II. DESCRIPTION OF THE PROPOSED PROJECT

A. Right-of-way ("ROW")

1. Provide the length of the proposed corridor and viable alternatives.

Response: The total length of the Rebuild Projects' transmission corridor is approximately 11.4 miles. The Rebuild Projects consist of the Line #2113 Rebuild Project (approximately 3.8 miles) and the Line #2154 Rebuild Project (approximately 7.6 miles) all within existing transmission line right-of-way or on Company-owned property, with no additional right-of-way required. No alternative routes are proposed for the Rebuild Projects. See Section II.A.9 of the Appendix for an explanation of the Company's route selection process.

Line #2113 Rebuild Project

The Line #2113 Rebuild Project extends approximately 3.8 miles between the Lightfoot Substation and the Waller Substation. It includes the wreck and rebuild of approximately 3.8 miles of double circuit H-frame structures currently supporting the existing 230 kV transmission Line #2113 and the co-located idle 115 kV Line #58. The existing Line #2113 Rebuild Project right-of-way traverses approximately 1.3 miles of York County, approximately 0.7 mile of the City of Williamsburg, and approximately 1.8 miles of James City County.

Line #2154 Rebuild Project

The Line #2154 Rebuild Project extends approximately 7.6 miles between the Waller Substation and Structure #2154/482. It includes the wreck and rebuild of approximately 7.6 miles of double circuit H-frame structures currently supporting the existing 230 kV transmission Line #2154, the co-located idle 115 kV Line #58 (for approximately 6.1 miles), and the co-located 115 kV Line #19 (for approximately 1.5 miles). The existing Line #2154 Rebuild Project right-of-way traverses approximately 5.0 miles of York County, approximately 0.9 mile of the City of Williamsburg, and approximately 1.7 miles of James City County.

II. DESCRIPTION OF THE PROPOSED PROJECT

A. Right-of-way ("ROW")

2. Provide color maps of suitable scale (including both general location mapping and more detailed GIS-based constraints mapping) showing the route of the proposed line and its relation to: the facilities of other public utilities that could influence the route selection, highways, streets, parks and recreational areas, scenic and historic areas, open space and conservation easements, schools, convalescent centers, churches, hospitals, burial grounds/cemeteries, airports and other notable structures close to the proposed project. Indicate the existing linear utility facilities that the line is proposed to parallel, such as electric transmission lines, natural gas transmission lines, pipelines, highways, and railroads. Indicate any existing transmission ROW sections that are to be quitclaimed or otherwise relinquished. Additionally, identify the manner in which the Applicant will make available to interested persons, including state and local governmental entities, the digital GIS shape file for the route of the proposed line.

Response: See Attachment II.A.2.a. No portion of the right-of-way is proposed to be quitclaimed or relinquished.

The Company will make the digital Geographic Information Systems ("GIS") shape file available to interested persons upon request to counsel for the Company as listed in the Rebuild Projects Application.

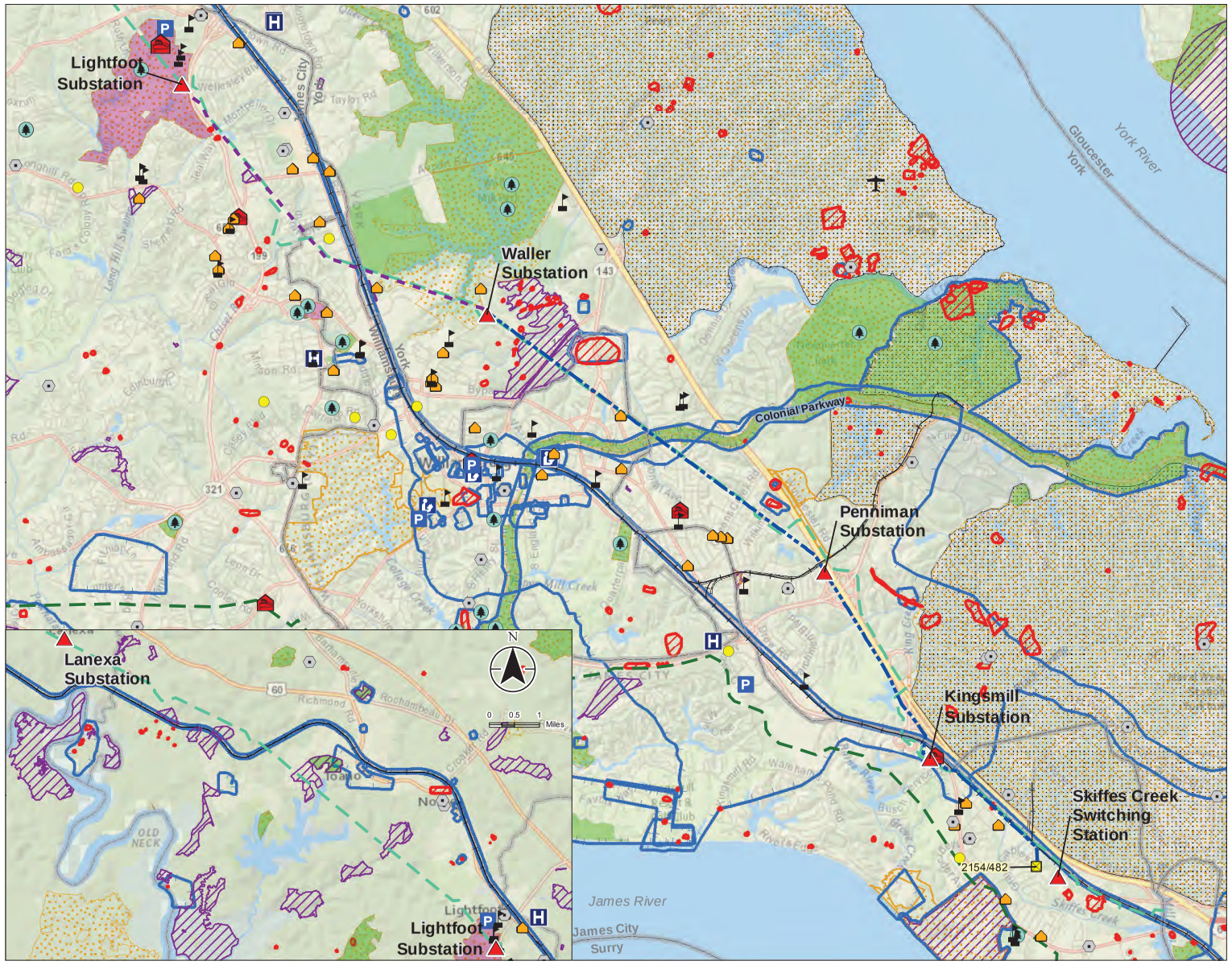


Figure No.
II.A.2

Title
Environmental Constraints Map

Client/Project 203401488
Dominion Energy Virginia
230 kV Lines #2113 and #2154 Transmission Line Rebuilds and Related Projects

Project Location
James City County, New Kent County, York County, and City of Williamsburg, Virginia

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

N

0 5,000 10,000 Feet
(At original document size of 11x17)
1:60,000

- Substation/Switching Station
- Structure 2154/482
- Airport
- Cemetery
- Convalescent Center
- Fire/Rescue
- Hospital
- Library
- Park
- Place of Worship
- Police
- School
- Line #2154 Rebuild Project
- Line #2113 Rebuild Project
- Gas Pipeline
- Colonial Pipeline
- Railroad
- Archaeological Resource
- Architectural Resource
- Military Installation
- Conservation Land
- Easement
- Park
- Recreation

Notes
1. Coordinate System: NAD 1983 StatePlane Virginia South FIPS 4502 Feet
2. Data Sources: Dominion Energy Virginia, Stantec, DCR, PADUS , James City County GIS 2020, NPMS, National Transporation Atlas Railroads, Virginia Department of Historic Resources, Virginia Cultural Resources Information System (VCRIS)
3. Base Map © National Geographic

Stantec

Page 01 of 01

II. DESCRIPTION OF THE PROPOSED PROJECT

A. Right-of-way ("ROW")

3. Provide a separate color map of a suitable scale showing all the Applicant's transmission line ROWs, either existing or proposed, in the vicinity of the proposed project.

Response: See Attachment I.G.1.

II. DESCRIPTION OF THE PROPOSED PROJECT

A. Right-of-way ("ROW")

4. To the extent the proposed route is not entirely within existing ROW, explain why existing ROW cannot adequately service the needs of the Applicant.

Response: Not applicable.

II. DESCRIPTION OF THE PROPOSED PROJECT

A. Right-of-way ("ROW")

5. Provide drawings of the ROW cross section showing typical transmission line structure placements referenced to the edge of the ROW. These drawings should include:

a. ROW width for each cross section drawing;

b. Lateral distance between the conductors and edge of ROW;

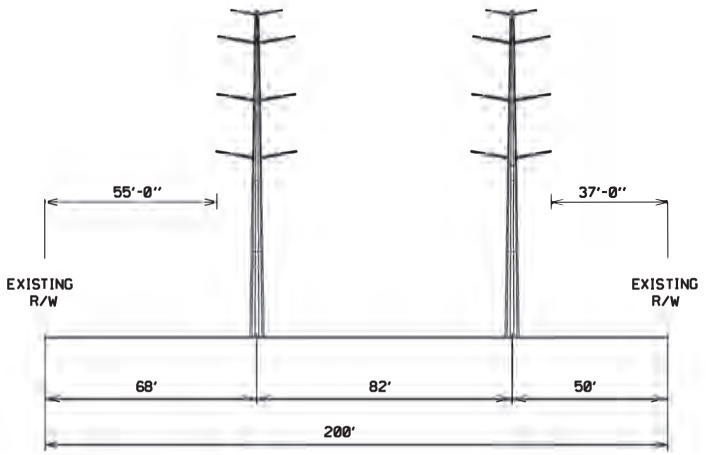
c. Existing utility facilities on the ROW; and

d. For lines being rebuilt in existing ROW, provide all of the above (i) as it currently exists, and (ii) as it will exist at the conclusion of the proposed project.

Response: See Attachments II.A.5.a-h.

For additional information on the structures, see Section II.B.3.

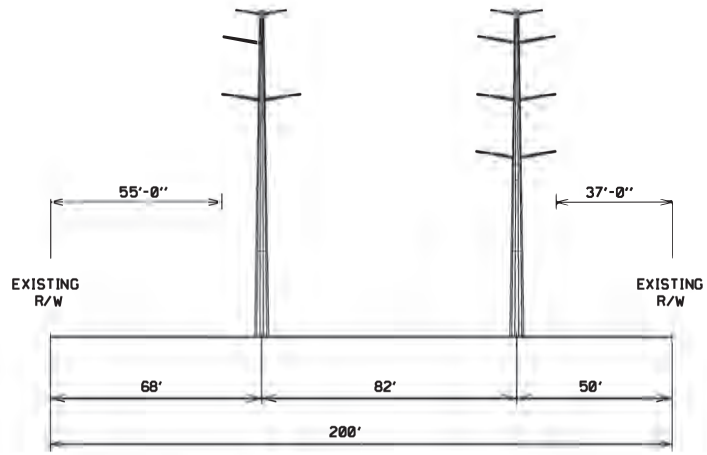
LIGHTFOOT TO STRUCTURE NUMBER 2113/377



EXISTING CONFIGURATION
TYPICAL CORRIDOR LOOKING TOWARD WALLER

LIGHTFOOT TO STRUCTURE NUMBER 2113/377

PRELIMINARY

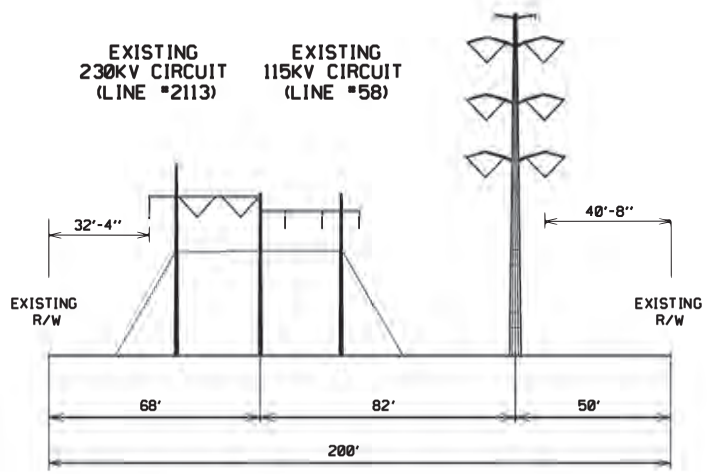


PROPOSED CONFIGURATION
TYPICAL CORRIDOR LOOKING TOWARD WALLER

NOTE: Information contained on drawing is to be considered preliminary in nature and subject to change based on final design.

$DGNSPEC$

STRUCTURE NUMBER 2113/377 TO WALLER

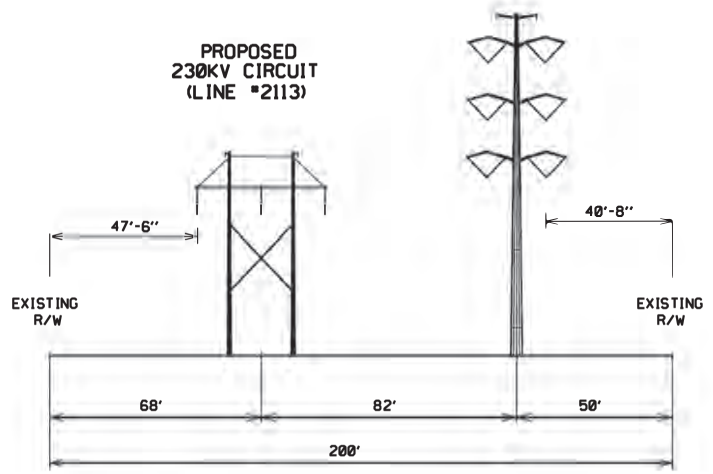


EXISTING CONFIGURATION
TYPICAL CORRIDOR LOOKING TOWARD WALLER

$DGNSPEC$

STRUCTURE NUMBER 2113/377 TO WALLER

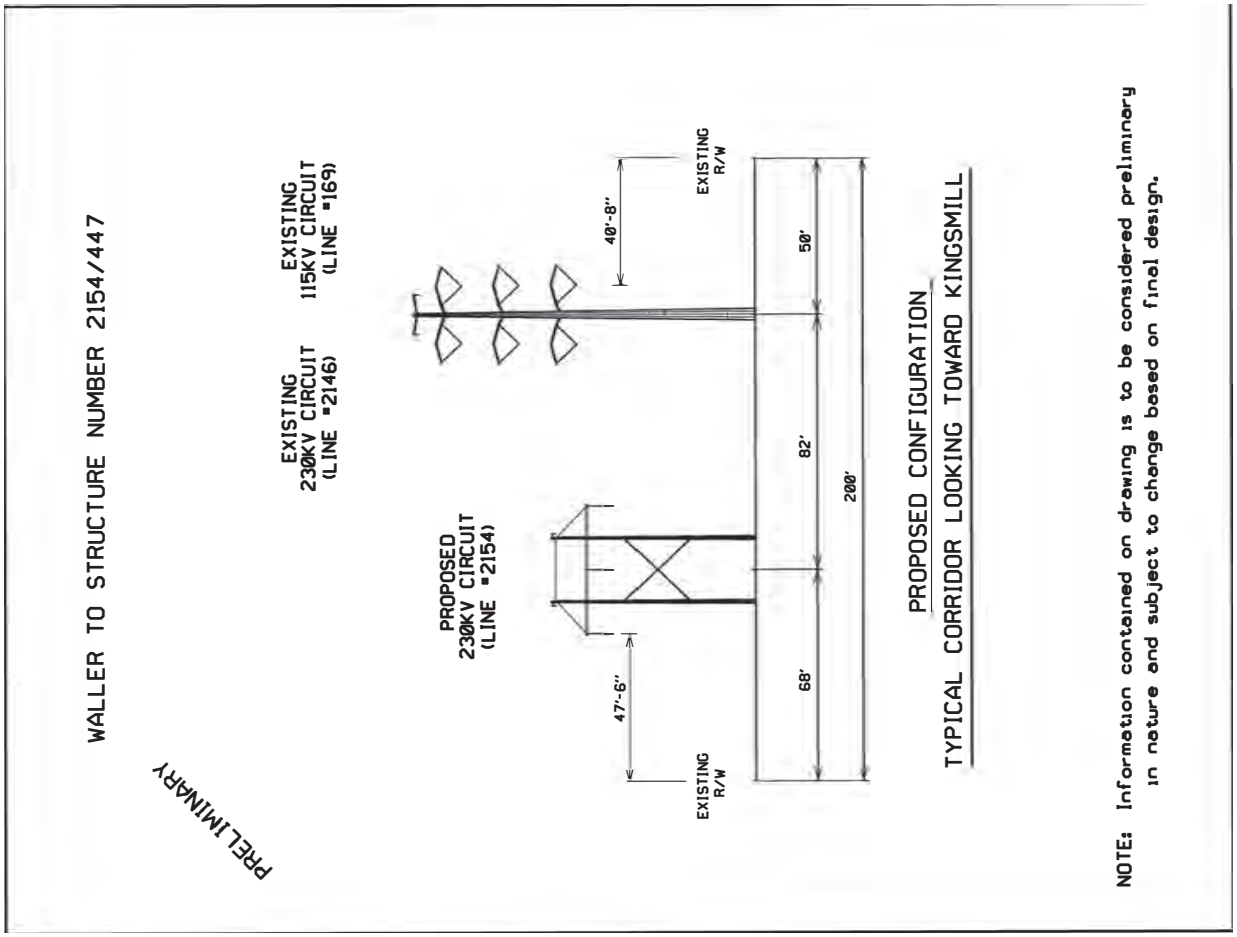
PRELIMINARY



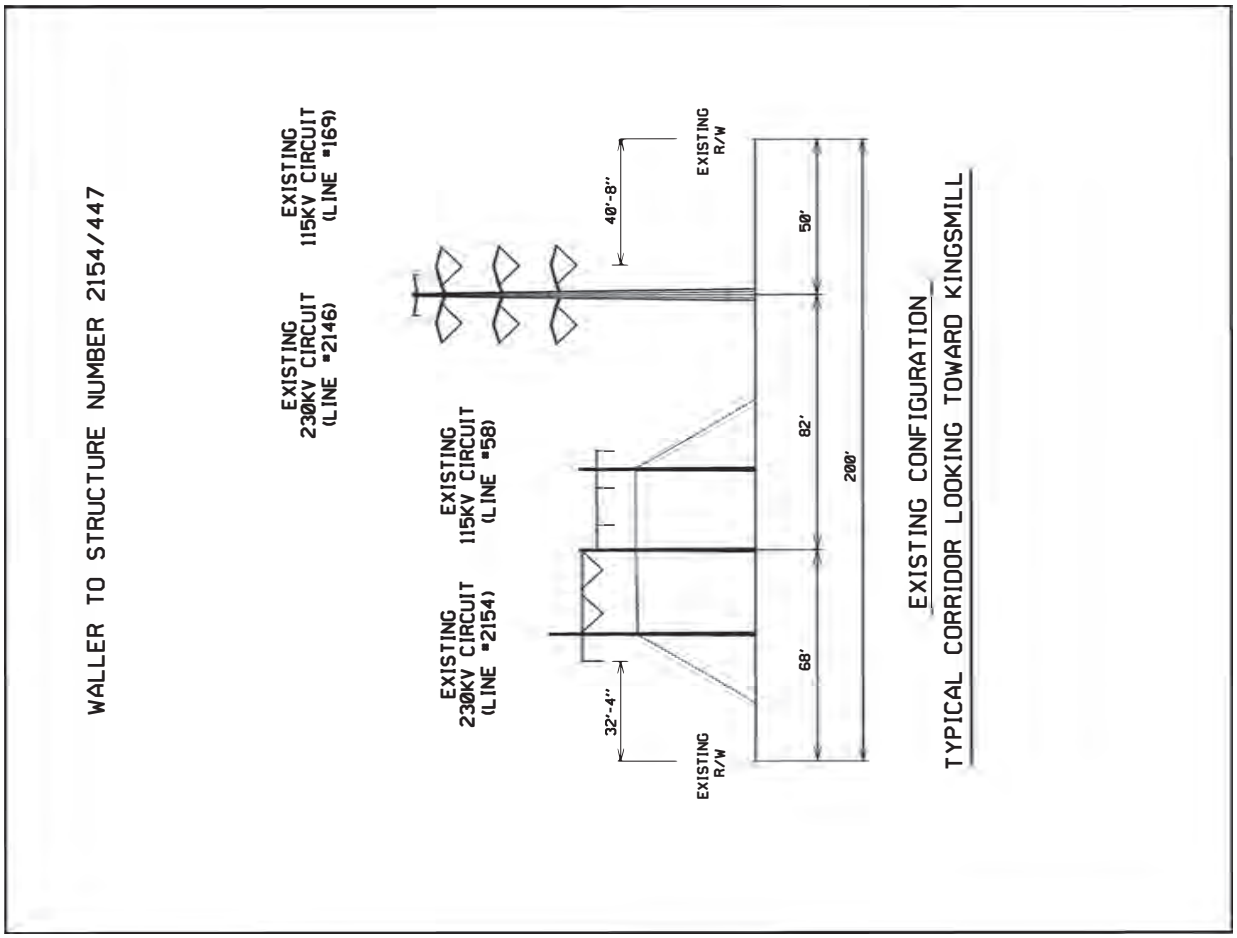
PROPOSED CONFIGURATION
TYPICAL CORRIDOR LOOKING TOWARD WALLER

NOTE: Information contained on drawing is to be considered preliminary in nature and subject to change based on final design.

$DGNSPEC$



$DONSPEC$



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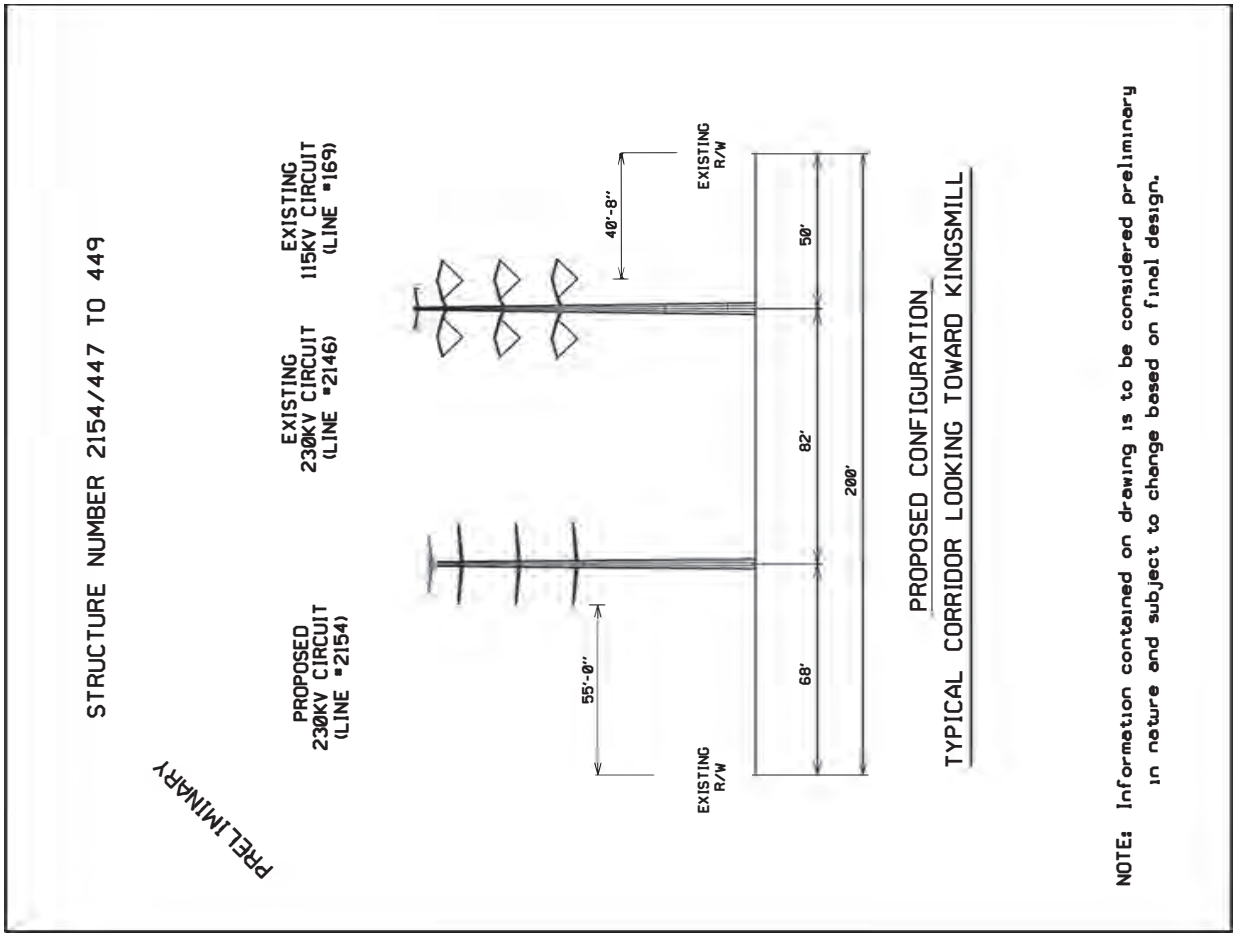

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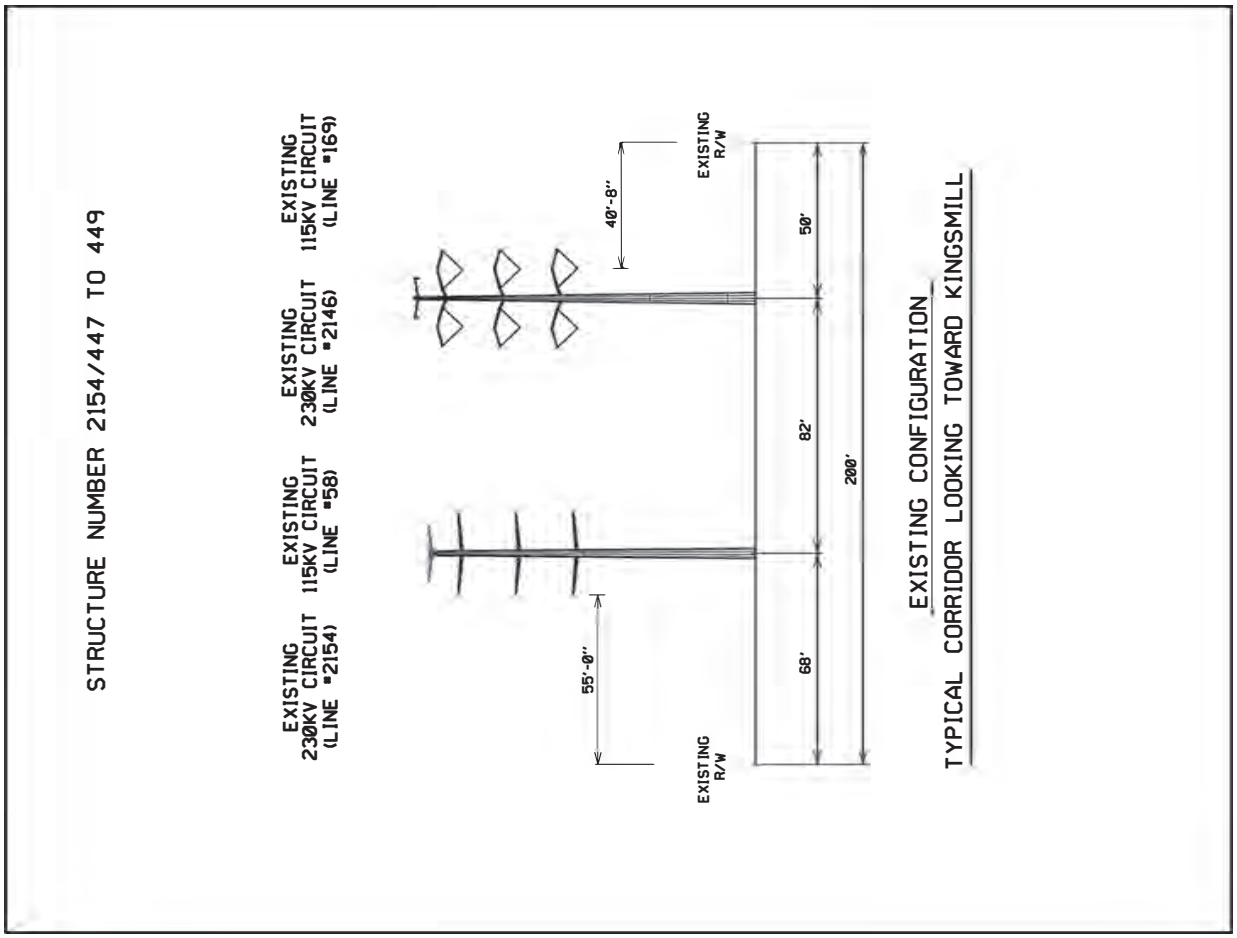

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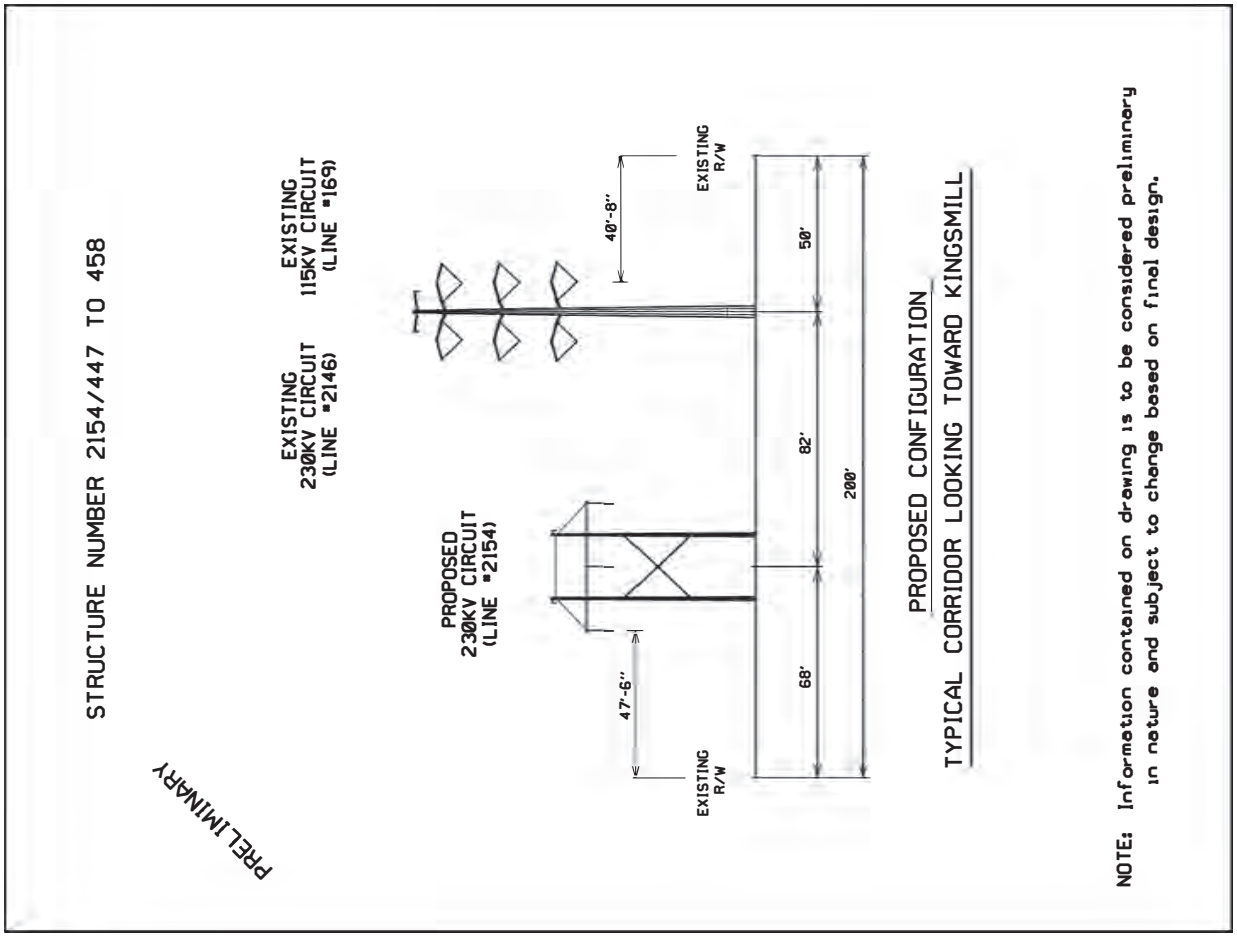

