	Eagle_use Moderate

Bald Eagle Nests (12 records)

<u>View Map of All Query Results</u> <u>Bald Eagle Nests</u>

Nest	N Obs	Letest Date	DGIF		
Nest	N ODS	Latest Date	Nest Status	View Map	
JC0106	3	Jan 1 2002	HISTORIC	<u>Yes</u>	
JC0304	7	Apr 26 2007	HISTORIC	<u>Yes</u>	
JC0305	2	May 1 2003	HISTORIC	<u>Yes</u>	
JC0401	9	Apr 28 2008	Unknown	<u>Yes</u>	
JC0703	4	Apr 23 2008	Unknown	<u>Yes</u>	
JC8703	20	May 10 1999	HISTORIC	<u>Yes</u>	
JC9802	9	Jan 1 2002	HISTORIC	<u>Yes</u>	
YK0204	11	Apr 26 2008	Unknown	<u>Yes</u>	
YK0302	2	May 1 2003	HISTORIC	<u>Yes</u>	
YK0703	4	Apr 26 2008	Unknown	<u>Yes</u>	
YK8601	5	Jan 1 1990	HISTORIC	<u>Yes</u>	
YK9101	1	Jan 1 1991	HISTORIC	<u>Yes</u>	

Displayed 12 Bald Eagle Nests

Habitat Predicted for Aquatic WAP Tier I & II Species

N/A

Habitat Predicted for Terrestrial WAP Tier I & II Species (4 Species) ordered by Status Concern for Conservation

View Map of Combined Terrestrial Habitat Predicted for 4 WAP Tier I & II Species Listed Below

BOVA Code	Status*	Tier**	Common Name	Scientific Name	View Map
040110	FPSE	la	Rail, eastern black	Laterallus jamaicensis jamaicensis	<u>Yes</u>
040379	ST	la	Sparrow, Henslow's	Centronyx henslowii	<u>Yes</u>
020044	ST	lla	Salamander, Mabee's	Ambystoma mabeei	<u>Yes</u>
030067	CC	lla	Terrapin, northern diamond-backed	Malaclemys terrapin terrapin	<u>Yes</u>

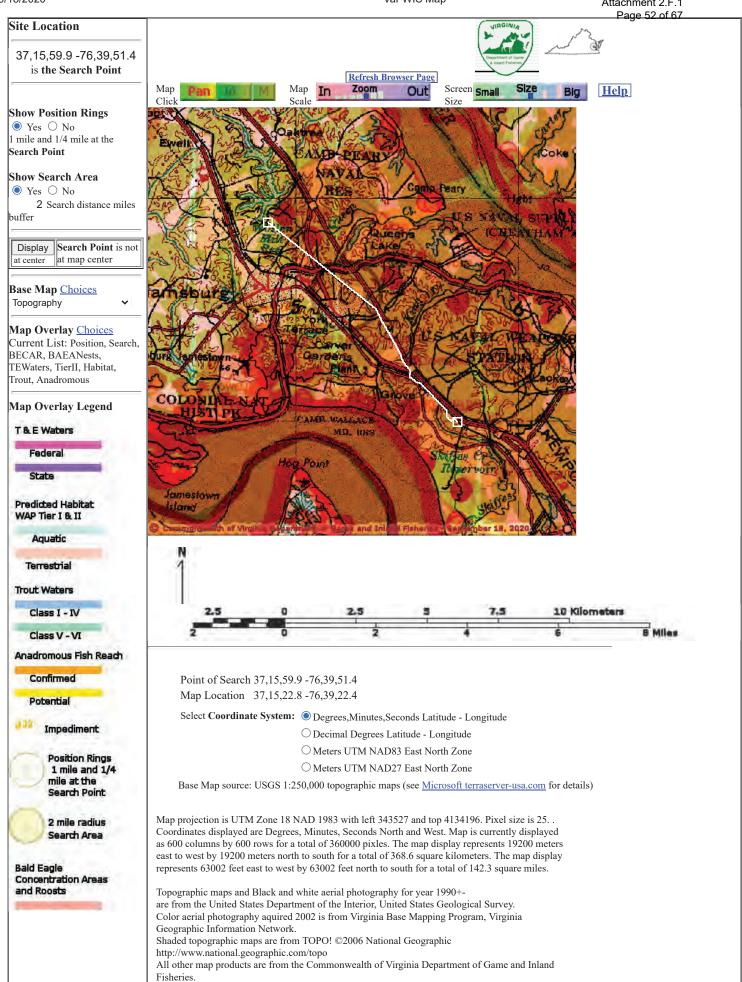
Public Holdings: (5 names)

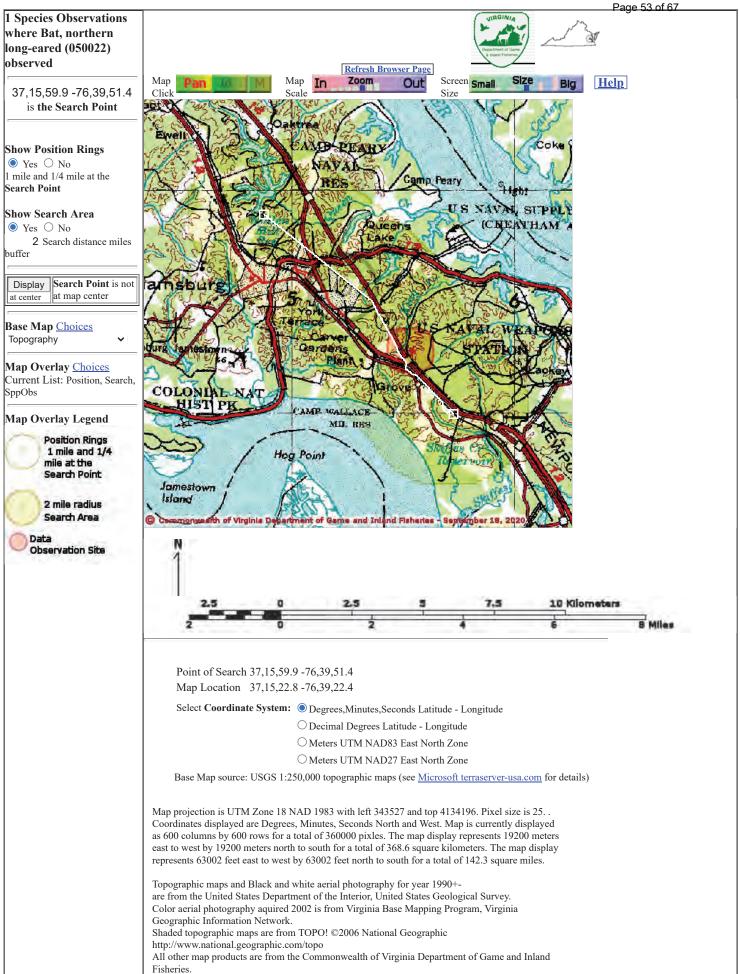
Name	Agency	Level
Colonial National Historical Park	National Park Service	Federal
Camp Peary	U.S. Dept. of Navy	Federal
Cheatam Annex Naval Supply Center	U.S. Dept. of Navy	Federal
Colonial National Historical Parkway	U.S. Dept. of Navy	Federal
Yorktown Naval Weapons Station	U.S. Dept. of Navy	Federal

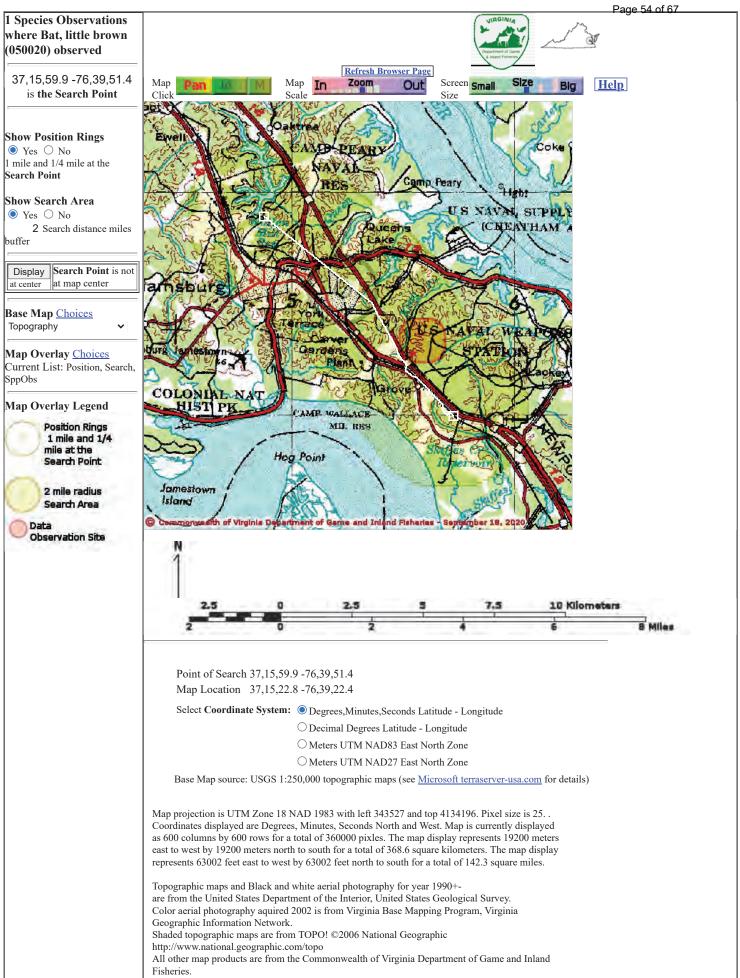
Complied on 9/18/2020, 11/23/05 AM 1105/4380.0 report=PA searchType=L disti-32/16 poi=37/2669600-76.642999 silesOD=37/2167890-76.65074638.37/216900-76.65074638.37/216900-76.615038.37/216

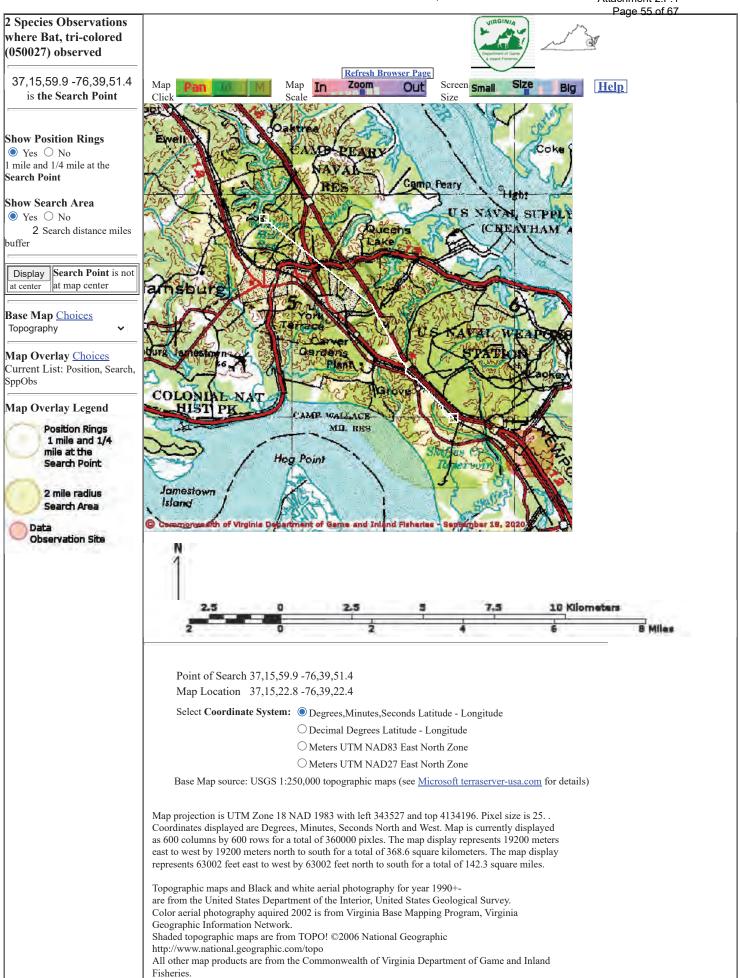
 $\c|$ 9/18/2020, 11:23:05 AM $\c|$ DGIF $\c|$ Credits $\c|$ Disclaimer $\c|$ Please view our privacy policy $\c|$ @ 1998-2020 Commonwealth of Virginia Department of Game and Inland Fisheries I 1054380

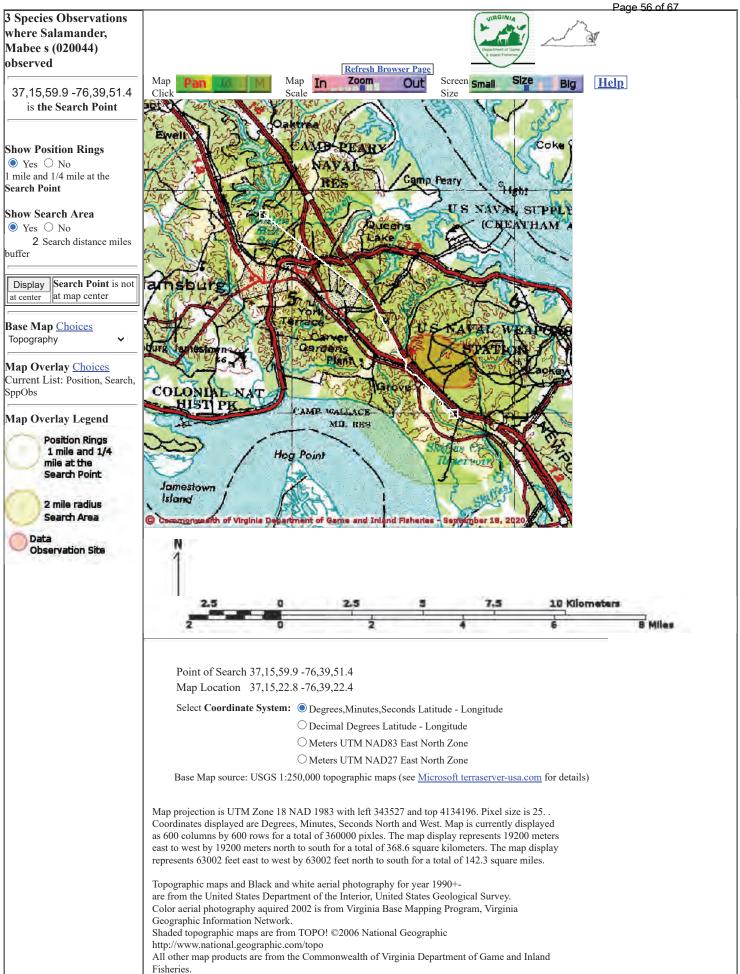
If you have difficulty reading or accessing documents, please $\underline{\textbf{Contact Us}}$ for assistance.

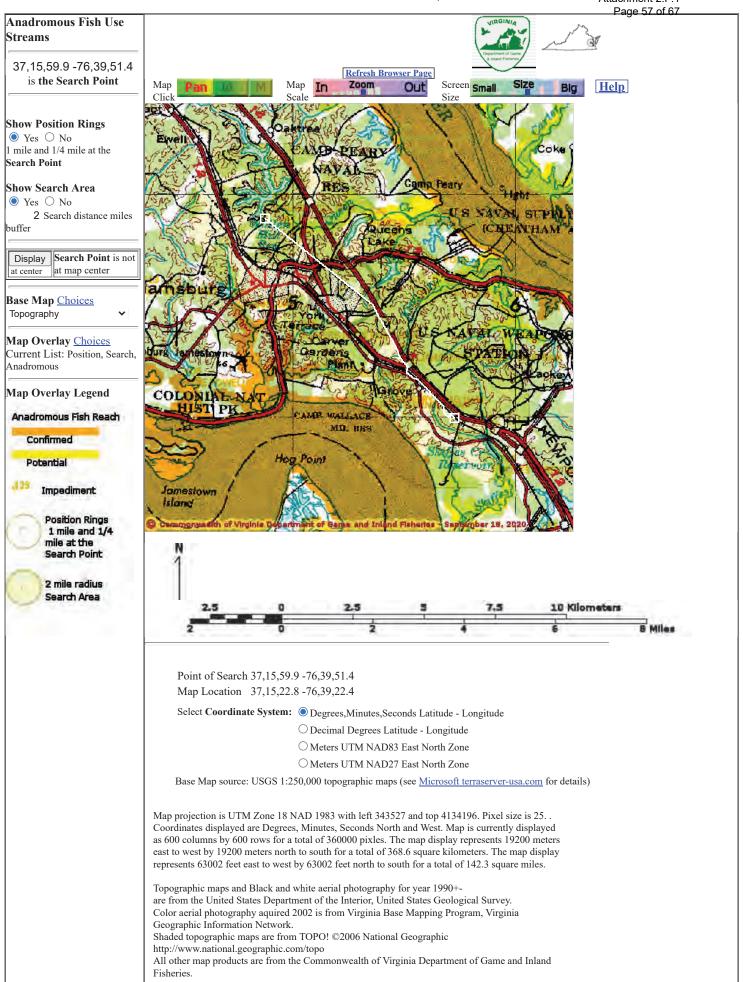


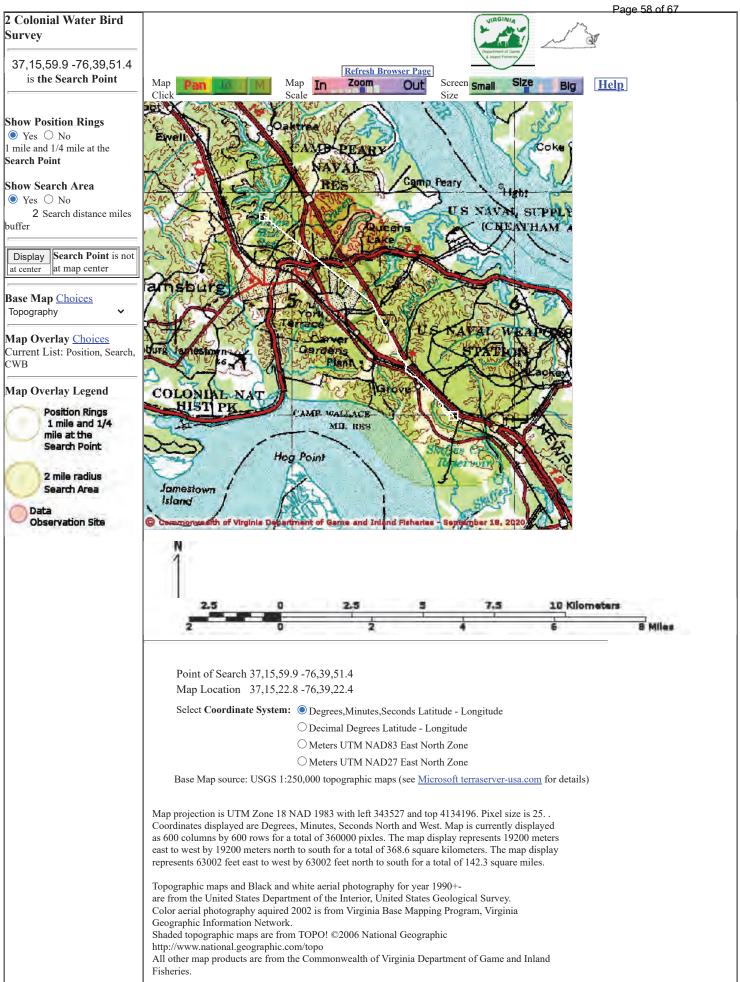


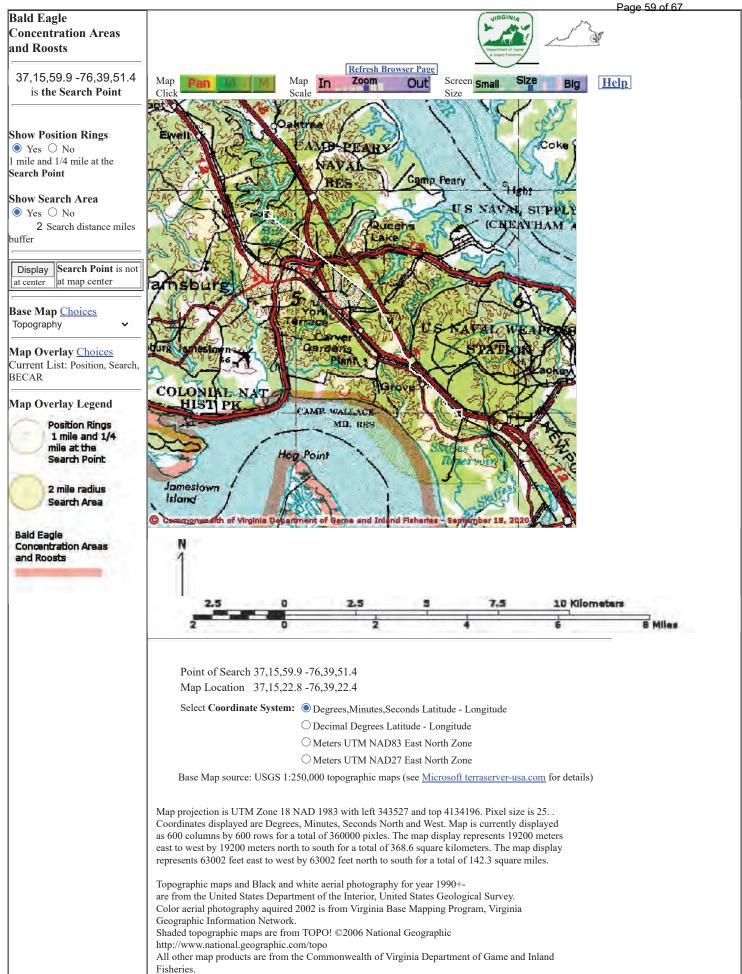


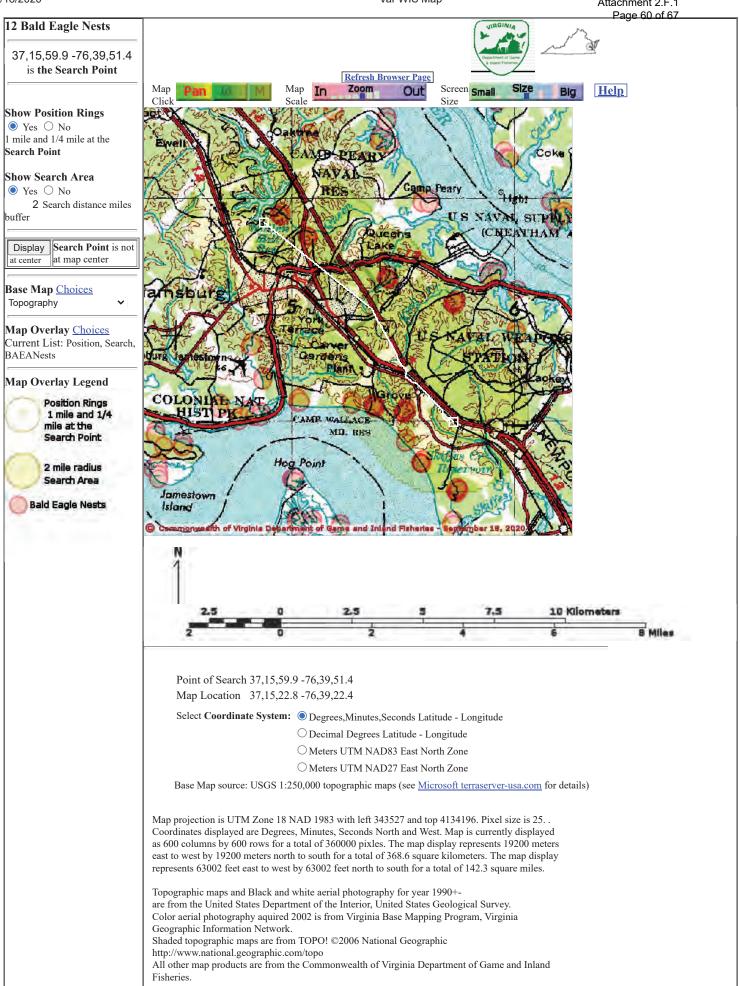












Natural Heritage Resources

Your Criteria

Federal Legal Status: Select All

State Legal Status: Select All

Watershed (8 digit HUC): 02080206 - Lower James River

Subwatershed (12 digit HUC): JL35 - James River-Skiffes Creek

Search Run: 12/14/2020 14:36:19 PM

Result Summary

Total Species returned: 1

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	Scientific Name	Scientific Name	Global Conservation	State Conservation	Federal Legal Status State Legal Status	State Legal Status	Statewide	Virginia Coastal
Name/Natural		Linked	Status Rank	Status Rank			Occurrences	Zone
Community								
Lower James	es							
James River-Skiffes Creek	; Creek							
FISH								
Atlantic Sturgeon	Acipenser	Acipenser	63	S2	_ 当	出	2	>-
	oxyrinchus	<u>oxyrinchus</u>						

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.

