

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

Before the State Corporation Commission of Virginia

Culpeper Technology Zone 230 kV Loop and Lines #2 and #1065 Conversion Project

Application No. 347

Case No. PUR-2025-00032

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Volume 5 of 5



APPENDIX G

KEY OBSERVATION POINT DESCRIPTIONS, PHOTOGRAPHS, AND SIMULATIONS



Key Observation Point Descriptions, Photographs, and Simulations

Culpeper Technology Zone 230 kV Loop and Lines #2 and #1065 Conversion Project

1. INTRODUCTION

This appendix supplements the visual impact assessment included in Section 5.3 of the Culpeper Technology Zone 230 kV Loop and Lines #2 and #1065 Conversion Project (Project) Environmental Routing Study. It describes existing visual resource conditions at each key observation point (KOP), anticipated changes to these conditions due to Project construction and operation, and assesses the Project's visual impacts based on commonly used federal visual resource management systems, including:

- Federal Highway Administration Guidelines for the Visual Impact Assessment of Highway Projects (FHWA 2015)
- US Department of Agriculture Forest Service Scenery Management System (USFS 1995)
- Bureau of Land Management Visual Resource Management (BLM 1984)

These systems provide standardized approaches that recognize both the environmental setting (visual features that contribute to the landscape) and viewer perception of this setting (viewer preferences and sensitivity). While each of these systems is tailored meet the needs and landscapes of its respective federal agency, the methodologies all share common elements that can be used to objectively assess projects that lack a federal nexus. Specifically, all three methodologies establish procedures or techniques for objectively describing existing visual resource conditions of the landscape and for estimating the level of visual change caused by a proposed project.

Based on these federal methodologies, ERM's approach to evaluating existing visual conditions in the Project study areas focuses on three primary criteria, as described below.

- Landscape character: The set of attributes, qualities, or traits in the landscape that make it identifiable or unique. The landscape character is a combination of the following:
 - Landforms—the distinct topographic features of the landscape including any visible water bodies or rivers; and
 - Vegetation—the variety of vegetation/vegetative communities present on the landscape; and
 - Built Environment—Existing structures, facilities, or other human modifications on the landscape.

These criteria are also used to evaluate the magnitude of visual change from the proposed Project. Magnitude of change is categorized based on Project visibility and the degree to which the Project changes the existing landscape characteristics. For each KOP, the magnitude of visual change is estimated as negligible, small, medium, or large.

- Viewer Types and Sensitivity: Viewers are defined by their interaction with a landscape
 (e.g., residents, motorists) and their preferences or sensitivity to changes or modifications
 to the landscape. A qualitative sensitivity level (low, medium, or high) is estimated for
 each viewer group based on their anticipated perception of visual changes on the
 landscape and level of concern with these changes.
- Distance Zones: A frame of reference to discuss the landscape character and specific features based on their distance from a specific location. Distance zones include the:
 - foreground (up to 0.5 mile from the viewer);
 - middle ground (0.5 to 2 miles from the viewer); and
 - background (more than 2 miles from the viewer).

The remainder of this appendix describes existing conditions and Project impacts at each key observation point (KOP) identified for the Project, based on the criteria listed above. Each KOP evaluation includes a photograph of existing conditions and a photographic simulation of the proposed Project. High-resolution versions of these images are provided at the end of this appendix. The information in this appendix is the basis of the visual impacts described in Section 5.3 of the Routing Study.

2. KOP LANDSCAPE DESCRIPTIONS

2.1 MT. PONY AND TECH PARK ROUTES

The Cirrus and Keyser Switching Stations (the terminus of the Tech Park Lines) have been approved as part of another project. In addition, portions of Dominion's existing Lines #2/#70 and #2/2199 have been approved for upgrade from 115 to 230 kV. These previously approved upgrades are depicted, where appropriate, in the simulation images. The simulations in this section also show grading and vegetation clearing associated with development of industrial uses in the Culpeper Technology Zone (other than the Project). Proposed data centers and other industrial structures are not shown in simulation images.

Except where noted, all distances are approximate and are rounded to the nearest 0.1 mile or 100 feet.

2.1.1 KOP 101

2.1.1.1 EXISTING CONDITIONS



FIGURE 1 KOP 101, EXISTING CONDITIONS

KOP 101 is located on Blackjack Road 0.5-mile southwest of the intersection with Batna Road (Figure 1). The KOP faces southwest and is on a rural road corridor with a mix of taller roadside vegetation, flat open fields, and several types of human modifications. The characteristics of the landscape visible from KOP 101 are described below.

Landforms

- The landscape is largely smooth and flat with subtle undulations perceptible in the foreground.
- While the line of trees along the righthand side of the road blocks views, the flat terrain generally allows for more distant views into the middle ground.

• The horizon line is defined by a low, tree-covered hillside punctuated by a series of transmission line poles.

Vegetation

- The righthand side of the road is dominated by a tall line of darker green evergreens interspersed with shorter deciduous trees. This line of trees creates a mostly solid, rectangular form with small, irregular gaps through which the sky is visible.
- The lefthand side of the road includes a strip of patchy, low vegetation with amorphous forms and an occasional taller, rounded tree.
- Beyond the immediate roadside, the vegetation transitions into flat, smooth fields for livestock with light green and tan hues.
- A low hillside of dense darker green and brown trees defines the background of the view.

Built Environment

- A flat, smooth, grey, paved two-lane road (Blackjack Road) bisects the view and creates a strong linear form that draws the viewer's eye toward the middle ground.
- Tall, thin, vertical, light grey, wooden distribution poles and a short fence with repeating wooden posts and wire parallel the road in the foreground.
- A series of tall vertical poles with short horizontal crossarms extend above the background vegetation on the lefthand side of the view for Dominion Existing Lines #2 and #2199.
- Multiple thin, horizontal conductor lines cross above the fields and road.

The primary viewer groups at KOP 101 are motorists traveling along Blackjack Road, as well as area residents. Motorists and area residents would have medium to high sensitivity to the changes in visual conditions at this location.

2.1.1.2 SIMULATED CONDITIONS WITH PROPOSED PROJECT



FIGURE 2 KOP 101, SIMULATED CONDITIONS

Mt. Pony Route 1 is less than 0.1-mile southwest of KOP 101 (Figure 2). The route crosses Blackjack Road in the foreground and then parallels the lefthand side of the road toward the tie-in location with Existing Lines #2 and #2199 in the middle ground of the view. From KOP 101, the proposed Project would result in changes to the visual characteristics of the landscape, as described below.

Landforms

• There would be no discernable changes to the landform/terrain.

Vegetation

• Ground level clearing necessary for the Project would result in no perceptible changes to vegetation.

Built Environment

- The route would add vertical poles and thin, horizontal overhead conductors to the landscape.
- The series of new, repetitive vertical poles are similar in form to other existing transmission poles, although they appear larger because of their location in the foreground.
- The slightly undulating conductors add multiple thin, parallel, horizontal lines above Blackjack Road and the adjacent fields. The new horizontal lines are highly visible against the open sky and increase the level of visual clutter in the area.

Due to the additional vertical and horizontal forms and lines, and scale of the transmission line within the fore and middle ground of KOP 101, the changes in visual conditions at this location would be medium.

2.1.2 KOP 102 E

2.1.2.1 EXISTING CONDITIONS (EAST)



FIGURE 3 KOP 102 E, EXISTING CONDITIONS

KOP 102 E is located on the north side of Route (Rt.) 3 (Germanna Highway) 0.8-mile northeast of the intersection with Zachary Taylor Highway (Figure 3). The KOP faces east along Rt. 3 and the neighboring agricultural fields. The characteristics of the landscape visible from KOP 102 E are described below.

Landforms

- The landscape is largely smooth and flat with subtle undulations perceptible in the foreground.
- A hill rises above the flat landscape on the right side of the view.

Vegetation

- The lefthand side of the road transitions from light to medium green low grasses to medium green deciduous trees forming a regular solid vegetative wall screening views to the northeast.
- The roadway median is a smooth vegetated at-grade feature with medium green and tan grasses.
- The righthand side of the roadway is dominated by grasses along the shoulder, transitioning to smooth, flat fields to the southeast. Several dark green shrubs and trees border the fenceline and roadway. Clusters of mature trees border additional fencelines along the edges of fields.
- As views move east along the roadway, similar to the left side, the right side transitions to a dense treeline of dark green mature evergreen and deciduous trees screening views to the immediate right of the roadway.
- Dense trees cover the low hill to the south of the KOP, forming a solid blanket of vegetation.
- The horizon line is defined by a low hillside of dense darker green and brown trees seen through gaps in the treelines along the road and fields.

Built Environment

- A flat, smooth, grey, paved, striped and divided roadway bisects the view and creates a strong linear form that draws the viewer's eye toward the left (east) side of the view.
- Several road signs are visible (one on the left side and one in the center of the roadway) and stand out primarily because of their color (bright white and red).
- Tall, thin, vertical, light grey, wooden distribution poles are visible at the far right of the view, directly across the roadway at a private residence, and again to the east along the roadway as the dense treeline begins.
- A short fence with repeating wooden posts and wires runs parallel to the road on the right side of the roadway and is also visible along field boundaries to the south/southeast.
- A series of tall vertical poles with short horizontal crossarms (Dominion's existing Lines #2/#70) extend above the left side of the open fields on the righthand side of the view.
- Multiple thin, horizontal conductor lines cross above the fields and road.

The primary viewer groups at KOP 102 E are motorists traveling along Rt. 3, as well as area residents. Motorists and area residents would have medium to high sensitivity to the changes in visual conditions at this location. For motorists, sensitivity may be moderated by speed and the direction of travel.

2.1.2.2 SIMULATED CONDITIONS WITH PROPOSED PROJECT



FIGURE 4 KOP 102 E, SIMULATED CONDITIONS

Mt. Pony Route 1 is less than 0.1-mile east of KOP 102 (Figure 4). The route crosses Germanna Highway in the foreground and then parallels existing Lines #2/#70 on the righthand side of the road. Because it crosses a low agricultural field, Mt. Pony Route 1 (as well as existing Lines #2/#70) are visible into the middle ground, where they are absorbed into the more distant landforms and vegetation. From KOP 102, the proposed Project would result in changes to the visual characteristics of the landscape, as described below.

Landforms

• There would be no discernable changes to the landform/terrain.

Vegetation

• Ground-level clearing necessary for Project construction would result in no perceptible changes to vegetation.

Built Environment

- The route would add vertical poles and thin, horizontal overhead conductors to the landscape. Because the proposed line is collocated with existing Lines #2/#70, the visual changes from the new poles and conductors are focused along one area of the landscape.
- The series of new, repetitive vertical poles with short, horizontal crossarms are similar in form to other existing transmission poles already present on the landscape; however, the new structures increase the number of large, visually dominant forms in the viewshed.
- The new overhead conductors add thin, parallel, horizontal lines above Germanna Highway and the adjacent fields. The new horizontal lines are highly visible against the open sky and increase the level of visual clutter in the area. They are most perceptible in the foreground and tend to disappear against the sky into the middle ground.

The proposed route is collocated with existing Lines #2/#70 to help limit the extent of visual resource changes, such as additional vertical and horizontal forms and lines added to the landscape. Accordingly, the Project would result in small to medium changes in visual conditions at this location.

2.1.3 KOP 102 NW

2.1.3.1 EXISTING CONDITIONS

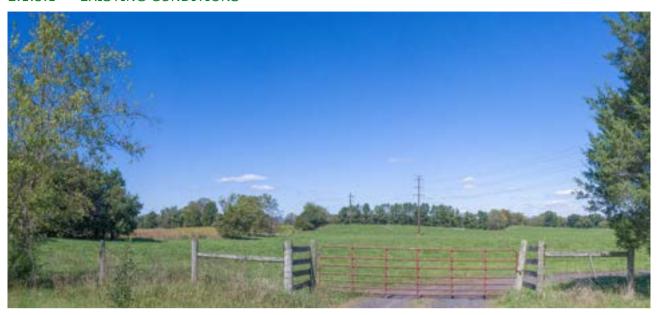


FIGURE 5 KOP 102 NW, EXISTING CONDITIONS

KOP 102 NW is on the north side of Rt. 3 in the same location as KOP 102 E (Figure 5). It faces northwest across the rural, gently rolling open fields that characterize this stretch of Germanna Highway. The characteristics of the landscape visible from KOP 102 NW are described below.

Landforms

The landscape is largely smooth with gentle undulations perceptible in the foreground.

Vegetation

- Deciduous trees in the foreground along the fenceline frame the view into the agricultural field beyond.
- Finely textured, green and light brown grasses border the fenceline and then transition into a low, smooth, green grassy field. To the left (west), a narrow, horizontal strip of tan to light brown vegetation stands out against the more vibrant greens in the surrounding vegetation.
- Dark green evergreen and medium green deciduous trees form rounded clusters along the
 western fenceline, leading to a regular line of mixed evergreen and deciduous trees along
 the northern edge of both fields and to the northeast. These trees generally enclose the
 view in this area and limit more distant views into the middle and background.

Built Environment

- A flat, grey unpaved roadway curves along the southern border of the foreground field and out of sight to the right.
- A short fence with wooden posts and wire and a dark brown metal swing gate dominates the foreground of the view. The fenceline is also visible along the west side of the field.
- A series of tall vertical poles with short horizontal crossarms (existing Lines #2/#70) extend above the open fields and run northwest out of sight behind the tall trees.

 Multiple thin, horizontal conductor lines cross above the fields connecting the transmission poles.

The primary viewer groups at KOP 102 NW are motorists traveling along Rt. 3, as well as area residents. Motorists and area residents would have medium to high sensitivity to the changes in visual conditions at this location. For motorists on Germanna Highway, sensitivity may be moderated by speed and the direction of travel, as well as the presence of screening vegetation.

2.1.3.2 SIMULATED CONDITIONS WITH PROPOSED PROJECT



FIGURE 6 KOP 102 NW, SIMULATED CONDITIONS

Mt. Pony Route 1 is less than 0.1-mile north of KOP 102 NW (Figure 6). The route crosses the open field in the foreground of this view. It is collocated with Dominion Existing Lines #2/#70. The routes (as well as the existing Lines) are highly perceptible in the foreground but are generally screened by existing trees as they pass from the foreground to middle ground. From KOP 102 NW, the proposed Project would result in changes to the visual characteristics of the landscape, as described below.

Landforms

• There would be no discernable changes to the landform/terrain.

Vegetation

• Ground-level clearing necessary for Project construction would result in no perceptible changes to vegetation.

Built Environment

- The route would add vertical poles and thin, horizontal overhead conductors to the landscape. Because the proposed line is collocated with Existing Lines #2/#70, the visual changes from the new poles and conductors are concentrated along one area of the landscape.
- The series of new, repetitive vertical poles with short, horizontal crossarms are similar in form to other existing transmission poles already present on the landscape. While similar,

the new structures increase the number of large, visually dominant forms in the foreground of viewshed of this KOP.

• The new overhead conductors add thin, parallel, horizontal lines above the rolling, agricultural fields in this location. The new horizontal lines are highly visible against the open sky in the foreground and increase the level of visual clutter in the area.

Similar to KOP 102 E, the proposed route in this location is also collocated with Dominion Existing Lines #2/#70 to help concentrate visual resource changes. This helps mitigate the additional vertical and horizontal forms and lines that are added to the landscape from the proposed Project. As such, the changes in visual conditions at this location would be small to medium.

2.1.4 KOP 104

2.1.4.1 EXISTING CONDITIONS



FIGURE 7 KOP 104, EXISITING CONDITIONS

KOP 104 is on the east side of the T-intersection of The Mountain Road and Rt. 3 (Figure 7). The KOP faces west and is on a highway corridor that is bordered on both sides by a mix of taller vegetation. The characteristics of the landscape visible from KOP 104 are described below.

Landforms

• In general, the terrain in this area along Rt. 3 is relatively flat with some low hills. From this KOP, the landscape slopes gently uphill to the left in the foreground.

- A dense mix of medium to dark green ground vegetation, shrubs, and trees border both sides of the highway. This vegetation forms irregular walls that enclose views to the highway corridor.
- Ground vegetation and grasses add subtle textures and muted colors that complement the grays of the roadway. A thin, low, strip of grass delineates the median.

- The shrubs and trees add rounded and amorphous forms and various shades of green to the landscape. The trees add taller features to the view and create an uneven, horizontal line across the sky.
- Small gaps in vegetation on the left side of the road provide views of dense trees in the middle ground.

Built Environment

- A flat, smooth, grey, paved four-lane road (Rt. 3) bisects the view and creates strong linear forms.
- Short, silver-grey guardrails with black and yellow striped ends parallel both sides and add subtle horizontal lines along the roadway.
- Tall, thin, vertical, light grey, wooden distribution poles parallel the road in the foreground. Multiple thin, horizontal, overhead lines extend between the poles above the roadside vegetation.
- A single, tall, vertical transmission pole with short horizontal crossarms extends above the vegetation on the lefthand side of the view in the middle ground. The overhead, horizontal conductors are barely perceptible at this distance.

The primary viewer groups at KOP 104 are motorists traveling along Rt. 3. Motorists would have medium sensitivity to the changes in visual conditions at this location. Similar to other KOPs along Rt. 3, motorists' perception of and sensitivity to the new structures may be tempered by their travel speed and direction and the presence of screening vegetation.

2.1.4.2 SIMULATED CONDITIONS WITH PROPOSED PROJECT

Mt. Pony Route 1 is about 0.4-mile west of KOP 104. The route runs across the open fields in this area before crossing Rt. 3 near KOP 102. Existing vegetation on both sides of Rt. 3 screen views of the proposed Project, so there would be no change in visual conditions at KOP 104.

2.1.5 KOP 108 CR

2.1.5.1 EXISTING CONDITIONS



FIGURE 8 KOP 108 CR, EXISTING CONDITIONS

KOP 108 CR is on Blackjack Road 0.8-mile southwest of the intersection with Batna Road (Figure 8). The KOP faces north and is on a rural road bordered by flat, open fields and several types of human modifications. The characteristics of the landscape visible from KOP 108 CR are described below.

Landforms

The landscape is largely smooth and flat with a gentle hill on the left side of the view.

Vegetation

- The foreground is dominated by an expansive field with medium green grasses and a mowed shoulder along the left side of Blackjack Road.
- A grassy shoulder that quickly transitions into a mix of taller, green shrubs and trees borders the right side of Blackjack Road.
- A dense line of trees that parallels the north side of Alvere Road screens views to the north. The mix of deciduous and coniferous trees creates a visual break between the low grassy field and sky. The uneven line and differing forms that characterize the top of the trees provide periodic opportunities to view taller landscape features beyond the trees.

Built Environment

- A flat, smooth, grey, paved two-lane road (Blackjack Road) runs along the right side of the view
- A tall, thin, vertical, light grey, wooden distribution pole sits on the left side of Blackjack Road near the intersection with Alvere Road. Several thin, horizontal overhead lines are slightly perceptible near the distribution pole.
- A series of tall, vertical poles (part of existing Lines #2/#70) extend above the background vegetation on the lefthand side of the view.
- A cell phone tower rises above the background tree line in the center of the view. This thin, gray, vertical feature is the tallest structure visible on the landscape from this location.

The primary viewer groups at KOP 108 CR are motorists traveling along Blackjack Road, as well as area residents. Motorists and area residents would have medium to high sensitivity to the changes in visual conditions at this location.

2.1.5.2 SIMULATED CONDITIONS WITH PROPOSED PROJECT



FIGURE 9 KOP 108 CR, SIMULATED CONDITIONS

Mt. Pony Route 1 is more than 0.1-mile north of KOP 108 CR (Figure 9). The route crosses the open field that characterizes this view and is highly perceptible in the foreground, due to the scale and height of the poles. From KOP 108 CR, the proposed Project would result in changes to the visual characteristics of the landscape, as described below.

Landforms

• There would be no discernable changes to the landform/terrain.

Vegetation

- Several trees on the lefthand end (west) of the tree line that runs along the north side of Alvere Road would be cleared to facilitate Project construction.
- The tree removal decreases the variability in form and lines on the landscape and opens views into the middle ground. This more expansive view reveals additional low agricultural fields in the foreground and a more distant line of trees.

Built Environment

- The route would add vertical poles and thin, horizontal overhead conductors to the landscape. The line is visible as it crosses Blackjack Road, parallels the south side of Alvere Road, and then continues to the west.
- The proposed line adds a series of new, repetitive vertical poles with short, horizontal crossarms to the landscape. Because these structures are primarily in the foreground at this location, their height and scale make them visually prominent.
- The new overhead conductors add slightly undulating, thin, parallel, horizontal lines above the field in this location. The new horizontal lines are highly visible against the open sky in the foreground but disappear (are not perceptible) in the middle ground. Some of the lower lines are partially absorbed into the trees that border Alvere Road.

Due to the additional vertical and horizontal forms and lines, and scale of the transmission line within the foreground of KOP 108 CR, the changes in visual conditions at this location would be medium to large.

2.1.6 KOP 123

2.1.6.1 EXISTING CONDITIONS



FIGURE 10 KOP 123, EXISTING CONDITIONS

KOP 123 is on the northeast side of the intersection of Rosson Lane and South East Street (Figure 10). The KOP faces east on a tree-lined residential road within the Town of Culpeper. The characteristics of the landscape visible from KOP 123 are described below.

Landforms

• The landscape is largely flat and smooth. The terrain gently slopes downhill to the east.

Vegetation

- A mix of landscaped lawns and forested areas are visible at this location.
- Mowed, smooth, grassy lawns with occasional dark green shrubs and trees around several
 homes border the right side of Rosson Lane. Tall deciduous trees and flowering shrubs
 border the left side of Rosson Lane. These trees, along with the tall trees on the right side
 of Rosson Lane create a vegetative wall that enclose and screens views beyond the
 foreground.

Built Environment

- Rosson Lane appears as a short strip of flat, smooth, grey asphalt that bisects the lower half of the view in this location.
- Multi-story, geometric residences with slanted roofs line both sides of Rosson Lane. These
 homes add several colors (yellow, white, grey) to the landscape that generally complement
 the natural hues in the surrounding vegetation.
- Tall, thin, vertical, light brown, wooden telecommunication poles parallel the left side of Rosson Lane, with associated horizontal conductor lines paralleling and crossing the roadway.

The primary viewer group at KOP 123 is local residents. Local residents would have high sensitivity to changes in visual conditions in this location.

2.1.6.2 SIMULATED CONDITIONS WITH PROPOSED PROJECT

Tech Park Routes 1, 2, and 3 (which share the same alignment in this area) are more than 0.1-mile east of KOP 123. The existing, tall, mature trees at the eastern end of Rosson Lane block views of the proposed Project; therefore, the Project would result in no change in visual conditions at this KOP.

2.1.7 KOP 125

2.1.7.1 EXISTING CONDITIONS

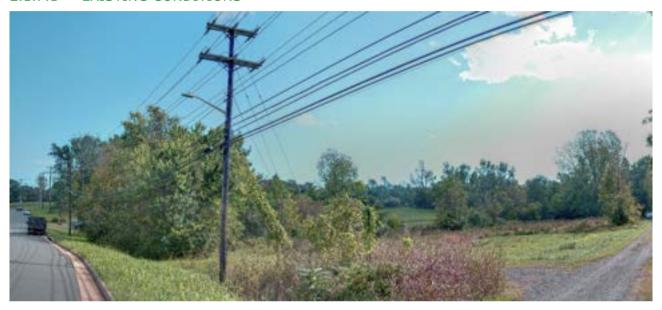


FIGURE 11 KOP 125, EXISTING CONDITIONS

KOP 125 is on the south side of East Chandler Street at the existing Culpeper Substation, 0.1-mile southeast of the intersection with South East Street (Figure 11). The KOP faces southeast and is characterized by a mix of sloping open areas, taller shrubs and trees, roadside vegetation, and a rural road paralleled by a distribution line. The characteristics of the landscape visible from KOP 125 are described below.

Landforms

• The terrain is undulating with low hills and slight depressions that add some variety in height to the landscape.

- On the righthand side of the road, a grassy shoulder transitions into clusters of shrubs and taller trees. The shrubs and trees add amorphous forms and medium textures to the landscape.
- To the right of the roadside vegetation, a mix of open, grassy fields are interspersed with and bordered by taller trees. This diversity of vegetation creates contrasting areas of flat, smooth fields, patchy, coarse clusters of taller grasses and shrubs, and dense lines of tall trees.
- The vegetation is typified by a variety of neutral to cool colors, including yellow, reddishbrown, tan, and various shades of green.

Built Environment

- A flat, smooth, grey, paved two-lane road (East Chandler Street) delineates the left side of the view.
- An unpaved medium grey gravel driveway is visible along the right side of the view.
- A repeating series of tall, thin, vertical, medium grey, wooden distribution poles parallels
 the right side of the road. These poles and their associated conductors are especially
 noticeable in areas without adjacent taller vegetation. Where they are located in front of
 clusters of shrubs and trees, the poles and conductions are partially absorbed into this
 adjacent vegetation.
- Another distribution line that parallels the far side of the open field to the southeast is barely perceptible in front of the line of trees that borders the far end of the field.

The primary viewer groups at KOP 125 are motorists traveling along East Chandler Street, as well as area residents. Motorists and area residents would have medium to high sensitivity to the changes in visual conditions at this location.

2.1.7.2 SIMULATED CONDITIONS WITH PROPOSED PROJECT



FIGURE 12 KOP 125, SIMULATED CONDITIONS

Tech Park Routes 1, 2, and 3 (which share the same alignment in this area) are more than 0.2-mile south-southeast of KOP 125 (Figure 12). The proposed routes would be visible through a new break in the vegetation (cleared to facilitate construction of the line). From KOP 125, the proposed Project would result in changes to the visual characteristics of the landscape, as described below.

Landforms

• There would be no discernable changes to the landform/terrain.

- Construction of the proposed route would result in a gap in the wall of vegetation that encloses adjacent field and currently limits more distant views.
- The removal of vegetation would decrease the density of forms and colors and disrupt the contiguous wall of vegetation that characterizes this portion of the view.

Built Environment

- The route would add vertical poles and thin, horizontal overhead conductors that are clearly visible through the new gap in vegetation.
- The Project's tall, linear poles and thin, overhead conductors would repeat the vertical and horizontal lines and forms that already exist on the landscape (specifically, the distribution line that runs parallel to East Chandler Street).
- The concentration of new vertical and horizontal lines in the gap in the vegetation would draw the viewer's eye to this location.

Due to their distance from this location, the Tech Park route structures would appear shorter and smaller than nearby trees but would be more prominent distribution line along East Chandler Street. The degree of change in visual conditions from the proposed route would be small from KOP 125.

2.1.8 KOP 140

2.1.8.1 EXISTING CONDITIONS



FIGURE 13 KOP 140, EXISTING CONDITIONS

KOP 140 is on the northwest side of the intersection of Old Fredericksburg Road and Wolford Street (Figure 13). The KOP faces east on a tree-lined residential road within the Town of Culpeper. The characteristics of the landscape visible from KOP 140 are described below.

Landforms

• The landscape is largely flat and smooth, gently sloping downhill to the east.

- Landscaped deciduous trees are planted at regular intervals along the sidewalk on the left side of Wolford Street and in the yards on the right side of Wolford Street. Tall mature trees are also visible towering above residences from back yards providing additional screening.
- Maintained and mowed grassy shoulders, lawns, and slopes are visible along Wolford Street.

 A dense wall of mature medium to dark green trees frames the background of the view at the terminus of Waldorf Street.

Built Environment

- The flat, smooth, grey, paved two-lane roads of Old Fredericksburg Road and Wolford Street dominate the foreground. Old Fredericksburg Road runs to the left and out of view in the immediate foreground. Wolford Street runs downhill before terminating at a parking lot to the right.
- Streetlamps parallel the left side of Wolford Street at regular intervals as rounded black vertical features with a white and frosted glass bulb at the top.
- Multiple road signs parallel Wolford Street at the intersection and to the east.
- Two-story residences and outbuildings face both roadways, with associated paved driveways. These homes add tan, light yellow, white, and dark grey colors to the landscape and compliment the nature hues in the surrounding vegetation.
- A black chain-link fence denotes the perimeter of the business on the left side of Wolford Street. Partial views of school buildings are visible on the left side of Wolford Street downslope of the chain-link fence.
- A tall, thin, vertical, light green-grey, wooden telecommunication pole stands on the left side of the intersection, with associated horizontal conductor lines and is partially skylined above the treeline.

The primary viewer groups at KOP 140A are motorists traveling along Old Fredericksburg Road and Wolford Street and local residents. Area residents would have medium to high sensitivity to the changes in visual conditions at this location, and motorists would have a low to medium sensitivity.

2.1.8.2 SIMULATED CONDITIONS WITH PROPOSED PROJECT



FIGURE 14 KOP 140, SIMULATED CONDITIONS

Tech Park Routes 1, 2, and 3 (which share the same alignment in this area) and Chandler Substation are 0.2-mile east of KOP 140 (Figure 14). The proposed route would be visible above the treeline at the terminus of Wolford Street. From KOP 140, the proposed Project would result in changes to the visual characteristics of the landscape, as described below.

Landforms

• There would be no discernable changes to the landform/terrain.

Vegetation

• There would be no discernable changes to the vegetation.

Built Environment

- The route would add vertical poles and thin, horizontal overhead conductors that are clearly visible above the wall of trees at the terminus of Wolford Street to the east.
- The tall, linear poles and thin, overhead conductors would repeat the vertical and horizontal lines and forms that already exist on the landscape (specifically, the distribution line that crosses the intersection in the foreground).
- The concentration of new vertical and horizontal lines in the gap in the vegetation draws the viewer's eye to this location.

Due to their distance from this location, the height and scale of the new transmission line structures tower above nearby trees, but blend with the existing vertical structures of the distribution line and streetlights. The degree of change in visual conditions from the proposed route would be small from KOP 140.

2.1.9 KOP 141

2.1.9.1 EXISTING CONDITIONS



FIGURE 15 KOP 141, EXISTING CONDITIONS

KOP 141 is within a parking lot on the east side of Rt. 3, 0.1-mile southeast of the intersection with McDevitt Drive (Figure 15). The KOP faces northeast and has views of Open Door Baptist Church and neighboring commercial properties within an open landscape. The characteristics of the landscape visible from KOP 141 are described below.

Landforms

- The landscape is largely smooth and flat with subtle undulations perceptible in the foreground.
- Buildings and vegetation screen panoramic views of the landscape and surrounding area.

Vegetation

- Several deciduous trees, one short branching tree, and one rounded tree that is taller than the church building sit on the grassy lawn of the church, to the right of the main entrance.
- Medium green mature trees border the church's south property boundary. These trees screen additional views to the right (south-southeast) of the church.

Dense mature evergreen and deciduous trees border the eastern property boundary of the commercial area screening views to the northeast beyond the property.

Built Environment

- The foreground is dominated by the smooth, medium grey, paved and striped parking lot for Open Door Baptist Church—a red brick and white siding structure with a white spire—and its associated school building.
- A flagpole, several signs, and an overhead light for the parking lot associated with the church are visible in the foreground of the view in front of the church.
- To the left of the church, a chain link fence with barbed wire along the top follows the property boundary of a commercial property with a windowless off-white and medium brown building, an unpaved parking area with several truck trailers, and stacked wooden pallets and products.
- A gated business property is visible to the east, behind the church. The upper portion of a tan and light brown building is visible above the fenceline and vegetated property boundary. Mature trees surround the building and screen views beyond this building.

The primary viewer groups at KOP 141 are motorists traveling along Rt. 3, as well as area residents visiting the church. Churchgoers would have a low sensitivity to the changes in visual conditions at this location since their primary focus is indoors, and motorists would have a low sensitivity, because this view is perpendicular to the direction of travel along Rt. 3.

2.1.9.2 SIMULATED CONDITIONS WITH PROPOSED PROJECT

Tech Park Route 1

Tech Park Route 1 is more than 0.5-mile northeast of KOP 141. The existing, tall, mature trees framing the background of the view and existing commercial area block views of the proposed Project; therefore, Route 1 would result in no change in visual conditions at this KOP.

Tech Park Route 2



FIGURE 16 KOP 141, SIMULATED CONDITIONS

From KOP 141, portions of Tech Park Route 2 (0.2-mile to the east) would be visible above the treeline and buildings (Figure 16). From KOP 141, the proposed Project would result in changes to the visual characteristics of the landscape, as described below.

Landforms

There would be discernible changes to landforms or vegetation from this KOP.

Built Environment

- The route would add vertical poles and thin, horizontal overhead conductors that are clearly visible above the trees and church building to the east.
- The tall, linear poles and thin, overhead conductors repeat the vertical and horizontal lines and forms that already exist on the landscape (specifically, the overhead lighting in the parking lot and church steeple).

Due to their distance from this location, the height and scale of the new transmission line structures stretch above nearby trees, but blend with the existing vertical structures and trees within the view. The degree of change in visual conditions from the Route 2 would be negligible to small from KOP 141.

Tech Park Route 3



FIGURE 17 KOP 141, SIMULATED CONDITIONS

From KOP 141, Tech Park Route 3 (0.4-mile to the east) would be partially visible above the treeline and buildings (Figure 17). From KOP 141, the proposed Project would result in changes to the visual characteristics of the landscape, as described below.

Landforms

• There would be discernable changes to landforms or vegetation from this KOP.

Built Environment

- The route would add vertical poles and thin, horizontal overhead conductors that are clearly visible above the trees and church building to the east.
- The tall, linear poles and thin, overhead conductors repeat the vertical and horizontal lines and forms that already exist on the landscape (specifically, the overhead lighting in the parking lot and church steeple).

Due to their distance from this location, the height and scale of the new transmission line structures stretch above nearby trees, but blend with the existing vertical structures and trees within the view. The degree of change in visual conditions from the Route 3 would be negligible to small from KOP 141. Compared to Route 2, more Route 3 structures visible, and are a similar height.

2.1.10 KOP 143

2.1.10.1 EXISTING CONDITIONS



FIGURE 18 KOP 143, EXISTING CONDITIONS

KOP 143 is within the Culpeper National Cemetery Annex, on the south side of East Chandler Street, south of the intersection with Electric Avenue (Figure 18). The KOP faces south and has views of the cemetery grounds and surrounding rural areas. The characteristics of the landscape visible from KOP 143 are described below.

Landforms

- The landscape is largely smooth and flat with subtle undulations perceptible in the foreground.
- The treeline that crosses the view obscures views beyond the cemetery grounds of the surrounding landscape.

Vegetation

- The open, maintained grassy area of the cemetery stretches behind and to the right of the columbaria.
- The righthand side of the road is dominated by a tall line of darker green evergreens interspersed with shorter deciduous trees. This line of trees creates a mostly solid, rectangular form with small, irregular gaps through which the sky is visible.
- Mature deciduous trees border the fence line screening views beyond the property line.
 Through several gaps in the trees, an open grass-covered field is visible with a continuation of screening mature trees to the southwest.

Built Environment

 The foreground is dominated by the medium grey paved roadway that provides access to the cemetery and park. A light tan cement sidewalk borders the roadway leading to two brick-sided columbaria and a partially skylined flagpole. Several black metal benches sit within the memorial area. • A chain-link fence denotes the property boundary of the cemetery, running from east to west within the view.

The primary viewer groups at KOP 143 are area residents and people visiting the cemetery as either pedestrians or slow-moving motorists. Area residents and cemetery visitors would have a medium sensitivity to the changes in visual conditions at this location.

2.1.10.2 SIMULATED CONDITIONS WITH PROPOSED PROJECT



FIGURE 19 KOP 143, SIMULATED CONDITIONS

Tech Park Routes 1, 2, and 3 (which share the same alignment in this area) are 0.2-mile south-southeast of KOP 143 (Figure 19). The proposed route would be visible above the treeline to the southeast, while Palomino Substation would be fully screened by the treeline along the south property line. From KOP 143, the proposed Project would result in changes to the visual characteristics of the landscape, as described below.

Landforms

• There would be no discernable changes to the landform/terrain.

Vegetation

There would be no discernable changes to the vegetation.

Built Environment

- The route would add vertical poles and thin, horizontal overhead conductors that are clearly visible above the tops of shorter trees along the property boundary to the south.
- The tall, linear poles and thin, overhead conductors repeat the vertical and horizontal lines and forms that already exist on the landscape (specifically, the telecommunication line in the far-right corner of the view). While the new vertical line rises above the trees, it does not significantly attract the viewer's eye.

The height of Project structures would extend above the treeline at this location, attracting the eye. Due to the distance of the Tech Park Lines from this location, the perceived scale of these structures would be similar to existing telecommunication lines within the view. As a result, the Project would create a small degree of visual change in visual conditions at KOP 143.

2.1.11 KOP 144 SW

2.1.11.1 EXISTING CONDITIONS



FIGURE 20 KOP 144, EXISTING CONDITIONS

KOP 144 is on the southeast side of McDevitt Drive, at the T-intersection with East Chandler Street (Figure 20). The KOP faces southwest and has views of the rural, rolling landscape. The characteristics of the landscape visible from KOP 144 SW are described below.

Landforms

• The landscape is largely smooth and flat in the foreground but slopes downhill to the south and has gentle hills in the background to the south.

Vegetation

- The treeline and wooden fencing bisects the view, with rural landscape to the left and the McDevitt Drive roadway to the right.
- The open, mowed field is bordered by bright green groundcover vegetation, several tall, tufted grass species, and several other dark brown plants along the fenceline.
- The mowed field slopes downward to lines of mature deciduous trees.
- A dense line of deciduous trees screen views to the northwest, constraining views beyond the road.

Built Environment

- The smooth, paved and striped roadway and vegetated median of McDevitt Drive is prominent in the foreground. Several road signs are visible on both sides of the road.
- A short fence with repeating wooden posts and wire parallels the road in the foreground.

The primary viewer groups at KOP 144 are motorists travelling along McDevitt Drive and Keyser Road. Motorists would have medium sensitivity to the changes in visual conditions at this location, although their sensitivity may be moderated by speed and the direction of travel.

2.1.11.2 SIMULATED CONDITIONS WITH PROPOSED PROJECT



FIGURE 21 KOP 144, SIMULATED CONDITIONS

Tech Park Route 1 is less than 0.1-mile southwest of KOP 144 (Figure 21). The route crosses McDevitt Drive in the foreground, paralleling existing Line #70. Because it crosses an open agricultural field, Route 1 is visible into the middle ground, where the conductors are absorbed into the more distant built environment and landforms. From KOP 144 SW, the proposed Project would result in changes to the visual characteristics of the landscape, as described below.

Landforms

There would be no discernable changes to the landform/terrain associated with the Project.
 The changes visible in the simulation are associated with planned grading for the Culpeper Technology Zone (CTZ).

Vegetation

• The Project would require extensive removal of ground level vegetation in the immediate foreground and trees within the middle ground.

Built Environment

- CTZ grading would remove the existing fenceline and bordering vegetation. While not
 associated with the Project, these changes would be noticed as a cumulative effect of
 projects in the area.
- Several buildings constructed to the southeast as part of CTZ (not depicted in the simulation for this KOP) would screen of the lower portions of the transmission structures in the middle ground to background of the view.
- Route 1 would add a series of new, repetitive vertical poles with short, horizontal crossarms to the landscape. Although collocated with and similar in appearance to existing Line #70, the Project features would be large, visually dominant forms in the viewshed.
- The new overhead conductors add thin, parallel, horizontal lines above the adjacent fields. The new horizontal lines are highly visible against the open sky and increase the level of visual clutter in the area. They are most perceptible in the foreground and tend to disappear against the sky into the middle ground.

Tech Park Route 1 is collocated with existing Line #70 in this area. While collocation mitigates the Project's additional vertical and horizontal forms and lines, the changes in visual conditions at this location would nonetheless be medium to large.

2.1.12 KOP 144 W

2.1.12.1 EXISTING CONDITIONS



FIGURE 22 KOP 144 W EXISTING CONDITIONS

KOP 144 W is on the southeast side of McDevitt Drive, in the same location as KOP 144 SW (Figure 22). The KOP faces west, and has views of the rural, rolling landscape. The characteristics of the landscape visible from KOP 144 W are described below.

Landforms

- The landscape is largely smooth and flat in the foreground but slopes uphill to the north, beyond McDevitt Drive.
- Dense treelines along the roadway and the northern hillside screen views of the surrounding landscape.

Vegetation

- The treeline visible on the left side of McDevitt Drive screens views to the southwest—including existing Line #70—from this view angle. This is the same treeline as in the central portion of the view from KOP 144 SW.
- Rounded clusters of trees border the right side of McDevitt Drive and block more distant views.
- A dense, dark green wall of mature evergreen and deciduous trees to the north, on the left side of the existing Line #70 right-of-way, limits views to the right.
- Tall grasses border the shoulders of McDevitt Drive and fill the vegetated median that bisects the roadway.

Built Environment

• The flat, smooth, grey, striped, paved roadway of McDevitt Drive dominates the foreground. The roadway is divided by a vegetated at-grade median.

- Several road signs are visible on both sides of McDevitt Drive, along with a street sign at the intersection of McDevitt Drive and East Chandler Street.
- Existing Line #70 includes a series of tall vertical poles with short horizontal crossarms, a cut in the treeline on the hill to the north of McDevitt Drive, and conductors that pass directly overhead.
- Short wooden post and wire fences parallel both sides of the roadway and define property boundaries. Posts are visible closer to the KOP and either drop below grade (right side of the road) or are obscured by overhanging tree branches (left side).

The primary viewer groups at KOP 144 W are motorists travelling along McDevitt Drive and Keyser Road. Motorists would have medium sensitivity to the changes in visual conditions at this location, although their sensitivity may be moderated by speed and the direction of travel. Motorists would have prolonged views of the corridor as the route parallels the roadway on the west side of the roadway.

2.1.12.2 SIMULATED CONDITIONS WITH PROPOSED PROJECT



FIGURE 23 KOP 144 W, SIMULATED CONDITIONS

Tech Park Route 1 is less than 0.1-mile southwest of KOP 144 W (Figure 23). The route crosses McDevitt Drive in the foreground, paralleling existing Line #70. The route is prominently visible into the middle ground, where its structures and conductors are absorbed into the landforms. From KOP 144 W, the proposed Project would result in changes to the visual characteristics of the landscape, as described below.

Landforms

• There would be no discernable changes to the landform/terrain associated with the project. The changes visible in the simulation are associated with planned CTZ grading.

Vegetation

• The Project would require extensive removal of ground level vegetation in the immediate foreground and trees in the middle ground.

Built Environment

- Route 1 would add a series of new, repetitive vertical poles with short, horizontal
 crossarms to the landscape. Although collocated with and similar in appearance to existing
 Line #70 near the center of the view, the Project features would be large, visually
 dominant forms in the viewshed.
- The new overhead conductors add thin, parallel, horizontal lines above McDevitt Drive and adjacent fields. The new horizontal lines are highly visible against the open sky and increase the level of visual clutter in the area. They are most perceptible in the foreground and tend to disappear against the sky into the middle ground.
- Due to clearing associated with CTZ, the Project's structures are clearly visible in the landscape to the west and to the southwest, where the route parallels McDevitt Drive.