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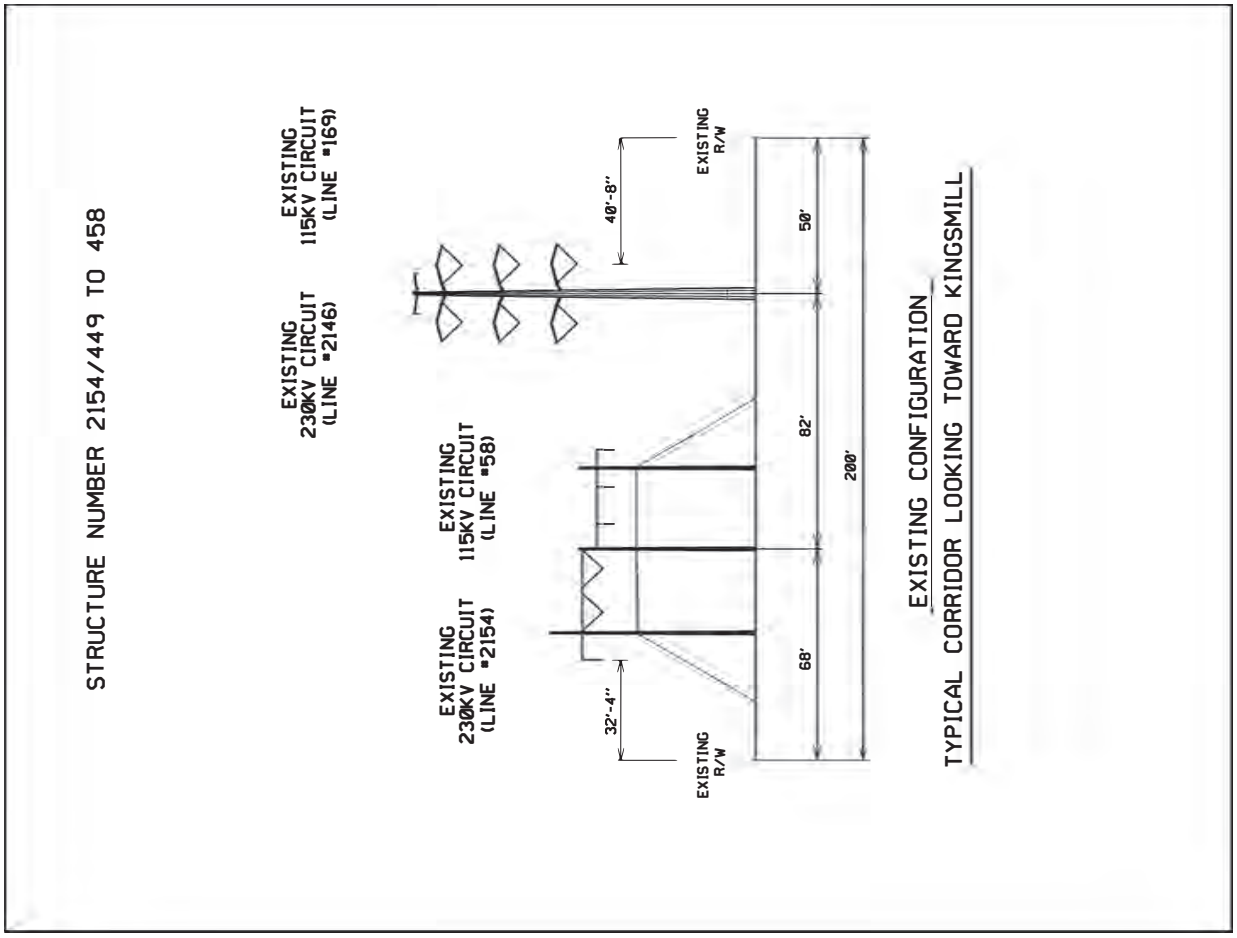
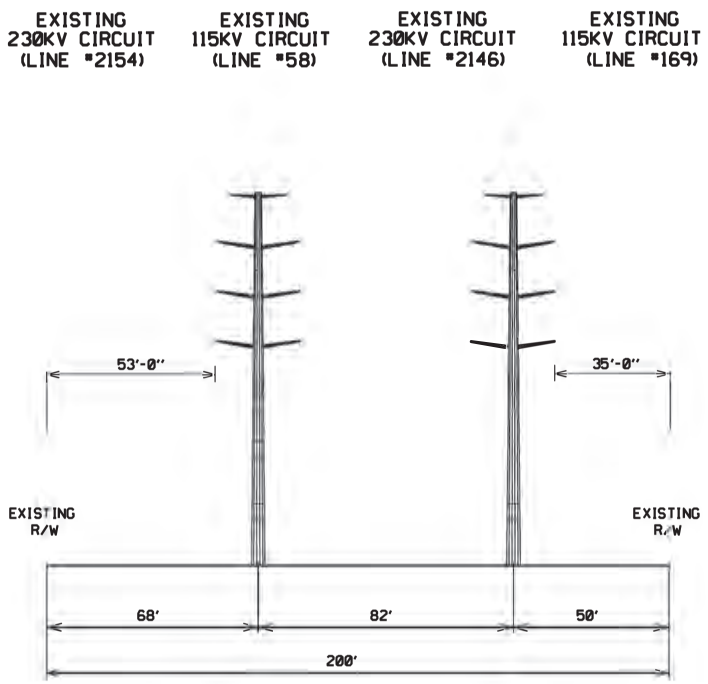


$DGNSPEC$

STRUCTURE NUMBER 2154/458 TO 463



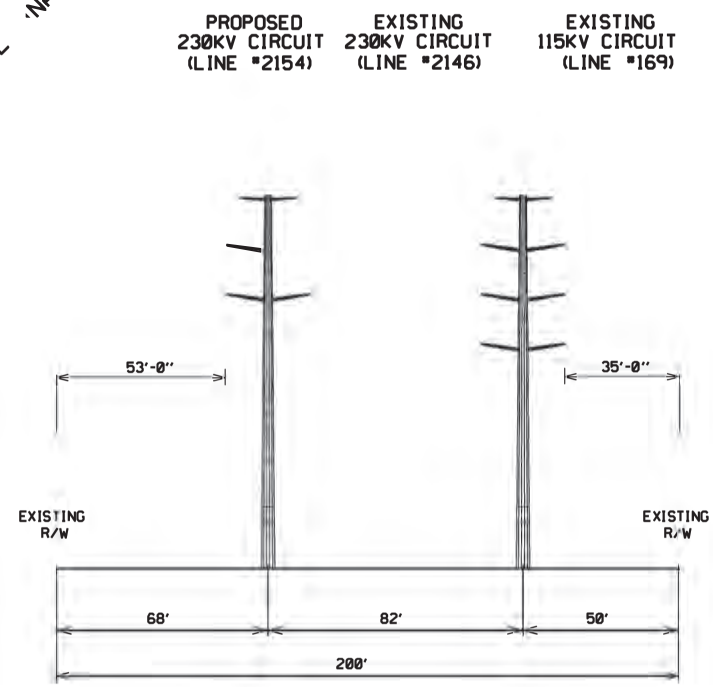
EXISTING CONFIGURATION

TYPICAL CORRIDOR LOOKING TOWARD KINGSMILL

$DGNSPEC$

STRUCTURE NUMBER 2154/458 TO 463

PRELIMINARY



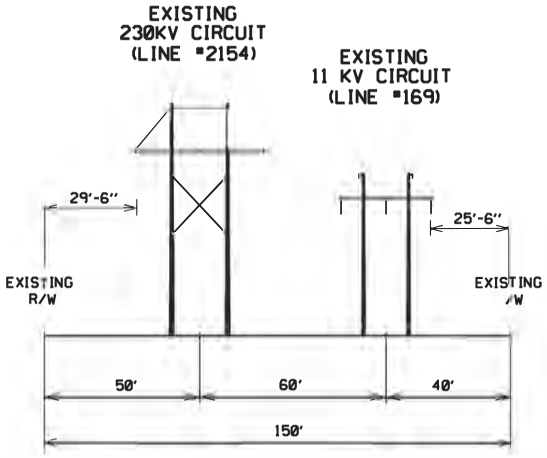
PROPOSED CONFIGURATION

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.

$DGNSPEC$

STRUCTURE NUMBER 2154/463 TO KINGSMILL

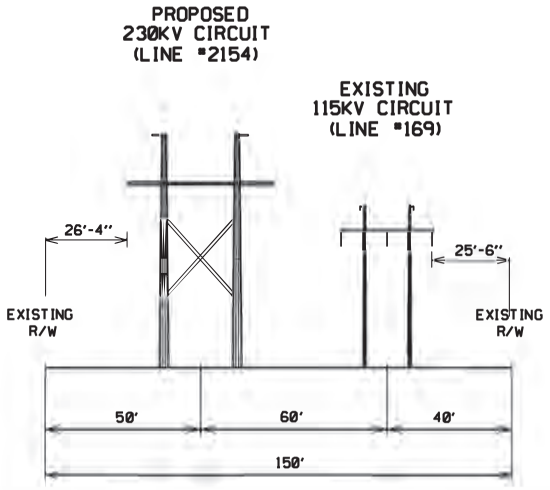


EXISTING CONFIGURATION
TYPICAL CORRIDOR LOOKING TOWARD KINGSMILL

$DGNSPEC$

STRUCTURE NUMBER 2154/463 TO KINGSMILL

PRELIMINARY



PROPOSED CONFIGURATION
TYPICAL CORRIDOR LOOKING TOWARD KINGSMILL

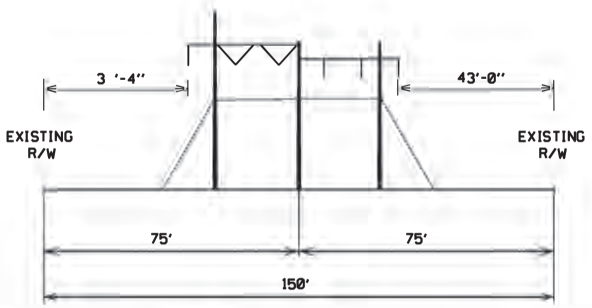
NOTE: Information contained on drawing is to be considered preliminary in nature and subject to change based on final design.

$DGNSPEC$

KINGSMILL TO STRUCTURE NUMBER 2154/482

EXISTING
230KV CIRCUIT
(LINE #2154)

EXISTING
115KV CIRCUIT
(LINE #19)



EXISTING CONFIGURATION
TYPICAL CORRIDOR LOOKING TOWARD STR #2154/482

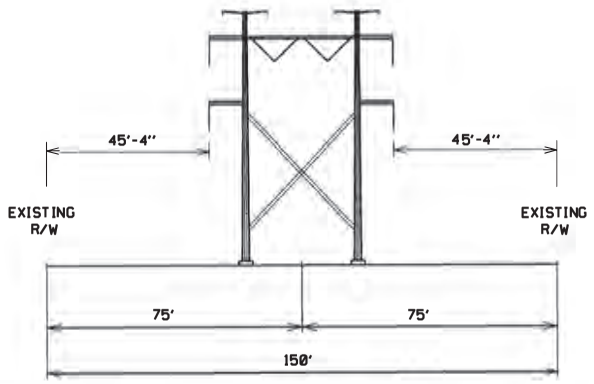
$DGNSPEC$

KINGSMILL TO STRUCTURE NUMBER 2154/482

PRELIMINARY

PROPOSED
230KV CIRCUIT
(LINE #2154)

PROPOSED
115KV CIRCUIT
(LINE #19)



PROPOSED CONFIGURATION
TYPICAL CORRIDOR LOOKING TOWARD STR #2154/482

NOTE: Information contained on drawing is to b considered preliminary in nature and subject to change based on final design.

$DGNSPEC$

II. DESCRIPTION OF THE PROPOSED PROJECT

A. Right-of-way ("ROW")

6. Detail what portions of the ROW are subject to existing easements and over what portions new easements will be needed.

Response: The Company obtained easements along the existing right-of-way of the approximately 11.4-mile Rebuild Projects' transmission corridor in the 1950s and 1960s. The Company does not expect to require new easements, as the Rebuild Projects are within existing right-of-way. See Attachment II.A.6.a for a conservation easement map for the Rebuild Projects.

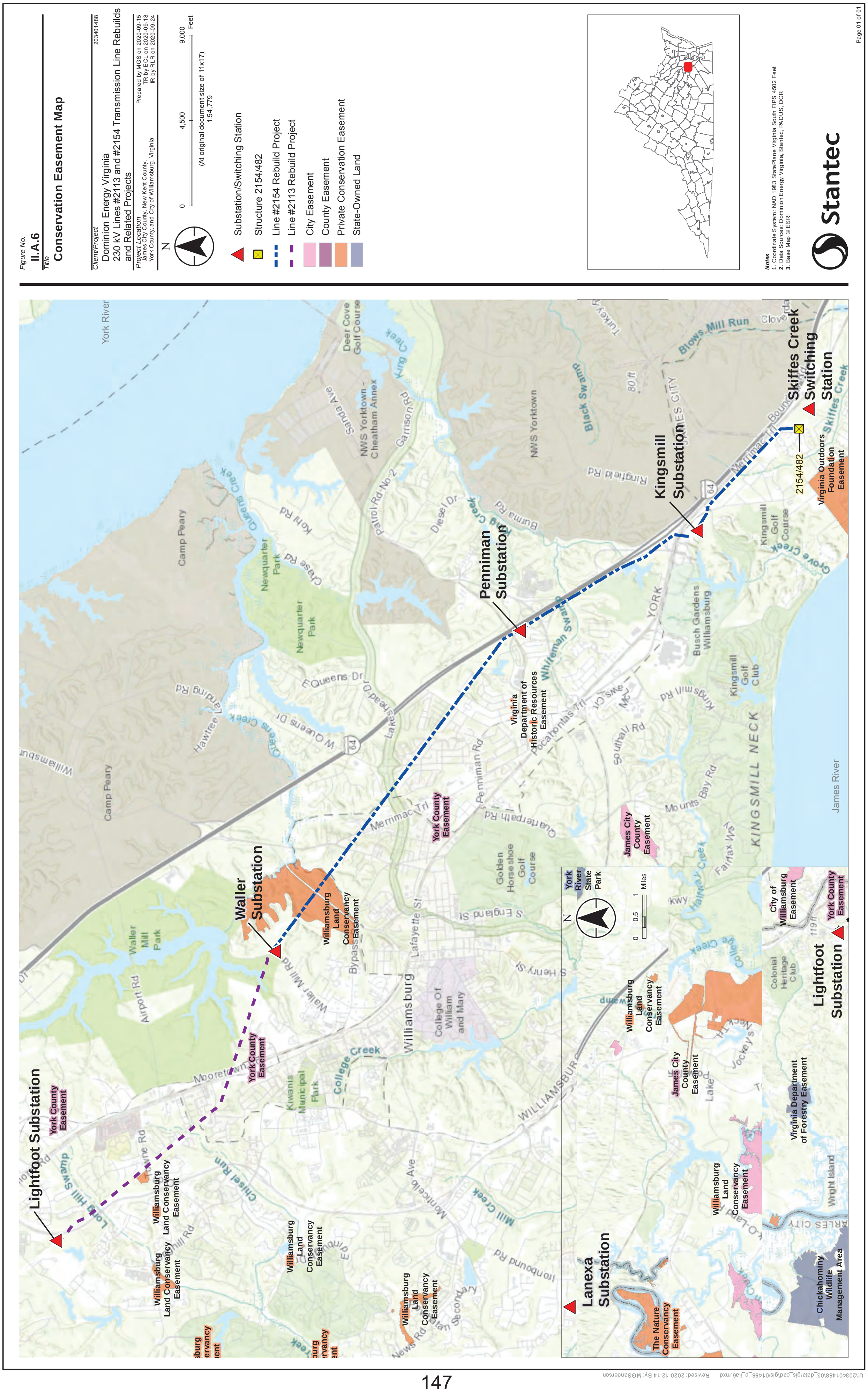


Figure No.
II.A.6
Title
Conservation Easement Map
Client/Project
Dominion Energy Virginia
230 kV Lines #2113 and #2154 Transmission Line Rebuilds and Related Projects
203401488
Project Location
James City County, New Kent County, York County, and City of Williamsburg, Virginia
Prepared by MGS on 2020-09-15
TR by ECL on 2020-09-18
IR by RLR on 2020-09-24
0
4,500
9,000
Feet
(At original document size of 11x17)
1:54,779
Substation/Switching Station
Structure 2154/482
Line #2154 Rebuild Project
Line #2113 Rebuild Project
City Easement
County Easement
Private Conservation Easement
State-Owned Land
Notes
1. Coordinate System: NAD 1983 StatePlane Virginia South FIPS 4502 Feet
2. Data Sources: Dominion Energy Virginia, Stantec, PADUS, DCR
3. Base Map © ESRI
Stantec
Page 01 of 01
Lightfoot Substation
Waller Substation
Penniman Substation
Kingsmill Substation
Skiffes Creek Switching Station
2154/482
Lanexa Substation
York County Easement
Williamsburg Land Conservancy Easement
Virginia Department of Historic Resources Easement
James City County Easement
Virginia Outdoors Foundation Easement
City of Williamsburg Easement
Virginia Department of Forestry Easement
The Nature Conservancy Easement
Chickahominy Wildlife Management Area
York River State Park
0
0.5
1
Miles
York River
James River
Camp Peary
NWS Yorktown
Williamsburg
Disclaimer: This document has been prepared based on information provided by others as cited in the Notes section. Stantec has not verified the accuracy and/or completeness of this information and shall not be responsible for any errors or omissions which may be incorporated herein as a result. Stantec assumes no responsibility for data supplied in electronic format, and the recipient accepts full responsibility for verifying the accuracy and completeness of the data.

II. DESCRIPTION OF THE PROPOSED PROJECT

A. Right-of-way ("ROW")

7. Detail the proposed ROW clearing methods to be used and the ROW restoration and maintenance practices planned for the proposed project.

Response: The entire width of the existing transmission line right-of-way, which varies from approximately 150 to 200 feet wide as shown in Attachments II.A.5.a-h, is currently maintained for operation of the existing transmission facilities. Some trimming of tree limbs along the edge of the upland right-of-way may be conducted to support construction activities for the Rebuild Projects. For any such minimal clearing, trees will be cut to no more than three inches above ground level. Trees located outside of the right-of-way that are tall enough to potentially impact the transmission facilities, commonly referred to as "danger trees," may also need to be cut. Danger trees will be cut to be no more than three inches above ground level, will be limbed, and will remain where felled. Debris that is adjacent to homes will be disposed of by chipping or removal. In other areas, debris may be mulched or chipped as practicable. Danger tree removal will be accomplished by hand in wetland areas and within 100 feet of streams, if applicable. Care will be taken not to leave debris in streams or wetland areas. Matting may be used for heavy equipment in these areas. Erosion control devices will be used on an ongoing basis during all clearing and construction activities.

Erosion control will be maintained and temporary stabilization for all soil-disturbing activities will be used until the right-of-way has been restored. Upon completion of the Rebuild Projects, the Company will restore the right-of-way utilizing site rehabilitation procedures outlined in the Company's *Standards & Specifications for Erosion & Sediment Control and Stormwater Management for Construction and Maintenance of Linear Electric Transmission Facilities* that was approved by the Virginia Department of Environmental Quality ("DEQ"). Time of year and weather conditions may affect when permanent stabilization takes place.

This right-of-way will continue to be maintained on a regular cycle to prevent interruptions to electric service and to provide ready access to the right-of-way in order to patrol and make emergency repairs. Periodic maintenance to control woody growth will consist of hand cutting, machine mowing, and herbicide application.

II. DESCRIPTION OF THE PROPOSED PROJECT

A. Right-of-way ("ROW")

8. Indicate the permitted uses of the proposed ROW by the easement landowner and the Applicant.

Response: Any non-transmission use will be permitted that:

- Is in accordance with the terms of the easement agreement for the right-of-way;
- Is consistent with the safe maintenance and operation of the transmission lines;
- Will not restrict future line design flexibility; and,
- Will not permanently interfere with future construction.

Subject to the terms of the easement, examples of typical permitted uses include but are not limited to:

- Agriculture;
- Hiking Trails;
- Fences;
- Perpendicular Road Crossings;
- Perpendicular Utility Crossings;
- Residential Driveways; and,
- Wildlife / Pollinator Habitat.

II. DESCRIPTION OF THE PROPOSED PROJECT

A. Right-of-way ("ROW")

9. Describe the Applicant's route selection procedures. Detail the feasible alternative routes considered. For each such route, provide the estimated cost and identify and describe the cost classification (e.g. "conceptual cost," "detailed cost," etc.). Describe the Applicant's efforts in considering these feasible alternatives. Detail why the proposed route was selected and other feasible alternatives were rejected. In the event that the proposed route crosses, or one of the feasible routes was rejected in part due to the need to cross, land managed by federal, state, or local agencies or conservation easements or open space easements qualifying under §§ 10.1-1009 – 1016 or §§ 10.1-1700 – 1705 of the Code (or a comparable prior or subsequent provision of the Code), describe the Applicant's efforts to secure the necessary ROW.

Response: The Company's route selection for transmission line rebuilds begins with a review of existing rights-of-way. This approach generally minimizes impacts on the natural and human environments. This approach also is consistent with Attachment 1 to these Guidelines, which provides a tool routinely used by the Company in routing its transmission line projects. Specifically, this approach is consistent with Guideline #1, which states that existing rights-of-way should be given priority when adding new transmission facilities, and §§ 56-46.1 and 56-259 of the Code of Virginia ("Va. Code"), which promote the use of existing rights-of-way for new transmission facilities. For the proposed Rebuild Projects, the existing right-of-way that currently contains Lines #2113, #2154, and #19 is adequate.

Because the existing right-of-way is adequate to construct the proposed Rebuild Projects, no new right-of-way is necessary. Given the availability of existing right-of-way and the statutory preference given to the use of existing rights-of-way, and because additional costs and environmental impacts would be associated with the acquisition and construction of new right-of-way, the Company did not consider any alternate routes requiring new right-of-way for this Rebuild Projects.

II. DESCRIPTION OF THE PROPOSED PROJECT

A. Right-of-way ("ROW")

10. Describe the Applicant's construction plans for the project, including how the Applicant will minimize service disruption to the affected load area. Include requested and approved line outage schedules for affected lines as appropriate.

Response: To minimize service disruption to the affected load area during construction of the Rebuild Projects, the Company plans to take segments out in separate switching sequences. The outages are sequenced to allow the adjacent infrastructure to adequately provide service to connected customers while certain lines and equipment are out of service.

Specifically, the Company plans to take the following segments out of service in 11 separate switching sequences: segments of Lines #2113, #2154, and #19; Kingsmill Substation transformers ("TX") #1 and #2; Waller Substation TX#3; and Lightfoot Substation TX#1, TX#2, and TX#3. The work will be done during non-peak load times. This strategy will allow the grid to be in normal and optimal configuration during peak load times and available to respond to contingency issues should they arise. Assuming a final order by April 1, 2022, as requested in Section I.H., the current plan is to start construction on the Rebuild Projects by June 1, 2022, and to complete construction by September 30, 2023.

The Company has requested three outages from PJM for Lines #2154 and #19 during the Fall of 2022. The eDart Numbers for those outages include: 898890, 904269, 898893, 898919, 898920, 898929, 898992, 898993, and 899429.

The Company has also requested two outages from PJM for Lines #2154 and #2113 during the Spring of 2023. The eDart Numbers for those outages include: 898948, 898957, 898987, 899185, 898637, 899430, 899431, and 899432.

The Company also requested six additional switching sequences that affect transformers at the distribution level for work at Lightfoot Substation, Waller Substation, Penniman Substation, and Kingsmill Substation.

It is customary for PJM to not grant approval of the outages until shortly before the outages are expected to occur.

II. DESCRIPTION OF THE PROPOSED PROJECT

A. Right-of-way ("ROW")

11. Indicate how the construction of this transmission line follows the provisions discussed in Attachment 1 of these Guidelines.

Response: As noted in Section II.A.9, Attachment 1 to these Guidelines provides a tool routinely used by the Company in routing its transmission line projects.

The Company utilized Guideline #1 (existing rights-of-way should be given priority when adding additional facilities) by siting the proposed Rebuild Projects within the existing transmission corridor, as discussed in Section II.A.9.

By utilizing the existing transmission corridor, the proposed Rebuild Projects will minimize impact to any site listed on the National Register of Historic Places ("NRHP"). Thus, the Rebuild Projects are consistent with Guideline #2 (where practical, rights-of-way should avoid sites listed on the National Register of Historic Places). A Stage I Pre-Application Analysis prepared by Stantec Consulting Services, Inc. ("Stantec"), which is included with the DEQ Supplement as Attachment 2.H.1, has been submitted to the Virginia Department of Historic Resources ("VDHR"). See also Section III.A.

The Company has communicated with a number of local, state, and federal agencies prior to filing this Application consistent with Guideline #4 (where government land is involved, the applicant should contact the agencies early in the planning process). See Section III.B, III.J, and the DEQ Supplement.

The Company follows recommended construction methods on a site-specific basis for typical construction projects (Guidelines #8, #10, #11, #15, #16, #18, and #22).

The Company also utilizes recommended guidelines in the clearing of right-of-way, constructing facilities and maintaining rights-of-way after construction. Moreover, secondary uses of right-of-way that are consistent with the safe maintenance and operation of facilities are permitted.

II. DESCRIPTION OF THE PROPOSED PROJECT

A. Right-of-way ("ROW")

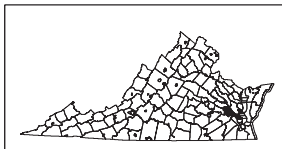
12. a. Detail counties and localities through which the line will pass. If any portion of the line will be located outside of the Applicant's certificated service area: (1) identify each electric utility affected; (2) state whether any affected electric utility objects to such construction; and (3) identify the length of line(s) proposed to be located in the service area of an electric utility other than the Applicant; and

b. Provide three (3) color copies of the Virginia Department of Transportation "General Highway Map" for each county and city through which the line will pass. On the maps show the proposed line and all previously approved and certificated facilities of the Applicant. Also, where the line will be located outside of the Applicant's certificated service area, show the boundaries between the Applicant and each affected electric utility. On each map where the proposed line would be outside of the Applicant's certificated service area, the map must include a signature of an appropriate representative of the affected electric utility indicating that the affected utility is not opposed to the proposed construction within its service area.

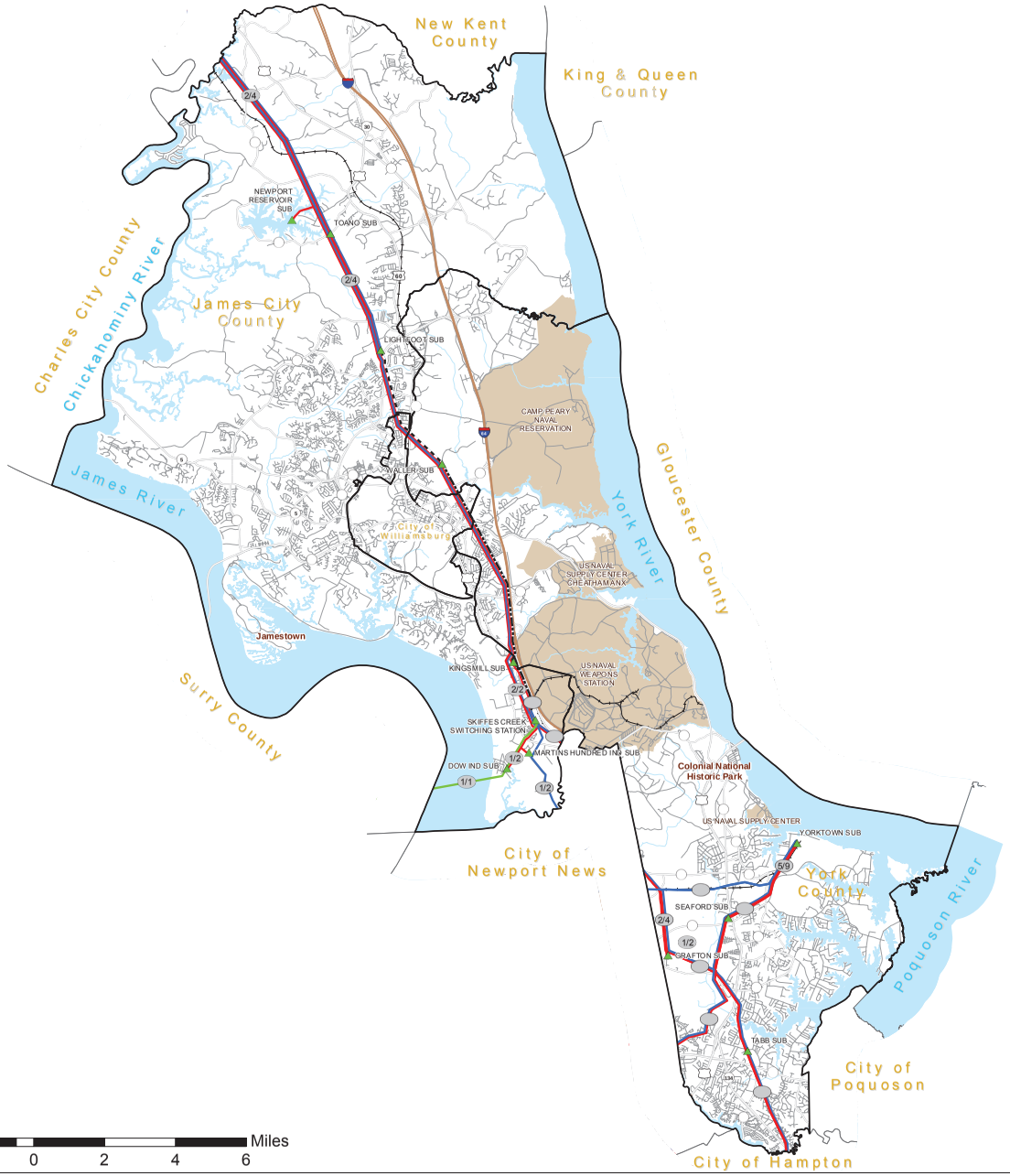
Response: a. The proposed Rebuild Projects will pass through York and James City Counties and the City of Williamsburg, entirely within the Company's certificated service area.

b. Three copies of the map of the Virginia Department of Transportation "General Highway Map" for York County, James City County, and the City of Williamsburg are marked as required and filed with the Application. A reduced copy of the map is provided as Attachment II.A.12.b.1.