Natural Heritage Resources

Your Criteria

Federal Legal Status: Select All

State Legal Status: Select All

Watershed (8 digit HUC): 02080107 - York River

Subwatershed (12 digit HUC): YO67 - Queen Creek, YO68 - York River-Carter Creek-King Creek

Search Run: 12/14/2020 14:38:29 PM

Result Summary

Total Species returned: 2

Total Communities returned: 0

Click scientific names below to go to NatureServe report.

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

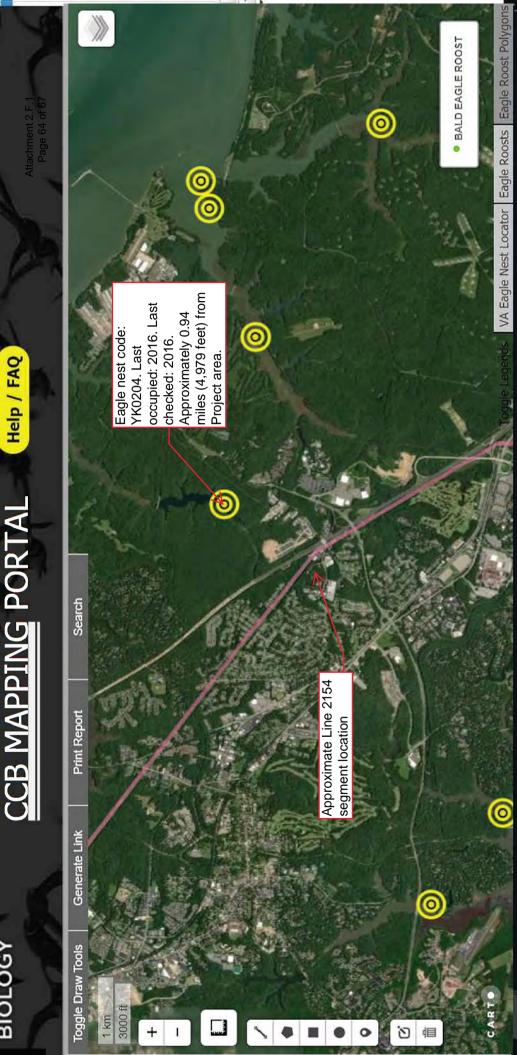
Common	Scientific Name	Scientific Name	Global Conservation	State Conservation	State Conservation Federal Legal Status State Legal Status	Legal Status	Statewide	Virginia Coastal
Name/Natural		Linked	Status Rank	Status Rank			Occurrences	Zone
Community								
York								
Queen Creek								
VASCULAR PLANTS								
Small Whorled	Isotria medeoloides	Isotria medeoloides	G2G3	S2	ᄪ		09	>-
Pogonia								
York River-Carter Creek-King Creek	ek-King Creek							
AMPHIBIANS								
Mabee's Salamander	Ambystoma mabeei	Mabee's Salamander Ambystoma mabeei Ambystoma mabeei G4	G4	S1S2	None LT		18	>

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.









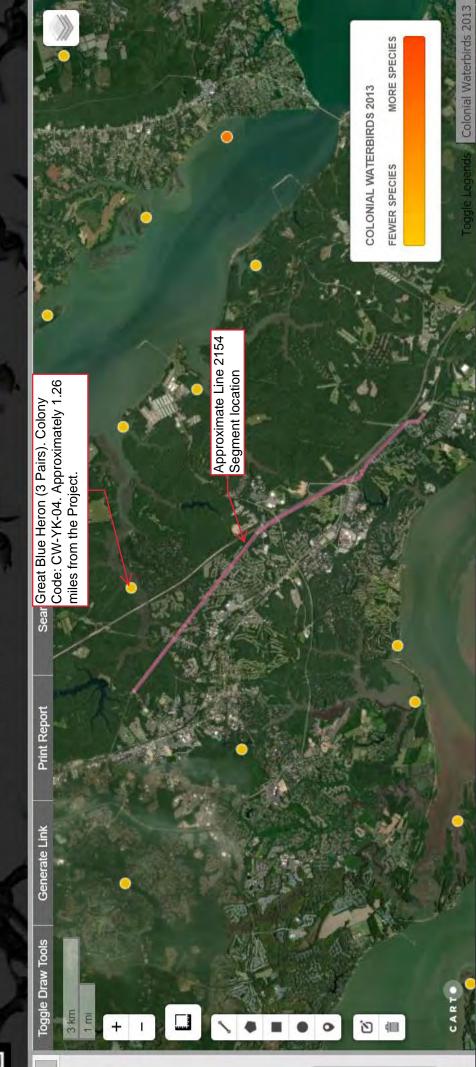
Resources News Room

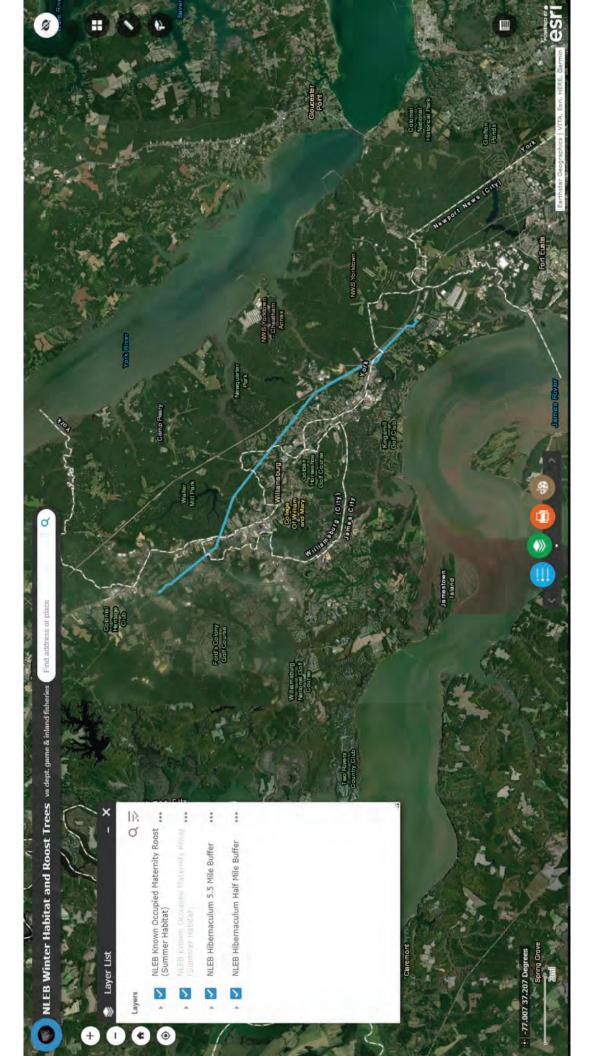
What We Do

About Us

Give to CCB

Help / FAQ CCB MAPPING PORTAL





Attachment 2.F.2 Page 1 of 2

Matthew J. Strickler Secretary of Natural Resources

Clyde E. Cristman Director



Rochelle Altholz Deputy Director of Administration and Finance

Russell W. Baxter
Deputy Director of
Dam Safety & Floodplain
Management and Soil & Water
Conservation

Nathan Burrell
Deputy Director of
Government and Community Relations

Thomas L. Smith Deputy Director of Operations

October 2, 2020

Meagan Moore Stantec Consulting Services, Inc. 5209 Center Street Williamsburg, VA 23188

Re: 203401488, Skiffes Creek-Waller Mill-Lightfoot 230 kV Rebuild

Dear Ms. Moore:

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.

Hog Island Quad, Norge Quad, Williamsburg Quad, Yorktown Quad

Biotics documents the presence of natural heritage resources within the project boundary including a 100ft buffer. However, due to the scope of the activity we do not anticipate that this project will adversely impact these natural heritage resources. Please note, predictive models identifying potential habitat for natural heritage resources intersect the project boundary. However, based on DCR biologist's review of the proposed project a survey is not recommended for the resources.

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 statelisted 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.

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 \$360.00 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 https://vafwis.dgif.virginia.gov/fwis/ or contact Ernie Aschenbach at 804-367-2733 or Ernie.Aschenbach@dwr.virginia.gov.

Should you have any questions or concerns, please contact me at 804-225-2429. Thank you for the opportunity to comment on this project.

Sincerely,

Tyler Meader

Tyle Meade

Natural Heritage Locality Liaison



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;

Dominion Energy (Electric Transmission) – AS&S for ESC and SWM August 12, 2019
Page 2 of 2

- 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, Manager
Office of Stormwater Management

Cc: Amelia Boschen, <u>Amelia.h.boschen@dominionenergy.com</u>
Elizabeth Hester, <u>Elizabeth.l.hester@dominionenergy.com</u>
Stacey Ellis, <u>Stacey.t.ellis@dominionenergy.com</u>

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.



December 7, 2020

Prepared for:

Dominion Energy Virginia Attention: Lane Carr 10900 Nuckols Road, 4th Floor Glen Allen VA 23060 (804) 310-9658

Prepared by:

Ellen M. Brady Cultural Resources Practice Leader

and

Sandra DeChard Senior Architectural Historian

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

Sign-off Sheet

This document entitled Stage I Pre-Application Analysis for the Proposed Dominion Energy Virginia 230 kV Lines #2113 And #2154 Transmission Line Rebuilds and Related Projects, James City and York Counties and the City of Williamsburg, Virginia was prepared by Stantec Consulting Services Inc. ("Stantec") for the account of Dominion Energy Virginia (the "Client"). Any reliance on this document by any third party is strictly prohibited. The material in it reflects Stantec's professional judgment in light of the scope, schedule and other limitations stated in the document and in the contract between Stantec and the Client. 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. In preparing the document, Stantec did not verify information supplied to it by others. Any use which a third party makes of this document is the responsibility of such third party. Such third party agrees that Stantec shall not be responsible for costs or damages of any kind, if any, suffered by it or any other third party as a result of decisions made or actions taken based on this document.

Prepared by	Shada) of dd					
	(signature)					
Sandra DeChard, Senior Architectural Historian						
Prepared by	EllenMBrady					
	(signature)					
Ellen M. Bra	dy, Cultural Resources Practice Leader					
Reviewed by	13 Shit					
·	(signature)					
Brynn Stewa	art, Senior Principal Investigator					
Approved by						
•	(signature)					

Rachel Roberts, Senior Regulatory Specialist

Table of Contents

EXE	CUTIVE SU	JMMARY	I
ABB	REVIATIO	NS	VI
1.0	INTROD	UCTION	1.1
1.1	OVERVI	EW	1.1
1.2	PROJEC	CT COMPONENTS	1.2
	1.2.1		1.2
	1.2.2		
1.3	STAGE	I PRE-APPLICATION ANALYSIS	1.6
2.0	BACKG	ROUND RESEARCH	2.1
2.1		S OF THE BACKGROUND RESEARCH	
	2.1.1	Architectural Resources	
	2.1.2	Archaeological Resources	
	2.1.3	Summary of Background Research Per Project	2.3
3.0		I PRE-APPLICATION ANALYSIS RESULTS	
3.1		EFFECTS METHODOLOGY	
3.2		UAL ARCHITECTURAL RESOURCES CONSIDERED	
	3.2.1	Carter's Grove Plantation (DHR #047-0001)	3.2
	3.2.2	Colonial Parkway (DHR #047-0002)/Colonial National Historic Park (DHR #099-5241)	3.7
	3.2.3	Chesapeake & Ohio Railroad (DHR #121-5134)	3.12
	3.2.4	Bruton Parish Church (DHR #137-0007)	3.18
	3.2.5	Peachy/Peyton Randolph House (DHR #137-0032)	3.22
	3.2.6	James Semple House (DHR #137-0033)	
	3.2.7	George Wythe House (DHR #137-0058)	
3.3	HISTOR	IC DISTRICTS CONSIDERED	3.34
	3.3.1	Old College Yard (College of William & Mary) Historic District (DHR	
		#137-0013)	3.34
	3.3.2	Williamsburg Historic District (DHR #137-0050)	
3.4	BATTLE 3.4.1	FIELD RESOURCES CONSIDEREDBattle of Fort Magruder/Battle of Williamsburg (DHR #099-5282/ABPF	
	J. 4 . I	VA 010)	
4.0	CONCL	USIONS	
4.1	OVERVI		
	4.1.1	Recommendations - Architectural Resources.	
	4.1.2	Recommendations - Archaeological Resources	
5.0	REFERE	ENCES	5.1
LIST	OF TABLE	ES	
Table	e 1 Structui	e Heights: Line #2154 Rebuild Project	1.2

Table 2 Structure Heights: Line #2113 Rebuild Project	1.5
Table 3 Study Areas as Defined by DHR Guidelines for Transmission Lines	2.1
Table 4 Previously Recorded Architectural Resources Considered under the Stage I Pre-	
Application Guidelines	2.2
Table 5 Previously Recorded Archaeological Resources Considered under the Stage I	
Pre-Application Guidelines	2.3
Table 6 Architectural and Archaeological Resources Considered During the Stage I –	
Line #2154	2.4
Table 7 Architectural and Archaeological Resources Considered During the Stage I –	٥.
Line #2113	2.5
Table 8 Battlefield Resources Considered under the Stage I Pre-Application Guidelines	3.44
Table 9 Previously Recorded Architectural Resources Considered under the Stage I Pre-	4.3
Application Guidelines Table 10 Previously Recorded Archaeological Resources Considered under the Stage I	4.3
Pre-Application Guidelines	4.4
Fie-Application Guidelines	4.4
LIST OF FIGURES	
	4.0
Figure 1 Location of the Line #2113 and #2154 Transmission Line Rebuild Projects	1.8
Figure 2 Carter's Grove Plantation (DHR #047-0001), View Looking Southwest	3.2
(Photograph taken during a Previous Survey) Figure 3 View from Carter's Grove (Photo Location 93) Looking North towards the	3.2
Existing Transmission Line. The Existing Line is Not Visible	3 /
Figure 4 View from Carter's Grove (Photo Location 93) Looking Northeast towards the	3.4
Existing Transmission Line. The Existing Line is Not Visible	3.4
Figure 5 View from Carter's Grove (Photo Location 93) Looking East towards the	
	3.5
Figure 6 Viewshed Analysis and Photo Location Map for Carter's Grove Plantation (DHR	
#047-0001)	3.6
Figure 7 Colonial Parkway (DHR #047-0002) and Colonial National Historic Park (DHR	
#099-5241), View Looking East	3.7
Figure 8 View from Colonial Parkway and Colonial National Historic Park (Photo	
Location OP 3 – See Appendix D) Looking West towards the Existing	
Transmission Line	3.9
Figure 9 View from Colonial Parkway and Colonial National Historic Park (Photo	
Location 85) Looking West towards the Existing Transmission Line. Existing	
Line is Not Visible.	3.9
Figure 10 View from Colonial Parkway and Colonial National Historic Park (Photo	
Location 85) Looking West towards the Existing Transmission Line. Existing	0.40
Line is Not Visible.	3.10
Figure 11 Viewshed Analysis and Photo Location Map for the Colonial Parkway (DHR	2 44
#047-0002) and Colonial National Historic Park (DHR #099-5241)	
Figure 12 View of the Chesapeake & Ohio Railroad (DHR #121-5134)	3.12
Figure 13 View from Chesapeake & Ohio Railroad and Battle of Fort Magruder (Photo Location 90) Looking South towards the Existing Transmission Line #2154. The	
Existing Line is Not Visible	3 1/
Existing Line is that visible	0. 14

Figure 14 View from Chesapeake & Ohio Railroad (Photo Location 1) Looking	
Southeast towards the Existing Transmission Line #2113. The Existing Line is	
Not Visible	3.14
Figure 15 View from Chesapeake & Ohio Railroad (Photo Location 2) Looking Southeast	
towards the Existing Transmission Line #2113. The Existing Line is Visible	3.15
Figure 16 Viewshed Analysis and Photo Location Map for the Chesapeake & Ohio	
Railroad (DHR #121-5134)	3.16
Figure 17 Viewshed Analysis and Photo Location Map for the Chesapeake & Ohio	
Railroad (DHR #121-5134)	3.17
Figure 18 View of Bruton Parish Church (DHR #137-0007), Looking East	3.18
Figure 19 View from Bruton Parish Church, Williamsburg Historic District, and Battle of	
Fort Magruder/Battle of Williamsburg (Photo Location 50) Looking North	
towards the Existing Transmission Line. The Existing Line is Not Visible	3.19
Figure 20 View from Bruton Parish Church, Williamsburg Historic District, and Battle of	
Fort Magruder/Battle of Williamsburg (Photo Location 50) Looking Northeast	
towards the Existing Transmission Line. The Existing Line is Not Visible	3.20
Figure 21 Viewshed Analysis and Photo Location Map for Bruton Parish Church (DHR	
#137-0007)	3.21
Figure 22 View of the Peachy House/Peyton Randolph House (DHR #137-0032),	
Looking North	3.22
Figure 23 View from Peachy House/Peyton Randolph House, Williamsburg Historic	
District, and Battle of Fort Magruder/Battle of Williamsburg (Photo Location 72)	
Looking North towards the Existing Transmission Line. The Existing Line is Not	
Visible	3.23
Figure 24 View from Peachy House/Peyton Randolph House, Williamsburg Historic	
District, and Battle of Fort Magruder/Battle of Williamsburg (Photo Location 72)	
Looking Northeast towards the Existing Transmission Line. The Existing Line is	
Not Visible	3.24
Figure 25 Viewshed Analysis and Photo Location Map for Peachy House/Peyton	
Randolph House (DHR #137-0032).	3.25
Figure 26 View of the James Semple House (DHR #137-0033), Looking Southeast	3.26
Figure 27 View from the James Semple House, Williamsburg Historic District, and Battle	
of Fort Magruder/Battle of Williamsburg (Photo Location 80) Looking North	
towards the Existing Transmission Line. The Existing Line is Not Visible	3.27
Figure 28 View from the James Semple House, Williamsburg Historic District, and Battle	
of Fort Magruder/Battle of Williamsburg (Photo Location 80) Looking Northeast	
towards the Existing Transmission Line. The Existing Line is Not Visible	.3.28
Figure 29 Viewshed Analysis and Photo Location Map for the James Semple House	
	3.29
Figure 30 View of the George Wythe House (DHR #137-0058), Looking West	.3.30
Figure 31 View from the George Wythe House, Williamsburg Historic District, and Battle	
of Fort Magruder/Battle of Williamsburg (Photo Location 52) Looking North	
towards the Existing Transmission Line. The Existing Line is Not Visible	3.31
Figure 32 View from George Wythe House, Williamsburg Historic District, and Battle of	
Fort Magruder/Battle of Williamsburg (Photo Location 52) Looking Northeast	
towards the Existing Transmission Line. The Existing Line is Not Visible	.3.32
Figure 33 Viewshed Analysis and Photo Location Map for the George Wythe House	
(DHR #137-0058)	3 33

Figure 34 View of Old College Yard (DHR #137-0013) Looking West	3.34
Figure 35 View from Old College Yard and Battle of Fort Magruder/Battle of	
Williamsburg (Photo Location 104) Looking East towards the Existing	
Transmission Line. The Existing Line is Not Visible.	3.36
Figure 36 Viewshed Analysis and Photo Location Map of the Old College Yard (College	
of William & Mary) Historic District (DHR #137-0013).	3.37
Figure 37 View from Williamsburg Historic District and Battle of Fort Magruder/Battle of	
Williamsburg (Photo Location 60) Looking East towards the Existing	
Transmission Line. The Existing Line is Not Visible.	3.39
Figure 38 View from Williamsburg Historic District and Battle of Fort Magruder/Battle of	
Williamsburg (Photo Location 60) Looking North towards the Existing	
Transmission Line. The Existing Line is Not Visible.	3.40
Figure 39 View from Williamsburg Historic District and Battle of Fort Magruder/Battle of	
Williamsburg (Photo Location 69) Looking East towards the Existing	
Transmission Line. The Existing Line is Not Visible.	3.40
Figure 40 View from Williamsburg Historic District and Battle of Fort Magruder/Battle of	
Williamsburg (Photo Location 76) Looking East towards the Existing	
Transmission Line. The Existing Line is Not Visible.	3.41
Figure 41 View from Williamsburg Historic District and Battle of Fort Magruder/Battle of	
Williamsburg (Photo Location 83) Looking East towards the Existing	
Transmission Line. The Existing Line is Not Visible.	3.41
Figure 42 View from Williamsburg Historic District and Battle of Fort Magruder/Battle of	
Williamsburg (Photo Location 35) Looking Northeast towards the Existing	
Transmission Line. The Existing Line is Not Visible.	3.42
Figure 43 Viewshed Analysis and Photo Location Map of the Williamsburg Historic	
District (DHR #137-0050)	3.43
Figure 44 View from Battle of Fort Magruder/Battle of Williamsburg (Photo Location 18)	
Looking North towards the Existing Transmission Line. The Existing Line is Not	0.40
Visible	3.46
Figure 45 View from Battle of Fort Magruder/Williamsburg Battlefield (Photo Location 47)	
Looking Northeast toward the Existing Transmission Line. The Existing Line is	0.47
Not Visible	3.47
Figure 46 View from Battle of Fort Magruder/Williamsburg Battlefield (Photo Location 45)	
Looking North toward the Existing Transmission Line. The Existing Line is Not	2 47
Visible	3.47
Figure 47 View from Battle of Fort Magruder/Williamsburg Battlefield (Photo Location 43)	
Looking North toward the Existing Transmission Line. The Existing Line is	3.48
VisibleFigure 48 View from Battle of Fort Magruder/Williamsburg Battlefield (Photo Location 24)	3.40
Looking North toward the Existing Transmission Line. The Existing Line is Not	
Visible	3.48
Figure 49 View from Battle of Fort Magruder/Williamsburg Battlefield (Photo Location 10)	3.40
Looking North toward the Existing Transmission Line. The Existing Line is Not	
Visible	3.49
Figure 50 View from Battle of Fort Magruder/Williamsburg Battlefield (Photo Location 14)	5.49
Looking North toward the Existing Transmission Line. The Existing Line is Not	
Visible	3 40
, IVINIO	

Looking So	Battle of Fort Magruder/Williamsburg Battlefield (Photo Location 97) buth toward the Existing Transmission Line. The Existing Line is Not	3 50
Figure 52 View from 103) Lookir	Battle of Fort Magruder/Williamsburg Battlefield (Photo Location ng South toward the Existing Transmission Line. The Existing Line is	3.50
103) Lookir	Battle of Fort Magruder/Williamsburg Battlefield (Photo Location ng West toward the Existing Transmission Line. The Existing Line is	3.51
Figure 54 Viewshed	Analysis and Photo Location Map of Battle of Fort Magruder/Battle burg (DHR #099-5282).	
LIST OF APPENDIC	CES	
APPENDIX A S	TRUCTURE DETAILS AND STRUCTURE LOCATION MAPS	A.1
	RCHITECTURAL RESOURCE MAPS – LINE #2113 AND #2154 NSMISSION LINE REBUILDS AND RELATED PROJECTS	B.1
	RCHAEOLOGICAL RESOURCE MAPS – LINE #2113 AND #2154 NSMISSION LINE REBUILDS AND RELATED PROJECTS	C.1
#2113 AND #	IEWSHED MAPS AND OP PHOTOGRAPH LOCATIONS – LINE #2154 230KV TRANSMISSION LINE REBUILDS AND RELATED	D.1
APPENDIX E PI	HOTO SIMULATIONS FOR SELECT LOCATIONS	E.1

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 rebuild of Lines #2113 and #2154 in York and James City Counties and the City of Williamsburg (collectively, the "Rebuild Projects"). The Rebuild Projects will entail the following:

Line #2154 Rebuild Project

- Rebuild 7.6 miles of 230 kV Line #2154 between Waller Substation and Structure #2154/482 (near Skiffes Creek Switching Station);
- Remove 6.1 miles of idle 115 kV Line #58 between Waller Substation and Kingsmill Substation;
- Rebuild 1.5 miles of 115 kV Line #19 between Kingsmill Substation and Structure #2154/482;
- Related substation work at Waller, Penniman, and Kingsmill Substations and Skiffes Creek Switching Station.