Tech Park Route 1 is collocated with existing Line #70 in this area. While collocation mitigates the Project's additional vertical and horizontal forms and lines, the changes in visual conditions at this location would nonetheless be medium to large.

2.1.13 KOP 146

2.1.13.1 EXISTING CONDITIONS



FIGURE 24 KOP 146, EXISTING CONDITIONS

KOP 146 is on the northeast side of Rt. 3, at the intersection with the off-ramp from southbound US 15/29 (Figure 24). The KOP faces east and includes views of the rural and tree covered landscape. The characteristics of the landscape visible from KOP 146 are described below.

Landforms

- The landscape is largely smooth and flat in the middle ground and background with an uphill slope to the KOP.
- Mature trees blanket much of the view, screening clear views of the landscape.
- The horizon line is defined by the dense blanket of trees in the background

Vegetation

- Grasses border the left side of the US 15/29 off-ramp, while dense line of mixed evergreen and deciduous trees screen views to the northeast.
- Grasses transitioning to medium green leafy vegetation cover the sloping right side of the off-ramp. A branching dark green evergreen tree sits in the foreground, screening views to the southeast
- A blanket of mixed evergreen and deciduous trees cover the middle ground and background of the view, with gentle undulations created by differing crown heights.

Built Environment

- The flat, smooth, dark grey, striped, paved roadway of the US 15/29 off-ramp dominates the foreground. In the middle ground, a small segment of the flat US 15/29 roadway is visible between foreground slopes and vegetation. A silver-grey guardrail parallels the right side of the off-ramp introducing a horizontal linear feature to the foreground.
- Several road signs are visible on both sides of the off-ramp and along US 15/29.
- A series of tall vertical poles associated with existing Lines #2/#70 extend above the treeline across the middle ground. Associated thin, linear conductors are visible along the corridor when they extend above the treeline.
- A structure with a corrugated metal roof is visible between a gap in the trees in the center
 of the view. Additional geometric structures are visible on an open hillside in the
 background.

The primary viewer groups at KOP 146 are motorists travelling along Rt. 3 and US 15/29. Motorists would have medium sensitivity to the changes in visual conditions at this location, although their sensitivity may be moderated by speed and the direction of travel.

2.1.13.2 SIMULATED CONDITIONS WITH PROPOSED PROJECT

All Route Alternatives

The location of route alternatives relative to KOP 146 is as follows (see Figure 25, Figure 26, Figure 27, and Figure 28):

- The proposed Mt. Pony Substation is 0.4-mile to the northeast;
- Tech Park Route 1 and Mt. Pony Route 1 share the same corridor, parallel to the south side of US 15/29, 0.5-mile to the northeast;
- Mt. Pony Route 2 is 0.4-mile to the northeast; and
- Tech Park Routes 2 and 3 share the same corridor, parallel to the south side of US 15/29, 0.3-mile to the northeast.

Regardless of the route alternatives selected, the proposed Project would result in changes to landforms and vegetation, as described below.

Landforms

• There would be no discernable changes to the landform/terrain associated with the project. The changes visible in the simulation are associated with planned CTZ grading.

Vegetation

• The Project and, to a greater degree, CTZ development would require extensive ground level vegetation removal in the middleground. This vegetation removal allows for more distant views compared to existing conditions.

From KOP 146, the Project's substation and transmission right-of way would change the visual characteristics of this location from agricultural to open with human-made vertical features. These changes would be consistent with adjacent CTZ development (not depicted in simulations). While partial collocation with existing Lines #2/#70 mitigates some of the Project's vertical and horizontal forms and lines would still be prominent. The subsections below discuss the changes in the built environment and overall magnitude of change in the landscape attributable to each combination of route alternatives visible from KOP 146.

Mt. Pony Route 1 and Tech Park Route 1



FIGURE 25 KOP 146, SIMULATED CONDITIONS

Built Environment

- Mt. Pony Route 1 (including the proposed Mt. Pony Substation) and Tech Park Route 1 would add vertical poles and thin, horizontal overhead conductors to the landscape.
 Although partially collocated with and similar in appearance to existing Lines #2/#70, the Project features would be large, visually dominant forms in the viewshed.
- The new overhead conductors would add thin, parallel, horizontal lines below and in front of the treeline, which would increase the level of visual clutter in the area. Conductors would be most perceptible in the foreground and would tend to disappear against the sky into the middle ground.
- The substation would add geometric structures and rectangular perimeter fencing that would be new elements in the view.
- Existing vegetation would screen views of Tech Park Route 1 to the northeast, north of Mt. Pony Substation.

From KOP 146, the magnitude of change in visual conditions due to Mt. Pony Route 1 and Tech Park Route 1 would be medium.

Mt. Pony Route 2 and Tech Park Route 1



FIGURE 26 KOP 146, SIMULATED CONDITIONS

Built Environment

• Due to the clearing associated with Technology Park, the structures along Mt. Pony Route 2 (including the proposed Mt. Pony Substation) are clearly visible in the landscape to the northeast as the route heads south.

From KOP 146, the magnitude of change in visual conditions due to Mt. Pony Route 2 and Tech Park Route 1 would be medium.

Mt. Pony Route 1 and Tech Park Routes 2 and 3



FIGURE 27 KOP 146, SIMULATED CONDITIONS

Built Environment

 Several new poles and conductors would be visible south of US 15/29, on the left side of the view. • The new overhead conductors add thin, parallel, horizontal lines that increase the level of visual clutter in the area. Conductors are most perceptible in the foreground and tend to disappear against the sky into the middle ground.

From KOP 146, the magnitude of change in visual conditions due to Mt. Pony Route 1 (including the proposed Mt. Pony Substation) and Tech Park Routes 2 and 3 would be medium.

Mt. Pony Route 2 and Tech Park Routes 2 and 3



FIGURE 28 KOP 146, SIMULATED CONDITIONS

Built Environment

• The new overhead conductors add thin, parallel, horizontal lines above (Tech Park Routes 2 and 3) and below the treeline (Mt. Pony Route 2), and increase the level of visual clutter in the area. They are most perceptible in the foreground and tend to disappear against the sky into the middle ground.

From KOP 146, the magnitude of change in visual conditions due to Mt. Pony Route 2 (including the proposed Mt. Pony Substation) and Tech Park Routes 2 and 3 would be medium.

2.1.14 KOP 154

2.1.14.1 EXISTING CONDITIONS



FIGURE 29 KOP 154, EXISTING CONDITIONS

KOP 154 is on the northwest side of the US 522/Mt. Pony Road intersection (Figure 29). The KOP faces southeast across the open roadway to the densely forested views to the east. The characteristics of the landscape visible from KOP 154 are described below.

Landforms

The landscape is largely smooth in the foreground with a low hill in the middle ground.

Vegetation

- A band of grasses, broad-leafed vegetation, and low woody shrubs border US 522 and Mt.
 Pony Road.
- Dense mixed deciduous and evergreen trees form a solid wall along the roadways, restricting views of the landscape and views outside of the roadway corridors.
- A densely forested hillside is visible in the middle ground along the Mt. Pony Road roadway corridor.

Built Environment

- The flat, grey, striped roadway and tan concrete median of U.S 522 dominates the foreground, extending across the view. The flat, grey, striped roadway for Mt. Pony Road extends into the view drawing the viewer's eye to the middle ground.
- Road signs are visible in the US 522 median and to either side of the intersection in the middle of the view.
- A smooth wooden utility pole sits below the treeline to the right of Mt. Pony Road. Multiple
 thin, horizontal conductor lines cross US 522 to the right and follow the utility corridor
 across the view. The conductors are skylined when they cross Mt. Pony Road.
- A geometric structure is partially visible above the treeline at the curve of Mt. Pony Road.

The primary viewer groups at KOP 154 are motorists traveling along the roadways, as well as area residents. Motorists and area residents would have medium to high sensitivity to the

changes in visual conditions at this location. For motorists, sensitivity may be moderated by speed and the direction of travel.

2.1.14.2 SIMULATED CONDITIONS WITH PROPOSED PROJECT



FIGURE 30 KOP 154, SIMULATED CONDITIONS

Mt. Pony Route 2 is less than 0.1-mile east of KOP 154 (Figure 30). The route parallels the east side of US 522. From KOP 154, the proposed Project would result in changes to the visual characteristics of the landscape, as described below.

Landforms

• There would be no discernable changes to the landform/terrain.

Vegetation

- Tree necessary for the Project immediately adjacent to US 522 would remove some taller trees closest to the road, resulting in a noticeable change in overall vegetation height.
- Other trees and dense vegetation would remain in place and the view would retain its overall forested character.

Built Environment

- Mt. Pony Route 2 would add vertical poles and thin, horizontal overhead conductors to the landscape. The visual changes from this infrastructure are focused along the US 522 corridor.
- The series of new, vertical poles with short, horizontal crossarms are similar in form to existing transmission poles already present in the study area, but would appear much larger in scale, due to viewer proximity. The new structures would also be large, visually dominant forms in the viewshed.
- The new overhead conductors add thin, parallel, horizontal lines above the treeline on the east side of US 522. The new horizontal lines are highly visible against the open sky and increase the level of visual clutter in the area.

Collocation of Route 2 with an existing distribution line corridor concentrates and slightly mitigates the Project's built environment elements. From KOP 154, the magnitude of change in visual conditions would be medium.

2.1.15 KOP 155

2.1.15.1 EXISTING CONDITIONS

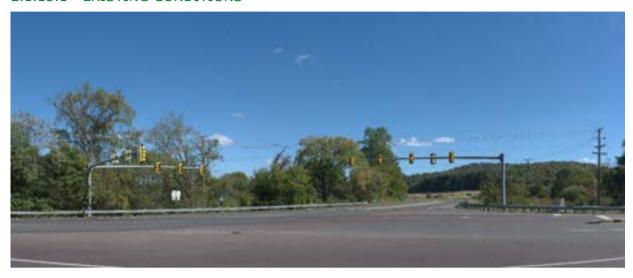


FIGURE 31 KOP 155, EXISTING CONDITIONS

KOP 155 is on the southwest side of the T-intersection of Germanna Highway (US 522/Rt. 3) and Zachary Taylor Highway (US 522)(Figure 31). The view faces east and includes the roadways and nearby hills. The characteristics of the landscape visible from KOP 155 are described below.

Landforms

- The foreground of the landscape is largely smooth and flat, while a hill is prominent on the right in the middle ground background on the right.
- Mature trees obscure much of the view beyond the roadway corridor to the left (north).

Vegetation

- Light to medium green grasses bordering the roadsides transition into leafy shrubs and tall, branching, mature deciduous and evergreen trees, which screen views to the north and south.
- An open field with mowed vegetation/crops on an uphill slope is visible in the middle ground in the right-center of the view, on the right side of Rt. 3.
- A vegetated median divides Rt. 3 travel directions with light green grasses and a dark green leafy tree in the middle ground.
- A blanket of mixed evergreen and deciduous trees cover the hillside to the right of Rt. 3, forming the background of the view.

Built Environment

• The flat, smooth, dark grey and reddish, striped, paved roadways of the Germanna Highway/Zachary Taylor Highway intersection dominate the foreground. The curving roadway of Rt. 3 leads the viewer's eye to towards the middle ground.

- Silver-grey guardrails parallel the edges of the roads, introducing a horizontal linear feature to the foreground.
- Yellow and black traffic signals and cameras on vertical posts, mounted on silver-grey horizontal arms reach across the roads, adding color and smooth textures. Several white road signs visible at the intersection and along Rt. 3 also add color.
- A series of tall vertical distribution poles extend above the tree-crowns, while the associated thin, linear conductors cross and run along the roads. These elements add vertical and horizontal linear features to the foreground and middle ground.

The primary viewer groups at KOP 155 are motorists travelling along US 522/Rt. 3. Motorists and area residents would have medium sensitivity to the changes in visual conditions at this location. For motorists, sensitivity may be moderated by speed and the direction of travel, as well as the existing built environment elements at and near this intersection.

2.1.15.2 SIMULATED CONDITIONS WITH PROPOSED PROJECT

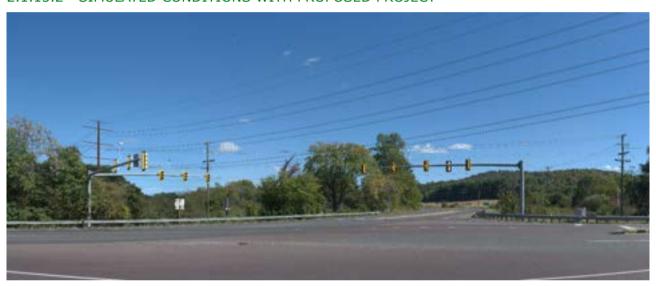


FIGURE 32 KOP 155, SIMULATED CONDITIONS

Mt. Pony Route 2 is less than 0.1-mile east of KOP 155. The route crosses Germanna Highway where it transitions from US 522 to Rt. 3 and parallels the east side of Zachary Taylor Highway (US 522) to the south (Figure 32). Vegetation removal required for the route, as well as the proximity of the viewer to the route allows views of the Project in the foreground and middle ground. From KOP 155, the proposed Project would result in changes to the visual characteristics of the landscape, as described below.

Landforms

There would be no discernable changes to the landform/terrain.

Vegetation

 Tree clearing necessary for the Project immediately adjacent to US 522/Rt. 3 would remove some taller trees closest to the road, resulting in a noticeable change in overall vegetation height, although the forested character of the central part of the view would remain.

Built Environment

- The route would add vertical poles and thin, horizontal overhead conductors to the landscape. The visual changes from the new poles and conductors are focused along the US 522 corridor, and north side of the Rt. 3/US 522 intersection.
- The series of new, repetitive vertical poles with short, horizontal crossarms are similar in form to other existing transmission structures already present on the study area, but would appear much larger in scale, due to viewer proximity. The new structures would also be large, visually dominant forms in the viewshed.
- The new overhead conductors add thin, parallel, horizontal lines above the treeline and within the intersection for Rt. 3/US 522. The new horizontal lines are highly visible against the open sky and increase the level of visual clutter in the area.

Collocation of Route 2 with an existing distribution line corridor concentrates and slightly mitigates the Project's built environment elements. From KOP 155, the magnitude of change in visual conditions would be medium.

2.1.16 KOP 156

2.1.16.1 EXISTING CONDITIONS

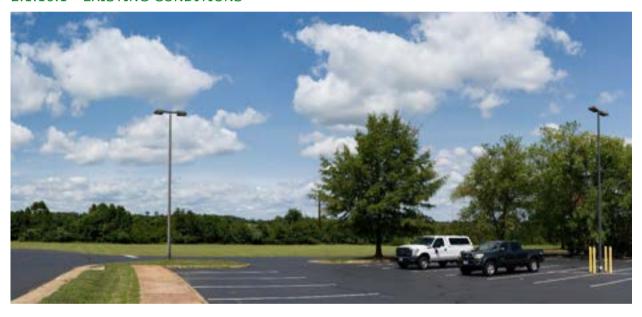


FIGURE 33 KOP 156, EXISTING CONDITIONS

KOP 156 is within the parking lot for the Germanna Community College Daniel Technology Center, 0.1-mile northwest of the US 15/29, east of the interchange with US 522 (Figure 33). The KOP faces northwest and has views of the parking lot, open landscape, and surrounding forested area. The characteristics of the landscape visible from KOP 156 are described below.

Landforms

• The landscape is largely smooth and flat. The land slopes gently up into the middle ground and background.

Vegetation

- Several deciduous trees sit on medium green, landscaped grass islands in the parking lot.
- An open, maintained lawn on the northwest side of the parking lot leads to a dense line of mixed deciduous and evergreen trees.

• Through the gaps in the trees, or where vegetation is lower, the crest of a low hill is visible in the background. Another dense treeline forms the undulating horizon line beyond the middle ground treeline.

Built Environment

- The foreground is dominated by the smooth, black, paved and striped parking lot for the college. Several medium grey smooth vertical poles with overhead lighting on horizontal crossarms are visible. Smooth yellow bollards circle the right-most overhead light.
- The parking lot islands have tan cement curbs. A sidewalk is visible in the immediate foreground, leading the viewer's eye towards the middle ground.
- A series of tall vertical poles for existing Lines #2/#70 extend above the treeline. The associated thin, linear conductors are visible in the right and center of the view. A weatherized steel monopole associated with these lines is nestled in the middle ground treeline, and mostly skylined above the surrounding vegetation.
- Additional thin horizontal conductors are visible through the parking lot trees to the right.
 The lower portion of a vertical, smooth, light brown, wooden utility pole is partially visible below the conductors.

The primary viewer groups at KOP 156 are area residents (i.e., students) and workers associated with Germanna Community College. Area residents would have a low to medium sensitivity to the changes in visual conditions at this location.

2.1.16.2 SIMULATED CONDITIONS WITH PROPOSED PROJECT

All Route Alternatives

The location of route alternatives relative to KOP 156 is as follows (see Figure 34, Figure 35, and Figure 36):

- The Cirrus and Keyser Switching Stations (approved as part of a separate project) are approximately 0.2-mile north;
- Tech Park Route 1 is less than 0.1-mile east;
- Tech Park Routes 2 and 3 are 0.3-mile north. The routes share an alignment, but would have different pole locations; and
- The proposed Palomino Substation is 1.0-mile northwest.

Regardless of the route alternatives selected, the proposed Project would result in no changes to landforms. The subsections below discuss the changes in vegetation and the built environment and overall magnitude of change in the landscape attributable to each route alternative visible from KOP 156.

Tech Park Route 1



FIGURE 34 KOP 156, SIMULATED CONDITIONS

Vegetation

- Tree level clearing for the Project immediately adjacent to the parking lot and along the route corridor would open views of the Route and the switching stations to the north.
- The vegetation removal and grading for the CTZ allows views of skylined structures to the north, including Palomino Substation which will sit 1 mile to the northwest.

Built Environment

- The route would add vertical poles and thin, horizontal overhead conductors that are clearly visible to the north and within the parking lot to the northeast.
- Cirrus and Keyser Switching Stations would be clearly visible, due to vegetation removal within the Route 1 right-of-way, adding industrial features to the view.
- The series of new, repetitive vertical poles with short, horizontal crossarms are similar in form to the existing Line #2/#70 structures other existing transmission poles already present on the landscape, but would appear larger in scale, due to viewer proximity. The new structures would be large, visually dominant forms in the viewshed.
- The new overhead conductors add thin, parallel, horizontal lines above the treeline. The new horizontal lines would be highly visible against the open sky and increase the level of visual clutter in the area.

From this location, the height and scale of the transmission line structures would make them clearly visible within the view, especially where the structures extend above the background treeline. Route 1 would increase the visual clutter and built features within the view. From KOP 156, the degree of change in visual conditions from Route 1 would be medium.

Tech Park Routes 2 and 3



FIGURE 35 KOP 156, SIMULATED CONDITIONS



FIGURE 36 KOP 156, SIMULATED CONDITIONS

Vegetation

• There would be no perceptible change to the dense vegetation that would remain along the northern boundary of the parking lot.

Built Environment

• Routes 2 and 3 would add vertical poles and thin, horizontal overhead conductors that are clearly visible above the trees as the route enters the switching stations from the north.

From this location, the substation and transmission line structures would extend above the treeline, increasing the visual clutter and built features within the view. From KOP 156, The degree of change in visual conditions from Tech Park Route 2 or 3 would be small.

2.1.17 KOP 157 NW

2.1.17.1 EXISTING CONDITIONS



FIGURE 37 KOP 157 NW, EXISTING CONDITIONS

KOP 157 NW is on the walkway in front of the main entrance to Germanna Community College Daniel Technology Center, 0.1-mile northwest of US 15/29, east of the interchange with US 522 (Figure 37). The KOP faces northwest and includes views of an open grassy field and a dense treeline. The characteristics of the landscape visible from KOP 157 NW are described below.

Landforms

The landscape is largely smooth and flat with a gradual sloping downhill to the west.

Vegetation

- The smooth, open, maintained, light to medium green grassy lawn west of the paved walkway dominates the foreground and leads the eye to the middle ground.
- A bold, prominent mixed-height treeline of deciduous and evergreen trees and shrubs, ranging from medium to dark green, borders the west side of the open lawn and screen further views.

Built Environment

- A small area of smooth, tan cement is visible in the lower right foreground of the view.
- A narrow vertical distribution pole rises above the treeline on the right side of the view. The short horizontal crossarms and associated thin linear conductors are also visible.

The primary viewer groups at KOP 157 NW are area residents (i.e., students) and workers associated with the college. Area residents would have a low to medium sensitivity to the changes in visual conditions at this location.

2.1.17.2 SIMULATED CONDITIONS WITH PROPOSED PROJECT

All Route Alternatives

The location of route alternatives relative to KOP 157 NW is as follows:

- The Cirrus and Keyser Switching Stations (approved as part of a separate project) are 0.2mile north-northwest;
- Tech Park Route 1 is 0.1-mile north;
- Tech Park Route 2 is 0.3-mile west; and
- Tech Park Route 3 is 0.3-mile southwest; and
- The Palomino Substation is 1.0-mile northwest.

Regardless of the route alternatives selected, the proposed Project would result in no changes to landforms. The subsections below discuss the changes in vegetation and the built environment and overall magnitude of change in the landscape attributable to each route alternative visible from KOP 157 NW.

Tech Park Route 1



FIGURE 38 KOP 157 NW, SIMULATED CONDITIONS

Tech Park Route 1 would be visible through the break in the treeline on the far side of the lawn (Figure 38). From KOP 157 NW, the proposed Project would result in changes to the visual characteristics of the landscape, as described below.

Vegetation

- Tree clearing for Route 1 would remove the righthand portion of the treeline.
- The vegetation removal and grading for the CTZ allows views of skylined structures to the north, including the proposed Palomino Substation.

Built Environment

- The route would add vertical poles and thin, horizontal overhead conductors that are clearly visible to the north and within the parking lot to the northeast.
- Cirrus and Keyser Switching Stations would be clearly visible, due to vegetation removal within the Route 1 right-of-way, adding industrial features to the view.
- The series of new, repetitive vertical poles with short, horizontal crossarms are similar in form to the existing Line #2/#70 structures other existing transmission poles already present on the landscape, but would appear larger in scale, due to viewer proximity. The new structures would be large, visually dominant forms in the viewshed.

• The new overhead conductors would add thin, parallel, horizontal lines above the treeline. The new horizontal lines would be highly visible against the open sky and would increase the level of visual clutter in the area.

From this location, the height and scale of the transmission line structures would make them clearly visible within the view, especially where the structures extend above the background treeline. Route 1 would increase the visual clutter and built features within the view. From KOP 157 NW, the degree of change in visual conditions from Route 1 would be medium.

Tech Park Route 2



FIGURE 39 KOP 157 NW, SIMULATED CONDITIONS

Tech Park Route 2 would be visible above the treeline on the far side of the open lawn (Figure 39). From KOP 157 NW, the proposed Project would result in changes to the visual characteristics of the landscape, as described below.

Vegetation and Built Environment differences from those listed for Tech Park Route 1 above are mentioned here.

Vegetation

• There would be no perceptible change to the existing dense vegetation along the northern boundary of the parking lot.

Built Environment

- Route 2 would add vertical poles and thin, horizontal overhead conductors that are clearly visible above the trees as the route enters the switching stations from the north.
- The new overhead conductors would add thin, parallel, horizontal lines above the treeline. The new horizontal lines would be highly visible against the open sky and would increase the level of visual clutter in the area.

From this location, the e substation and transmission line structures stretch above the treeline, increasing the visual clutter and built features within the view. From KOP 157 NW, the degree of change in visual conditions from the proposed route would be small.

Tech Park Route 3

Tech Park Routes 2 and 3 are more than 0.3-mile northwest of KOP 157 NW and share the same corridor within this view. The existing treeline framing the background of the view block views of the proposed Project; therefore Routes 2 and 3 would result in no change in visual conditions at this KOP.

2.1.18 KOP 157 SW

2.1.18.1 EXISTING CONDITIONS



FIGURE 40 KOP 157 SW, EXISTING CONDITIONS

KOP 157 SW is in the same location as KOP 157 NW but faces southwest and includes views of an open grassy field and nearby existing data center buildings (Figure 40). The characteristics of the landscape visible from KOP 157 SW are described below.

Landforms

• The landscape is largely smooth and flat with gentle undulations in the foreground, leading to a gentle rising slope in the middle ground.

Vegetation

- A young crepe myrtle tree with white flowers and several low pale yellow and light green leaved plants sit in a slightly raised planter next to the main entrance of the college.
- Low, dark green low trees and rounded shrubs border the wall of the college building to the right of the main entrance.
- The smooth, open, maintained, light to medium green grassy lawn to the right of the paved walkway dominates the foreground and leads the eye to the middle ground as the it slopes gently upward.
- A dense solid line of mature trees borders the left (south) side of the view. A more distant treeline adds to the density and creates a smooth horizon line in that direction.
- A thick curving line of clumped grasses/vegetation follows the upper slope of the grassy hillside along the width of the view from left to right.
- Several irregular clusters of woody medium green shrubs are interspersed with the band of low vegetation.

• A broken line of medium and dark green shrubs and mature deciduous and evergreen trees border the property line between Germanna Community College and the neighboring data center. On the left side, the trees along the top of the hill screen views to the southwest. Breaks in the trees provide views of maintained lawn as it slopes downward to the west views of the medium green grassy slope within the data center campus. Tree crowns are also visible within the data center campus between buildings.

Built Environment

- The foreground is dominated by the smooth, tan cement walkway for the college. A smooth medium grey walkway curves to the left around the southern side of the building.
- A curving and geometric segmented silver sculpture sits on a raised cement square in front of the main entrance to the college.
- Several short round vertical walkway lights sit within the raised planter to the right of the sculpture.
- The medium red brick and off-white stone building of the college is partially visible on the left side of the view.
- To the west-southwest several multi-story, geometric data center buildings are visible through and above the trees. The lower portion of each building is dark gray and the upper portion is light gray, with a distinct red band separating the two grays.
- A chain link fence denotes the property boundary between the college and the data centers.
- Multiple overhead lights on tall, cylindrical, partially skylined posts are visible along the walkways near the college and within the data center campus.

The primary viewer groups at KOP 157 SW are area residents (i.e., students) and workers associated with the college. Area residents would have a low to medium sensitivity to the changes in visual conditions at this location.

2.1.18.2 SIMULATED CONDITIONS WITH PROPOSED PROJECT

All Route Alternatives

The location of route alternatives relative to KOP 157 SW is as follows (see Figure 41, Figure 42, Figure 43, and Figure 44):

- The proposed Mt. Pony Substation is 0.3-miles to the south-southwest;
- Tech Park Route 1 and Mt. Pony Route 1 share the same corridor, parallel to the south side of US 15/29, 0.2-mile to the southwest;
- Mt. Pony Route 2 is 0.4-mile to the northeast; and
- Tech Park Routes 2 and 3 share the same corridor, parallel to the south side of US 15/29,
 0.4-mile to the south-southwest.

Mt. Pony Route 1 and Tech Park Route 1



FIGURE 41 KOP 157 SW, SIMULATED CONDITIONS

Mt. Pony Route 1, and Tech Park Routes 2 and 3



FIGURE 42 KOP 157 SW, SIMULATED CONDITIONS

Mt. Pony Route 2 and Tech Park Route 1



FIGURE 43 KOP 157 SW, SIMULATED CONDITIONS

Mt. Pony Route 2 and Tech Park Routes 2 and 3



FIGURE 44 KOP 157 SW, SIMULATED CONDITIONS

Regardless of the route alternatives selected, the proposed Project would result in no changes to landforms or vegetation, as described below. Portions of all Mt. Pony and Tech Park route alternatives would be visible above the treeline to the south, and would result in the following changes in the built environment:

Built Environment

- The routes would add vertical poles and thin, horizontal overhead conductors clearly visible above the existing treeline.
- The series of new, repetitive vertical poles with short, horizontal crossarms would introduce new structures and increase the number of large, visually dominant forms in the viewshed.

- The new overhead conductors would add thin, parallel, horizontal lines above the treeline. These lines would be highly visible against the open sky and would increase the level of visual clutter in the area.
- The substation would add vertical structures that would be partially screened by existing rectangular data center buildings and the existing treeline. The structures for Tech Park Routes 2 and 3 would be partially skylined above the existing data center buildings and treeline. Due to the distance from the KOP, these structures would blend in with and appear to be similar height and size as the overhead lighting at the data center.

Magnitude of Impact

From KOP 157 SW, the degree of change in visual conditions from the proposed route would be as follows:

- Mt. Pony Route 1 and Tech Park Route 1: medium;
- Mt. Pony Route 1 and Tech Park Routes 2 and 3: medium;
- Mt. Pony Route 2 and Tech Park Route 1: medium; and
- Mt. Pony Route 2 and Tech Park Routes 2 and 3: small (due to distance and the screening effects of structures and vegetation)

2.1.19 KOP 158

2.1.19.1 EXISTING CONDITIONS



FIGURE 45 KOP 158, EXISTING CONDITIONS

KOP 158 is on the south side of Woolens Lane 0.3-mile, southwest of the intersection with Mt. Pony Road (Figure 45). The KOP faces northeast and includes views of a treelined rural roadway. The characteristics of the landscape visible from KOP 158 are described below.

Landforms

The landscape has slight undulations in the foreground due to road fill.

- Dense walls of branching mature evergreen and deciduous trees screen views outside of the roadway corridor on both sides of the road. Most of the trees have narrow, vertical trunks and thin linear branches.
- Trees in the middle ground form a canopy over the roadway, screening views to the northeast.
- Medium green to yellow grassy shoulders line both sides of Woolens Lane.

Built Environment

- The flat, smooth, grey, paved roadway of Woolens Lane creates a strong linear form that draws the viewer's eye toward the middle ground.
- The roadway dips slightly in the middle ground before curving slightly to the left and up a gentle slope.

The primary viewer groups at KOP 158 are motorists (most of whom would likely be area residents) traveling along Woolens Lane. Motorists and area residents would have medium to high sensitivity to the changes in visual conditions at this location. For motorists, sensitivity may be moderated by speed and the direction of travel.

2.1.19.2 SIMULATED CONDITIONS WITH PROPOSED PROJECT

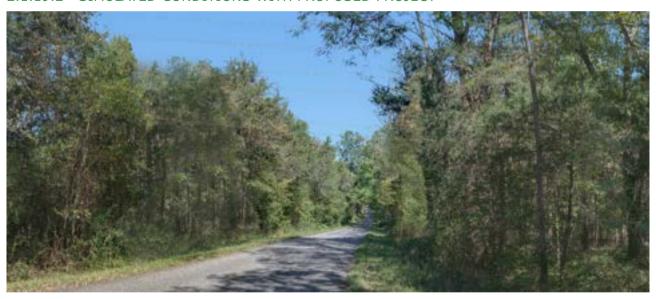


FIGURE 46 KOP 158, SIMULATED CONDITIONS

The conductors and vegetation clearing for Mt. Pony Route 2 (less than 0.1-mile northeast) conductors would be visible where they cross the roadway (Figure 46). From KOP 158, the proposed Project would result in changes to the visual characteristics of the landscape, as described below.

Landforms

• There would be no discernable changes to the landform/terrain.

Vegetation

• Mt. Pony Route 2 would require tree removal on both sides of the roadway. The remaining trees would continue to focus views within the Woolens Lane roadway corridor.

Built Environment

• The route would add thin, horizontal overhead conductors that are clearly visible across the roadway to the northeast. The new horizontal lines are highly visible against the open sky and increase the level of visual clutter in the area

From KOP 158, the degree of change in visual conditions from Mt. Pony Route 2 would be small.

2.1.20 KOP 161

2.1.20.1 EXISTING CONDITIONS

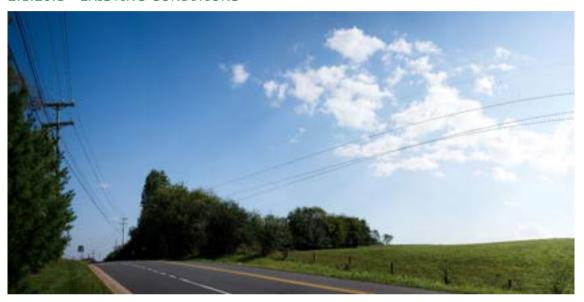


FIGURE 47 KOP 161, EXISTING CONDITIONS

KOP 161 is on the northeast side of the East Chandler Street/Kingsbrook Road T-intersection (Figure 47). The KOP faces southeast and includes a rural road corridor with open fields and forested areas. The characteristics of the landscape visible from KOP 161 are described below.

Landforms

• The smooth, rolling landscape—including a noticeable upslope on the right side of East Chandler Street screen views to the south.

Vegetation

- Maintained grassy shoulders line both sides of East Chandler Street.
- Numerous dark green, long-needled evergreen branches on the left side of East Chandler Street screen views to the northeast. Several branches of a deciduous tree with light tan and light green leaves are visible above the evergreen trees, adding to the vegetated screening.
- An open field with low grasses slopes upward to the southeast.
- A cluster of predominately medium green deciduous trees occupy the middle ground in the center of the view and provide an irregular shape to the skyline. Existing Line #70 cuts through this cluster of trees; however, the cleared right-of-way for that transmission line is difficult to distinguish, due to the position of other trees.
- Tall, deciduous, and branching woody shrubs border the fenceline along the right side of East Chandler Street, adding to the vegetative screen to the southeast

Built Environment

- The flat, smooth, medium grey, paved and striped roadway of East Chandler Street dominates the foreground and creates a linear feature that draws the viewer's eye to the middle ground along the left side of the view.
- A short fence with wooden posts and wire parallels the right side of the roadway, denoting the property boundary of the open field.
- Road signs are visible on both sides of the roadway, introducing metallic vertical and rectangular structures to the view.
- Tall, thin, vertical, medium grey-brown, wooden distribution poles with horizontal crossarms and associated thin linear conductors parallel both sides of the roadway in the foreground. The distribution lines on the left side of the road cross to the right side at the transition to the middle ground. The structures and their conductors are partially skylined above the treeline due to their height and locations uphill of the viewer.
- The thin, linear horizontal conductors of existing Line #70 parallel the right side of the roadway, cutting through the cluster of deciduous trees. Several tall, vertical transmission structures associated with the Line #70 are skylined in the background of the view along the roadway.

The primary viewer groups at KOP 161 are motorists traveling along East Chandler Street, as well as area residents (particularly, residents of the Mountain Brook Estates subdivision, immediately behind the viewer). Motorists and area residents would have medium to high sensitivity to the changes in visual conditions at this location. For motorists, sensitivity may be moderated by speed and the direction of travel.





FIGURE 48 KOP 161, SIMULATED CONDITIONS

Tech Park Routes 1, 2, and 3 (which share the same alignment in this area) are 0.1-mile southeast of KOP 161 (Figure 48). Portions of the proposed route would be visible above the hillside on the right side of East Chadler Street, and further down the roadway past the cluster of trees on the right side of the road. From KOP 161, the proposed Project would result in changes to the visual characteristics of the landscape, as described below.

Landforms

• There would be no discernable changes to the landform/terrain.

Vegetation

• There would be no discernable changes to vegetation within the view from this KOP.

Built Environment

- The tops of vertical poles and short segments of thin, horizontal overhead conductors for the Tech Park Lines would be partially visible above the hillside to the south of the KOP.
- The Tech Park Lines would also be visible in the background, above the vanishing point of East Chandler Street, adjacent to the existing Line #70 structures.
- The tall, linear poles and thin, overhead conductors would repeat the vertical and horizontal lines and forms that already exist on the landscape, especially those associated with existing Line #70.
- The concentration of new vertical and horizontal lines within the axial view along East Chandler Street draws the viewer's eye to this location.

Due to distance, the transmission structures for the Tech Park Lines would appear to be the same size as those for existing Line #70. The landscape screens most Project infrastructure, except where the Tech Park Lines would be collocated with existing Line #70. As a result the degree of change in visual conditions due to the Project would be small to medium from KOP 161.

2.1.21 KOP 163 E

2.1.21.1 EXISTING CONDITIONS



FIGURE 49 KOP 163 E, EXISTING CONDITIONS

KOP 163 is on Alvere Road 0.5-mile west of the intersection with Blackjack Road (Figure 49). Alvere Road terminates 0.4-mile south of this KOP at the driveways of several rural residences. The KOP faces northeast and includes a rural road corridor with flat open fields and several types of human modifications. The characteristics of the landscape visible from KOP 163 E are described below.

Landforms

- The landscape is largely smooth and flat, with a subtle ridge running across the view in the middle ground.
- The open terrain generally allows for more distant views into the middle ground and background.
- The horizon line is defined by a treeline punctuated by a series of transmission poles.

Vegetation

- The foreground is dominated by a grassy field with medium green grasses and mowed shoulders along both sides of Alvere Road. The field to the left of Alvere Road is bordered by tall medium green and tan grasses, and the field itself is blanketed in dried brown grasses.
- In the middle ground, a dense treeline of mixed mature evergreen and deciduous trees
 parallels the left side of Alvere Road and then turns perpendicularly away from the road,
 along the northern side of the brown field. This treeline screens views to the north and
 northeast.
- The open views on the right side of Alvere Road show vegetated and irregular tree clusters along field boundaries. A treeline visible in the background creates an undulating, vegetated horizon line.

Built Environment

- A flat, coarse, dark grey, unpaved two-lane road (Alvere Road) runs through the left side of the view and creates a strong linear form that draws the viewer's eye toward the middle ground. The road reappears in the background, revealing the subtle vertical relief of the landscape.
- A series of tall vertical poles with short horizontal crossarms (existing Lines #2/#70) extend above the middle ground vegetation on the left side of the view. Structures associated with existing Lines #2/#2199 are also visible above the background skyline on the right side of the view. Associated thin horizontal conductors are visible above the treelines.
- A cell phone tower rises above the middle ground treeline and above existing Lines #2/#70 on the left side of the view.
- Multiple rectangular residences are visible in the background on the right side of the view. These blend somewhat with the treeline in both color and height.

The primary viewer groups at KOP 163 E are motorists (area residents) traveling along Alvere Road. Motorists and area residents would have medium to high sensitivity to the changes in visual conditions at this location.

2.1.21.2 SIMULATED CONDITIONS WITH PROPOSED PROJECT

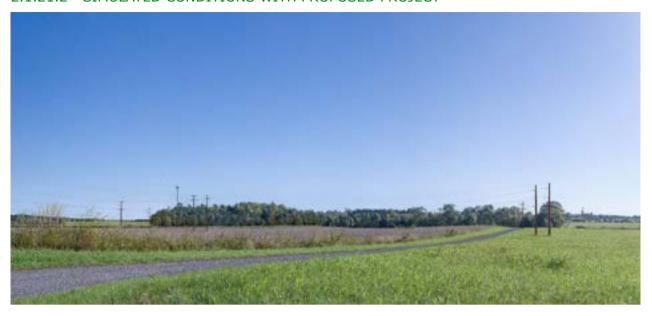


FIGURE 50 KOP 163 E, SIMULATED CONDITIONS

Mt. Pony Route 1 is 0.2-mile east of KOP 163 E (Figure 50). The route crosses Alvere Road in the middleground and then northern side of the field to the north of Alvere Road, paralleling existing Lines #2/#70. From KOP 163 E, the proposed Project would result in changes to the visual characteristics of the landscape, as described below.

Landforms

• There would be no discernable changes to the landform/terrain.

Vegetation

• Construction of Mt. Pony Route 1 would require removal of all trees on the left side of the middle-ground treeline, opening views to the north and northeast.

Built Environment

- The route would add vertical poles and thin, horizontal overhead conductors to the landscape.
- The series of new, repetitive vertical poles would be similar in form to other existing transmission poles, but would appear larger due to their proximity to the viewer.
- The slightly undulating conductors add multiple thin, parallel, horizontal lines above Alvere Road and the adjacent fields. The new horizontal lines are highly visible against the open sky and increase the level of visual clutter in the area.

Due to the additional vertical and horizontal forms and lines, and scale of the transmission line within the middle ground, the magnitude of change in visual conditions at KOP 163 E this location would be medium.

2.1.22 KOP 163 N

2.1.22.1 EXISTING CONDITIONS



FIGURE 51 KOP 163 N, EXISTING CONDITIONS

KOP 163 N is in the same location as KOP 163 E, but faces north (Figure 51). The view includes a rural road corridor with flat open fields, and several types of human modifications. The characteristics of the landscape visible from KOP 163 N are described below.

Landforms

- The landscape is largely smooth and flat with subtle undulations perceptible in the foreground.
- Vegetated hills in the background create an undulating horizon line mixed with the treeline in the middle ground of the view.

Vegetation

- The foreground is dominated by the mowed shoulder of coarse medium green and medium to dark brown grasses along both Alvere Road. The field to the left of Alvere Road is blanketed in low dried brown grasses.
- An undulating tree line of mixed heights and medium to dark green deciduous and evergreen trees borders the north side of the open fields.
- The hills in the background of the view to the northwest that rise above the middleground treeline are blanketed in dark green trees, creating a smooth regular texture.

Built Environment

- A flat, coarse, dark grey, unpaved two-lane road (Alvere Road) is visible in the immediate foreground on the right side of the view.
- A low, rectangular pile of medium grey paving stones on light brown plywood boards and pallets sits in the mowed shoulder on the northwest side of Alvere Road.
- A small silver-grey post with a solar panel and a mounted rectangular grey box sits in front of the treeline between the fields.
- A two-track unpaved and vegetated roadway is visible running into the middle ground to the right of the adjacent treeline on the right side of the view.

A series of tall vertical poles with short horizontal crossarms (existing Lines #2/#70)
 extend above the background vegetation on the right side of the view. Associated thin
 horizontal conductors are visible above the treelines.

The primary viewer groups at KOP 163 N are motorists (area residents) traveling along Alvere Road. Motorists and area residents would have medium to high sensitivity to the changes in visual conditions at this location.

2.1.22.2 SIMULATED CONDITIONS WITH PROPOSED PROJECT



FIGURE 52 KOP 163 N, SIMULATED CONDITIONS

Mt. Pony Route 1 is 0.2-mile north of KOP 163 N (Figure 52). The route parallels Alvere Road and the northern side of the fields, collocated with existing Lines #2/#70. From KOP 163 N, the proposed Project would result in changes to the visual characteristics of the landscape, as described below.

Landforms

- There would be no discernable changes to the landform/terrain.
- Tree removal for Mt. Pony Route 1 would enable views of the adjacent quarry in the center of the view.

Vegetation

• Mt. Pony Route 1 would require removal of trees along the north side of open field opening views to the north-northwest.

Built Environment

- The route would add vertical poles and thin, horizontal overhead conductors to the landscape. The series of new, repetitive vertical poles would be similar in form and perceived size to the poles for existing Lines #2/#70.
- The slightly undulating conductors add multiple thin, parallel, horizontal lines above the fields. The new horizontal lines are highly visible against the open sky and increase the level of visual clutter in the area.