James City County, York County, and City of Williamsburg Road Map



This digital map depicts the Virginia Electric and Power Company ("Company") transmission facilities in this county as approved by the Virginia State Corporation Commission ("SCC"), and any proposed transmission facilities in this county, as of 11/20/2020 . Other Company facilities previously authorized by the SCC may be depicted on prior SCC approved county maps.



VIRGINIA ELECTRIC AND POWER COMPANY PLANS TO BUILD TRANSMISSION LINES AND SUBSTATIONS AS SHOWN IN BLACK DASHES ON THIS MAP.

Legend

- Line #2113 Rebuild Project
- Line #2154 Rebuild Project
- Number of Lines of Structures/Number of Circuits
- Existing Substation
- 115 kV
- 230 kV
- 500 kV
- Military Base

Provider Service Territory

- VEPCO

*VDOT and other road data obtained from Navteq and County data, current as of September 2014.

James City County, York County, and City of Williamsburg, Virginia

154

Attachment II.A.12.b.1

II. DESCRIPTION OF THE PROPOSED PROJECT

B. Line Design and Operational Features

1. Detail the number of circuits and their design voltage, initial operational voltage, any anticipated voltage upgrade, and transfer capabilities.

Response: Single circuit 230 kV Lines #2113 and #2154 will be designed and operated at 230 kV and have a transfer capability of 1047 MVA. Single circuit 115 kV Line #19 will be designed and operated at 115 kV and have a transfer capability of 262 MVA. There is no anticipated voltage upgrade for any of these lines.

II. DESCRIPTION OF THE PROPOSED PROJECT

B. Line Design and Operational Features

2. Detail the number, size(s), type(s), coating and typical configurations of conductors. Provide the rationale for the type(s) of conductor(s) to be used.

Response: Single circuit 230 kV Lines #2113 and #2154 will each have 3-phase twin-bundled 636 ACSR conductors arranged as shown in Attachments II.B.3.i-vi with two fiber optic shield wires. The twin-bundled 636 ACSR conductors are the Company's standard conductors for new 230 kV construction.

Single circuit 115 kV Line #19 will have 3-phase 636 ACSR conductors arranged as shown in Attachments II.B.3.v-vii. The 636 ACSR conductors are the Company's standard conductors for new 115 kV construction.

II. DESCRIPTION OF THE PROPOSED PROJECT

B. Line Design and Operational Features

3. With regard to the proposed supporting structures over each portion of the ROW for the preferred route, provide diagrams (including foundation reveal) and descriptions of all the structure types, to include:

a. mapping that identifies each portion of the preferred route;

b. the rationale for the selection of the structure type;

c. the number of each type of structure and the length of each portion of the ROW;

d. the structure material and rationale for the selection of such material;

e. the foundation material;

f. the average width at cross arms;

g. the average width at the base;

h. the maximum, minimum and average structure heights;

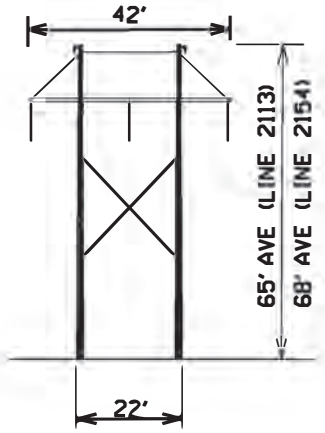
i. the average span length; and

j. the minimum conductor-to-ground clearances under maximum operating conditions.

Response: See Attachments II.B.3.i-vii.

SINGLE CIRCUIT SUSPENSION H-FRAME

PRELIMINARY



PROPOSED STRUCTURES

a. MAPPING THAT IDENTIFIES EACH PORTION OF THE PREFERRED ROUTE:
SEE ATTACHMENT II.B.5

b. RATIONALE FOR THE SELECTION OF THE STRUCTURE TYPE: THE H-FRAME STRUCTURE MAINTAINS THE 230kV CIRCUIT IN THE HORIZONTAL ARRANGEMENT

c. NUMBER OF EACH TYPE OF STRUCTURE AND LENGTH OF EACH PORTION OF THE R/W:
3 AND 3.8 MILES LINE 2113
38 AND 6.1 MILES LINE 2154 (WALLER - KINGSMILL SECTION)

d. STRUCTURE MATERIAL AND RATIONALE FOR THE SELECTION OF SUCH MATERIAL:
WEATHERING STEEL POLES AND GALVANIZED CROSSBACES/CROSSARMS
WEATHERING STEEL POLES TO RESEMBLE EXISTING WOOD POLES

e. FOUNDATION MATERIAL: DIRECT BURIED

f. AVERAGE WIDTH AT CROSSARM: 42'

g. AVERAGE WIDTH AT BASE: 22'

h. MAX, MIN, AND AVERAGE STRUCTURE HEIGHTS: 84', 52', AND 65' (LINE 2113)
84', 61
(DOES NOT INCLUDE FOUNDATION REVEAL)

i. AVERAGE SPAN LENGTH: 513 FEET (RANGE 1 893 FEET) (LINE 2113)
594 FEET (RANGE 244 - 897 FEET) (LINE 2154)

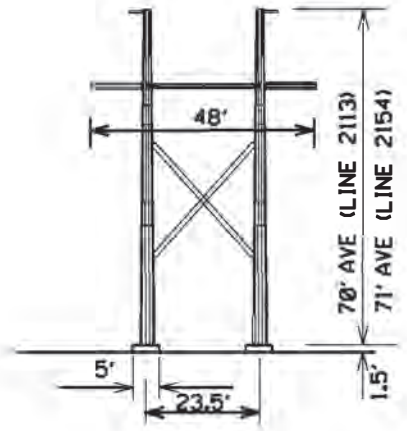
j. MINIMUM CONDUCTOR-GROUND CLEARANCE UNDER MAXIMUM OPERATING CONDITIONS: 22.5'

NOTE: Information contained on drawing is to be considered preliminary in nature and subject to change based on final design.

$DG SPEC$

SINGLE CIRCUIT DOUBLE DEADEND H-FRAME

PRELIMINARY



PROPOSED STRUCTURES

a. MAPPING THAT IDENTIFIES EACH PORTION OF THE PREFERRED ROUTE:
SEE ATTACHMENT II.B.5

b. RATIONALE FOR THE SELECTION OF THE STRUCTURE TYPE: THE H-FRAME STRUCTURE MAINTAINS THE 230kV CIRCUIT IN THE HORIZONTAL ARRANGEMENT

c. NUMBER OF EACH TYPE OF STRUCTURE AND LENGTH OF EACH PORTION OF THE R/W:
2 AND 3.8 MILES LINE 2113
4 AND 6.1 MILES LINE 2154 (WALLER - KINGSMILL SECTION)

d. STRUCTURE MATERIAL AND RATIONALE FOR THE SELECTION OF SUCH MATERIAL:
WEATHERING STEEL TO RESEMBLE EXISTING WOOD POLE STRUCTURES

e. FOUNDATION MATERIAL: CONCRETE

f. AVERAGE WIDTH AT CROSSARM: 48'

g. AVERAGE WIDTH AT BASE: 28.5'

h. MAX, MIN, AND AVERAGE STRUCTURE HEIGHTS: 80', 60', AND 70' (LINE 2113)
80', 60', AND 71' (LINE 2154)
(DOES NOT INCLUDE FOUNDATION REVEAL)

i. AVERAGE SPAN LENGTH: 513 FEET (RANGE 169 - 893 FEET) (LINE 2113)
594 FEET (RANGE 244 - 897 FEET) (LINE 2154)

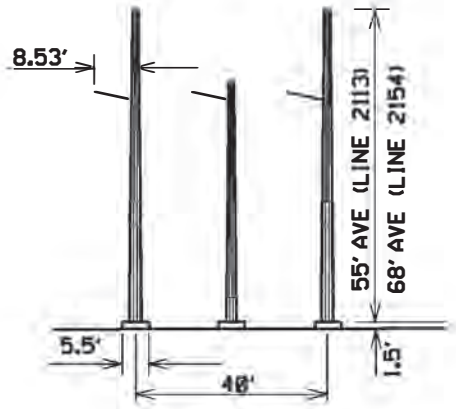
j. MINIMUM CONDUCTOR-GROUND CLEARANCE UNDER MAXIMUM OPERATING CONDITIONS: 22.5'

NOTE: Information contained on drawing is to be considered preliminary in nature and subject to change based on final design.

$DGNSPEC$

SINGLE CIRCUIT STEEL 3-POLE

PRELIMINARY



PROPOSED STRUCTURES

a. MAPPING THAT IDENTIFIES EACH PORTION OF THE PREFERRED ROUTE:
SEE ATTACHMENT II.B.5

b. RATIONALE FOR THE SELECTION OF THE STRUCTURE TYPE: THE 3-POLE STRUCTURE MAINTAINS THE 230kV CIRCUIT IN THE HORIZONTAL ARRANGEMENT

c. NUMBER OF EACH TYPE OF STRUCTURE AND LENGTH OF EACH PORTION OF THE R/W:
1 AND 3.8 MILES LINE 2113
2 AND 6. MILES LINE 2154 (WALLER - KINGSMILL SECTION)

d. STRUCTURE MATERIAL AND RATIONALE FOR THE SELECTION OF SUCH MATERIAL:
WEATHERING STEEL TO RESEMBLE EXISTING WOOD POLE STRUCTURES

e. FOUNDATION MATERIAL: CONCRETE

f. AVERAGE WIDTH AT CROSSARM: 42'

g. AVERAGE WIDTH AT BASE: 45.5'

h. MAX, MIN, AND AVERAGE STRUCTURE HEIGHTS: 55' LINE 2113)
70'
(DOES NOT INCLUDE FOUNDATION REVEAL)

i. AVERAGE SPAN LENGTH: 513 FEET (RANGE 169 - 893 FEET) (LINE 2113)
594 FEET (RANGE 244 - 897 FEET) (LINE 2154)

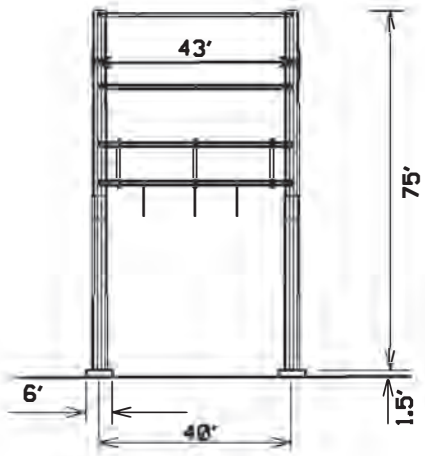
j. MINIMUM CONDUCTOR-GROUND CLEARANCE UNDER MAXIMUM OPERATING CONDITIONS: 22.5'

NOTE: Information contained on drawing is to be considered preliminary in nature and subject to change based on final design.

$DCNSPEC$

SINGLE CIRCUIT SWITCH STRUCTURE

PRELIMINARY



PROPOSED STRUCTURES

a. MAPPING THAT IDENTIFIES EACH PORTION OF THE PREFERRED ROUTE:
SEE ATTACHMENT II.B.5

b. RATIONALE FOR THE SELECTION OF THE STRUCTURE TYPE: THE SWITCH STRUCTURE MAINTAINS THE 230kV CIRCUIT IN THE HORIZONTAL ARRANGEMENT

c. NUMBER OF EACH TYPE OF STRUCTURE AND LENGTH OF EACH PORTION OF THE R/W:

2 AND 3.8 MILES LINE 2113
1 AND 6.1 MILES LINE 2154 (WALLER - KINGSMILL SECTION)
1 AND 1.5 MILES LINE 2154 (KINGSMILL - STR #2154/482 SECTION)

d. STRUCTURE MATERIAL AND RATIONALE FOR THE SELECTION OF SUCH MATERIAL:
GALVANIZED STEEL TO MATCH STRUCTURES AT THE SUBSTATION

e. FOUNDATION MATERIAL: CONCRETE

f. AVERAGE WIDTH AT CROSSARM: 43'

g. AVERAGE WIDTH AT BASE: 46'

h. MAX, MIN, AND AVERAGE STRUCTURE HEIGHTS: 75', 75', AND 75' (LINE 2113 & 2154)
(DOES NOT INCLUDE FOUNDATION REVEAL)

i. AVERAGE SPAN LENGTH: 513 FEET (RANGE 169 - 893 FEET) (LINE 2113)
594 FEET (RANGE 244 - 897 FEET) (LINE 2154) (WALLER - KINGSMILL SECTION)
471 FEET (RANGE 62 - 615 FEET) (LINE 2154) (KINGSMILL - STR #2154/482 SECTION)

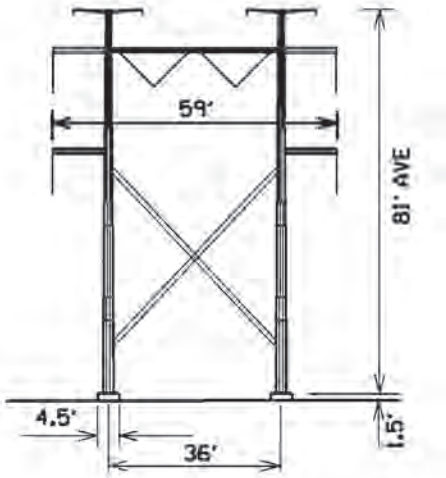
j. MINIMUM CONDUCTOR-GROUND CLEARANCE UNDER MAXIMUM OPERATING COND TIONS: 22.5'

NOTE: Information contained on drawing is to be considered preliminary in nature and subject to change based on final design.

$DGNSPEC$

DOUBLE CIRCUIT SUSPENSION H-FRAME

PRELIMINARY



PROPOSED STRUCTURES

a. MAPPING THAT IDENTIFIES EACH PORTION OF THE PREFERRED ROUTE: SEE ATTACHMENT II.B.5

b. RATIONALE FOR THE SELECTION OF THE STRUCTURE TYPE: THE H-FRAME STRUCTURE ALLOWS THE INSTALLATION OF THE TWO CIRCUITS IN THE EXISTING R/W AND MINIMIZES HEIGHT COMPARED TO A DOUBLE CIRCUIT POLE

c. NUMBER OF EACH TYPE OF STRUCTURE AND LENGTH OF EACH PORTION OF THE R/W: 11 AND 1.5 MILES LINE 2154

d. STRUCTURE MATERIAL AND RATIONALE FOR THE SELECTION OF SUCH MATERIAL: WEATHERING STEEL TO RESEMBLE EXISTING WOOD POLE STRUCTURES

e. FOUNDATION MATERIAL: CONCRETE

f. AVERAGE WIDTH AT CROSSARM: 59'

g. AVERAGE WIDTH AT BASE: 40.5'

h. MAX, MIN, AND AVERAGE STRUCTURE HEIGHTS: 85', 80', AND 81' (LINE 19 & 2154) (DOES NOT INCLUDE FOUNDATION REVEAL)

i. AVERAGE SPAN LENGTH: 471 FEET (RANGE 162 - 615 FEET) (LINE 19 & 2154)

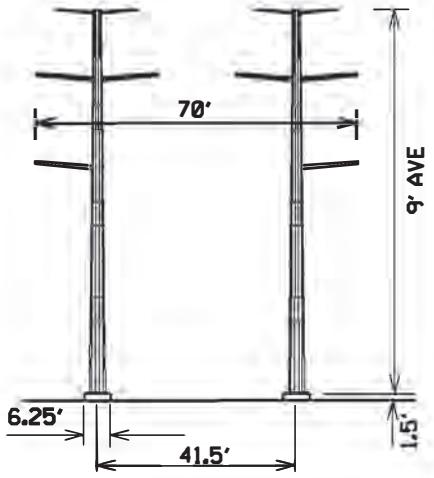
j. MINIMUM CONDUCTOR-GROUND CLEARANCE UNDER MAXIMUM OPERATING CONDITIONS: 20.1' @ 115kV & 22.5' @ 230kV

NOTE: Information contained on drawing is to be considered preliminary in nature and subject to change based on final design.

$DGNSPEC$

DOUBLE CIRCUIT DOUBLE DEADEND 2-POLE

PRELIMINARY



PROPOSED STRUCTURES

a. MAPPING THAT IDENTIFIES EACH PORTION OF THE PREFERRED ROUTE: SEE ATTACHMENT II.B.5

b. RATIONALE FOR THE SELECTION OF THE STRUCTURE TYPE: THE 2-POLE STRUCTURE ALLOWS THE INSTALLATION OF THE TWO CIRCUITS IN THE EXISTING R/W AND MINIMIZES HEIGHT COMPARED TO A DOUBLE CIRCUIT POLE

c. NUMBER OF EACH TYPE OF STRUCTURE AND LENGTH OF EACH PORTION OF THE R/W: 5 AND 1.5 MILES (LINE 19 & 2154)

d. STRUCTURE MATERIAL AND RATIONALE FOR THE SELECTION OF SUCH MATERIAL: WEATHERING STEEL TO RESEMBLE EXISTING WOOD POLE STRUCTURES

e. FOUNDATION MATERIAL: CONCRETE

f. AVERAGE WIDTH AT CROSSARM: 70'

g. AVERAGE WIDTH AT BASE: 47.75'

h. MAX, MIN, AND AVERAGE STRUCTURE HEIGHTS: 85', (DOES NOT INCLUDE FOUNDATION REVEAL)

i. AVERAGE SPAN LENGTH: 471 FEET (RANGE 162 - 615 FEET) (LINE 9 & 2154)

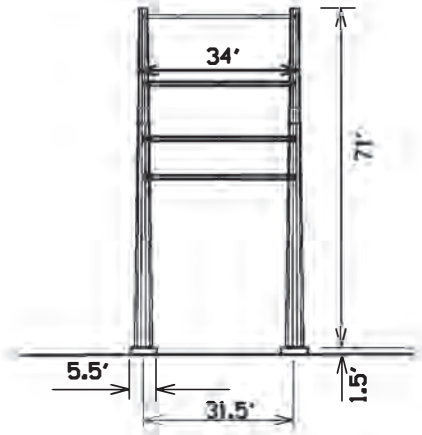
j. MINIMUM CONDUCTOR-GROUND CLEARANCE UNDER MAXIMUM OPERATING CONDITIONS: 20.1' @ 115kV & 22.5' @ 230kV

NOTE: Information contained on drawing is to be considered preliminary in nature and subject to change based on final design.

$DG SPEC$

SINGLE CIRCUIT SWITCH STRUCTURE

PRELIMINARY



PROPOSED STRUCTURES

a. MAPPING THAT IDENTIFIES EACH PORTION OF THE PREFERRED ROUTE: SEE ATTACHMENT II.B.5

b. RATIONALE FOR THE SELECTION OF THE STRUCTURE TYPE: THE SWITCH STRUCTURE MAINTAINS THE 115kV CIRCUIT IN THE HORIZONTAL ARRANGEMENT

c. NUMBER OF EACH TYPE OF STRUCTURE AND LENGTH OF EACH PORTION OF THE R/W: 1 AND 1.5 MILES (LINE 19)

d. STRUCTURE MATERIAL AND RATIONALE FOR THE SELECTION OF SUCH MATERIAL: GALVANIZED STEEL T MATCH STRUCTURES AT THE SUBSTATION

e. FOUNDATION MATERIAL: CONCRETE

f. AVERAGE WIDTH AT CROSSARM: 34'

g. AVERAGE WIDTH AT BASE: 37'

h. MAX, MIN, AND AVERAGE STRUCTURE HEIGHTS: 71 FEET, 71', AND 71' (LINE 19) (DOES NOT INCLUDE FOUNDATION REVEAL)

i. AVERAGE SPAN LENGTH: 471 FEET (RANGE 162 - 615 FEET) (LINE 19)

j. MINIMUM CONDUCTOR-GROUND CLEARANCE UNDER MAXIMUM OPERATING CONDITIONS: 20.1'

NOTE: Information contained on drawing is to be considered preliminary in nature and subject to change based on final design.

$DGNSPEC$

II. DESCRIPTION OF THE PROPOSED PROJECT

B. Line Design and Operational Features

4. With regard to the proposed supporting structures for all feasible alternate routes, provide the maximum, minimum and average structure heights with respect to the whole route.

Response: Not applicable.

II. DESCRIPTION OF THE PROPOSED PROJECT

B. Line Design and Operational Features

5. For lines being rebuilt, provide mapping showing existing and proposed structure heights for each individual structure within the ROW, as proposed in the application.

Response: See Attachment II.B.5.a for existing structure locations.

The proposed approximate structure heights are from the conceptual design created to estimate the cost of the proposed Rebuild Projects and are subject to change based on final engineering design. The approximate structure heights do not include foundation reveal and assume equal leg lengths based on the centerline ground elevation.

Structure Number	Existing Structure Height (ft)	Proposed Structure Height (ft)	Attachment II.B.3 Structure Type
Lightfoot-Waller			
2113/374A	n/a	75	iv
2113/378	66	80	ii
2113/379	62	66	i
2113/380	57	57	i
2113/381	57	57	i
2113/382	57	57	i
2113/383	57	61	i
2113/384	57	57	i
2113/385	62	66	i
2113/386	57	66	i
2113/387	62	66	i
2113/388	57	66	i
2113/389	62	75	i
2113/390	62	70	i
2113/391	57	61	i
2113/392	57	61	i
2113/393	57	61	i
2113/394	57	55	iii
2113/395	57	61	i
2113/396	57	70	i
2113/397	84	84	i
2113/398	71	70	i
2113/399	57	61	i
2113/400	53	52	i
2113/401	66	75	i
2113/402	57	57	i

2113/403	66	70	i
2113/404	57	61	i
2113/405	66	70	i
2113/406	62	70	i
2113/407	62	70	i
2113/408	57	61	i
2113/409	62	61	i
2113/410	61	60	ii
2113/411	70	75	iv
Min	53	52	
Max	84	84	
Average	61	65	
Waller-Kingsmill			
2154/411	70	75	iv
2154/412	66	70	ii
2154/413	63	70	i
2154/414	63	61	i
2154/415	68	70	i
2154/416	63	61	i
2154/418	76	70	i
2154/419	56	70	i
2154/420	61	70	i
2154/421	61	70	i
2154/422	76	70	i
2154/423	81	79	i
2154/424	71	70	i
2154/425	76	70	i
2154/426	66	70	i
2154/427	56	61	i
2154/428	66	70	i
2154/429	71	70	i
2154/430	56	61	i
2154/431	56	61	i
2154/432	56	61	i
2154/433	56	61	i
2154/434	56	66	i
2154/435	66	66	i
2154/436	56	66	i
2154/437	56	61	i
2154/438	61	70	i
2154/439	66	70	i
2154/440	61	70	i

2154/441	61	61	i
2154/442	56	61	i
2154/443	61	70	i
2154/444	71	70	i
2154/445	61	70	i
2154/446	79	70	iii
2154/450	79	80	ii
2154/451	81	84	i
2154/452	81	79	i
2154/453	66	70	i
2154/454	61	70	i
2154/455	66	70	i
2154/456	56	61	i
2154/457	57	60	ii
2154/464	75	75	ii
2154/465	61	65	iii
Min	56	60	
Max	81	84	
Average	65	68	
Kingsmill-Structure #2154/482			
19/191A	n/a	70	vii
2154/466A	n/a	75	iv
2154/467	56	85	vi
2154/468	70	85	vi
2154/469	70	85	vi
2154/470	56	85	v
2154/471	56	80	v
2154/472	56	80	v
2154/473	61	85	v
2154/474	56	80	v
2154/475	56	80	v
2154/476	56	85	v
2154/477	56	80	v
2154/478	56	80	v
2154/479	56	80	v
2154/480	57	70	vi
2154/481	58	80	v
2154/482	61	70	vi
Min	56	70	
Max	70	85	
Average	59	80	

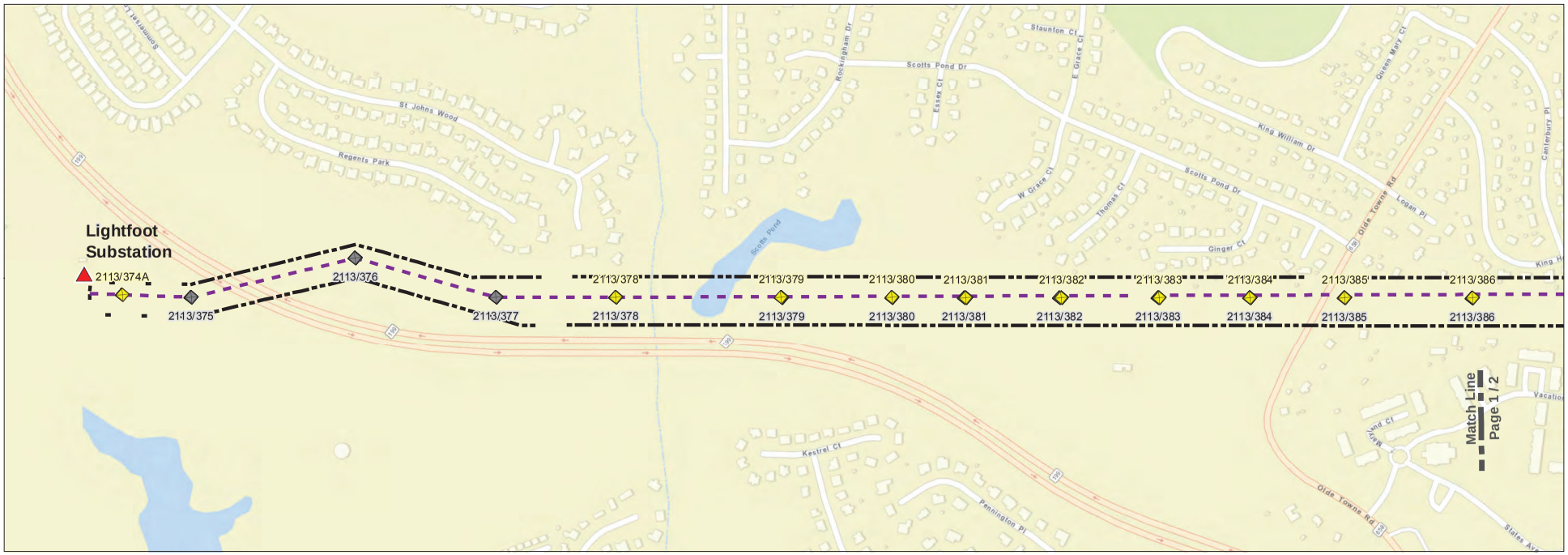


Table II.B.5

Existing Structure Number	2113/374A	2113/375	2113/376	2113/377	2113/378	2113/379	2113/380	2113/381	2113/382	2113/383	2113/384	2113/385	2113/386
Existing Structure Height (Feet)	N/A	100	110	105	66	62	57	57	57	57	57	62	57

Proposed Structure Number	2113/374A	2113/375	2113/376	2113/377	2113/378	2113/379	2113/380	2113/381	2113/382	2113/383	2113/384	2113/385	2113/386
Proposed Structure Height (Feet)	75	100	110	105	80	66	57	57	57	61	57	66	66

*Structure heights do not include foundation reveal. Proposed heights based on preliminary engineering

Substation
Proposed Structure
Existing Structure
Project Limits
230kV Line #2113 Rebuild and Related Projects
230kV Line #2154 Rebuild and Related Projects

0 500 1,000 Feet
(At original document size of 11x17)
1:6,000

N

Stantec

Project Location
James City County, New Kent County, York County, and City of Williamsburg, Virginia

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

Client/Project
203401488
Dominion Energy Virginia
230 kV Lines #2113 and #2154 Transmission Line Rebuilds and Related Projects

Figure No.
II.B.5

Title
Existing and Proposed Structures

Page 01 of 09

Notes
1. Coordinate System: NAD 1983 StatePlane Virginia South FIPS 4502 Feet
2. Structure locations provided by Dominion Energy Virginia, Stantec
3. Base Map © ESRI World Street Map

Table II.B.5

Existing Structure Number	2113/386	2113/387	2113/388	2113/389	2113/390	2113/391	2113/392	2113/393	2113/394	2113/395	2113/396	2113/397	2113/398	2113/399	2113/400
Existing Structure Height (Feet)	57	62	57	62	62	57	57	57	57	57	57	84	71	57	53

Proposed Structure Number	2113/386	2113/387	2113/388	2113/389	2113/390	2113/391	2113/392	2113/393	2113/394	2113/395	2113/396	2113/397	2113/398	2113/399	2113/400
Proposed Structure Height (Feet)	66	66	66	75	70	61	61	61	55	61	70	84	70	61	52

*Structure heights do not include foundation reveal. Proposed heights based on preliminary engineering

Substation
Proposed Structure
Existing Structure
Project Limits
230kV Line #2113 Rebuild and Related Projects
230kV Line #2154 Rebuild and Related Projects

0 500 1,000 Feet
(At original document size of 11x17)
1:6,000

Notes
1. Coordinate System: NAD 1983 StatePlane Virginia South FIPS 4502 Feet
2. Structure locations provided by Dominion Energy Virginia, Stantec
3. Base Map © ESRI World Street Map

Stantec

Project Location
James City County, New Kent County, York County, and City of Williamsburg, Virginia

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

Client/Project
203401488
Dominion Energy Virginia
230 kV Lines #2113 and #2154 Transmission Line Rebuilds and Related Projects