Line #2113 Rebuild Project

- Rebuild 3.8 miles of 230 kV Line #2113 between Lightfoot Substation and Waller Substation;
- Remove 3.8 miles of idle 115 kV Line #58 between Lightfoot Substation and Waller Substation;
 and
- Related substation work at Lanexa, Lightfoot, and Waller Substations.

No additional right-of-way (ROW) is required. In order to maintain the structural integrity and reliability of its transmission system and perform needed maintenance on its existing facilities, Dominion Energy proposes to rebuild, pending final approval by the State Corporation Commission (SCC), entirely within existing ROW, approximately 11.4 miles of existing transmission lines in James City and York counties and the City of Williamsburg. Dominion proposes to remove and replace 99 existing transmission support structures, mainly wood H-frame structures, associated foundations, and overhead conductor wire with weathering steel double-circuit 230 kV structures as part of the Rebuild Projects. All proposed structure heights and locations provided in this report are based upon preliminary engineering and are subject to final design.

Background research for the Stage I Pre-Application Analysis was conducted in June 2020 by Stantec staff. The preliminary background research and a 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 for each line; NRHP-eligible sites located within a 0.5-mile radius of the project centerline for each line; and archaeological sites located within the project right-of-way (ROW) for each line. Fourteen previously recorded architectural resources were identified for inclusion in the Stage I analysis. Two of the 14 resources have been demolished and therefore no longer required visual effects evaluation. One resource was identified as significant as an archaeological site and therefore no visual effects assessment was conducted. As the study was completed prior to filing a SCC application, all digital images for the resources under consideration were taken from public ROW and/or Dominion Energy property or easements. Additionally, 12 previously recorded archaeological resources within the ROW were identified during this phase of the project.

Recommendations

Architectural Resources

Line #2154 Rebuild Project

Seven NHL-listed architectural resources are located within the 1.5-mile buffer and include Carter's Grove Plantation (DHR 047-0001), Bruton Parish Church (DHR #137-0007), Old College Yard Historic District (DHR #137-0013), Peachy House (DHR #137-0032), James Semple House (DHR #137-0033), Williamsburg Historic District (DHR #137-0050), and the George Wythe House (DHR #137-0058). Four of the NHL-listed resources are also contributing resources to the NHL-listed Williamsburg Historic District. Two NRHP-listed resources, Colonial Parkway (DHR #047-0002) and the Colonial National Historic Park (DHR #099-5241), were identified within the 1.0-mile buffer, and three NRHP-eligible resources. Confederate Redoubt #9 (DHR #099-0040), Chesapeake & Ohio Railroad (DHR #121-5134), and Capitol Landing (DHR #137-0056), were identified within the 0.5-mile buffer. A single battlefield was also identified, the NRHP-potentially eligible Battle of Fort Magruder/Battle of Williamsburg (DHR #099-5282), which also falls within 1.0 mile. Additionally, one NRHP listed resource, Bryan Manor Plantation (DHR #099-0065), located within 1.0 mile of the centerline, and one NRHP-eligible resource, Confederate Redoubt #9, located within 0.5 mile of the centerline, have been demolished. Four resources cross the project limits: Colonial Parkway, Colonial National Historic Park, Battle of Fort Magruder/Battle of Williamsburg, and the Chesapeake & Ohio Railroad. One resource, Capitol Landing (DHR #137-0056), was identified within 0.5-mile of the Line #2154 Rebuild Project centerline; however, the resource is significant as an archaeological site and therefore no visual effects assessment was conducted.

Based on preliminary engineering, the height of the proposed structures would decrease by approximately 9 feet (maximum) below the existing structure heights and increase to approximately 29 (maximum) feet over existing structure height. Based on the analysis, it is recommended that the Line #2154 Rebuild Project would have No Visual Impact to Carter's Grove Plantation (DHR #047-0001), Bruton Parish Church (DHR #137-0007), Old College Yard (DHR #137-0013), Peachy House/Peyton Randolph House (DHR #137-0032), James Semple House (VHDR #137-0033), Williamsburg Historic District (DHR #137-0050), and the George Wythe House (DHR #137-0058). The proposed Line #2154 Rebuild Project would have a Minimal Impact to the Colonial Parkway (DHR #047-0002), Colonial National Historic Park (DHR #099-5241), Battle of Fort Magruder/Battle of Williamsburg (DHR #099-5282), and Chesapeake & Ohio Railroad (DHR #121-5134).

Line #2113 Rebuild Project

One NHL-listed architectural resource, the Williamsburg Historic District (DHR #137-0050), is located within the 1.5-mile buffer. No NRHP-listed resources were identified within 1.0 mile of the transmission line centerline. One NRHP-eligible resource, the Chesapeake & Ohio Railroad (DHR #121-5134), was identified within 0.5 mile and also crosses the project ROW. A single battlefield, the NRHP-potentially eligible Battle of Fort Magruder/Battle of Williamsburg (DHR #099-5282), was also identified within 1.0 mile of the centerline.

Based on preliminary engineering, the height of the proposed structures would decrease by approximately 2 feet (maximum) below the existing structure heights and increase to approximately 14 (maximum) feet over existing structure height. Based on the analysis, it is recommended that the Line #2154 Rebuild Project would have No Visual Impact to the Battle of Fort Magruder/Battle of Williamsburg (DHR #099-5282) and the Williamsburg Historic District (DHR #137-0050). The proposed Line #2154 Rebuild Project would have a Minimal Visual Impact to the Chesapeake & Ohio Railroad (DHR #121-5134).

The following table details the potential impacts to historic resources for both the Line #2113 Rebuild Project and the Line #2154 Rebuild Project.

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

DHR#	Resource Name	DHR/NRHP Status	Rebuild Project	Distance to Line (Feet)	Impact
047-0001	Carter's Grove Plantation, 8797 Pocahontas Trail	Listed on the NHL in 1970; Listed on the NRHP in 1969	Line #2154	2,474	None
047-0002	Colonial Parkway	Listed on the NRHP in 1966; Addendum 2001	Line #2154	0	Minimal
099-5241	Colonial National Historic Park	Listed on the NRHP in 1966	Line #2154	0	Minimal
099-5282	Battle of Fort Magruder/Battle of Williamsburg	Determined Potentially Eligible by DHR in 2007, 2013, 2015 and 2019	Line #2154	0	Minimal
			Line #2113	4,531	None
121-5134	Chesapeake & Ohio Railroad	Determined Eligible for Listing on the	Line #2154	0	Minimal
		NRHP by DHR in 2015, 2019, and 2020	Line #2113	0	Minimal
137-0007	Bruton Parish Church, Duke of Gloucester Street	Listed on the NHL and on the NRHP in 1970	Line #2154	6,456	None
137-0013	Old College Yard (College of William & Mary) Historic District, 111 Jamestown Road	Listed on the NHL in 1960; Listed on the NRHP in 1966 and 1986	Line #2154	7.620	None

DHR#	Resource Name	DHR/NRHP Status	Rebuild Project	Distance to Line (Feet)	Impact
137-0032	Peachy House/Peyton Randolph House, Nicolson & North England Streets	Listed on the NHL and on the NRHP in 1970	Line #2154	5,451	None
137-0033	James Semple House, 506 Francis Street	Listed on the NHL and on the NRHP in 1970	Line #2154	5,073	None
	Williamsburg Historic District Listed on the NHL in 1960; Listed on the NRHP in 1966	Line #2154	4,029	None	
		,	Line #2113	7,479	None
137-0058	George Wythe House, Palace Green	Listed on the NHL and on the NRHP in 1970	Line #2154	6,309	None

Archaeological Resources

Line #2154 Rebuild Project

Twelve previously recorded archaeological resources were identified during the background research. Two sites, a Middle Woodland Camp and eighteenth-century farmstead (44JC1044) and a dam/road (44YO0541), have been determined potentially eligible for listing on the NRHP by DHR. A third site, a seventeenth century gallows (44WB0066), has been determined eligible by DHR for listing on the NRHP. The remaining nine sites have not been evaluated for NRHP eligibility. *An archaeological survey of areas subject to land disturbance during construction is recommended as part of a Stage II analysis.*

Line #2113 Rebuild Project

Five previously recorded archaeological resources were identified during the background research. Two sites, a Woodland site (44JC0369) and an indeterminate prehistoric site (44JC0466), were determined potentially eligible for listing on the NRHP. The remaining three sites, an indeterminate prehistoric site (44JC1304) and two sections of a late eighteenth-century camp site (44JC0133-0001 and 44JC0133-0002) have not been evaluated for listing on the NRHP by DHR. *An archaeological survey of areas subject to land disturbance during construction is recommended as part of a Stage II analysis.*

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

DHR#	Resource Name	DHR/NRHP Status	Within ROW of Rebuild Project	Impact
44JC0369	Woodland Site; Indeterminate	Determined Potentially Eligible for Listing on the NRHP by DHR in 1988	Line #2113	Avoid During Construction or Investigate During Archaeological Survey
44JC0466	Prehistoric; Indeterminate	Determined Potentially Eligible for Listing on the NRHP by DHR in 1988	Line #2113	Avoid During Construction or Investigate During Archaeological Survey

DHR#	Resource Name	DHR/NRHP Status	Within ROW of Rebuild Project	Impact
44JC1044	Middle Woodland Camp and Artifact Scatter; 18 th Century Farmstead	Determined Potentially Eligible for Listing on the NRHP by DHR in 2001	Line #2154	Avoid During Construction or Investigate During Archaeological Survey
44JC1301	18 th Century Domestic Site	Not Evaluated	Line #2154	Avoid During Construction or Investigate During Archaeological Survey
44JC1303	Indeterminate Woodland Site; Indeterminate 20 th Century Site	Not Evaluated	Line #2154	Avoid During Construction or Investigate During Archaeological Survey
44JC1304	Prehistoric; Indeterminate	Not Evaluated	Line #2113	Avoid During Construction or Investigate During Archaeological Survey
44WB0066	17 th Century Gallows Site	Determined Eligible for Listing on the NRHP by DHR in 1992	Line #2154	Avoid During Construction or Investigate During Archaeological Survey
44WB0133- 0001	4 th Quarter of the 18 th Century Camp	Not Evaluated	Line #2113	Avoid During Construction or Investigate During Archaeological Survey
44WB0133- 0002	4th Quarter of the 18th Century Camp	Not Evaluated	Line #2113	Avoid During Construction or Investigate During Archaeological Survey
44YO0220	Indeterminate 18 ^{th,} 19 th and 20 th Century Site; Civil War Site	Not Evaluated	Line #2154	Avoid During Construction or Investigate During Archaeological Survey
44YO0524	19 th Century Dwelling Site	Not Evaluated	Line #2154	Avoid During Construction or Investigate During Archaeological Survey
44YO0541	Dam/Road; Indeterminate Date	Determined Potentially Eligible for Listing on the NRHP by DHR in 2006	Line #2154	Avoid During Construction or Investigate During Archaeological Survey
44YO0757	19 th Century Dwelling Site	Not Evaluated	Line #2154	Avoid During Construction or Investigate During Archaeological Survey
44YO1137	1 st Half of the 20th Century Dwelling Site	Not Evaluated	Line #2154	Avoid During Construction or Investigate During Archaeological Survey
44YO1138	20 th Century Transportation Site	Not Evaluated	Line #2154	Avoid During Construction or Investigate During Archaeological Survey
44YO1139	18 th Century Dwelling Site	Not Evaluated	Line #2154	Avoid During Construction or Investigate During Archaeological Survey
44YO1140	19 th Century Dwelling Site	Not Evaluated	Line #2154	Avoid During Construction or Investigate During Archaeological Survey

Abbreviations

ABPP American Battlefield Protection Program

amsl Above Mean Sea Level
DEM Digital Elevation Model

DHR Department of Historic Resources

DSM Digital Surface Model
Dominion Energy Dominion Energy Virginia

kV Kilovolt

NERC North American Electric Reliability Corporation

NHL National Historic Landmark

NHPA National Historic Preservation Act
NRHP National Register of Historic Places

PotNR Potential National Register

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

INTRODUCTION

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 rebuild of Lines #2113 and #2154 in York and James City Counties and the City of Williamsburg (collectively, the "Rebuild Projects"). The Rebuild Projects will entail the following:

Line #2154 Rebuild Project

- Rebuild 7.6 miles of 230 kV Line #2154 between Waller Substation and Structure #2154/482 (near Skiffes Creek Switching Station);
- Remove 6.1 miles of idle 115 kV Line #58 between Waller Substation and Kingsmill Substation;
- Rebuild 1.5 miles of 115 kV Line #19 between Kingsmill Substation and Structure #2154/482;
- Related substation work at Waller, Penniman, and Kingsmill Substations and Skiffes Creek Switching Station.

Line #2113 Rebuild Project

- Rebuild 3.8 miles of 230 kV Line #2113 between Lightfoot Substation and Waller Substation;
- Remove 3.8 miles of idle 115 kV Line #58 between Lightfoot Substation and Waller Substation;
 and
- Related substation work at Lanexa, Lightfoot, and Waller Substations.

No additional right-of-way (ROW) is required. In order to maintain the structural integrity and reliability of its transmission system and perform needed maintenance on its existing facilities, Dominion Energy proposes to rebuild, pending final approval by the State Corporation Commission (SCC), entirely within existing ROW, approximately 12 miles of existing transmission lines in James City and York counties and the City of Williamsburg. Dominion proposes to remove and replace 99 existing transmission support structures, mainly wood H-frame structures, associated foundations, and overhead conductor wire with weathering steel double-circuit 230 kV structures as part of the Rebuild Projects. All proposed structure heights and locations provided in this report are based upon preliminary engineering and are subject to final design. The Rebuild Projects consist of two separate projects as described in Section 1.2.1 and 1.2.2. Figure 1 depicts the location of both projects.

INTRODUCTION

1.2 PROJECT COMPONENTS

1.2.1 Line #2154 Rebuild Project

The Line #2154 Rebuild Project, which is located entirely in existing ROW or on Dominion Energy-owned property between Dominion Energy's Skiffes Creek Switching Station and Waller Mill Substation (herein "Line 2154"), Dominion Energy proposes to:

- Rebuild 6.1 miles of 230 kV Line #2154 and idle 115 kV Line #58 between Waller Substation and Kingsmill Substation. These structures will be replaced with the following structures to support rebuilt Line #2154:
 - o 38 single circuit 230 kV weathering steel suspension H-frame structures,
 - o 4 single circuit 230 kV weathering steel double dead-end H-frame structures,
 - o 2 single circuit 230 kV weathering steel double dead end 3-pole structures, and
 - 1 single circuit 230 kV switch structure.
- Rebuild 1.5 miles of 230 kV Line #2154 and 115 kV Line #19 on single circuit weathering steel structures between Kingsmill Substation and Structure #2154/482. These structures will be replaced with the following structures to support rebuilt Line #2154 and Line #19:
 - o 11 double circuit 115/230 kV weathering steel suspension H-frame structures,
 - o 5 double circuit 115/230 kV weathering steel double dead end 2-pole structures,
 - o 1 single circuit 230 kV switch structure, and
 - o 1 single circuit 115 kV switch structure.

Table 1 provides existing and proposed structure heights for Line #2154 and the approximate height change between the existing and proposed structures.

Table 1 Structure Heights: Line #2154 Rebuild Project

Structure No.	Existing Height (FT)	Proposed Height (FT)+	Approximate Height Change (FT)
2154/411	70	75	5
2154/412	66	70	4
2154/413	63	70	7
2154/414	63	61	-2
2154/415	68	70	2
2154/416	63	61	-2
2154/418	76	70	-6
2154/419	56	70	14

INTRODUCTION

Structure No.	Existing Height (FT)	Proposed Height (FT)+	Approximate Height Change (FT)
2154/420	61	70	9
2154/421	61	70	9
2154/422	76	70	-6
2154/423	81	79	-2
2154/424	71	70	-1
2154/425	76	70	-6
2154/426	66	70	4
2154/427	56	61	5
2154/428	66	70	4
2154/429	71	70	-1
2154/430	56	61	5
2154/431	56	61	5
2154/432	56	61	5
2154/433	56	61	5
2154/434	56	66	10
2154/435	66	66	0
2154/436	56	66	10
2154/437	56	61	5
2154/438	61	70	9
2154/439	66	70	4
2154/440	61	70	9
2154/441	61	61	0
2154/442	56	61	5
2154/443	61	70	9
2154/444	71	70	-1
2154/445	61	70	9
2154/446	79	70	-9
2154/447	100	NRP**	NRP
2154/448	95	NRP	NRP
2154/449	110	NRP	NRP
2154/450	79	80	1
2154/451	81	84	3
2154/452	81	79	-2
2154/453	66	70	4
2154/454	61	70	9
2154/455	66	70	4

INTRODUCTION

Structure No.	Existing Height (FT)	Proposed Height (FT)+	Approximate Height Change (FT)
2154/456	56	61	5
2154/457	57	60	3
19/191A*	N/A	70	N/A
2154/460	130	NRP	NRP
2154/461	135	NRP	NRP
2154/462	125	NRP	NRP
2154/463	115	NRP	NRP
2154/464	75	75	0
2154/465	61	65	4
2154/466	N/A	75	N/A
2154/466A	N/A	75	N/A
2154/467	56	85	29
2154/468	70	85	15
2154/469	70	85	15
2154/470	56	85	29
2154/471	56	80	24
2154/472	56	80	24
2154/473	61	85	24
2154/474	56	80	24
2154/475	56	80	24
2154/476	56	85	29
2154/477	56	80	24
2154/478	56	80	24
2154/479	56	80	24
2154/480	57	70	13
2154/481	58	80	22
2154/482	61	70	9
Minimum	56	70++	-9**
Maximum	81	85++	29**
Average	67	72**	8++

^{*}Heights for 115 kV are not required under the SCC **NRP-No Replacement Proposed

⁺Structure heights do not include foundation reveal. Structure heights are based on preliminary engineering ++Structures which will not be rebuilt have not been included in the average minimum, maximum and average heights

INTRODUCTION

1.2.2 Line #2113 Rebuild Project

The Line #2113 Rebuild Project, which is located entirely in existing ROW or on Dominion Energy-owned property between the Dominion Energy's existing Waller Mill and Lightfoot Substations (herein "Line 2113"), Dominion Energy proposes to:

- Rebuild 3.8 miles of 230 kV Line #2113 on single circuit steel structures between Lightfoot Substation and Waller Substation. These structures will be replaced with the following structures to support rebuilt Line #2113.
 - o 30 single circuit 230 kV weathering steel suspension H-frame structures,
 - o 2 single circuit 230 kV weathering steel double dead-end H-frame structures,
 - o 1 single circuit 230 kV weathering steel double dead end 3-pole structure, and
 - o 2 single circuit 230 kV switch structures.
- Remove 3.8 miles of idle 115 kV Line #58 between Lightfoot Substation and Waller Substation

Table 2 provides existing and proposed heights for the Line #2113 Rebuild Project and the approximate height change between the existing and proposed structures.

Table 2 Structure Heights: Line #2113 Rebuild Project

Structure No.	Existing Height (FT)	Proposed Height (FT)+	Approximate Height Change (FT)
2113/374	70.5	N/A	N/A
2113/374A	N/A	75	N/A
2113/375	100	NRP**	N/A
2113/376	110	NRP	N/A
2113/377	105	NRP	N/A
2113/378	66	80	14
2113/379	62	66	4
2113/380	57	57	0
2113/381	57	57	0
2113/382	57	57	0
2113/383	57	61	4
2113/384	57	57	0
2113/385	62	66	4
2113/386	57	66	9
2113/387	62	66	4
2113/388	57	66	9
2113/389	62	75	13

INTRODUCTION

Structure No.	Existing Height (FT)	Proposed Height (FT)+	Approximate Height Change (FT)
2113/390	62	70	8
2113/391	57	61	4
2113/392	57	61	4
2113/393	57	61	4
2113/394	57	55	-2
2113/395	57	61	4
2113/396	57	70	13
2113/397	84	84	0
2113/398	71	70	-1
2113/399	57	61	4
2113/400	53	52	-1
2113/401	66	75	9
2113/402	57	57	0
2113/403	66	70	4
2113/404	57	61	4
2113/405	66	70	4
2113/406	62	70	8
2113/407	62	70	8
2113/408	57	61	4
2113/409	62	61	-1
2113/410	61	60	-1
2113/411	70	75	5
Minimum	53	52++	-2**
Maximum	84	84**	14**
Average	61	65**	4**

^{**}NRP-No Replacement Proposed

1.3 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 (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

⁺Structure heights do not include foundation reveal. Structure heights are based on preliminary engineering

⁺⁺Structures which will not be rebuilt have not been included in the average minimum, maximum and average heights

INTRODUCTION

archaeological resources requiring inclusion in a formal Stage I Pre-Application Analysis, as defined by the 2008 Guidelines.