Due to the vegetation removal, additional vertical and horizontal forms and lines, and the scale of the transmission line within the middle ground, the magnitude of changes in visual conditions at KOP 163N would be medium.

2.1.23 KOP 165

2.1.23.1 EXISTING CONDITIONS



FIGURE 53 KOP 165, EXISTING CONDITIONS

KOP 165 is at the intersection of Technology Drive and McDevitt Drive, 0.3-mile northeast of US 522 (Figure 53). The KOP faces northwest and includes a rural road corridor with views of a divided rural roadway (McDevitt Drive) and rolling wooded landscape. The characteristics of the landscape visible from KOP 165 are described below.

Landforms

- The landscape is largely smooth and flat, with gentle undulations perceptible in the foreground and middle ground.
- Grass-covered, landscaped berms are visible in the foreground.
- The topography slopes gently downward towards the middle ground before sloping upwards towards the background of the view.

Vegetation

- The foreground is dominated by an open field of coarse, medium green grasses and a light to medium tan, round hay bale on the right side of McDevitt Drive.
- A wooded landscape of mixed medium and dark green deciduous and evergreen trees borders the left side of McDevitt Drive in the middle ground and both sides of the road in the background. Several breaks in the trees provide views of neighboring grassy areas and slopes.
- The wooded areas on both sides of McDevitt Drive generally focus views primarily to the roadway corridor.
- McDevitt Drive has a vegetated median with mowed medium green and light tan grasses.

Built Environment

• A flat, smooth, dark grey, paved divided road (McDevitt Drive) with associated rectangular road signs on silver-grey posts runs through the left side of the view and creates a strong linear form that draws the viewer's eye toward the middle ground.

- Short silver-grey guardrails border both sides of the roadway at the low point in the topography.
- A smooth grey to medium brown wooden telecommunication pole with associated thin black horizontal conductors is visible in the immediate foreground at the right side of the Technology Boulevard/McDevitt Drive intersection. The conductor crosses McDevitt Drive.
- The tops of tall vertical poles with short horizontal crossarms (existing Lines #2/#70) extend above the background vegetation on the right side of the view.
- The vertical wooden poles with short horizontal crossarms for a distribution line cross
 McDevitt Drive within the middle ground, where the topography begins to angle uphill.
 These poles are mostly below the treeline, but one pole is partially visible above the
 treeline on the right side of the road through a gap in the trees. Associated thin horizontal
 conductors are visible above the treeline and crossing McDevitt Drive.

The primary viewer groups at KOP 165 are motorists traveling along McDevitt Drive and Technology Road. Motorists would have medium sensitivity to the changes in visual conditions at this location, although their sensitivity may be moderated by speed and the direction of travel.

2.1.23.2 SIMULATED CONDITIONS WITH PROPOSED PROJECT

Tech Park Routes 1 and 2



FIGURE 54 KOP 165, SIMULATED CONDITIONS

Tech Park Routes 1 and 2 (which share the same alignment in this area) are 0.2-mile north of KOP 165 (Figure 54). The route crosses McDevitt Drive in the background of the view. From KOP 165, the proposed Project would result in changes to the visual characteristics of the landscape, as described below.

Landforms

There would be no discernable changes to the landform/terrain; however, tree clearing
would reveal the edge of a gentle ridge (masked by existing trees) in the center of the
view.

• Tech Park Routes 1 and 2 would require tree removal on the hillside to the left of McDevitt Drive, where the roadway runs uphill in the background of the view. The topography of the area would screen views beyond the hills

Built Environment

- The route would add vertical poles and thin, horizontal overhead conductors to the landscape on both sides of McDevitt Drive. The series of new, repetitive vertical poles would be prominent new vertical features in the landscape. While similar in form to transmission poles for existing Lines #2/#70, the Tech Park Lines would be much closer and would therefore appear larger to the viewer.
- The slightly undulating conductors would add multiple thin, parallel, horizontal lines above the fields. The new horizontal lines would be highly visible against the open sky and would increase the level of visual clutter in the area.

Due to the vegetation removal and the addition of prominent vertical and horizontal forms and lines, the changes in visual conditions at KOP 165 due to Tech Park Routes 1 or 2 would be medium.

Tech Park Route 3



FIGURE 55 KOP 165, SIMULATED CONDITIONS

Tech Park Route 3 is less than 0.1-mile north of KOP 165 (Figure 55). The route crosses McDevitt Drive in the foreground of the view and parallels McDevitt Drive on the left side into the background. From KOP 165, the proposed Project would result in changes to the visual characteristics of the landscape, as described below.

Landforms

There would be no discernable changes to the landform/terrain; however, tree clearing
would reveal the edge of a gentle ridge (masked by existing trees) in the center of the
view.

 Tech Park Routes 1 and 2 would require tree removal and tree trimming on the left side of McDevitt Drive, as well as clearing on the hillside to the left of McDevitt Drive, where the roadway runs uphill in the background of the view. The topography of the area would screen views beyond the hills.

Built Environment

- The route would add vertical poles and thin, horizontal overhead conductors to the landscape on both sides of McDevitt Drive. The series of new, repetitive vertical poles would be dominant new vertical features in the landscape. While similar in form to transmission poles for existing Lines #2/#70, the Tech Park Lines would be much closer and would therefore appear larger to the viewer.
- The slightly undulating conductors would add multiple thin, parallel, horizontal lines above the fields. The new horizontal lines would be highly visible against the open sky and would increase the level of visual clutter in the area.

Due to the vegetation removal and the addition of dominant new vertical and horizontal forms and lines in the foreground, the magnitude of changes in visual conditions at KOP 165 due to Tech Park Route 3 would be large.

2.1.24 KOP 166 A

2.1.24.1 EXISTING CONDITIONS

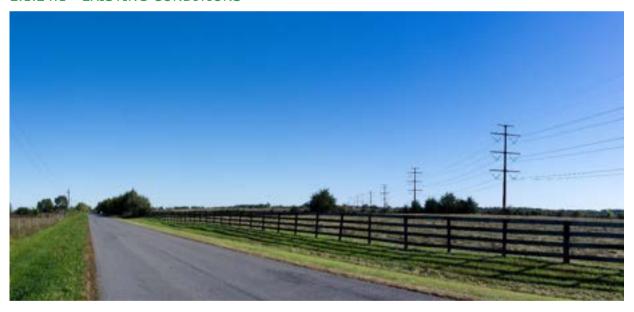


FIGURE 56 KOP 166A, EXISTING CONDITIONS

2.1.24.2 EXISTING CONDITIONS

KOP 166A is located on the west side of Blackjack Drive, 0.2-mile south of its intersection with Carolina Lane (Figure 56). The KOP faces northeast and includes rural views of the rural landscape. The characteristics of the landscape visible from KOP 166A are described below.

Landforms

• The landscape is largely smooth and flat with gentle undulations perceptible in the foreground and middle ground.

- Mowed grassy shoulders parallel both sides of Blackjack Drive.
- Open fields of light to medium brown grasses and crops border both sides of the road.
- Scattered clusters of medium to dark green shrubs and evergreen trees border the fenceline between fields on the right side of Blackjack Drive.
- Towards the middle ground and background, mature dark green deciduous and evergreen trees border both sides of Blackjack Drive, focusing views along the roadway corridor.
- The horizon line is an undulating irregular line of dark green trees.

Built Environment

- The flat, smooth, grey, paved two-lane Blackjack Road bisects the view and creates a strong linear form that draws the viewer's eye toward the middle ground and background.
- Medium to dark grey wooden slat fences border the right side of the road and run between fields on both sides of the road.
- Tall, thin, vertical, light grey, wooden distribution poles and a short fence with repeating wooden posts and wire parallel the left side of the road in the foreground.
- A series of tall, vertical poles with short horizontal crossarms (existing Lines #2/#2199) extend above the fields and vegetation on the righthand side of the view and create a strong linear form that draws the viewer's eye toward the middle ground and background (in a different direction than the road).
- Multiple thin, horizontal conductor lines cross the fields and road.

The primary viewer groups at KOP 166A are motorists traveling along Blackjack Road, as well as area residents. Motorists and area residents would have medium to high sensitivity to the changes in visual conditions at this location.

2.1.24.3 SIMULATED CONDITIONS WITH PROPOSED PROJECT



FIGURE 57 KOP 166A, SIMULATED CONDITIONS

Mt. Pony Route 1 is 0.1-mile northeast of KOP 166 A (Figure 57). The route ties into existing Lines #2/#2199 in the immediate foreground and run parallel to the right side of Blackjack

Road into the background. From KOP 166 A, the proposed Project would result in changes to the visual characteristics of the landscape, as described below.

Landforms

• There would be no discernable changes to the landform/terrain.

Vegetation

• There would be no discernable changes to vegetation.

Built Environment

- The route would add vertical poles and thin, horizontal overhead conductors to the landscape. The series of new, repetitive vertical poles would be similar in form to existing Lines #2/#2199 but would appear slightly larger due to their location relative to the viewer.
- The slightly undulating conductors would add multiple thin, parallel, horizontal lines above Blackjack Road and the adjacent fields. The new horizontal lines would be highly visible against the open sky and would increase the level of visual clutter in the area.

Due to the additional vertical and horizontal forms and lines, and scale of the transmission line within the fore and middle ground of KOP 166 A, the changes in visual conditions at this location would be medium.

2.2 OAK GREEN REBUILD

2.2.1 KOP 135

2.2.1.1 EXISTING CONDITIONS



FIGURE 58 KOP 135, EXISTING CONDITIONS

KOP 135 is on the southwest side of the River Road/Bushy Mountain Road T-intersection, 0.5-mile northwest of the intersection with Zachary Taylor Highway (US 522)(Figure 58). The KOP faces southeast and shows a rural road corridor, with open fields, forested areas, and several types of human modifications. The characteristics of the landscape visible from KOP 125 are described below.

Landforms

- The landscape is gently to moderately rolling towards the east.
- The hillside on the left side of River Road screens views to the north and forms part of the overall skyline.

Vegetation

- The berms on both sides of River Road, and the open smooth field to the east are blanketed in medium green grasses.
- A mixture of bare earth, grasses, and crops cover the fields in the middle ground and background.
- The horizon line in the center of the view is defined by a hillside covered by mature, deciduous, medium green trees in the background.
- The horizon line on the right side is a composite of the background treeline, as well as a
 line of medium green deciduous trees in the middle ground. These trees screen views of
 the landscape on the right side of River Road. A break in the treeline for the cleared rightof-way of existing Lines #2/#11 is partially masked by intervening vegetation and
 landforms.
- A cluster of trees punctuate the left (north) side of River Road.

Built Environment

- The flat, smooth, grey, paved, two-lane roadways of River Road and Bushy Mountain Road dominate the foreground. Bushy Mountain Road runs to the right and out of view in the immediate foreground. River Road bisects the view and creates a strong linear form that draws the viewer's eye toward the middle ground.
- A white road sign and a red and white advertisement are visible at the T-intersection of the two roads.
- A short fence with wooden posts and wire borders the fields on both sides of River Road and along Bushy Mountain Road. Wooden slat fences border the fields associated with the barn.
- Triangular-roofed, single-story outbuildings, including a long, rectangular medium red barn
 with a silver-grey corrugated roof are prominent at the base of the hill that forms the
 background in the center of the view.
- A series of tall vertical poles with short horizontal crossarms (existing Lines #2/#11) cross River Road from left to right in the foreground and middle ground.
- Tall, thin, vertical, medium grey, wooden distribution poles and associated conductors run along the left side of River Road, with one pole and an associated conductor on the right side of the intersection. The structures and conductors are skylined above the treeline.

The primary viewer groups at KOP 135 are motorists traveling along the roadways, as well as area residents. Motorists and area residents would have medium sensitivity to the changes in visual conditions at this location.

2.2.1.2 SIMULATED CONDITIONS WITH PROPOSED PROJECT

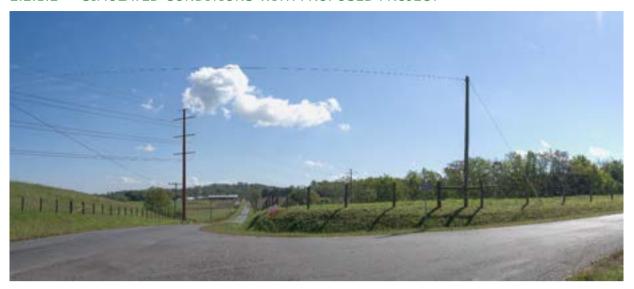


FIGURE 59 KOP 135, SIMULATED CONDITIONS

The Oak Green Rebuild is 0.1-mile east of KOP 135 and would have the same centerline as existing Lines #2/#11 (Figure 59). From KOP 135, the proposed Project would result in changes to the visual characteristics of the landscape, as described below.

Landforms

• There would be no discernable changes to the landform/terrain.

Vegetation

There would be no discernable changes to vegetation.

Built Environment

• The new monopoles would be larger than the existing poles, resulting in a stronger vertical and horizontal presence that contrasts with the low, horizontal agricultural landscape.

While more prominent, the new structures would share similar types of forms, line, colors, and textures as existing Lines #2/#11. As such, the magnitude of changes in visual resource conditions at KOP 135 would be small.

2.2.2 KOP 149 (OAK GREEN REBUILD)

2.2.2.1 EXISTING CONDITIONS



FIGURE 60 KOP 149, EXISTING CONDITIONS

KOP 149 is at the intersection of US 522 and a private driveway on the east side of US 522 (Figure 60). The view from this KOP faces south and includes a predominantly agricultural landscape. The characteristics of the landscape visible from KOP 149 are described below.

Landforms

The landscape is smooth and flat with gentle undulations visible in the foreground.

Vegetation

- The dominant feature in the foreground is a patch of tall, bright green corn.
- An open field of dark green leafy crops blanket the view to the left of a gravel access road/driveway. The field is bordered by grassy areas on both sides.
- Several evenly spaced, tall mature trees punctuate the horizon—formed by a line of low, dark green vegetation—at the far side of the field.
- A row of tall, dense, dark green trees borders the right side of US 522 and screens views to the west. These trees create an irregular line on the horizon and help provide vertical contrast to the other features on the landscape.

Built Environment

- To the right of the cornfield, the flat, smooth, grey, paved and striped two-lane roadway of US 522 is visible. Bright white and yellow markings create distinct diagonal lines that are prominent in the view.
- To the left of the cornfield, a short strip of flat, smooth, gray, unpaved roadway is visible before it disappears behind the crops.
- A series of tall, vertical poles with short horizontal crossarms (existing Lines #2/#11)
 crosses the view diagonally right to left. A single pole that stretches above the cornfield is
 dominant, while others are visible but less prominent over the open field on the left side of
 the view. Slightly undulating, thin, overhead lines span the distance between poles and are
 more perceptible against the open sky in the foreground.

 Tall, thin, vertical, medium grey, wooden distribution poles parallel the right side of US 522 and blend in with the vegetation due to their color and smooth, matte texture. The associated distribution conductors also blend in with existing vegetation

The primary viewer group at KOP 149 is motorists traveling along US 522. Motorists would have low to medium sensitivity to changes in visual conditions in this location.

2.2.2.2 SIMULATED CONDITIONS WITH PROPOSED PROJECT



FIGURE 61 KOP 149, SIMULATED CONDITIONS

The Oak Green Rebuild is less than 0.1-mile south of KOP 149 and would have the same centerline as existing Lines #2/#11 (Figure 61). From KOP 149, the proposed Project would result in changes to the visual characteristics of the landscape, as described below.

Landforms

• There would be no discernable changes to the landform/terrain.

Vegetation

There would be no perceptible changes to vegetation.

Built Environment

- The Project would shift the location of transmission structures, making them somewhat more prominent on the landscape.
- The new monopoles would be larger than the existing poles, resulting in a stronger vertical and horizontal presence that contrasts with the low, horizontal agricultural landscape.

While more prominent, the new structures would have similar types of forms, line, colors, and textures as existing Lines #2/#11. As such, the magnitude of changes in visual resource conditions at KOP 149 would be small.

2.2.3 KOP 150 B (OAK GREEN REBUILD)

2.2.3.1 EXISTING CONDITIONS

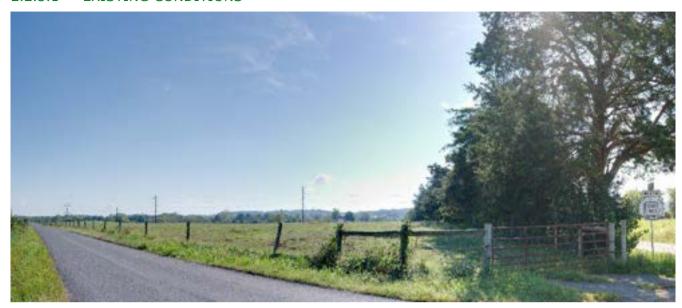


FIGURE 62 KOP 150 B, EXISTING CONDITIONS

KOP 150 B is at the northeast corner of the intersection of Twin Mountains Road and Somerville Road (Figure 62). The KOP faces southeast and includes a rural road through flat, open fields, low tree covered hills, and several types of human modifications. The characteristics of the landscape visible from KOP 150 B are described below.

Landforms

- The terrain in the foreground is largely smooth and flat.
- A low ridge forms a generally smooth horizon in the distant background of the view.

Vegetation

- The foreground is dominated by a large, grassy field. The patchy vegetation in the field includes a mix of green and tan hues.
- A dense row of dark green evergreen and deciduous trees parallels the left side Somerville Road. The darker greens, coarse texture, height, and bulk of these trees contrasts with the brighter hues and smoother textures in the adjacent field and is a dominant natural feature in the view.
- A dense row of mature trees frames far end of the field, in front of the densely treecovered ridge that forms the horizon line.

Built Environment

- A flat, smooth, grey, paved two-lane road (Twin Mountains Road) extends along the left side of the view, creating a strong linear form that draws the viewer's eye toward the middle ground.
- A short fence with repeating wooden posts and wire parallels the right side of Twin Mountains Road. A medium brown metal swing gate sits at the intersection of the two roads, in front of a light grey gravel access road leading.

- A small segment of Somerville Road is visible to the right of the swing gate, on the extreme right side of the view. The roadway is flat, smooth, and unpaved. A post with several white and metallic gray road signs also sits to the right of the swing gate.
- A small, geometric, white house with a brown roof stands out among the row of trees at the back end of the field.
- A series of tall vertical poles with short horizontal crossarms (existing Lines #2, #11, and #2199) extend across the far end of the open field and across Twin Mountains Road from right to left. A series of long, thin, elevated conductor lines span the area between the poles. These linear structures are highly perceptible on the open landscape of the foreground.

The primary viewer groups at KOP 150 B are motorists traveling along Twin Mountains Road and Somerville Road, as well as area residents. Motorists and area residents would have medium to high sensitivity to the changes in visual conditions at this KOP.

2.2.3.2 SIMULATED CONDITIONS WITH PROPOSED PROJECT



FIGURE 63 KOP 150 B, SIMULATED CONDITIONS

The Oak Green Rebuild is about 0.4-mile east of KOP 150 B and would have the same centerline as existing Lines #2/#11 (which intersect existing Line #2199 to the right of Twin Mountains Road)(Figure 63). From KOP 101, the proposed Project would result in changes to the visual characteristics of the landscape, as described below.

Landforms

• There would be no discernable changes to the landform/terrain.

Vegetation

There would be no perceptible changes to vegetation.

Built Environment

• The route would add vertical, linear poles to the landscape. Two new poles would extend above the row of trees at the back of the open field. These new poles would repeat the vertical lines and forms that already exist on the landscape.

Due to their distance from the viewer, the height and scale of the new transmission structures would be similar to existing structures. As such, the changes in visual conditions at KOP 150 B would be small.

2.2.4 KOP 151 (OAK GREEN REBUILD)

2.2.4.1 EXISTING CONDITIONS



FIGURE 64 KOP 151, EXISTING CONDITIONS

KOP 151 is on US 522, 0.5-mile southeast of the intersection with Twin Mountains Road (Figure 64). The KOP is on a rural road and faces southwest. The agricultural landscape is characterized by rolling hills, open fields, and scattered trees and shrubs. The characteristics of the landscape visible from KOP 151 are described below.

Landform

• The landscape has a broad, open appearance with gentle rolling hills that rise and fall, creating smooth, rounded forms and soft, curving lines on the landscape.

Vegetation

- The vegetation is a mix of grassy pastures and isolated clusters and rows of trees in the foreground and middle ground, with dense forest in the background.
- Smooth, open fields blanket the foreground to the middle ground. The majority of the fields are light green grasses, but the crop field in the center of the view is a vibrant mix of golden yellow and light green.
- The rounded, amorphous forms of deciduous trees are scattered along the edge of the fields and on the edge of US 522. The trees range in color from medium to dark green.
- A dense, forested area covers the more distant hillside where it is visible beyond the foreground. These darker green areas form a soft horizon line.

Built Environment

- The flat, smooth, gray, striped, paved two-lane roadway of US 522 is bordered by short, silver-grey guardrails as it crosses the foreground of the view.
- A smooth unpaved dirt road across from the viewer follows the gentle slope of a hill and curves out of sight, leading the viewer's eye toward the farm to the south.
- Multiple short fences with repeating wooden posts denote field boundaries.

- Several farm outbuildings are visible to the south cylindrical silo that is distinct on the landscape, due to its size and scale. A low, long, horizontal open structure with a gray roof and support posts is to the left of the silo. The pitched rooftop of another building is visible to the right of the silo, although most of the building is hidden behind a hillside.
- Several distribution poles and associated conductor lines are skylined to the left of the silo.
- Existing Lines #2/#11 run from left to right across the landscape. This line is most visible where it runs along the top of a hill and the poles extend above the nearby trees. In the middle ground on the left side of the view, the transmission line is somewhat absorbed into the dense forest vegetation that is behind the line. The transmission structures add a series of tall, thin vertical lines that are connected by thin, slightly undulating horizontal conductors that contrast with the flowing natural lines of the hills and fields.

The primary viewer group at KOP 151 is motorists traveling along US 522. Motorists would have low to medium sensitivity to changes in visual conditions in this location.





FIGURE 65 KOP 151, SIMULATED CONDITIONS

The Oak Green Rebuild is about 0.3-mile southeast of KOP 151 and would have the same centerline as existing Lines #2/#11 (Figure 65). From KOP 151, the proposed Project would result in changes to the visual characteristics of the landscape, as described below.

Landforms

• There would be no discernable changes to the landform/terrain.

Vegetation

• There would be no perceptible changes to vegetation.

Built Environment

- The Project would shift the location of transmission structures, making them somewhat more prominent on the landscape.
- The new monopoles would be larger than the existing poles, resulting in a stronger vertical and horizontal presence. The new structures would also be more visible against the forested backdrop on the lefthand side of the view, and the conductors will be more

prominent and run in front of the farm buildings, including the silo, on the righthand side of the view.

While more prominent, the new structures would share similar types of forms, line, colors, and textures as existing Lines #2/#11. As such, changes in visual resource conditions at KOP 151 would be small.

2.3 REMINGTON REBUILD

2.3.1 KOP 164

2.3.1.1 EXISTING CONDITIONS

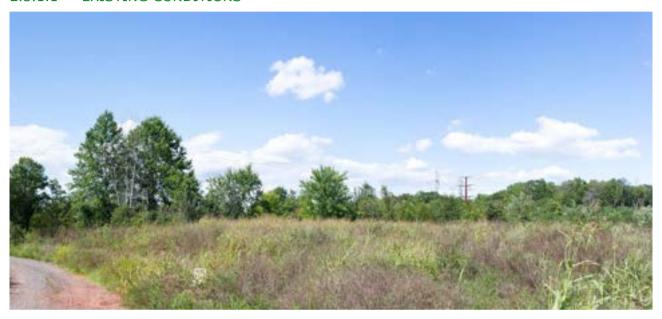


FIGURE 66 KOP 164, EXISTING CONDITIONS

KOP 164 is on Helm Drive, less than 0.1-mile northeast of the intersection with Justin Court East (Figure 66). The KOP is at the end of a short, paved road in a residential neighborhood and provides views to the northeast of an open field, a row of taller trees, and the tops of nearby transmission lines, including existing Lines #2/#70. The characteristics of the landscape visible from KOP 164 are described below.

Landforms

• The landscape is generally flat with no distinct topographical relief visible from this location.

Vegetation

- A mix of grasses, shrubs, and trees occupies the foreground. The trees create a wall of taller vegetation along the far end of the field that partially obscures more distant views across the landscape.
- The low grasses add a fine texture and several muted shades of green, brown, and grey to the foreground.
- Behind the grasses, the rounded and amorphous forms of the trees appear as a solid, darker green strip, except for a few gaps where the sky is visible. The tall trees provide vertical context and enclose the view primarily to the foreground. The tops of the trees create an undulating and irregular line against the open sky.

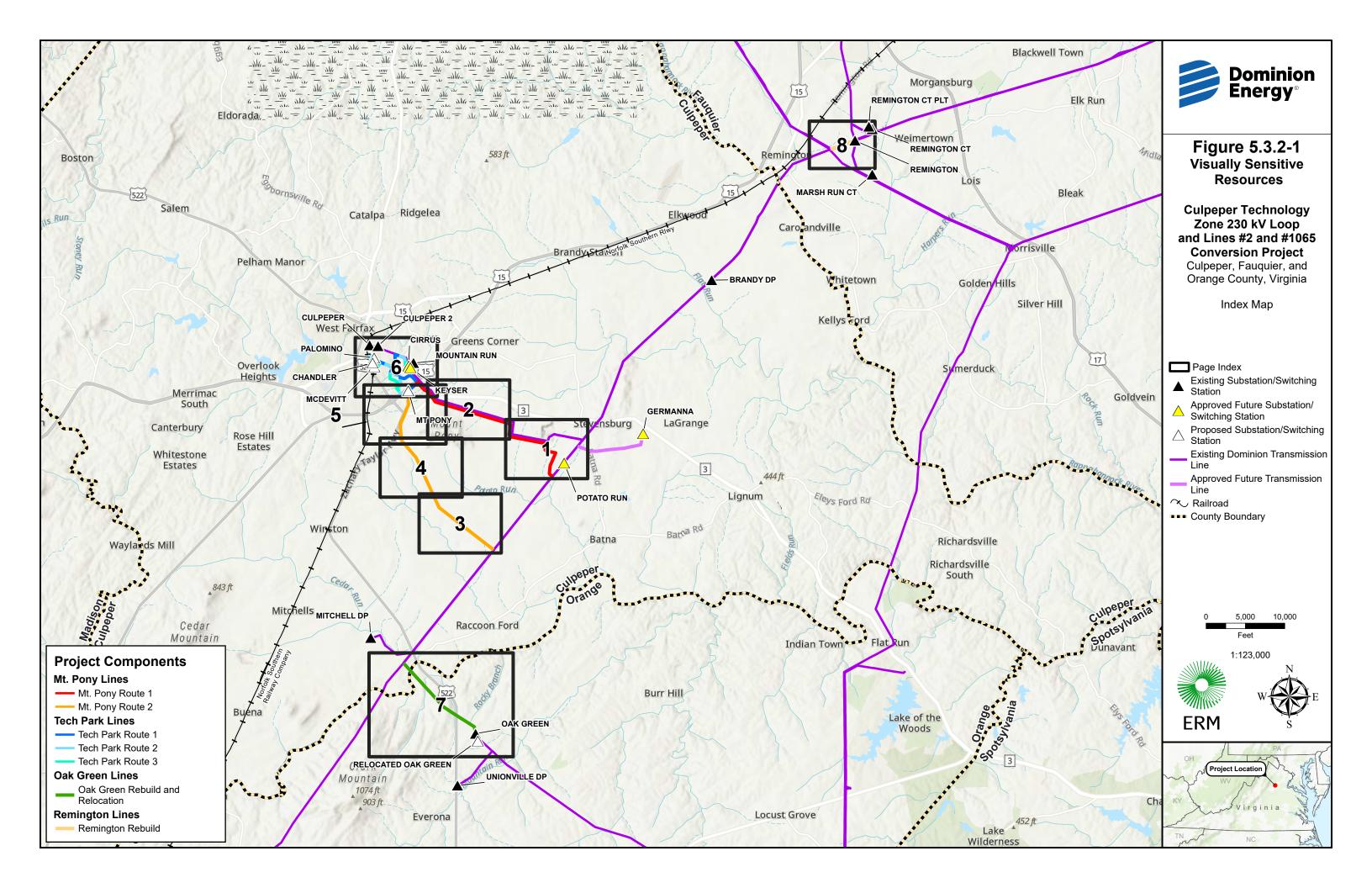
Built Environment

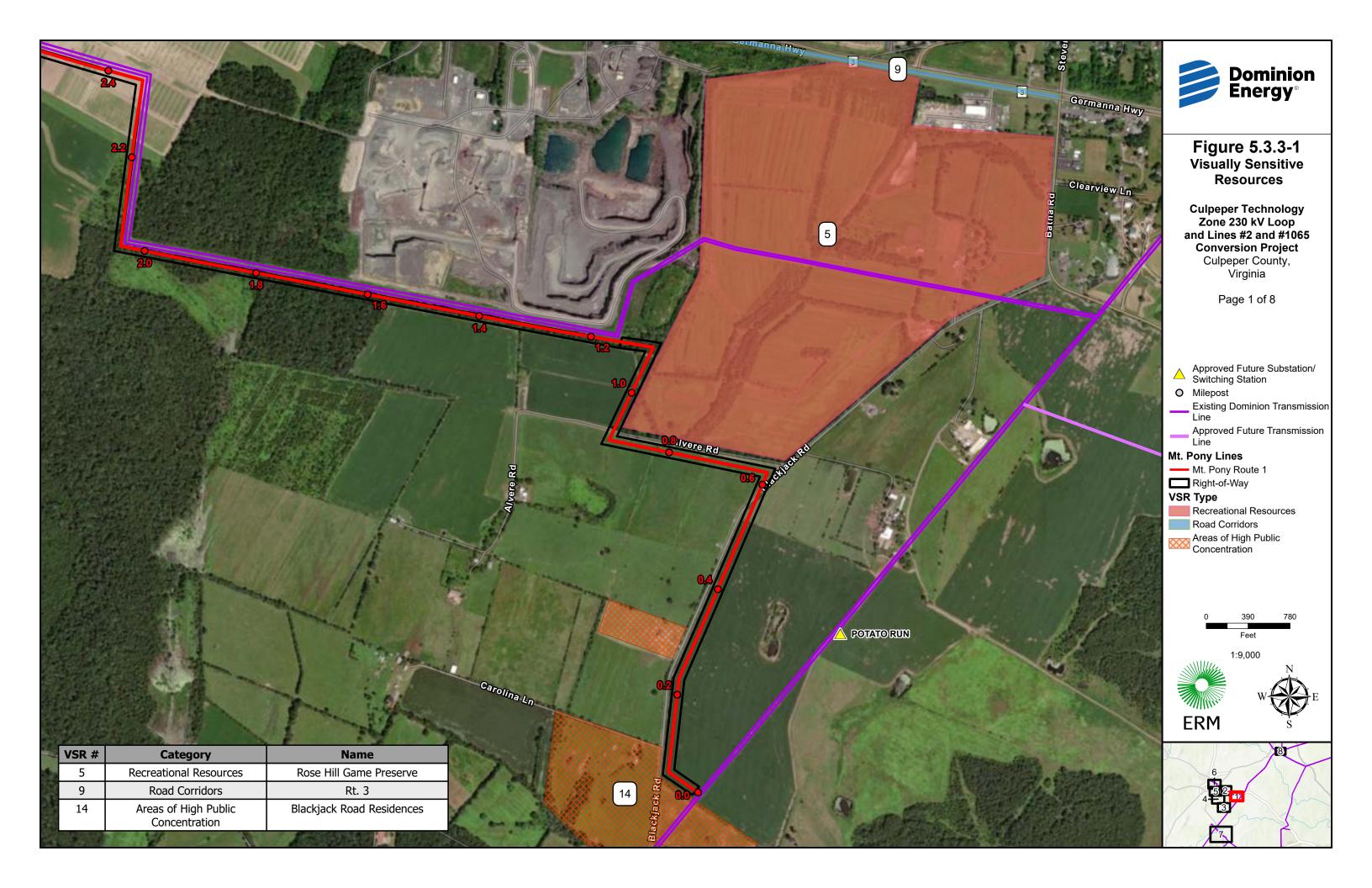
- A sliver of gravel road is visible on the lefthand side of the view. The gray and red-brown road is finely textured, flat, and generally complements the more muted colors of the nearby grasses.
- Multiple transmission lines (existing Lines #2/#70, #535, and #580) extend above the treeline. The tall, vertical poles and short, horizontal crossarms add thin linear elements to the horizon. Most of the visible poles are dark gray, except for a single, more substantial muted brown pole.
- A series of paired, thin, horizontal conductors stretch between the poles. These fine, linear
 features are visible above the tree line. Some of the lower conductors are partially
 screened by tall trees.

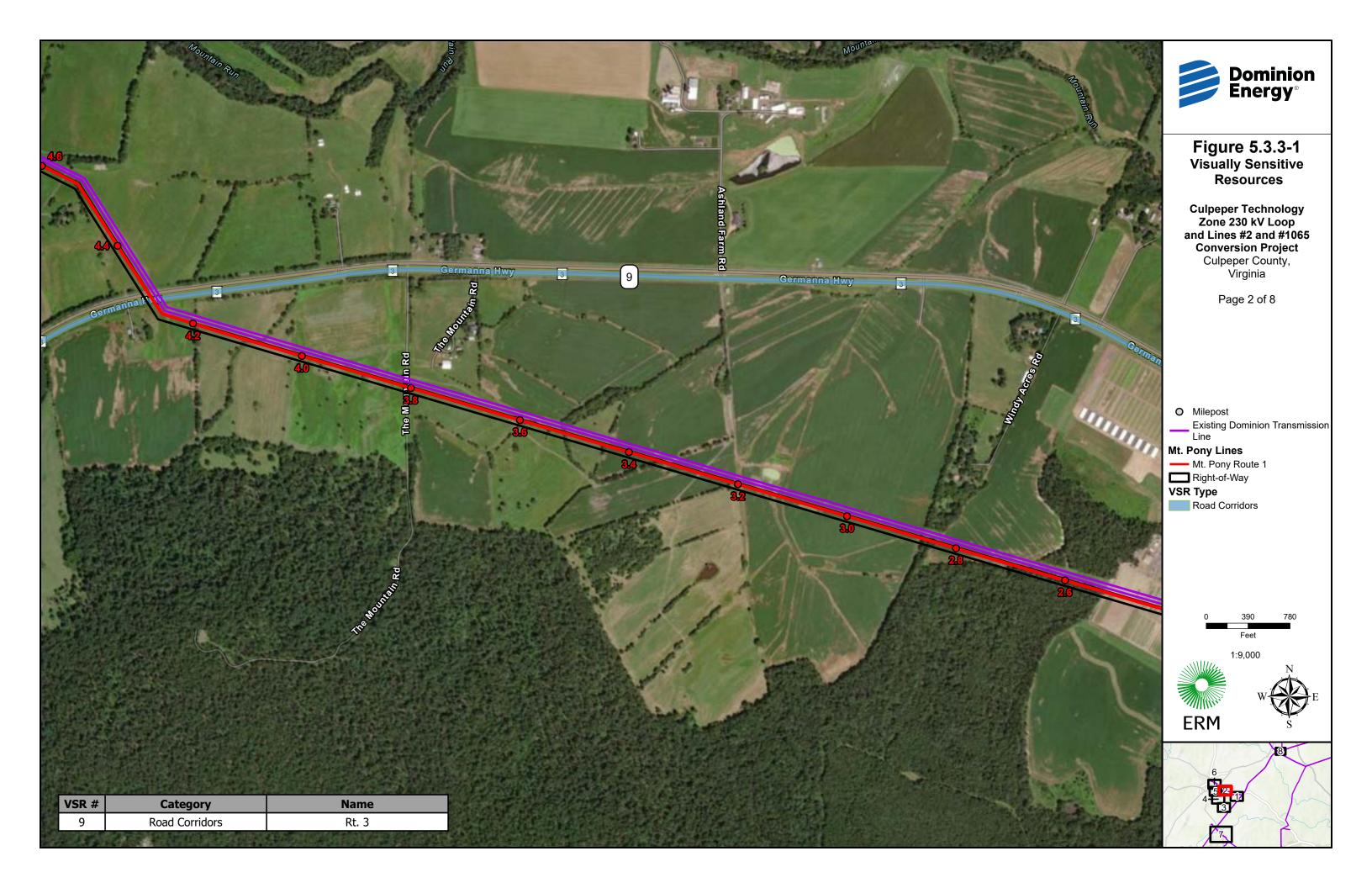
The primary viewer group at KOP 164 is area residents. Local residents would have high sensitivity to changes in visual conditions in this location.

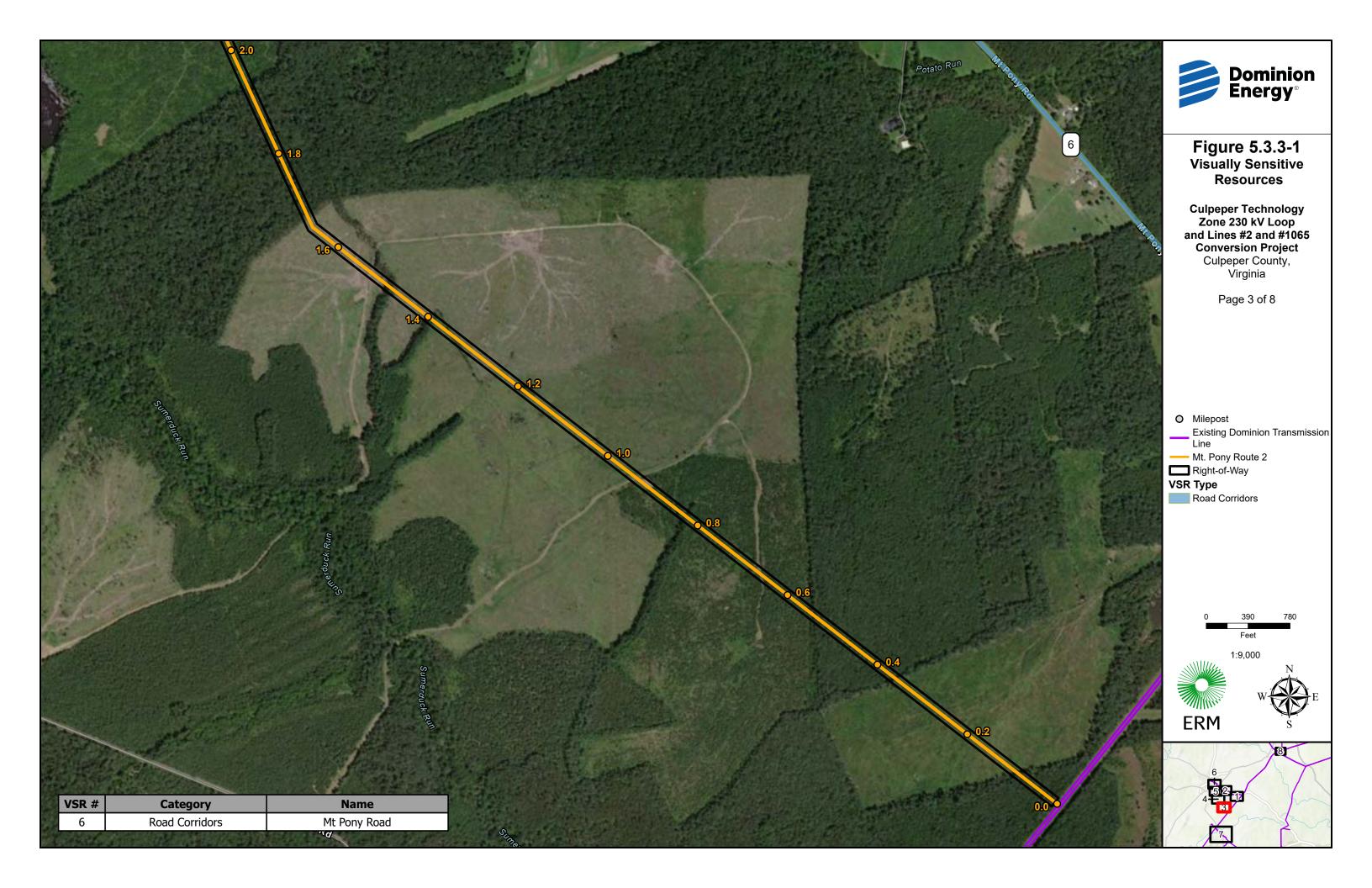
2.3.1.2 SIMULATED CONDITIONS WITH PROPOSED PROJECT

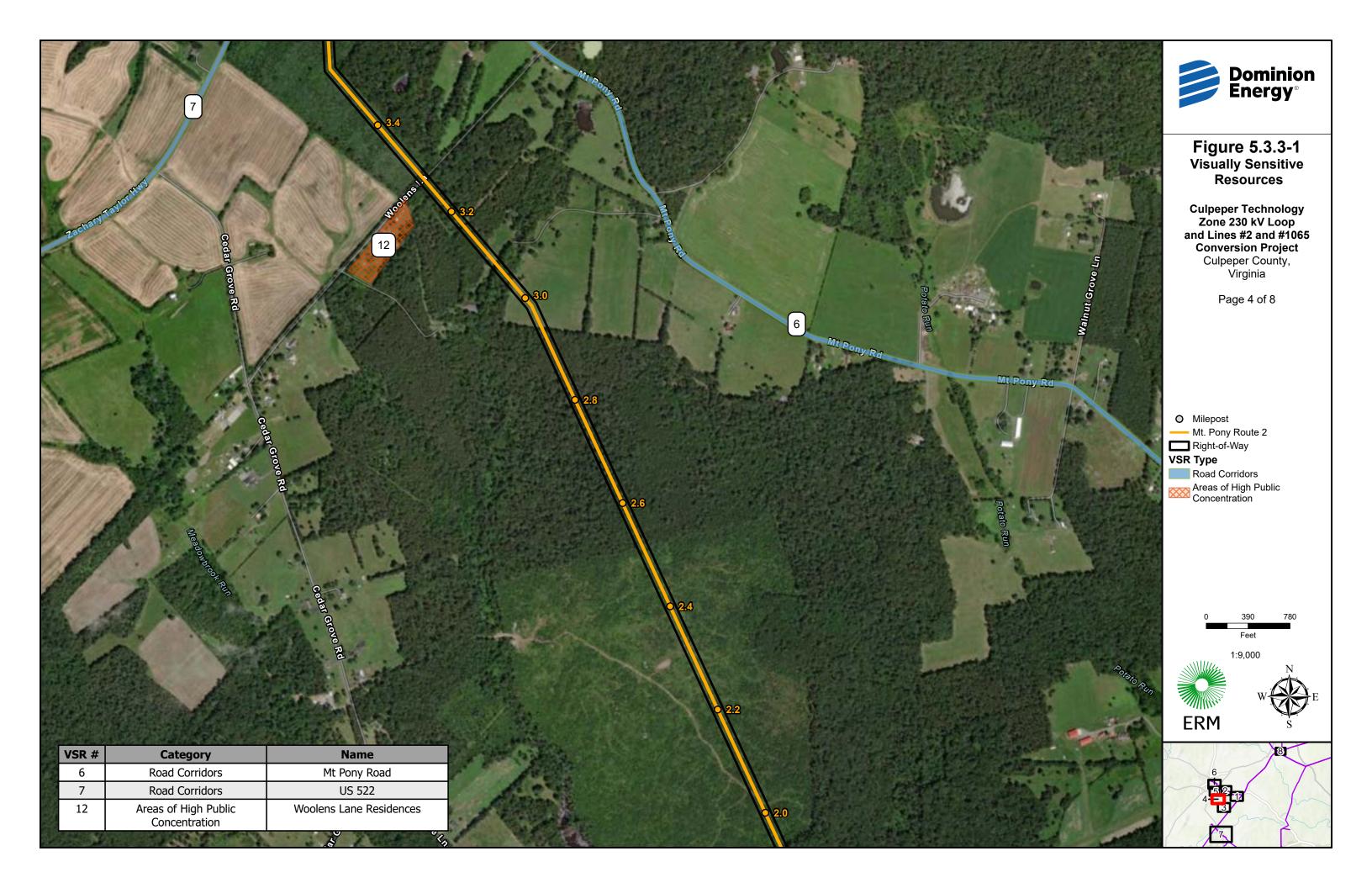
The eastern end of the Remington Rebuild is 0.2-mile northeast of KOP 164. There would be no change in visual conditions at this KOP, because the upgraded route will be constructed in the same location and use similar structures and conductors as the existing line.