Figure No.
II.B.5

Title
Existing and Proposed Structures

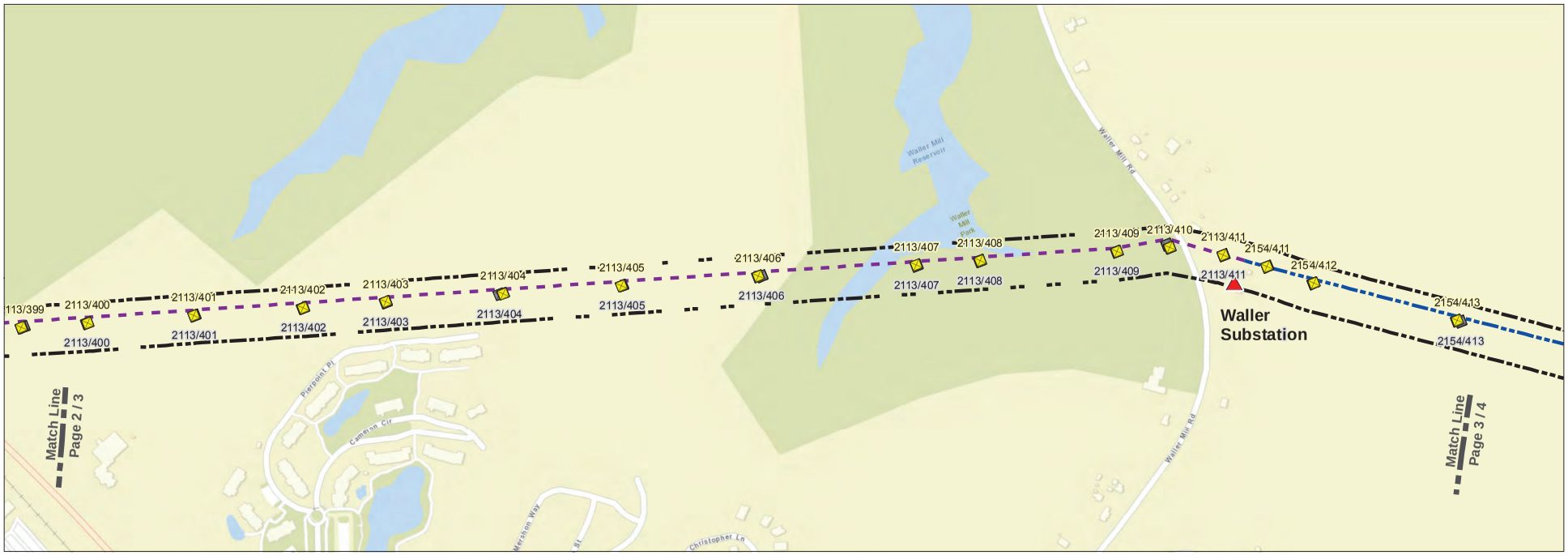


Table II.B.5

Existing Structure Number	2113/399	2113/400	2113/401	2113/402	2113/403	2113/404	2113/405	2113/406	2113/407	2113/408	2113/409	2113/410	2113/411	2154/411	2154/412	2154/413
Existing Structure Height (Feet)	57	53	66	57	66	57	66	62	62	57	62	61	70	70	66	63

Proposed Structure Number	2113/399	2113/400	2113/401	2113/402	2113/403	2113/404	2113/405	2113/406	2113/407	2113/408	2113/409	2113/410	2113/411	2154/411	2154/412	2154/413
Proposed Structure Height (Feet)	61	52	75	57	70	61	70	70	70	61	61	60	75	75	70	70

*Structure heights do not include foundation reveal. Proposed heights based on preliminary engineering

Substation
Proposed Structure
Existing Structure
Project Limits
230kV Line #2113 Rebuild and Related Projects
230kV Line #2154 Rebuild and Related Projects

0 500 1,000 Feet
(At original document size of 11x17)
1:6,000

N

Stantec

Project Location
James City County, New Kent County, York County, and City of Williamsburg, Virginia

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

Client/Project
203401488
Dominion Energy Virginia
230 kV Lines #2113 and #2154 Transmission Line Rebuilds and Related Projects

Figure No.
II.B.5

Title
Existing and Proposed Structures

Notes
1. Coordinate System: NAD 1983 StatePlane Virginia South FIPS 4502 Feet
2. Structure locations provided by Dominion Energy Virginia, Stantec
3. Base Map © ESRI World Street Map

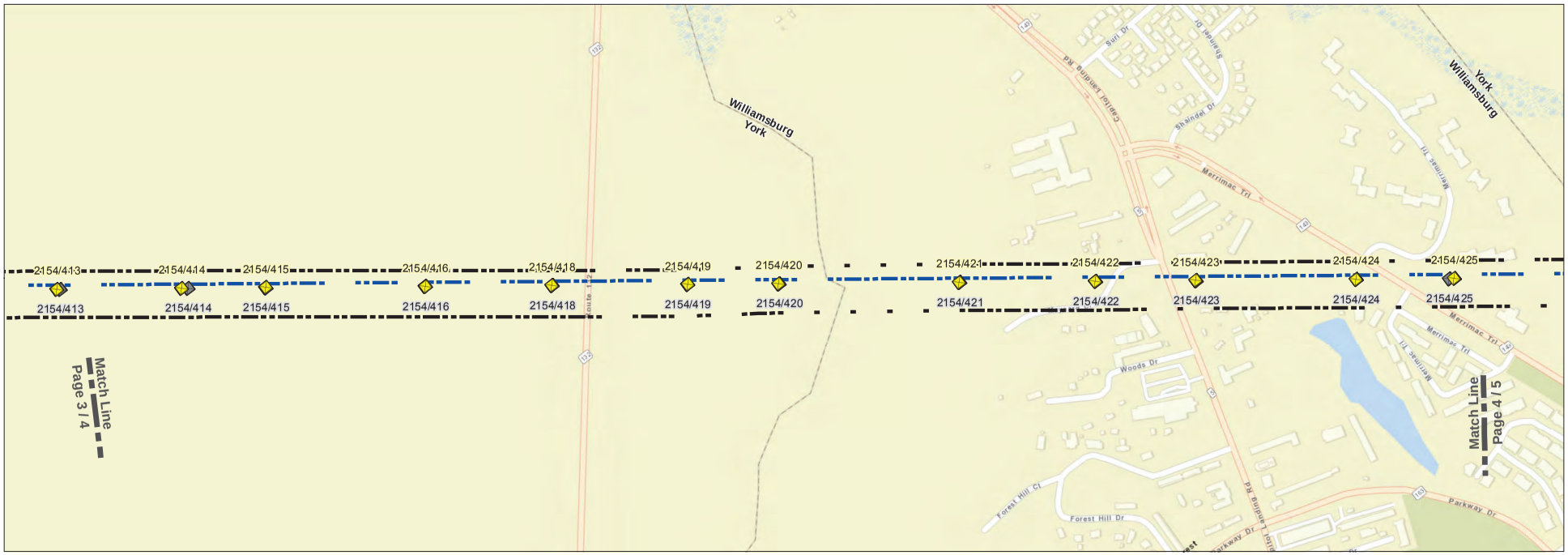


Table II.B.5

Existing Structure Number	2154/413	2154/414	2154/415	2154/416	2154/418	2154/419	2154/420	2154/421	2154/422	2154/423	2154/424	2154/425
Existing Structure Height (Feet)	63	63	68	63	76	56	61	61	76	81	71	76

Proposed Structure Number	2154/413	2154/414	2154/415	2154/416	2154/418	2154/419	2154/420	2154/421	2154/422	2154/423	2154/424	2154/425
Proposed Structure Height (Feet)	70	61	70	61	70	70	70	70	70	79	70	70

*Structure heights do not include foundation reveal. Proposed heights based on preliminary engineering

Substation
Proposed Structure
Existing Structure
Project Limits
230kV Line #2113 Rebuild and Related Projects
230kV Line #2154 Rebuild and Related Projects

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Stantec

Project Location
James City County, New Kent County, York County, and City of Williamsburg, Virginia

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

Client/Project
203401488
Dominion Energy Virginia
230 kV Lines #2113 and #2154 Transmission Line Rebuilds and Related Projects

Figure No.
II.B.5

Title
Existing and Proposed Structures

Notes
1. Coordinate System: NAD 1983 StatePlane Virginia South FIPS 4502 Feet
2. Structure locations provided by Dominion Energy Virginia, Stantec
3. Base Map © ESRI World Street Map

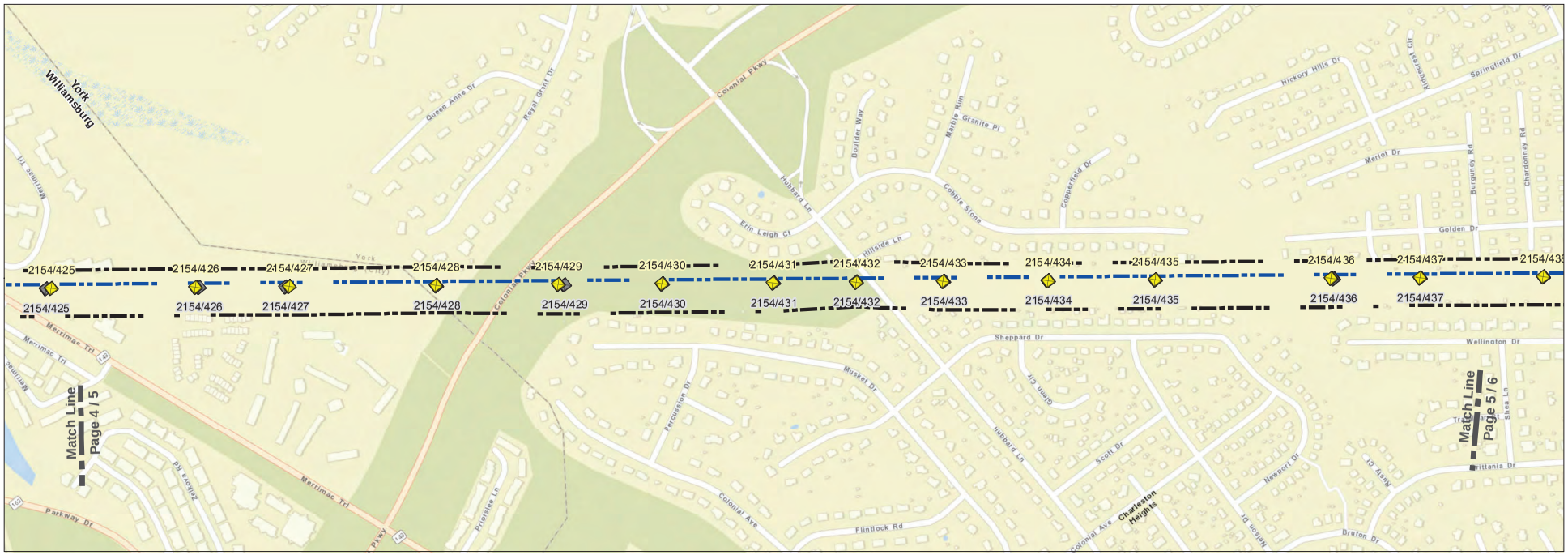

Table II.B.5

Existing Structure Number	2154/425	2154/426	2154/427	2154/428	2154/429	2154/430	2154/431	2154/432	2154/433	2154/434	2154/435	2154/436	2154/437	2154/438
Existing Structure Height (Feet)	76	66	56	66	71	56	56	56	56	56	66	56	56	61

Proposed Structure Number	2154/425	2154/426	2154/427	2154/428	2154/429	2154/430	2154/431	2154/432	2154/433	2154/434	2154/435	2154/436	2154/437	2154/438
Proposed Structure Height (Feet)	70	70	61	70	70	61	61	61	61	66	66	66	61	70

*Structure heights do not include foundation reveal. Proposed heights based on preliminary engineering

- Substation
- Proposed Structure
- Existing Structure
- Project Limits
- 230kV Line #2113 Rebuild and Related Projects
- 230kV Line #2154 Rebuild and Related Projects

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Stantec

Project Location
James City County, New Kent County, York County, and City of Williamsburg, Virginia

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

Client/Project 203401488
Dominion Energy Virginia
230 kV Lines #2113 and #2154 Transmission Line Rebuilds and Related Projects

Figure No.
II.B.5

Title
Existing and Proposed Structures

Notes
1. Coordinate System: NAD 1983 StatePlane Virginia South FIPS 4502 Feet
2. Structure locations provided by Dominion Energy Virginia, Stantec
3. Base Map © ESRI World Street Map

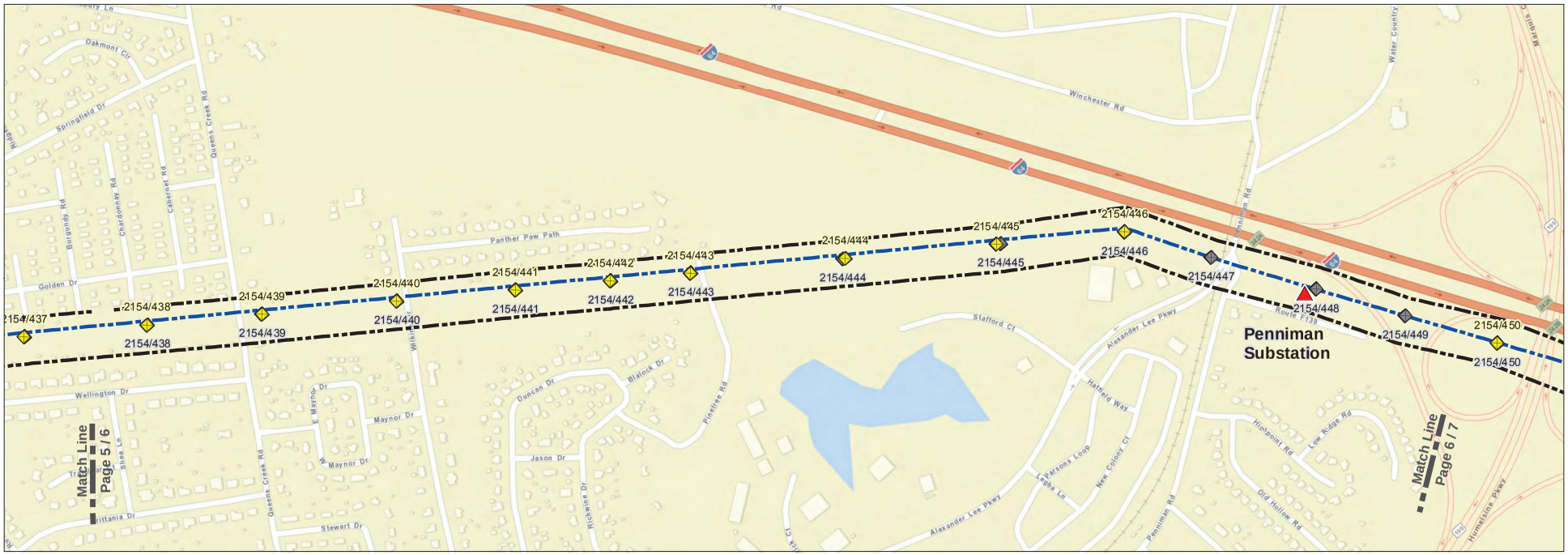

Table II.B.5

Existing Structure Number	2154/437	2154/438	2154/439	2154/440	2154/441	2154/442	2154/443	2154/444	2154/445	2154/446	2154/447	2154/448	2154/449	2154/450
Existing Structure Height (Feet)	56	61	66	61	61	56	61	71	61	79	100	95	110	79

Proposed Structure Number	2154/437	2154/438	2154/439	2154/440	2154/441	2154/442	2154/443	2154/444	2154/445	2154/446	2154/447	2154/448	2154/449	2154/450
Proposed Structure Height (Feet)	61	70	70	70	61	61	70	70	70	70	N/A	N/A	N/A	80

*Structure heights do not include foundation reveal. Proposed heights based on preliminary engineering

Substation
Proposed Structure
Existing Structure
Project Limits
230kV Line #2113 Rebuild and Related Projects
230kV Line #2154 Rebuild and Related Projects

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Stantec

Project Location
James City County, New Kent County, York County, and City of Williamsburg, Virginia

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

Client/Project 203401488
Dominion Energy Virginia
230 kV Lines #2113 and #2154 Transmission Line Rebuilds and Related Projects

Figure No.
II.B.5

Title
Existing and Proposed Structures

Notes
1. Coordinate System: NAD 1983 StatePlane Virginia South FIPS 4502 Feet
2. Structure locations provided by Dominion Energy Virginia, Stantec
3. Base Map © ESRI World Street Map

Table II.B.5

Existing Structure Number	2154/449	2154/450	2154/451	2154/452	2154/453	2154/454	2154/455	2154/456	2154/457	2154/458	2154/459	2154/460
Existing Structure Height (Feet)	110	79	81	81	66	61	66	56	57	105	110	130

Proposed Structure Number	2154/449	2154/450	2154/451	2154/452	2154/453	2154/454	2154/455	2154/456	2154/457	2154/458	2154/459	2154/460
Proposed Structure Height (Feet)	N/A	80	84	79	70	70	70	61	60	N/A	N/A	N/A

*Structure heights do not include foundation reveal. Proposed heights based on preliminary engineering

- Substation
- Proposed Structure
- Existing Structure
- Project Limits
- 230kV Line #2113 Rebuild and Related Projects
- 230kV Line #2154 Rebuild and Related Projects

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(At original document size of 11x17)
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Stantec

Project Location
James City County, New Kent County,
York County, and City of Williamsburg, Virginia

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

Client/Project 203401488
Dominion Energy Virginia
230 kV Lines #2113 and #2154 Transmission Line Rebuilds and Related Projects

Figure No.
II.B.5

Title
Existing and Proposed Structures

Notes
1. Coordinate System: NAD 1983 StatePlane Virginia South FIPS 4502 Feet
2. Structure locations provided by Dominion Energy Virginia, Stantec
3. Base Map © ESRI World Street Map

Table II.B.5

Existing Structure Number	19/191A	2154/460	2154/461	2154/462	2154/463	2154/464	2154/465	2154/466	2154/466A	2154/467	2154/468	2154/469	2154/470	2154/471	2154/472	2154/473	2154/474	2154/475
Existing Structure Height (Feet)	N/A	130	135	125	115	75	61	65	N/A	56	70	70	56	56	56	61	56	56

Proposed Structure Number	19/191A	2154/460	2154/461	2154/462	2154/463	2154/464	2154/465	2154/466	2154/466A	2154/467	2154/468	2154/469	2154/470	2154/471	2154/472	2154/473	2154/474	2154/475
Proposed Structure Height (Feet)	70	N/A	N/A	N/A	N/A	75	65	N/A	75	85	85	85	85	80	80	85	80	80

*Structure heights do not include foundation reveal. Proposed heights based on preliminary engineering

- Substation
- Proposed Structure
- Existing Structure
- Project Limits
- 230kV Line #2113 Rebuild and Related Projects
- 230kV Line #2154 Rebuild and Related Projects

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(At original document size of 11x17)
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Stantec

Project Location
James City County, New Kent County, York County, and City of Williamsburg, Virginia

Prepared by MGS on 2020-09-16
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IR by RLR on 2020-09-24

Client/Project 203401488
Dominion Energy Virginia
230 kV Lines #2113 and #2154 Transmission Line Rebuilds and Related Projects

Figure No.
II.B.5

Title
Existing and Proposed Structures

Notes
1. Coordinate System: NAD 1983 StatePlane Virginia South FIPS 4502 Feet
2. Structure locations provided by Dominion Energy Virginia, Stantec
3. Base Map © ESRI World Street Map

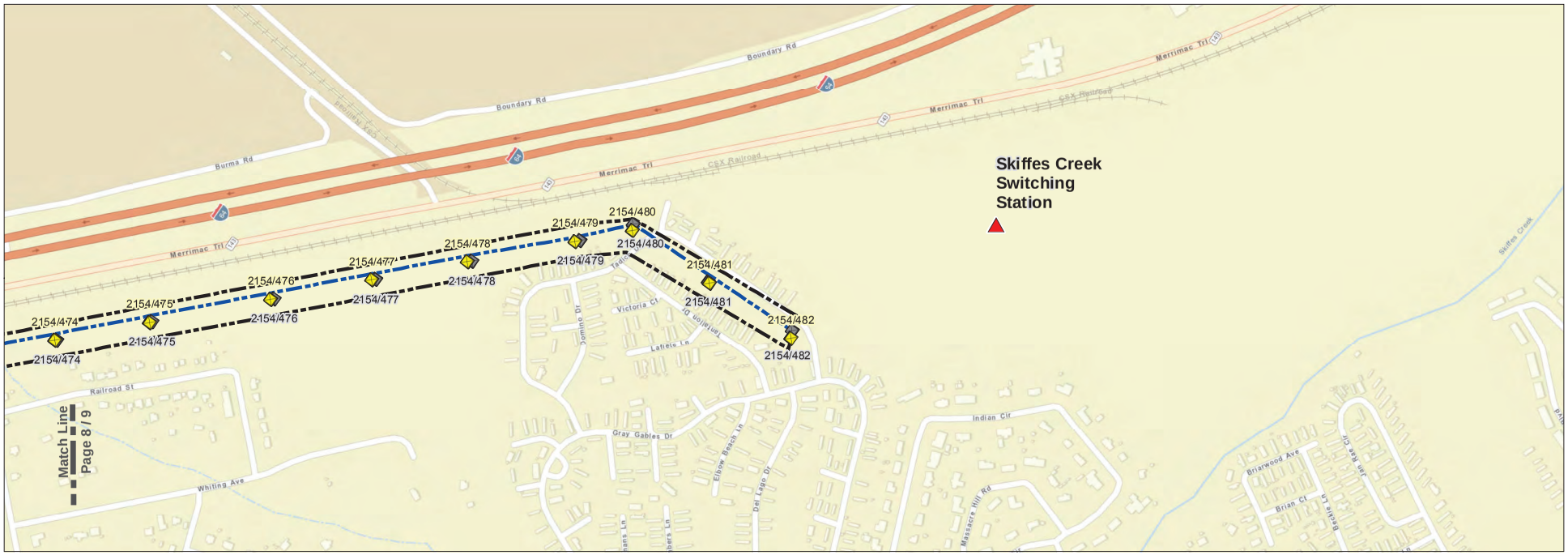

Table II.B.5

Existing Structure Number	2154/474	2154/475	2154/476	2154/477	2154/478	2154/479	2154/480	2154/481	2154/482
Existing Structure Height (Feet)	56	56	56	56	56	56	57	58	61

Proposed Structure Number	2154/474	2154/475	2154/476	2154/477	2154/478	2154/479	2154/480	2154/481	2154/482
Proposed Structure Height (Feet)	80	80	85	80	80	80	70	80	70

*Structure heights do not include foundation reveal. Proposed heights based on preliminary engineering

Substation
Proposed Structure
Existing Structure
Project Limits
230kV Line #2113 Rebuild and Related Projects
230kV Line #2154 Rebuild and Related Projects

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(At original document size of 11x17)
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Stantec

Project Location
James City County, New Kent County,
York County, and City of Williamsburg, Virginia

Prepared by MGS on 2020-09-16
TR by ECL on 2020-09-18
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Client/Project
203401488
Dominion Energy Virginia
230 kV Lines #2113 and #2154 Transmission Line Rebuilds and Related Projects

Figure No.
II.B.5

Title
Existing and Proposed Structures

Notes
1. Coordinate System: NAD 1983 StatePlane Virginia South FIPS 4502 Feet
2. Structure locations provided by Dominion Energy Virginia, Stantec
3. Base Map © ESRI World Street Map

II. DESCRIPTION OF THE PROPOSED PROJECT

B. Line Design and Operational Features

6. Provide photographs for typical existing facilities to be removed, comparable photographs or representations for proposed structures, and visual simulations showing the appearance of all planned transmission structures at identified historic locations within one mile of the proposed centerline and in key locations identified by the Applicant.

Response: [1] See Attachments II.B.6.a.i-ix for representative photographs of typical existing structures.

[2] See Attachments II.B.6.b.i-vi for representative photographs of typical proposed structures.

[3] Visual simulations showing the appearance of the proposed transmission structures are provided for historic properties where the Rebuild Projects will be visible. Attachment II.B.6.c.i provides a map that was created using GIS modeling to depict whether the existing and proposed structures are or will be visible from historic properties. Observation points ("OPs") used for the simulations are indicated on the map. Attachment II.B.6.c.ii provides existing photographs and simulations of the proposed structures from the selected OPs. The table below identifies the historic properties evaluated.

Historic Property	OPs	Comments
Williamsburg Historic District (VDHR # 137-0050)	1	No visibility of existing or proposed structures.
James Semple House (NRHP Listing)/ Peyton Randolph House (VDHR #137-0033)	2	No visibility of existing or proposed structures.
Colonial Parkway (NRHP Listing)/ Colonial National Historic Park (VDHR #047-0002)	3	Visibility of existing and proposed structures; increased height change from existing to proposed structures.
Battle of Williamsburg (VDHR #099-5282)	4	Visibility of existing and proposed structures; increased height change from existing to proposed structures.
Carter's Grove Plantation (VDHR #047-0001)	5	No visibility of existing or proposed structures.
Chesapeake and Ohio Railroad (Historic)/ CSX Railroad (VDHR #121-5134)	6	Visibility of existing and proposed structures; increased height change from existing to proposed structures.

See Attachment III.B.6 for photo simulations from key locations.

Photograph provided by Dominion Energy

Existing Single Circuit Double Deadend H-frame

Photograph provided by Dominion Energy

Existing Single 230 kV Circuit Switch

Photograph provided by Dominion Energy

Existing Single 115 kV Switch Structure

Photograph provided by Dominion Energy

Existing Single Circuit Pole

Photograph provided by Dominion Energy

Existing Single Double Deadend 3-Pole

Photograph provided by Dominion Energy

Existing Single Running Angle 3-Pole

Photograph provided by Dominion Energy

Existing Single Circuit Running Angle 2-Pole

Photograph provided by Dominion Energy

Existing Double Circuit Suspension H-frame

Photograph provided by Dominion Energy

Existing Double Circuit Double Deadend H-frame

Photograph provided by Dominion Energy

Proposed Single Circuit Suspension H-frame

Photograph provided by Dominion Energy

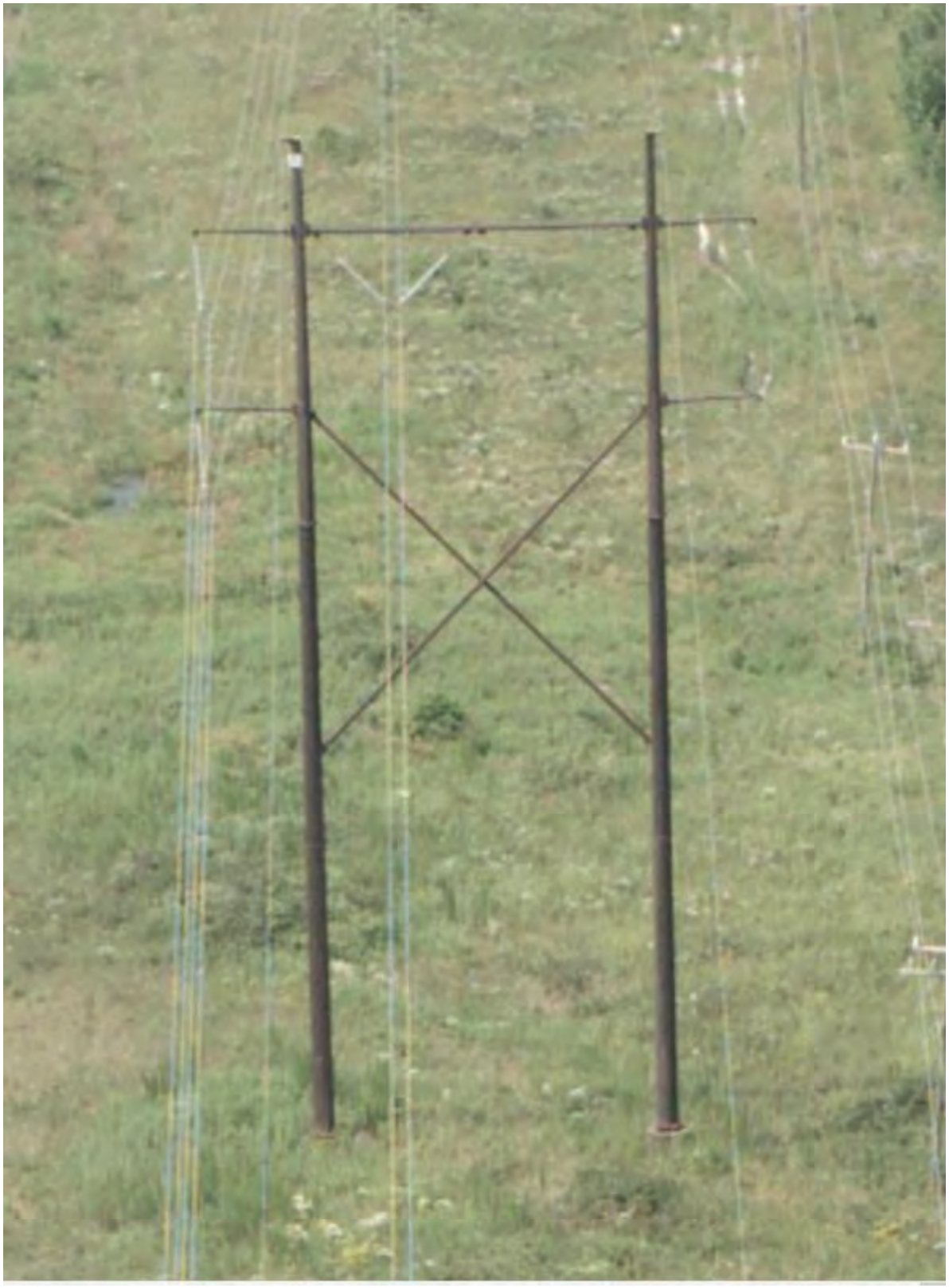
Proposed Single Circuit Double Deadend H-frame

Photograph provided by Dominion Energy

Proposed Single Circuit 3-Pole Double Deadend

Photograph provided by Dominion Energy

Proposed Single Circuit Switch



Photograph provided by Dominion Energy

Proposed Double Circuit Suspension H-frame

Photograph provided by Dominion Energy

Proposed Double Circuit Double Deadend 2-Pole

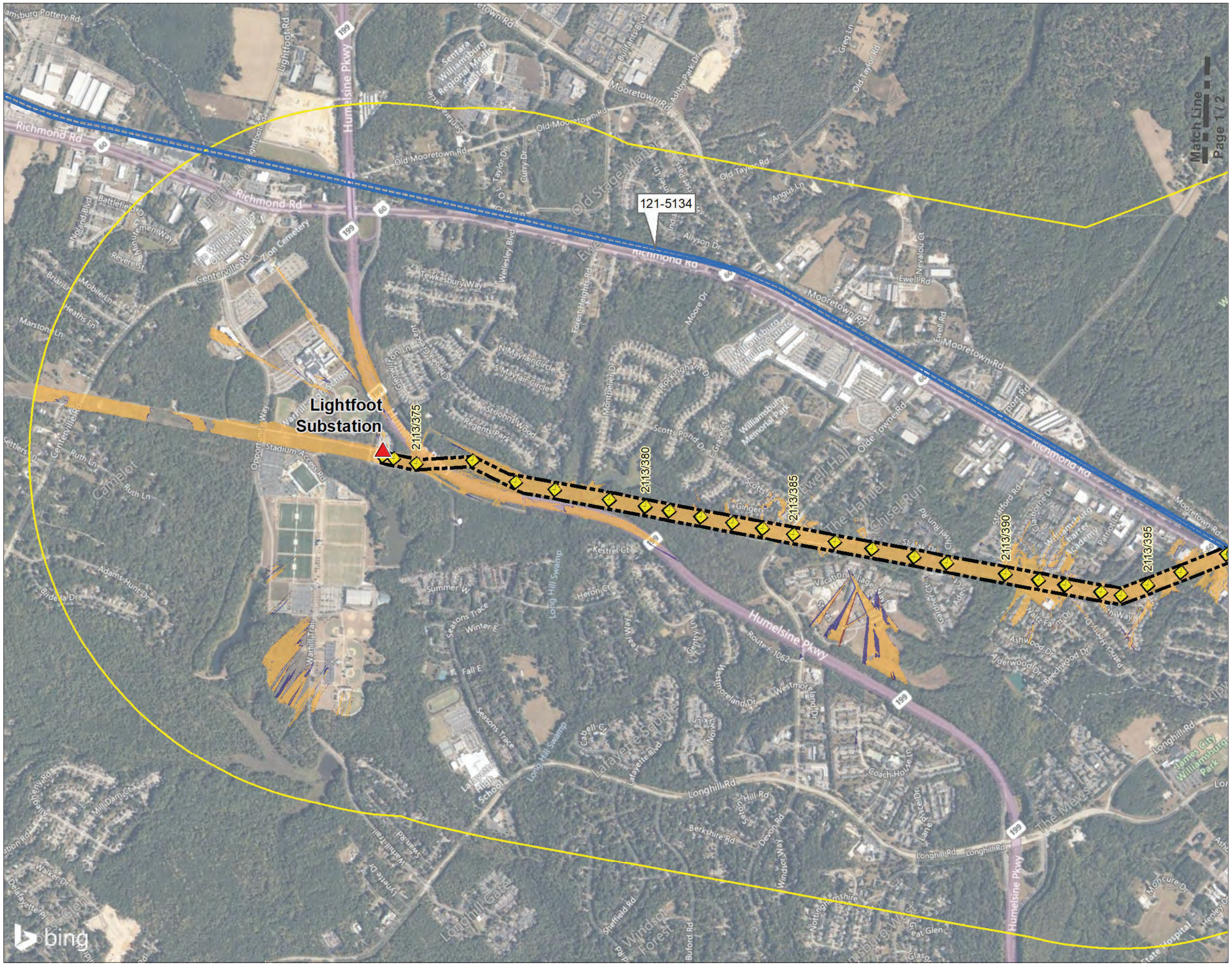


Figure No.