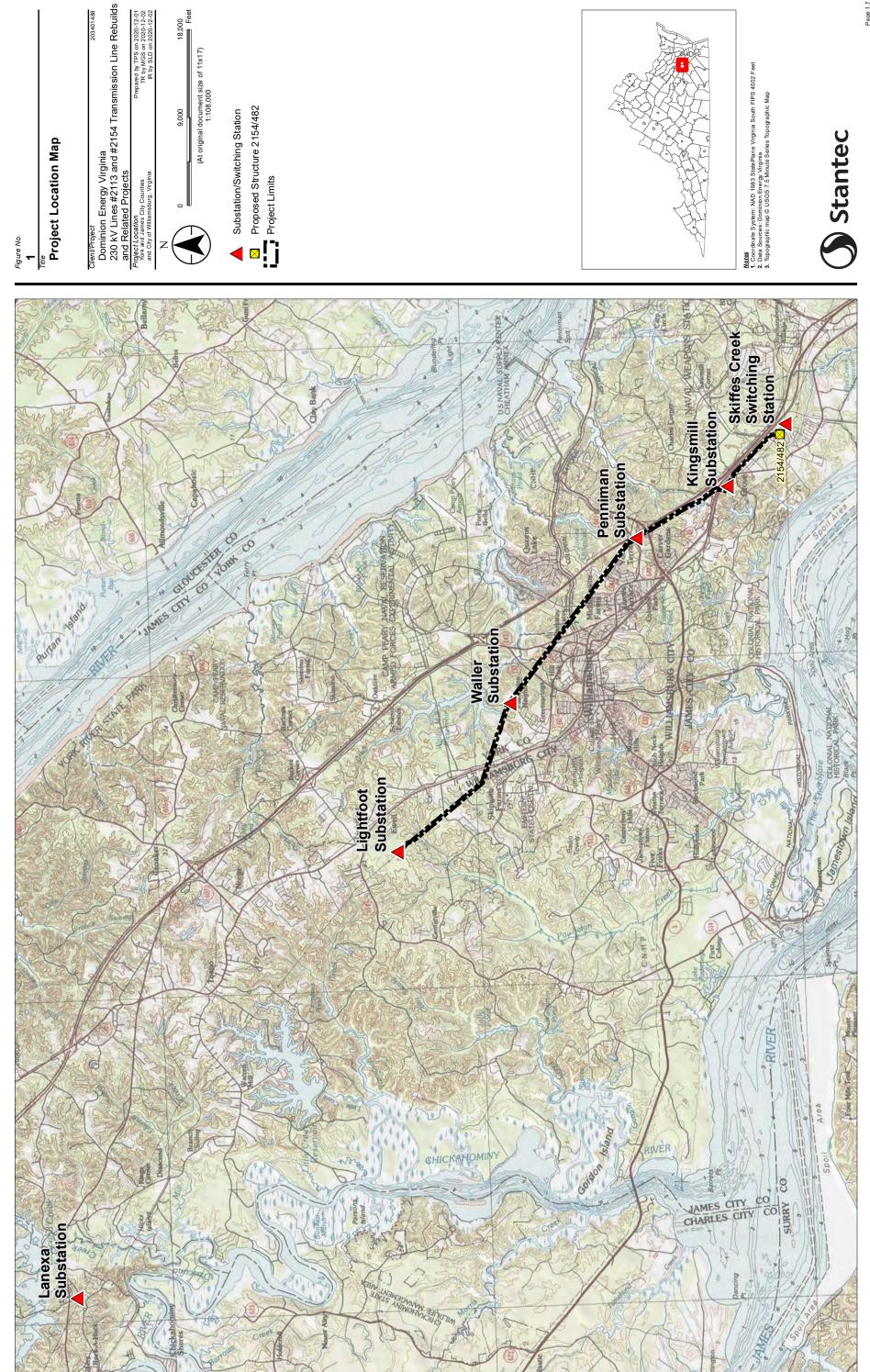
As detailed by DHR guidance, consideration was given to National Historic Landmark (NHL) properties located within a 1.5-mile radius of the Rebuild Projects centerlines; NRHP-listed properties, battlefields, and historic landscapes located within a 1.0-mile radius of the projects centerlines; NRHP-eligible sites located within a 0.5-mile radius of the projects centerlines; and archaeological sites located within the projects ROWs. For each of the 14 architectural resources considered during the Stage I study, this document evaluates the visual effects for the two projects. Effects from each of the projects are discussed separately in case both are not built at this time.

This Stage I Pre-Application Analysis project was directed by Senior Principal Investigator Ellen Brady and authored by Senior Architectural Historian Sandra DeChard. Project Archaeologist Donald Sadler conducted the fieldwork and additional photographs used for the photo simulations were obtained by GIS Coordinator, Perron Singleton. GIS Coordinator Perron Singleton and GIS Coordinator Melissa Sanderson prepared the report graphics.

18,000

9,000

Prepared by TPS on 2020-12-01 TR by MGS on 2020-12-02 IR by SLD on 2020-12-02



BACKGROUND RESEARCH

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 Rebuild Project for the proposed undertaking (Table 3). 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 3 Study Areas as Defined by DHR Guidelines for Transmission Lines

Radius (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 areas and all previously recorded architectural resources up to a 1.5-mile radius of the projects. ESRI ArcGIS Online aerial photography of current conditions was examined for the entire 1.5-mile radius for visual effects analysis. Photographs of each of the architectural resources under consideration, if visible, as well as their viewsheds, were taken from the public ROW.

2.1 RESULTS OF THE BACKGROUND RESEARCH

2.1.1 Architectural Resources

Seven NHL-listed architectural resources are located within the 1.5-mile radius. Three NRHP-listed resources are located within 1.0 mile and three NRHP-eligible individual resource is located within 0.5 mile of the Rebuild Projects transmission lines. Two resources, the NRHP-listed Bryan Manor and the NRHP-eligible Confederate Redoubt #9 have been demolished and therefore no longer required visual effects evaluation. Additionally, one resource, Capitol Landing, was identified as significant as an archaeological site and therefore no visual effects assessment was conducted. In addition to the previously recorded resources listed above, a portion of a battlefield resource is located within the 1.0-mile radius (Appendix B). Table 4 provides a listing of the architectural resources considered for the 1.5-

BACKGROUND RESEARCH

mile Rebuild Projects visual effects area. A more detailed summary of resources considered during the Stage I, including the distance from each resource to the project centerline, is presented by project in Section 2.1.3.

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

DHR#	Resource Name	DHR/NRHP Status
047-0001	Carter's Grove Plantation, 8797 Pocahontas Trail	Listed on the NHL in 1970; Listed on the NRHP in 1969
047-0002	Colonial Parkway	Listed on the NRHP in 1966; Addendum 2001
099-0040	Confederate Redoubt #9	Determined Eligible by DHR in 2009 (demolished)
099-0065	Bryan Manor	Listed on the NRHP in 1978 (demolished)
099-5241	Colonial National Historic Park	Listed on the NRHP in 1966
099-5282	Battle of Fort Magruder/Battle of Williamsburg	Determined Potentially Eligible by DHR in 2007, 2013, 2015 and 2019
121-5134	Chesapeake & Ohio Railroad	Determined Eligible for Listing on the NRHP by DHR in 2015, 2019, and 2020
137-0007	Bruton Parish Church, Duke of Gloucester Street	Listed on the NHL and on the NRHP in 1970
137-0013	Old College Yard (College of William & Mary) Historic District, 111 Jamestown Road	Listed on the NHL in 1960; Listed on the NRHP in 1966
137-0032	Peachy House/Peyton Randolph House, Nicolson & North England Streets	Listed on the NHL and on the NRHP in 1970
137-0033	James Semple House, 506 Francis Street	Listed on the NHL and on the NRHP in 1970
137-0050	Williamsburg Historic District	Listed on the NHL in 1960; Listed on the NRHP in 1966
137-0056	Capitol Landing, Capitol Landing Road	Determined Eligible by VDHR in 1977 (significant as an archaeology site only)
137-0058	George Wythe House, Palace Green	Listed on the NHL and on the NRHP in 1970

2.1.2 Archaeological Resources

Seventeen previously recorded archaeological resources were identified during the background research. Four sites, a Woodland site (44JC0369), an indeterminate prehistoric site (44JC0466), a Middle Woodland camp and eighteenth-century farmstead (44JC1044), and a dam/road (44YO0541), have been determined potentially eligible for listing on the NRHP by DHR. A fifth site, a seventeenth century gallows (44WB0066), has been determined eligible by DHR for listing on the NRHP. The remaining 12 sites have not been evaluated for NRHP eligibility (Appendix C; Table 5). A visual effects evaluation is not required for archaeological resources for this study.

BACKGROUND RESEARCH

Table 5 Previously Recorded Archaeological Resources Considered under the Stage I Pre-Application Guidelines

DHR#	Resource Name	DHR/NRHP Status
44JC0369	Woodland Site; Indeterminate	Determined Potentially Eligible for Listing on the NRHP by DHR in 1988
44JC0466	Prehistoric; Indeterminate	Determined Potentially Eligible for Listing on the NRHP by DHR in 1988
44JC1044	Middle Woodland Camp and Artifact Scatter; 18 th Century Farmstead	Determined Potentially Eligible for Listing on the NRHP by DHR in 2001
44JC1301	18 th Century Domestic Site	Not Evaluated
44JC1303	Indeterminate Woodland Site; Indeterminate 20th Century Site	Not Evaluated
44JC1304	Prehistoric; Indeterminate	Not Evaluated
44WB0066	17 th Century Gallows Site	Determined Eligible for Listing on the NRHP by DHR in 1992
44WB0133- 0001	4 th Quarter of the 18 th Century Camp	Not Evaluated
44WB0133- 0002	4th Quarter of the 18th Century Camp	Not Evaluated
44YO0220	Indeterminate 18 ^{th,} 19 th and 20 th Century Site; Civil War Site	Not Evaluated
44YO0524	19th Century Dwelling Site	Not Evaluated
44YO0541	Dam/Road; Indeterminate Date	Determined Potentially Eligible for Listing on the NRHP by DHR in 2006
44YO0757	19th Century Dwelling Site	Not Evaluated
44YO1137	1st Half of the 20th Century Dwelling Site	Not Evaluated
44YO1138	20 th Century Transportation Site	Not Evaluated
44YO1139	18 th Century Dwelling Site	Not Evaluated
44YO1140	19 th Century Dwelling Site	Not Evaluated

2.1.3 Summary of Background Research Per Project

The following sections summarize the background research and resources considered for each project. Tables 6 and 7 provide the distance, in feet, from each resource to the project centerline for which it was considered as part of the Stage I Analysis. Resource maps illustrating the locations of the resources are presented in Appendices B and C.

2.1.3.1 Resources Considered: Line #2154 Rebuild Project

Fourteen previously recorded architectural resources and 12 archaeological sites were identified within the defined Stage I study radii for Line #2154. The architectural resources include five individual NHL-listed resources, two NHL-listed historic districts, three individually NRHP-listed resources, two NRHP-eligible resources, and one potentially eligible battlefield. Two resources, the NRHP-listed Bryan Manor and the NRHP-eligible Confederate Redoubt #9 have been demolished and therefore no longer required visual effects evaluation. Additionally, one resource, Capitol Landing, was identified as significant as an

BACKGROUND RESEARCH

archaeological site and therefore no visual effects assessment was conducted. Archaeological resources include three multi-components sites, two eighteenth century domestic sites, three nineteenth century domestic sites, one seventeenth century site, a dam/road, one twentieth century domestic site, and one twentieth century transportation site (Table 6).

Table 6 Architectural and Archaeological Resources Considered During the Stage I – Line #2154

DHR#	Resource Name	DHR/NRHP Status	Distance to Centerline (Feet)
047-0001	Carter's Grove Plantation, 8797 Pocahontas Trail	Listed on the NHL in 1970; Listed on the NRHP in 1969	2,474
047-0002	Colonial Parkway	Listed on the NRHP in 1966; Addendum 2001	0
099-0040	Confederate Redoubt #9	Determined Eligible by DHR in 2009 (demolished)	N/A
009-0065	Bryan Manor	Listed on the NRHP in 1978 (demolished)	N/A
099-5241	Colonial National Historic Park	Listed on the NRHP in 1966	0
099-5282	Battle of Fort Magruder/Battle of Williamsburg	Determined Potentially Eligible by DHR in 2007, 2013, 2015 and 2019	0
121-5134	Chesapeake & Ohio Railroad	Determined Eligible for Listing on the NRHP by DHR in 2015, 2019, and 2020	0
137-0007	Bruton Parish Church, Duke of Gloucester Street	Listed on the NHL and on the NRHP in 1970	6,456
137-0013	Old College Yard (College of William & Mary) Historic District, 111 Jamestown Road	Listed on the NHL in 1960; Listed on the NRHP in 1966	7,620
137-0032	Peachy House/Peyton Randolph House, Nicolson & North England Streets	Listed on the NHL and on the NRHP in 1970	5,451
137-0033	James Semple House, 506 Francis Street	Listed on the NHL and on the NRHP in 1970	5,073
137-0050	Williamsburg Historic District	Listed on the NHL in 1960; Listed on the NRHP in 1966	4,029
137-0058	George Wythe House, Palace Green	Listed on the NHL and on the NRHP in 1970	6,309
44JC1044	Middle Woodland Camp and Artifact Scatter; 18 th Century Farmstead	Determined Potentially Eligible for Listing on the NRHP by DHR in	0
44JC1301	18 th Century Domestic Site	Not Evaluated	0
44JC1303	Indeterminate Woodland Site; Indeterminate 20 th Century Site	Not Evaluated	0
44WB0066	17 th Century Gallows Site	Determined Eligible for Listing on the NRHP by DHR in	0
44YO0220	Indeterminate 18 ^{th,} 19 th and 20 th Century Site; Civil War Site	Not Evaluated	0
44YO0524	19 th Century Dwelling Site	Not Evaluated	0
44YO0541	Dam/Road; Indeterminate Date	Determined Potentially Eligible for Listing on the NRHP by DHR in	0

DHR#	Resource Name	DHR/NRHP Status	Distance to Centerline (Feet)
44YO0757	19 th Century Dwelling Site	Not Evaluated	0
44YO1137	1 st Half of the 20th Century Dwelling Site	Not Evaluated	0
44YO1138	20 th Century Transportation Site	Not Evaluated	0
44YO1139	18 th Century Dwelling Site	Not Evaluated	0
44YO1140	19 th Century Dwelling Site	Not Evaluated	0

2.1.3.2 Resources Considered: Line #2113 Rebuild Project

Three previously recorded architectural resources and five archaeological sites were identified within the defined Stage I study radii for Line #2113. The resources include one NHL-listed historic district, one NRHP-eligible architectural resource, one potentially eligible battlefield, one potentially eligible Woodland site, two indeterminate prehistoric sites (one has been determined potentially eligible), and two eighteenth century camp sites (Table 7).

Table 7 Architectural and Archaeological Resources Considered During the Stage I – Line #2113

DHR#	Resource Name	DHR/NRHP Status	Distance to Centerline (Feet)
099-5282	Battle of Fort Magruder/Battle of Williamsburg	Determined Potentially Eligible by DHR in 2007, 2013, 2015 and 2019	4,531
121-5134	Chesapeake & Ohio Railroad	Determined Eligible for Listing on the NRHP by DHR in 2015, 2019, and 2020	0
137-0050	Williamsburg Historic District	Listed on the NHL in 1960; Listed on the NRHP in 1966	7,479
44JC0369	Woodland Site; Indeterminate	Determined Potentially Eligible for Listing on the NRHP by DHR in 1988	0
44JC0466	Prehistoric; Indeterminate	Determined Potentially Eligible for Listing on the NRHP by DHR in 1988	0
44JC1304	Prehistoric; Indeterminate	Not Evaluated	0
44WB0133- 0001	4 th Quarter of the 18 th Century Camp	Not Evaluated	0
44WB0133- 0002	4th Quarter of the 18th Century Camp	Not Evaluated	0

Stage I Pre-Application Analysis Results

3.0 STAGE I PRE-APPLICATION ANALYSIS RESULTS

3.1 VISUAL EFFECTS METHODOLOGY

Fieldwork for the proposed transmission line projects was undertaken by Stantec's Project Archaeologist Donald Sadler under the direction of Senior Architectural Historian Sandra DeChard on July 22 to 24, 2020. The fieldwork for the assessment entailed photographing the resources requiring viewshed analysis according to the Stage I Pre-Application review process and examined the potential views from the resources towards the proposed transmission line improvements (Appendix D). 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. To further assess the potential visual impacts to the resources under consideration, photo simulations of the proposed structures were also prepared (Appendix E). As the proposed lines are a rebuild of existing transmission lines and the proposed new lines will be located within the current alignment, the existing lines were 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 terrain elevations including tree canopy. The DEM utilized was a 1/3 arc second elevation model downloaded from the U. S. Geological Survey (USGS). To create the DSM, the Virginia Statewide Landcover Dataset, provided by the Virginia Geographic Information Network, was used to identify areas covered by tree canopy. Those areas were then given a constant value of 75 feet, which was added to the ground elevation to account for the typical mature forest heights found in the area. 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 towers are or will be visible in the landscape surrounding the project ROW. The visibility is illustrated by three color shadings:

- orange where both existing and proposed structures are/will be visible,
- red 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.

In addition to the preparation of the viewshed model, simulations from select Observation Points (OPs) were prepared and utilized to assist with the assessment of potential visibility and effect. The photo simulations are presented in Appendix E and referenced to the project photo locations in Appendix D.

Stage I Pre-Application Analysis Results

3.2 INDIVIDUAL ARCHITECTURAL RESOURCES CONSIDERED

Eight individual resources: Carter's Grove Plantation (DHR #047-0001), Colonial Parkway (DHR #047-0002), Colonial National Historic Park (DHR #099-5241), Chesapeake & Ohio Railroad (DHR #121-5134), Bruton Parish Church (DHR #137-0007), Peach House (DHR #137-0032), James Semple House (DHR #137-0033), and George Wythe House (DHR #137-0058), are located within the 1.0-mile radius of the ROW 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.

3.2.1 Carter's Grove Plantation (DHR #047-0001)

Carter's Grove is a well-preserved example of a two-story, seven-bay, mid-eighteenth century Georgian dwelling (Figure 2). Flanking the main block are one-story brick dependencies thought to have been constructed prior to the main dwelling, although at an unknown date. The main block features a hipped roof, two large interior chimneys and hipped-roof dormers. Other features include rubbed brick quoins, a modillioned cornice, nine-over-nine wood double-hung sash windows, and a rubbed brick belt course. Carter's Grove was listed on the NRHP in 1969 and as a NHL in 1970 (DHR Site Files).



Figure 2 Carter's Grove Plantation (DHR #047-0001), View Looking Southwest (Photograph taken during a Previous Survey).

Stage I Pre-Application Analysis Results

3.2.1.1 Visual Effect Assessment

Carter's Grove Plantation sits back from the road down a long, paved driveway, which is gated at the entry, on a level lot which overlooks the James River. Surrounding the house is an open lawn with large trees in the vicinity of the house and tree lines along the road.

Line #2154 Rebuild Project

Carter's Grove Plantation is located within 1.5 miles to the southwest of the transmission line ROW (Appendix B) and at its closest point, is approximately 2,474 feet from the proposed Rebuild Project. Under current conditions, as observed during the fieldwork, the existing structures are not visible from the resource (Figures 3-5). Based upon preliminary design, the proposed structures (Structures #2154/474 through #2154/482) will range in height from approximately 70 to 80 feet with an increase in height ranging from approximately 9 to 29 feet above the height of the existing structures. It is anticipated that the proposed structures, based on the fieldwork, will also not be viewed from the resource.

The viewshed modeling conducted for the Line #2154 Rebuild Project indicates that neither the existing nor proposed structures will be visible from the resource (Figure 6). Based on the fieldwork, the proposed structure heights, and the viewshed modeling for the resource, *it is recommended that the proposed Line #2154 Rebuild Project would have No Visual Impact on Carter's Grove Plantation (DHR #047-0001).*

Line #2113 Rebuild Project

Carter's Grove is greater than 1.5 miles from Line #2113. Therefore, visual effects from the Line #2113 Rebuild Project were not considered.



Figure 3 View from Carter's Grove (Photo Location 93) Looking North towards the Existing Transmission Line. The Existing Line is Not Visible.



Figure 4 View from Carter's Grove (Photo Location 93) Looking Northeast towards the Existing Transmission Line. The Existing Line is Not Visible.



Figure 5 View from Carter's Grove (Photo Location 93) Looking East towards the Existing Transmission Line. The Existing Line is Not Visible.

#047-0001)
ClentProject
Dominion Energy Virginia
230 kV Lines #2113 and #2154 Transmission Line Rebuilds and Related Projects 2,000 Prepared by TPS on 2020-12-01 TR by MGS on 2020-12-02 IR by SLD on 2020-12-02 (At original document size of 11x17) 1:12,000 Existing Not Visible, Proposed Visible Existing Visible, Proposed Not Visible Both Existing and Proposed Visible 1,000 Substation/Switching Station Architectural Resource Proposed Structure Existing Structure Photo Location 0.5-Mile Buffer 1.5-Mile Buffer

Stage I Pre-Application Analysis Results

3.2.2 Colonial Parkway (DHR #047-0002)/Colonial National Historic Park (DHR #099-5241)

The Colonial National Parkway, which is part of the Colonial National Historic Park, was constructed between 1930 and 1958 as a scenic roadway connecting Jamestown, Williamsburg, and Yorktown (Appendix B; Figure 7). The NRHP-listed resource contains 22 contributing sites, 23 contributing structures and 2 contributing objects. Colonial Parkway and the Colonial National Historic Park share the same resource boundary and as a result were combined for the purposes of the visual effects assessment. The portions of the Colonial Parkway and the Colonial National Historic Park within the Line #2154 Rebuild Project visual effects area extends approximately 761 feet to the southwest of the Chesapeake & Ohio Railroad tracks and approximately 364 feet east of Allendale Place. Colonial National Historic Park and the Colonial Parkway Historic District were listed on the NRHP in 1966 under Criteria A and C (DHR Site Files; Eyring and Ellin 1999).



Figure 7 Colonial Parkway (DHR #047-0002) and Colonial National Historic Park (DHR #099-5241), View Looking East.

3.2.2.1 Visual Effect Assessment

The landscape flanking the parkway and the park within the Line #2154 and Line # 2113 Rebuild Projects visual effects area consists mainly of wooded areas of deciduous and evergreen trees.