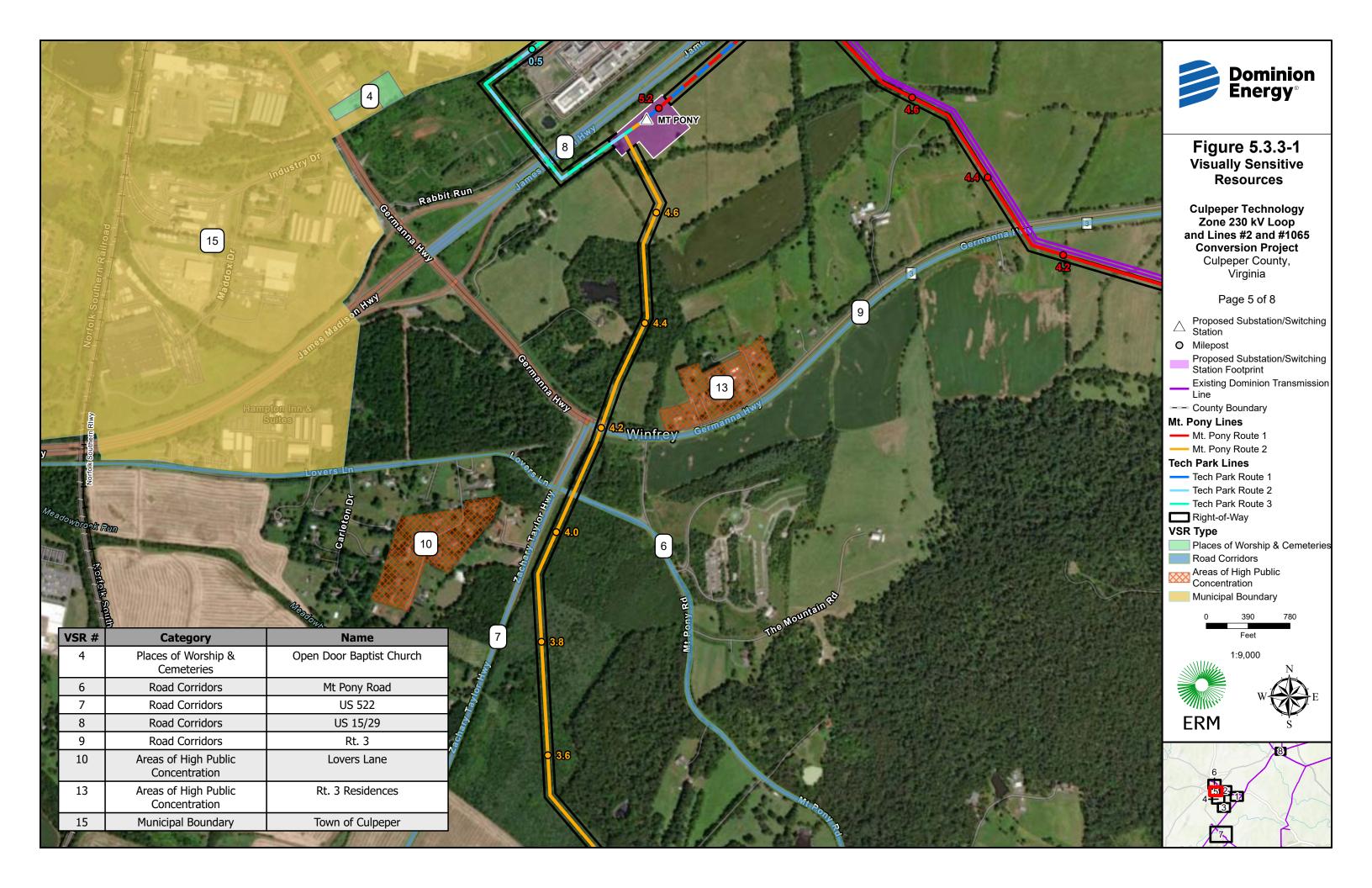


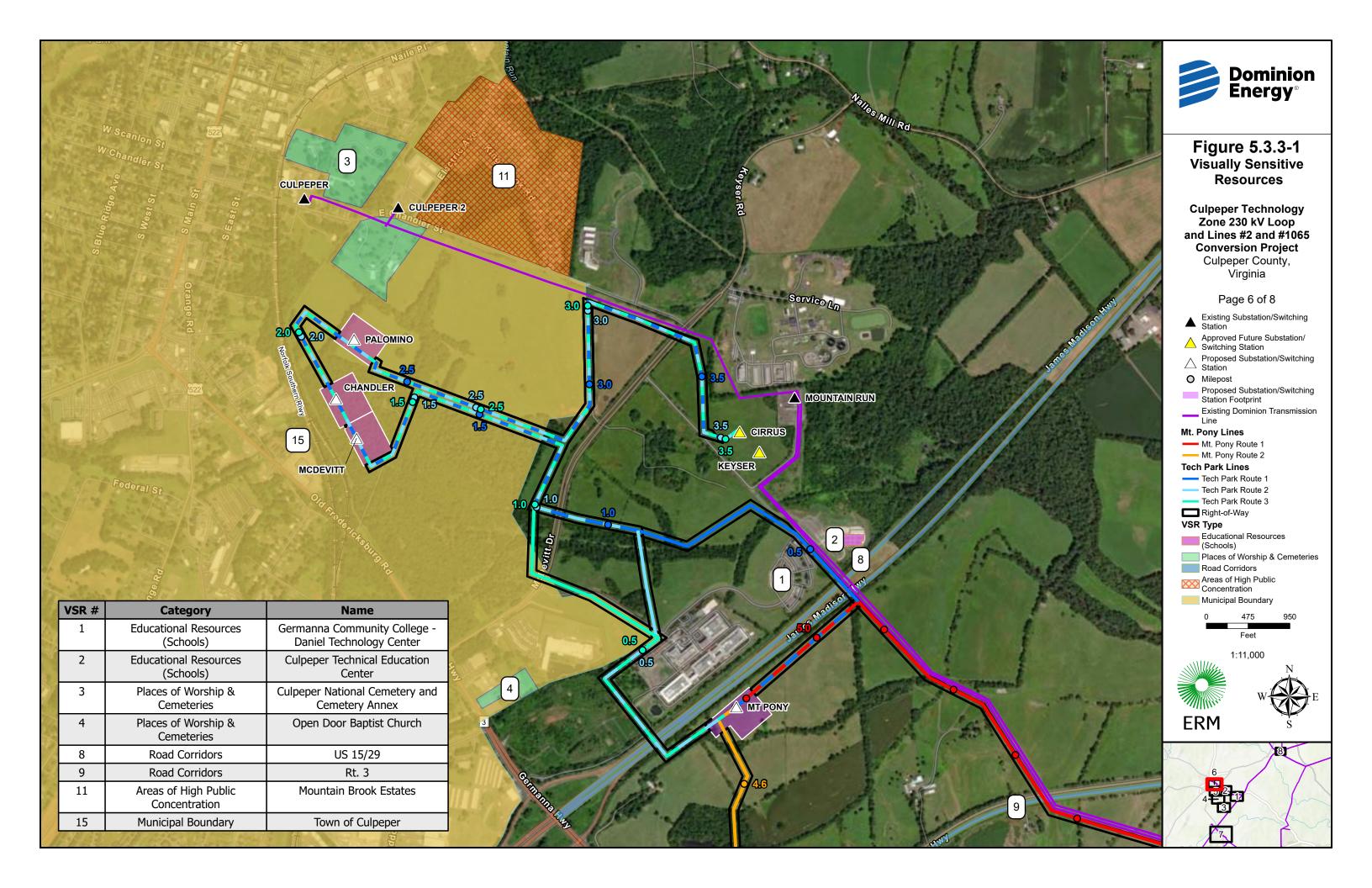


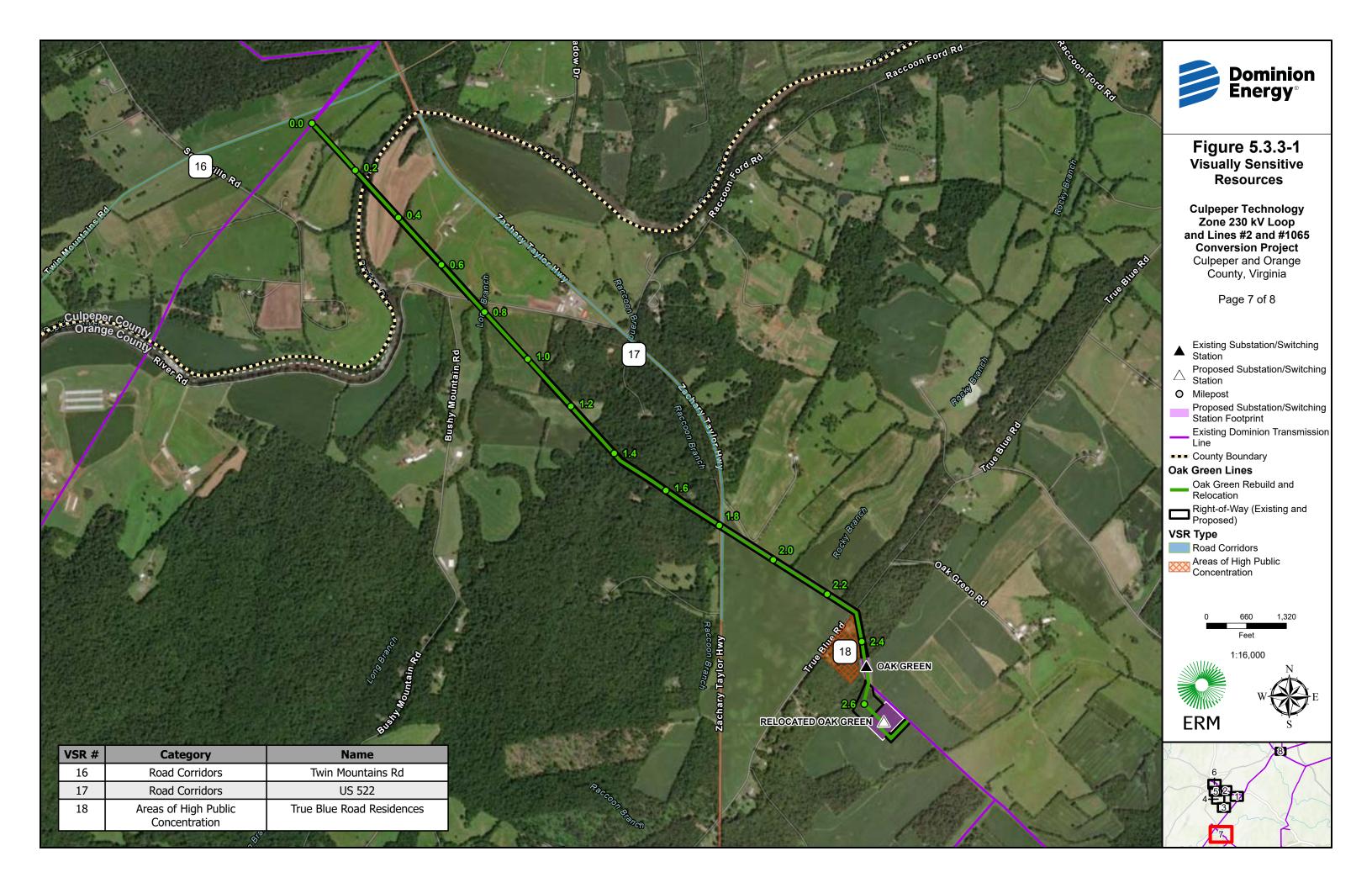




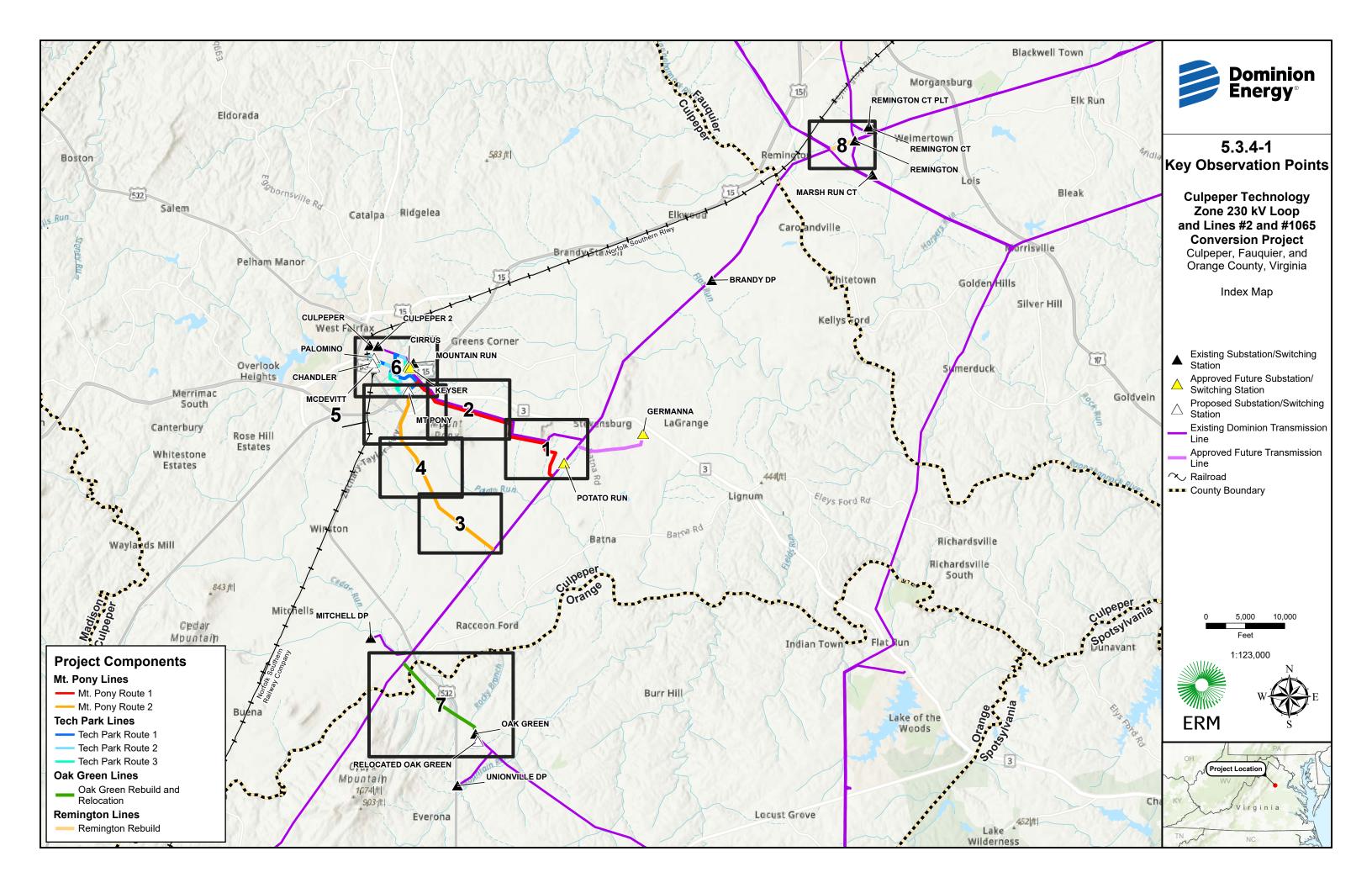


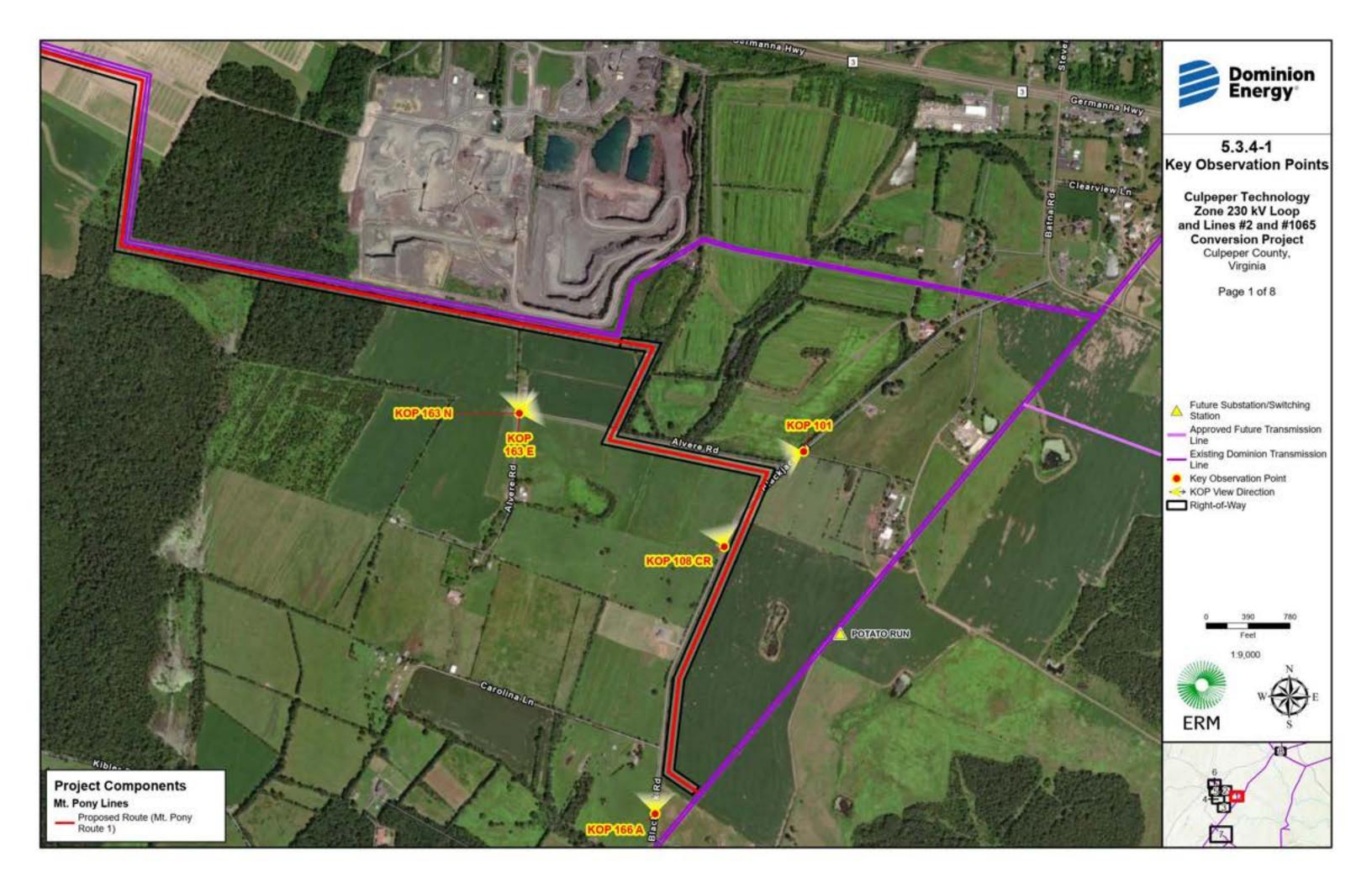


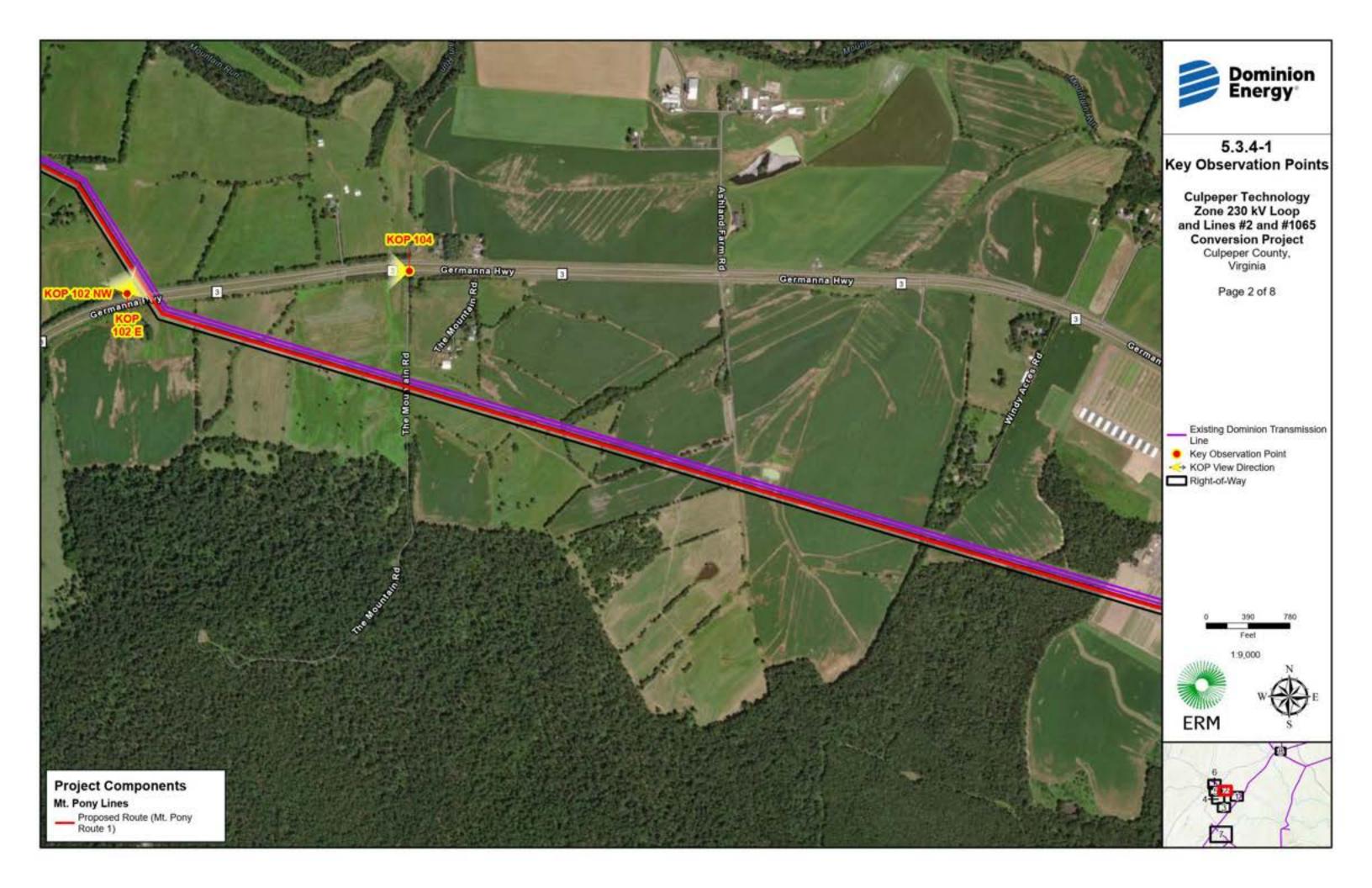






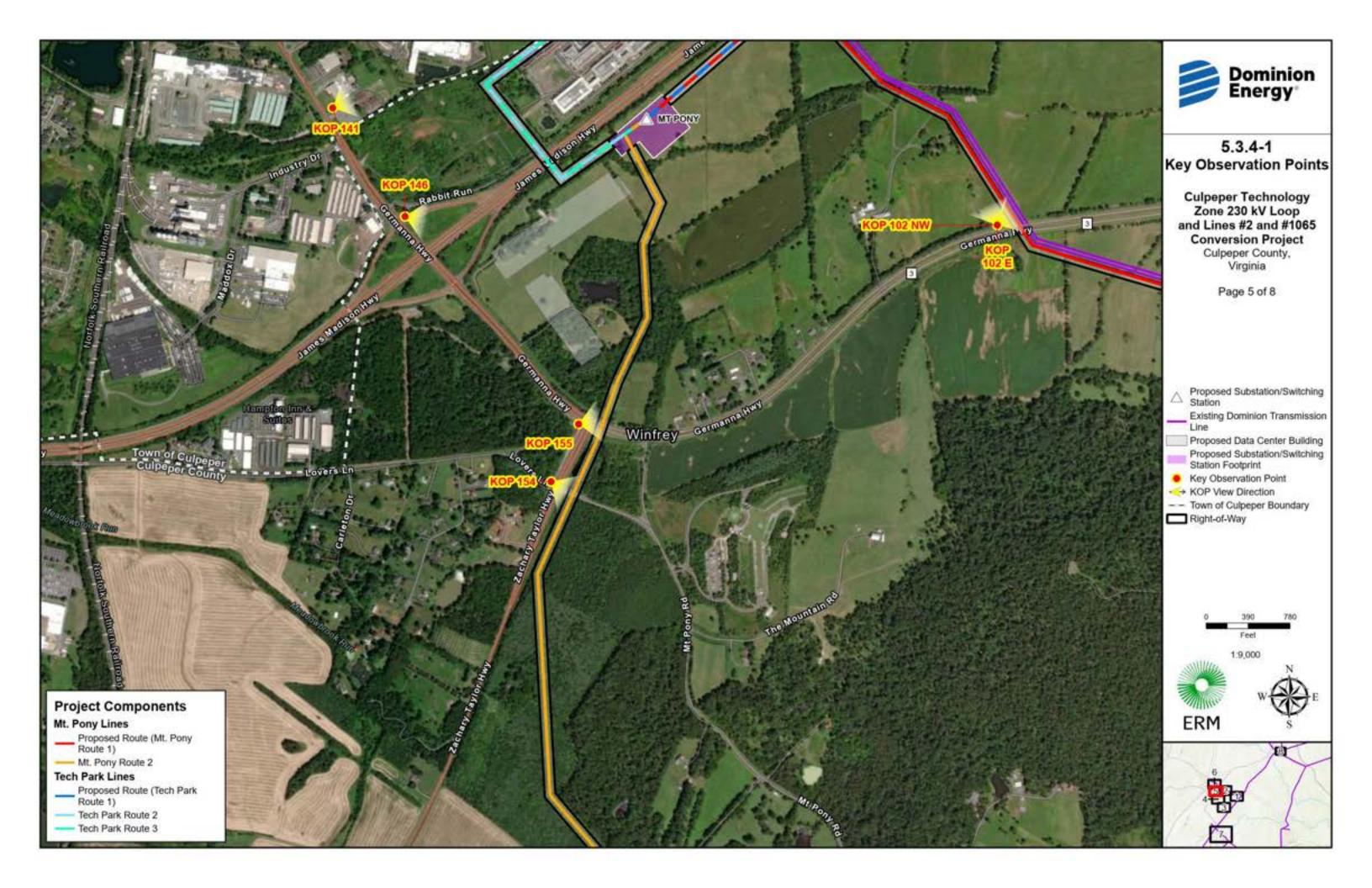


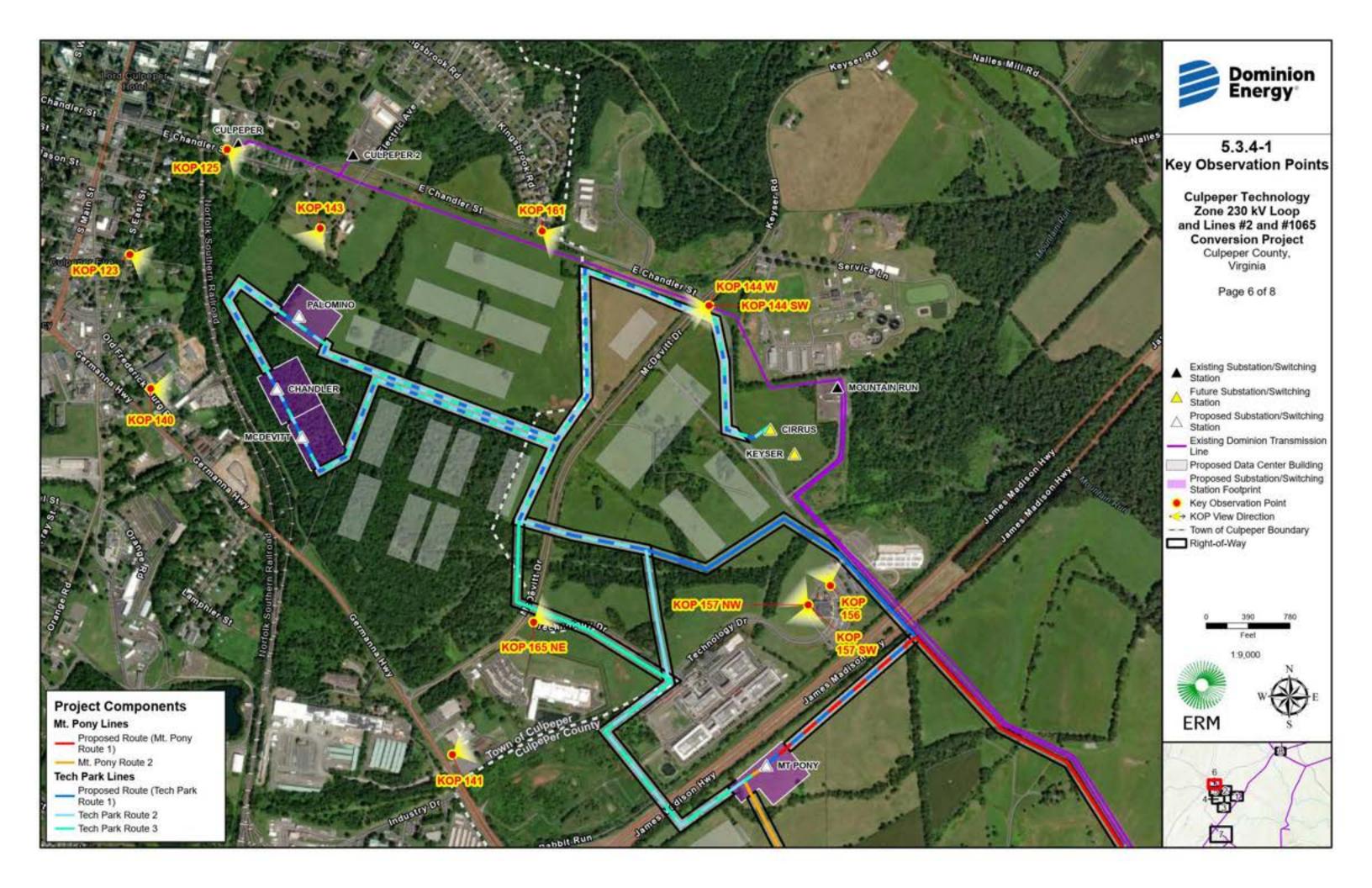






















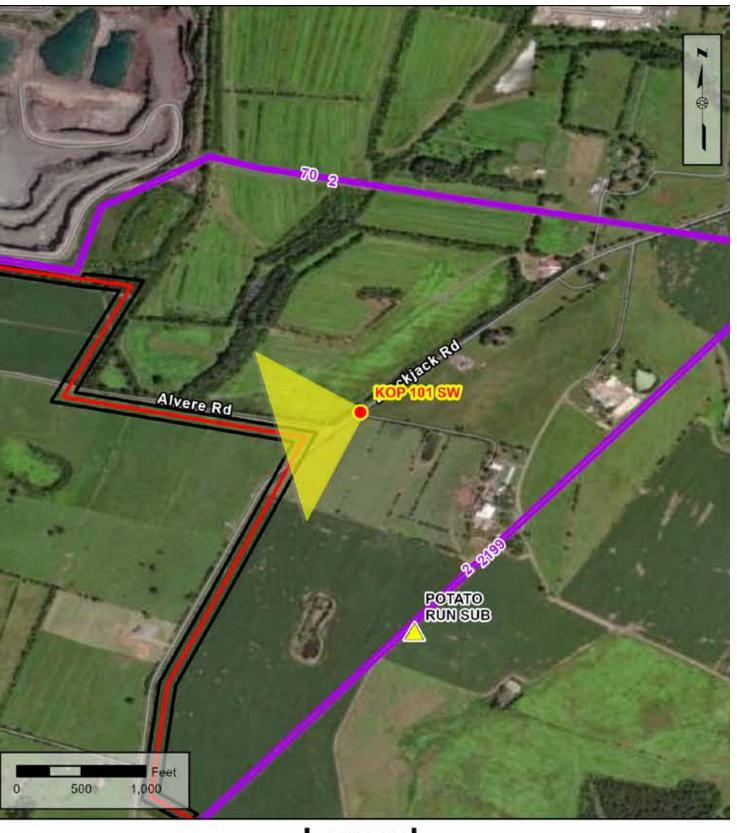
KOP 101 SW

Route: Mt. Pony Route 1

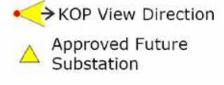
Date: 11/06/24 Time: 10:46 am

Viewing Direction: Southwest

Distance to closest feature: 0.07 miles



Legend



Existing DominionEnergy ElectricTransmission Line Mt Pony Route 1

Right of Way



Culpeper Technology Zone 230 kV Loop and Lines #2 and #1065 Conversion Project Culpeper, Fauquier, & Orange Counties, Virginia



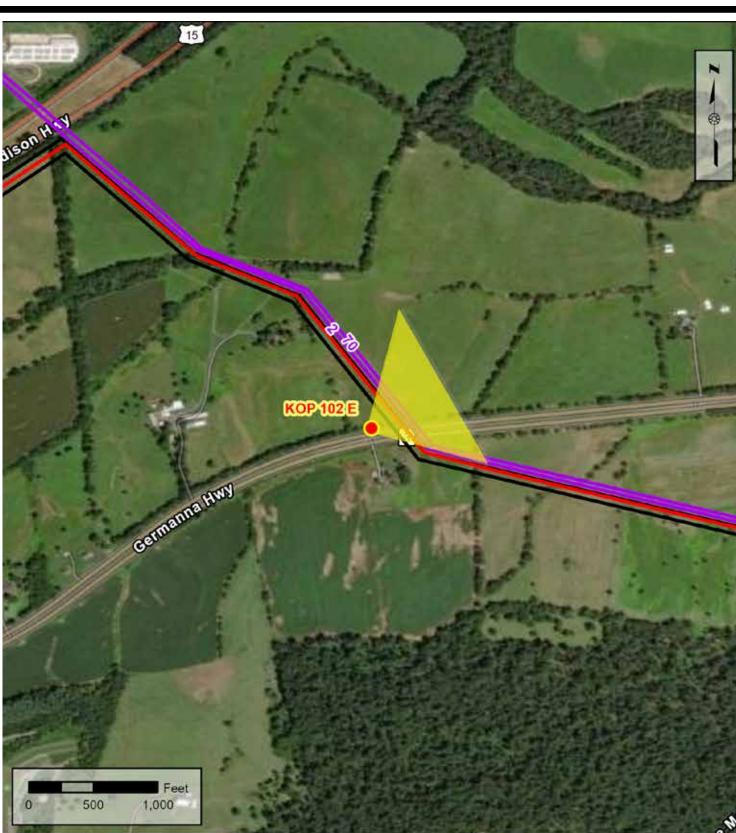
KOP 102 E

Route: Mt. Pony Route 1

Date: 10/08/24 Time: 12:43 pm

Viewing Direction: East

Distance to closest feature: 0.03 miles



Legend

◆ KOP View Direction **Existing Dominion** Energy Electric
 Transmission Line

— Mt Pony Route 1 Right of Way







KOP 102 NW

Route: Mt. Pony Route 1

Date: 10/08/24 Time: 12:43 pm

Viewing Direction: Northwest

Distance to closest feature: 0.03 miles



Legend

◆ KOP View Direction **Existing Dominion** Energy Electric
 Transmission Line

— Mt Pony Route 1 Right of Way



Culpeper Technology Zone 230 kV Loop and Lines #2 and #1065 Conversion Project Culpeper, Fauquier, & Orange Counties, Virginia



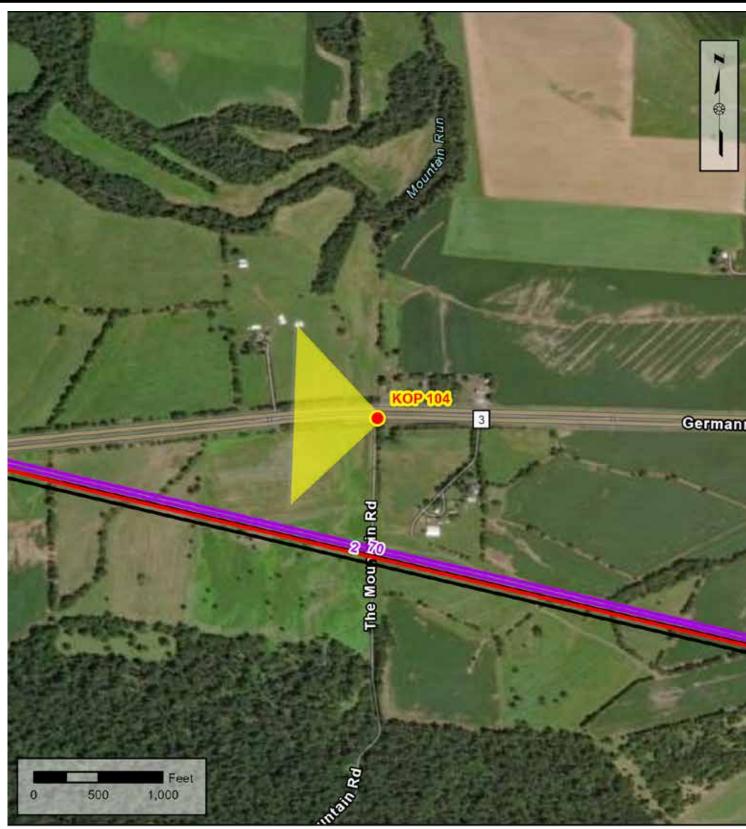
KOP 104

Route: Mt. Pony Route 1

Date: 10/08/24 Time: 12:58 pm

Viewing Direction: West

Distance to closest feature: 0.21 miles



Legend

◆ KOP View Direction **Existing Dominion** Energy Electric
 Transmission Line

— Mt Pony Route 1 Right of Way







KOP 108 CR

Route: Mt. Pony Route 1

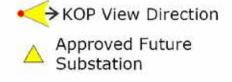
Date: 08/23/24 Time: 09:26 am

Viewing Direction: Northwest

Distance to closest feature: 0.02 miles



Legend



Existing DominionEnergy ElectricTransmission Line — Mt Pony Route 1

Right of Way







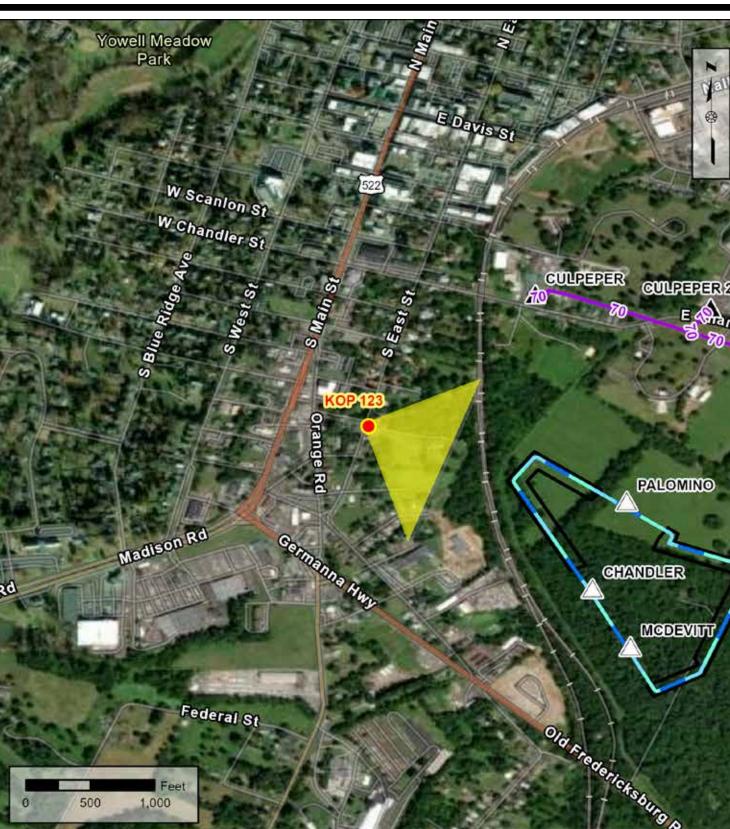
KOP 123

Route: Tech Park All Routes

Date: 10/08/24 Time: 02:46 pm

Viewing Direction: Southeast

Distance to closest feature: 0.19 miles



Legend

← KOP View Direction ▲ Existing Substation Proposed △ Substation

Existing DominionEnergy ElectricTransmission Line

Tech Park All Routes Right of Way



Culpeper Technology Zone 230 kV Loop and Lines #2 and #1065 Conversion Project Culpeper, Fauquier, & Orange Counties, Virginia