Appendix II.B.6.c.i

Title

Viewshed Map

Client/Project 203401488

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

Project Location
James City County, New Kent County, York County, and City of Williamsburg, Virginia

Prepared by TPS on 2020-10-29
TR by MGS on 2020-10-29
IR by RLR on 2020-10-29

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(At original document size of 11x17)
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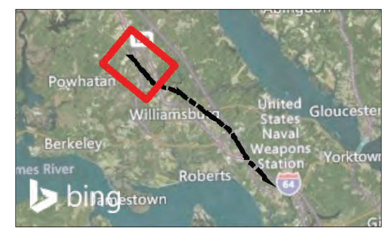
- Substation
- Photo Observation Point
- Proposed Structures
- Existing Structures
- Project Limits
- Architectural Resource
- Viewshed Limits 1-Mile Bufer
- Existing Visible, Proposed Not Visible
- Both Existing and Proposed Visible
- Existing Not Visible, Proposed Visible



Notes

1. Coordinate System: NAD 1983 StatePlane Virginia South FIPS 4502 Feet
2. Data Sources: Dominion Energy Virginia, Historic resource data provided by Virginia Department of Historic Resources, Virginia Cultural Resources Information System (VCRIS)
3. Viewshed analysis produced from digital elevation model and digital surface model derived from VGIN LiDAR
4. Orthoimagery © Bing Maps
5. Microsoft product screen shot(s) reprinted with permission from Microsoft Corporation

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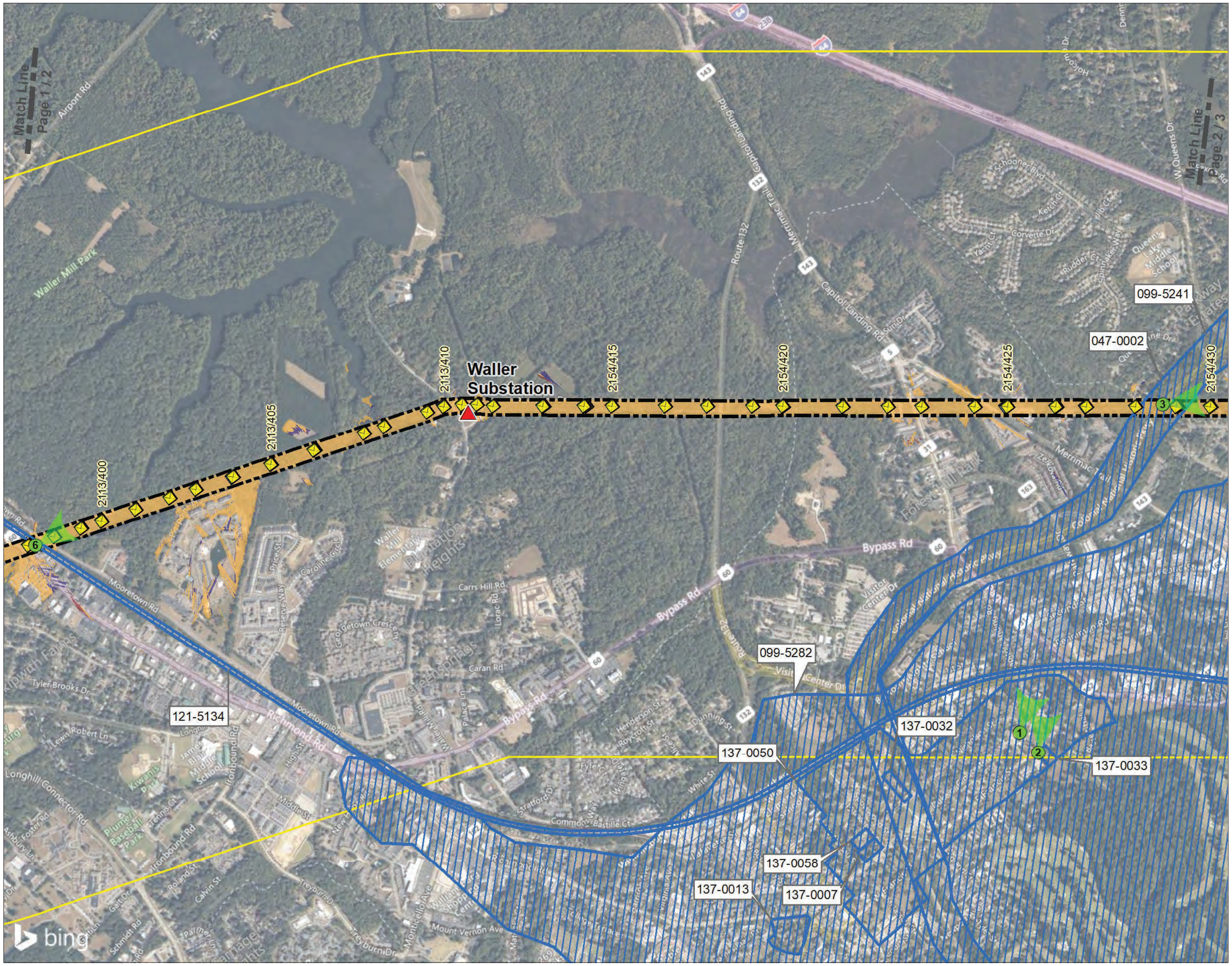

Figure No.
Appendix II.B.6.c.i

Title
Viewshed Map

Client/Project 203401488
Dominion Energy Virginia
230 kV Lines #2113 and #2154 Transmission Line Rebuilds and Related Projects

Project Location
James City County, New Kent County, York County, and City of Williamsburg, Virginia

Prepared by TPS on 2020-10-29
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IR by RLR on 2020-10-29

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- Substation
- Photo Observation Point
- Proposed Structures
- Existing Structures
- Project Limits
- Architectural Resource
- Viewshed Limits 1-Mile Bufer
- Existing Visible, Proposed Not Visible
- Both Existing and Proposed Visible
- Existing Not Visible, Proposed Visible

Notes
1. Coordinate System: NAD 1983 StatePlane Virginia South FIPS 4502 Feet
2. Data Sources: Dominion Energy Virginia, Historic resource data provided by Virginia Department of Historic Resources, Virginia Cultural Resources Information System (VCRIS)
3. Viewshed analysis produced from digital elevation model and digital surface model derived from VGIN LiDAR
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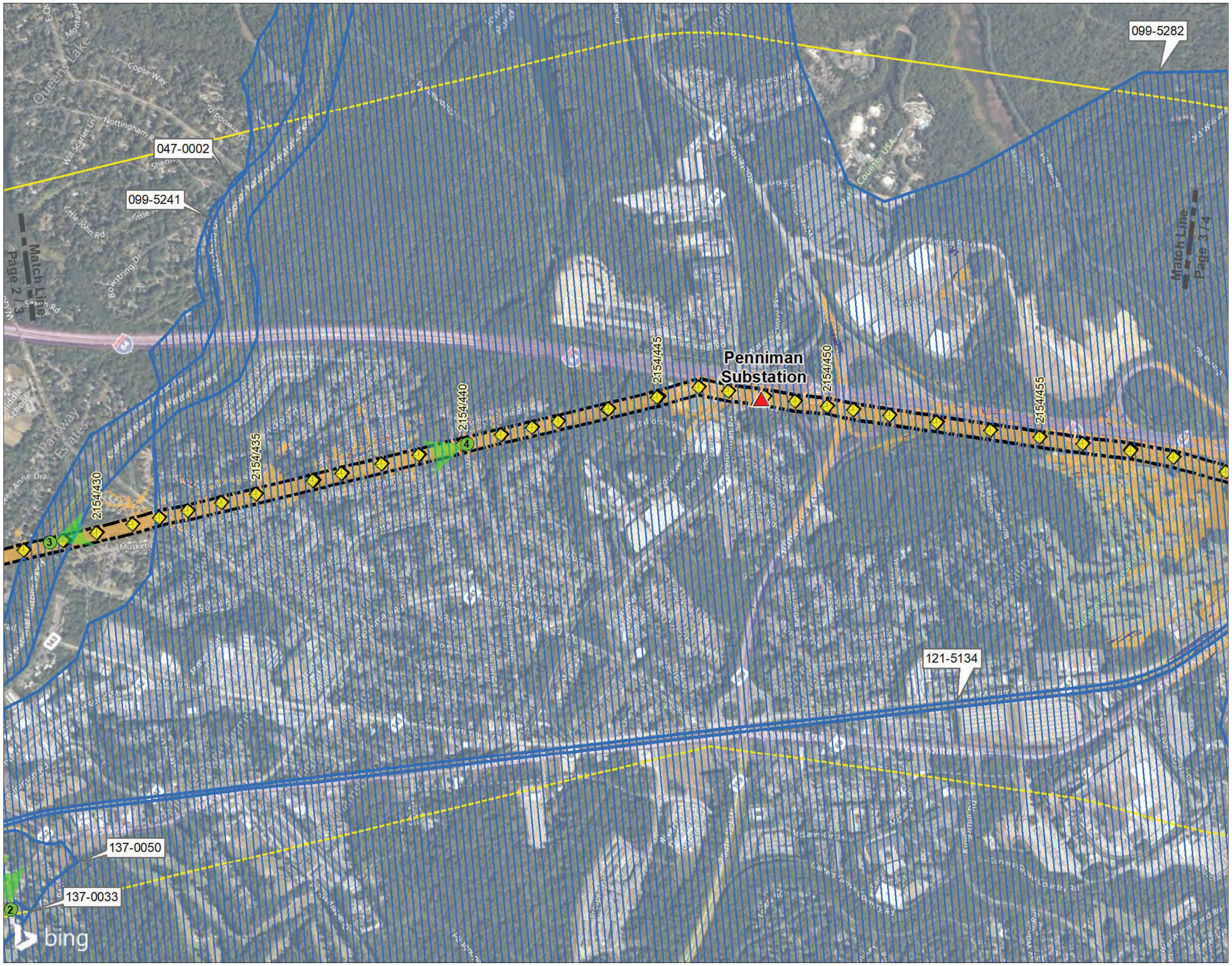

Figure No.
Appendix II.B.6.c.i

Title
Viewshed Map

Client/Project 203401488
Dominion Energy Virginia
230 kV Lines #2113 and #2154 Transmission Line Rebuilds and Related Projects

Project Location
James City County, New Kent County, York County, and City of Williamsburg, Virginia

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0 1,500 3,000 Feet
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- Substation
- Photo Observation Point
- Proposed Structures
- Existing Structures
- Project Limits
- Architectural Resource
- Viewshed Limits 1-Mile Bufer
- Existing Visible, Proposed Not Visible
- Both Existing and Proposed Visible
- Existing Not Visible, Proposed Visible

Notes
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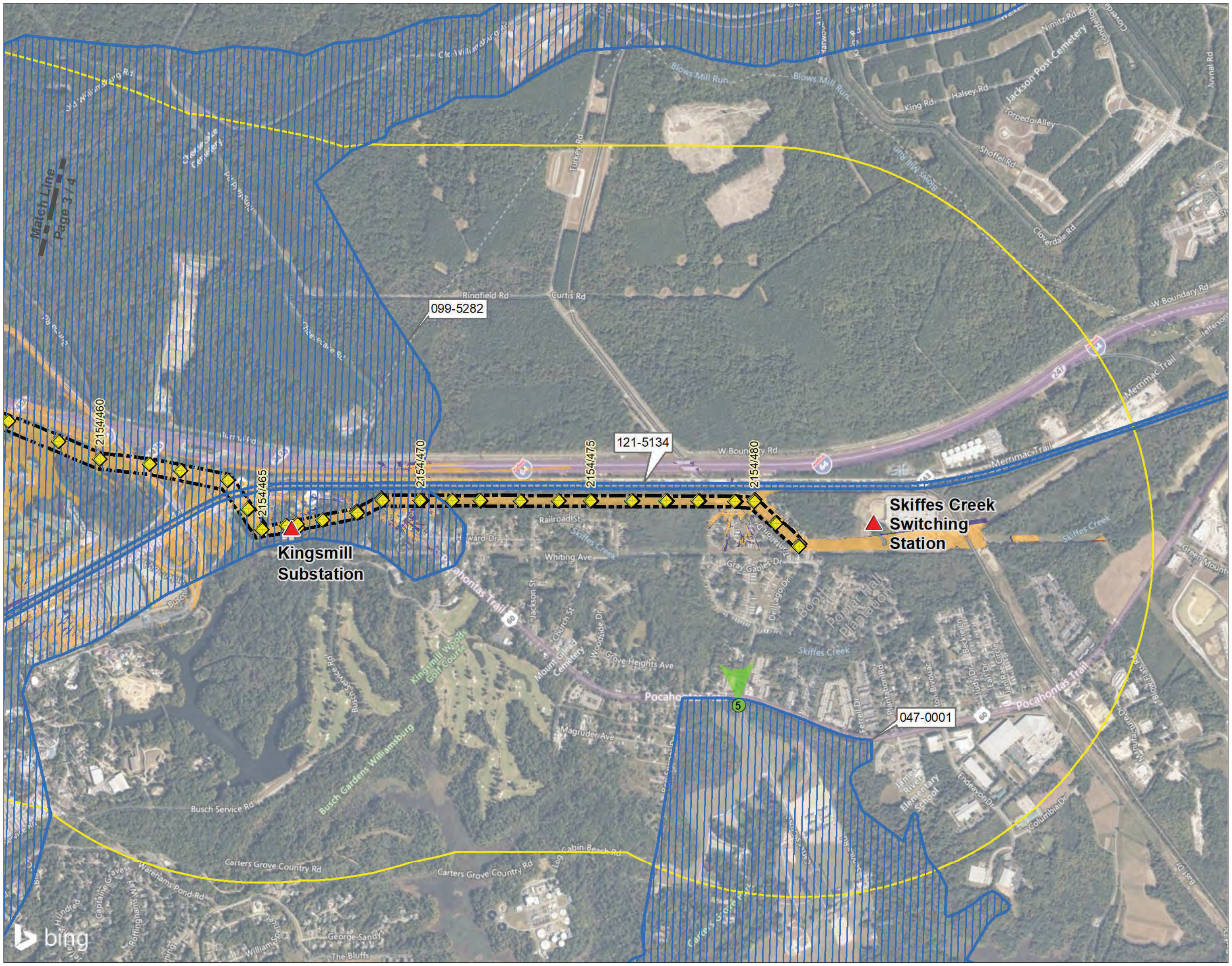

Figure No.

Appendix II.B.6.c.i

Title

Viewshed Map

Client/Project 203401488

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

Project Location
James City County, New Kent County, York County, and City of Williamsburg, Virginia

Prepared by TPS on 2020-10-29
TR by MGS on 2020-10-29
IR by RLR on 2020-10-29

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0 1,500 3,000 Feet

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- Substation
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- Proposed Structures
- Existing Structures
- Project Limits
- Architectural Resource
- Viewshed Limits 1-Mile Bufer
- Existing Visible, Proposed Not Visible
- Both Existing and Proposed Visible
- Existing Not Visible, Proposed Visible

Notes

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3. Viewshed analysis produced from digital elevation model and digital surface model derived from VGIN LiDAR
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Representation Provided by Stantec
**Subject to final engineering*

OP 1: Existing
Williamsburg Historic District
(DHR #137-0050)

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Representation Provided by Stantec
**Subject to final engineering*

OP 1: Proposed (No Visibility)
Williamsburg Historic District
(DHR #137-0050)

Stantec Dominion Energy

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Representation Provided by Stantec
**Subject to final engineering*

OP 2: Existing
James Semple House (NRHP Listing)/ Peyton Randolph House
(DHR #137-0033)

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Representation Provided by Stantec
**Subject to final engineering*

OP 2: Proposed (No Visibility)
James Semple House (NRHP Listing)/ Peyton Randolph House
(DHR #137-0033)

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Representation Provided by Stantec
**Subject to final engineering*

OP 3: Existing Colonial Parkway (NRHP Listing)/ Colonial National Historic Park (DHR #047-0002)

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Representation Provided by Stantec
**Subject to final engineering*

OP 3: Proposed Colonial Parkway (NRHP Listing)/ Colonial National Historic Park (DHR #047-0002)

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Representation Provided by Stantec
**Subject to final engineering*

OP 4: Existing
Battle of Williamsburg
(DHR #099-5282)

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Representation Provided by Stantec
**Subject to final engineering*

OP 4: Proposed
Battle of Williamsburg
(DHR #099-5282)

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Representation Provided by Stantec
**Subject to final engineering*

OP 5: Existing
Carter's Grove Plantation
(DHR #047-0001)

Stantec Dominion Energy

207

Representation Provided by Stantec
**Subject to final engineering*

OP 5: Proposed (No Visibility)
Carter's Grove Plantation
(DHR #047-0001)

Stantec Dominion Energy

Representation Provided by Stantec
**Subject to final engineering*

OP 6: Existing
Chesapeake and Ohio Railroad (Historic)/ CSX Railroad
(DHR #121-5134)

Stantec Dominion Energy

Representation Provided by Stantec
**Subject to final engineering*

OP 6: Proposed
Chesapeake and Ohio Railroad (Historic)/ CSX Railroad
(DHR #121-5134)

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II. DESCRIPTION OF THE PROPOSED PROJECT

C. Describe and furnish plan drawings of all new substations, switching stations, and other ground facilities associated with the proposed project. Include size, acreage, and bus configurations. Describe substation expansion capability and plans. Provide one-line diagrams for each.

Response: There are no new substations, switching stations, or other ground facilities associated with the proposed Rebuild Projects, nor are any of the impacted stations being expanded. The Rebuild Projects will require the following station work:

At Lightfoot Substation, the Line #2113 Rebuild Project will require replacing and relocating one 230 kV switch outside the substation.

At Waller Substation, the Rebuild Projects will require replacing one 230 kV circuit breaker, two 230 kV switches and two 230 kV wave traps to current substation standards.

At Penniman Substation, the Line #2154 Rebuild Project will require replacing two existing 230 kV switches to current substation standards.

At Kingsmill Substation, the Line #2154 Rebuild Project will require replacing one 230 kV switch, one 115 kV switch and relocating one 230 kV switch outside the substation.

At Skiffes Creek Switching Station, the Line #2154 Rebuild Project will require relay resets, as well as fiber installation and termination.[12]

At Lanexa Substation, the Line #2113 Rebuild Project will require relay resets only. No physical changes will be required.

[12] *See supra* n. 11 and related text.

III. IMPACT OF LINE ON SCENIC, ENVIRONMENTAL AND HISTORIC FEATURES

A. Describe the character of the area that will be traversed by this line, including land use, wetlands, etc. Provide the number of dwellings within 500 feet, 250 feet and 100 feet of the centerline, and within the ROW for each route considered. Provide the estimated amount of farmland and forestland within the ROW that the proposed project would impact.

Response: **Land Use**

The overall character of the Rebuild Projects area is suburban residential with scattered open space areas. The Rebuild Projects are located in York and James City Counties and the City of Williamsburg, Virginia.

Wetlands

The Company reviewed U.S. Geological Survey ("USGS") topographic quadrangles for waterbodies within the Rebuild Projects area.

Within the Rebuild Projects right-of-way, 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 U.S. Army Corps of Engineers ("Corps") on December 1, 2020, for confirmation. Total jurisdictional resources within the proposed Rebuild Projects right-of-way are provided below. Prior to construction, the Company will obtain any necessary permits to impact jurisdictional resources.

Line #2113 Rebuild Project

According to the USGS topographic quadrangles (Williamsburg [2019] and Norge [2019]), the existing line for this project crosses two named perennial streams: Long Hill Swamp and Chisel Run. Potential wetlands and other waters of the United States are provided in the following table.

Jurisdictional resources within Line #2113 Rebuild Project right-of-way

Resource	Acreage (±)
Palustrine Scrub Shrub Wetland	0.42
Palustrine Emergent Wetland	3.93
Palustrine Unconsolidated Bottom	2.16
Riverine Upper Perennial Stream Channels	0.12 (1,215 linear feet)
Riverine Intermittent Stream Channels	0.03 (265 linear feet)

Line #2154 Rebuild Project

According to the USGS topographic quadrangles (Yorktown [2019], Hog Island [2019], and Williamsburg [2019]), the existing line for this project crosses three named perennial streams: Skiffes Creek, King Creek, and Whiteman Swamp. Potential wetlands and other waters of the United States are provided in the following table.

Jurisdictional resources within Line #2154 Rebuild Project right-of-way

Resource	**Acreage (±)**
Palustrine Scrub Shrub Wetland	0.34
Palustrine Emergent Wetland	12.31
Palustrine Unconsolidated Bottom	1.59
Riverine Upper Perennial Stream Channels	0.35 (2,934 linear feet)
Riverine Ephemeral Stream Channels	0.01 (232 linear feet)

Historic Features

In accordance with the Guidelines for Assessing Impacts of Proposed Transmission Lines and Associated Facilities on Historic Resources in the Commonwealth of Virginia (2008), a Stage I Pre-Application Analysis was conducted by Stantec. This report was forwarded to VDHR on January 6, 2021, and is included as Attachment 2.H.1 to the DEQ Supplement.

Visual impacts from the Rebuild Projects were assessed using a viewshed model based upon existing and proposed structure heights, subject to verification by field review. Impacts were based upon the following scale used by VDHR:

- **None** – Project is not visible from the property.
- **Minimal** – Occur within viewsheds that have existing transmission lines, locations where there will only be a minor change in tower height, and/or views that have been partially obstructed by intervening topography and vegetation.
- **Moderate** – Include viewsheds with expansive views of the transmission line, more dramatic changes in the line and tower height, and/or an overall increase in the visibility of the route from the historic properties.
- **Severe** – Occur within viewsheds that do not have existing transmission lines and where the views are primarily unobstructed, locations where there will be dramatic increase in tower visibility due to the close proximity of the route to historic properties, and viewsheds where the visual introduction of the transmission line is a significant change in the setting of the historic properties.

Based upon the proposed changes to structure heights and design, it is anticipated that the Rebuild Projects will have no impact to historic properties for which the Rebuild Projects are not within their viewshed, and will have potentially a minimal incremental impact to those historic properties for which the Rebuild Projects are within their viewshed. See the tables below. The Company will coordinate with VDHR through review of the Stage I Pre-Application Analysis regarding these initial findings.

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
099-5282	Battle of Fort Magruder/Battle of Williamsburg	Determined Potentially Eligible by VDHR 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 NRHP by VDHR 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 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

Previously Recorded Archaeological Resources within the Existing Right-of-Way of the Rebuild Projects and Considered under the Stage I Pre-Application Guidelines

VDHR #	Resource Name	Rebuild 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; 18th 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 20th Century Site	Line #2154	Not Evaluated
44JC1304	Prehistoric; Indeterminate	Line #2113	Not Evaluated
44WB0066	17th Century Gallows Site	Line #2154	Determined Eligible for Listing on the NRHP by VDHR in 1992
44WB0133-0001	4th Quarter of the 18th Century Camp	Line #2113	Not Evaluated
44WB0133-0002	4th Quarter of the 18th Century Camp	Line #2113	Not Evaluated
44YO0220	Indeterminate 18th, 19th and 20th Century Site; Civil War Site	Line #2154	Not Evaluated
44YO0524	19th 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	19th Century Dwelling Site	Line #2154	Not Evaluated
44YO1137	1st Half of the 20th Century Dwelling Site	Line #2154	Not Evaluated
44YO1138	20th 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

Line #2113 Rebuild Project

As shown in the tables above, one National Historic Landmark ("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.

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.

Line #2154 Rebuild Project

As shown in the tables above, 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.

Dwellings

Line #2113 Rebuild Project

According to York County, James City County, and the City of Williamsburg GIS data, there are 438 dwellings within 500 feet of the centerline, 153 dwellings within 250 feet of the centerline, 25 dwellings within 100 feet of the centerline, and 14 dwellings within the Line #2113 Rebuild Project right-of-way.

Line #2154 Rebuild Project

According to York County, James City County, and the City of Williamsburg GIS data, there are 629 dwellings within 500 feet of the centerline, 246 dwellings within 250 feet of the centerline, 27 dwellings within 100 feet of the centerline, and 36 dwellings within the Line #2154 Rebuild Project right-of-way.

Farmland/Forests

Line #2113 Rebuild Project

According to the Natural Resource Conservation Service, there are 54.22 acres of prime farmland and 24.00 acres of farmland of statewide importance located within the Line #2113 Rebuild Project right-of-way. However, aerial imagery of this project does not show any portion of the existing right-of-way currently in agricultural use. See Attachment III.A.1. As the right-of-way for the proposed Line #2113 Rebuild Project is currently in use for transmission line operation, no impact to farmlands would be expected beyond temporary impacts during construction. Because the right-of-way is currently maintained for transmission line operation, no forestland occurs within the Line #2113 Rebuild Project right-of-way.

Line #2154 Rebuild Project

According to the Natural Resource Conservation Service, there are 70.65 acres of prime farmland and 57.88 acres of farmland of statewide importance located within the Line #2154 Rebuild Project right-of-way. However, aerial imagery of this project does not show any portion of the existing right-of-way currently in agricultural use. See Attachment III.A.1. As the right-of-way for the proposed Line #2154 Rebuild Project is currently in use for transmission line operation, no impact to farmlands would be expected beyond temporary impacts during construction. Because the right-of-way is currently maintained for transmission line operation, no forestland occurs within the Line #2154 Rebuild Project right-of-way.

Wildlife

A search of the Virginia Department of Wildlife Resources ("DWR") public database identified several federal and state listed species that have the potential to occur within the Rebuild Projects area. These resources are identified in the report included as Attachment 2.F.1 to the DEQ Supplement. The Company intends to reasonably minimize any impact on these resources and coordinate with DWR as appropriate.