Stage I Pre-Application Analysis Results

Line #2154 Rebuild Project

Colonial Parkway is located within 1.0 mile of the Line #2154 Rebuild Project (Appendix B) and crosses the transmission line between Merrimac Trail to the west and Hubbard Lane to the east. Under current conditions, as observed during the fieldwork, the existing structures were visible from where the line crosses the road between Structures 2154/428 and #2154/429 (Figure 8). The existing line was not visible from the resource from any of the other visual effects survey points (Figures 9 and 10). Based upon preliminary design, the proposed structures (Structures #2154/420 through #2154/440) will range in height from approximately 61 to 79 feet with a decrease in height from approximately 1 to 6 feet below the existing structure heights and an increase in height ranging from approximately 4 to 10 feet above the height of the existing structures in the section of the transmission line closest to the resource. It is anticipated that the proposed structures, based on the fieldwork, will also not be viewed from the resource except at the intersection of the parkway and transmission line.

The viewshed modeling conducted for the Line #2154 Rebuild Project indicates neither the existing nor proposed structures will be visible from the resource except where the line crosses the resources (Figure 11). Based on the fieldwork, proposed structure heights, and the viewshed modeling for the resource, *it is* recommended that the proposed Line #2154 Rebuild Project would have a Minimal Visual Impact on the Colonial Parkway (DHR #047-0002) and Colonial National Historic Park (DHR #099-5241).

Line #2113 Rebuild Project

Colonial Parkway is greater than 1.0 mile from Line #2113. Therefore, visual effects from this Rebuild Project were not considered.



Figure 8 View from Colonial Parkway and Colonial National Historic Park (Photo Location OP 3 – See Appendix D) Looking West towards the Existing Transmission Line.



Figure 9 View from Colonial Parkway and Colonial National Historic Park (Photo Location 85) Looking West towards the Existing Transmission Line. Existing Line is Not Visible.



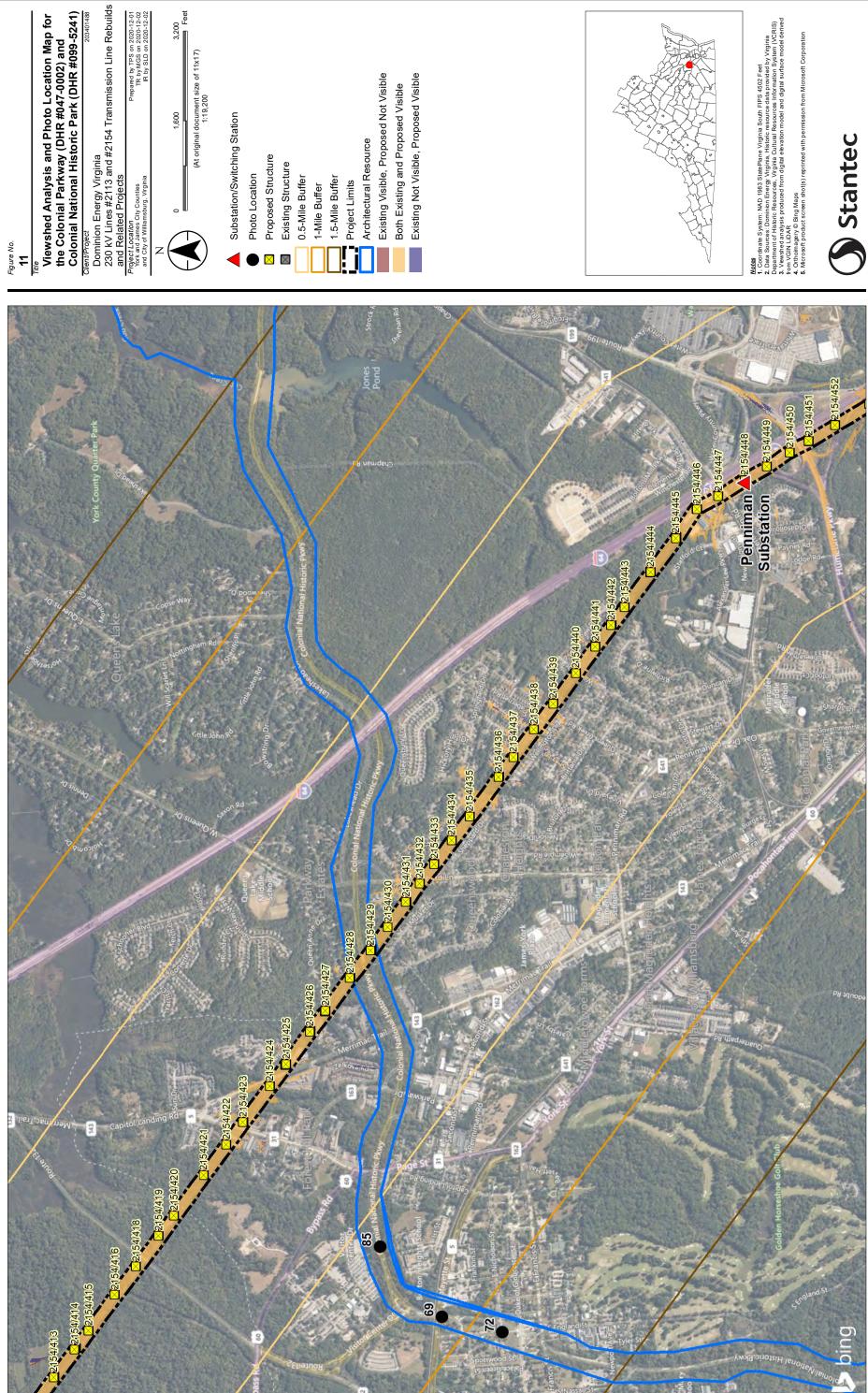
Figure 10 View from Colonial Parkway and Colonial National Historic Park (Photo Location 85) Looking West towards the Existing Transmission Line. Existing Line is Not Visible.

3,200

1,600

(At original document size of 11x17) 1:19,200

Prepared by TPS on 2020-12-01 TR by MGS on 2020-12-02 IR by SLD on 2020-12-02



are rescued any error and stall 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 responsibility for weifying the accuracy and completeness of this information and shall not be responsibility for weifying the accuracy and completeness of the data

Stage I Pre-Application Analysis Results

3.2.3 Chesapeake & Ohio Railroad (DHR #121-5134)

The former Chesapeake and Ohio Railroad, now CSX, was built c. 1881. The line consists of two tracks (Figure 12) and was utilized mainly for the transportation of coal from the fields in West Virginia to the shipping docks in Newport News. The rail line was determined eligible for listing on the NRHP in 2015 under Criterion A for its significance in the transportation history of the region (DHR Site Files).



Figure 12 View of the Chesapeake & Ohio Railroad (DHR #121-5134).

3.2.3.1 Visual Effect Assessment

Line #2154 Rebuild Project

A majority of the Chesapeake & Ohio Railroad corridor is located beyond 0.5 mile of the project centerline. The railroad crosses into the 0.5-mile buffer in the vicinity of where Route 143 (Pocahontas Trail) and Busch Gardens Boulevard merge. The resource parallels Route 143 for much of the remaining project area and continues outside the 0.5-mile buffer to the southeast of the Skiffes Creek Substation (Appendix B). Although the resource parallels Route 143 within the study area, the landscape on either side of the tracks comprises mainly woods and tree lines with some residential development to the southwest. Under current conditions, the existing transmission line, which ranges in height from approximately 56 to 135 feet in the vicinity of the resource (Structure #2154/455 through #2154/482), is not visible from the point of survey (Photo Location 90; Figure 13). Existing Structure #2154/460 through #2154/463) which range in height from 115 to 135 feet in height will not be replaced. Based upon preliminary design, the proposed structures to be rebuilt will range in height from approximately 60 to 85

Stage I Pre-Application Analysis Results

feet with an increase in height ranging from approximately 3 to 29 feet above the height of the existing structures in the section of the transmission line closest to the resource. It is anticipated that the proposed structures, based on the fieldwork, will also not be viewed from the resource.

The viewshed modeling conducted for the Line #2154 Rebuild Project indicates neither the existing nor proposed structures will be visible from the resource except for two locations: the vicinity of the Williamsburg Golf Club, which is located between the tracks and the transmission line, and where the line crosses the resource (Figures 16 and 17). Based on the fieldwork, the proposed structure heights, and the viewshed modeling for the resource, *it is recommended that the proposed Line #2154 Rebuild Project would have a Minimal Visual Impact on the Chesapeake & Ohio Railroad (DHR #121-5134).*

Line #2113 Rebuild Project

A majority of the Chesapeake & Ohio Railroad corridor is located beyond 0.5 mile of the Line #2113 Rebuild Project centerline. The railroad crosses into the 0.5-mile buffer in the vicinity of Old Towne Road and parallels US Highway 60 to the southwest and Mooretown Road to the northeast, crosses the transmission line ROW approximately 1,023 feet southeast of Waltz Farm Drive, and extends beyond the 0.5-mile buffer near the intersection of Mooretown Road and Reserve Way. Approximately 8,847 linear feet of the resource is located within the 0.5-mile buffer (Appendix B). The landscape on either side of the tracks consists of mainly commercial development to the southwest with woods and tree lines to the northeast. Under current conditions, the existing transmission line, which ranges in height from approximately 53 to 110 feet in the vicinity of the resource (Structure #2113/375 through #2113/406), is not visible from Photo Location 1 (Figure 14) but was visible from Photo Location 2 (Figure 15). Existing Structure #2113/375 through #2113/377) which range in height from 115 to 135 feet in height will not be replaced. Based upon preliminary design, the proposed structures to be rebuilt in this section of the line will range in height from approximately 52 to 84 feet with a decrease in height of approximately 1 to 2 feet below the existing structure heights and an increase in height ranging from approximately 0 to 14 feet above the existing structures. It is anticipated that the proposed structures, based on the fieldwork, will be viewed from the resource where the line crosses the tracks; however, will not be visible from the remaining areas.

The viewshed modeling conducted for the Line #2113 Rebuild Project indicates neither the existing nor proposed structures will be visible from the resource except where the line crosses the resource between Structure #2113/397 and #2113/398 (Figures 16-17). However, the overall visual impact of the proposed structures will not greatly change from the existing conditions in the vicinity of this resource. Based on the fieldwork, the proposed structure heights, and the viewshed modeling for the resource, *it is* recommended that the proposed Line #2113 Rebuild Project would have a Minimal Visual Impact on the Chesapeake & Ohio Railroad (DHR #121-5134).



Figure 13 View from Chesapeake & Ohio Railroad and Battle of Fort Magruder (Photo Location 90) Looking South towards the Existing Transmission Line #2154. The Existing Line is Not Visible.



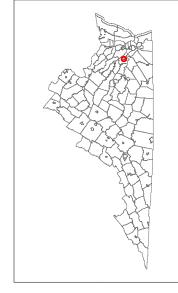
Figure 14 View from Chesapeake & Ohio Railroad (Photo Location 1) Looking Southeast towards the Existing Transmission Line #2113. The Existing Line is Not Visible.



Figure 15 View from Chesapeake & Ohio Railroad (Photo Location 2) Looking Southeast towards the Existing Transmission Line #2113. The Existing Line is Visible.

(DHR #121-5134)

ClientProject
Dominion Energy Virginia
230 kV Lines #2113 and #2154 Transmission Line Rebuilds and Related Projects 2,000 Prepared by TPS on 2020-12-01 TR by MGS on 2020-12-02 IR by SLD on 2020-12-02 Viewshed Analysis and Photo Location Map for the Chesapeake & Ohio Railroad (At original document size of 11x17) 1:12,000 Existing Not Visible, Proposed Visible Existing Visible, Proposed Not Visible Both Existing and Proposed Visible 1,000 Substation/Switching Station Architectural Resource Proposed Structure Existing Structure Existing Existing Project Limits Photo Location 0.5-Mile Buffer 1.5-Mile Buffer 1-Mile Buffer



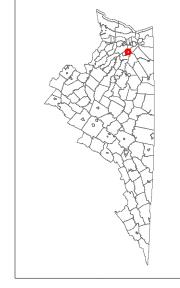
Notes
1. Coordinate System: NAD 1983 StatePlane Virginia South FIPS 4502 Feet
2. Coordinate System: NAD 1983 StatePlane Virginia South FIPS 4502 Feet
2. Data Sources: Dominon Energy Virginia. Historic resources Information System (VCRIS)
3. Velexita da nalysis produced from digital elevation model and digital surface model derived from Virginia LIDAR of Chitomagery © Bing Maps
4. Orthorinagery © Bing Maps
5. Microsoft product screen shot(s) reprinted with permission from Microsoft Corporation

5. Microsoft product screen shot(s) reprinted with permission from

are recursory 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 supplier accepts full responsibility for verifying the acceptancy and completeness of this information and shall responsibility for verifying the acceptancy and completeness of the data

(DHR #121-5134)

ClientProject
Dominion Energy Virginia
230 kV Lines #2113 and #2154 Transmission Line Rebuilds and Related Projects 2,400 Feet Prepared by TPS on 2020-12-01 TR by MGS on 2020-12-02 IR by SLD on 2020-12-02 Viewshed Analysis and Photo Location Map for the Chesapeake & Ohio Railroad (At original document size of 11x17) 1:14,400 Existing Not Visible, Proposed Visible Existing Visible, Proposed Not Visible Both Existing and Proposed Visible 1,200 Substation/Switching Station Architectural Resource Proposed Structure Existing Structure Photo Location 0.5-Mile Buffer 1.5-Mile Buffer Project Limits 1-Mile Buffer



Stantec

.us0265-ppfss01/shared_projects/203401488/03_data/gis_cad/gis/01488_c_fig17.mxd Revised: 2020-12-02 By: psingleton

Stage I Pre-Application Analysis Results

3.2.4 Bruton Parish Church (DHR #137-0007)

The Bruton Parish Church, constructed in 1711, was built in a cruciform plan with brick exterior walls laid in a Flemish bond pattern. The design of the church is attributed to Royal Governor Alexander Spottswood; however, the tower was added in 1769 and reflects the design style of James Gibbs and was built by Benjamin Powell. The church also features round arch windows and a modillioned cornice (Figure 18). The church was restored in the early to mid-twentieth century by Colonial Williamsburg, Inc. The church was listed on the NHL and NRHP in 1970 under Criterion C for its significance in architecture. The resource is also contributing to the NHL-listed Williamsburg Historic District (DHR #137-0050; DHR Site Files; Dillon 1974).



Figure 18 View of Bruton Parish Church (DHR #137-0007), Looking East.

3.2.4.1 Visual Effect Assessment

The resource sits on a level, relatively open landscape within the Williamsburg Historic District. Surrounding the resource is a lawn with a number of mature trees in the church's vicinity. Enclosing the church parcel and associated cemetery is a brick wall.

Line #2154 Rebuild Project

The property of the Bruton Parish Church is located to the southwest of the existing transmission line within the 1.5-mile radius and at its closest point is approximately 6,456 feet from the Line #2154 Rebuild Project centerline (Appendix B). Under current conditions, the existing transmission line, which ranges in height from approximately 61 to 81 feet in the vicinity of the resource (Structure #2154/420 through

Stage I Pre-Application Analysis Results

#2154/425), is not visible (Figures 19 and 20). Based upon preliminary design, the proposed structures will range in height from approximately 70 to 79 feet with a decrease in height of approximately 1 to 6 feet below the existing structures and an increase in height of approximately 9 feet (maximum) above the height of the existing structures in the section of the transmission line closest to the resource. It is anticipated that the proposed structures, based on the fieldwork, will also not be viewed from the resource.

The viewshed modeling conducted for the Line #2154 Rebuild Project indicates that neither the existing nor proposed structures will be visible from the resource (Figure 21). Based on the fieldwork, the proposed structure heights, and the viewshed modeling for the resource, *it is recommended that the proposed Line #2154 Rebuild Project would have No Visual Impact on the Bruton Parish Church (DHR #137-0007).*

Line #2113 Rebuild Project

Bruton Parish Church is greater than 1.5 miles from Line #2113. Therefore, visual effects from this project were not considered.

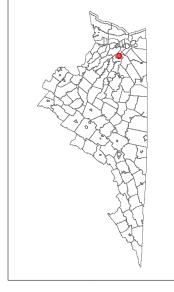


Figure 19 View from Bruton Parish Church, Williamsburg Historic District, and Battle of Fort Magruder/Battle of Williamsburg (Photo Location 50) Looking North towards the Existing Transmission Line. The Existing Line is Not Visible.



Figure 20 View from Bruton Parish Church, Williamsburg Historic District, and Battle of Fort Magruder/Battle of Williamsburg (Photo Location 50) Looking Northeast towards the Existing Transmission Line. The Existing Line is Not Visible.

Prepared by TPS on 2020-12-01 TR by MGS on 2020-12-02 IR by SLD on 2020-12-02 (At original document size of 11x17) 1:7,200 Existing Visible, Proposed Not Visible Existing Not Visible, Proposed Visible Both Existing and Proposed Visible Architectural Resource Proposed Structure Existing Structure Photo Location Existing StructuProject Limits 0.5-Mile Buffer 1.5-Mile Buffer 1-Mile Buffer



Stantec

Stage I Pre-Application Analysis Results

3.2.5 Peachy/Peyton Randolph House (DHR #137-0032)

The Peachy/Peyton Randolph House is a two-story dwelling constructed around 1715. The Georgian-style frame dwelling was constructed in three phases. The original section of the building was the western section of the house. The eastern section was constructed in 1724 and a one-and-a-half-story section was thought to have been built in 1783 but removed and reconstructed in the twentieth century. As noted during the 2008 survey, the house also featured interior brick chimneys, a brick foundation, weatherboard siding, and six-over-nine and nine-over-nine wood sash windows (Figure 22). The dwelling was listed on the NHL and the NRHP in 1970 under Criterion C for its significance in architecture. The dwelling is also a contributing resource to the Williamsburg Historic District (DHR #137-0050; DHR Site Files).



Figure 22 View of the Peachy House/Peyton Randolph House (DHR #137-0032), Looking North.

3.2.5.1 Visual Effect Assessment

The dwelling sits on a level lot at the corner of New England and Nicolson streets within the Williamsburg Historic District. Surrounding the house is a lawn with large trees to the west and northwest and a gravel parking area to the south.

Line #2154 Rebuild Project

The Peachy House/Peyton Randolph House is located within the 1.5-mile radius of the Line #2154 Rebuild Project centerline. At its closest point, the resource is approximately 5,451 feet southwest of the existing/proposed transmission line (Appendix B). Under current conditions, the existing transmission line,

Stage I Pre-Application Analysis Results

which ranges in height from approximately 61 to 81 feet in the vicinity of the resource (Structure #2154/420 through #2154/425), is not visible (Figures 23 and 24). Based upon preliminary design, the proposed structures will range in height from approximately 70 to 79 feet with a decrease in height of approximately 1 to 6 feet below the existing structures and an increase in height of approximately 9 feet (maximum) above the height of the existing structures in the section of the transmission line closest to the resource. It is anticipated that the proposed structures, based on the fieldwork, will also not be viewed from the resource.

The viewshed modeling conducted for the Line #2154 Rebuild Project indicates that neither the existing nor proposed structures will be visible from the resource (Figure 25). Based on the fieldwork, the proposed structure heights, and the viewshed modeling for the resource, *it is recommended that the proposed Line #2154 Rebuild Project would have No Visual Impact on the Peachy House/Peyton Randolph House (DHR #137-0032).*

Line #2113 Rebuild Project

Peachy House/Peyton Randolph House is greater than 1.5 miles from Line #2113. Therefore, visual effects from this transmission line rebuild were not considered.

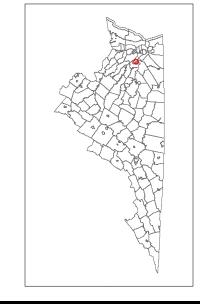


Figure 23 View from Peachy House/Peyton Randolph House, Williamsburg Historic District, and Battle of Fort Magruder/Battle of Williamsburg (Photo Location 72) Looking North towards the Existing Transmission Line. The Existing Line is Not Visible.



Figure 24 View from Peachy House/Peyton Randolph House, Williamsburg Historic District, and Battle of Fort Magruder/Battle of Williamsburg (Photo Location 72) Looking Northeast towards the Existing Transmission Line. The Existing Line is Not Visible.

1,000



Stantec

Stage I Pre-Application Analysis Results

3.2.6 James Semple House (DHR #137-0033)

The James Semple House is a two-story Classical-Revival dwelling built around 1770. At the time of survey in 1974, the house featured weatherboard siding, Roman Doric porch, interior end chimneys, wood shingle roof, and six-over-six and nine-over-nine wood sash windows. Flanking the main block are one story wings (Figure 26). In 1932, the house was purchased by The Colonial Williamsburg Foundation and restored. The dwelling was listed on the NHL and the NRHP in 1970 under Criterion C for its significance in architecture and is a contributing resource to the Williamsburg Historic District (DHR #137-0050; DHR Site Files; Dillion 1974).



Figure 26 View of the James Semple House (DHR #137-0033), Looking Southeast.

3.2.6.1 Visual Effect Assessment

The dwelling sits on a level lot at the corner of on the southeast side of E. Francis Street within the Williamsburg Historic District. Surrounding the house is a lawn with large trees to the west and southeast. The rear yard is enclosed by a white picket fence.

Line #2154 Rebuild Project

The James Semple House is located within the 1.0-mile radius of the Line #2154 Rebuild Project centerline. At its closest point, the resource is approximately 5,073 feet southwest of the existing/proposed transmission line (Appendix B). Under current conditions, the existing transmission line, which ranges in height from approximately 56 to 76 feet in the vicinity of the resource (Structure #2154/424 through #2154/430), is not visible (Figures 27 and 28). Based upon preliminary design, the

Stage I Pre-Application Analysis Results

proposed structures will range in height from approximately 61 to 70 feet with a decrease in height of approximately 1 to 6 feet below the existing structure heights and an increase in height ranging from approximately 4 to 5 feet above the height of the existing structures in the section of the transmission line closest to the resource. It is anticipated that the proposed structures, based on the fieldwork, will also not be viewed from the resource.

The viewshed modeling conducted for the Line #2154 Rebuild Project indicates that neither the existing nor proposed structures will be visible from the resource (Figure 29). Based on the fieldwork, the proposed structure heights, and the viewshed modeling for the resource, *it is recommended that the proposed Line #2154 Rebuild Project would have No Visual Impact on the James Semple House (DHR #137-0033).*

Line #2113 Rebuild Project

The James Semple House is greater than 1.5 miles from the Line #2113 Rebuild Project. Therefore, visual effects from this transmission line rebuild were not considered.



Figure 27 View from the James Semple House, Williamsburg Historic District, and Battle of Fort Magruder/Battle of Williamsburg (Photo Location 80) Looking North towards the Existing Transmission Line. The Existing Line is Not Visible.



Figure 28 View from the James Semple House, Williamsburg Historic District, and Battle of Fort Magruder/Battle of Williamsburg (Photo Location 80) Looking Northeast towards the Existing Transmission Line. The Existing Line is Not Visible.