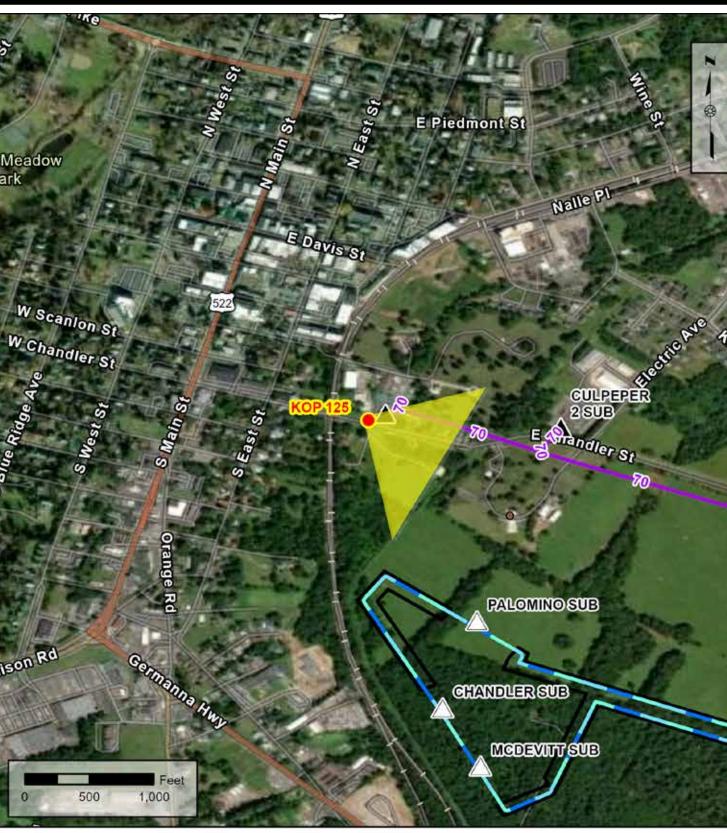
KOP 125

Route: Tech Park All Routes

Date: 10/07/24 Time: 02:30 pm

Viewing Direction: Southeast

Distance to closest feature: 0.25 miles



Legend

◆ KOP View Direction ▲ Existing Substation Proposed

△ Substation

Existing Dominion Energy Electric
 Transmission Line

___ Tech Park All Routes Right of Way



Culpeper Technology Zone 230 kV Loop and Lines #2 and #1065 Conversion Project Culpeper, Fauquier, & Orange Counties, Virginia



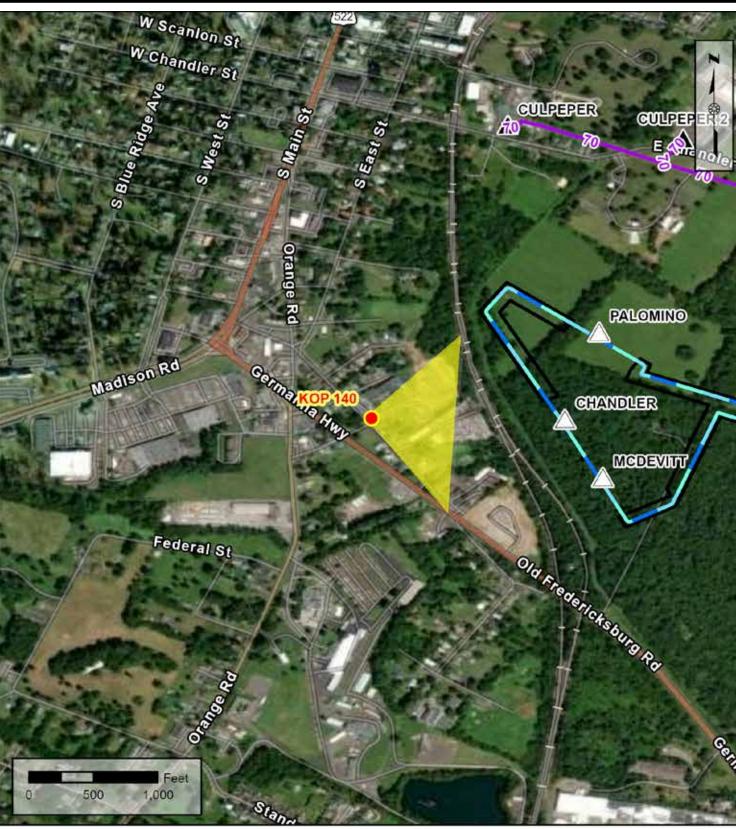
KOP 140

Route: Tech Park All Routes

Date: 10/08/24 Time: 02:29 pm

Viewing Direction: East

Distance to closest feature: 0.19 miles



Legend

← KOP View Direction ▲ Existing Substation Proposed Substation

Existing DominionEnergy ElectricTransmission Line

___ Tech Park All Routes Right of Way







KOP 141

Route: Tech Park Route 2

Date: 08/23/2024 Time: 11:01 am

Viewing Direction: Northeast

Distance to closest feature: 0.27 miles



Legend

◆ KOP View Direction △ Proposed Substation

Tech Park Route 2 Right of Way







KOP 141

Route: Tech Park Route 3

Date: 08/23/2024 Time: 11:01 am

Viewing Direction: Northeast

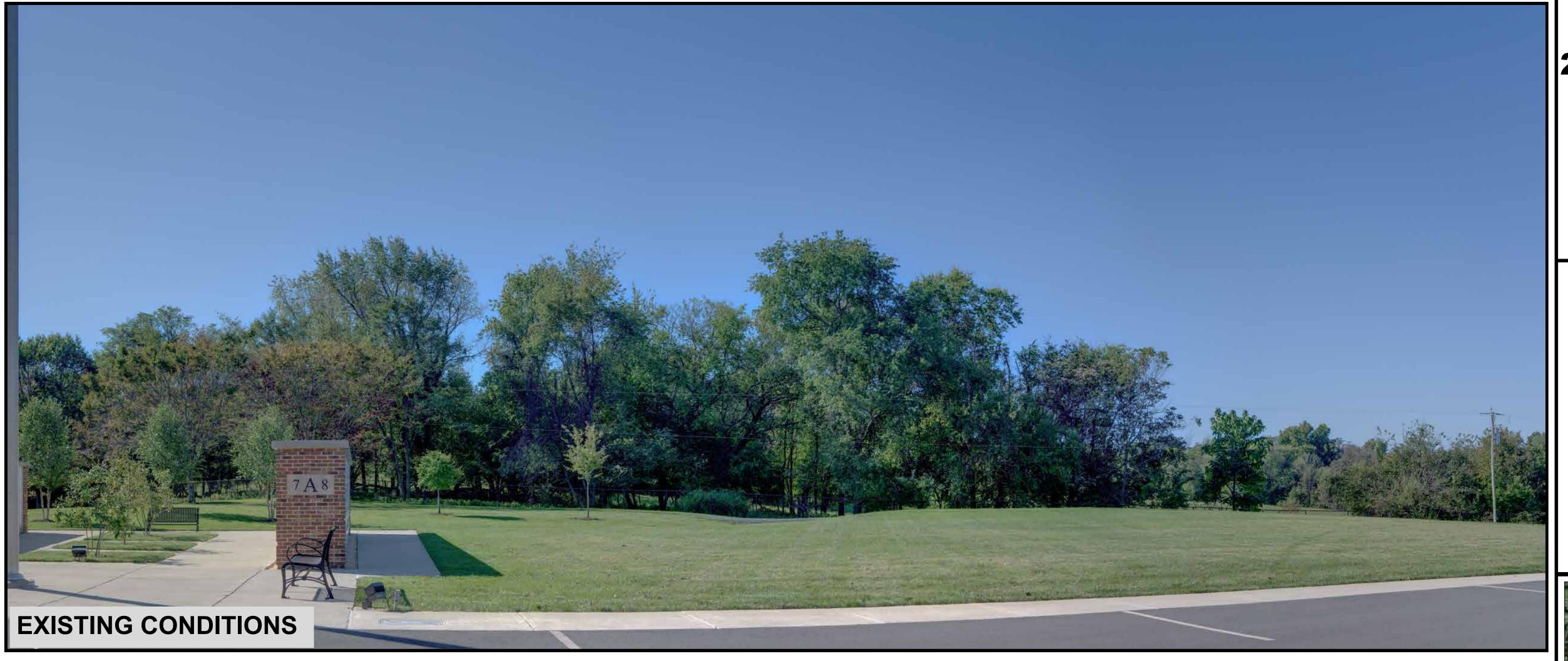
Distance to closest feature: 0.27 miles



Legend

◆ KOP View Direction △ Proposed Substation

Tech Park Route 3 Right of Way





Culpeper Technology Zone 230 kV Loop and Lines #2 and **#1065 Conversion Project**

Culpeper, Fauquier, & Orange Counties, Virginia



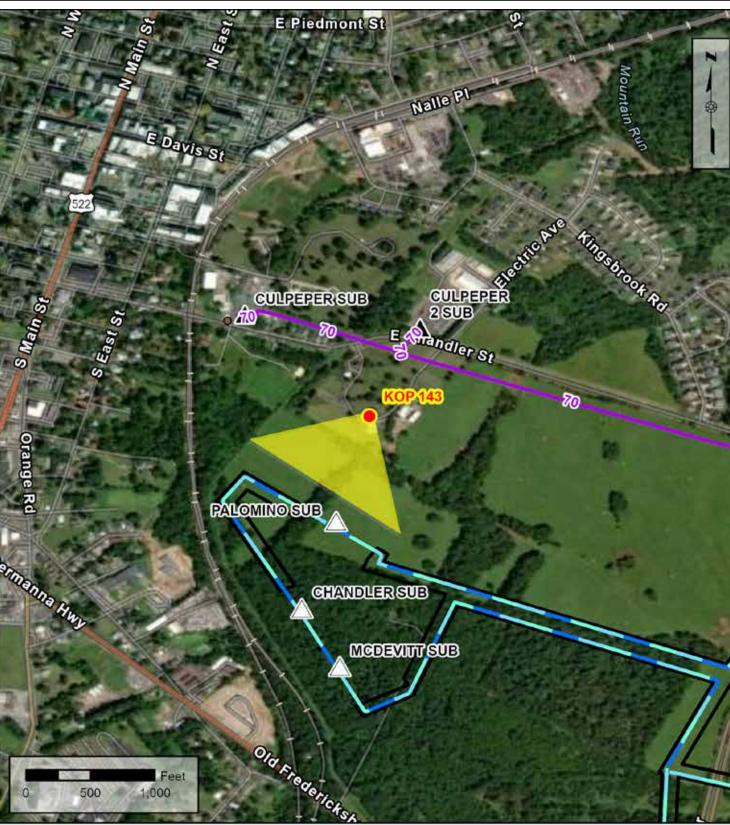
KOP 143

Route: Tech Park All Routes

Date: 10/09/2024 Time: 10:27 am

Viewing Direction: Southwest

Distance to closest feature: 0.16 miles



Legend

◆ KOP View Direction ▲ Existing Substation △ Proposed Substation

Existing Dominion Energy Electric
 Transmission Line

___ Tech Park All

Routes Right of Way



Culpeper Technology Zone 230 kV Loop and Lines #2 and #1065 Conversion Project Culpeper, Fauquier, & Orange Counties, Virginia



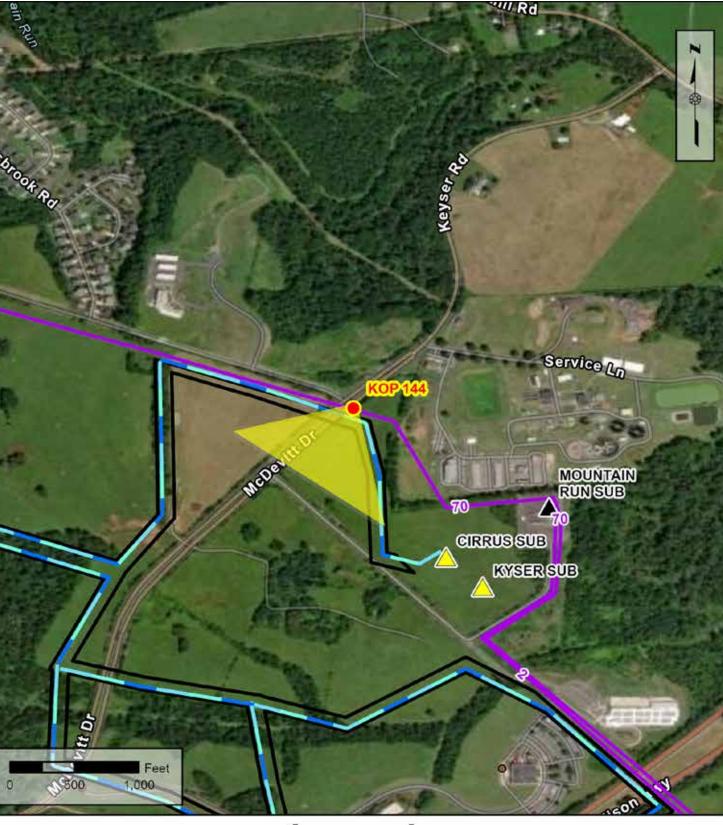
KOP 144

Route: Tech Park All Routes

Date: 08/21/2024 Time: 11:51 am

Viewing Direction: Southwest

Distance to closest feature: 0.02 miles



Legend

◆ KOP View Direction ▲ Existing Substation Approved Future Substation

Existing Dominion Energy Electric Transmission Line

___ Tech Park All Routes Right of Way



Culpeper Technology Zone 230 kV Loop and Lines #2 and #1065 Conversion Project Culpeper, Fauquier, & Orange Counties, Virginia



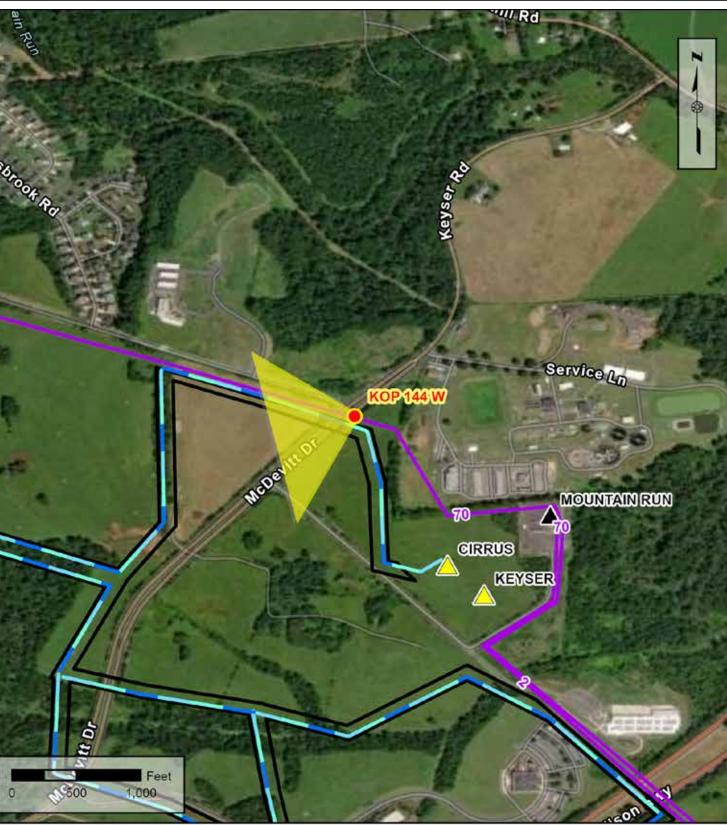
KOP 144 W

Route: Tech Park All Routes

Date: 08/21/2024 Time: 11:51 am

Viewing Direction: West

Distance to closest feature: 0.02 miles

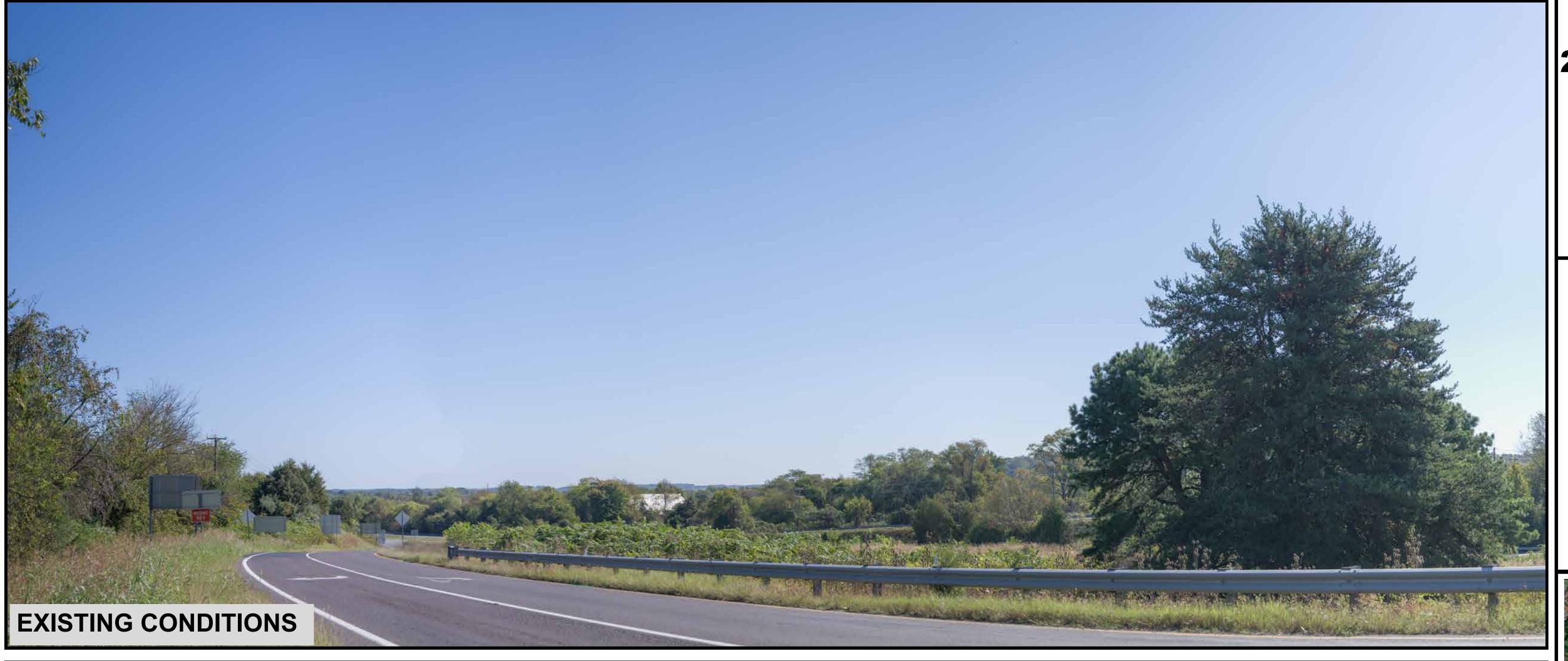


Legend

◆ KOP View Direction ▲ Existing Substation Approved Future Substation

Existing Dominion Energy Electric Transmission Line

___ Tech Park All Routes Right of Way







KOP 146

Route: Tech Park Route 1 & Mt. Pony Route 1

Date: 10/09/2024 Time: 10:58 am

Viewing Direction: East

Distance to closest feature: 0.46 miles



◆ KOP View Direction Approved Future Substation

△ Proposed Substation **Existing Dominion** Energy Electric
 Transmission Line

- Tech Park Route 1 Mt Pony Route 1/ Tech Park Route 1 Right of Way

Note: Project components illustrated are based on proposed preliminary designs The images contained on this page show the proposed project within a wider landscape context and are not representative of scale and distance when viewed from the actual view point.

Legend







KOP 146

Route: Tech Park Route 1 & Mt. Pony Route 2

Date: 10/09/2024 Time: 10:58 am

Viewing Direction: East

Distance to closest feature: 0.41 miles



Legend

◆ KOP View Direction Approved Future Substation

△ Proposed Substation Existing DominionEnergy ElectricTransmission Line

— Mt Pony Route 2 - Tech Park Route 1 Right of Way







KOP 146

Route: Tech Park Route 2 & Mt. Pony Route 1

Date: 10/09/2024 Time: 10:58 am

Viewing Direction: East

Distance to closest feature: 0.26 miles



◆ KOP View Direction Approved Future Substation

A Proposed Substation Existing DominionEnergy ElectricTransmission Line

— Mt Pony Route 1 — Tech Park Route 2 Right of Way







KOP 146

Route: Tech Park Route 2 & Mt. Pony Route 2

Date: 10/09/2024 Time: 10:58 am

Viewing Direction: East

Distance to closest feature: 0.26 miles



Legend ◆ KOP View Direction

Approved Future Substation

△ Proposed Substation Existing DominionEnergy ElectricTransmission Line

— Mt Pony Route 2 — Tech Park Route 2 Right of Way







KOP 146

Route: Tech Park Route 3 & Mt. Pony Route 1

Date: 10/09/2024 Time: 10:58 am

Viewing Direction: East

Distance to closest feature: 0.26 miles



◆ KOP View Direction

Approved Future Substation

A Proposed Substation Existing DominionEnergy ElectricTransmission Line

— Mt Pony Route 1 Tech Park Route 3 Right of Way







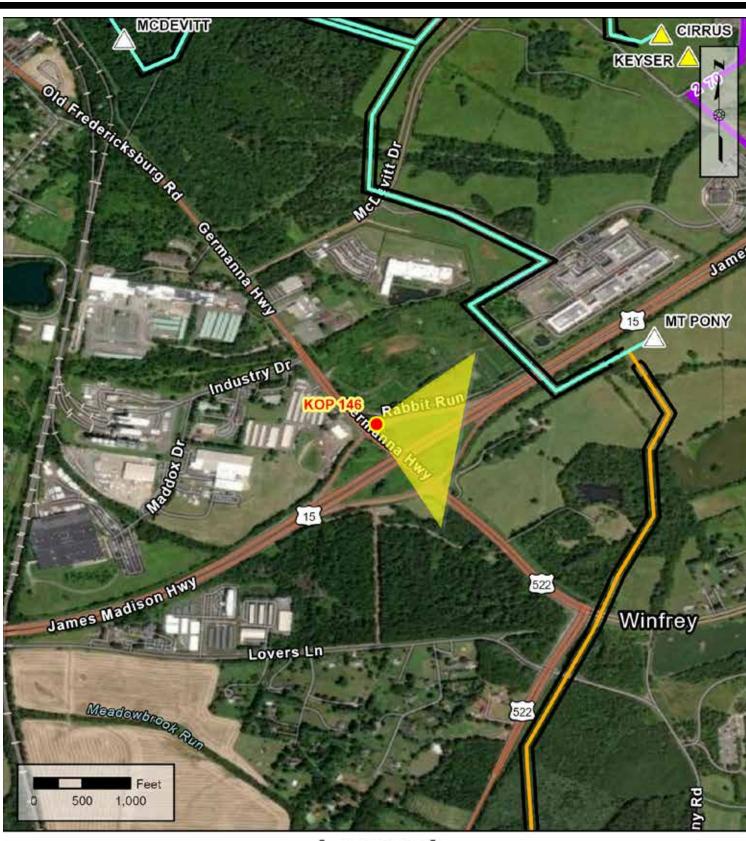
KOP 146

Route: Tech Park Route 3 & Mt. Pony Route 2

Date: 10/09/2024 Time: 10:58 am

Viewing Direction: East

Distance to closest feature: 0.26 miles



Legend

◆ KOP View Direction Approved Future Substation

△ Proposed Substation Existing DominionEnergy ElectricTransmission Line

— Mt Pony Route 2 Tech Park Route 3 Right of Way







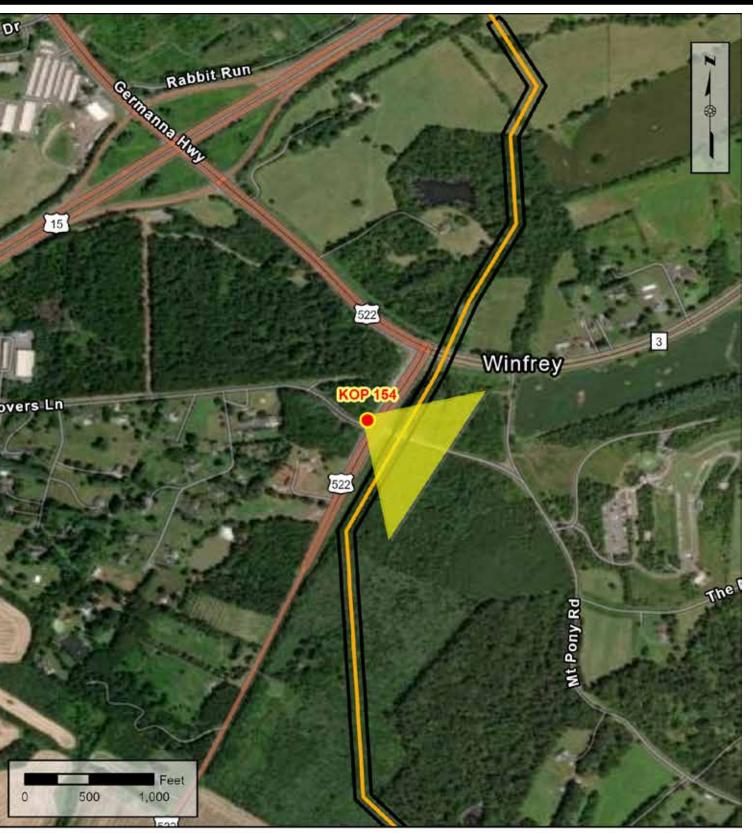
KOP 154

Route: Mt. Pony Route 2

Date: 10/08/2024 Time: 01:42 pm

Viewing Direction: Southeast

Distance to closest feature: 0.04 miles



Legend

◆ KOP View Direction — Mt Pony Route 2

Right of Way



Culpeper Technology Zone 230 kV Loop and Lines #2 and #1065 Conversion Project Culpeper, Fauquier, & Orange Counties, Virginia



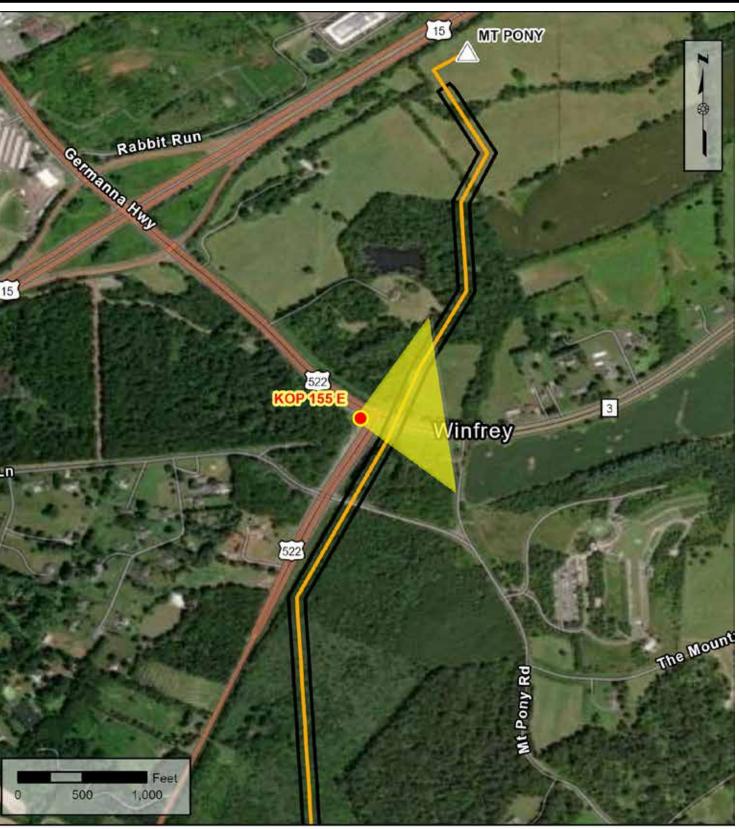
KOP 155 E

Route: Mt. Pony Route 2

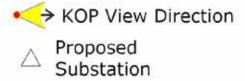
Date: 10/08/2024 Time: 01:33 pm

Viewing Direction: East

Distance to closest feature: 0.04 miles



Legend



— Mt Pony Route 2 Right of Way







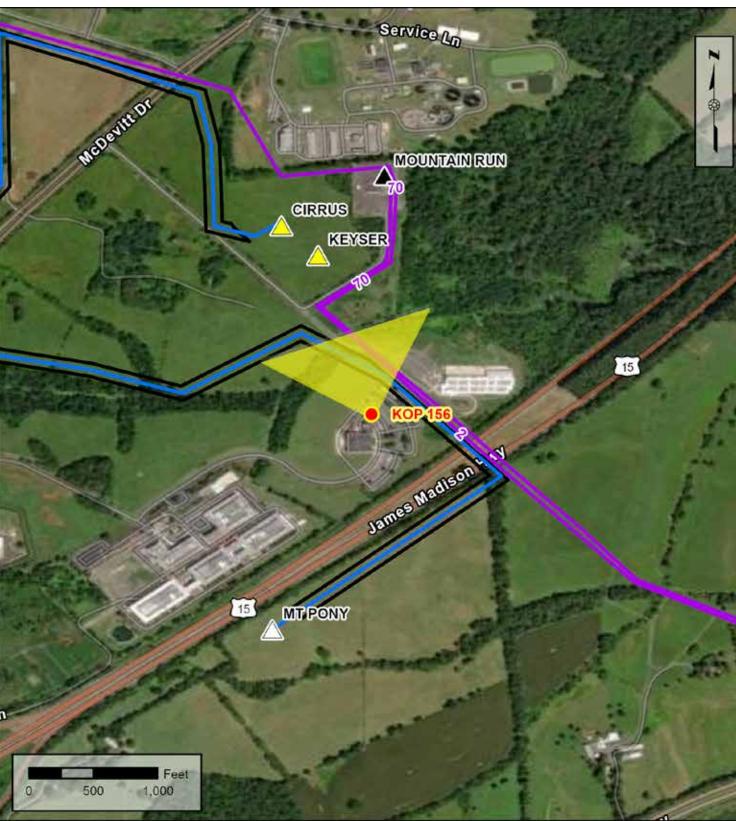
KOP 156

Route: Tech Park Route 1

Date: 08/21/2024 Time: 12:44 pm

Viewing Direction: Northwest

Distance to closest feature: 0.05 miles



► KOP View Direction Proposed

▲ Existing Substation

Approved Future
Substation

Proposed
 Substation
 Existing Dominion
 Energy Electric
 Transmission Line

Tech Park Route 1
Right of Way







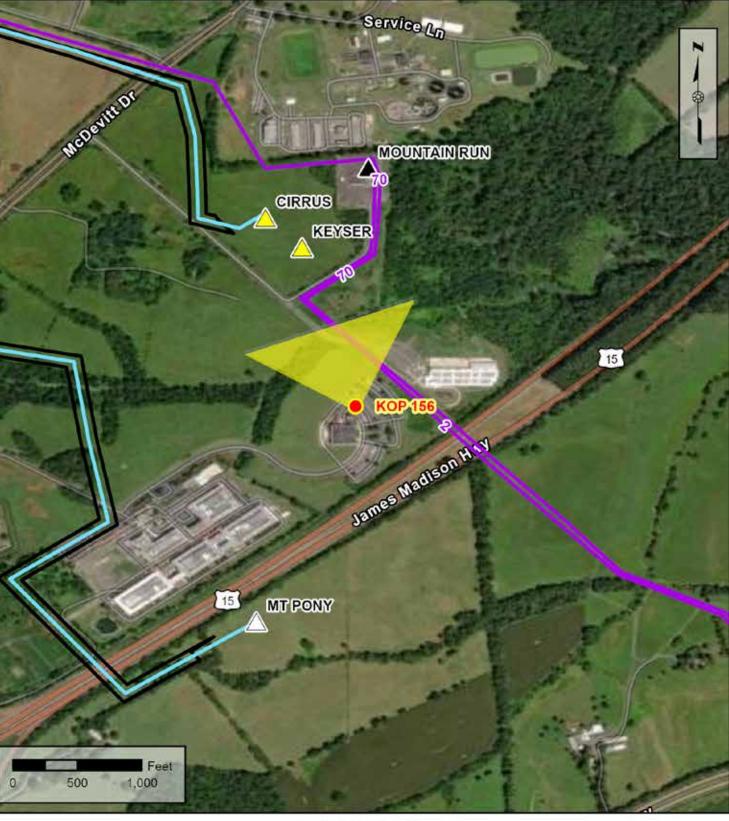
KOP 156

Route: Tech Park Route 2

Date: 08/21/2024 Time: 12:44 pm

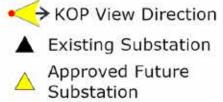
Viewing Direction: Northwest

Distance to closest feature: 0.29 miles



Legend

Transmission Line



Proposed Substation - Energy Electric

Tech Park Route 2 **Existing Dominion**

Right of Way



Culpeper Technology Zone 230 kV Loop and Lines #2 and #1065 Conversion Project Culpeper, Fauquier, & Orange Counties, Virginia



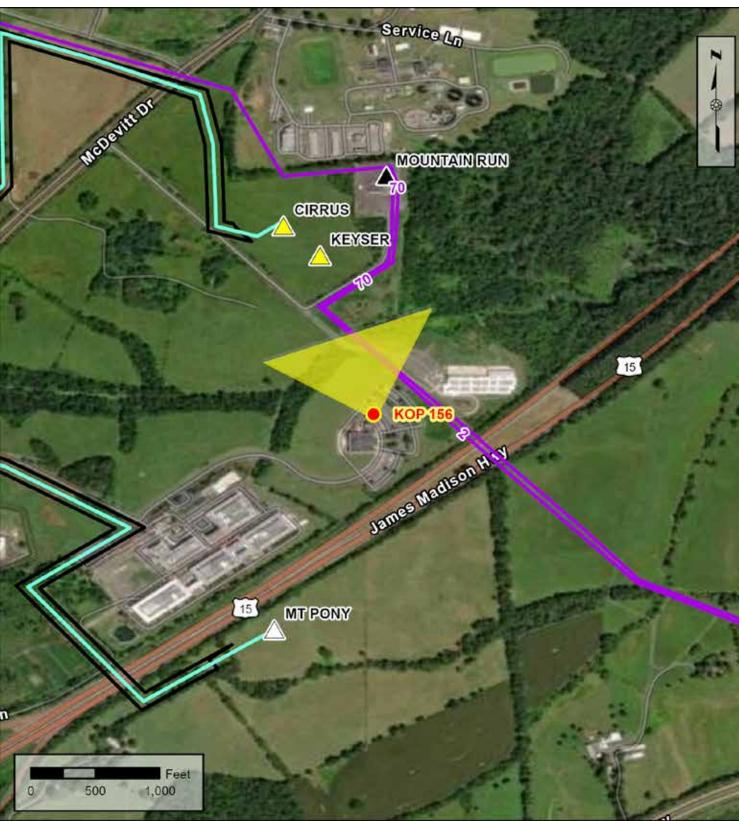
KOP 156

Route: Tech Park Route 3

Date: 08/21/2024 Time: 12:44 pm

Viewing Direction: Northwest

Distance to closest feature: 0.29 miles



Legend

◆ KOP View Direction ▲ Existing Substation Approved Future Substation

Proposed Substation **Existing Dominion** - Energy Electric Transmission Line

Tech Park Route 3 Right of Way







KOP 157

Route: Tech Park Route 1

Date: 08/21/2024 Time: 01:04 pm

Viewing Direction: Northwest

Distance to closest feature: 0.13 miles



► KOP View Direction ▲ Existing Substation Approved Future Substation

Proposed
 Substation
 Existing Dominion
 Energy Electric
 Transmission Line

Tech Park Route 1
Right of Way







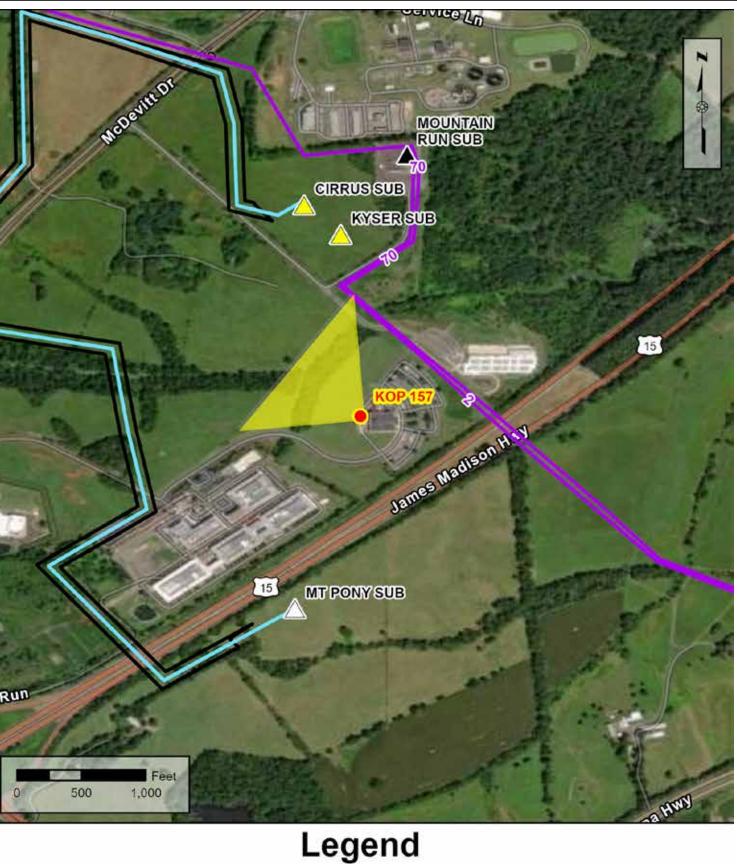
KOP 157

Route: Tech Park Route 2

Date: 08/21/2024 Time: 01:04 pm

Viewing Direction: Northwest

Distance to closest feature: 0.27 miles



► KOP View Direction A Existing Substation Approved Future Substation

Proposed
 Substation
 Existing Dominion
 Energy Electric
 Transmission Line

Tech Park Route 2

Right of Way



Culpeper Technology Zone 230 kV Loop and Lines #2 and #1065 Conversion Project Culpeper, Fauquier, & Orange Counties, Virginia



KOP 157

Route: Tech Park Route 3

Date: 08/21/2024 Time: 01:04 pm

Viewing Direction: Northwest

Distance to closest feature: 0.38 miles



► KOP View Direction Approved Future Substation

Proposed
 Substation
 Existing Dominion
 Energy Electric
 Transmission Line

rech Park Route 3
Tation Right of Way







KOP 157 S

Route: Mt. Pony Route 1 & Tech Park Route 1

Date: 08/21/2024 Time: 01:04 pm

Viewing Direction: South

Distance to closest feature: 0.16 miles



←→ KOP View Direction ▲ Existing Substation Approved Future Transmission Line

Substation

Proposed Substation **Existing Dominion** - Energy Electric

— Mt Pony Route 1 - Tech Park Route 1 Right of Way







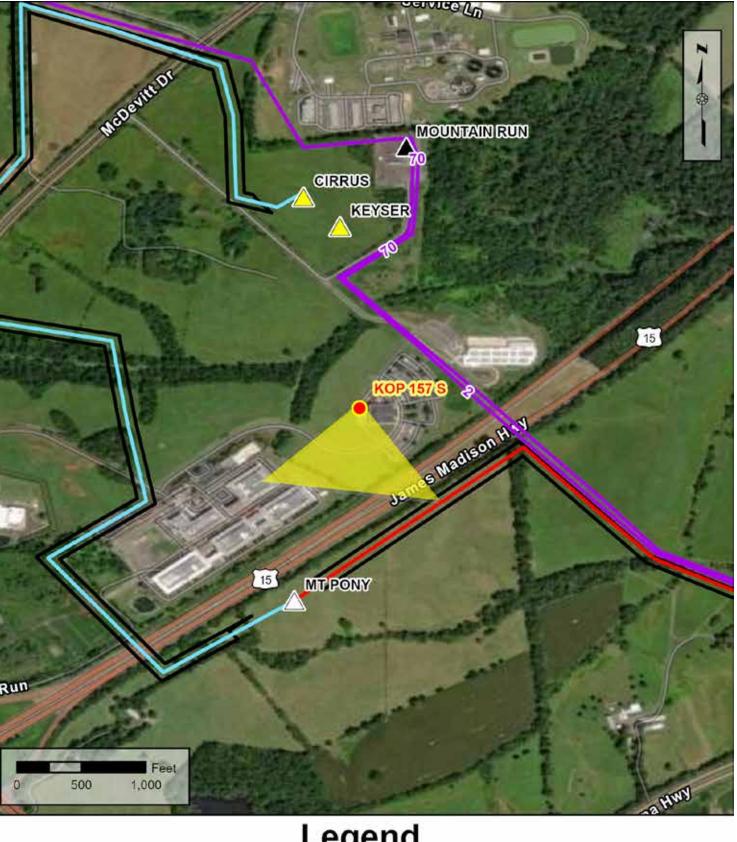
KOP 157 S

Route: Mt. Pony Route 1 & Tech Park Route 2

Date: 08/21/2024 Time: 01:04 pm

Viewing Direction: South

Distance to closest feature: 0.16 miles



Legend

←→ KOP View Direction ▲ Existing Substation Approved Future

Substation

Proposed

Substation **Existing Dominion** - Energy Electric Transmission Line

— Mt Pony Route 1 — Tech Park Route 2 Right of Way







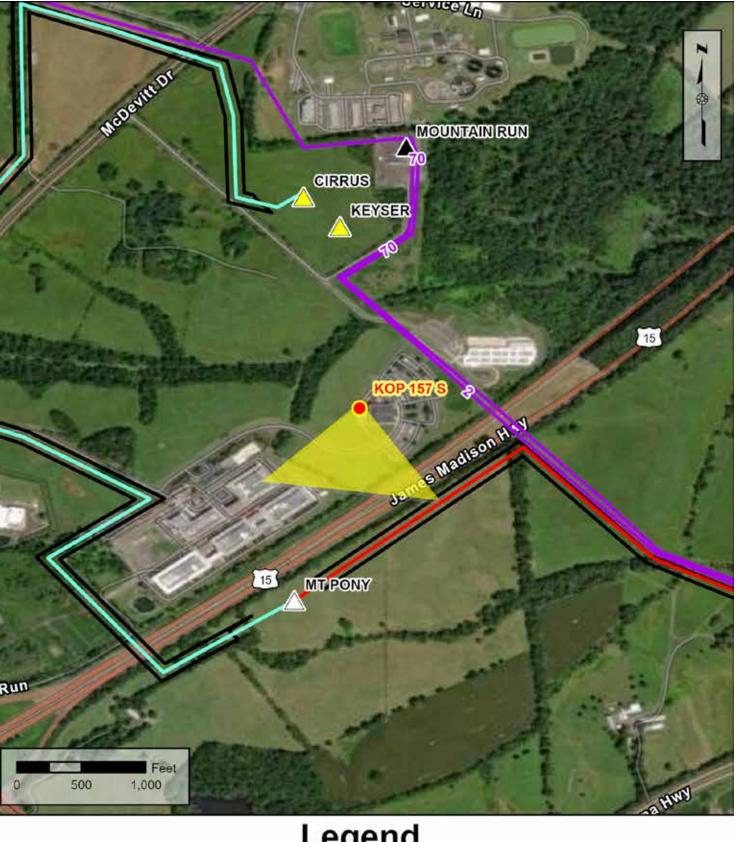
KOP 157 S

Route: Mt. Pony Route 1 & Tech Park Route 3

Date: 08/21/2024 Time: 01:04 pm

Viewing Direction: South

Distance to closest feature: 0.16 miles



Legend

←→ KOP View Direction ▲ Existing Substation Approved Future

Substation

Proposed

Substation **Existing Dominion** - Energy Electric Transmission Line

— Mt Pony Route 1 Tech Park Route 3 Right of Way







KOP 157 S

Route: Mt. Pony Route 2 & Tech Park Route 1

Date: 08/21/2024 Time: 01:04 pm

Viewing Direction: South

Distance to closest feature: 0.16 miles



▲ Existing Substation Approved Future

Substation

Proposed

Substation **Existing Dominion** - Energy Electric Transmission Line

— Mt Pony Route 2 - Tech Park Route 1 Right of Way







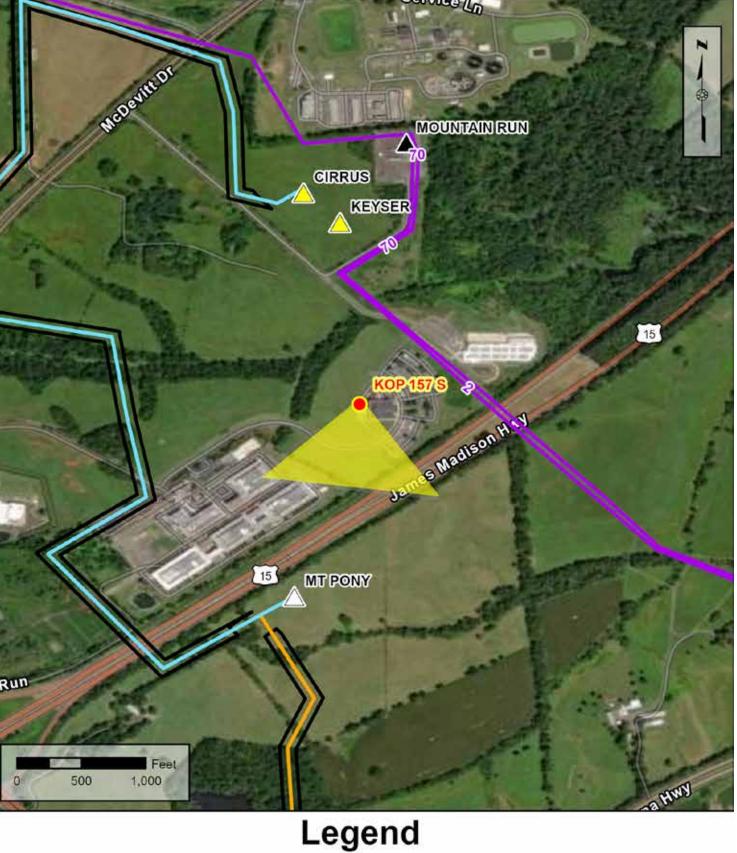
KOP 157 S

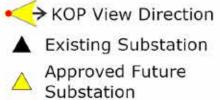
Route: Mt. Pony Route 2 & Tech Park Route 2

Date: 08/21/2024 Time: 01:04 pm

Viewing Direction: South

Distance to closest feature: 0.28 miles





Proposed Substation

Existing Dominion - Energy Electric Transmission Line

— Mt Pony Route 2 — Tech Park Route 2 Right of Way







KOP 157 S

Route: Mt. Pony Route 2 & Tech Park Route 3

Date: 08/21/2024 Time: 01:04 pm

←→ KOP View Direction

▲ Existing Substation

Approved Future

Substation

Viewing Direction: South

Distance to closest feature: 0.28 miles



Note: Project components illustrated are based on proposed preliminary designs
The images contained on this page show the proposed project within a wider landscape context
and are not representative of scale and distance when viewed from the actual view point.