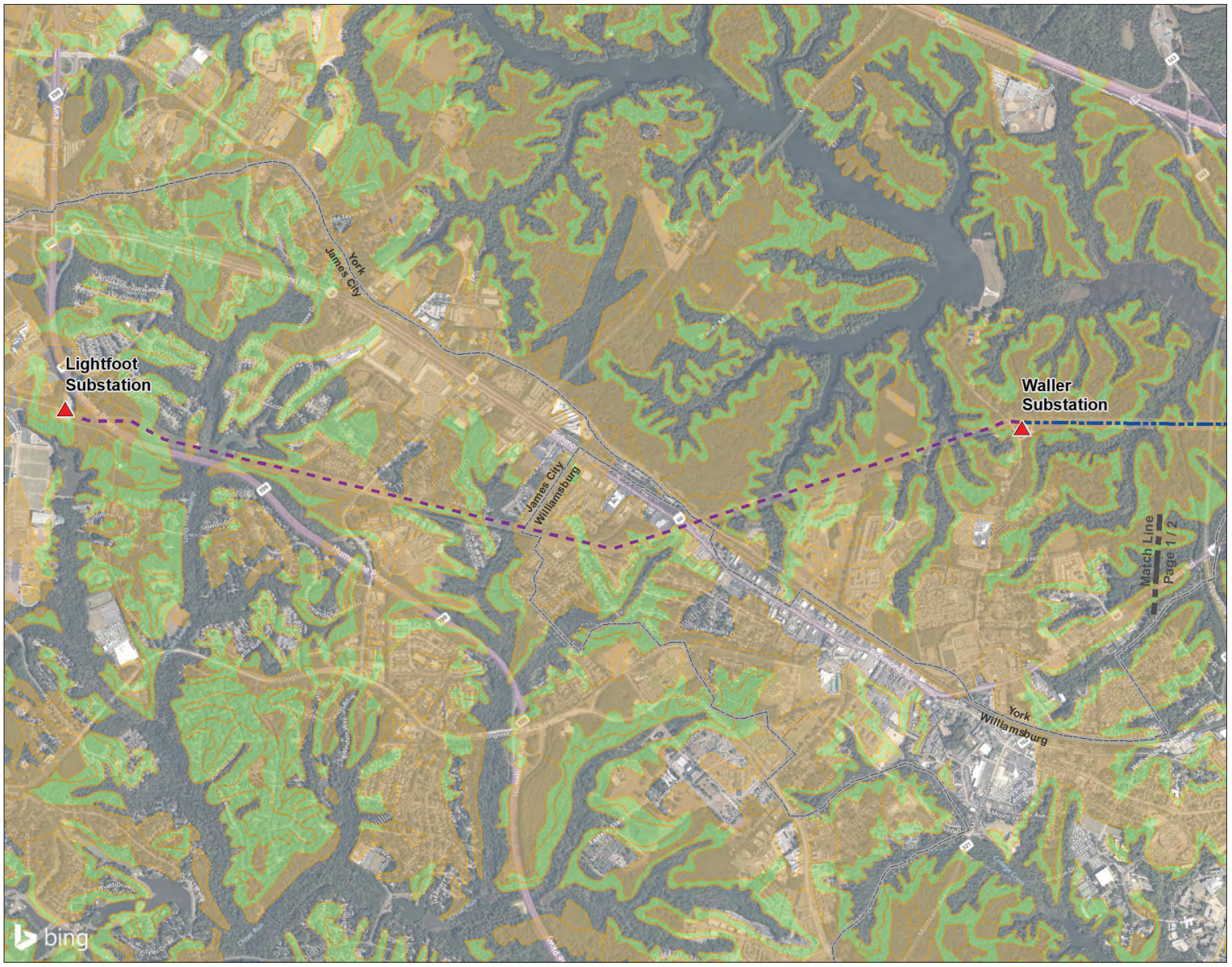


Figure No.
III.A.1

Title
Prime Farmland Map

Client/Project 203401488
Dominion Energy Virginia
Skiffes Creek-Waller Mill-Lightfoot

Project Location
James City County, York County,
and City of Williamsburg, Virginia

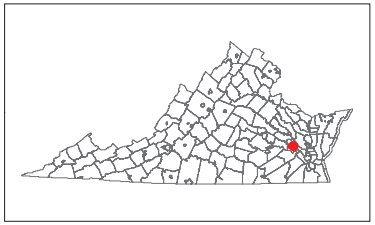
Prepared by MGS on 2020-09-16
TR by ECL on 2020-09-18
IR by RLR on 2020-09-24

N

0 2,000 4,000 Feet

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

- Substation
- Skiffes Creek-Waller Mill Segment
- Waller Mill-Lightfoot Segment
- All areas are prime farmland (124.87 Acres ±)
- Farmland of statewide importance (81.88 Acres ±)



Notes
1. Coordinate System: NAD 1983 StatePlane Virginia South FIPS 4502 Feet
2. Dominion Energy Virginia, Stantec, Soils data provided by USDA NRCS SSURGO Soil Survey, DCR
3. Orthoimagery © Bing Maps
4. Microsoft product screen shot(s) reprinted with permission from Microsoft Corporation

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Page 01 of 03

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Figure No.
III.A.1

Title
Prime Farmland Map

Client/Project 203401488
Dominion Energy Virginia
Skiffes Creek-Waller Mill-Lightfoot

Project Location
James City County, York County, and City of Williamsburg, Virginia

Prepared by MGS on 2020-09-16
TR by ECL on 2020-09-18
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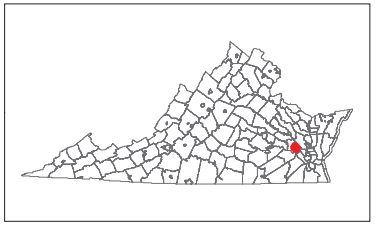
N

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

- Substation
- Skiffes Creek-Waller Mill Segment
- Waller Mill-Lightfoot Segment
- All areas are prime farmland (124.87 Acres ±)
- Farmland of statewide importance (81.88 Acres ±)



Notes
1. Coordinate System: NAD 1983 StatePlane Virginia South FIPS 4502 Feet
2. Dominion Energy Virginia, Stantec, Soils data provided by USDA NRCS SSURGO Soil Survey, DCR
3. Orthoimagery © Bing Maps
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Figure No.
III.A.1

Title
Prime Farmland Map

Client/Project 203401488
Dominion Energy Virginia
Skiffes Creek-Waller Mill-Lightfoot

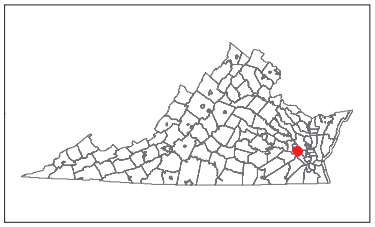
Project Location
James City County, York County, and City of Williamsburg, Virginia

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

N

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

- Substation
- Skiffes Creek-Waller Mill Segment
- Waller Mill-Lightfoot Segment
- All areas are prime farmland (124.87 Acres ±)
- Farmland of statewide importance (81.88 Acres ±)
- Prime farmland if drained



Notes
1. Coordinate System: NAD 1983 StatePlane Virginia South FIPS 4502 Feet
2. Dominion Energy Virginia, Stantec, Soils data provided by USDA NRCS SSURGO Soil Survey, DCR
3. Orthoimagery © Bing Maps
4. Microsoft product screen shot(s) reprinted with permission from Microsoft Corporation

Stantec

III. IMPACT OF LINE ON SCENIC, ENVIRONMENTAL AND HISTORIC FEATURES

B. Describe any public meetings the Applicant has had with neighborhood associations and/or officials of local, state or federal governments that would have an interest or responsibility with respect to the affected area or areas.

Response: Information is provided to the public through an internet website dedicated to the Rebuild Projects:

www.dominionenergy.com/waller

The website includes route maps, an explanation of need, a description of the Rebuild Projects and their benefits, information on the Commission review process, structure diagrams and answers to frequently asked questions.

Save the date postcards and letters were sent to more than 369 property owners inviting them to attend a virtual community meeting to hear specific details relating to the Rebuild Projects and to provide any feedback on the scope and potential impacts of the Rebuild Projects. Examples of the postcards and letters are included as Attachments III.B.1 and III.B.2, respectively. The letter sent to property owners outlined the scope of the Rebuild Projects and directed recipients to the website to view maps, information on structural changes and additional information regarding the Rebuild Projects. The postcard and letter also offered a dedicated phone number and email address for community members to provide comment on or to ask any questions about the Rebuild Projects. A door hanger was also utilized to communicate information about the Rebuild Projects and the online virtual community meeting to the Country Village Mobile Home Park. The door hanger also contained a QR code that directed recipients directly to information about the online meeting and Rebuild Projects. An example of the door hanger is included as Attachment III.B.3. The virtual open house event was held on December 3, 2020, from 5 p.m. to 6 p.m. utilizing WebEx Events software. At the virtual community meeting, the Company provided details about construction, project timing, and the State Corporation Commission approval process. Eighteen people attended the virtual community meeting.

In addition to the postcards and letters, advertisements for the open houses were placed in the Virginia Gazette prior to the event. A copy of the newspaper advertisement is included as Attachment III.B.4. Paid digital and social media campaigns that ran from November 20 to December 18, 2020, were also used to drive awareness of the Company's Rebuild Projects and the virtual community meeting, as well as to educate the public. Examples are included as Attachment III.B.5. The event campaigns ran within Google AdWords, Google Display, Google Video, Facebook, Twitter and Nextdoor. All phases urged local residents to visit the Company website to learn more about the meeting and to participate virtually. Campaign results include 80,096 Impressions Delivered, 6,031 Clicks on Ads, .70% Click Thru Rate, 1,646 Link Clicks, 68,651 Video Views.

Traditional open house materials have been posted on the website for the proposed Rebuild Projects, including simulations of the proposed Rebuild Projects from key locations, which are included as Attachment III.B.6.

As part of preparing for this project, the Company researched the demographics of the surrounding communities using 2020 U.S. Census data. This information revealed that there are 26 Census Block Groups within the Rebuild Projects area that fall within a mile of the existing transmission lines to be rebuilt. A review of ethnicity, income, age, and education census data identified populations within the study area that meet the Virginia Environmental Justice threshold to be defined as Environmental Justice communities ("EJ Communities").

Pursuant to Va. Code §§ 56-46.1 C and 56-259 C and Attachment 1 of these Guidelines, there is a strong preference for the use of existing utility rights-of-way whenever feasible. The Rebuild Projects are within the existing right-of-way and will not require any of the following: additional permanent or temporary right-of-way, the construction of a temporary line, or an increase in operating voltage. However, the segment of the Line #2154 Rebuild Project between Kingsmill Substation and Structure #2154/482 will have an over 20% average increase in structure heights.

While portions of the Rebuild Projects will result in an average increase in structure height of more than 20%, the Company determined that installing two single circuit H-frame structures would have required additional right-of-way. Therefore, the Company decided to use double circuit H-frame structures, which resulted in an overall height increase. See Section II.B.5.

Based on the analysis of the Rebuild Projects, the Company does not anticipate disproportionately high or adverse impacts to the surrounding community and the EJ Communities located within the study area, consistent with the Rebuild Projects design to reasonably minimize impacts. In addition to its evaluation of impacts, the Company has and will continue to engage the EJ Communities and others affected by the Rebuild Projects in a manner that allows them to meaningfully participate in the project development and approval process so that their views and input can be taken into consideration.

Dominion Energy image. Not project specific.

Electric Transmission
P.O. Box 26666
Richmond, VA 23261

Dominion Energy®

Actions Speak Louder

YOU'RE INVITED TO A VIRTUAL COMMUNITY MEETING

DETAILS ENCLOSED

IMPORTANT

Local Power Line Project Information

Use your iPhone camera or the QR reader app on other smartphones to visit the project page on our website.

Line 2113/2154 230 kV Rebuild Project — Virtual Community Meeting

AT DOMINION ENERGY, we are committed to staying connected with our neighbors and providing the latest information on work being done in the communities we serve.

You are receiving this postcard because we would like to invite you to our virtual community meeting for the Line 2113/2154 Rebuild Project.

You can ask questions and interact with our project team as they present important information about the project, including timelines, visual simulations, and the project's impact on your community.

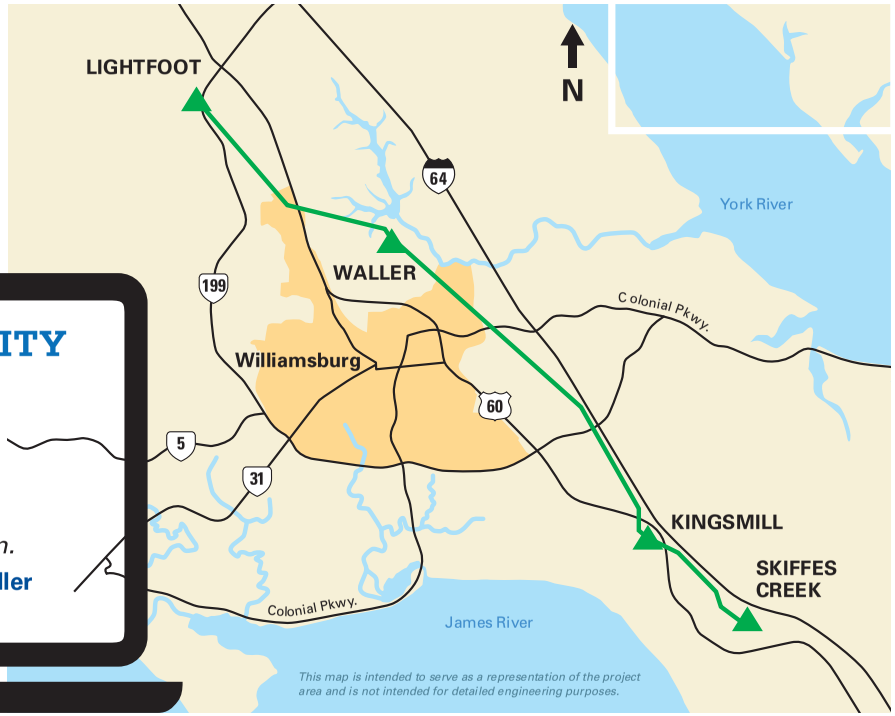
You can access our virtual community meeting for free using a mobile device, tablet, computer, or you can simply dial-in with your telephone. For details on how to access the virtual community meeting, please visit DominionEnergy.com/waller.

VIRTUAL COMMUNITY MEETING

Dec. 3, 2020
5–6 p.m.

First 20 minutes will be a project overview presentation.

Visit DominionEnergy.com/waller for more information.



CONTACT US

Visit our website at DominionEnergy.com/waller for project updates. Or contact us by calling 888-291-0190 or sending an email to powerline@dominionenergy.com.

Nov. 19, 2020

Proposed Line 2113/2154 230 kV Electric Transmission Rebuild Project

Dear Neighbor,

At Dominion Energy, we are committed to continually reviewing and analyzing our energy infrastructure to provide the most safe and reliable electric service. You are receiving this letter because we are currently exploring options to address portions of an aging 230 kilovolt (kV) electric transmission line located near your property. This work is necessary to maintain reliability for our customers.

We are dedicated to finding the best solution for our long-term needs and the communities we proudly serve. We would like to hear from you before filing an application with the Virginia State Corporation Commission (SCC) in January 2021.

This 12-mile project will rebuild Line 2113 and Line 2154, a 230 kV line connecting our Lightfoot, Waller, Kingsmill, and Skiffes Creek substations in Williamsburg, James City, and York counties.

We will replace aging infrastructure with new electrical equipment in an existing right of way. This equipment will help ensure the continued integrity of the electrical grid. For this project, we are scheduled to do the following:

- Replace wooden H-frame structures with steel H-frame structures from our Lightfoot to Waller substations, and remove an existing 115 kV transmission line
- Replace wooden H-frame structures with steel H-frame structures from our Waller to Kingsmill substations, and remove an existing 115 kV transmission line
- Rebuild the existing transmission line between our Kingsmill and Skiffes Creek substations using double-circuit steel H-frame structures

Due to the ongoing public health concerns resulting from the spread of the coronavirus, we do not plan to host formal community open house events at this time. In lieu of our traditional in-person meetings, we will host a virtual community meeting Dec. 3, 2020, from 5 – 6 p.m. We encourage you to visit the project's dedicated webpage at DominionEnergy.com/waller for meeting information. On this page, you will also find details on the need for the project, maps, and information on structural changes.

For additional questions, you may contact us by sending an email to powerline@dominionenergy.com or calling 888-291-0190.

Sincerely,

The Electric Transmission Project Team

You're Invited to a Virtual Community Meeting

Due to health concerns related to the coronavirus, we are mindful of maintaining proper social distancing. However, we want to inform you about an upcoming project in your community.

AT DOMINION ENERGY, we are committed to working safely and courteously in your community. We are currently preparing to rebuild an existing electric transmission line near our Skiffes Creek Substation located near your property.

We would like to invite you to our virtual community meeting to learn more about this project. You can ask questions and interact with our team as they present information about the project, including timelines, visual simulations and the project's impact on your community.

The meeting is scheduled for **Dec. 3, 2020 at 5 p.m.** Please visit **DominionEnergy.com/waller** for information on the virtual community meeting and to learn more about the project. Or contact us by calling **888-291-0190** or send an email to **powerline@dominionenergy.com**.

Use your iPhone camera or the QR reader app on other smartphones to visit the project page on our website.

Virtual Community Meeting

Thursday Dec. 3, 2020 5 p.m.

Dominion Energy®

Actions Speak Louder

You are invited to our Virtual Community Meeting

Hear from experts about the rebuilding of portions of Line 2113/2154, a 230 kV line connecting Dominion Energy's Lightfoot and Waller substations — ensuring our community has access to affordable, reliable energy for years to come.

Join us live online on **Thursday, December 3 at 5 p.m.**

You can find event details at **DominionEnergy.com/waller**

Dominion Energy®

Actions Speak Louder

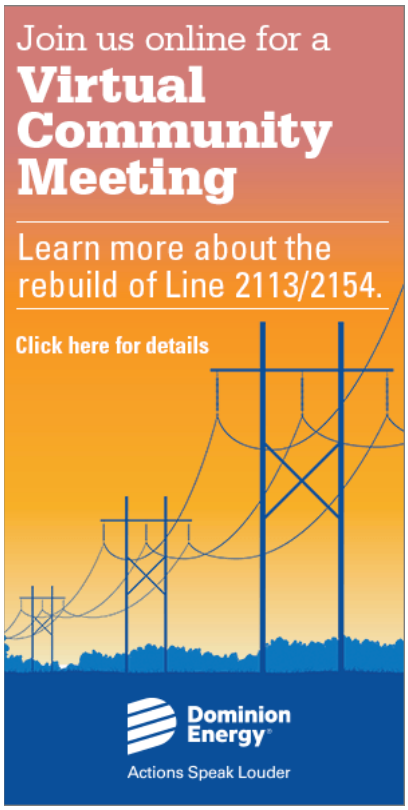
charles ryan associates

Dominion Energy Electric Transmission

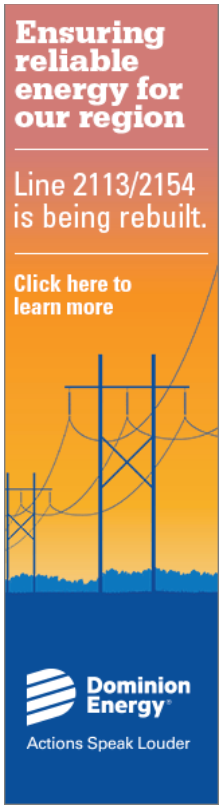
Waller Display

Both versions will be resized to all of the various sizes needed for the campaign.

Event Display:



Awareness Display:

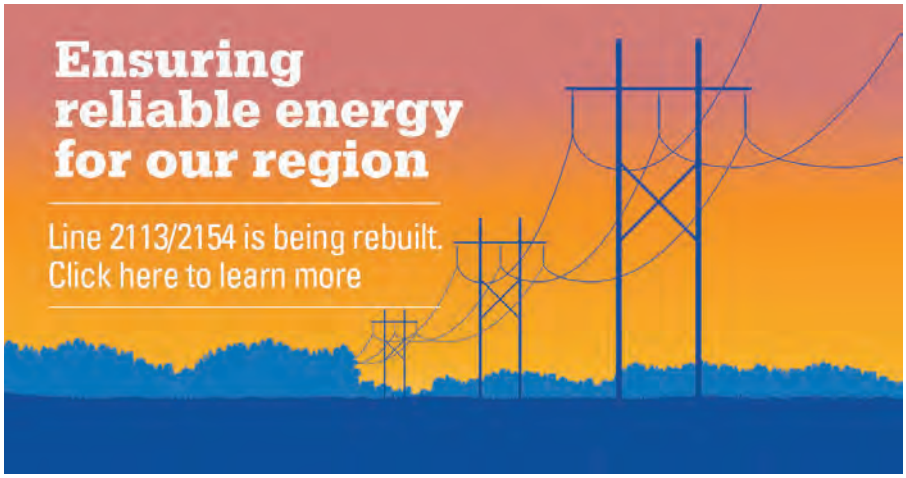


Dominion Energy Electric Transmission

Nextdoor Imagery

Event Post Image:

Awareness Post Image:



Post Logo:

Dominion Energy®

Actions Speak Louder


Lightfoot
10
9
8
LIGHTFOOT Substation
6
7
WALLER Substation
YORK COUNTY
JAMES CITY COUNTY
5
4
3
Williamsburg
JOHN TYLER HWY
COLONIAL NATIONAL HISTORIC PKWY
KINGSMILL Substation
2
1
Grove
SKIFFES CREEK Substation
64
N
LINE 2113 & 2154
230kV Rebuild Project
Photo Simulation Locations
Photo Location
Proposed Transmission Line
Substation
County/City Boundary Line
Dominion Energy®

Existing Conditions

Proposed Conditions

230

Photo Simulation is for demonstrative purposes only. Final design is subject to change pending public, utility, and regulatory review.

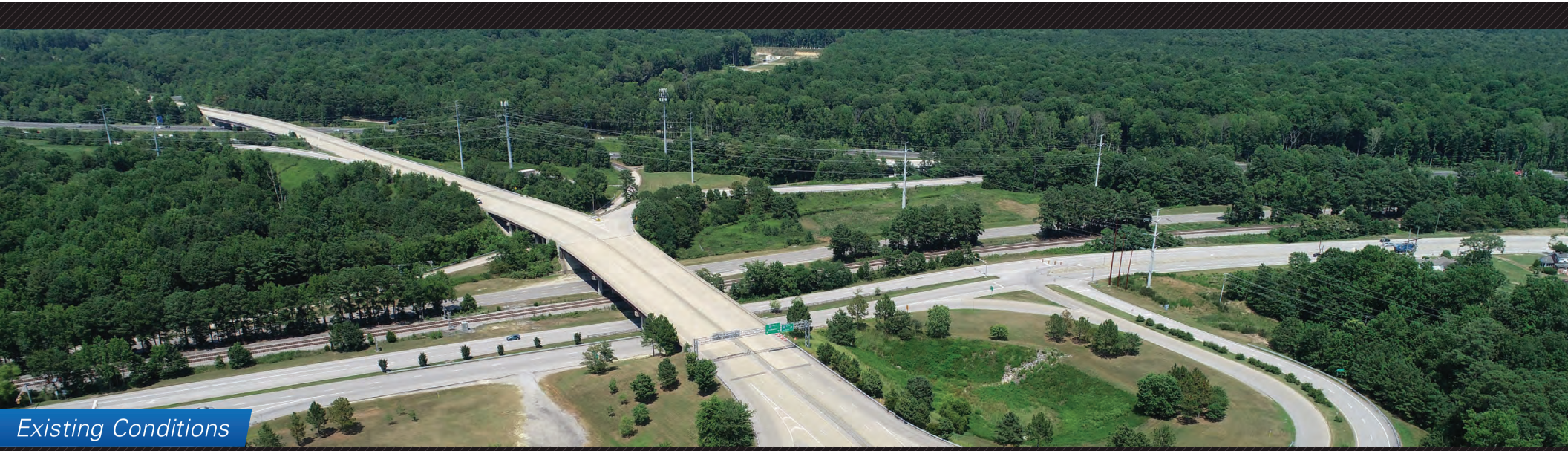
LINE 2113 & 2154

230kV Rebuild Project

Viewpoint 1

Date: 7/15/20
Time: 1:57 pm
Direction: Southeast

Dominion Energy®



Existing Conditions

Proposed Conditions

Photo Simulation is for demonstrative purposes only. Final design is subject to change pending public, utility, and regulatory review.

Objects shown in orange represent proposed transmission elements. In this segment one circuit will be removed from the existing monopole structures.

LINE 2113 & 2154

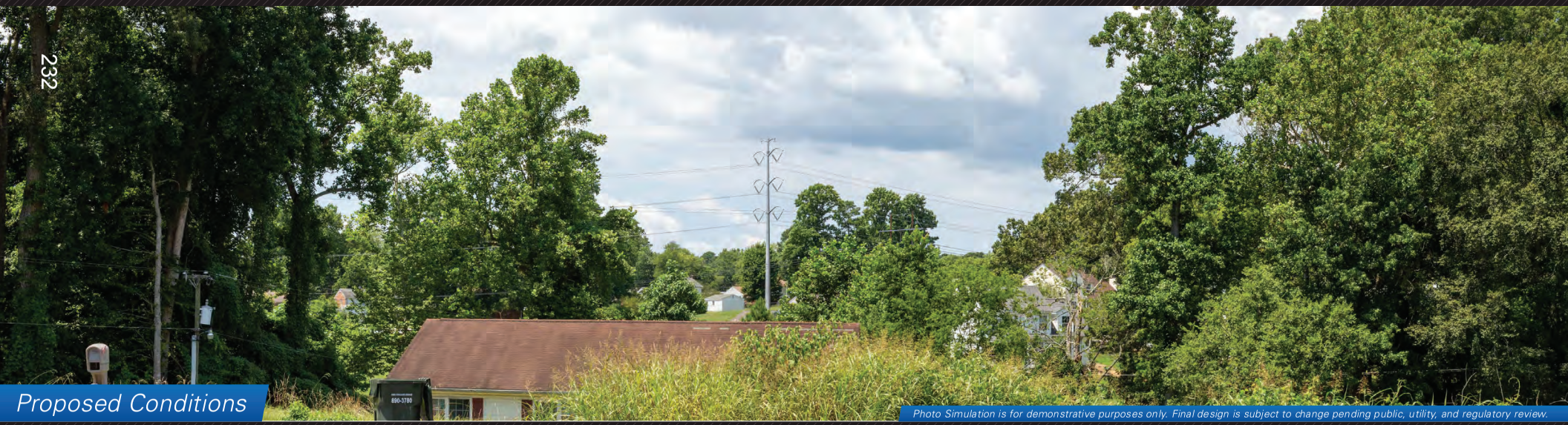
230kV Rebuild Project

Viewpoint 2

Date: 7/15/20
Time: 4:42 pm
Direction: North

Dominion Energy®

Existing Conditions



Proposed Conditions

232

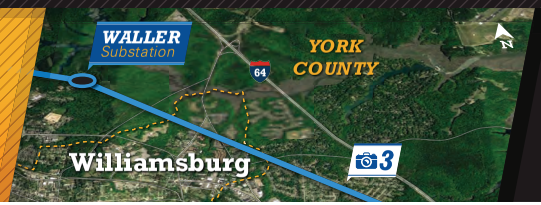
Photo Simulation is for demonstrative purposes only. Final design is subject to change pending public, utility, and regulatory review.

LINE 2113 & 2154

230kV Rebuild Project

Viewpoint 3

Date: 7/15/20
Time: 11:19 am
Direction: Southwest



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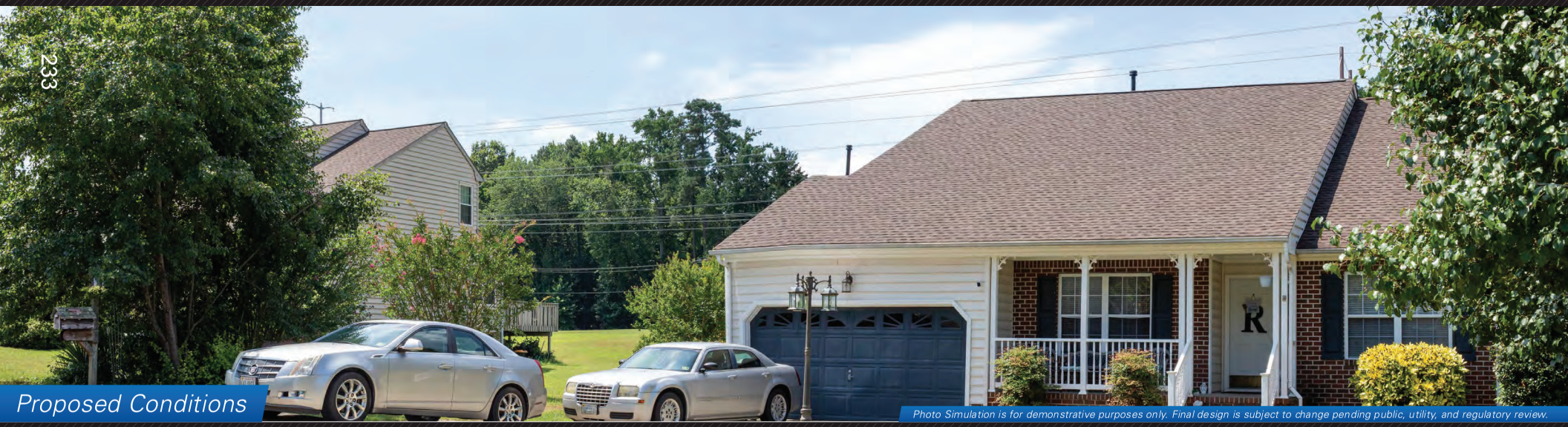
Existing Conditions



Proposed Conditions

233

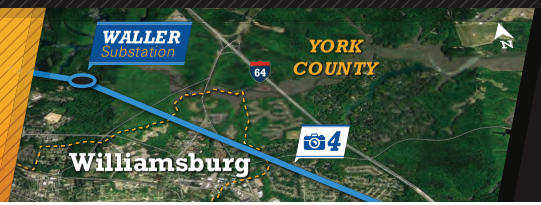
Photo Simulation is for demonstrative purposes only. Final design is subject to change pending public, utility, and regulatory review.

LINE 2113 & 2154

230kV Rebuild Project

Viewpoint 4

Date: 7/15/20
Time: 10:41 am
Direction: Southwest



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Existing Conditions

234

Proposed Conditions

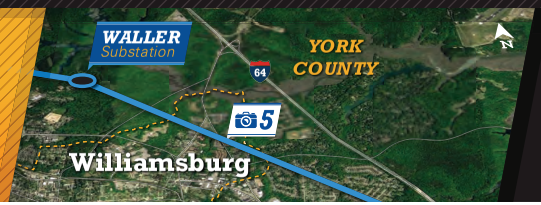
Photo Simulation is for demonstrative purposes only. Final design is subject to change pending public, utility, and regulatory review.

LINE 2113 & 2154

230kV Rebuild Project

Viewpoint 5

Date: 7/15/20
Time: 9:54 am
Direction: Southeast



Dominion Energy®

Existing Conditions

Proposed Conditions

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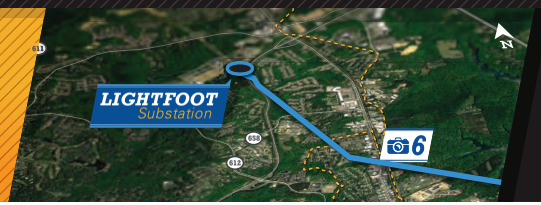
LINE 2113 & 2154

230kV Rebuild Project

Viewpoint 6

Date: 7/15/20
Time: 8:28 am
Direction: North



Dominion Energy®

Existing Conditions

Proposed Conditions

Photo Simulation is for demonstrative purposes only. Final design is subject to change pending public, utility, and regulatory review.

LINE 2113 & 2154

230kV Rebuild Project

Viewpoint 7

Date: 7/15/20
Time: 8:09 am
Direction: Southeast

Dominion Energy®

Existing Conditions

Proposed Conditions

Photo Simulation is for demonstrative purposes only. Final design is subject to change pending public, utility, and regulatory review.

LINE 2113 & 2154

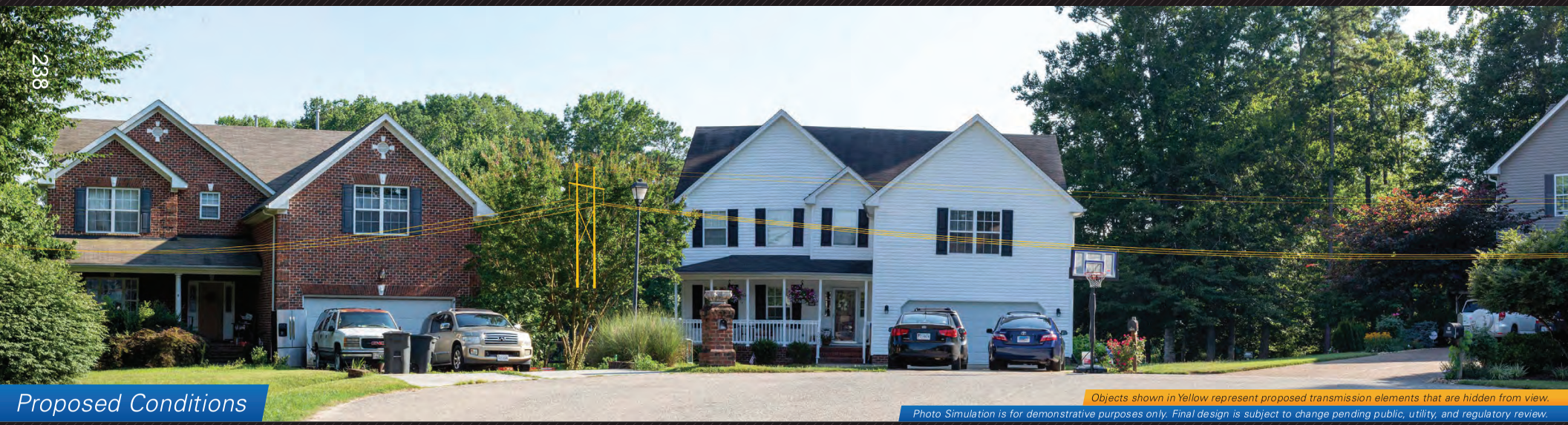
230kV Rebuild Project

Viewpoint 8

Date: 7/14/20
Time: 4:47 pm
Direction: Northwest

Dominion Energy®

Existing Conditions



Proposed Conditions

Objects shown in Yellow represent proposed transmission elements that are hidden from view.