Viewshed Analysis and Photo Location
Map for the James Semple House (DHR
#137-0033)

ClientProject
Dominion Energy Virginia
230 kV Lines #2113 and #2154 Transmission Line Rebuilds and Related Projects

Project Location
Note and James City Countes
and City of Williamsburg, Virginia

Photo Location

N

Photo Location

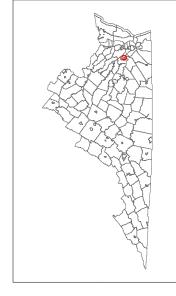
Existing Structure

Existing Wisible, Proposed Not Visible

Both Existing und Proposed Visible

Existing Not Visible, Proposed Visible

Existing Not Visible, Proposed Visible



1. Coordinate System: NAD 1993 StatePlane Virginia South FIPS
2. Data Sources, Jonninion Energy Wirgina, Historic resource data Department of Historic Resources, Virginia Cultura Resources, Virginia Cultura Resources, Virginia Cultura Resources Infine VOSIN LIDAR 1. Orthomagery © Bing Maps
5. Microsoft product screen shot(s) reprinted with permission from 5. Microsoft product screen shot(s) reprinted with permission from

Stantec Stantec

Stage I Pre-Application Analysis Results

3.2.7 George Wythe House (DHR #137-0058)

The George Wythe House is a two-story brick town house noted as one of Virginia's finest eighteenth-century dwellings. Designed in the Georgian style by Richard Taliaferro around 1755, the brick house features Flemish bond-pattern laid bricks, a hipped roof, brick chimneys, modillioned cornice, and nine-over-nine wood sash windows (Figure 30). The dwelling was listed on the NHL and the NRHP in 1970 under Criterion C for its significance in architecture and for its significance as the home of George Wythe, signer of the Declaration of Independence. The dwelling is also a contributing resource to the Williamsburg Historic District (DHR #137-0050; DHR Site Files; Snell 1971).



Figure 30 View of the George Wythe House (DHR #137-0058), Looking West.

3.2.7.1 Visual Effect Assessment

The dwelling sits on a level lot at the corner of on the west side of Palace Green Street within the Williamsburg Historic District. Surrounding the house is a lawn with large trees to the north and south. The rear yard is enclosed by a white picket fence.

Line #2154 Rebuild Project

The George Wythe House is located within the 1.5-mile radius of the Line #2154 Rebuild Project centerline. At its closest point, the resource is approximately 6,309 feet southwest of the existing/proposed transmission line (Appendix B). Under current conditions, the existing transmission line, which ranges in height from approximately 61 to 81 feet in the vicinity of the resource (Structure #2154/420 through #2154/425), is not visible (Figures 31 and 32). Based upon preliminary design, the

Stage I Pre-Application Analysis Results

proposed structures will range in height from approximately 70 to 79 feet with a decrease in height of approximately 1 to 6 feet below the existing structures and an increase in height of approximately 9 feet (maximum) above the height of the existing structures in the section of the transmission line closest to the resource. It is anticipated that the proposed structures, based on the fieldwork, will also not be viewed from the resource.

The viewshed modeling conducted for the Line #2154 Rebuild Project indicates that neither the existing nor proposed structures will be visible from the resource (Figure 33). Based on the fieldwork, the proposed structure heights, and the viewshed modeling for the resource, *it is recommended that the proposed Line #2154 Rebuild Project would have No Visual Impact on the George Wythe House (DHR #137-0058).*

Line #2113

The George Wythe House is greater than 1.5 miles from Line #2113. Therefore, visual effects from this transmission line rebuild were not considered.

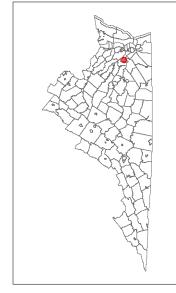


Figure 31 View from the George Wythe House, Williamsburg Historic District, and Battle of Fort Magruder/Battle of Williamsburg (Photo Location 52) Looking North towards the Existing Transmission Line. The Existing Line is Not Visible.



Figure 32 View from George Wythe House, Williamsburg Historic District, and Battle of Fort Magruder/Battle of Williamsburg (Photo Location 52) Looking Northeast towards the Existing Transmission Line. The Existing Line is Not Visible.

Viewshed Analysis and Photo Location
Map for the George Wythe House (DHR
#137-0058)
Client/Project
Dominion Energy Virginia
230 kV Lines #2113 and #2154 Transmission Line Rebuilds
and Related Projects 1,200 Prepared by TPS on 2020-12-01 TR by MGS on 2020-12-02 IR by SLD on 2020-12-02 (At original document size of 11x17) 1:7,200 Existing Visible, Proposed Not Visible Existing Not Visible, Proposed Visible Both Existing and Proposed Visible 9 Architectural Resource Proposed Structure Existing Structure Photo Location 1.5-Mile Buffer 0.5-Mile Buffer Project Limits 1-Mile Buffer



Motos

1. Coordinate System: NAD 1983 State Plane Virginia South FIPS 4502 Feet

2. Data Sources: Dominion Energy Virginia, Historic resource data provided by Virginia. Historic resources information System Sa. Viewshed analysis produced from digital elevation model and digital surface moform Visin LIDAR.

Stage I Pre-Application Analysis Results

3.3 HISTORIC DISTRICTS CONSIDERED

Two NHL/NRHP-listed historic districts, the Old College Yard (College of William & Mary) Historic District (DHR #137-0013) and the Williamsburg Historic District (DHR #137-0050), are located within 1.5 miles of the Rebuild Projects centerlines 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 Old College Yard (College of William & Mary) Historic District (DHR #137-0013)

Old College Yard Historic District contains one of the oldest buildings on the campus of the College of William & Mary. Designed by Sir Christopher Wren, the four-story Old College Yard building, which includes the raised basement, was the largest building constructed in the colonies at the time (Figure 34). The main section of the U-shaped building was begun in 1695 and completed in 1705. The north wing, known as the "Great Hall" was also completed at that time. The south wing, which holds the college chapel, was completed in 1732. The symmetrical building is constructed of brick and measures 136 feet in length with a round-arch entry. The district was listed on the NHL in 1960 and on the NRHP in 1986 under Criteria A and C with a period of significance from c. 1750 to 1939 (DHR Site Files; Melvin 1972; Greiff and Epperson 1985).



Figure 34 View of Old College Yard (DHR #137-0013) Looking West.

Stage I Pre-Application Analysis Results

3.3.1.1 Visual Effect Assessment

The building sits on a level lot at the west end of Duke of Gloucester Street in a triangular area formed by Jamestown and Richmond roads. The building is surrounded by a manicured lawn with mature trees and a series of poured concrete sidewalks (Appendix B).

Line #2154 Rebuild Project

Old College Yard (College of William & Mary) is located within the 1.5-mile radius of the Line #2154 Rebuild Project centerline. At its closest point, the resource is approximately 7,620 feet southeast of the existing/proposed transmission line (Appendix B). Under current conditions, the existing transmission line, which ranges in height from approximately 61 to 81 feet in the vicinity of the resource (Structure #2154/420 through #2154/425), is not visible (Figure 35). Based upon preliminary design, the proposed structures will range in height from approximately 70 to 79 feet with a decrease in height of approximately 1 to 6 feet below the existing structures and an increase in height ranging from approximately 4 to 9 feet above the height of the existing structures in the section of the transmission line closest to the resource. It is anticipated that the proposed structures, based on the fieldwork, will also not be viewed from the resource.

The viewshed modeling conducted for the Line #2154 Rebuild Project indicates that neither the existing nor proposed structures will be visible from the resource (Figure 36). Based on the fieldwork, the preliminary heights of the proposed structures, and the viewshed modeling for the resource, *it is* recommended that the proposed Line #2154 Rebuild Project would have No Visual Impact on Old College Yard (College of William & Mary; DHR #137-0013).

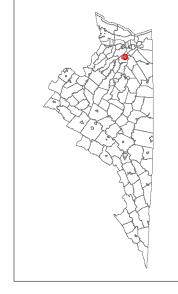
Line #2113 Rebuild Project

Old College Yard (College of William & Mary) is greater than 1.5 miles from Line #2113. Therefore, visual effects from this transmission line rebuild were not considered.



Figure 35 View from Old College Yard and Battle of Fort Magruder/Battle of Williamsburg (Photo Location 104) Looking East towards the Existing Transmission Line. The Existing Line is Not Visible.

ClientProject
Dominion Energy Virginia
230 KV Lines #2113 and #2154 Transmission Line Rebuilds and Related Projects 1,400 Prepared by TPS on 2020-12-01 TR by MGS on 2020-12-02 IR by SLD on 2020-12-02 Viewshed Analysis and Photo Location Map of the Old College Yard (College of William & Mary) Historic District (DHR #137-0013) (At original document size of 11x17) 1:8,400 Existing Not Visible, Proposed Visible Existing Visible, Proposed Not Visible Both Existing and Proposed Visible 700 Architectural Resource Proposed Structure Existing Structure Photo Location 1.5-Mile Buffer 0.5-Mile Buffer Project Limits 1-Mile Buffer



Notice 1. Coordinate System: NAD 1983 StatePlane Virginia South FIPS 4502 Feet
2. Data Sources, Londonino Energy Virginia, Historic resource data provided by VI Department of Historic Resources, Virginia Cultural Resources information System 5. Viewshed analysis produced from digital elevation model and digital surface model virginia Cultural Resources information System from VIGNI LIDAR 4. Orthoring gray © Bing Maps

Stantec

Stage I Pre-Application Analysis Results

3.3.2 Williamsburg Historic District (DHR #137-0050)

The Williamsburg Historic District comprises approximately 173 acres and contains approximately 100 restored and 350 reconstructed buildings within its NHL/NRHP boundary. The area encompasses much of the area of the first capital of Virginia (1699-1780). Restoration efforts were undertaken beginning in the late 1920s through the auspices of John D. Rockefeller, Jr. Colonial Williamsburg's intention is to interpret life of the colonial capital, including eighteenth century African American slaves, which made up almost half of Williamsburg's population at that time. The Williamsburg Historic District was listed on the NHL in 1960 and on the NRHP in 1966 for its significance as a colonial capital and its role in eighteenth century politics (DHR Site Files; Melvin 1972; Lissandrello 1975).

3.3.2.1 Visual Effect Assessment

The district is generally characterized by open greens, lawns, and tree lines and small wooded areas.

Line #2154 Rebuild Project

To assess the potential visual effects on the historic district, photographs were taken from the public ROW from accessible points of the resource within 1.5 miles of the ROW. At its closest point, the historic district is approximately 2,440 feet to the south/southwest of the Line #2154 Rebuild Project. Under current conditions, the existing transmission line structures, which range in height from approximately 56 to 81 feet in the vicinity of the resource (Structure #2154/420 through #2154/430), are not visible (Figures 19-20, 23-24, 27-28, 31-32 and 37-43). Based upon preliminary design, the proposed structures will range in height from approximately 61 to 79 feet with a decrease in height of approximately 1 to 6 feet below the existing structure heights and an increase in height ranging from approximately 4 to 9 feet above the height of the existing structures in the section of the transmission line closest to the resource. It is anticipated that the proposed structures, based on the fieldwork, will also not be viewed from the resource.

The viewshed modeling conducted for the Line #2154 Rebuild Project indicates that neither the existing nor proposed structures will be visible from the resource (Figure 43). Based on the fieldwork, the preliminary heights of the proposed structures, and the viewshed modeling for the resource, *it is* recommended that the proposed Line #2154 Rebuild Project would have No Visual Impact on the Williamsburg Historic District (DHR #137-0050).

Line #2113 Rebuild Project

To assess the potential visual effects on the historic district, photographs were taken from the public ROW from accessible points of the resource within 1.5 miles of the ROW. At its closest point, the historic district is approximately 7,479 feet to the south/southwest of the Line #2113 Rebuild Project. Under current conditions, as observed during the fieldwork, the existing transmission line structures, which range in height from approximately 57 to 70 feet in the vicinity of the resource (Structure #2113/406 through #2113/411), are not visible from the survey points within the portion of the district located within

Stage I Pre-Application Analysis Results

1.5 miles of the Line #2113 Rebuild Project (Figures 37-42). Based upon preliminary design, the proposed structures will range in height from approximately 60 to 75 feet with a decrease of approximately 1 foot below the existing structure heights and an increase in height ranging from approximately 4 to 8 feet above the height of the existing structures in the section of the transmission line closest to the resource. It is anticipated that the proposed structures, based on the fieldwork, will also not be viewed from the resource.

The viewshed modeling conducted for the Line #2113 Rebuild Project indicates that neither the existing nor proposed structures will be visible from the resource (Figure 43). Based on the fieldwork, the preliminary heights of the proposed structures, and the viewshed modeling for the resource, *it is* recommended that the proposed Line #2113 Rebuild Project would have No Visual Impact on the Williamsburg Historic District (DHR #137-0050).



Figure 37 View from Williamsburg Historic District and Battle of Fort Magruder/Battle of Williamsburg (Photo Location 60) Looking East towards the Existing Transmission Line. The Existing Line is Not Visible.



Figure 38 View from Williamsburg Historic District and Battle of Fort Magruder/Battle of Williamsburg (Photo Location 60) Looking North towards the Existing Transmission Line. The Existing Line is Not Visible.



Figure 39 View from Williamsburg Historic District and Battle of Fort Magruder/Battle of Williamsburg (Photo Location 69) Looking East towards the Existing Transmission Line. The Existing Line is Not Visible.



Figure 40 View from Williamsburg Historic District and Battle of Fort Magruder/Battle of Williamsburg (Photo Location 76) Looking East towards the Existing Transmission Line. The Existing Line is Not Visible.



Figure 41 View from Williamsburg Historic District and Battle of Fort Magruder/Battle of Williamsburg (Photo Location 83) Looking East towards the Existing Transmission Line. The Existing Line is Not Visible.



Figure 42 View from Williamsburg Historic District and Battle of Fort Magruder/Battle of Williamsburg (Photo Location 35) Looking Northeast towards the Existing Transmission Line. The Existing Line is Not Visible.

Map of the Williamsburg Historic District (DHR #137-0050)

Clent/Project
Dominion Energy Virginia
230 KV Lines #2113 and #2154 Transmission Line Rebuilds and Related Projects
Project Location
N
N
N
Photo Location

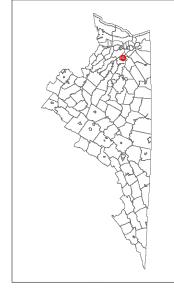
Existing Structure

Existing Visible, Proposed Visible

Existing Visible, Proposed Visible

Existing Not Visible, Proposed Visible

Existing Not Visible, Proposed Visible



Motes

1. Coordinate System: NAD 1983 StatePlane Virginia South FIPS 4502 Fr.

2. Data Sources: Dominion Energy Virgina, Historic resource data provide Department of Historic Resources, Virginia Cultural Resources Information, 3. Viewated analysis produced from digital elevation model and digital sur from VGIN LIDAR.

Stantec

Stage I Pre-Application Analysis Results

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 8 (Appendix B). 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 Programs (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 8 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
099-5282	Battle of Fort Magruder/Battle of Williamsburg	10,371	4,941

3.4.1 Battle of Fort Magruder/Battle of Williamsburg (DHR #099-5282/ABPP VA 010)

The Battle of Fort Magruder/Battle of Williamsburg is an area comprising an estimated 10,370 acres with approximately 4,941 acres located within 1.0-mile of the centerline of the Rebuild Projects. Located within the current battlefield boundary is the NHL-listed Colonial Williamsburg Historic District. Much of the battlefield has been developed, including the construction of I-64, a number of modern residential neighborhoods, and commercial and industrial complexes as well as the Williamsburg Golf Course. The resource as a whole was determined potentially eligible for listing on the NRHP by DHR in 2007 and again in 2013 (DHR Site Files). However, a majority of the area of the battlefield resource under consideration has been developed with very little remaining, undisturbed landscape.

Stage I Pre-Application Analysis Results

3.4.1.1 Visual Effects Assessment

Line #2154 Rebuild Project

The portion of the NRHP-potentially eligible resource within 1.0 mile of the transmission line includes sections of the Study and Core Areas of the battlefield as determined by the ABPP. The Core Area encompasses Structure #2154/437 through #2154/445. Both the Study and Core Areas of the battlefield also extend beyond 1 mile on either side of the Line #2154 Rebuild Project corridor. Additionally, the existing transmission line crosses the battlefield (Appendix B). Under current conditions, as observed during the fieldwork, the existing transmission line is visible from the resource from Photo Location 43 (Figure 45) and where the transmission line crosses the battlefield. The existing line is not visible from the remaining photo locations utilized for the visual effects evaluation (Figures 16, 19-20, 22-23, 27-28, 31-32, 35, 37-42, 44-46, 48-50). Based upon preliminary design, the structures in the vicinity of the resource (Structures #2154/411 through #2154/472) will range in height from approximately 60 to 85 feet with a decrease in height of approximately 1 to 9 feet below the existing structure heights and an increase in height ranging from approximately 0 to 29 feet.

The viewshed modeling conducted for the Line #2154 Rebuild Project indicates that the existing and proposed structures are visible where the battlefield crosses the transmission line and in areas immediately adjacent to the ROW (Figure 54). However, the overall visual impact of the proposed structures will not greatly change from the existing conditions in the vicinity of this resource. Based on the fieldwork, the preliminary heights of the proposed structures, and the viewshed modeling for the resource it is recommended that the proposed Line #2154 Rebuild Project would have a Minimal Visual Impact on the Battle of Fort Magruder/Battle of Williamsburg (DHR #099-5282/VA 010).

Line #2113 Rebuild Project

The portion of the NRHP-potentially eligible resource within 1.0 mile of the transmission line includes sections of the Study Area of the battlefield as determined by the ABPP. The main Core Area of the battlefield is located approximately 2.7 miles from the Line #2113 Rebuild Project with the existing transmission line located to the northeast, north, and northwest of the battlefield (Appendix B). The closest point, which is the northwestern-most point of the resource, is approximately 4,531 feet from the existing transmission line. Under current conditions, as observed during the fieldwork, the existing transmission line is not visible from the battlefield resource (Figures 10-12). Based upon preliminary design, the structures in the vicinity of the resource (Structures #2113/405 through #2113/411) will range in height from approximately 60 to 75 feet with a decrease in height of approximately 1 foot below the existing structure heights and an increase in height ranging from approximately 4 to 8 feet. It is anticipated that the proposed structures, based on fieldwork observation, will also not be viewed from the resource.

The viewshed modeling conducted for the Line #2113 Rebuild Project indicates that neither the existing nor proposed structures will be visible from the resource (Figure 54). Based on the fieldwork, the preliminary heights of the proposed structures, and the viewshed modeling for the resource, *it is*

Stage I Pre-Application Analysis Results

recommended that the proposed Line #2113 Rebuild Project would have No Visual Impact on the Battle of Fort Magruder/Battle of Williamsburg (DHR #099-5282/VA 010).



Figure 44 View from Battle of Fort Magruder/Battle of Williamsburg (Photo Location 18) Looking North towards the Existing Transmission Line. The Existing Line is Not Visible.



Figure 45 View from Battle of Fort Magruder/Williamsburg Battlefield (Photo Location 47) Looking Northeast toward the Existing Transmission Line. The Existing Line is Not Visible.

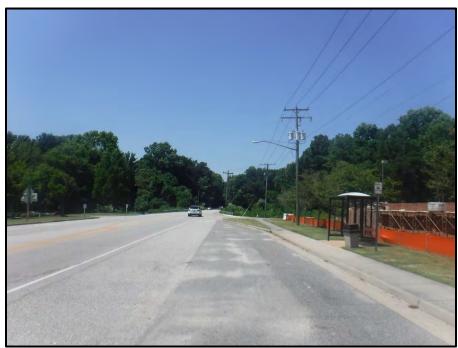


Figure 46 View from Battle of Fort Magruder/Williamsburg Battlefield (Photo Location 45) Looking North toward the Existing Transmission Line. The Existing Line is Not Visible.



Figure 47 View from Battle of Fort Magruder/Williamsburg Battlefield (Photo Location 43) Looking North toward the Existing Transmission Line. The Existing Line is Visible.

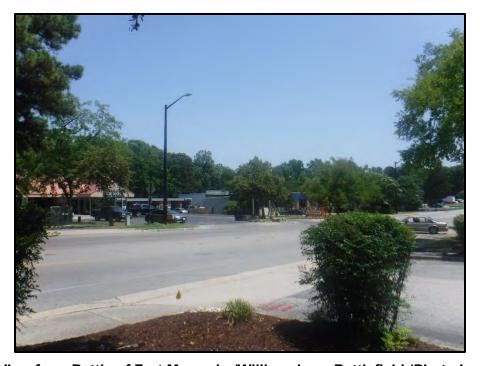


Figure 48 View from Battle of Fort Magruder/Williamsburg Battlefield (Photo Location 24) Looking North toward the Existing Transmission Line. The Existing Line is Not Visible.



Figure 49 View from Battle of Fort Magruder/Williamsburg Battlefield (Photo Location 10) Looking North toward the Existing Transmission Line. The Existing Line is Not Visible.



Figure 50 View from Battle of Fort Magruder/Williamsburg Battlefield (Photo Location 14) Looking North toward the Existing Transmission Line. The Existing Line is Not Visible.



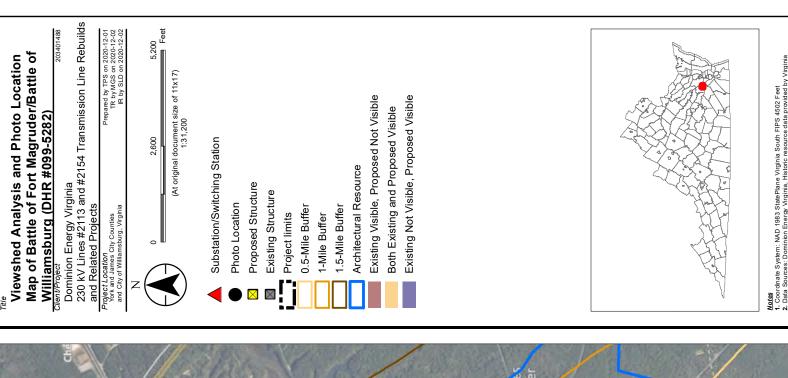
Figure 51 View from Battle of Fort Magruder/Williamsburg Battlefield (Photo Location 97) Looking South toward the Existing Transmission Line. The Existing Line is Not Visible.



Figure 52 View from Battle of Fort Magruder/Williamsburg Battlefield (Photo Location 103) Looking South toward the Existing Transmission Line. The Existing Line is Not Visible.



Figure 53 View from Battle of Fort Magruder/Williamsburg Battlefield (Photo Location 103) Looking West toward the Existing Transmission Line. The Existing Line is Not Visible.





Stantec

are rescued any error and stall 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 responsibility for weifying the accuracy and completeness of this information and shall not be responsibility for weifying the accuracy and completeness of the data

CONCLUSIONS

4.0 CONCLUSIONS

4.1 OVERVIEW

Stantec was retained by Dominion Energy to conduct a Stage I Pre-Application Analysis for the proposed rebuild of Lines #2113 and #2154 in York and James City Counties and the City of Williamsburg. The Rebuild Projects will entail the following:

Line #2154 Rebuild Project

- Rebuild 7.6 miles of 230 kV Line #2154 between Waller Substation and Structure #2154/482 (near Skiffes Creek Switching Station);
- Remove 6.1 miles of idle 115 kV Line #58 between Waller Substation and Kingsmill Substation;
- Rebuild 1.5 miles of 115 kV Line #19 between Kingsmill Substation and Structure #2154/482;
- Related substation work at Waller, Penniman, and Kingsmill Substations and Skiffes Creek Switching Station.