Proposed

Substation

- Energy Electric

Existing Dominion

Transmission Line

— Mt Pony Route 2

Tech Park Route 3

Right of Way



Culpeper Technology Zone 230 kV Loop and Lines #2 and #1065 Conversion Project Culpeper, Fauquier, & Orange Counties, Virginia



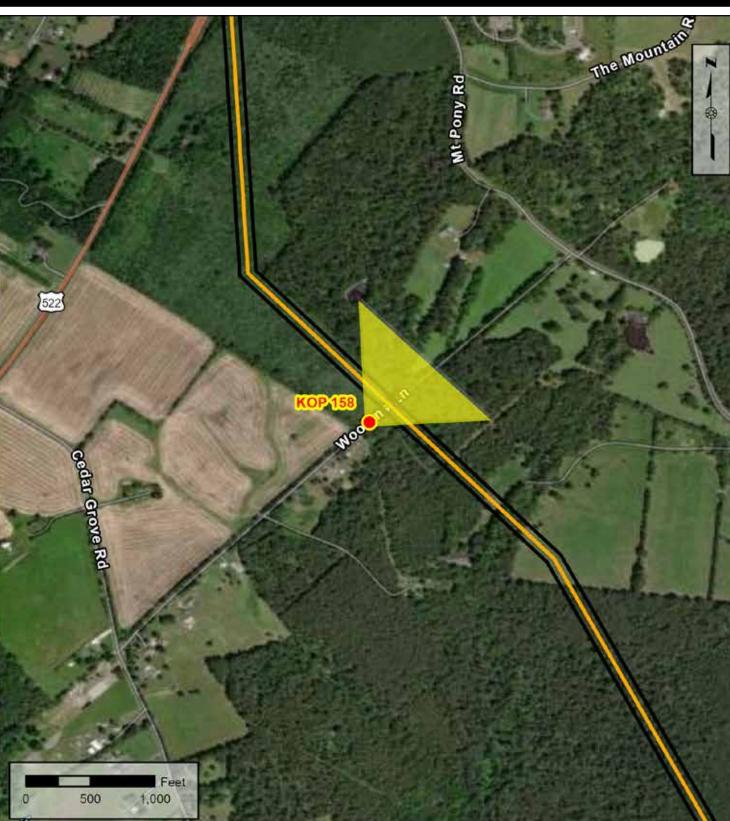
KOP 158

Route: Mt. Pony Route 2

Date: 10/08/2024 Time: 01:58 pm

Viewing Direction: Northeast

Distance to closest feature: 0.03 miles



Legend

◆ KOP View Direction — Mt Pony Route 2

Right of Way



Culpeper Technology Zone 230 kV Loop and Lines #2 and #1065 Conversion Project Culpeper, Fauquier, & Orange Counties, Virginia



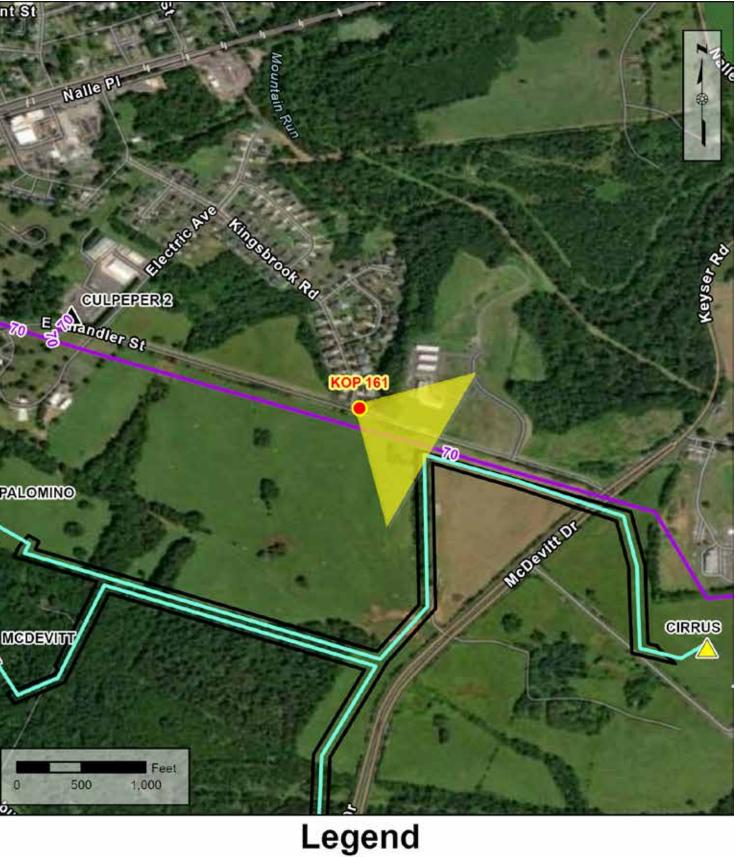
KOP 161

Route: Tech Park Route 3

Date: 10/07/2024 Time: 02:59 pm

Viewing Direction: East

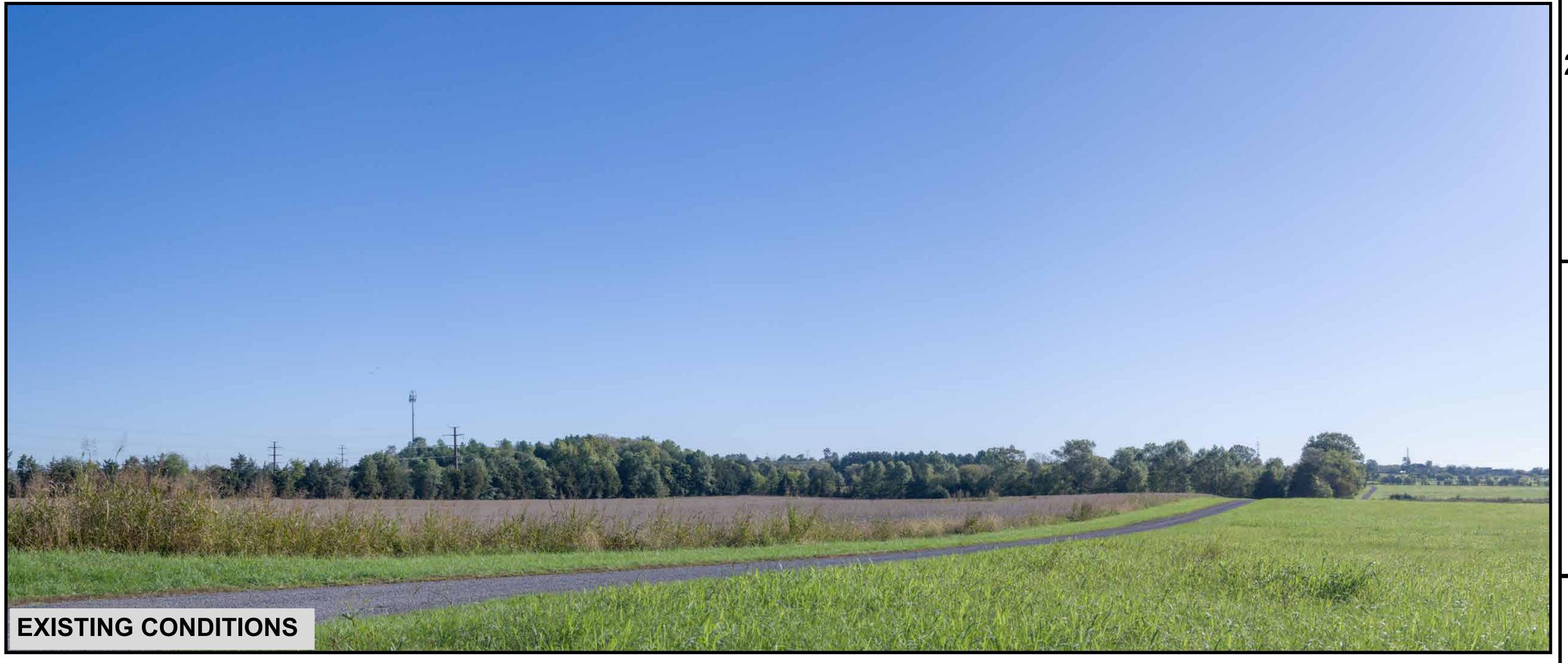
Distance to closest feature: 0.1 miles



► KOP View Direction ▲ Existing Substation Approved Future Substation

Proposed
 Substation
 Existing Dominion
 Energy Electric
 Transmission Line

Tech Park Route 3
Right of Way







KOP 163 E

Route: Mt. Pony Route 1

Date: 10/08/2024 Time: 09:32 am

Viewing Direction: East

Distance to closest feature: 0.16 miles



Legend

← KOP View Direction **Existing Dominion**

— Mt Pony Route 1 Right of Way

Energy Electric Transmission Line







KOP 163 N

Route: Mt. Pony Route 1

Date: 10/08/2024 Time: 09:32 am

Viewing Direction: North

Distance to closest feature: 0.16 miles



Legend

← KOP View Direction **Existing Dominion** Energy Electric
 Transmission Line

— Mt Pony Route 1 Right of Way







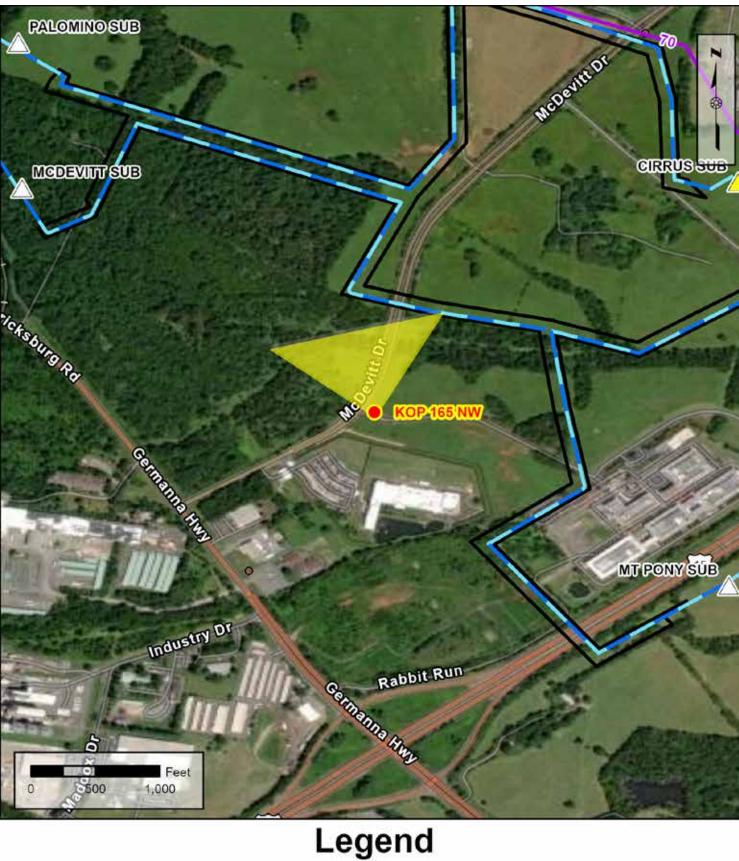
KOP 165 NW

Route: Tech Park Route 1 & 2

Date: 10/09/2024 Time: 11:12 am

Viewing Direction: Northwest

Distance to closest feature: 0.17 miles



←→ KOP View Direction Approved Future Substation

△ Proposed Substation

Existing Dominion - Energy Electric Transmission Line

Tech Park Route 1/ Tech Park Route 2 Right of Way







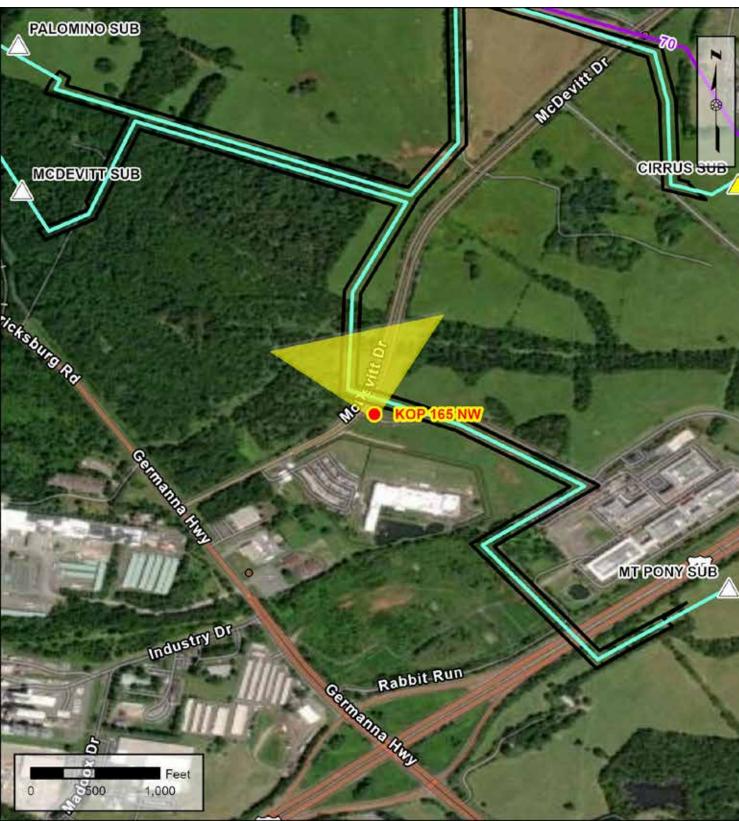
KOP 165 NW

Route: Tech Park Route 3

Date: 10/09/2024 Time: 11:12 am

Viewing Direction: Northwest

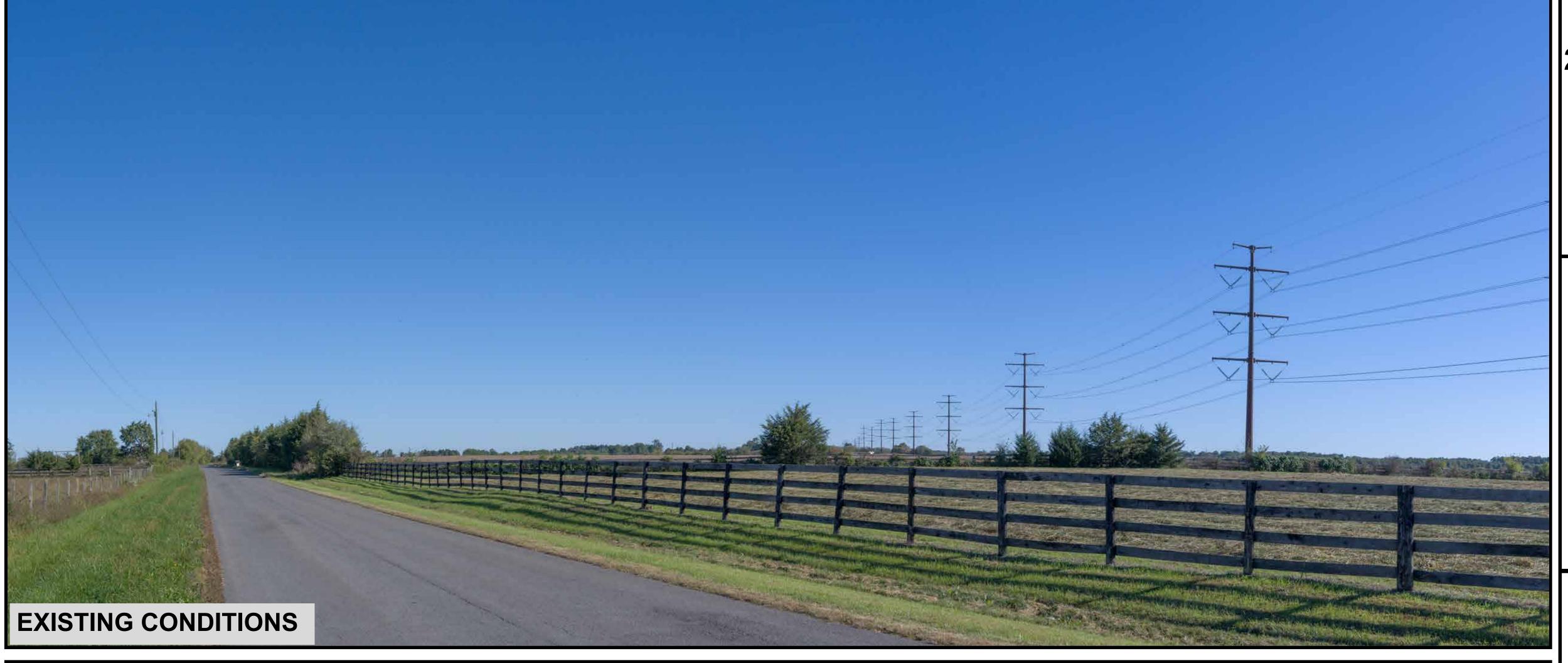
Distance to closest feature: 0.02 miles



← KOP View Direction Approved Future Substation

Legend Proposed Substation **Existing Dominion** - Energy Electric Transmission Line

— Tech Park Route 3 Right of Way







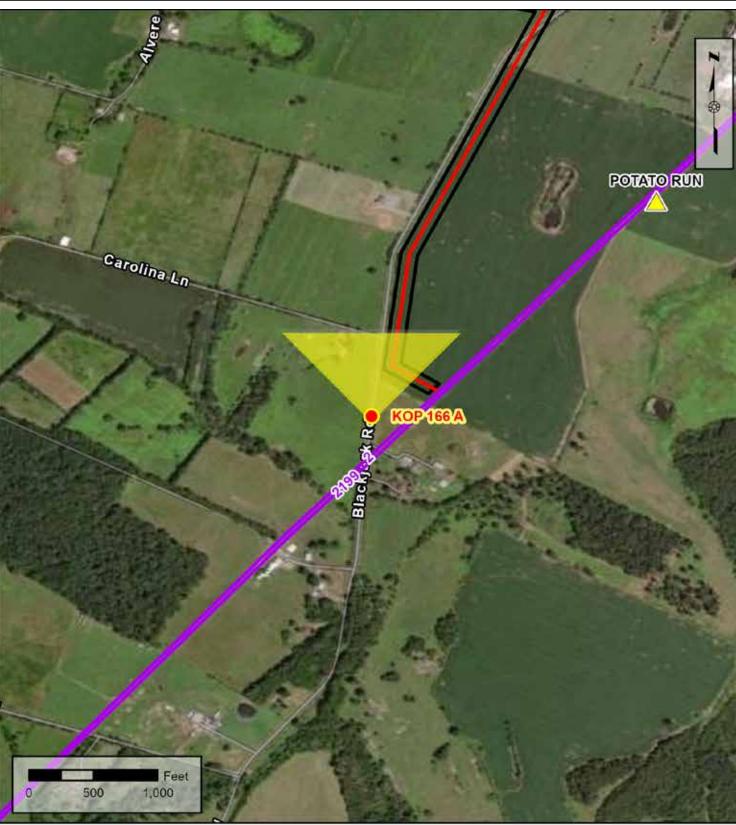
KOP 166 A

Route: Mt. Pony Route 1

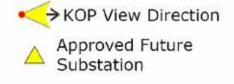
Date: 10/08/2024 Time: 10:15 am

Viewing Direction: North

Distance to closest feature: 0.07 miles

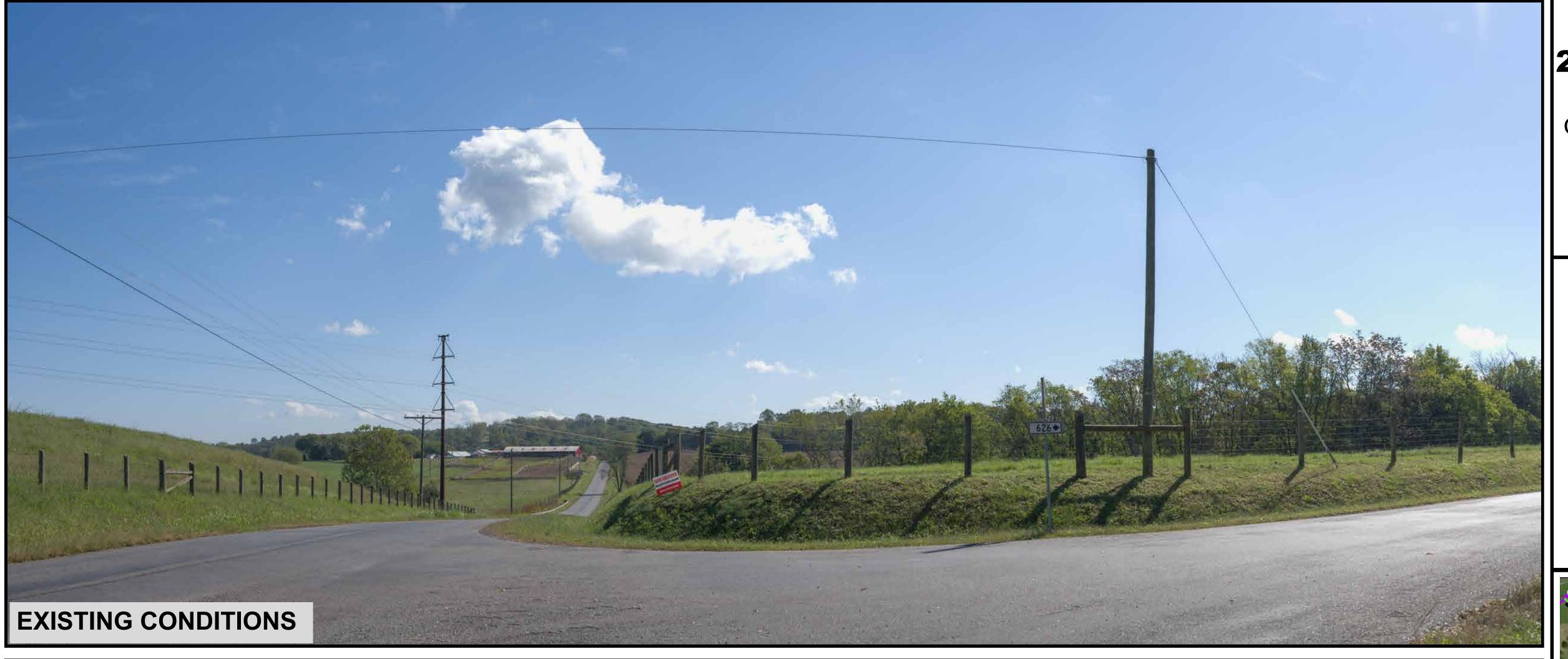


Legend



 Existing Dominion
 Energy Electric
 Transmission Line Mt Pony Route 1

Right of Way







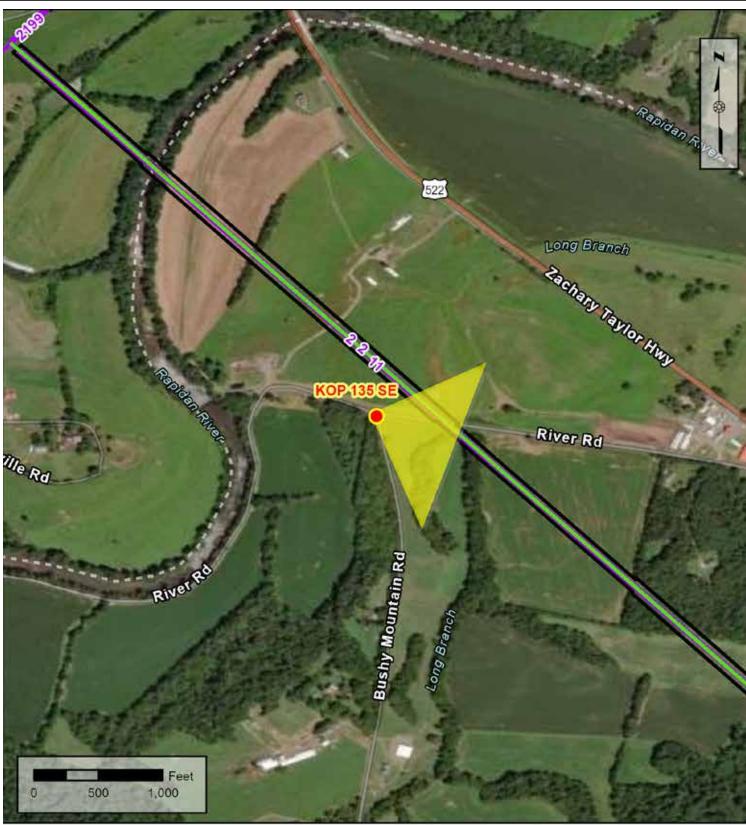
KOP 135 SE

Route: Oak Green Rebuild and Relocation

Date: 10/07/24 Time: 11:21 am

Viewing Direction: Southeast

Distance to closest feature: 0.05 miles



Legend

←→ KOP View Direction **Existing Dominion** Energy Electric
 Transmission Line

Oak Green Rebuild and Relocation

Right of Way



Culpeper Technology Zone 230 kV Loop and Lines #2 and #1065 Conversion Project Culpeper, Fauquier, & Orange Counties, Virginia



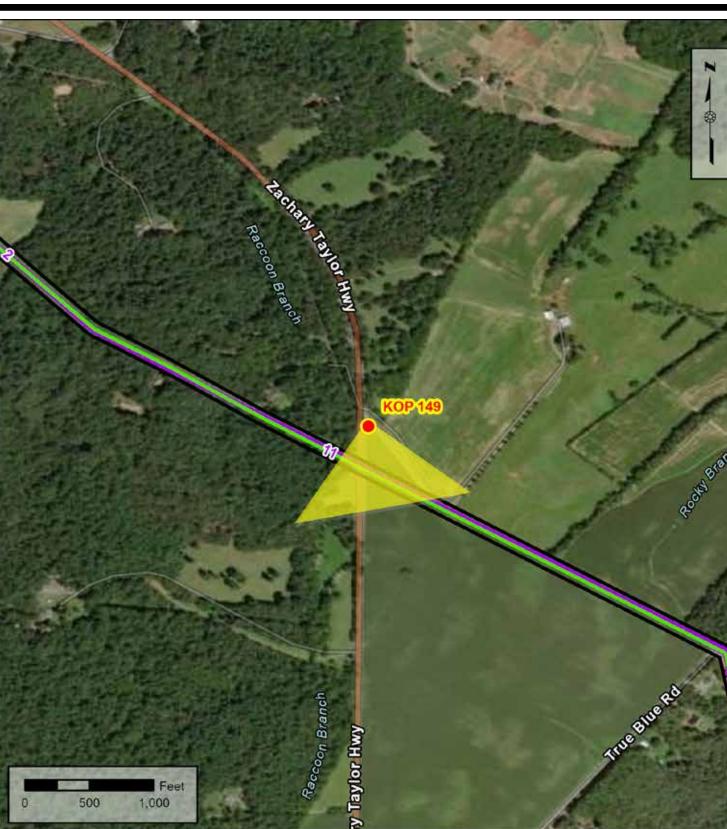
KOP 149

Route: Oak Green Rebuild and Relocation

Date: 08/22/2024 Time: 11:13 am

Viewing Direction: Southeast

Distance to closest feature: 0.06 miles



Legend

◆ KOP View Direction **Existing Dominion** - Energy Electric

Transmission Line

Oak Green Rebuild and Relocation Right of Way



Culpeper Technology Zone 230 kV Loop and Lines #2 and #1065 Conversion Project Culpeper, Fauquier, & Orange Counties, Virginia



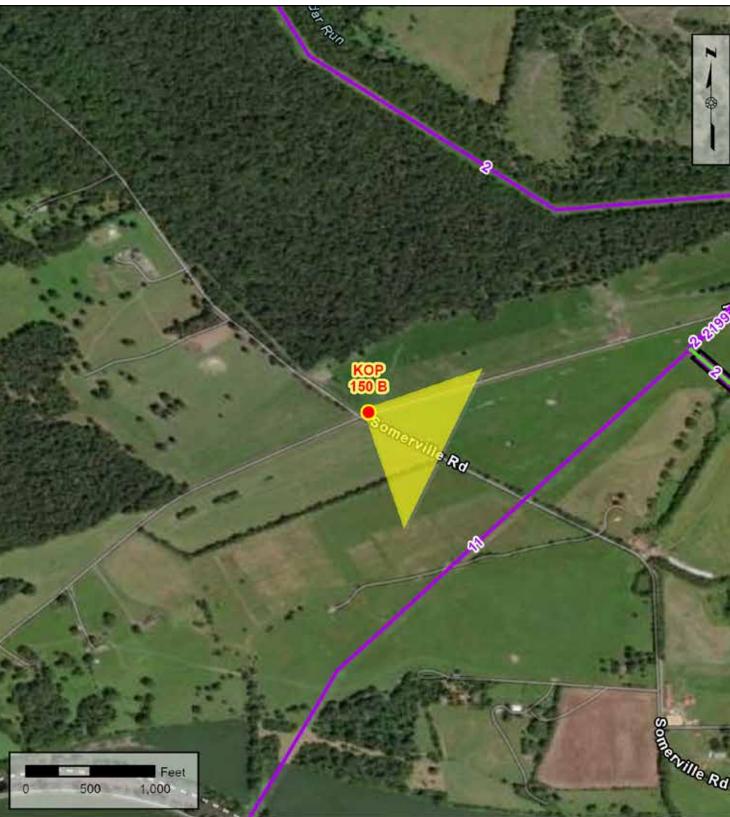
KOP 150 B

Route: Oak Green Rebuild and Relocation

Date: 10/07/2024 Time: 10:43 am

Viewing Direction: Southeast

Distance to closest feature: 0.38 miles

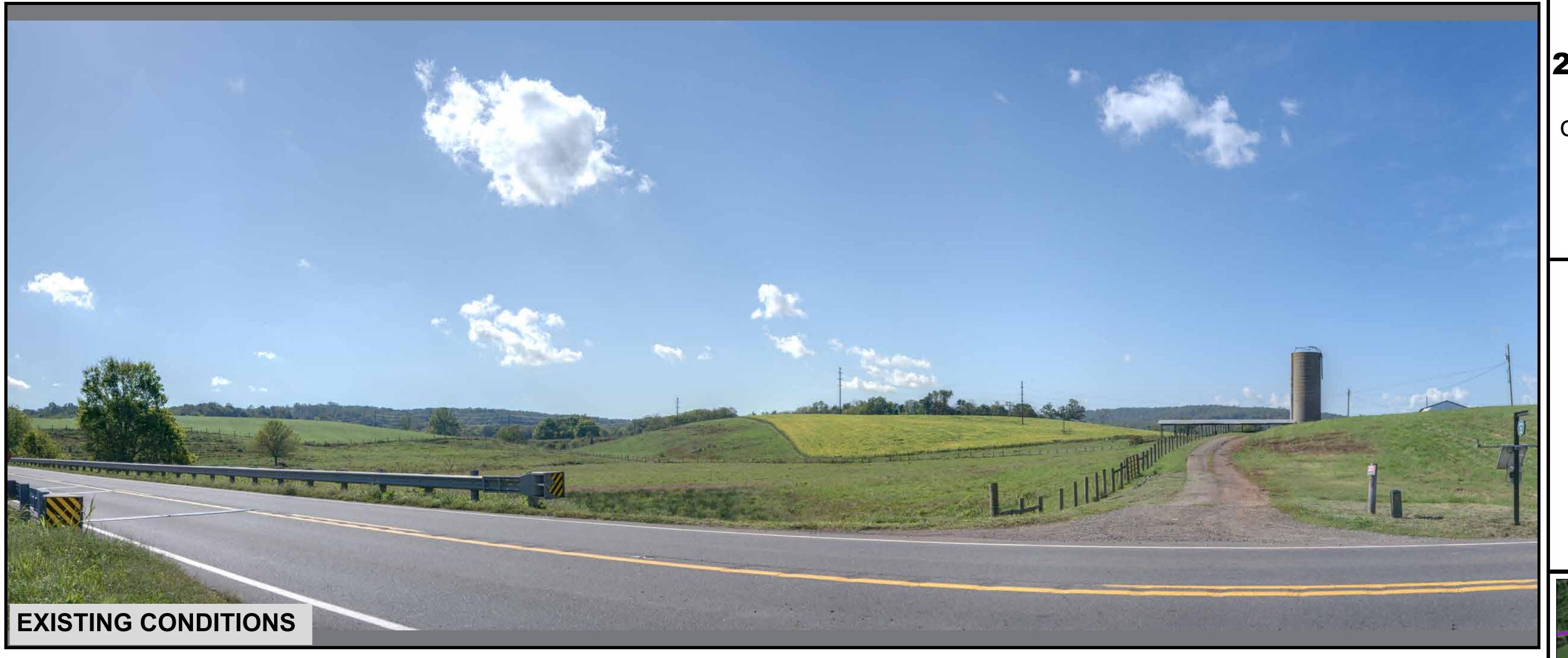


Legend

←→ KOP View Direction **Existing Dominion**

Oak Green Rebuild and Relocation

Right of Way Energy Electric
 Transmission Line







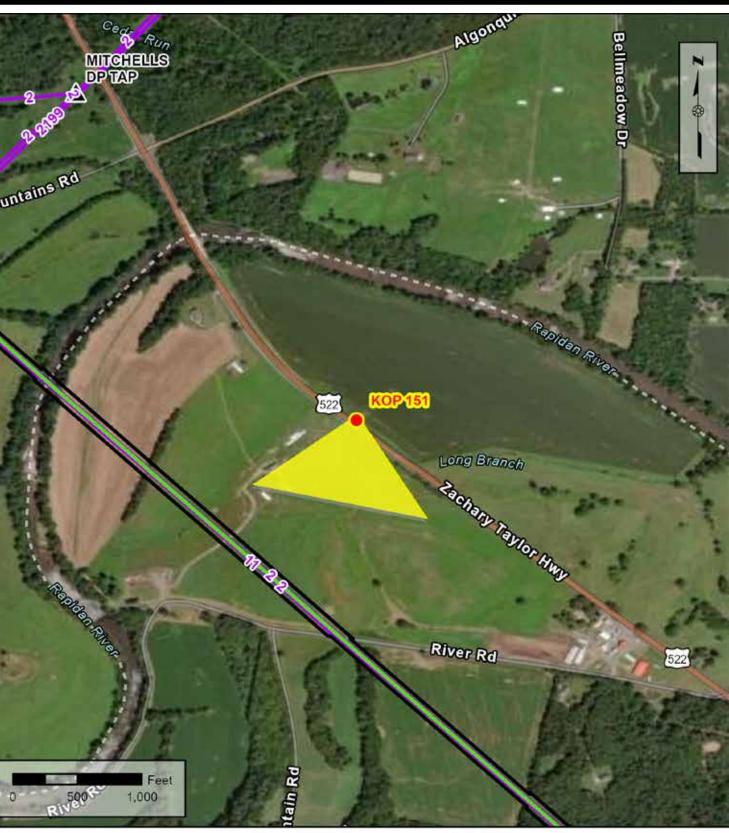
KOP 151

Route: Oak Green Rebuild and Relocation

Date: 10/07/2024 Time: 11:04 am

Viewing Direction: Southwest

Distance to closest feature: 0.23 miles



Legend

◆ KOP View Direction ▲ Existing Substation

Transmission Line

 Oak Green Rebuild and Relocation **Existing Dominion** - Energy Electric

Right of Way







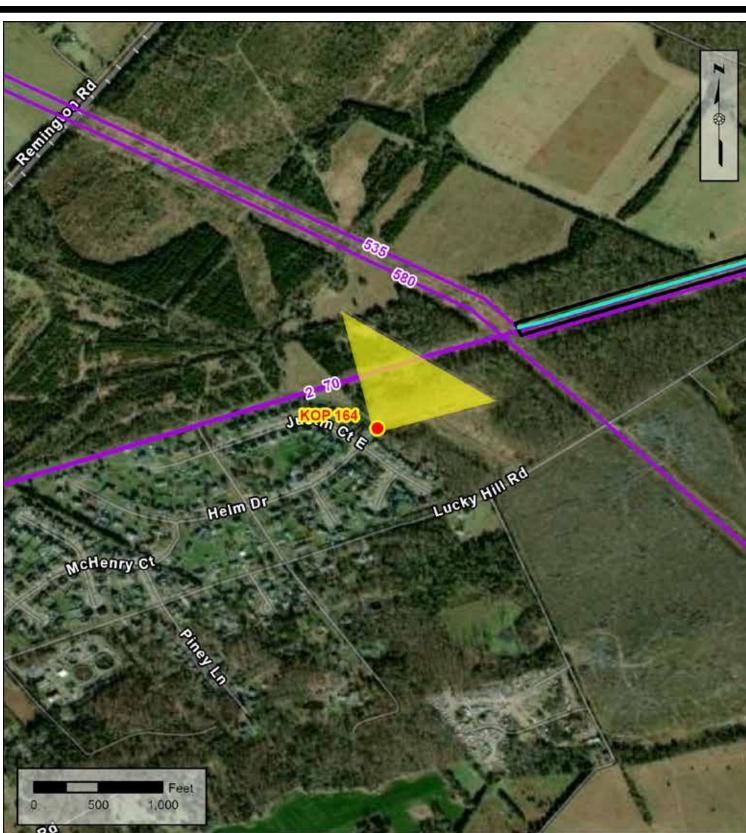
KOP 164

Route: Remington Rebuild

Date: 08/21/2024 Time: 03:31 pm

Viewing Direction: Northeast

Distance to closest feature: 0.22 miles



Legend

Existing Dominion

Energy Electric

Transmission Line

Remington Rebuild
Right of Way



APPENDIX H STAGE 1 PRE-APPLICATION ANALYSIS



Culpeper Technology Zone 230 kV Loop and Lines #2 and #1065 Conversion Project

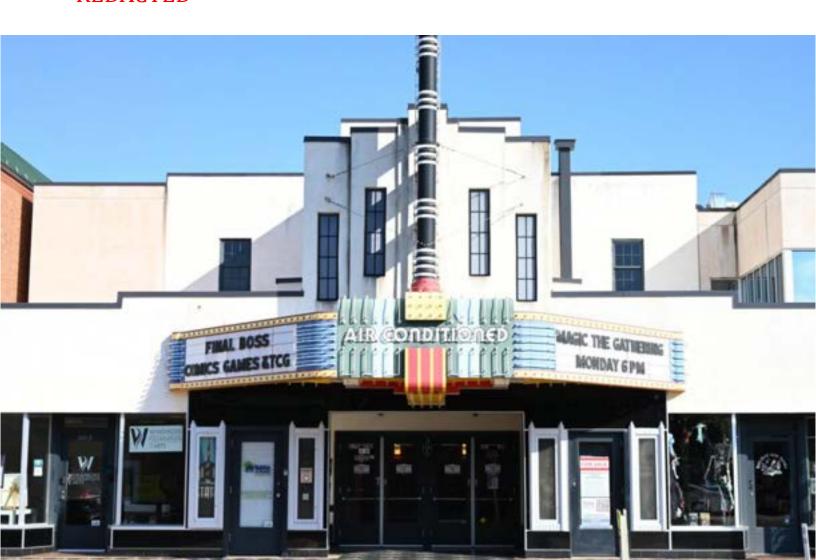
Pre-Application Analysis Report REDACTED

PREPARED FOR



DATE 19 February 2025

REFERENCE 0726778



SIGNATURE PAGE

Culpeper Technology Zone 230 kV Loop and Lines #2 and #1065 Conversion Project

Pre-Application Analysis Report REDACTED

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magaro to garoupo

Mary Beth Derrick

Senior Architectural Historian

Megan Wiginton

Senior Architectural Historian

Markeywandl

MacKenzie Carroll

Architectural Historian

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CLIENT: Dominion Energy PROJECT NO: 0726778