Photo Simulation is for demonstrative purposes only. Final design is subject to change pending public, utility, and regulatory review.

LINE 2113 & 2154

230kV Rebuild Project

Viewpoint 9

Date: 7/14/20
Time: 4:38 pm
Direction: West

Dominion Energy®

Existing Conditions

Proposed Conditions

Objects shown in Yellow represent proposed transmission elements that are hidden from view.

Photo Simulation is for demonstrative purposes only. Final design is subject to change pending public, utility, and regulatory review.

LINE 2113 & 2154

230kV Rebuild Project

Viewpoint 10

Date: 7/14/20
Time: 4:06 pm
Direction: Northeast

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III. IMPACT OF LINE ON SCENIC, ENVIRONMENTAL AND HISTORIC FEATURES

C. Detail the nature, location, and ownership of each building that would have to be demolished or relocated if the project is built as proposed.

Response: During the Company's initial review of the existing right-of-way, it became aware of approximately 19 unauthorized encroachments within the Rebuild Projects' right-of-way. The encroachments will need to be addressed with the respective property owners as the Company continues to investigate the right-of-way.

In support of the Rebuild Projects, the Company will be reviewing the entire corridor width prior to construction and plans to address unauthorized encroachments and easement violations as appropriate.

III. IMPACT OF LINE ON SCENIC, ENVIRONMENTAL AND HISTORIC FEATURES

D. Identify existing physical facilities that the line will parallel, if any, such as existing transmission lines, railroad tracks, highways, pipelines, etc. Describe the current use and physical appearance and characteristics of the existing ROW that would be paralleled, as well as the length of time the transmission ROW has been in use.

Response: The Rebuild Projects will be constructed within existing maintained transmission line right-of-way.

Line #2113 Rebuild Project

The Line #2113 Rebuild Project is within an existing transmission line corridor that begins at the Waller Substation in York County and traverses through James City County where it terminates at the Lightfoot Substation. It parallels several different electric transmission lines along the majority of the corridor. Idle 115 kV Line #58 is co-located with Line #2113. Lines #34 and #2102 are co-located on structures that parallel this project. The Line #2113 Rebuild Project currently crosses, and will continue to cross State Highway 60, and State Route 199.

Line #2154 Rebuild Project

The Line #2154 Rebuild Project is within an existing transmission line corridor that begins at the Waller Substation, traverses through the City of Williamsburg and terminates at Structure #2154/48. The Line #2154 Rebuild Project parallels several different electric transmission lines along the majority of the corridor. Line #58 is co-located with Line #2154 and Lines #34 and #2102 are co-located on structures that parallel this project. Approximately 3.1 miles of the proposed Line #2154 Rebuild Project parallel Interstate 64, and approximately 1.8 miles parallels the CSX Railroad. The Line #2154 Rebuild Project currently crosses, and will continue to cross, the CSX right-of-way, as well I-64 west exit 243b; I-64 east exits 242, 242a, 243, and 243a; and State Highway 60.

III. IMPACT OF LINE ON SCENIC, ENVIRONMENTAL AND HISTORIC FEATURES

E. Indicate whether the Applicant has investigated land use plans in the areas of the proposed route and indicate how the building of the proposed line would affect any proposed land use.

Response: The Company reviewed *The County of York Comprehensive Plan: Charting the Course to 2035*, *Leading the Way Toward 2035: James City County Comprehensive Plan*, and *City of Williamsburg 2013 Comprehensive Plan* to evaluate the potential effect the Rebuild Projects could have on future development. The placement and construction of electric transmission lines was not addressed within the plans. The portions of the Rebuild Projects within the three localities are entirely within existing right-of-way.

III. IMPACT OF LINE ON SCENIC, ENVIRONMENTAL AND HISTORIC FEATURES

F. Government Bodies

1. Indicate if the Applicant determined from the governing bodies of each county, city and town in which the proposed facilities will be located whether those bodies have designated the important farmlands within their jurisdictions, as required by § 3.2-205 B of the Code.

2. If so, and if any portion of the proposed facilities will be located on any such important farmland:

a. Include maps and other evidence showing the nature and extent of the impact on such farmlands;

b. Describe what alternatives exist to locating the proposed facilities on the affected farmlands, and why those alternatives are not suitable; and

c. Describe the Applicant's proposals to minimize the impact of the facilities on the affected farmland.

Response: 1. Neither York County, James City County, or the City of Williamsburg have designated important farmlands within their jurisdiction. Neither York County nor the City of Williamsburg have identified any agricultural districts within their jurisdiction. James City County has identified agricultural and forestal districts within their jurisdiction; however, the proposed Rebuild Projects are not located within one. The closest district to each Rebuild Project is listed below.

Line #2113 Rebuild Project

The Armistead agricultural and forestal district is within 0.8 mile (4,380 feet) of the Line #2113 Rebuild Project. Due to the nature of the proposed work and distance from the Armistead district, no adverse impacts to the district are expected.

Line #2154 Rebuild Project

The Carter's Grove agricultural and forestal district is within 0.5 mile (2,450 feet) of the Line #2154 Rebuild Project. Due to the nature of the proposed work and distance from the Carter's Grove district, no adverse impacts to the district are expected.

2. Not applicable.

III. IMPACT OF LINE ON SCENIC, ENVIRONMENTAL AND HISTORIC FEATURES

G. Identify the following that lie within or adjacent to the proposed ROW:

1. **Any district, site, building, structure, or other object included in the National Register of Historic Places maintained by the U.S. Secretary of the Interior;**

2. **Any historic architectural, archeological, and cultural resources, such as historic landmarks, battlefields, sites, buildings, structures, districts or objects listed or determined eligible by the Virginia Department of Historic Resources ("DHR");**

3. **Any historic district designated by the governing body of any city or county;**

4. **Any state archaeological site or zone designated by the Director of the DHR, or its predecessor, and any site designated by a local archaeological commission, or similar body;**

5. **Any underwater historic assets designated by the DHR, or predecessor agency or board;**

6. **Any National Natural Landmark designated by the U.S. Secretary of the Interior;**

7. **Any area or feature included in the Virginia Registry of Natural Areas maintained by the Virginia Department of Conservation and Recreation ("DCR");**

8. **Any area accepted by the Director of the DCR for the Virginia Natural Area Preserves System;**

9. **Any conservation easement or open space easement qualifying under §§ 10.1-1009 – 1016, or §§ 10.1-1700 – 1705, of the Code (or a comparable prior or subsequent provision of the Code);**

10. **Any state scenic river;**

11. **Any lands owned by a municipality or school district; and**

12. **Any federal, state or local battlefield, park, forest, game or wildlife preserve, recreational area, or similar facility. Features, sites, and the like listed in 1 through 11 above need not be identified again.**

Response: 1. Line #2113 Rebuild Project

There are no NRHP listed resources within the Line #2113 Rebuild Project right-of-way.

Line #2154 Rebuild Project

One NRHP listed resource is within the Line #2154 Rebuild Project right-of-way. The Colonial Parkway and Colonial National Historical Park (VDHR ID# 047-0002/ 099-5241), part of the Colonial National Historical Park, is managed by the National Park Service and listed on the NRHP. Construction of the portion of the Colonial Parkway situated near Line #2154 predates the installation of the existing transmission lines.

2. Historic properties listed on the NRHP were provided in the response above. NRHP-eligible properties within the existing right-of-way for each project are provided below. Resources in proximity to each individual project have been identified.

Line #2113 Rebuild Project

The existing right-of-way for the Line #2113 Rebuild Project crosses the Chesapeake and Ohio Railroad (VDHR# 121-5134), which has been determined by VDHR to be eligible for listing on the NRHP.

Line #2154 Rebuild Project

The existing right-of-way for the Line #2154 Rebuild Project crosses the Chesapeake and Ohio Railroad (VDHR# 121-5134), which has been determined by VDHR to be eligible for listing on the NRHP; additionally, the existing right-of-way crosses the Battle of Fort Magruder (VDHR# 099-5282) which has been determined by VDHR to be potentially eligible for listing on the NRHP.

3. York County, James City County, and the City of Williamsburg have designated historic districts; however, none are within the vicinity of the Rebuild Projects. The Williamsburg Historic District is approximately 1 mile from the Rebuild Projects. The Yorktown Historic District and the Toano Commercial Historic District are greater than 4 miles from the Rebuild Projects.

4. Line #2113 Rebuild Project

The existing right-of-way for the Line #2113 Rebuild Project does not cross any archaeological site or zone designated as listed, eligible, or potentially eligible for listing on the NRHP.

Line #2154 Rebuild Project

The existing right-of-way for the Line #2154 Rebuild Project crosses the Gallows

Site (VDHR# 44WB0066) which has been determined by VDHR to be eligible for listing on the NRHP and a domestic camp/ farmstead (VDHR# 44JC1044) which has been determined by VDHR as potentially eligible for listing on the NRHP.

5. None.

6. None.

7. Line #2113 Rebuild Project

   According to a letter from DCR dated October 2, 2020, the project is not anticipated to adversely impact natural heritage resources.

   Line #2154 Rebuild Project

   According to a letter from DCR dated October 2, 2020, the project is not anticipated to adversely impact natural heritage resources.

8. None.

9. Line #2113 Rebuild Project

   None.

   Line #2154 Rebuild Project

   Two existing conservation easements are located within the Line #2154 Rebuild Project 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.

10. None.

11. Line #2113 Rebuild Project

    Two parks owned by a municipality are located within the Line #2113 Rebuild Project right-of-way. Waller Mill Park is park owned and operated by the City of Williamsburg. Warhill Sports Complex is a park owned and managed by James City County.

    Line #2154 Rebuild Project

    None.

12. None.

III. IMPACT OF LINE ON SCENIC, ENVIRONMENTAL AND HISTORIC FEATURES

H. List any registered aeronautical facilities (airports, helipads) where the proposed route would place a structure or conductor within the federally-defined airspace of the facilities. Advise of contacts, and results of contacts, made with appropriate officials regarding the effect on the facilities' operations.

Response: The Federal Aviation Administration ("FAA") is responsible for overseeing air transportation in the United States. The FAA manages air traffic in the United States and evaluates physical objects that may affect the safety of aeronautical operations through an obstruction evaluation. The prime objective of the FAA in conducting an obstruction evaluation is to ensure the safety of air navigation and the efficient utilization of navigable airspace by aircraft.

The Company reviewed the FAA's website[13] to identify airports within 10 nautical miles ("NM") of the proposed Rebuild Projects. Based on this review, five FAA-restricted airports were identified:

Airport	Distance to Line #2154 Rebuild Project (NM)	Distance to Line #2113 Rebuild Project (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 Airport	7.2	>10

In an email dated December 1, 2020, the Virginia Department of Aviation ("DOAv") stated that a Form 7460 will need to be submitted to the FAA to initiate an aeronautical study to ensure that the proposed Rebuild Projects will not constitute a hazard to air navigation. The letter is included as Attachment 2.N.1 of the DEQ Supplement.

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

See also Section 2.N of the DEQ Supplement.

[13] https://oeaaa.faa.gov/oeaaa/external/portal.jsp.

III. IMPACT OF LINE ON SCENIC, ENVIRONMENTAL AND HISTORIC FEATURES

I. Advise of any scenic byways that are in close proximity to or that will be crossed by the proposed transmission line and describe what steps will be taken to mitigate any visual impacts on such byways. Describe typical mitigation techniques for other highways' crossings.

Response: Line #2113 Rebuild Project

The Line #2113 Rebuild Project right-of-way does not cross any national or state scenic byways.

Line #2154 Rebuild Project

The Line #2154 Rebuild Project right-of-way 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.

III. IMPACT OF LINE ON SCENIC, ENVIRONMENTAL AND HISTORIC FEATURES

J. Identify coordination with appropriate municipal, state, and federal agencies.

Response: Below is a list of coordination that has occurred with municipal, state, and federal agencies:

- A wetland delineation has been completed and a request for preliminary jurisdictional determination was submitted to the Corps.

- Letters dated November 25, 2020, were submitted to York County, James City County, and the City of Williamsburg to describe the Rebuild Projects and request comment. See Section V.D. The Company also met with staff and leadership from the City and the Counties to detail the Rebuild Projects and solicit feedback.

- Letters were submitted to the agencies listed in Section V.C on December 1, 2020, describing the Rebuild Projects and requesting comment. See Attachment 2 to the DEQ Supplement.

- The FAA will be given notice for proposed structures, as is standard for the DOAv. Per an email dated December 1, 2020, a 7460 form will be filed to aid in the determination of such structures. See Section III.J and Attachment 2.N.1 to the DEQ Supplement.

- A letter from the DEQ was received on December 2, 2020, providing recommendations and potential permits. The Company will follow the recommendations and will notify the DEQ of any Rebuild Projects changes.

- The Company submitted a GIS shapefile of the Rebuild Projects to the DEQ on December 1, 2020.

- A Stage I Pre-Application was submitted to VDHR on January 6, 2021.

- Coordination with the Corps, DEQ, Virginia Department of Transportation, and the Virginia Marine Resources Commission will take place as appropriate to obtain necessary approvals for the Rebuild Projects.

- As part of the Rebuild Projects, the Company solicited comments via letter from several federally-recognized Native American tribes, including: Cheroenhaka, Chickahominy, Mattaponi, Monacan, Nansemond, Nottaway, Pamunkey, Rappahannock, Upper Mattaponi, Chickahominy Tribe - Eastern Division. See Attachment III.J.1 for a template of the letter and map that were provided.

Nov. 24, 2020

Proposed Line 2113/2154 230 kV Electric Transmission Partial Rebuild Project

Dear:

At Dominion Energy, we are dedicated to finding the best solution for our long-term needs in the communities we serve. As a valued stakeholder with a vested interest in the community, we invite you to participate in the development of an electric transmission partial rebuild project along an existing transmission corridor.

This 12-mile project will rebuild Line 2113 and Line 2154, a 230 kV line in Williamsburg, James City, and York counties.

We will replace aging infrastructure with new electrical equipment in an existing right of way. This equipment will help ensure the continued integrity of the electrical grid. For this project, we are scheduled to do the following:

- Replace wooden H-frame structures with steel H-frame structures from our Lightfoot to Waller substations, and remove an existing 115 kV transmission line
- Replace wooden H-frame structures with steel H-frame structures from our Waller to Kingsmill substations
- Rebuild the transmission line about 1.6 miles from our Kingsmill Substation using double-circuit steel H-frame structures

We are currently in the conceptual phase and are seeking input prior to submitting an application with the Virginia State Corporation Commission (SCC) in January 2021. Doing so allows us to hear any concerns you may have. Enclosed is a project overview map to help in your review.

Please provide your comments by Jan. 4, 2021 so we have adequate time to review and consider your comments in our project design and as part of our SCC application. We appreciate your assistance as we move through the planning process.

Due to the ongoing public health concerns resulting from the spread of the coronavirus, we do not plan to host formal community open house events at this time. In lieu of our traditional in-person meetings, we will host a virtual community meeting Dec. 3, 2020, from 5 – 6 p.m. We encourage you to visit the project's dedicated webpage at DominionEnergy.com/waller for meeting information. On this page, you will also find details on the need for the project, maps, and information on structural changes.

If you would like any additional information, have any questions or would like to set up a meeting to discuss the project, please do not hesitate to contact Ken Custalow, our Tribal

Liaison. He can be reached by sending an email to ken.custalow@dominionenergy.com or by calling 804-837-2067.

Sincerely,

Robert Richardson
Communications Consultant
The Electric Transmission Project Team

Enclosure: Project Overview Map

This map is intended to serve as a representation of the project area and is not intended for detailed engineering purposes.

III. IMPACT OF LINE ON SCENIC, ENVIRONMENTAL AND HISTORIC FEATURES

K. Identify coordination with any non-governmental organizations or private citizen groups.

Response: On November 24, 2020, the Company solicited comments via letter from the non-governmental organizations and private citizens groups identified in the table below. A copy of the letter template and overview map is included as Attachment III.K.1.

Name	**Organization**
Ms. Elizabeth S. Kostelny	Preservation Virginia
Mr. Thomas Gilmore	Civil War Trust
Mr. Jim Campi	Civil War Trust
Mr. Adam Gillenwater	Civil War Trust
Ms. Kym Hall	Colonial National Historical Park
Mr. Jack Gary	Council of Virginia Archaeologists
Ms. Leighton Powell	Scenic Virginia
Mr. Alexander Macaulay	Macaulay & Jamerson
Sharee Williamson	National Trust for Historic Preservation
Dan Holmes	Piedmont Environmental Council
Dr. Newby- Alexander	Norfolk State University
Mary Frances Wilkerson	Cheroenhaka (Nottoway) Indian Tribe
Mr. Dave Dutton	Dutton + Associates, LLC

Nov. 24, 2020

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- Rebuild the transmission line about 1.6 miles from our Kingsmill Substation using double-circuit steel H-frame structures

We are currently in the conceptual phase and are seeking input prior to submitting an application with the Virginia State Corporation Commission (SCC) in January 2021. Doing so allows us to hear any concerns you may have. Enclosed is a project overview map to help in your review.

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If you would like any additional information, have questions, or would like to set up a meeting to discuss the project, please contact me by sending an email to Robert.E.Richardson@dominionenergy.com or calling 888-291-0190.

Thank you for your willingness to join us in our commitment to serving the community.

Sincerely,

Robert E. Richardson

Rob Richardson
Communications Consultant
The Electric Transmission Project Team

This map is intended to serve as a representation of the project area and is not intended for detailed engineering purposes.

III. IMPACT OF LINE ON SCENIC, ENVIRONMENTAL AND HISTORIC FEATURES

L. Identify any environmental permits or special permissions anticipated to be needed.

Response: See table below.

Potential Permits

Activity	Permit	Agency / Entity
Impacts to wetlands and waters of the U.S.	Nationwide Permit 12	U.S. Army Corps of Engineers
Impacts to wetlands and waters of the U.S.	Virginia Water Protection Permit	Virginia Department of Environmental Quality
Work within, over or under state subaqueous bottom	Subaqueous Bottom Permit	Virginia Marine Resources Commission
Work within or over Colonial National Historic Parkway	Special Use Permit	National Park Service
Discharge of Stormwater from Construction	Construction General Permit	Virginia Department of Environmental Quality
Work within VDOT right-of-way	Land Use Permit	Virginia Department of Transportation
Work within City right-of-way	Right of way Permit	City of Williamsburg-Public Works and Utilities
Work within CSX railroad right-of-way	Encroachment Permit	CSX Transportation

IV. HEALTH ASPECTS OF ELECTROMAGNETIC FIELDS ("EMF")

A. Provide the calculated maximum electric and magnetic field levels that are expected to occur at the edge of the ROW. If the new transmission line is to be constructed on an existing electric transmission line ROW, provide the present levels as well as the maximum levels calculated at the edge of ROW after the new line is operational.

Response: Public exposure to magnetic fields is best estimated by field levels from power lines calculated at annual average loading. For any day of the year, the EMF levels associated with average conditions provide the best estimate of potential exposure. Maximum (peak) values are less relevant as they may occur for only a few minutes or hours each year.

This section describes the levels of EMF associated with the existing transmission line. EMF levels are provided for both historical (2019-20) and future (2025) annual average and maximum (peak) loading conditions.

Existing lines – Historical average loading

EMF levels were calculated for the existing lines at the ***historical average*** load condition (62 amps for Line #19, 0 amps for Line #169, 129 amps for Line #2102, 161 amps for Line #2146, 155 amps for Line #2113, and 239 amps for Line #2154) and at an operating voltage of 120.75 and 241.5 kV when supported on the existing structures – Attachments II.A.5.a, b, c, d, e, f, g, and h.

These field levels were calculated at mid-span where the conductors are closest to the ground and the conductors are at an historical average load operating temperature.

EMF levels at the edge of the rights-of-way for the existing lines at the historical average loading:

	Left Edge		**Right Edge**	
	Electric Field (kV/m)	Magnetic Field (mG)	Electric Field (kV/m)	Magnetic Field (mG)
Attachment II.A.5.a	0.060	7.982	0.369	5.836
Attachment II.A.5.b	0.766	2.832	0.249	6.184
Attachment II.A.5.c	0.770	4.237	0.243	8.028
Attachment II.A.5.d	0.075	12.147	0.304	8.166
Attachment II.A.5.e	0.776	4.242	0.244	7.940
Attachment II.A.5.f	0.053	12.126	0.369	7.662

Attachment II.A.5.g	1.345	17.853	1.474	4.637
Attachment II.A.5.h	0.521	6.616	0.698	10.609

Existing lines – Historical peak loading

EMF levels were calculated for the existing line at the ***historical peak*** load condition (246 amps for Line #19, 0 amps for Line #169, 456 amps for Line #2102, 603 amps for Line #2146, 501 amps for Line #2113, and 606 amps for Line #2154) and at an operating voltage of 120.75 and 241.5 kV when supported on the existing structures – Attachments II.A.5.a, b, c, d, e, f, g, and h.

These field levels were calculated at mid-span where the conductors are closest to the ground and the conductors are at a historical peak load operating temperature.

EMF levels at the edge of the rights-of-way for the existing lines at the historical peak loading:

	Left Edge		**Right Edge**	
	Electric Field (kV/m)	Magnetic Field (mG)	Electric Field (kV/m)	Magnetic Field (mG)
Attachment II.A.5.a	0.054	26.393	0.370	20.297
Attachment II.A.5.b	0.769	9.329	0.249	21.507
Attachment II.A.5.c	0.774	11.596	0.245	27.807
Attachment II.A.5.d	0.086	32.739	0.301	28.023
Attachment II.A.5.e	0.781	11.671	0.246	27.548
Attachment II.A.5.f	0.050	32.794	0.371	26.430
Attachment II.A.5.g	1.346	45.707	1.475	11.783
Attachment II.A.5.h	0.520	21.514	0.695	28.493

Proposed project – Historical average loading

EMF levels were calculated for the proposed Rebuild Projects at the ***historical average*** load condition (62 amps for Line #19, 0 amps for Line #169, 129 amps for Line #2102, 161 amps for Line #2146, 155 amps for Line #2113, and 239 amps for Line #2154) and at an operating voltage of 120.75 and 241.5 kV when supported on the proposed Rebuild Projects structures – see Attachments II.A.5.a, b, c, d, e, f, g, and h.

These field levels were calculated at mid-span where the conductors are closest to the ground and the conductors are at a historical average load operating temperature.

EMF levels at the edge of the rights-of-way for the proposed Rebuild Projects at the historical average loading:

	Left Edge		**Right Edge**	
	Electric Field (kV/m)	Magnetic Field (mG)	Electric Field (kV/m)	Magnetic Field (mG)
Attachment II.A.5.a	0.721	7.239	0.368	6.061
Attachment II.A.5.b	1.085	7.879	0.350	6.184
Attachment II.A.5.c	1.090	11.973	0.351	8.190
Attachment II.A.5.d	0.074	11.819	0.387	7.740
Attachment II.A.5.e	1.090	11.979	0.351	8.191
Attachment II.A.5.f	0.730	11.023	0.368	8.067
Attachment II.A.5.g	2.138	24.338	1.474	6.417
Attachment II.A.5.h	0.822	12.434	0.341	6.301

Proposed project – Historical peak loading

EMF levels were calculated for the proposed Rebuild Projects at the ***historical peak*** load condition (246 amps for Line #19, 0 amps for Line #169, 456 amps for Line #2102, 603 amps for Line #2146, 501 amps for Line #2113, and 606 amps for Line #2154) and at an operating voltage of 120.75 and 241.5 kV when supported on the proposed Rebuild Projects structures – see Attachments II.A.5.a, b, c, d, e, f, g, and h.

These field levels were calculated at mid-span where the conductors are closest to the ground and the conductors are at a historical peak load operating temperature.

EMF levels at the edge of the rights-of-way for the proposed Rebuild Projects at the historical peak loading:

	Left Edge		**Right Edge**	
	Electric Field (kV/m)	Magnetic Field (mG)	Electric Field (kV/m)	Magnetic Field (mG)
Attachment II.A.5.a	0.722	23.765	0.369	21.008

Attachment II.A.5.b	1.084	25.630	0.351	21.387
Attachment II.A.5.c	1.087	31.054	0.353	27.597
Attachment II.A.5.d	0.070	31.761	0.388	26.695
Attachment II.A.5.e	1.087	31.064	0.353	27.597
Attachment II.A.5.f	0.731	29.537	0.370	27.395
Attachment II.A.5.g	2.151	62.056	1.474	16.290
Attachment II.A.5.h	0.820	32.478	0.341	19.621

Proposed project – Projected average loading in 2025

EMF levels were calculated for the proposed Rebuild Projects at the ***projected average*** load condition (66 amps for Line #19, 0 amps for Line #169, 137 amps for Line #2102, 172 amps for Line #2146, 166 amps for Line #2113, and 256 amps for Line #2154) and at an operating voltage of 120.75 and 241.5 kV when supported on the proposed Rebuild Projects structures – see Attachments II.A.5.a, b, c, d, e, f, g, and h.

These field levels were calculated at mid-span where the conductors are closest to the ground and the conductors are at a projected average load operating temperature.

EMF levels at the edge of the rights-of-way for the proposed Rebuild Projects at the projected average loading:

	Left Edge		**Right Edge**	
	Electric Field (kV/m)	Magnetic Field (mG)	Electric Field (kV/m)	Magnetic Field (mG)
Attachment II.A.5.a	0.721	7.744	0.368	6.451
Attachment II.A.5.b	1.085	8.435	0.350	6.583
Attachment II.A.5.c	1.090	12.824	0.351	8.757
Attachment II.A.5.d	0.074	12.655	0.387	8.274
Attachment II.A.5.e	1.090	12.830	0.351	8.758
Attachment II.A.5.f	0.730	11.804	0.368	8.625
Attachment II.A.5.g	2.138	26.069	1.474	6.873

Attachment II.A.5.h	0.822	13.315	0.341	6.734

Proposed project – Projected Peak loading in 2025

EMF levels were calculated for the proposed Rebuild Projects at the ***projected peak*** load condition (263 amps for Line #19, 0 amps for Line #169, 488 amps for Line #2102, 645 amps for Line #2146, 536 amps for Line #2113, and 648 amps for Line #2154) and at an operating voltage of 120.75 and 241.5 kV when supported on the proposed Rebuild Projects structures – see Attachments II.A.5.a, b, c, d, e, f, g, and h.

These field levels were calculated at mid-span where the conductors are closest to the ground and the conductors are at a projected peak load operating temperature.

EMF levels at the edge of the rights-of-way for the proposed Rebuild Projects at the projected peak loading:

	Left Edge		**Right Edge**	
	Electric Field (kV/m)	Magnetic Field (mG)	Electric Field (kV/m)	Magnetic Field (mG)
Attachment II.A.5.a	0.723	25.440	0.369	22.493
Attachment II.A.5.b	1.083	27.431	0.351	22.895
Attachment II.A.5.c	1.087	33.220	0.353	29.530
Attachment II.A.5.d	0.069	33.981	0.388	28.568
Attachment II.A.5.e	1.087	33.229	0.353	29.530
Attachment II.A.5.f	0.731	31.598	0.370	29.316
Attachment II.A.5.g	2.153	66.407	1.475	17.422
Attachment II.A.5.h	0.820	34.747	0.341	20.942

IV. HEALTH ASPECTS OF ELECTROMAGNETIC FIELDS ("EMF")

B. If the Applicant is of the opinion that no significant health effects will result from the construction and operation of the line, describe in detail the reasons for that opinion and provide references or citations to supporting documentation.

Response: The conclusions of multidisciplinary scientific review panels assembled by national and international scientific agencies during the past two decades are the foundation of the Company's opinion that no adverse health effects will result from the operation of the proposed Rebuild Projects. Each of these panels has evaluated the scientific research related to health and power-frequency EMF and provided conclusions that form the basis of guidance to governments and industries. The Company regularly monitors the recommendations of these expert panels to guide their approach to EMF.

Research on EMF and human health varies widely in approach. Some studies evaluate the effects of high, short-term EMF exposures not typically found in people's day-to-day lives on biological responses, while others evaluate the effects of common, lower EMF exposures found throughout communities. Studies also have evaluated the possibility of effects (e.g., cancer, neurodegenerative diseases, reproductive effects) of long-term exposure. Altogether, this research includes well over a hundred epidemiologic studies of people in their natural environment and many more laboratory studies of animals (*in vivo*) and isolated cells and tissues (*in vitro*). Standard scientific procedures, such as weight-of-evidence methods, were used by the expert panels assembled by agencies to identify, review, and summarize the results of this large and diverse research.

The reviews of EMF biological and health research have been conducted by numerous scientific and health agencies, including the European Health Risk Assessment Network on Electromagnetic Fields Exposure ("EFHRAN"), the International Commission on Non-Ionizing Radiation Protection ("ICNIRP"), the World Health Organization ("WHO"), the International Committee on Electromagnetic Safety ("ICES"), the Scientific Committee on Emerging and Newly Identified Health Risks ("SCENIHR") of the European Commission, and the Swedish Radiation Safety Authority ("SSM") [formerly the Swedish Radiation Protection Authority ("SSI")] (EFHRAN, 2010, 2012; ICNIRP, 2010; WHO, 2007; SCENIHR, 2009, 2015; SSM, 2015, 2016, 2018, 2019; ICES, 2019). The general scientific consensus of the agencies that have reviewed this research, relying on generally accepted scientific methods, is that the scientific evidence does not show that common sources of EMF in the environment, including transmission lines and other parts of the electric system, appliances, etc., are a cause of any adverse health effects. The WHO, for example, states on their website: "Based on a recent in-depth review of the scientific literature, the WHO concluded that current evidence does not confirm the existence of any health consequences from exposure to low level electromagnetic fields" (WHO, 2020).

The most recent reviews on this topic include the 2015 report by SCENIHR and annual reviews published by SSM (e.g., for the years 2015, 2016, 2018, and 2019). These reports, similar to previous reviews, found that the scientific evidence does not confirm the existence of any adverse health effects caused by environmental or community exposure to EMF.

The WHO has recommended that countries adopt recognized international standards published the International Commission on Non-ionizing Radiation (ICNIRP) and the IEEE's International Committee on Electromagnetic Safety (ICES). Typical levels of EMF from Dominion's power lines outside its property and rights-of-way are far below the screening reference levels of EMF recommended for the general public and still lower than exposures equivalent to restrictions to limits on fields within the body (ICNIRP, 2010; ICES, 2019).

Thus, based on the conclusions of scientific reviews and the levels of EMF associated with the proposed Rebuild Projects, the Company has determined that no adverse health effects are anticipated to result from the operation of the proposed Rebuild Projects.