Line #2113 Rebuild Project

- Rebuild 3.8 miles of 230 kV Line #2113 between Lightfoot Substation and Waller Substation;
- Remove 3.8 miles of idle 115 kV Line #58 between Lightfoot Substation and Waller Substation;
 and
- Related substation work at Lanexa, Lightfoot, and Waller Substations.

No additional ROW is required. In order to maintain the structural integrity and reliability of its transmission system and perform needed maintenance on its existing facilities, Dominion Energy proposes to rebuild, pending final approval by the SCC, entirely within existing ROW, approximately 12 miles of existing transmission lines in James City and York counties and the City of Williamsburg. Dominion proposes to remove and replace 99 existing transmission support structures, mainly wood H-frame structures, associated foundations, and overhead conductor wire with weathering steel double-circuit 230 kV structures as part of the rebuild projects. All proposed structure heights and locations provided in this report are based upon preliminary engineering and are subject to final design.

CONCLUSIONS

4.1.1 Recommendations - Architectural Resources

Architectural Resources

Line #2154 Rebuild Project

Seven NHL-listed architectural resources are located within the 1.5-mile buffer and include Carter's Grove Plantation (DHR 047-0001), Bruton Parish Church (DHR #137-0007), Old College Yard Historic District (DHR #137-0013), Peachy House (DHR #137-0032), James Semple House (DHR #137-0033), Williamsburg Historic District (DHR #137-0050), and the George Wythe House (DHR #137-0058). Four of the NHL-listed resources are also contributing resources to the NHL-listed Williamsburg Historic District. Two NRHP-listed resources, Colonial Parkway (DHR #047-0002) and the Colonial National Historic Park (DHR #099-5241), were identified within the 1.0-mile buffer, and three NRHP-eligible resources. Confederate Redoubt #9 (DHR #099-0040), Chesapeake & Ohio Railroad (DHR #121-5134), and Capitol Landing (DHR #137-0056), were identified within the 0.5-mile buffer. A single battlefield was also identified, the NRHP-potentially eligible Battle of Fort Magruder/Battle of Williamsburg (DHR #099-5282), which also falls within 1.0 mile. Additionally, one NRHP listed resource, Bryan Manor Plantation (DHR #099-0065), located within 1.0 mile of the centerline, and one NRHP-eligible resource, Confederate Redoubt #9, located within 0.5 mile of the centerline, have been demolished. Four resources cross the project limits: Colonial Parkway, Colonial National Historic Park, Battle of Fort Magruder/Battle of Williamsburg, and the Chesapeake & Ohio Railroad. One resource, Capitol Landing (DHR #137-0056), was identified within 0.5-mile of the Line #2154 Rebuild Project centerline; however, the resource is significant as an archaeological site and therefore no visual effects assessment was conducted (Table 9).

Based on preliminary engineering, the height of the proposed structures would decrease by approximately 9 feet (maximum) below the existing structure heights and increase to approximately 29 (maximum) feet over existing structure height. Based on the analysis, it is recommended that the Line #2154 Rebuild Project would have No Visual Impact to Carter's Grove Plantation (DHR #047-0001), Bruton Parish Church (DHR #137-0007), Old College Yard (DHR #137-0013), Peachy House/Peyton Randolph House (DHR #137-0032), James Semple House (VHDR #137-0033), Williamsburg Historic District (DHR #137-0050), and the George Wythe House (DHR #137-0058). The proposed Line #2154 Rebuild Project would have a Minimal Impact to the Colonial Parkway (DHR #047-0002), Colonial National Historic Park (DHR #099-5241), Battle of Fort Magruder/Battle of Williamsburg (DHR #099-5282), and Chesapeake & Ohio Railroad (DHR #121-5134).

Line #2113 Rebuild Project

One NHL-listed architectural resource, the Williamsburg Historic District (DHR #137-0050), was located within the 1.5-mile buffer. No NRHP-listed resources were identified within 1.0 mile of the transmission line centerline. One NRHP-eligible resource, the Chesapeake & Ohio Railroad (DHR #121-5134), was identified within 0.5 mile and also crosses the project ROW. A single battlefield, the NRHP-potentially eligible Battle of Fort Magruder/Battle of Williamsburg (DHR #099-5282), was also identified within 1.0 mile of the centerline (Table 9).

CONCLUSIONS

Based on preliminary engineering, the height of the proposed structures would decrease by approximately 2 feet (maximum) below the existing structure heights and increase to approximately 14 (maximum) feet over existing structure height. Based on the analysis, it is recommended that the Line #2113 Rebuild Project would have No Visual Impact to the Battle of Fort Magruder/Battle of Williamsburg (DHR #099-5282) and the Williamsburg Historic District (DHR #137-0050). The proposed Line #2113 Rebuild Project would have a Minimal Visual Impact to the Chesapeake & Ohio Railroad (DHR #121-5134).

Table 9 Previously Recorded Architectural Resources Considered under the Stage I Pre-Application Guidelines

DHR#	Resource Name	DHR/NRHP Status	Rebuild Project	Distance to Line (Feet)	Impact
047-0001	Carter's Grove Plantation, 8797 Pocahontas Trail	Listed on the NHL in 1970; Listed on the NRHP in 1969	Line #2154	2,474	None
047-0002	Colonial Parkway	Listed on the NRHP in 1966; Addendum 2001	Line #2154	0	Minimal
099-0040	Confederate Redoubt #9	Determined Eligible by DHR in 2009 (demolished)	Line #2154	N/A	N/A
099-0065	Bryan Manor	Listed on the NRHP in 1978 (demolished)	Line #2154	N/A	N/A
099-5241	Colonial National Historic Park	Listed on the NRHP in 1966	Line #2154	0	Minimal
000 E202	Battle of Fort Magruder/Battle of Williamsburg	Determined Potentially Eligible by DHR in 2007, 2013, 2015 and 2019	Line #2154	0	Minimal
099-5282			Line #2113	4,531	None
121-5134	Chesapeake & Ohio Railroad	Determined Eligible for Listing on the NRHP by DHR in 2015, 2019, and 2020	Line #2154	0	Minimal
			Line #2113	0	Minimal
137-0007	Bruton Parish Church, Duke of Gloucester Street	Listed on the NHL and on the NRHP in 1970	Line #2154	6,456	None
137-0013	Old College Yard (College of William & Mary) Historic District, 111 Jamestown Road	Listed on the NHL in 1960; Listed on the NRHP in 1966	Line #2154	7.620	None
137-0032	Peachy House/Peyton Randolph House, Nicolson & North England Streets	Listed on the NHL and on the NRHP in 1970	Line #2154	5,451	None
137-0033	James Semple House, 506 Francis Street	Listed on the NHL and on the NRHP in 1970	Line #2154	5,073	None
137-0050	Williamsburg Historic District	Listed on the NHL in 1960; Listed on the NRHP in 1966	Line #2154	4,029	None
			Line #2113	7,479	None
137-0056	Capitol Landing, Capitol Landing Road	Determined Eligible by DHR in 1977 (archaeology site)	Line #2154	N/A	N/A

CONCLUSIONS

DHR#	Resource Name	DHR/NRHP Status	Rebuild Project	Distance to Line (Feet)	Impact
137-0058	George Wythe House, Palace Green	Listed on the NHL and on the NRHP in 1970	Line #2154	6,309	None

4.1.2 Recommendations - Archaeological Resources

Line #2154 Rebuild Project

Twelve previously recorded archaeological resources were identified during the background research. Two sites, a Middle Woodland camp and eighteenth-century farmstead (44JC1044) and a dam/road (44YO0541), have been determined potentially eligible for listing on the NRHP by DHR. A third site, a seventeenth century gallows (44WB0066), has been determined eligible by DHR for listing on the NRHP. The remaining nine sites have not been evaluated for NRHP eligibility (Table 10). *An archaeological survey of areas subject to land disturbance during construction is recommended as part of a Stage II analysis.*

Line #2113 Rebuild Project

Five previously recorded archaeological resources were identified during the background research. Two sites, a Woodland site (44JC0369) and an indeterminate prehistoric site (44JC0466), were determined potentially eligible for listing on the NRHP. The remaining three sites, an indeterminate prehistoric site (44JC1304) and two sections of a late eighteenth-century camp site (44JC0133-0001 and 44JC0133-0002), have not been evaluated for listing on the NRHP by DHR (Table 10). An archaeological survey of areas subject to land disturbance during construction is recommended as part of a Stage II analysis.

Table 10 Previously Recorded Archaeological Resources Considered under the Stage I Pre-Application Guidelines

DHR#	Resource Name	DHR/NRHP Status	Within ROW of Line #	Impact
44JC0369	Woodland Site; Indeterminate	Determined Potentially Eligible for Listing on the NRHP by DHR in 1988	Line #2113	Avoid During Construction or Investigate During Archaeological Survey
44JC0466	Prehistoric; Indeterminate			Avoid During Construction or Investigate During Archaeological Survey
44JC1044	Middle Woodland Camp and Artifact Scatter; 18 th Century Farmstead	Determined Potentially Eligible for Listing on the NRHP by DHR in 2001	Line #2154	Avoid During Construction or Investigate During Archaeological Survey
44JC1301 18 th Century Domestic Site Not Evaluated		Line #2154	Avoid During Construction or Investigate During Archaeological Survey	

CONCLUSIONS

DHR#	Resource Name	DHR/NRHP Status	Within ROW of Line #	Impact
44JC1303	Indeterminate Woodland Site; Indeterminate 20 th Century Site	Not Evaluated	Line #2154	Avoid During Construction or Investigate During Archaeological Survey
44JC1304	Prehistoric; Indeterminate	Not Evaluated	Line #2113	Avoid During Construction or Investigate During Archaeological Survey
44WB0066	17 th Century Gallows Site	Determined Eligible for Listing on the NRHP by DHR in 1992	Line #2154	Avoid During Construction or Investigate During Archaeological Survey
44WB0133- 0001	4 th Quarter of the 18 th Century Camp	Not Evaluated	Line #2113	Avoid During Construction or Investigate During Archaeological Survey
44WB0133- 0002	4th Quarter of the 18th Century Camp	Not Evaluated	Line #2113	Avoid During Construction or Investigate During Archaeological Survey
44YO0220	Indeterminate 18 ^{th,} 19 th and 20 th Century Site; Civil War Site	Not Evaluated	Line #2154	Avoid During Construction or Investigate During Archaeological Survey
44YO0524	19 th Century Dwelling Site	Not Evaluated	Line #2154	Avoid During Construction or Investigate During Archaeological Survey
44YO0541	Dam/Road; Indeterminate Date	Determined Potentially Eligible for Listing on the NRHP by DHR in 2006	Line #2154	Avoid During Construction or Investigate During Archaeological Survey
44YO0757	19 th Century Dwelling Site	Not Evaluated	Line #2154	Avoid During Construction or Investigate During Archaeological Survey
44YO1137	1 st Half of the 20th Century Dwelling Site	Not Evaluated	Line #2154	Avoid During Construction or Investigate During Archaeological Survey
44YO1138	20 th Century Transportation Site	Not Evaluated	Line #2154	Avoid During Construction or Investigate During Archaeological Survey
44YO1139	18 th Century Dwelling Site	Not Evaluated	Line #2154	Avoid During Construction or Investigate During Archaeological Survey
44YO1140	19 th Century Dwelling Site	Not Evaluated	Line #2154	Avoid During Construction or Investigate During Archaeological Survey

REFERENCES

5.0 REFERENCES

Advisory Council for Historic Preservation (ACHP)

2000 36 CFR 800: Part 800- Protection of Historic and Cultural Properties. Federal Register, September 2, Washington, D.C.

American Battlefield Protection Program (ABPP)

2009 Update to the Civil War Sites Advisory Commission's Report on the Nation's Civil War Battlefields: Commonwealth of Virginia. National Park Service, Washington D.C.

Dillon, James

1974 "Brunton Parish Church" National Register of Historic Places Nomination form.

1974 "James Semple House" National Register of Historic Places Nomination form.

Evring, Shaun and Phyllis Ellin

1999 "Colonial Parkway" National Register of Historic Places Nomination form.

Grieff, Constance M. and Terrence W. Epperson

1985 "Old College Yard, College of William and Mary" National Register of Historic Places Nomination form.

Lissanderllo, Stephen

1975 "Williamsburg Historic District" National Register of Historic Places Nomination form.

Melvin, Frank S.

1972 "Williamsburg Historic District" National Register of Historic Places Nomination form.

1972 "Wren Building" National Register of Historic Places Nomination form.

Snell, Charles

1971 "George Wythe House" National Register of Historic Places Nomination form.

United States Department of the Interior (Interagency Resources Division)

- 1981 Department of the Interior's Regulations, 36 CFR Part 60: National Register of Historic Places. Interagency Resources Division, National Park Service, U.S. Department of the Interior, Washington, D.C.
- 1983 Department of the Interior, Archaeology and Historic Preservation: Secretary of the Interior's Standards and Guidelines. Interagency Resources Division, National Park Service, U.S. Department of the Interior, Washington, D.C.
- 1991 How to Apply the National Register Criteria of Evaluation. National Register Bulletin 15. Interagency Resources Division, National Park Service, U.S. Department of the Interior, Washington, D.C.

Virginia Department of Historic Resources (DHR)

2008 Guidelines for Assessing Impacts of Proposed Electric Transmission Lines and Associated Facilities on Historic Resources in the Commonwealth of Virginia. DHR, Richmond.

REFERENCES

2017 Guidelines for Conducting Historic Resource Survey in Virginia. DHR, Richmond.

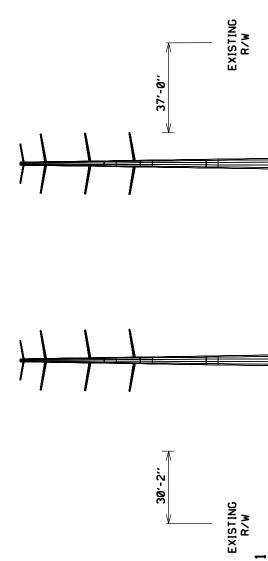
2020 Site Files.

APPENDIX A STRUCTURE DETAILS AND STRUCTURE LOCATION MAPS

LIGHTFOOT TO STRUCTURE NUMBER 2113/377

EXISTING 230KV CIRCUIT (LINE #2102) EXISTING 115KV CIRCUIT (LINE *58) EXISTING 230KV CIRCUIT (LINE #2113)

EXISTING 115KV CIRCUIT (LINE #169)



CORRIDOR LOOKING TOWARD WALLER CONFIGURATION EXISTING **TYPICAL**

AS PART OF A HIGHWAY RELOCATION PROJECT. THE R/W EXPANSION VARIES UP 1. ORIGINAL 200'R/W CONFIGURATION SHOWN HOWEVER R/W HAS BEEN EXPANDED TO APPROXIMATLEY 383' BEYOND WHAT IS SHOWN. NOTE:

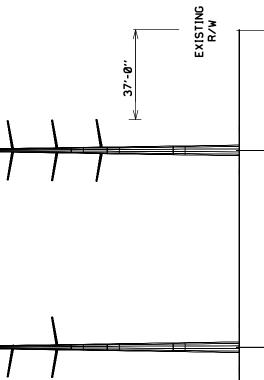
LIGHTFOOT TO STRUCTURE NUMBER 2113/377

THENINI THE

PROPOSED 230KV CIRCUIT (LINE #2113)

EXISTING EXISTING 230KV CIRCUIT 115KV CIRCUIT (LINE *2102) (LINE *169)





30'-2"

EXISTING R/W

NOTE 1

CORRIDOR LOOKING TOWARD WALLER PROPOSED CONFIGURATION TYPICAL

50,

85,

68,

50,

85,

68,

NOTE 1

200,

200,

AS PART OF A HIGHWAY RELOCATION PROJECT. THE R/W EXPANSION VARIES UP 1. ORIGINAL 200'R/W CONFIGURATION SHOWN HOWEVER R/W HAS BEEN EXPANDED

NOTE:

TO APPROXIMATLEY 383' BEYOND WHAT IS SHOWN.

2. INFORMATION CONTAINED ON DRAWING IS TO BE CONSIDERED PRELIMINARY

IN NATURE AND SUBJECT TO CHANGE BASED ON FINAL DESIGN.

#DCNSbEC#

STRUCTURE NUMBER

STRUCTURE NUMBER 2113/377 TO WALLER

THONINI THE

EXISTING 230KV CIRCUIT (LINE #2102)

EXISTING 115KV CIRCUIT (LINE #169)

EXISTING 230KV CIRCUIT (LINE #2102)

EXISTING 115KV CIRCUIT (LINE #169)

PROPOSED 230KV CIRCUIT (LINE #2113)

EXISTING 115KV CIRCUIT (LINE #58)

EXISTING 230KV CIRCUIT (LINE #2113)

47'-6"

40'-8" 20, 85, 200,

EXISTING R/W

EXISTING R/W

40'-8"

32'-4"

EXISTING R/W

EXISTING R/W

CORRIDOR LOOKING TOWARD WALLER PROPOSED CONFIGURATION TYPICAL

68,

50,

85,

68,

200,

NOTE: Information contained on drawing is to be considered preliminary

in nature and subject to change based on final design.

#DCMSbEC#

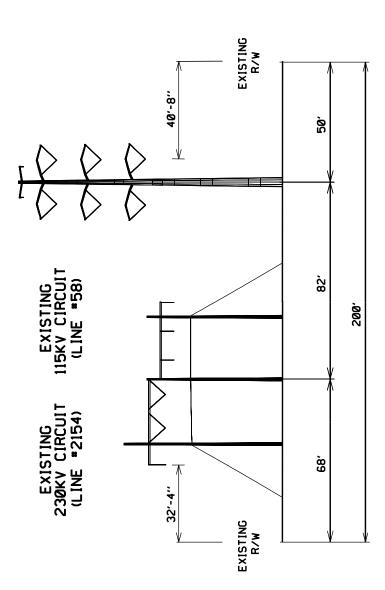
TYPICAL CORRIDOR LOOKING TOWARD WALLER

CONFIGURATION

EXISTING

WALLER TO STRUCTURE NUMBER 2154/447

EXISTING EXISTING 230KV CIRCUIT 115KV CIRCUIT (LINE *2146) (LINE *169)



EXISTING CONFIGURATION TYPICAL CORRIDOR LOOKING TOWARD KINGSMILL

WALLER TO STRUCTURE NUMBER 2154/447

EXISTING
2396KY CIRCUIT
(LINE "2146)
(LINE "169)

A40-8"

EXISTING
EXISTIN

PROPOSED CONFIGURATION TYPICAL CORRIDOR LOOKING TOWARD KINGSMILL

NOTE: Information contained on drawing is to be considered preliminary in nature and subject to change based on final design.

#DCMSbEC#

STRUCTURE NUMBER 2154/447 TO 449

STRUCTURE NUMBER 2154/447 TO 449

EXISTING 115KV CIRCUIT (LINE #169) EXISTING 230KV CIRCUIT (LINE #2146) EXISTING EXISTING 230KV CIRCUIT 115KV CIRCUIT (LINE *2154) (LINE *58)

EXISTING 115KV CIRCUIT (LINE *169)

EXISTING 230KV CIRCUIT (LINE #2146)

PROPOSED 230KV CIRCUIT (LINE #2154)

THENINI SHO

EXISTING R/W 40'-8" 50, 85, 200,

55′-0″

CORRIDOR LOOKING TOWARD KINGSMILL CONFIGURATION EXISTING TYPICAL

68,

EXISTING R/W

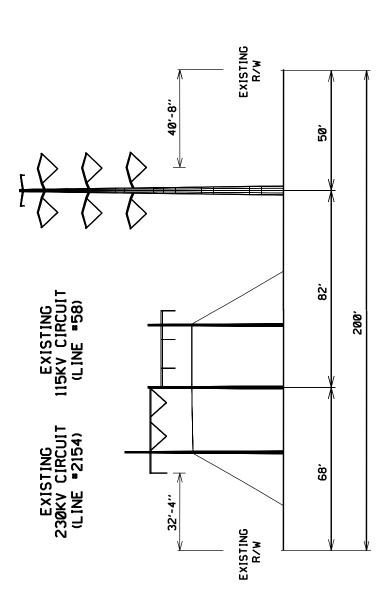
EXISTING R/W 40'-8" 50, PROPOSED CONFIGURATION 85, 200, 55'-0" 68, EXISTING R/W

CORRIDOR LOOKING TOWARD KINGSMILL TYPICAL NOTE: Information contained on drawing is to be considered preliminary in nature and subject to change based on final design.

#DCMSbEC#

STRUCTURE NUMBER 2154/449 TO 458

EXISTING EXISTING
23@KV CIRCUIT 115KV CIRCUIT
(LINE *2146) (LINE *169)



EXISTING CONFIGURATION

TYPICAL CORRIDOR LOOKING TOWARD KINGSMILL

STRUCTURE NUMBER 2154/447 TO 458

EXISTING
230KV CIRCUIT
(LINE "2146)
(LINE "169)

230KV CIRCUIT
(LINE "2154)

A77-6"

EXISTING
EXISTING
RAW

DCNSbEC

NOTE: Information contained on drawing is to be considered preliminary

in nature and subject to change based on final design.

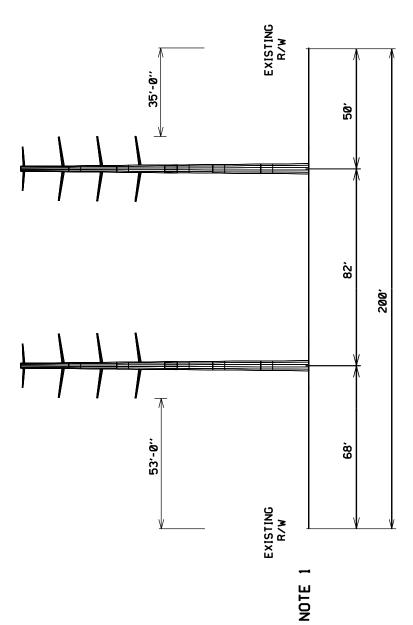
CORRIDOR LOOKING TOWARD KINGSMILL

TYPICAL

PROPOSED CONFIGURATION

2154/458 TO 463 STRUCTURE NUMBER

EXISTING 115KV CIRCUIT (LINE *169) EXISTING 230KV CIRCUIT (LINE #2146) EXISTING 115KV CIRCUIT (LINE *58)



CORRIDOR LOOKING TOWARD KINGSMILL CONFIGURATION EXISTING TYPICAL

AS PART OF A HIGHWAY RELOCATION PROJECT. THE R/W EXPANSION VARIES UP 1. ORIGINAL 200'R/W CONFIGURATION SHOWN HOWEVER R/W HAS BEEN EXPANDED IS SHOWN. TO APPROXIMATLEY 220' BEYOND WHAT

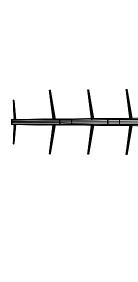
STRUCTURE NUMBER 2154/458 TO 463

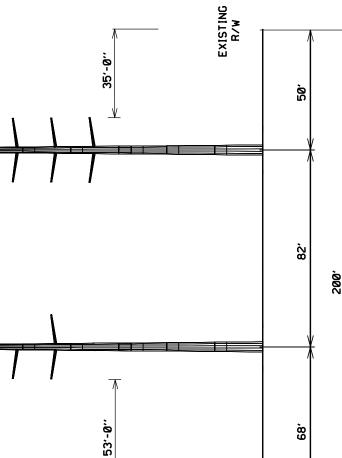
THENINI SHE

PROPOSED 23@KV CIRCUIT (LINE *2154)

EXISTING 230KV CIRCUIT (LINE #2146)

EXISTING 115KV CIRCUIT (LINE *169)





EXISTING R/W

NOTE

CORRIDOR LOOKING TOWARD KINGSMILL PROPOSED CONFIGURATION TYPICAL

TO APPROXIMATLEY 220' BEYOND WHAT IS SHOWN.