CONTENTS

EXE	ECUTIVE SUMMARY		
1.	INTROI	DUCTION	6
1.1	OVERVIEW		
	1.1.1 1.1.2 1.1.3 1.1.4	Remington Rebuild	8 9 10 11
1.2	MANAG	EMENT RECOMMENDATIONS	11
2.	RECOR	DS REVIEW	13
2.1		OLLECTION APPROACH	13
2.2		EOLOGICAL RESOURCES	13
2.3			
2.3		IC RESOURCES	16
2.4	2.3.1 2.3.2 2.3.3 2.3.4 PREVIO	Mt. Pony Lines Tech Park Lines Oak Green Rebuild and Relocation Remington Rebuild US SURVEYS	18 19 22 23 24
3.	STAGE	I PRE-APPLICATION ANALYSIS FINDINGS	26
3.1	METHO	OS FOR ANALYSIS	26
3.2	STRUCT	URE TYPES AND RIGHT-OF-WAY WIDTHS	27
3.3	ASSESS	MENT OF POTENTIAL IMPACTS	28
3.4	HISTORIC RESOURCE DESCRIPTIONS		29
	3.4.1 3.4.2 3.4.3 3.4.4 3.4.5 3.4.6 3.4.7 3.4.8 3.4.9 3.4.10 3.4.11 3.4.12 3.4.13 3.4.14 3.4.15 3.4.16 3.4.17 3.4.18 3.4.19 3.4.20 3.4.21	023-0018, Rose Hill 023-0084, Mount Pony Rural Historic District 023-5023, Mount Castle 023-5040, Croftburn Farm 023-5041, Eckington School 023-5049, Rappahannock Station Battlefield I 023-5050, Rappahannock Station Battlefield II 023-5055, Brandy Station Battlefield II 023-5161, St. Steven's Baptist Church 023-5162, Zimmerman's Tavern 023-5494, House 030-5587, Mt. Holly Ridge-Marsh Run Rural Historic District 030-5593, Rappahannock River 1862 Northern Virginia Campaign Rural Historic District 030-5607, Hedgeman-Rappahannock Rural Historic District 030-5852, Piney Ridge School 068-0031, Morton Hall 068-0131, Lessland 068-0473, Mt. Holy Baptist Church 068-5037, Battle of Morton's Ford 068-5033, Rapidan River and Clark Mountain Rural Historic District 204-0002, Hill Mansion 204-0003, St. Stephen's Episcopal Church	29 29 30 30 31 32 33 35 36 36 37 37 38 39 40 41 42 43



	3.4.23 3.4.24 3.4.25 3.4.26 3.4.27 3.4.28	204-0005, Burgandine House 204-0006, A.P. Hill Boyhood Home 204-0020, Culpeper Historic District 204-0020-0140, Antioch Baptist Church 204-0021, Corrie Hill House 204-0064, South East Street Historic District	44 45 45 46 47
	3.4.29 3.4.30 3.4.31 3.4.32 3.4.33 3.4.34	204-0069, Culpeper National Cemetery 204-0070, Greenwood 204-5053, Pitts Theater 204-5067, Lord Culpeper Hotel 204-5097, Culpeper Light and Power 288-5001, Remington Historic District	48 49 49 50 50 51
3.5	HISTOR	IC RESOURCES FINDINGS FOR MT. PONY LINES	52
3.6	3.5.1 3.5.2 HISTOR	Historic Resource Findings for Mt. Pony Route 1 Historic Resource Findings for Mt. Pony Route 2 IC RESOURCES FINDINGS FOR TECH PARK LINES	52 56 57
3.7	3.6.1 3.6.2 3.6.3	Historic Resource Findings for Tech Park Route 1 Historic Resource Findings for Tech Park Route 2 Historic Resource Findings for Tech Park Route 3 IC RESOURCE FINDINGS FOR OAK GREEN REBUILD AND RELOCATION	57 62 66 70
3.8	3.7.1 3.7.2 3.7.3 3.7.4	068-0031, Morton Hall 068-0131, Lessland 068-0473, Mt. Holy Baptist Church 068-5033, Rapidan River and Clark Mountain Rural Historic District IC RESOURCE FINDINGS FOR REMINGTON REBUILD	70 71 71 71 71
3.9	3.8.1 3.8.2 3.8.3 3.8.4 3.8.5 3.8.6 3.8.7	023-5049, Freeman's Ford Battlefield 023-5050, Rappahannock Station Battlefield II 030-5587, Mt. Holly Ridge-Marsh Run Rural Historic District 030-5593, Rappahannock River 1862 Northern Virginia Campaign Rural Historic District 030-5607, Hedgeman-Rappahannock Rural Historic District 030-5852, Piney Ridge School 288-5001, Remington Historic District	72 72 72 73 73 73 73
	3.9.1 3.9.2 3.9.3 3.9.4	Mt. Pony Lines Tech Park Lines Oak Green Rebuild and Relocation Remington Rebuild	75 75 78 78
4.	CONCL	USION AND RECOMMENDATIONS	79
4.1	MT. PON	IY LINES	80
4.2	4.1.1 4.1.2 TECH PA	Mt. Pony Route 1 Mt. Pony Route 2 ARK LINES	80 80 81
4.3	4.2.1 4.2.2 4.2.3 OAK GR	Tech Park Route 1 Tech Park Route 2 Tech Park Route 3 EEN REBUILD AND RELOCATION	81 82 83 84
4.4	REMINGTON REBUILD		85
4.5	FUTURE INVESTIGATIONS		86



5. REFERENCES	88
ATTACHMENT 1	LOCATIONS OF CONSIDERED HISTORIC RESOURCES ASSOCIATED WITH PROPOSED PROJECT
ATTACHMENT 2	CULTURAL RESOURCES SURVEYS WITHIN 1 MILE OF ROUTES
ATTATCHMENT 3	TYPICAL DESIGN AND LAYOUT
ATTACHMENT 4	HISTORIC RESOURCE PHOTOS
ATTACHMENT 5	PHOTO SIMULATIONS

LIST OF TAE	BLES	
TABLE 1	EXECUTIVE SUMMARY OF NATIONAL REGISTER STATUS OF CONSIDERED ARCHAEOLOGICAL RESOURCES IN THE STUDY AREA OF THE ROUTES	3
TABLE 2	EXECUTIVE SUMMARY OF PROJECT IMPACTS TO CONSIDERED HISTORIC RESOURCE THE STUDY AREA OF THE ROUTE ALTERNATIVES	CES IN
TABLE 3	ARCHAEOLOGICAL RESOURCES IN THE RIGHT-OF-WAY FOR EACH ROUTE	15
TABLE 4	HISTORIC RESOURCES IN THE VDHR TIERS FOR MT. PONY ROUTE 1	18
TABLE 5	HISTORIC RESOURCES IN THE VDHR TIERS FOR MT. PONY ROUTE 2	19
TABLE 6	HISTORIC RESOURCES IN THE VDHR TIERS FOR TECH PARK ROUTE 1	20
TABLE 7	HISTORIC RESOURCES IN THE VDHR TIERS FOR TECH PARK ROUTE 2	21
TABLE 8	HISTORIC RESOURCES IN THE VDHR TIERS FOR TECH PARK ROUTE 3	22
TABLE 9	HISTORIC RESOURCES IN THE VDHR TIERS FOR OAK GREEN REBUILD AND RELOCATION	23
TABLE 10	HISTORIC RESOURCES IN THE VDHR TIERS FOR REMINGTON REBUILD	23
TABLE 11	CULTURAL RESOURCE SURVEYS WITHIN 1 MILE OF THE PROJECT	24
TABLE 12	ESTIMATED STRUCTURE HEIGHTS	28
TABLE 13	ARCHAEOLOGICAL RESOURCES WITHIN THE RIGHT-OF-WAY FOR THE ROUTES	74
TABLE 14	COMPARISON OF PROJECT IMPACTS ON HISTORIC RESOURCES IN THE STUDY AREAS OF THE ALTERNATIVE ROUTES	79
TABLE 15	IMPACTS ON HISTORIC RESOURCE IN THE VDHR STUDY TIERS FOR MT. PONY ROUTE 1	80
TABLE 16	IMPACTS ON HISTORIC RESOURCE IN THE VDHR STUDY TIERS FOR MT. PONY ROUTE 2	81
TABLE 17	IMPACTS ON HISTORIC RESOURCE IN THE VDHR STUDY TIERS FOR TECH PARK ROUTE 1	82
TABLE 18	IMPACTS ON HISTORIC RESOURCE IN THE VDHR STUDY TIERS FOR TECH PARK ROUTE 2	83
TABLE 19	IMPACTS ON HISTORIC RESOURCE IN THE VDHR STUDY TIERS FOR TECH PARK ROUTE 3	84



TABLE 20	IMPACTS ON HISTORIC RESOURCE IN THE VDHR STUDY TIERS FOR THE OAK GREEN REBUILD AND RELOCATION	85
TABLE 21	IMPACTS ON HISTORIC RESOURCE IN THE VDHR STUDY TIERS FOR THE REMINGTON REBUILD	86

LIST OF FI	GURES	
FIGURE 1	OVERVIEW OF TRANSMISSION LINE SEGMENTS UNDER CONSIDERATION FOR THE PROJECT	7
FIGURE 2	LOCATIONS OF ARCHAEOLOGICAL RESOURCES WITHIN THE RIGHT-OF-WAY FOR EACROUTE REDACTED	CH 14
FIGURE 3	LOCATION OF CONSIDERED HISTORIC RESOURCES ALONG AND NEAR ALTERNATIVE ROUTES	17

ACRONYMS AND ABBREVIATIONS

3D	Three Dimensional
ABPP	American Battlefield Protection Program
ABT	American Battlefield Trust
AF	Auto Focus
CMOS	Complementary Metal Oxide Semiconductor
CWSAC	Civil War Sites Advisory Commission
ERM	Environmental Resources Management
ESRI	Environmental Systems Research Institute
GNSS	Global Navigation Satellite System
HABS	Historic American Buildings Survey
HAER	Historic American Engineering Record
HALS	Historic American Landscape Survey
KOP	Key Observation Point
kV	kilovolt
MP	Milepost
MPD	Multiple Property Documentation
NHL	National Historic Landmark
NPS	National Park Service
NRHP	National Register of Historic Places
PotNR	Potential National Register
PWA	Public Works Administration
ROW	Right-of-Way
SCC	State Corporation Commission
SLR	Single Lens Reflex
SP	Simulation Point
USGS	U.S. Geological Survey
UTM	Universal Transverse Mercator
VCRIS	Virginia Cultural Resources Information System
VDHR	Virginia Department of Historic Resources
VDOT	Virginia Department of Transportation
VLR	Virginia Landmarks Register



EXECUTIVE SUMMARY

This report presents the findings of the pre-application analysis for Virginia Electric and Power Company's (Dominion Energy Virginia, Dominion, or the Company) proposed Culpeper Technology Zone 230 kV Loop and Lines #2 and #1065 Conversion Project in Culpeper, Fauquier, and Orange Counties, Virginia (Project). The Project is needed to provide electrical service to multiple new industrial customers within an area referred to as the Culpeper Technology Zone, with the requests being prompted by the growing data center development in the area; to maintain reliable service for the overall load growth in the area; and to comply with mandatory North American Electric Reliability Corporation Standards. To meet the Project purpose and need, Dominion proposes to construct and operate the following facilities:

- New 230 kilovolt (kV) Mt. Pony-Oak Green and Mt. Pony-Potato Run Lines and Mt. Pony Substation (referred to as Mt. Pony Lines and Substation, or Mt. Pony Components);
- New 230 kV Cirrus-Mt. Pony Lines and Chandler, McDevitt, and Palomino Substations (referred to as Tech Park Lines and Substations, or Tech Park Components);
- Conversion and rebuild of existing 115 kV Lines #2 and #11 to 230 kV from the existing Line #2/#2199 and #11/#2199 corridor to the relocated Oak Green Switching Station, including expansion of existing right-of-way and relocation of the Oak Green Switching Station and new 115 kV Line #153 tap to interconnect the relocated Oak Green Switching Station to the existing Line #153 (referred to as Oak Green Rebuild and Relocation, Oak Green Rebuild, Oak Green Lines, or Oak Green Components); and
- Conversion and rebuild of existing 115 kV Line #2 from existing Line #535 to the existing Remington Substation (referred to as Remington Rebuild, Remington Lines, or Remington Components).

This pre-application analysis assesses and compares potential impacts on previously recorded historic and archaeological resources in relation to each route. Impacts from the proposed substations and switching station are also considered. Environmental Resources Management, Inc. (ERM) conducted the analysis on behalf of Dominion Energy Virginia to assist in the development of a feasible Project design that minimizes impacts to historic resources. The pre-application analysis is a required study for transmission line projects regulated by the State Corporation Commission (SCC). The study was completed in accordance with the Virginia Department of Historic Resources' (VDHR's) *Guidelines for Assessing Impacts of Proposed Electric Transmission Lines and Associated Facilities on Historic Resources in the Commonwealth of Virginia* (VDHR 2008) (Guidelines).

Seven archaeological sites are within or adjacent to the right-of-way for the routes and/or proposed substations/switching station. Of these, six are considered unevaluated for listing in the National Register of Historic Places (NRHP) and one has been determined not eligible for listing in the NRHP. Three sites are located in what would be the right-of-way for Mt. Pony Route 1 or adjacent to the proposed Mt. Pony Substation. One site is adjacent to the proposed Mt. Pony Substation, associated with Mt. Pony Route 2. Three sites are located in what would be the right-of-way for Tech Park Route 1, two sites are located within what would be the right-of-way for Tech



Park Route 2, and four sites are located within what would be the right-of-way for Tech Park Route 3. No archaeological sites were identified within what would be the right-of-way for the Oak Green Rebuild and Relocation, the Remington Rebuild or the proposed Chandler, McKevitt, and Palomino Substations. The archaeological sites associated with each route and their current NRHP status are summarized in the table below (Table 1). The sites could be impacted by construction traffic or clearing within the right-of-way. A confident evaluation of the nature of archaeological deposits at each site and impacts on the sites from prior land use activities would require a field survey.

Thirty-four previously recorded historic architectural resources meeting the criteria specified in the Guidelines fall within study tiers defined by the VDHR for identifying aboveground historic sites along and near transmission line routes. The likely impacts on individual historic resources associated with each route are presented in the table below (Table 2).

For the Mt. Pony Lines, Mt. Pony Route 1 passes near ten historic resources meeting the criteria specified in the Guidelines, while Mt. Pony Route 2 passes near six. For the Tech Park Lines, Tech Park Route 1 passes near 16 historic resources meeting the criteria specified in the Guidelines, while Tech Park Routes 2 and 3 pass near 15. The Oak Green Rebuild and Relocation passes near four, while the Remington Rebuild passes near seven. ERM recommends that Mt. Pony Route 1 would have a moderate impact on six resources, a minimal on one, and no impact on three resources; Mt. Pony Route 2 would have a minimal impact on two resources and no impact on four; Tech Park Route 1 would have a minimal impact on three resources and no impact on 13; Tech Park Routes 2 and 3 would have a minimal impact on three resources and no impact on 12; the Oak Green Rebuild and Relocation would have a minimal impact on three resources and no impact on one; and the Remington Rebuild would have a minimal impact on two resources and no impact on five.

While this report addresses potential impacts on all of the resources meeting the criteria for inclusion in the Guidelines, our comparison of routes is limited to the Mt. Pony Lines and the Tech Park Lines. Of the former, Mt. Pony Route 2 appears to present the least impact on cultural resources because there is only one archaeological site adjacent to the proposed Mt. Pony Substation and that route has the smallest number of considered historic resources with, no more than minimal impacts. Of the latter, Tech Park Route 2 appears to present the least impact on cultural resources with two archaeological sites (in comparison to four resources for Tech Park Route 3) in what would be its right-of-way and one less considered historic resource than Tech Park Route 1.

No alternative routes were considered for the Oak Green Rebuild and Relocation or the Remington Rebuild.

TABLE 1 EXECUTIVE SUMMARY OF NATIONAL REGISTER STATUS OF CONSIDERED ARCHAEOLOGICAL RESOURCES IN THE STUDY AREA OF THE ROUTES

	Route Alternatives									
	Mt. Por	ny Lines	Tech Park Lines							
Considered Resource	Mt. Pony Route 1	Mt. Pony Route 2	Tech Park Route 1	Tech Park Route 2	Tech Park Route 3	Oak Green Rebuild and Relocation	Remington Rebuild			
44CU0135ª	Unevaluated	Unevaluated								
44CU0137	Unevaluated		Unevaluated							
44CU0188	Not Eligible									
44CU0219					Unevaluated					
44CU0220					Unevaluated					
44CU0221 ^{b,c}			Unevaluated	Unevaluated	Unevaluated					
44CU0222			Unevaluated	Unevaluated	Unevaluated					

^a Located adjacent to proposed Mt. Pony Substation

^b Located adjacent to or within proposed Chandler Substation

^c Located adjacent to or within proposed McDevitt Substation

TABLE 2 EXECUTIVE SUMMARY OF PROJECT IMPACTS TO CONSIDERED HISTORIC RESOURCES IN THE STUDY AREA OF THE ROUTE ALTERNATIVES

Considered Resource		Route Alternatives							
	Mt. Por	ny Lines	1	Tech Park Lines	;	Oak Green Rebuild and Relocation			
	Mt. Pony Route 1	Mt. Pony Route 2	Tech Park Route 1	Tech Park Route 2	Tech Park Route 3		Remington Rebuild		
023-0018	Moderate								
023-0084ª	Moderate	Minimal	Minimal	Minimal	Minimal				
023-5023	Moderate		None						
023-5040ª	Moderate	Minimal	Minimal	Minimal	Minimal				
023-5041		None							
023-5049							None		
023-5050							Minimal		
023-5055	Minimal								
023-5161	None								
023-5162	None								
023-5494	Moderate								
030-5587							Minimal		
030-5593							None		
030-5607							None		
030-5852							None		
068-0031						Minimal			
068-0131						Minimal			
068-0473						None			



			Route	e Alternatives			
	Mt. Pony Lines		1	Tech Park Lines			
Considered Resource	Mt. Pony Route 1	Mt. Pony Route 2	Tech Park Route 1	Tech Park Route 2	Tech Park Route 3	Oak Green Rebuild and Relocation	Remington Rebuild
068-5007	Moderate	None					
068-5033		None				Minimal	
204-0002 ^{b, c, d}			None	None	None		
204-0003 ^{b, c, d}			None	None	None		
204-0005 ^{b, c, d}			None	None	None		
204-0006 ^{b, c, d}			None	None	None		
204-0020 ^{b, c, d}			None	None	None		
204-0020-0140 ^{b, c, d}			None	None	None		
204-0021 ^{b, c, d}			None	None	None		
204-0064 ^{b, c, d}			Minimal	Minimal	Minimal		
204-0069 ^{b, c, d}			None	None	None		
204-0070 ^{a, b, c, d}	None	None	None	None	None		
204-5053 ^{b, c, d}			None	None	None		
204-5067 ^{b, c, d}			None	None	None		
204-5097 ^{b, c, d}			None	None	None		
288-5001							None

^a Resource is within the designated tiers for the proposed Mt. Pony Substation



^b Resource is within the designated tiers for the proposed Palomino Substation

^c Resource is within the designated tiers for the proposed Chandler Substation

d Resource is within the designated tiers for the proposed McDevitt Substation

e Resource is within the designated tiers for the proposed Relocated Oak Green Switching Station

1. INTRODUCTION

This report presents the findings of the pre-application analysis conducted for Dominion Energy Virginia's proposed Culpeper Technology Zone 230 kV Loop and Lines #2 and #1065 Conversion Project in Culpeper, Fauquier, and Orange Counties, Virginia. For this Project, the Company is proposing to construct and operate:

- New 230 kilovolt (kV) Mt. Pony-Oak Green and Mt. Pony-Potato Run Lines and Mt. Pony Substation (referred to as Mt. Pony Lines and Substation, or Mt. Pony Components);
- New 230 kV Cirrus-Mt. Pony Lines and Chandler, McDevitt, and Palomino Substations (referred to as Tech Park Lines and Substations, or Tech Park Components);
- Conversion and rebuild of existing 115 kV Lines #2 and #11 to 230 kV from the existing Line #2/#2199 and #11/#2199 corridor to the relocated Oak Green Switching Station, including expansion of existing right-of-way and relocation of the Oak Green Switching Station and new 115 kV Line #153 tap to interconnect the relocated Oak Green Switching Station to the existing Line #153 (referred to as Oak Green Rebuild and Relocation, Oak Green Rebuild, Oak Green Lines, or Oak Green Components); and
- Conversion and rebuild of existing 115 kV Line #2 from existing Line #535 to the existing Remington Substation (referred to as Remington Rebuild, Remington Lines, or Remington Components).

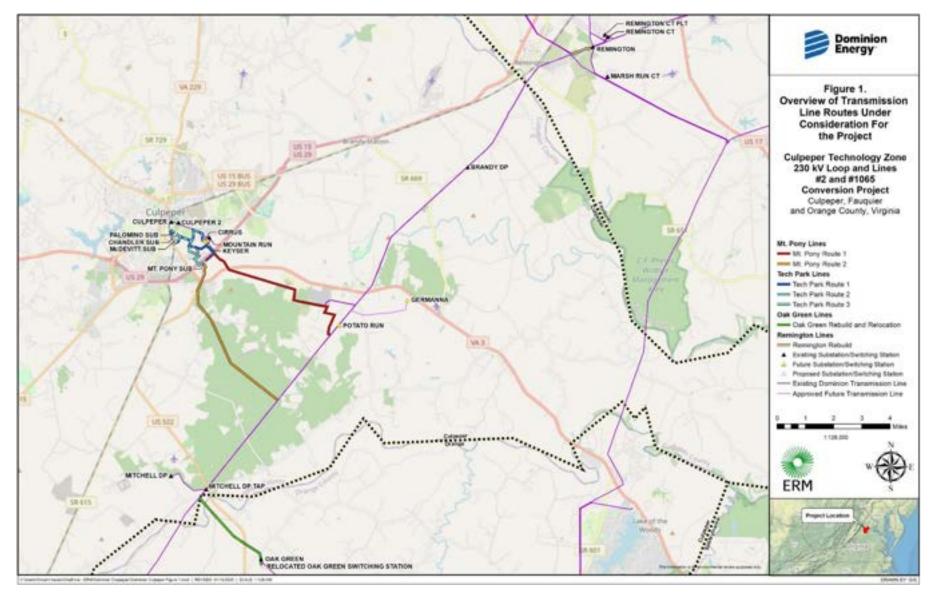
The pre-application analysis assesses potential impacts on previously recorded historic and archaeological resources relative to each route. Environmental Resources Management, Inc. (ERM) conducted the pre-application analysis on behalf of Dominion Energy Virginia to assist in the development of a feasible Project design that minimizes impacts on historic resources. The study was completed in accordance with Virginia Department of Historic Resources' (VDHR's) *Guidelines for Assessing Impacts of Proposed Electric Transmission Lines and Associated Facilities on Historic Resources in the Commonwealth of Virginia* (VDHR 2008) (Guidelines).

1.1 OVERVIEW

In developing alternative routes for the new transmission line, the Company considered the facilities required to construct and operate the Project, the length of new rights-of-way that would be required, the amount of existing development in the area, the potential for environmental impacts and impacts on communities, and cost. As discussed in detail below, ERM identified two viable route options for the Mt. Pony Lines; three viable options for the Tech Park Lines; and only one option has been identified for the Oak Green Rebuild and Relocation and the Remington Rebuild (Figure 1).



FIGURE 1 OVERVIEW OF TRANSMISSION LINE SEGMENTS UNDER CONSIDERATION FOR THE PROJECT





1.1.1 MT. PONY LINES

This section provides descriptions of the two overhead transmission line routes deemed feasible for construction for the Mt. Pony Lines and retained for further analysis.

1.1.1.1 MT. PONY ROUTE 1

Mt. Pony Route 1 originates at a cut-in location on the Company's existing Lines #2/#2199 at Structure #2199/110 / #2/496. From the cut-in location, the route parallels Blackjack Road north for approximately 0.6 mile, then parallels Alvere Road to the west and north for approximately 0.6 mile where it joins the corridor for the Company's existing Lines #2/#70. Mt. Pony Route 1 then runs west, collocated with the Company's Lines #2/#70 for approximately 3.1 miles. Mt. Pony Route 1 then turns northwest, crosses Rt. 3 and runs another 0.6 mile (collocated with existing Lines #2/#70) before reaching the south side of US 15/29. At this point, Mt. Pony Route 1 turns southwest, paralleling the south side of US 15/29 for 0.3 mile before terminating at the proposed Mt. Pony Substation.

In total, Mt. Pony Route 1 measures approximately 5.2 miles long. Mt. Pony Route 1 would be constructed within a new 100-foot right-of-way in areas where not collocated with existing transmission lines. The 3.7-mile portion of Mt. Pony Route 1 that would be collocated with existing Lines #2/#70 would require a new 60-foot new right-of-way adjacent to the existing 100-foot right-of-way, creating a 160-foot-wide right-of-way.

1.1.1.2 MT. PONY ROUTE 2

Mt. Pony Route 2 originates at a cut-in location on the Company's existing Lines #2/#2199 at Structure #2199/132 / #2/518. From the cut-in location, the route heads northwest through forested and open land for approximately 3.5 miles and crosses Woolens Lane. The route then turns northeast, parallels the east side of US 522 for approximately 0.3 mile, crosses Rt. 3, and continues north across forested and open lands for approximately 0.5 mile before terminating at the proposed Mt. Pony Substation.

In total, Mt. Pony Route 2 measures approximately 4.8 miles long. Mt. Pony Route 2 would be constructed entirely within a new 100-foot-wide right-of-way.

1.1.1.3 MT. PONY SUBSTATION

The proposed 230-34.5 kV Mt. Pony Substation would be located on the south side of US 15/29, approximately 0.4 mile northeast of the intersection with Rt. 3. The substation would be constructed on land obtained through easement and owned by the developers of the proposed Customer A Data Center. The substation will be designed to serve load within the Culpeper Load Area. The proposed Mt. Pony Substation would require approximately 5.0 acres.

For the purposes of this report, the Mt. Pony Substation is included in the analysis for both Mt. Pony Routes 1 and 2.



1.1.2 TECH PARK LINES

This section provides descriptions of the three overhead transmission line routes deemed feasible for construction for the Tech Park Lines and retained for further analysis.

1.1.2.1 TECH PARK ROUTE 1

Tech Park Route 1 originates at the proposed Mt. Pony Substation. From the proposed Mt. Pony Substation, Tech Park Route 1 heads northeast for approximately 0.3 mile on the south side of US 15/29, then turns northwest for approximately 0.2 mile. This segment crosses US 15/29 and would be collocated with the Company's existing Lines #2/#70. The route then runs southwest and west along the southern and western edges of a non-customer planned data center campus for 0.6 mile (including a crossing of McDevitt Drive), then crosses the Customer B (Culpeper Tech Campus by Stack Infrastructure, Inc.) and Customer C (Copper Ridge Data Center Campus) data center campuses as part of a 2.0 mile loop that connects the proposed McDevitt, Chandler, and Palomino Substations. Tech Park Route 1 then follows the existing 115 kV Line #70 corridor to the southeast and south for approximately 0.5 mile and terminates at the future Cirrus substation (approved as part of a separate filing).

In total, Tech Park Route 1 measures approximately 3.7 miles long. Tech Park Route 1 would be constructed within a new 100-foot right-of-way, except for two 0.2-mile segments where it is collocated with the existing Lines #2/#70 right-of-way and would require only 60 additional feet of right-of-way.

1.1.2.2 TECH PARK ROUTE 2

Tech Park Route 2 originates at the proposed Mt. Pony Substation. From the proposed Mt. Pony Substation, Tech Park Route 2 heads southwest for approximately 0.2 mile along the south side of US 15/29. The route then turns northwest, crosses US 15/29, and continues northwest and north for approximately 0.6 mile, crossing Technology Drive. Tech Park Route 2 turns west and follows the southern and western edges of a non-customer planned data center for 0.4 mile (including a crossing of McDevitt Drive), then crosses the Customer B and Customer C data center campuses as part of a 2.0-mile loop that connects the proposed McDevitt, Chandler, and Palomino Substations. Tech Park Route 2 then follows the existing 115 kV Line #70 corridor to the southeast and south for approximately 0.5 mile and terminates at the future Cirrus substation (approved as part of a separate filing).

In total, Tech Park Route 2 measures approximately 3.5 miles long. Tech Park Route 2 would be constructed within a new 100-foot right-of-way, except for one 0.2-mile segment where it is collocated with the existing Line #70 right-of-way and would require only 60 additional feet of right-of-way.

1.1.2.3 TECH PARK ROUTE 3

Tech Park Route 3 originates at the proposed Mt. Pony Substation. From the proposed Mt. Pony Substation, Tech Park Route 3 heads southwest for approximately 0.2 mile along the south side of US 15/29. The route turns northwest, crossing US 15/29, and continues generally northwest for approximately 0.8 mile generally parallel to Technology Drive and crossing McDevitt Drive. Tech



Park Route 3 then crosses the STACK and Copper Ridge data center campuses as part of a 2.0-mile loop that connects the proposed McDevitt, Chandler, and Palomino Substations. Tech Park Route 3 then follows the existing 115 kV Line #70 corridor to the southeast and south for approximately 0.5 mile and terminates at the future Cirrus substation (approved as part of a separate filing).

In total, Tech Park Route 3 measures approximately 3.5 miles long. Tech Park Route 3 would be constructed within a new 100-foot right-of-way, except for one 0.2-mile segment where it is collocated with the existing Line #70 right-of-way and would require only 60 additional feet of right-of-way.

1.1.2.4 PALOMINO SUBSTATION

The proposed 230-34.5 kV Palomino Substation located 0.1 mile east of the Norfolk-Southern Railroad and 0.2 mile south of the East Chandler Street within the Town of Culpeper, on an easement on land owned by the Copper Ridge Data Center campus. The substation would be located less than 200 feet north of the proposed Chandler Substation and will be designed to accommodate multiple network connections to allow for increased reliability and to serve load within the Culpeper Load Area. The proposed Palomino Substation would require approximately 4.4 acres.

1.1.2.5 CHANDLER SUBSTATION

The proposed 230-34.5 kV Chandler Substation would be located 0.2 mile north of the intersection of Rt. 3 and the Norfolk-Southern Railroad within the Town of Culpeper, on land to be owned by the Company within the STACK data center campus. The substation would be located directly adjacent to and north of the proposed McDevitt Substation, and less than 200 feet south of the proposed Palomino Substation and will be designed to accommodate multiple network connections to allow for increased reliability and to serve load within the Culpeper Load Area. The proposed Chandler Substation would require approximately 4.8 acres.

1.1.2.6 MCDEVIT SUBSTATION

The proposed 230-34.5 kV McDevitt Substation would be located 0.1 mile north of the intersection of Rt. 3 and the Norfolk-Southern Railroad within the Town of Culpeper, on land to be owned by the Company within the STACK data center campus. The substation would be directly adjacent to and south of the proposed Chandler Substation and will be designed to accommodate multiple network connections to allow for increased reliability and to serve load within the Culpeper Load Area. The proposed McDevitt Substation would require approximately 4.4 acres.

1.1.3 OAK GREEN REBUILD AND RELOCATION

This section provides a description of the Oak Green Rebuild and relocation of the Oak Green Switching Station.

1.1.3.1 OAK GREEN REBUILD

Oak Green Rebuild begins at a cut-in location on the Company's existing Lines #2/#2199 at Structure #2199/164 / #2/550 in Culpeper County. From the cut-in, the Oak Green Rebuild would



follow the Company's existing Lines #2/#11 southeast for approximately 2.5 miles to the existing Oak Green Switching Station. This segment crosses the Rapidan River, enters Orange County, and crosses US 522 about 1.5 miles east of the county boundary. The Oak Green Rebuild passes through the existing Oak Green Switching Station (which would be partially removed, although the transmission structures within the existing substation site would be retained) and continues approximately 0.2 mile south to the relocated proposed Oak Green Switching Station site. In total, the Oak Green Rebuild measures approximately 2.7 miles long. The Oak Green Rebuild also includes an approximately 0.2-mile segment of new 75 foot right-of-way south of the relocated proposed Oak Green Switching Station to interconnect the existing 115 kV Line #153 to the relocated proposed Oak Green Switching Station.

The Oak Green Rebuild would be primarily within a 100-foot-wide right-of-way, which is comprised of the existing 75-foot right-of-way for existing Lines #2/#11, plus a 25-foot expansion. The exceptions to this right-of-way expansion include a 0.2-mile segment west of the Rapidan River in Culpeper County and 0.3-mile segment south of River Road in Orange County that cross existing conservation easements and will be maintained within the existing 75-foot-wide rights-of-way. In addition, an approximately 0.2-mile segment south of the existing Oak Green Switching Station a new variable width right-of-way will be used to connect the existing Oak Green Switching Station to the relocated proposed Oak Green Switching Station.

1.1.3.2 RELOCATED OAK GREEN SWITCHING STATION

The relocated proposed Oak Green Switching Station would entail relocating and upgrading the existing 115-34.5 kV Oak Green Switching Station to 230-34.5 kV. The boundary of the new substation site would be less than 200 feet south of the boundary of the existing substation site (the Oak Green Rebuild transmission line between the existing and new substation sites would span approximately 0.2 mile). The proposed relocated Oak Green Switching Station site would require approximately 4.7 acres. Transformers and other substation equipment would be removed from the existing Oak Green Switching Station site; however, Dominion would retain the transmission structures within the existing substation site as part of the Oak Green Rebuild and Relocation.

1.1.4 REMINGTON REBUILD

The Remington Rebuild begins at a cut-in location on the Company's existing Lines #70/#535 at Structure #70/147 east of the Town of Remington in Fauquier County. From the cut-in, the Remington Rebuild heads east-northeast within the existing Line #70/#535 right-of-way for approximately 0.7 mile, where it terminates in the existing Remington Substation. The Remington Rebuild would occur entirely within existing variable width rights-of-way and across Dominion-owned lands.

1.2 MANAGEMENT RECOMMENDATIONS

Seven archaeological sites are within or adjacent to the right-of-way for the routes and/or proposed substations/switching station. Of these, six are considered unevaluated for listing in the National Register of Historic Places (NRHP) and one has been determined not eligible for listing in the NRHP. Three sites are located in what would be the right-of-way for Mt. Pony Route 1 or



adjacent to the proposed Mt. Pony Substation. One site is adjacent to the proposed Mt. Pony Substation, associated with Mt. Pony Route 2. Three sites are located in what would be the right-of-way for Tech Park Route 1, while two sites are located within what would be the right-of-way for Tech Park Route 2. Finally, four sites are located within what would be the right-of-way for Tech Park Route 3. No archaeological sites were identified within what would be the right-of-way for the Oak Green Rebuild and Relocation, the Remington Rebuild or the proposed Chandler, McKevitt, and Palomino Substations.

Thirty-four previously recorded historic resources meeting the criteria specified in the Guidelines fall within study tiers defined by the VDHR for identifying aboveground historic sites along and near transmission line routes. For the Mt. Pony Lines, Mt. Pony Route 1 passes near ten historic resources meeting the criteria specified in the Guidelines, while Mt. Pony Route 2 passes near six. For the Tech Park Lines, Tech Park Route 1 passes near 16 historic resources meeting the criteria specified in the Guidelines, while Tech Park Routes 2 and 3 pass near 15. The Oak Green Rebuild and Relocation passes near four, while the Remington Rebuild passes near seven. ERM recommends that Mt. Pony Route 1 would have a moderate impact on six resources, a minimal on one, and no impact on three resources; Mt. Pony Route 2 would have a minimal impact on two resources and no impact on four; Tech Park Route 1 would have a minimal impact on three resources and no impact on 13; Tech Park Routes 2 and 3 would have a minimal impact on three resources and no impact on 12; the Oak Green Rebuild and Relocation would have a minimal impact on three resources and no impact on one; and the Remington Rebuild would have a minimal impact on two resources and no impact on impact on five.

While this report addresses potential impacts on all of the resources meeting the criteria for inclusion in the Guidelines, our comparison of routes is limited to the Mt. Pony Lines and the Tech Park Lines. Of the former, Mt. Pony Route 2 appears to present the least impact on cultural resources because there is only one archaeological site adjacent to the proposed Mt. Pony Substation and that route has the smallest number of considered historic resources with no more than minimal impacts. Of the latter, Tech Park Route 2 appears to present the least impact on cultural resources, with two archaeological sites (in comparison to four resources for Tech Park Route 3) in what would be its right-of-way and one less considered historic resource than Tech Park Route 1. No alternative routes were considered for comparison for the Oak Green Rebuild and Relocation or the Remington Rebuild.

RECORDS REVIEW

2.1 DATA COLLECTION APPROACH

ERM conducted an analysis of potential cultural resource impacts for the alternative routes under consideration in accordance with the Guidelines. For each route, this analysis identified and considered the following previously recorded resources:

- National Historic Landmarks (NHLs) within a 1.5 mile-radius of each centerline;
- NRHP-listed properties, NHLs, battlefields, and historic landscapes within a 1.0-mile radius of each centerline;
- NRHP-eligible and NRHP-listed properties, NHLs, battlefields, and historic landscapes within a
 0.5 mile radius of each centerline; and
- All of the above qualifying resources as well as archaeological sites within the right-of-way for each alternative route.

Data on previously recorded cultural resources within each study tier was obtained from the Virginia Cultural Resources Information System (VCRIS 2024).

In addition to VCRIS, ERM collected information from the Historical Marker Database (2021), Preservation Virginia (2024), Visit Culpeper (n.d.), American Battlefield Protection Program (ABPP 2024), American Battlefield Trust (ABT 2024a), Museum of Culpepper History (2024), and Historic Germanna (2013) to find locally significant resources within a 1.0-mile radius of each proposed route centerline.

Along with the records review, ERM conducted field assessments of the considered aboveground resources along each alternative route in accordance with the Guidelines. Digital photographs of each historic resource and views to the proposed transmission line were taken. Photo simulations were then prepared to assess the potential for visual impacts on the new transmission infrastructure on the resources. For previously recorded archaeological sites under consideration, aerial photographs were examined to assess the current land condition and the spatial relationship between the sites and any existing or planned transmission lines.

2.2 ARCHAEOLOGICAL RESOURCES

Crossings of archaeological sites were considered a constraint in this study due to the potential for an electric transmission line to impact cultural deposits in these areas (for example, due to transmission structure placement, tree clearing, or heavy equipment traffic within a site). Information on the known archaeological sites in the right-of-way for each transmission line route are summarized in Table 3, while the site locations are depicted on Figure 2. Individual maps for each route are provided in Attachment 1.

Of the seven archaeological sites identified within what would be the rights-of-way for the alternative routes or adjacent to a proposed substation, one has been determined not eligible for listing on the NRHP, while the remaining six have no formal determination of eligibility and are unevaluated. For the Mt. Pony Routes, three are located within Mt. Pony Route 1 or adjacent to the proposed Mt. Pony Substation: 44CU0135, 44CU0137, and 44CU0188. One is adjacent to the



FIGURE 1 LOCATIONS OF ARCHAEOLOGICAL RESOURCES WITHIN THE RIGHT-OF-WAY FOR EACH ROUTE REDACTED





TABLE 3 ARCHAEOLOGICAL RESOURCES IN THE RIGHT-OF-WAY FOR EACH ROUTE

Project Component	Greenfield or Existing/ Expanded ROW?	Site Number	Description	NRHP Status
	Greenfield	44CU0135ª	Dwelling (Colony to Nation, Early National Period, Antebellum Period)	Unevaluated
Mt. Pony Route 1	Existing/Expanded ROW	44CU0137	Road bed (Contact Period, Colony to Nation, Early National Period)	Unevaluated
	Greenfield	44CU0188	Temporary camp (Early Archaic Period, Middle Archaic Period, Late Archaic Period)	Not Eligible
Mt. Pony Route 2	Greenfield	44CU0135ª	Dwelling (Colony to Nation, Early National Period, Antebellum Period)	Unevaluated
	Existing/Expanded ROW	44CU0137	Road bed (Contact Period, Colony to Nation, Early National Period)	Unevaluated
Tech Park Route 1	Greenfield	44CU0221 ^{b, c}	Dwelling (Antebellum Period, Civil War, Reconstruction and Growth)	Unevaluated
	Greenfield	44CU0222	Multicomponent artifact scatter (Pre- Contact, Antebellum Period, Civil War, Reconstruction and Growth)	Unevaluated
	Greenfield	44CU0221 ^{b, c}	Dwelling (Antebellum Period, Civil War, Reconstruction and Growth)	Unevaluated
Tech Park Route 2	Greenfield	44CU0222	Multicomponent artifact scatter (Pre- Contact, Antebellum Period, Civil War, Reconstruction and Growth)	Unevaluated
	Greenfield	44CU0219	Artifact scatter (Pre-Contact) and Artifact fragment (Early National Period, Antebellum Period, Civil War, Reconstruction and Growth, World War I to World War II)	Unevaluated
Tech Park Route 3	Greenfield	44CU0220	Multicomponent artifact scatter (Pre- Contact, Early National Period, Antebellum Period, Civil War, Reconstruction and Growth)	Unevaluated
	Greenfield	44CU0221 ^{b, c}	Dwelling (Antebellum Period, Civil War, Reconstruction and Growth)	Unevaluated
	Greenfield	44CU0222	Multicomponent artifact scatter (Pre- Contact, Antebellum Period, Civil War, Reconstruction and Growth)	Unevaluated
Oak Green Rebuild and Relocation	-	-	-	-
Remington Rebuild	-	-	-	-

Source: VDHR 2024 ROW = right-of-way;



CLIENT: Dominion Energy
PROJECT NO: 0726778

DATE: 19 February 2025 VERSION: 01

^a Located adjacent to proposed Mt. Pony Substation

^b Located adjacent to or within proposed Chandler Substation

^c Located adjacent to or within proposed McDevitt Substation

proposed Mt. Pony Substation in association with Mt. Pony Route 2: 44CU0135. For the Tech Park Routes, three are located within Tech Park Route 1: 44CU0137, 44CU0221, and 44CU0222. Two archaeological sites are located within Tech Park Route 2—44CU0221 and 44CU0222, while four are located within Tech Park Route 3: 44CU0219, 44CU0220, 44CU0221, 44CU0222. No archaeological sites were identified within what would be the right-of-way for the Oak Green Rebuild and Relocation, Remington Rebuild, or the proposed Palomino Substation. A confident evaluation of the nature of archaeological deposits at each site and impacts on the sites from prior land use activities would require a field survey.