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IV. HEALTH ASPECTS OF ELECTROMAGNETIC FIELDS ("EMF")

C. Describe and cite any research studies on EMF the Applicant is aware of that meet the following criteria:

1. Became available for consideration since the completion of the Virginia Department of Health's most recent review of studies on EMF and its subsequent report to the Virginia General Assembly in compliance with 1985 Senate Joint Resolution No. 126;

2. Include findings regarding EMF that have not been reported previously and/or provide substantial additional insight into findings; and

3. Have been subjected to peer review.

Response: The Virginia Department of Health ("VDH") conducted its most recent review and issued its report on the scientific evidence on potential health effects of extremely low frequency ("ELF") EMF in 2000: "[T]he Virginia Department of Health is of the opinion that there is no conclusive and convincing evidence that exposure to extremely low frequency EMF emanated from nearby high voltage transmission lines is causally associated with an increased incidence of cancer or other detrimental health effects in humans."[14]

The continuing scientific research on EMF exposure and health has resulted in many peer-reviewed publications since 2000. The accumulating research results have been regularly and repeatedly reviewed and evaluated by national and international health, scientific, and government agencies. One of the most comprehensive and detailed reviews of the relevant scientific peer-reviewed literature was published by the WHO in 2007. The conclusion of the WHO, as currently expressed on its website, is consistent with the earlier VDH conclusions: "Based on a recent in-depth review of the scientific literature, the WHO concluded that current evidence does not confirm the existence of any health consequences from exposure to low level electromagnetic fields."[15]

Research published in the peer-reviewed literature subsequent to the WHO report has been reviewed by several scientific organizations, including most notably:

- SCENIHR, a committee of the European Commission, that published its assessments in 2009 and 2015;

- The Swedish Radiation Safety Authority ("SSM"), formerly the Swedish Radiation Protection Authority ("SSI"), that has published annual reviews of the relevant peer-reviewed scientific literature since 2003, with its most recent

[14] *See* http://www.vdh.virginia.gov/content/uploads/sites/12/2016/02/highfinal.pdf.
[15] *See* http://www.who.int/peh-emf/about/WhatisEMF/en/index1.html.

review published in 2019; and,

- EFHRAN, that published its reviews in 2010 and 2012.

The above reviews provide detailed analyses and summaries of relevant recent peer-reviewed scientific publications. The conclusions of these reviews that the evidence overall does not confirm the existence of any adverse health effects due to exposure to EMF are consistent with the conclusions of the VDH and the WHO reports. With respect to the statistical association observed in some of the childhood leukemia epidemiologic studies, the most recent comprehensive review of the literature by SCENIHR, published in 2015, concluded that "no mechanisms have been identified and no support is existing [*sic*] from experimental studies that could explain these findings, which, together with shortcomings of the epidemiological studies prevent a causal interpretation" (SCENIHR, 2015, p. 16).

While research is continuing on multiple aspects of EMF exposure and health, many of the recent publications have focused on an epidemiologic assessment of the relationship between EMF exposure and childhood leukemia and neurodegenerative diseases. Of these, the following recent publications, published following the inclusion date (June 2014) for the SCENIHR (2015) report, provided additional evidence and contributed to clarification of previous findings. Overall, new research studies have not provided evidence to alter the previous conclusions of scientific and health organizations, including the WHO and SCENIHR.

Recent epidemiologic studies of EMF and childhood leukemia include:

- Bunch et al. (2015) assessed the potential association between residential proximity to high-voltage underground cables and development of childhood cancer in the United Kingdom largely using the same epidemiologic data as in a previously published study on overhead transmission lines (Bunch et al., 2014). No statistically significant associations or trends were reported with either distance to underground cables or calculated magnetic fields from underground cables for any type of childhood cancers.

- Pedersen et al. (2015) published a case-control study that investigated the potential association between residential proximity to power lines and childhood cancer in Denmark. The study included all cases of leukemia (n=1,536), central nervous system tumor, and malignant lymphoma (n=417) diagnosed before the age of 15 between 1968 and 2003 in Denmark, along with 9,129 healthy control children matched on sex and year of birth. Considering the entire study period, no statistically significant increases were reported for any of the childhood cancer types.

- Salvan et al. (2015) compared measured magnetic-field levels in the bedroom for 412 cases of childhood leukemia under the age of 10 and 587 healthy control children in Italy. Although the statistical power of the study was limited because of the small number of highly exposed subjects, no consistent statistical

associations or trends were reported between measured magnetic-field levels and the occurrence of leukemia among children in the study.

- Bunch et al. (2016) and Swanson and Bunch (2018) published additional analyses using data from an earlier study (Bunch et al., 2014). Bunch et al. (2016) reported that the association with distance to power lines observed in earlier years was linked to calendar year of birth or year of cancer diagnosis, rather than the age of the power lines. Swanson and Bunch (2018) re-analyzed data using finer exposure categories (e.g., cut-points of every 50-meter distance) and broader groupings of diagnosis date (e.g., 1960-1979, 1980-1999, and 2000-on) and reported no overall associations between exposure categories and childhood leukemia for the later time periods (1980 and on), and consistent pattern for time periods prior to 1980.

- Crespi et al. (2016) conducted a case-control epidemiologic study of childhood cancers and residential proximity to high-voltage power lines (60 kilovolts ["kV"] to 500 kV) in California. Childhood cancer cases, including 5,788 cases of leukemia and 3,308 cases of brain tumor, diagnosed under the age of 16 between 1986 and 2008, were identified from the California Cancer Registry. Controls, matched on age and sex, were selected from the California Birth Registry. Overall, no consistent statistically significant associations for leukemia or brain tumor and residential distance to power lines were reported.

- Kheifets et al. (2017) assessed the relationship between calculated magnetic-field levels from power lines and development of childhood leukemia within the same study population evaluated in Crespi et al. (2016). In the main analyses, which included 4,824 cases of leukemia and 4,782 controls matched on age and sex, the authors reported no consistent patterns, or statistically significant associations between calculated magnetic-field levels and childhood leukemia development. Similar results were reported in subgroup and sensitivity analyses. In two subsequent studies (Amoon et al., 2018a, 2019), the potential impact of residential mobility (i.e., moving residences between birth and diagnosis) on the associations reported in Crespi et al. (2016) and Kheifets et al. (2017) were examined. Amoon et al. (2019) concluded that while uncontrolled confounding by residential mobility had some impact on the association between EMF exposure and childhood leukemia, it was unlikely to be the primary driving force behind the previously reported associations.

- Amoon et al. (2018b) conducted a pooled analysis of 29,049 cases and 68,231 controls from 11 epidemiologic studies of childhood leukemia and residential distance from high-voltage power lines. The authors reported no statistically-significant association between childhood leukemia and proximity to transmission lines of any voltage. Among subgroup analyses, the reported associations were slightly stronger for leukemia cases diagnosed before 5 years of age and in study periods prior to 1980. Adjustment for various potential confounders (e.g., socioeconomic status, dwelling type, residential mobility) had little effect on the estimated associations.

- Kyriakopoulou et al. (2018) assessed the association between childhood acute leukemia and parental occupational exposure to social contacts, chemicals, and electromagnetic fields. The study was conducted at a major pediatric hospital in Greece and included 108 cases and 108 controls matched for age, gender, and ethnicity. Statistically non-significant associations were observed between paternal exposure to magnetic fields and childhood acute leukemia for any of the exposure periods examined (1 year before conception; during pregnancy; during breastfeeding; and from birth until diagnosis); maternal exposure was not assessed due to the limited sample size. No associations were observed between childhood acute leukemia and exposure to social contacts or chemicals.

- Auger et al. (2019) examined the relationship between exposure to EMF during pregnancy and risk of childhood cancer in a cohort of 784,000 children born in Quebéc. Exposure was defined using residential distance to the nearest high-voltage transmission line or transformer station. The authors reported statistically non-significant associations between proximity to transformer stations and any cancer, hematopoietic cancer, or solid tumors. No associations were reported with distance to transmission lines.

- Crespi et al. (2019) investigated the relationship between childhood leukemia and distance from high-voltage lines and calculated magnetic-field exposure, separately and combined, within the California study population previously analyzed in Crespi et al. (2016) and Kheifets et al. (2017). The authors reported that neither close proximity to high-voltage lines nor exposure to calculated magnetic fields alone were associated with childhood leukemia; an association was observed only for those participants who were both close to high-voltage lines (< 50 meters) and had high calculated magnetic fields (≥ 0.4 microtesla [i.e., 4 milligauss]). No associations were observed with low-voltage power lines (< 200 kV).

- Talibov et al. (2019) conducted a pooled analysis of 9,723 cases and 17,099 controls from 11 epidemiologic studies to examine the relationship between parental occupational exposure to magnetic fields and childhood leukemia. No statistically significant association was found between either paternal or maternal exposure and leukemia (overall or by subtype). No associations were observed in the meta-analyses.

Recent epidemiologic studies of EMF and neurodegenerative diseases include:

- Seelen et al. (2014) conducted a population-based case-control study in the Netherlands and included 1,139 cases diagnosed with amyotrophic lateral sclerosis ("ALS") between 2006 and 2013 and 2,864 frequency-matched controls. The shortest distance from the case' and control residences to the nearest high-voltage power line (50 kV to 380 kV) was determined by geocoding. No statistically significant associations between residential proximity to power lines with voltages of either 50 to 150 kV or 220 to 380 kV

and ALS were reported.

- Sorahan and Mohammed (2014) analyzed mortality from neurodegenerative diseases in a cohort of approximately 73,000 electricity supply workers in the United Kingdom. Cumulative occupational exposure to magnetic-fields was calculated for each worker in the cohort based on their job titles and job locations. Death certificates were used to identify deaths from neurodegenerative diseases. No associations or trends for any of the included neurodegenerative diseases (Alzheimer's disease, Parkinson's disease, and ALS) were observed with various measures of calculated magnetic fields.

- Koeman et al. (2015, 2017) analyzed data from the Netherlands Cohort Study of approximately 120,000 men and women who were enrolled in the cohort in 1986 and followed up until 2003. Lifetime occupational history, obtained through questionnaires, and job-exposure matrices on ELF magnetic fields and other occupational exposures were used to assign exposure to study subjects. Based on 1,552 deaths from vascular dementia, the researchers reported a statistically not significant association of vascular dementia with estimated exposure to metals, chlorinated solvents, and ELF magnetic fields. However, because no exposure-response relationship for cumulative exposure was observed and because magnetic fields and solvent exposures were highly correlated with exposure to metals, the authors attributed the association with ELF magnetic fields and solvents to confounding by exposure to metals (Koeman et al., 2015). Based on a total of 136 deaths from ALS among the cohort members, the authors reported a statistically significant, approximately two-fold association with ELF magnetic fields in the highest exposure category. This association, however, was no longer statistically significant when adjusted for exposure to insecticides (Koeman et al., 2017).

- Fischer et al. (2015) conducted a population-based case-control study that included 4,709 cases of ALS diagnosed between 1990 and 2010 in Sweden and 23,335 controls matched to cases on year of birth and sex. The study subjects' occupational exposures to ELF magnetic fields and electric shocks were classified based on their occupations, as recorded in the censuses and corresponding job-exposure matrices. Overall, neither magnetic fields nor electric shocks were related to ALS.

- Vergara et al. (2015) conducted a mortality case-control study of occupational exposure to electric shock and magnetic fields and ALS. They analyzed data on 5,886 deaths due to ALS and over 58,000 deaths from other causes in the United States between 1991 and 1999. Information on occupation was obtained from death certificates and job-exposure matrices were used to categorize exposure to electric shocks and magnetic fields. Occupations classified as "electric occupations" were moderately associated with ALS. The authors reported no consistent associations for ALS, however, with either electric shocks or magnetic fields, and they concluded that their findings did not support the hypothesis that exposure to either electric shocks or magnetic fields

explained the observed association of ALS with "electric occupations."

- Pedersen et al. (2017) investigated the occurrence of central nervous system diseases among approximately 32,000 male Danish electric power company workers. Cases were identified through the national patient registry between 1982 and 2010. Exposure to ELF magnetic fields was determined for each worker based on their job titles and area of work. A statistically significant increase was reported for dementia in the high exposure category when compared to the general population, but no exposure-response pattern was identified, and no similar increase was reported in the internal comparisons among the workers. No other statistically significant increases among workers were reported for the incidence of Alzheimer's disease, Parkinson's disease, motor neuron disease, multiple sclerosis, or epilepsy, when compared to the general population, or when incidence among workers was analyzed across estimated exposure levels.

- Vinceti et al. (2017) examined the association between ALS and calculated magnetic-field levels from high-voltage power lines in Italy. The authors included 703 ALS cases and 2,737 controls; exposure was assessed based on residential proximity to high-voltage power lines. No statistically significant associations were reported and no exposure-response trend was observed. Similar results were reported in subgroup analyses by age, calendar period of disease diagnosis, and study area.

- Checkoway et al. (2018) investigated the association between Parkinsonism[16] and occupational exposure to magnetic fields and several other agents (endotoxins, solvents, shift work) among 800 female textile workers in Shanghai. Exposure to magnetic fields was assessed based on the participants' work histories. The authors reported no statistically significant associations between Parkinsonism and occupational exposure to any of the agents under study, including magnetic fields.

- Jalilian et al. (2018) conducted a meta-analysis of 20 epidemiologic studies of occupational exposure to magnetic fields and Alzheimer's disease. The authors reported a moderate, statistically significant overall association; however, they noted substantial heterogeneity among studies and evidence for publication bias.

- Gervasi et al. (2019) assessed the relationship between residential distance to overhead power lines in Italy and risk of Alzheimer's dementia and Parkinson's disease. The authors included 9,835 cases of Alzheimer's dementia and 6,810 cases of Parkinson's disease; controls were matched by sex, year of birth, and municipality of residence. A weak, statistically non-significant association was

[16] Parkinsonism is defined by Checkoway et al. (2018) as "*a syndrome whose cardinal clinical features are bradykinesia, rest tremor, muscle rigidity, and postural instability. Parkinson disease is the most common neurodegenerative form of [parkinsonism]"* (p. 887).

observed between residences within 50 meters of overhead power lines and both Alzheimer's dementia and Parkinson's disease, compared to distances of over 600 meters.

- Peters et al. (2019) examined the relationship between ALS and occupational exposure to both magnetic fields and electric shock in a pooled study of data from three European countries. The study included 1,323 ALS cases and 2,704 controls matched for sex, age, and geographic location; exposure was assessed based on occupational title and defined as low (background), medium, or high. Statistically significant associations were observed between ALS and ever having been exposed above background levels to either magnetic fields or electric shocks; however, no clear exposure-response trends were observed with exposure duration or cumulative exposure. The authors also noted significant heterogeneity in risk by study location.

- Huss et al. (2018) conducted a meta-analysis of 20 epidemiologic studies of ALS and occupational exposure to magnetic fields. The authors reported a weak overall association; a slightly stronger association was observed in a subset analysis of six studies with full occupational histories available. The authors noted substantial heterogeneity among studies, evidence for publication bias, and a lack of a clear exposure-response relationship between exposure and ALS.

- Röösli and Jalilian (2018) performed a meta-analysis using data from five epidemiologic studies examining residential exposure to magnetic fields and ALS. A statistically non-significant negative association was reported between ALS and the highest exposed group, where exposure was defined based on distance from power lines or calculated magnetic-field level.

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V. NOTICE

A. Furnish a proposed route description to be used for public notice purposes. Provide a map of suitable scale showing the route of the proposed project. For all routes that the Applicant proposed to be noticed, provide minimum, maximum and average structure heights.

Response: A map showing the existing route to be used for the Rebuild Projects is provided as Attachment V.A. A written description of the route is as follows:

The proposed route for the Rebuild Projects is an approximate 11.4-mile right-of-way currently occupied by an existing 230 kV transmission Line #2113 (from Lightfoot Substation to Waller Substation) and Line #2154 (from Waller Substation to Structure #2154/482). The existing transmission line corridor right-of-way, which varies from 150 to 200 feet wide, originates from the Lightfoot Substation in James City County, traverses briefly through the City of Williamsburg, continues to Waller Substation in York County, traverses briefly again through the City of Williamsburg, and continues to Penniman Substation. From this point, the line heads to Kingsmill Substation in York County, and then terminates at Structure #2154/482 just before reaching the Skiffes Creek Switching Station off Highway 60 in York County.

The minimum proposed structure height is approximately 52 feet, the maximum proposed structure height is approximately 85 feet, and the average proposed structure height is approximately 74 feet, based on preliminary conceptual design, not including foundation reveal, and subject to change based on final engineering.

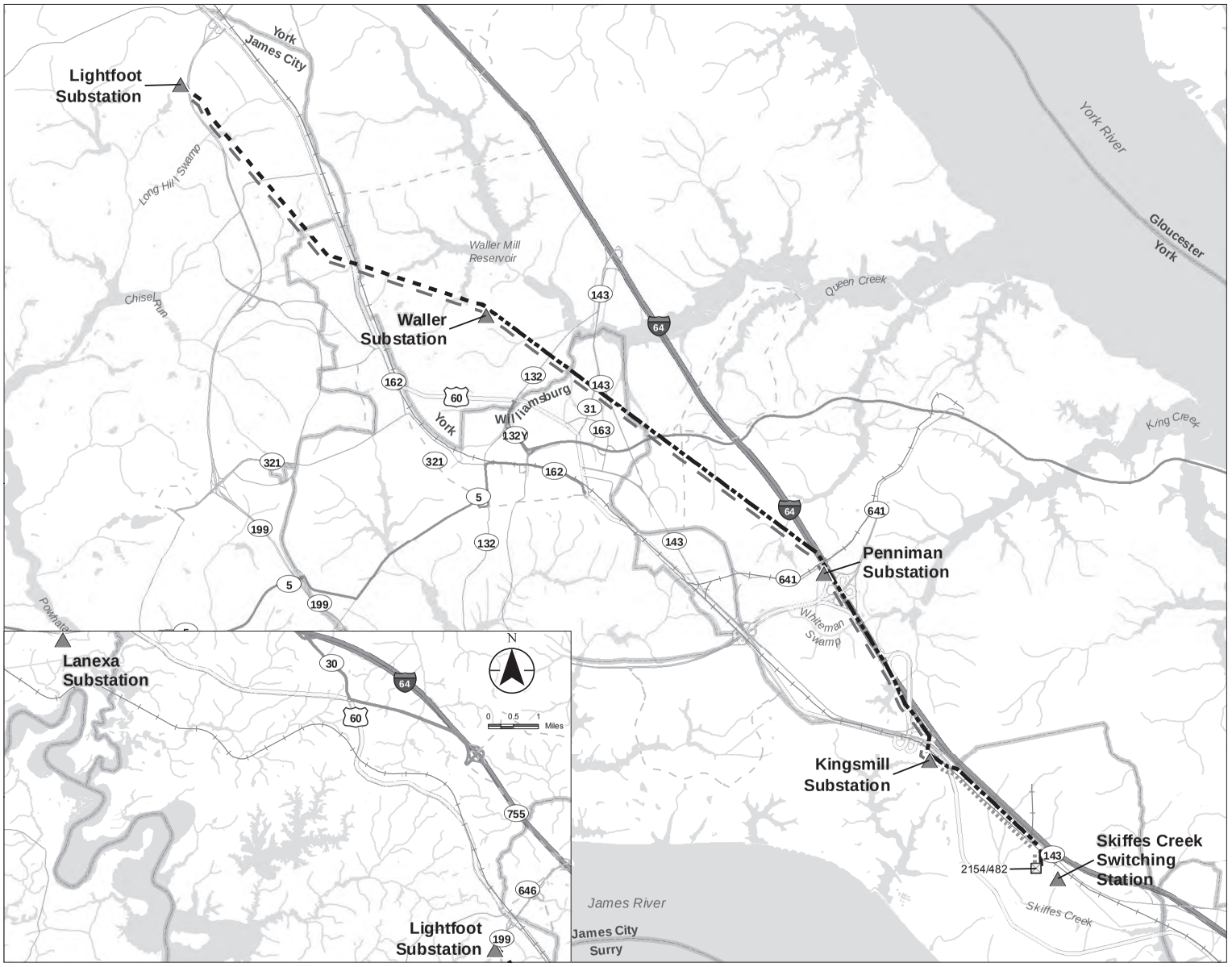

Figure No.
V.A.

Title
Notification Map

Client/Project 203401488
Dominion Energy Virginia
230 kV Lines #2113 and #2154 Transmission Line Rebuilds and Related Projects

Project Location
James City County, New Kent County, York County, and City of Williamsburg, Virginia

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

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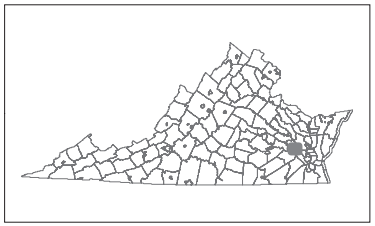
- Substation/Switching Station
- Structure 2154/482
- Line #2154 Rebuild Project
- Line #2113 Rebuild Project
- Line #19 Rebuild
- Line #58 Removal
- Railroad
- Freeway or Other Major Road
- Other Major Road
- Secondary Road
- Local Connecting Road
- Important Local Road



Notes
1. Coordinate System: NAD 1983 StatePlane Virginia South FIPS 4502 Feet
2. Data Sources: Dominion Energy Virginia, Stantec, National Transportation Atlas Railroads, ESRI, DCR, USFWS National Wetlands Inventory (NWI) and USGS National Hydrography Dataset (NHD)

Stantec

V. NOTICE

B. List Applicant offices where members of the public may inspect the application. If applicable, provide a link to website(s) where the application may be found.

Response: Due to the ongoing public health crisis, the Application is available for public inspection electronically at the following website:

www.dominionenergy.com/waller

V. NOTICE

C. List all federal, state, and local agencies and/or officials that may reasonably be expected to have an interest in the proposed construction and to whom the Applicant has furnished or will furnish a copy of the application.

Response: The following agency representatives may reasonably be expected to have an interest in the Rebuild Projects. Instead of furnishing a copy of the Application to these parties, the Company has sent a letter noting the availability of the Application for the Rebuild Projects on the Company's website.

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

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

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

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

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

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

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

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

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

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

Ms. Michelle Henicheck
Office of Wetlands and Stream Protection
Virginia Department of Environmental Quality
P.O. Box 1105
Richmond, VA 23218

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

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

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

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

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

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

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

Mr. Neil Morgan
County Administrator, York County
P.O. Box 532
Yorktown, VA 23690

Mr. Scott Stevens
County Administrator, James City County
101 Mounts Bay Road, Building D
Williamsburg, VA 23185

Mr. Andrew O. Trivette
City Manager, City of Williamsburg
Municipal Building
401 Lafayette Street
Williamsburg, VA 23185

V. NOTICE

D. If the application is for a transmission line with a voltage of 138 kV or greater, provide a statement and any associated correspondence indicating that prior to the filing of the application with the SCC the Applicant has notified the chief administrative officer of every locality in which it plans to undertake construction of the proposed line of its intention to file such an application, and that the Applicant gave the locality a reasonable opportunity for consultation about the proposed line (similar to the requirements of § 15.2-2202 of the Code for electric transmission lines of 150 kV or more).

Response: In accordance with Va. Code § 15.2-2202 E, letters dated November 25, 2020, were sent to Mr. Scott Stevens, County Administrator of James City County, Mr. Neil Morgan, County Administrator of York County, and Mr. Andrew O. Trivette, City Manager of the City of Williamsburg, Virginia, where the Rebuild Projects are located. The letters stated the Company's intention to file this Application and inviting the localities to consult with the Company about the Rebuild Projects. Copies of these letters are included as Attachment V.D.1.

Dominion Energy Virginia
10900 Nuckols Road, 4th Floor
Glen Allen, VA 23060
DominionEnergy.com

November 25, 2020

Mr. Andrew O. Trivette
City Manager, City of Williamsburg
Municipal Building
401 Lafayette Street, Virginia 23185

Reference: **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**
Notice Pursuant to Va. Code § 15.2-2202 E

Dear Mr. Trivette,

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 State Corporation Commission (SCC). Pursuant to Va. Code §15.2-2202, the Company is writing to notify the City of Williamsburg of the proposed project in advance of the SCC filing. We respectfully request that you submit any comments or additional information that would have bearing on the Rebuild Projects within 30 days of receipt of this letter. If there are any questions, please do not hesitate to contact me at (804) 310-9658 or Lane.E.Carr@dominionenergy.com. Dominion Energy appreciates your assistance with this project review and looks forward to any additional information you may have to offer.

Sincerely,

Lane E. Carr
Siting and Permitting Specialist

Enclosure: Project Overview Map

Dominion Energy Virginia
10900 Nuckols Road, 4th Floor
Glen Allen, VA 23060
DominionEnergy.com

November 25, 2020

Mr. Neil Morgan
County Administrator, York County
P.O Box 532
Yorktown, Virginia 23690

Reference: **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**
Notice Pursuant to Va. Code § 15.2-2202 E

Dear Mr. Morgan:

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

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- 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 State Corporation Commission (SCC). Pursuant to Va. Code §15.2-2202, the Company is writing to notify York County of the proposed project in advance of the SCC filing. We respectfully request that you submit any comments or additional information that would have bearing on the Rebuild Projects within 30 days of receipt of this letter. If there are any questions, please do not hesitate to contact me at (804) 310-9658 or Lane.E.Carr@dominionenergy.com. Dominion Energy appreciates your assistance with this project review and looks forward to any additional information you may have to offer.

Sincerely,

Lane E. Carr
Siting and Permitting Specialist

Enclosure: Project Overview Map

Dominion Energy Virginia
10900 Nuckols Road, 4th Floor
Glen Allen, VA 23060
DominionEnergy.com

November 25, 2020

Mr. Scott Stevens
County Administrator, James City County
101 Mounts Bay Road, Building D
Williamsburg, Virginia 23185

Reference: **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**
Notice Pursuant to Va. Code § 15.2-2202 E

Dear Mr. Stevens,

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:

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- 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 State Corporation Commission (SCC). Pursuant to Va. Code §15.2-2202, the Company is writing to notify James City County of the proposed project in advance of the SCC filing. We respectfully request that you submit any comments or additional information that would have bearing on the Rebuild Projects within 30 days of receipt of this letter. If there are any questions, please do not hesitate to contact me at (804) 310-9658 or Lane.E.Carr@dominionenergy.com. Dominion Energy appreciates your assistance with this project review and looks forward to any additional information you may have to offer.

Sincerely,

Lane E. Carr
Siting and Permitting Specialist

Enclosure: Project Overview Map

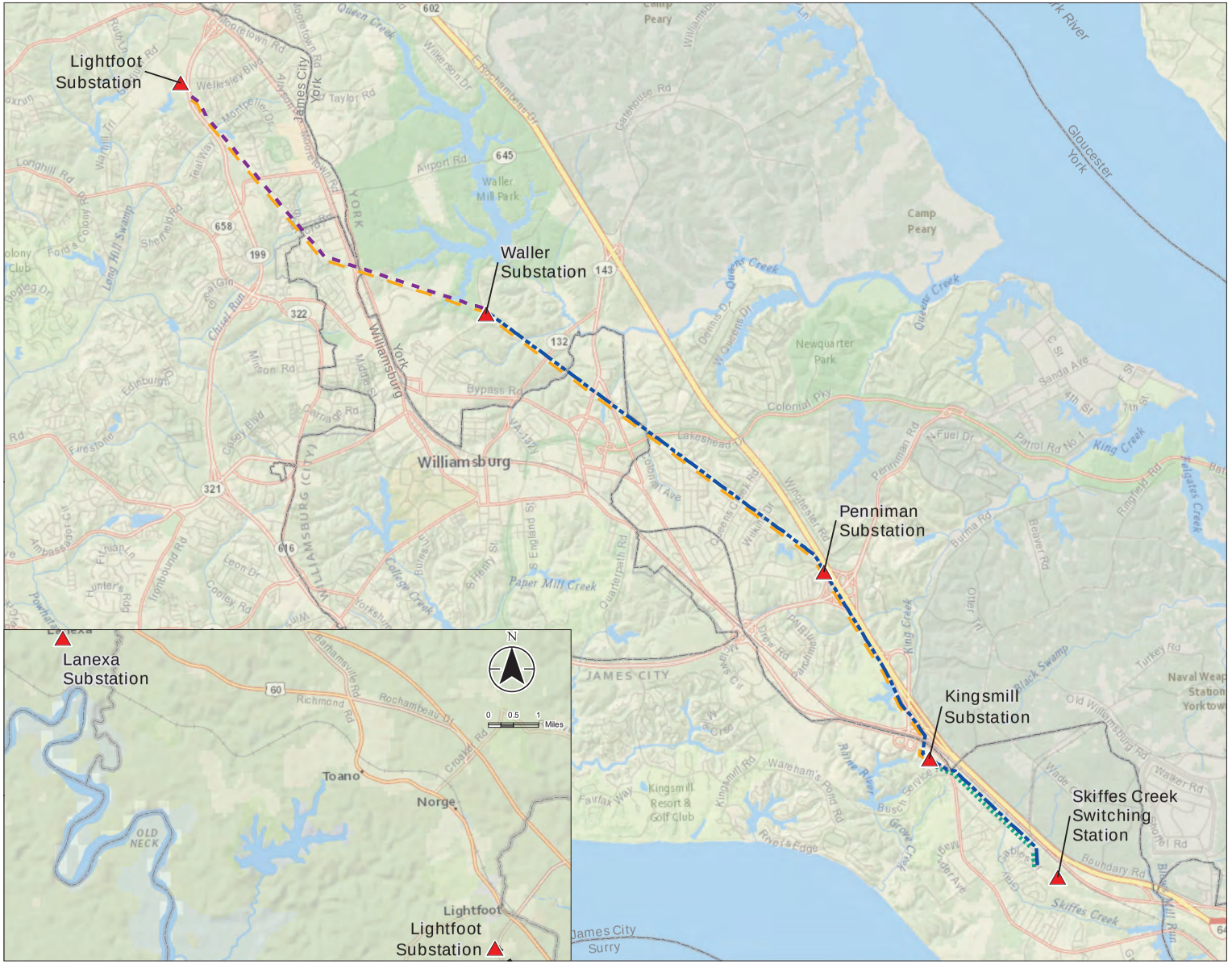

Figure No.
I.A.1

Title
Project Overview Map

Client/Project 203401488
Dominion Energy Virginia
230 kV Lines #2113 and #2154 Transmission Line Rebuilds and Related Projects

Project Location
James City County, New Kent County, York County, and City of Williamsburg, Virginia

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

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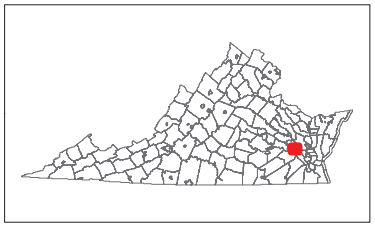
- Substation/Switching Station
- Line #2154 Rebuild Project (7.6 Miles)
- Line #2113 Rebuild Project (3.8 Miles)
- Line #19 Rebuild (1.5 Miles)
- Line #58 Removal (9.9 Miles)



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

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