AS PART OF A HIGHWAY RELOCATION PROJECT. THE R/W EXPANSION VARIES UP

2. INFORMATION CONTAINED ON DRAWING IS TO BE CONSIDERED PRELIMINARY

IN NATURE AND SUBJECT TO CHANGE BASED ON FINAL DESIGN.

1. ORIGINAL 200'R/W CONFIGURATION SHOWN HOWEVER R/W HAS BEEN EXPANDED

NOTE:

#DCNSbEC#

THENIN, JOHN

140NI

≉DCNSbEC≉

NOTE: Information contained on drawing is to be considered preliminary

in nature and subject to change based on final design.

CORRIDOR LOOKING TOWARD KINGSMILL

TYPICAL

PROPOSED CONFIGURATION

150′

EXISTING R/W

EXISTING R/W 40,

.09

20,

25′-6″

26′-4″

EXISTING 115KV CIRCUIT (LINE *169)

PROPOSED 230KV CIRCUIT (LINE #2154)

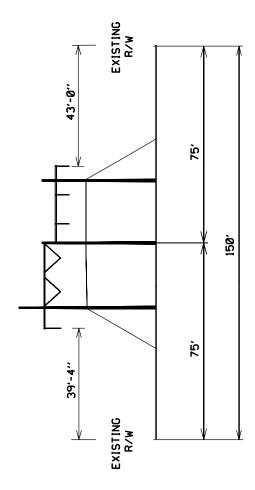
STRUCTURE NUMBER 2154/463 TO KINGSMILL 23@KV CIRCUIT (LINE *2154) 115KV CIRCUIT (LINE *169) 115KV CIRCUIT (LINE *169) 15KV CIRCUIT (LINE *169)

EXISTING CONFIGURATION
TYPICAL CORRIDOR LOOKING TOWARD KINGSMILL

KINGSMILL TO STRUCTURE NUMBER 2154/482

KINGSMILL TO STRUCTURE NUMBER 2154/482

TING EXISTING SIRCUIT 115KV CIRCUIT #2154) (LINE #19)



EXISTING CONFIGURATION

TYPICAL CORRIDOR LOOKING TOWARD STR #2154/482

Town In The

PROPOSED PROPOSED 230KV CIRCUIT (LINE *2154)

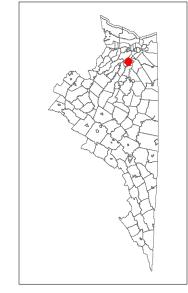
EXISTING
R/W
150'
150'

PROPOSED CONFIGURATION
TYPICAL CORRIDOR LOOKING TOWARD STR #2154/482

NOTE: Information contained on drawing is to be considered preliminary in nature and subject to change based on final design.

≉DCNSbEC≉

APPENDIX B ARCHITECTURAL RESOURCE MAPS – LINE #2113 AND #2154 230KV TRANSMISSION LINE REBUILDS AND RELATED PROJECTS



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

Anid doteM 121-5134 Lightfoot Substation

Prepared by TPS on 2020-12-01 TR by MGS on 2020-12-02 IR by SLD on 2020-12-02

Prepared by TPS on 2020-12-01 TR by MGS on 2020-12-02 IR by SLD on 2020-12-02

ClientProject
Dominion Energy Virginia
230 KV Lines #2113 and #2154 Transmission Line Rebuilds and Related Projects 4,000 Prepared by TPS on 2020-12-01 TR by MGS on 2020-12-02 IR by SLD on 2020-12-02 (At original document size of 11x17) 1:24,000 2,000 Substation/Switching Station Architectural Resource

are rescued any error and stall 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 responsibility for weifying the accuracy and completeness of this information and shall not be responsibility for weifying the accuracy and completeness of the data

STAGE I PRE-APPLICATION ANALYSIS FOR THE PROPOSED DOMINION ENERGY VIRGINIA 230 KV LINES #2113 AND #2154 TRANSMISSION LINE REBUILDS AND RELATED PROJECTS, JAMES CITY AND YORK COUNTIES AND THE CITY OF WILLIAMSBURG, VIRGINIA

APPENDIX C ARCHAEOLOGICAL RESOURCE MAPS – LINE #2113 AND #2154 230KV TRANSMISSION LINE REBUILDS AND RELATED PROJECTS

Prepared by TPS on 2020-12-01 TR by MGS on 2020-12-02 IR by SLD on 2020-12-02

2,000

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

Prepared by TPS on 2020-12-01 TR by MGS on 2020-12-02 IR by SLD on 2020-12-02 (At original document size of 11x17) 1:24,000 2,000 Substation/Switching Station Substation/Switching Station
Project Limits
Archaeological Resource

Prepared by TPS on 2020-12-01 TR by MGS on 2020-12-02 IR by SLD on 2020-12-02

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

2,000

Stantec

STAGE I PRE-APPLICATION ANALYSIS FOR THE PROPOSED DOMINION ENERGY VIRGINIA 230 KV LINES #2113 AND #2154 TRANSMISSION LINE REBUILDS AND RELATED PROJECTS, JAMES CITY AND YORK COUNTIES AND THE CITY OF WILLIAMSBURG, VIRGINIA

APPENDIX D VIEWSHED MAPS AND OP PHOTOGRAPH LOCATIONS –
LINE #2113 AND #2154 230KV TRANSMISSION LINE
REBUILDS AND RELATED PROJECTS

ilentProject
Dominion Energy Virginia
230 kV Lines #2113 and #2154 Transmission Line Rebuilds and Related Projects Figure No.
Appendix D
Title
Viewshed Maps and Photograph Locations Prepared by TPS on 2020-12-01 TR by MGS on 2020-12-02 IR by SLD on 2020-12-02 1,500 Photo Observation Point Project Location James City County, New Kent County, York County, and City of Williamsburg, Virginia Proposed Structures Existing Structures Substation

Project Limits

Architectural Resource

Existing Visible, Proposed Not Visible Viewshed Limits 1-Mile Bufer

Existing Not Visible, Proposed Visible Both Existing and Proposed Visible

> Substation Lightfoot

Stantec

are the care and the responsible for any errors or omissions which may be incorporated herein as a result. Stanted assumes no responsibility for data supplied in electronic format, and the recipient accepts full responsibility for verifying the accuracy and completeness of this information and shall not be responsibility for verifying the accuracy and completeness of the data



Stantec

099-5241 047-0002 2124/425 137-000 2124/420 137-0050 137-0013 2164/41S Waller Substation 014/6112 2113/405 00t/8112



Stantec

Match Line 099-5282 2154/455 Penniman Substation 044/4410 8124/440 2154/435 2154/430 Prepared by TPS on 2020-12-01 TR by MGS on 2020-12-02 IR by SLD on 2020-12-02

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

1,500

2124/460

Stantec

is 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

STAGE I PRE-APPLICATION ANALYSIS FOR THE PROPOSED DOMINION ENERGY VIRGINIA 230 KV LINES #2113 AND #2154 TRANSMISSION LINE REBUILDS AND RELATED PROJECTS, JAMES CITY AND YORK COUNTIES AND THE CITY OF WILLIAMSBURG, VIRGINIA

APPENDIX E PHOTO SIMULATIONS FOR SELECT LOCATIONS





OP 1: Existing Williamsburg Historic District (DHR #137-0050)

Attachment II.B.6.c.ii-i

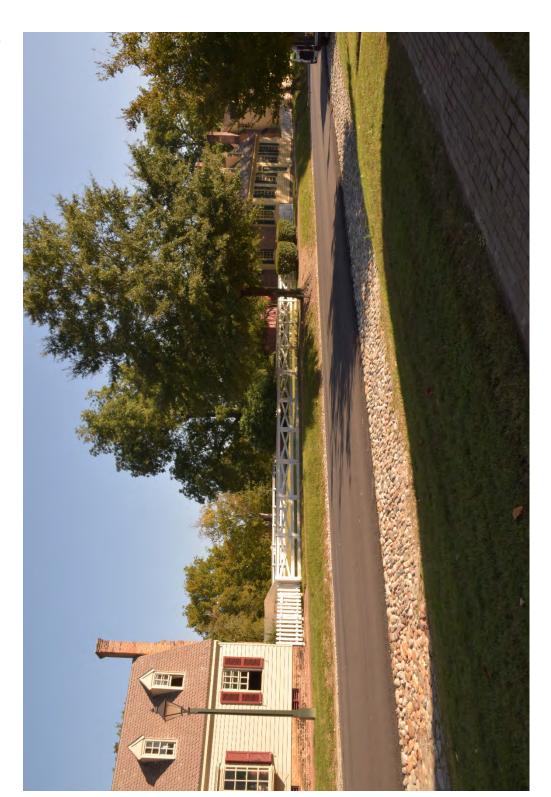


OP 1: Proposed (No Visibility) Williamsburg Historic District (DHR #137-0050)

Attachment II.B.6.c.ii-ii







OP 2: Existing James Semple House (NRHP Listing)/ Peyton Randolph House (DHR #137-0033)

Representation Provided by Stantec *Subject to final engineering

OP 2: Proposed (No Visibility)
James Semple House (NRHP Listing)/ Peyton
Randolph House
(DHR #137-0033)





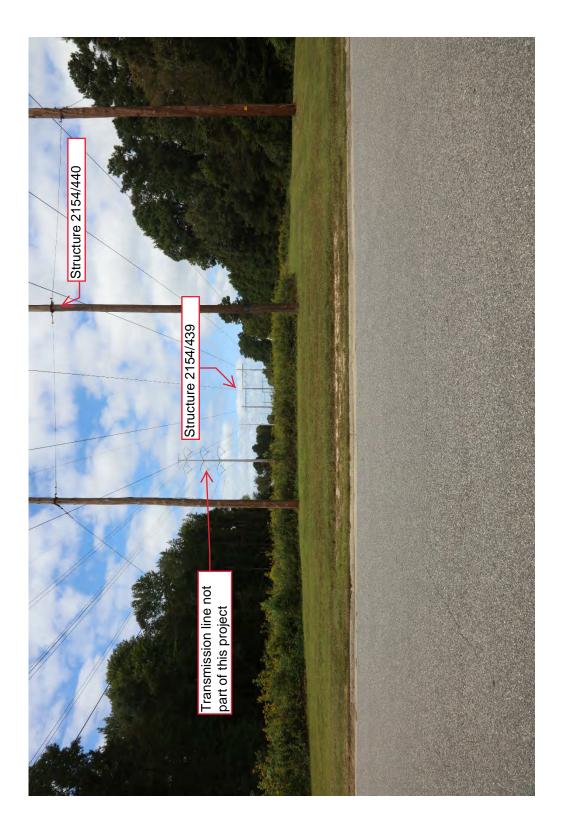


OP 3: Existing Colonial Parkway (NRHP Listing)/ Colonial National Historic Park (DHR #047-0002)

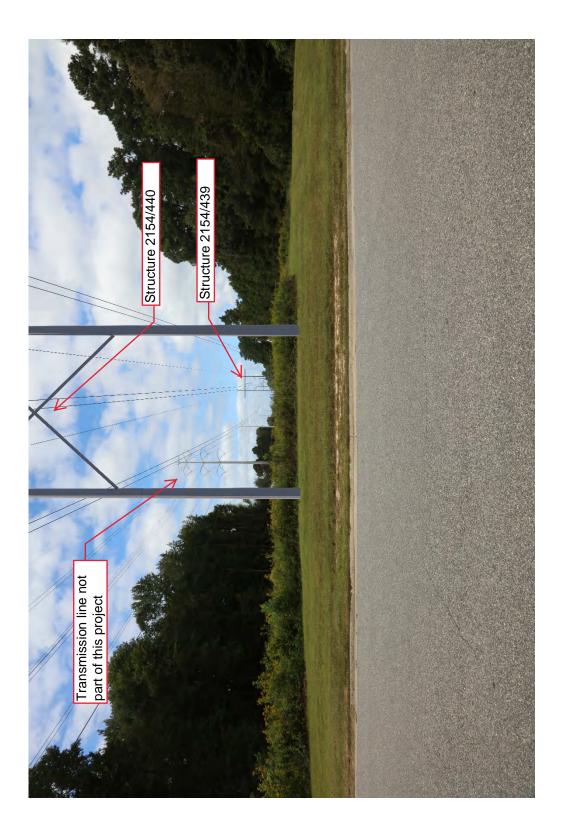
OP 3: Proposed Colonial Parkway (NRHP Listing)/ Colonial National Historic Park (DHR #047-0002)







OP 4: Existing Battle of Williamsburg (DHR #099-5282)



OP 4: **Proposed**Battle of Williamsburg
(DHR #099-5282)

Representation Provided by Stantec
*Subject to final engineering







OP 5: Existing Carter's Grove Plantation (DHR #047-0001)



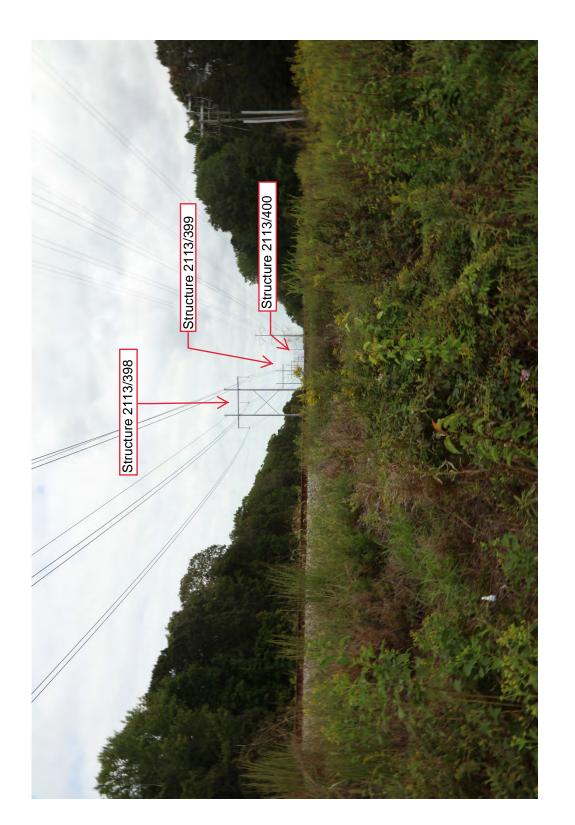
OP 5: Proposed (No Visibility) Carter's Grove Plantation (DHR #047-0001)





OP 6: Existing Chesapeake and Ohio Railroad (Historic)/ CSX Railroad (DHR #121-5134)

Representation Provided by Stantec *Subject to final engineering



OP 6: Proposed Chesapeake and Ohio Railroad (Historic)/ CSX Railroad (DHR #121-5134)

Attachment II.B.6.c.ii-xii



From: Brad Baskette

To: <u>Lane E Carr (Services - 6)</u>

Cc: Martha Little

Subject: [EXTERNAL] RE: Dominion Energy Request for Comments - 230 kV Lines #2113 and #2154 Transmission Line

Rebuilds and Related Projects

Date: Friday, December 4, 2020 8:43:45 AM
Attachments: image002.png

image002.png image004.png

This is an EXTERNAL email that was NOT sent from Dominion Energy. Are you expecting this message? Are you expecting a link or attachment? DO NOT click links or open attachments until you verify them

Ms. Lane,

Thank you for sharing those additional project details. After further review, VOF has determined that the proposed rebuild projects will not negatively impact either VOF's existing open-space easement, or a separate property currently under easement development, both of which are within a half-mile of the southern extent of this rebuild project, in the vicinity of the Skiffs Creek switching station. We acknowledge that the proposed activities and installation of the replacement structures will be occurring within the existing utility right-of-way.

We certainly appreciate the opportunity to review and comment on this project. If you have any further requests, comments, or questions, please just let me know.

Thank you, Brad Baskette

Brad Baskette

Asst. Director of Stewardship Virginia Outdoors Foundation (804) 297-2969 bbaskette@vof.org

From: Lane.E.Carr@dominionenergy.com < Lane.E.Carr@dominionenergy.com >

Sent: Wednesday, December 2, 2020 4:36 PM

To: Brad Baskette

 Co: Martha Little <mlittle@vof.org>

Subject: RE: Dominion Energy Request for Comments - 230 kV Lines #2113 and #2154 Transmission

Line Rebuilds and Related Projects

Alert: This email originated from outside VOF Hi Brad,

Thank you for the quick reply. In response to your inquiry, I offer the below information:

The section of the proposed Line #2154 Rebuild Project between the Kingsmill Substation and Structure #2154/482 (approximately 1.5 miles) includes the removal of the following structures supporting existing 230 kV Line #2154 and existing 115 kV Line #19:

- 12 double circuit 115/230 kV wood H-frame structures,
- 1 single circuit 115 kV pole,
- 4 single circuit 115 kV 3-pole structures, and
- 4 single circuit 230 kV 3-pole structures.
- The current average structure height is 59 feet (range is 56-70 feet)

These structures will be replaced with the following structures to support rebuilt Line #2154 and Line #19:

- 11 double circuit 115/230 kV weathering steel suspension H-frame structures.
- 5 double circuit 115/230 kV weathering steel double dead end 2-pole structures,
- 1 single circuit 230 kV switch structure, and
- 1 single circuit 115 kV switch structure.
- The proposed average structure height is 80 feet (range is 70-85 feet).

Glad to discuss more – thanks again,

Lane Carr

Siting and Permitting Specialist | 10900 Nuckols Rd. Glen Allen, VA 23060 O: 804.771.4061 | M: 804.310.9658 | Lane.E.Carr@dominionenergy.com



From: Brad Baskette < bbaskette@vof.org>

Sent: Wednesday, December 2, 2020 10:10 AM

To: Lane E Carr (Services - 6) < <u>Lane.E.Carr@dominionenergy.com</u>>

Cc: Martha Little < mlittle@vof.org>

Subject: [EXTERNAL] RE: Dominion Energy Request for Comments - 230 kV Lines #2113 and #2154

Transmission Line Rebuilds and Related Projects

This is an EXTERNAL email that was NOT sent from Dominion Energy. Are you expecting this message? Are you expecting a link or attachment? DO NOT click links or open attachments until you verify them

Ms. Lane,

Thank you for submitting this information to VOF for review ahead of the SCC filing. While Martha is currently out, I figured I'd take a look at the proposed rebuilds and respond to you to learn more about these upgrade projects. VOF does have an easement in the immediate vicinity on a property towards the southern extent of this proposal, near the skiffs creek switching station. The letter from you stated that there was already adequate right-of-way for the project and no additional right-of-way acquisition would be necessary. However, we are interested in learning additional details of these upgrades, specifically about any changes in existing infrastructure, including materials, height, etc for:

- a. Line #2154 (230kV) rebuild between Kingsmill/Skiffs Creek
- b. Line #19 (115kV) rebuild between Kingsmill/Skiffs Creek

Thank you, Brad

From: Martha Little <<u>mlittle@vof.org</u>>
Sent: Tuesday, December 1, 2020 9:57 AM

To: Mike Hallock-Solomon <<u>mhallock-solomon@vof.org</u>>; Brad Baskette <<u>bbaskette@vof.org</u>>

Subject: Fwd: Dominion Energy Request for Comments - 230 kV Lines #2113 and #2154

Transmission Line Rebuilds and Related Projects

Get Outlook for iOS

From: Lane.E.Carr@dominionenergy.com <Lane.E.Carr@dominionenergy.com>

Sent: Tuesday, December 1, 2020 8:49:13 AM

To: ImpactReview < impactreview@vof.org>; Martha Little < mlittle@vof.org>

Subject: Dominion Energy Request for Comments - 230 kV Lines #2113 and #2154 Transmission Line Rebuilds and Related Projects

Alert: This email originated from outside VOF

Ms. Little,

Please find the attached letter and overview map notifying you of the proposed transmission line rebuild projects located in James City

County, York County and the City of Williamsburg, Virginia.

Please contact me with any questions or for additional information.

Thank you,

Lane Carr

Siting and Permitting Specialist | 10900 Nuckols Rd. Glen Allen, VA 23060

O: 804.771.4061 | M: 804.310.9658 | Lane.E.Carr@dominionenergy.com



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

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

Rachel M Studebaker (Services - 6)

Office: (804) 273-4086

er (Services - 6)
Rhur, Roberta <robbie.rhur@dcr.virginia.gov> Wednesday, December 2, 2020 1:58 PM Rachel M Studebaker (Services - 6) [EXTERNAL] Re: TL #2113 and #2154 230kV Rebuild Project</robbie.rhur@dcr.virginia.gov>
mail that was NOT sent from Dominion Energy. Are you expecting this message? Are you ment? DO NOT click links or open attachments until you verify them***
ect and find that DCR Planning and Recreation has no comment on the scope of the project.
unity to comments
49 PM Rachel.M.Studebaker@dominionenergy.com dominionenergy.com> wrote:
r,
letter and project map notifying you of the proposed transmission line rebuild project locate ounties and the City of Williamsburg, Virginia.
any questions or for additional information.
paker
ialist II
ervices
, Richmond, VA 23219

Cell: (804) 217-1847



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

--

Robbie Rhur DCR VOP Project Planner and Environmental Review Coordinator 600 East Main Street Richmond VA 23219 804-371-2594 From: Scott Denny

To: <u>Lane E Carr (Services - 6)</u>

Subject: [EXTERNAL] Dominion Energy Virginia"s Prioposed 230kV Lines # 2113 and #2154 Transmission Line Rebuilds-

James City County, York County and the City of Williamsburg

Date: Tuesday, December 1, 2020 9:44:08 AM

This is an EXTERNAL email that was NOT sent from Dominion Energy. Are you expecting this message? Are you expecting a link or attachment? DO NOT click links or open attachments until you verify them

Dear Mr Carr:

The Virginia Department of Aviation has reviewed the proposal outlined in your December 1, 2020 email. Following our review of the layout it appears as though a portion of the proposed project will occur within 20,000 linear feet of the Williamsburg Jamestown Airport. Therefore, a 7460 form must be completed and submitted to the Federal Aviation Administration for review. This submittal will initiate an airspace study to determine if the proposed development will constitute a hazard to air navigation.

Provided the study results in s determination of no hazard, the department will not object to the project as it has been presented.

Please feel free to contact me at (804) 236-3638 if you have any questions regarding this matter.

Sincerely,

S. Scott Denny Senior Aviation Planner Virginia Department of Aviation

__

S. Scott Denny Senior Aviation Planner Virginia Department of Aviation 804-236-3638 scott.denny@doav.virginia.gov