2.3 HISTORIC RESOURCES

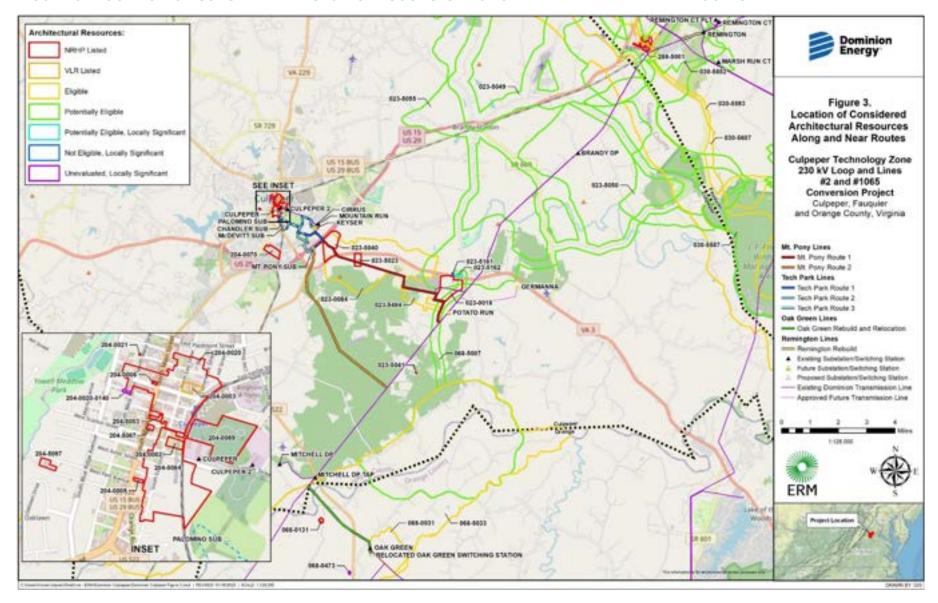
The following discussion summarizes the known historic resources in the vicinity of each alternative route based on the VDHR's tiered study model defined in the Guidelines. The locations of the considered resources and the various alternative routes are shown on Figure 3. Individual maps for each proposed alternative are provided in Attachment 1.

Resources located within what would be the right-of-way of a route may be subject to both direct impacts from placement of the line across the property as well as visual impacts from changes to the viewshed introduced by the new transmission line structures and conductors. Resources in the 0.5-mile tier would not be directly impacted, but would likely be visually impacted, unless topography, vegetation, or the built environment obscures the view to the transmission line. At a distance of over 0.5 mile, it becomes less likely that a resource would be within line-of-sight of the proposed transmission line. Beyond 1.0 mile, it becomes even less likely that a given resource would be within line-of-sight of a transmission line.

Areas of overlap between routes mean that the impacts on some resources will be identical in those cases. The nature of the impacts, while estimated in this study with the assistance of photo simulations, would depend on the final Project design in which the exact placement and height of transmission structures are determined. The purpose of the simulations and associated assessments in this report are to provide data on likely impacts and to compare those impacts to support the selection of a preferred route.

Once a route is certified by the State Corporation Commission (SCC), that route would be subject to a full historic architectural survey in which additional (as of yet, unrecorded) historic properties could be identified and Project impacts assessed. The survey area would be defined based on the design height of the transmission line structures, topography, tree cover, and other factors impacting line-of-sight from historic resources to the selected route.

FIGURE 3 LOCATION OF CONSIDERED HISTORIC RESOURCES ALONG AND NEAR ALTERNATIVE ROUTES





2.3.1 MT. PONY LINES

2.3.1.1 MT. PONY ROUTE 1

The considered resources that lie within the VDHR study tiers for Mt. Pony Route 1 are presented in Table 4 and depicted in the map provided as Attachment 1, Sheet 1. ERM identified ten aboveground historic resources within the VDHR study tiers for Mt. Pony Route 1. The considered resources were subjected for field reconnaissance and a preliminary assessment of impacts, discussed in the next chapter.

TABLE 4 HISTORIC RESOURCES IN THE VDHR TIERS FOR MT. PONY ROUTE 1

Buffer (Miles)	Resource Category	Resource Number	Description
	National Register Properties (listed)	204-0070 ^a	Greenwood
0.5 to 1.0	Locally Significant	023-5161	St. Steven's Baptist Church
		023-5162	Zimmerman's Tavern
0.0 to 0.5	National Register Properties (listed)	023-0018	Rose Hill
	Battlefields (Potentially Eligible)	023-5055	Brandy Station Battlefields
	National Register Properties (listed)	023-5023	Mount Castle
		023-5040ª	Croftburn Farm
0.0 (within ROW)	National Register - Eligible	023-0084ª	Mount Pony Rural Historic District
		023-5494	House
	Battlefields (Potentially Eligible)	068-5007	Battle of Morton's Ford

Source: VDHR 2024

2.3.1.2 MT. PONY ROUTE 2

The considered resources that lie within the VDHR study tiers for Mt. Pony Route 2 are presented in Table 5 and depicted in the map provided as Attachment 1, Sheet 2. ERM identified six aboveground historic resources within the VDHR study tiers for Mt. Pony Route 2. The considered resources were subjected for field reconnaissance and a preliminary assessment of impacts, discussed in the next chapter.



^a Resource is also within the designated tiers for the proposed Mt. Pony Substation

TABLE 5 HISTORIC RESOURCES IN THE VDHR TIERS FOR MT. PONY ROUTE 2

Buffer (Miles)	Resource Category	Resource Number	Description
	National Register Properties (listed)	023-5041	Eckington School
		204-0070a	Greenwood
0.5 to 1.0	National Register - Eligible	068-5033	Rapidan River and Clark Mountain Rural Historic District
	Battlefields (Potentially Eligible)	068-5007	Battle of Morton's Ford
	National Register Properties (listed)	023-5040 ^a	Croftburn Farm
0.0 to 0.5	National Register - Eligible	023-0084ª	Mount Pony Rural Historic District

2.3.2 TECH PARK LINES

2.3.2.1 TECH PARK ROUTE 1

The considered resources that lie within the VDHR study tiers for Tech Park Route 1 are presented in Table 6 and depicted in the map provided as Attachment 1, Sheet 3. ERM identified 16 aboveground historic resources within the VDHR study tiers for Tech Park Route 1. The considered resources were subjected for field reconnaissance and a preliminary assessment of impacts, discussed in the next chapter.



^a Resource is also within the designated tiers for the proposed Mt. Pony Substation

TABLE 6 HISTORIC RESOURCES IN THE VDHR TIERS FOR TECH PARK ROUTE 1

Buffer (Miles)	Resource Category	Resource Number	Description
	National Register Properties (listed)	023-5023	Mount Castle
0.5 to 1.0		204-0006 ^{a, b, c}	A.P. Hill Boyhood Home
		204-0021 ^{a, b, c}	Corrie Hill House
		204-0070 ^{a, b, c}	Greenwood
		204-5097 ^{a, b, c}	Culpeper Light & Power
	Locally Significant	204-0020-0140a, b, c	Antioch Baptist Church
	National Register Properties (listed)	204-0002a, b, c	Hill Mansion
		204-0003 ^{a, b, c}	Saint Stephen's Episcopal Church
		204-0005 ^{a, b, c}	Burgandine House
0.0 to 0.5		204-0020 ^{a, b, c}	Culpeper Historic District
0.0 to 0.5		204-0064 ^{a, b, c}	South East Street Historic District
		204-0069 ^{a, b, c}	Culpeper National Cemetery
		204-5053a, b, c	Pitts Theater
		204-5067 ^{a, b, c}	Lord Culpeper Hotel
	National Register Properties (listed)	023-5040	Croftburn Farm
0.0 (within ROW)	National Register- Eligible	023-0084	Mount Pony Rural Historic District

2.3.2.2 TECH PARK ROUTE 2

The considered resources that lie within the VDHR study tiers for Tech Park Route 2 are presented in Table 7 and depicted in the map provided as Attachment 1, Sheet 4. ERM identified 15 aboveground historic resources within the VDHR study tiers for Tech Park Route 2. The considered resources were subjected for field reconnaissance and a preliminary assessment of impacts, discussed in the next chapter.



^a Resource is also within the designated tiers for the proposed Palomino Substation

^b Resource is also within the designated tiers for the proposed McDevitt Substation

^c Resource is also within the designated tiers for the proposed Chandler Substation

TABLE 7 HISTORIC RESOURCES IN THE VDHR TIERS FOR TECH PARK ROUTE 2

Buffer (Miles)	Resource Category	Resource Number	Description
	National Register Properties (listed)	204-0006a, b, c	A.P. Hill Boyhood Home
0.5 to 1.0		204-0021 ^{a, b, c}	Corrie Hill House
		204-0070a, b, c	Greenwood
		204-5097 ^{a, b, c}	Culpeper Light and Power
	Locally Significant	204-0020-0140 ^{a, b, c}	Antioch Baptist Church
	National Register Properties (listed)	023-5040	Croftburn Farm
		204-0002a, b, c	Hill Mansion
		204-0003a, b, c	Saint Stephen's Episcopal Church
		204-0005 ^{a, b, c}	Burgandine House
		204-0020a, b, c	Culpeper Historic District
0.0 to 0.5		204-0064 ^{a, b, c}	South East Street Historic District
		204-0069 ^{a, b, c}	Culpeper National Cemetery
		204-5053 ^{a, b, c}	Pitts Theater
		204-5067 ^{a, b, c}	Lord Culpeper Hotel
	National Register- Eligible	023-0084	Mount Pony Rural Historic District

2.3.2.3 TECH PARK ROUTE 3

The considered resources that lie within the VDHR study tiers for Tech Park Route 3 are presented in Table 8 and depicted in the map provided as Attachment 1, Sheet 5. ERM identified 15 aboveground historic resources within the VDHR study tiers for Tech Park Route 3. The considered resources were subjected for field reconnaissance and a preliminary assessment of impacts, discussed in the next chapter.

^a Resource is also within the designated tiers for the proposed Palomino Substation

^b Resource is also within the designated tiers for the proposed McDevitt Substation

^c Resource is also within the designated tiers for the proposed Chandler Substation

TABLE 8 HISTORIC RESOURCES IN THE VDHR TIERS FOR TECH PARK ROUTE 3

Buffer (Miles)	Resource Category	Resource Number	Description
	National Register Properties (listed)	204-0006 ^{a, b, c}	A.P. Hill Boyhood Home
0.5 to 1.0		204-0021 ^{a, b, c}	Corrie Hill House
		204-0070 ^{a, b, c}	Greenwood
		204-5097 ^{a, b, c}	Culpeper Light and Power
	Locally Significant	204-0020-0140a, b, c	Antioch Baptist Church
	National Register Properties (listed)	023-5040	Croftburn Farm
		204-0002a, b, c	Hill Mansion
		204-0003 ^{a, b, c}	Saint Stephen's Episcopal Church
		204-0005a, b, c	Burgandine House
		204-0020a, b, c	Culpeper Historic District
0.0 to 0.5		204-0064 ^{a, b, c}	South East Street Historic District
		204-0069 ^{a, b, c}	Culpeper National Cemetery
		204-5053 ^{a, b, c}	Pitts Theater
		204-5067 ^{a, b, c}	Lord Culpeper Hotel
	National Register- Eligible	023-0084	Mount Pony Rural Historic District

2.3.3 OAK GREEN REBUILD AND RELOCATION

The considered resources that lie within the VDHR study tiers for the Oak Green Rebuild and Relocation are presented in Table 9 and depicted in the map provided as Attachment 1, Sheet 6. ERM identified four aboveground historic resources within the VDHR study tiers for the Oak Green Rebuild and Relocation. The considered resources were subjected for field reconnaissance and a preliminary assessment of impacts, discussed in the next chapter.



^a Resource is also within the designated tiers for the proposed Palomino Substation

^b Resource is also within the designated tiers for the proposed McDevitt Substation

c Resource is also within the designated tiers for the proposed Chandler Substation

TABLE 9 HISTORIC RESOURCES IN THE VDHR TIERS FOR OAK GREEN REBUILD AND RELOCATION

Buffer (Miles)	Resource Category	Resource Number	Description
0.5 to 1.0	Locally Significant	068-0473ª	Mt. Holy Baptist Church
0.0 to 0.5	National Register Properties (listed)	068-0131	Lessland
	National Register - Eligible	068-0031	Morton Hall
0.0 (within ROW)		068-5033ª	Rapidan River and Clark Mountain Rural Historic District

2.3.4 REMINGTON REBUILD

The considered resources that lie within the VDHR study tiers for the Remington Rebuild are presented in Table 10 and depicted in the map provided as Attachment 1, Sheet 7. ERM identified seven aboveground historic resources within the VDHR study tiers for the Remington Rebuild. The considered resources were subjected for field reconnaissance and a preliminary assessment of impacts, discussed in the next chapter.

TABLE 10 HISTORIC RESOURCES IN THE VDHR TIERS FOR REMINGTON REBUILD

Buffer (Miles)	Resource Category	Resource Number	Description
0.5 to 1.0	National Register Properties (listed)	288-5001	Remington Historic District
	National Register - Eligible	030-5593	Rappahannock River 1862 Northern Virginia Campaign Rural Historic District
		030-5607	Hedgeman- Rappahannock Rural Historic District
	Locally Significant	030-5852	Piney Ridge School
0.0 to 0.5	Battlefields (Potentially Eligible)	023-5049	Freeman's Ford Battlefield
0.0 (within ROW)	Battlefields (Potentially Eligible)	023-5050	Rappahannock Station Battlefield II
	Rural Historic Districts (Potentially Eligible)	030-5587	Mt. Holly Ridge- Marsh Run Rural Historic District

Source: VDHR 2024



^a Resource is also within the designated tiers for the proposed Relocated Oak Green Switching Station

2.4 PREVIOUS SURVEYS

Portions of the Project have previously been surveyed for cultural resources, among 22 studies reported within 1 mile of the Project. Six of the surveys intersect at least one of the routes under consideration. Information on these previous surveys—including VDHR survey number, report title, report authors, and report date—is provided in Table 11. The extent of the previous survey coverage is depicted on maps provided in Attachment 2.

TABLE 11 CULTURAL RESOURCE SURVEYS WITHIN 1 MILE OF THE PROJECT

VDHR Survey #	Title	Authors	Date
CU-002	A Preliminary Archeological Resources Reconnaissance of Proposed Improvements of a Section of the Floodplain of Mountain Run in the Town of Culpeper, Culpeper County, Virginia	Kimberly A. Snyder	1979
CU-005	A Preliminary Archeological Resources Reconnaissance of the Charlottesville-Remington 230 kV Transmission Line Where It Intersects with the Rapidan River in Culpeper and Orange Counties, Virginia	Kurt W. Carr	1980
CU-006	A Preliminary Archeological Resources Reconnaissance of the Proposed Expansion of the Virginia National Cemetery in Culpeper, Culpeper County, Virginia	Joan M. Walker	1980
CU-009	A Phase I Cultural Resource Survey of the Proposed Route 522 Widening, Culpeper County, Virginia	Gary G. Robinson, Daniel Pezzoni, Martha W. McCartney, Bruce B. Sterling	1989
CU-016	A Phase I Cultural Resources Reconnaissance of the Proposed Mitchell Substation and Mitchell Transmission Line in Culpeper County, Virginia	William M. Gardner, Joan M. Walker	1993
CU-026	An Archaeological Survey for the Proposed Route 3 Improvements and Stevensburg Bypass Project, Culpeper County, Virginia	Ricardo Fernandez- Sardina, Eric Griffitts	1998
CU-034	Cultural Resources Identification Survey, Proposed Western Inner Loop, Town of Culpeper, Culpeper County, Virginia	Susan E. Bamann, Jennifer B. Stewart, Bill Hall	2005
CU-042	Cost-Share Cultural Resource Survey of 23 Areas of Historic Interest Within Culpeper County, Virginia	Sean Maroney	2009
CU-043	Archaeological Survey of the Proposed Bristers- Appalachian Trail 500kV Transmission Line, Culpeper, Fauquier, and Rappahannock Counties, Virginia	Katherine Kosalko, Brad Duplantis, Michael Yengling	2009
CU-046	Cultural Resource Survey in Association with the Proposed Widening of Route 3, Stevensburg, Culpeper County, Virginia	Katherine Kosalko, Mike Yengling	2009



CLIENT: Dominion Energy

VDHR Survey #	Title	Authors	Date
CU-069	Phase I Archaeological Survey of Greenwood Solar I, Culpeper County, Virginia	Carol D. Tyrer, Dawn M. Muir	2018
CU-074	Phase I Archaeological Survey of the Culpeper National Cemetery Expansion Area, Culpeper County, Virginia	Kerry S. González, Kathleen Merli, Dan Dilks	2021
CU-082	Phase I Cultural Resource Survey for the Parkside Apartments Project, Culpeper, Virginia	Robert J. Taylor, Jr., J. Hope Smith, Dara Friedberg	2023
CU-083	Phase I Cultural Resources Survey for the Lightfoot Apartments Project, Culpeper, Virginia	Robert J. Taylor, Jr., J. Hope Smith, Dara Friedberg	2024
FQ-005	A Preliminary Archeological Resources Reconnaissance of a Proposed Sewer Line Between Bealeton and Remington, Fauquier County, Virginia	Kurt W. Carr	1980
FQ-040	Phase I Archaeological Survey for the Meadows of Remington, Fauquier County, Virginia	Joseph Balicki, J. Sanderson Stevens	1991
FQ-043	A Phase I Cultural Resources Survey of 250.534 Acres for a Proposed Power Generation Plant near the Town of Remington, Fauquier County, Virginia	Thomas N. Gannon	2000
FQ-072	Cultural Resources Survey, Proposed Tin Pot Run Bridge Replacement, Fauquier County, Virginia	Mike Klein, Sandra DeChard, Dane Magoon	2010
FQ-085	Cultural Resources Survey of the Pierce Elementary School Connector Trail Project, Fauquier County, Virginia	William H. Moore, Sarah M. Clarke	2014
FQ-097	Phase I Cultural Resources Survey of Virginia Dominion Power Remington Site, Fauquier County, Virginia	Carol D. Tyrer, Dawn M. Muir-Frost	2015
FQ-119	A Phase I Cultural Resources Survey of Approximately 233.8 Acres for the Proposed Remington Data Center in Fauquier County, Virginia	Megan Victor, Sandra DeChard, Brynn Stewart	2019
FQ-129	Phase I Cultural Resource Survey of the Warrenton Training Center, Station C, Fauquier County, Virginia	Andrew Martin, Jonas Schnur, Mical Tawney	2021

^{*} Gray shaded rows denote surveys that overlap portions of the route alternatives

STAGE I PRE-APPLICATION ANALYSIS FINDINGS

3.1 METHODS FOR ANALYSIS

Fieldwork for the pre-application analysis was conducted by Haley Hoffman and Emma Jennings under the direction of Secretary of the Interior Qualified architectural historian, Mary Beth Derrick between August 21 through 23, October 7 and 8, and December 17, 2024. The fieldwork involved photographing 34 resources requiring visual assessment according to the Guidelines and examining potential line-of-sight views from each resource toward the alternative routes. For resources where property owner approval was granted for historic resource documentation, photographs were taken toward the proposed transmission line(s) from the property at the most prominent view of the landscape. When such permission was not available, photographs were taken from the public right-of-way (typically a road) nearest to the resource facing toward the applicable route(s).

Panoramic photographs were taken from each resource, with an effort to capture the direction with the clearest, most unobstructed view toward the applicable route or routes. The precise location of the photograph was captured with a mobile tablet device connected to a sub-meter accurate Global Navigation Satellite System (GNSS) receiver, the Trimble R1. The locations where photographs were taken were noted as Simulation Points (SP). Site visits to the SPs were prioritized based on their location relative to the resource, so that viewpoints east of the resource were visited in the morning and viewpoints west of the resource were visited in the afternoon. This helped ensure, where possible, that the sun was behind the photographer at the time the viewpoint photography was captured. Additionally, minor adjustments to position were made to obtain as clear a view to the site center as possible, avoiding trees, landscaping, or built obstructions. Tablets recorded the center bearing, angle of view, altitude, and camera lens height. Upon receipt of the viewpoint location information, the viewpoints were plotted onto open source mapping from the Environmental Systems Research Institute (ESRI) using the Universal Transverse Mercator (UTM) 18N coordinate system.

The process of taking panoramas included setting up the tripod and camera. The camera was placed on the panoramic head in a landscape orientation where its lens height was confirmed and set at 1.5 meters (note: a portrait camera orientation was sometimes used in situations where the viewpoint is very close to a development so that the top of the development is not cut off by the image boundaries). The tripod head and camera combination was then leveled. With the camera's viewfinder centered on the perceived site center, exposure and focus settings were taken. These were then fixed manually on the camera so that they could not be inadvertently altered. The head was rotated 90 degrees to the left where the first frame of the 360-degree sequence was then taken. Each subsequent frame was taken using a 50 percent overlap of the previous frame until the full 360 degree sequence was captured. The camera was then removed from the tripod and a viewpoint location photograph was captured showing the tripod in its position.

The following camera and tripod configuration was used:

 Camera body: Nikon z6ii professional specification digital single lens reflex (SLR) (full frame complementary metal oxide semiconductor [CMOS] sensor)



Camera lens: Nikkor Auto Focus (AF) 50mm f1.8 prime

Tripod: Ulanzi Zero F38 Quick Release Travel Tripod 3131 with Level

Panoramic head: Nodal Ninja 6 with Nadir Adapter

After the photos were complete, they were uploaded to a server to begin the simulation/ visualization process. The single-frame photographs were opened in Adobe Photoshop CC 2022 where they were checked and any camera sensor dust spots were removed before being saved as high-resolution JPEG images. If required, discrete color and tonal adjustments were made to each frame before they were saved. The single-frame photographs were stitched together in PTGui Pro version 12.11 professional photographic stitching software using cylindrical projection settings. The camera locations were plotted in Global Mapper version 23.1. Digital models of the transmission line structures were provided by Dominion, then cleaned up and textured in Autodesk 3DS Max 2021. The transmission structures along each route were rendered in Vray version 5.2 from each SP camera location. 3D imagery was produced at the field of view using camera matching. Renderings for each route and each tower combination were then exported for use as an overlay.

Detailed, correctly dimensioned 3D computer models of the transmission structures along each route were generated using Autodesk 3DS Max 2021 and iToo RailClone. The virtual 3D model of the structures was created using real-world measurements and elevation drawings provided by the Company (see Attachment 3). These were textured using Vray PBR materials to simulate the weathering steel texture. The detailed, textured models were rendered to a digital image using a simulated physical camera and a sun and sky simulation lighting model in the computer software consistent with conditions within the original viewpoint photography.

Photomontages were produced by overlaying the rendered image on the photograph, using known control points and the wireline imagery showing the tower columns at the correct height and distance. Final adjustments were then made to the brightness and contrast of the rendered images to match them to the photograph. Final photomontages were prepared from each viewpoint for each route. These were then opened in Adobe Photoshop CC 2022 where minor changes were made such as placing relevant tree/building/hedge screening or telegraph wires over the proposed development renders where necessary. Finally, the final images were cropped to the proportions required for the visual simulation figures, and the visualization figures were prepared in Adobe InDesign CC2022 and exported in a PDF format.

3.2 STRUCTURE TYPES AND RIGHT-OF-WAY WIDTHS

The Company proposes to primarily use double circuit monopoles of either weathering or dulled galvanized steel for the Project. Table 12 lists the minimum, maximum, and average structure heights for the Mt. Pony, Tech Park, Oak Green, and Remington Lines. The information in Table 12 reflects preliminary conceptual design, excluding foundation reveal, and is subject to change based on final engineering (Attachment 3).

The Mt. Pony Lines and Tech Park Lines will be within a new 100-foot-wide right-of-way, except in areas collocated with Dominion's existing 100-foot-wide rights-of-way, where only 60 additional



feet of new right-of-way will be needed. In these collocated areas, the total right-of-way width will be 160 feet.

TABLE 12 ESTIMATED STRUCTURE HEIGHTS

Route*	Minimum (feet)	Maximum (feet)	Average (feet)
Mt. Pony Route 1	75	125	113
Mt. Pony Route 2	75	130	117
Tech Park Route 1	75	125	111
Tech Park Route 2	75	130	113
Tech Park Route 3	75	130	114
Oak Green Rebuild and Relocation	75	130	118
Remington Rebuild	45	125	105

^{*} All structure height estimates are based on conceptual engineering design and subject to change during final engineering design

The Oak Green Lines will be within a variable width right-of-way. The existing right-of-way is 75 feet, but will be expanded by 25 feet for a new width of 100 feet for the majority of the length of this component to accommodate the uprate and rebuild of the Company's #2 and #11 transmission lines. In addition, a segment of new 100-foot-wide right-of-way will be obtained to interconnect the existing right-of-way to the relocated substation.

The Remington Lines will be entirely within an existing 100-foot-wide right-of-way or on Dominion-owned land. The existing Remington Lines' right-of-way is collocated with other Dominion transmission lines in a shared 200-foot-wide corridor.

At each of the cut-ins the Company will install one new monopole structure near the existing structures to provide a network connection to the existing transmission system.

3.3 ASSESSMENT OF POTENTIAL IMPACTS

The assessment of potential Project impacts on individual resources made use of the visual assessment findings and categorized the level of impacts by severity according to the following scale devised by VDHR:

- **None**-Project is not visible from the resource.
- **Minima**l–Viewsheds have existing transmission lines, there would be only a minor change in height, and/or other views are partially obscured by topography or vegetation.
- **Moderate**–Viewsheds have more expansive views of the transmission line, more dramatic changes in height are proposed, and/or the overall visibility of the Project would be greater.
- Severe–Existing viewshed contains no transmission line, the view to the Project would be relatively unobstructed, the new transmission line would introduce a significant change to the setting of historic properties, and/or a dramatic change in the height of an existing transmission line would take place in close proximity to historic properties.



3.4 HISTORIC RESOURCE DESCRIPTIONS

3.4.1 023-0018, ROSE HILL

023-0018 is located on the west side of Batna Road/Route 663 in Stevensburg. The resource is situated on a 207.45-acre parcel consisting of agricultural land divided into sections by dense tree lines. The resource contains a house accessed via a paved private drive, approximately 610 feet from its intersection with Batna Road/Route 663. Due to the lack of access, ERM architectural historians took photos from the public right-of-way (Attachment 4, Figure 1).

023-0018 was first surveyed in 1937 for a Historic American Buildings Survey (HABS)/Historic American Engineering Record (HAER)/Historic American Landscape Survey (HALS) documentation (Jeffries 1937). It was subsequently surveyed eight more times through 2018 (Johnson 1958; Reed 1968; Neville 1993; Covington 1997; Kuhn and Yengling 2009a; Taylor 2017a; Muir 2018a; Neville 2018). The 2018 survey was conducted by Ashley Neville and John Salmon who noted an I-house and multiple outbuildings. The I-house was described as a circa 1855, two-and-a-half story, central-passage building built in the Federal/Adamesque style (Neville and Salmon 2019). It has a gabled, standing-seam metal roof, clapboard siding, and a stone foundation. Two interiorend brick chimneys and six-over-six and nine-over-nine double-hung wood sash windows are visible from the public road. The dwelling is accessed via a portico with a pediment and Doric columns.

The resource also includes a circa 1810 "Old Hall" or school, circa 1835 smoke house, detached kitchen, ice house, a circa 1826 Nalle cemetery, a circa 1850 Ashby-Covington cemetery, a circa 1870 pole barn, a circa 1955 grain house, two circa 1960 garages, and a circa 2009 bird house. Servant/slave quarters were noted during prior surveys; however, they were believed to be no longer extant by the time of the 2019 NRHP nomination. ERM did not note any changes since the previous survey.

Rose Hill Farm/Game Preserve was listed on the Virginia Landmarks Register (VLR) in December 2019 and later listed on the NRHP in August of 2020. 023-0018 is located within the half-mile study tier for Mt. Pony Route 1.

3.4.2 023-0084, MOUNT PONY RURAL HISTORIC DISTRICT

The Mount Pony Rural Historic District is located on the east side of James Madison Highway spanning north and south along Germanna Highway on the outskirts of the town of Culpeper. The historic district is irregular in shape and encompasses approximately 3,910 acres within a rural agricultural area (Attachment 4, Figure 2).

023-0084 was surveyed in 1995 by Laura Campbell and in 2009 by Patti Kuhn and Mike Yengling. Campbell noted that the district contained a variety of building types, including houses, tenant houses, and associated farmland. The district as a whole has changed very little since its inception, and any changes/additions to individual buildings reflect the evolution of a farming community (Campbell 1995). Properties within the district date from pre-revolutionary times to World War II (1734 to 1941). No changes were noted in the 2009 survey other than the widening of Germanna Highway (Kuhn and Yengling 2009b). ERM did not notice any changes since the previous survey.



Six previously recorded resources (farms) are considered contributing resources to the district. Two of the resources have been determined not eligible for the NRHP (023-5022 and 023-5035), one is eligible for the NRHP (023-5029), and one is individually unevaluated (023-0036). The Croftburn Farm (023-5040) and Signal Hill/Mount Castle (023-5023) are individually listed on the NRHP. Croftburn Farm (023-5040) and Signal Hill/Mount Castle (023-5023) are individual considered resources in this analysis and are discussed further below. Nine other resources are located in the district boundary, but their VCRIS forms mention no determination of their contributing status. The district's landscape consists of open land and rolling hills.

The district was determined eligible for the NRHP under Criterion A at the local level in the area of agriculture. 023-0084 is located within the right-of-way study tier for Mt. Pony Route 1 and Tech Park Route 1. Additionally, it is located within the half-mile study tier for Mt. Pony Route 2, Tech Park Routes 2 and 3, and the proposed Mt. Pony Substation.

3.4.3 023-5023, MOUNT CASTLE

Mount Castle, 023-5023, is located at 16190 Germanna Highway in Culpeper on a 40-acre parcel on the south side of the road. The area is primarily rural with open fields and a woodland to the south. The property is mainly cleared but features lines of trees along the driveway and at the northern boundary. A few additional scattered lines of trees are visible along the private dirt road. ERM was not able to access or view the resource due to thick vegetation between the public right-of-way and the resource (Attachment 4, Figure 3). However, aerial views show that there have been no changes since 2008.

The resource was first surveyed in September of 1997 by Helen P. Ross for the Virginia Department of Transportation (VDOT) in connection with the Mount Pony Rural Historic District (023-0084) survey. This survey noted a circa 1882 two-story brick dwelling and eight secondary resources (Ross 1997). In October 1998, the resource was surveyed again by Shirley Maxwell and James Massey for Massey Maxwell Associates, Inc. During this survey, Maxwell and Massey provided further details of the resource's history as once being a 340-acre dairy and sheep farm. They also noted the dwelling as being constructed in the late Victorian style and is one of Culpeper County's finest examples of turn-of-the-century domestic architecture (Maxwell and Massey 1998). It was not until August of 2008 that the resource was surveyed again. In this survey, Sean Maroney with Dovetail CRG, noted the resource remained in excellent condition with no modifications visible to the main house or its secondary resources.

023-5023 was nominated to the NRHP during Maxwell and Massey's survey in October of 1998. In December of 1998, it was listed on the VLR and in the following year on January 1999, it was listed on the NRHP under Criterion C for its high degree of architectural and historical integrity. 023-5023 is located within the right-of-way for Mt. Pony Route 1 and is within the 1-mile study tier for Tech Park Route 1.

3.4.4 023-5040, CROFTBURN FARM

023-5040, located at 18175 Croftburn Farm Road, is situated on an approximately 160-acre lot in the town of Culpeper. The surrounding area is predominantly rural, featuring tree lined properties enclosing cleared fields. A major highway, US 29, bounds the resource to the northwest and



Germanna Highway is to the south. The Mountain Run tributary runs through the northwestern portions of the property.

Croftburn Farm includes a circa 1890 vernacular L-shaped two-story dwelling and 17 secondary resources (Attachment 4, Figure 4). The resource was first surveyed in November of 2000 by Shirley Maxwell and James Massey for Massey Maxwell Associates, Inc. This survey noted the dwelling as a three-bay, frame and weather-boarded structure with a gabled roof and center pediment. A single-story, one-bay entrance porch with a deck and roof top railing added in the circa 1930s is located in the center bay. A window on the second floor opens to the flat sheet-metal roof of the porch (Maxwell and Massey 2000). A second survey was completed by Sean Maroney on behalf of Dovetail CRG in August 2008. This survey described the resource, including the dwelling and secondary resources, as still in good condition with retained historical integrity. It was also noted to be a contributing resource to the larger Mount Pony Historic District (023-0083) (Maroney 2008). ERM visited the resource in 2024, and no changes were observed since the previous survey.

023-5040 was nominated to the NRHP under Criteria A and C through the survey completed by Maxwell and Massey in 2000. In December of 2000, it was listed on the VLR and in February 2001, it was added to the NRHP. 023-5040 is located within the right-of-way study tier for Mt. Pony Route 1 and Tech Park Route 1. Additionally, it is situated within the half-mile study tier for Mt. Pony Route 2, Tech Park Routes 2 and 3, and the proposed Mt. Pony Substation.

3.4.5 023-5041, ECKINGTON SCHOOL

Eckington School is located at 21649 Mount Pony Road in Culpeper, adjacent to the parking lot of the Free Union Baptist Church. Its site is relatively level, with the church and a cemetery located approximately 100 feet to the north. It is surrounded by mowed fields with tree lines beyond, and a view to the east.

The resource is a one-story, one-room schoolhouse (Attachment 4, Figure 5). The resource was first surveyed in January 2000 by Ann L. Miller, who drafted the NRHP nomination in December of that year recommending it eligible under Criterion A. Miller descried the school as featuring its original 1895 end-gabled section with a ten-foot hipped-roofed addition at the west end that was reportedly added in 1950. The sill plate of the original section rests on stone piers, while the foundation of the addition is of brick and concrete masonry units. Both sections have weathered standing seam metal roofs, weatherboard siding, six-over-six double-hung windows, and updated panel doors at the east entrance to the original section and at the north façade into the addition. A brick chimney originally at the west end of the 1895 section is now an internal unit (Miller 2000). The most recent survey was completed by Robert Taylor with Dutton and Associates, LLC in November of 2011. Taylor noted that following the 1879 establishment of the African-American congregation's Poplar Ridge Baptist Church (also known as the Free Union), the school was built as a segregated school for Culpeper County. Once schools were consolidated in Culpeper in 1941, the church repurposed the building as a fellowship hall. Currently used for storage, it remains the only one-room school in its original location in the county. Its exterior finishes are considerably weathered, but no major changes were observed beyond the circa 1950 addition, and the resource is in overall fair condition (Taylor 2011). ERM visited the resource in October of 2024,



and noted no major changes since the previous survey.

Eckington School was listed in the NRHP and VLR in 2001 under Criterion A. 023-5041 is located within the 1-mile study tier for Mt. Pony Route 2.

3.4.6 023-5049, RAPPAHANNOCK STATION BATTLEFIELD I

The Rappahannock Station Battlefield I (068-5049) is located within the half-mile study tier for the Remington Rebuild. The battlefield includes a 3-mile-wide area along the Rappahannock River in Remington (Rappahannock Station), the site of a Confederate cavalry raid at Catlett Station, and the route of Confederate movements north of the river as they pursued the Union army withdrawing toward Manassas after the battle (Attachment 4, Figure 6). Pope's Union Army of the Potomac drew up a line of defense on the south side of the Rappahannock, where they were met by Confederates under General James Longstreet. On August 23, 1862, General J. E. B. Stuart launched a cavalry raid behind the Union lines to weaken their resolve. After several days of fighting, Longstreet was unable to break the Union line. However, the attacks kept Pope occupied long enough for General "Stonewall" Jackson to march farther in the Union rear to Manassas Junction, forcing Pope to withdraw, and setting up the First Battle of Manassas.

The resource was originally recorded in 1992 by the Civil War Sites Advisory Commission (CWSAC). In 2007, the battlefield was determined potentially eligible by VDHR from preliminary ABPP data. The boundaries of the resource are represented by the CWSAC Study Area boundary defined for its 1993 report and subsequent revisions (ABPP 2009; CWSAC 1999). The battlefield's boundary covers 34,745 acres, based on the ABPP Study Area. The ABPP also identified potential National Register boundaries where the Study Area retains sufficient integrity for NRHP eligibility. The Remington Rebuild Component lies about 0.4 miles southeast of the CWSAC Study Area and Potential National Register (PotNR) area of the resource, which follows the route of the former Alexandria and Orange Railroad used by the Union army in its retreat. The Remington Rebuild centerline is approximately 0.3 miles northeast of the Core Area, where the major action of the battle took place. The Core Area extends back from the river, where the Union line was located, about 1 mile. Troops were deployed from Rappahannock Station toward Kellys Ford to the southeast, as well as northwest along the river, and some troop movements and reserve deployments may have taken place in the Project vicinity. These actions were ephemeral and unlikely to leave evidence. It does not appear that any engagement was fought within the Project area (ABT 2024b).

023-5049 is located within the half-mile study tier for the Remington Rebuild.

3.4.7 023-5050, RAPPAHANNOCK STATION BATTLEFIELD II

023-5050, Rappahannock Station Battlefield II, or Second Battle of Rappahannock Station, is located in Culpeper and Fauquier counties (Attachment 4, Figure 7). The resource represents the geographical area that contains the significant sites and related features that played an important role in the Second Battle of Rappahannock Station, which took place on November 7, 1863 during the Civil War. The Core Areas of the battlefield are in and around the town of Remington (formerly Rappahannock Station) and at Kelly's Ford on the Rappahannock River in Fauquier County. The battle was the last engagement of the Bristoe Campaign, in which the General Robert E. Lee's



Confederate Army of Northern Virginia withdrew to the south side of the Rapidan River and took up winter quarters at Orange Courthouse. The boundaries of the resource are represented by the CWSAC Study Area boundary defined for its 1993 report and subsequent revisions (ABPP 2009; CWSAC 1999). The Remington Rebuild Component falls within the CWSAC Study Area and PotNR area of the resource, but not within the Core Area, where the major action of the battle took place.

The Second Battle of Rappahannock Station followed a brief campaign in which a Confederate attack on a retreating force of Union corps at Bristoe Station near Manassas stalled, and A. P. Hill was forced to withdraw across the Rappahannock River while skirmishing with the pursuing enemy. At Rappahannock Station, the Confederates were posted behind a redoubt and trenches on the north side of the river to protect a pontoon bridge. Union General George G. Meade launched a two-pronged attack against the position, striking the fortified bridge crossing as well as sending a flanking force to the Confederate right at Kelly's Ford. General William French's Third Corps overran the Confederate forces at Kelly's Ford first, resulting in the surrender of about 300 soldiers. General Jubal Early was able to hold the position at Rappahannock Station until nightfall, but a late Union surge forced Early back across the river. With Union forces on the south side of the river, Lee withdrew to the Rapidan River where he encamped for the winter. Approximately 4,000 troops were engaged in the battle, with Confederate casualties of 1,674 being nearly four times that of the Union combatants (ABT 2024b).

023-5050 was determined potentially eligible for the NRHP in 2016 for its association with the events connected to the Battle of Rappahannock Station. Although the integrity of the Core Area of the battlefield has been compromised by residential and commercial development, portions of the surrounding area retain their rural and agricultural character. The landscape is consistent with the general nature of the area during the Civil War, although no specific Civil War related features are known to exist within the Study Area. 023-5050 is located within the right-of-way for the Remington Rebuild

3.4.8 023-5055, BRANDY STATION BATTLEFIELD

023-5055, the Brandy Station Battlefield, is located in Culpeper and Fauquier counties (Attachment 4, Figure 8). The resource represents three geographical areas that contain the significant sites and related features that played an important role in the Civil War Battle of Brandy Station, which took place on June 9, 1863. The battle was the opening engagement of General Robert E. Lee's Gettysburg Campaign (ABT 2023a; Gossett 2005). The boundaries of the resource are represented by the CWSAC Study Area boundary defined for its 1993 report and subsequent revisions (ABPP 2009; CWSAC 1999). Within the resource boundary are three discontiguous Core Areas where the major action of the battle took place.

The Battle of Brandy Station was a pitched battle between the cavalry corps of the Army of the Potomac and the Army of Northern Virginia, regarded as the largest cavalry battle ever on U.S. soil. After success at Chancellorsville in early May, General Lee was confident that he could successfully take the war to the northern states and began a withdrawal from his position at Fredericksburg. He planned to pass through Culpeper County and into the Shenandoah Valley where he could secure supplies. To shield his movement, he stationed Jeb Stuart's seasoned



cavalry corps on his right at Brandy Station, where he could monitor any Union effort to cross the Rappahannock River. Lee needed to get a head start on his march to the Shenandoah, since he would be vulnerable to attack during the movement (Hawks 2023).

However, General Hooker, in command of the Army of the Potomac, knew that a movement was afoot, and suspected Lee might make an assault on the capital. He sent the cavalry corps under Major General Alfred Pleasonton to investigate, ordering him to "disperse and destroy" Stuart's cavalry. Pleasonton crossed the Rappahannock at two locations in the early morning of June 9th, hoping to crush Stuart between the pinchers of his two columns. Pleasonton did catch Stuart unprepared, but the southern crossing of the river at Kelly's Ford was delayed, then blocked by a Confederate brigade on the Brandy Station Road, and the Union was unable to gain a decisive advantage. Instead, Brigadier General John Buford, in command of the northern column of cavalry, could make little headway on Fleetwood Hill, which stood between his forces and Brandy Station. It was not until the arrival of David Gregg's command, which had taken a back road from Kelly's Ford to get into Stuart's rear, that Buford was able to take possession of Fleetwood Hill. The victory was short-lived, however, and the Confederates managed to hold Brandy Station, forcing a Union retreat across the Rappahannock. Although technically a Confederate victory, the Union cavalry under Pleasonton had comported themselves well against Stuart's renowned horsemen, who had outmaneuvered them for the first two years of the war. The confidence gained would serve them well in the upcoming Gettysburg campaign (NPS 2023).

The action at Stevensburg was somewhat tangential to the overall battle, as Colonel Alfred Duffié's forces drove the Confederates from the town, but were called back to Brandy Station too late to assist Buford (Brandy Station Foundation 2010). The Confederate defense at Stevensburg was under the command of Colonel Matthew C. Butler, who was stationed in reserve at Brandy Station with about 200 members of the 2nd South Carolina regiment. Upon receiving word that a force of Union cavalry about 2,000 strong were advancing on Stevensburg, Butler headed southwest to Hansbrough Ridge, where he deployed his men along the ridge facing east, with Stevensburg at his rear. His small force was divided into three commands of approximately 60 men each, with Captain T. E. Screven to the north, Butler in the middle, and Lieutenant Colonel Frank Hampton at the southern edge of the ridge.

Butler's men were able to hold off the initial assault on the line by Union Cavalry under Colonel Duffié, who then determined to concentrate his forces at Hansbrough Gap, where the Germanna Road passed through the ridge to Stevensburg. As the federal lines began their assault, the 4th Virginia Cavalry under Colonel Williams C. Wickham arrived over the "Mountain Road" behind the ridge to reinforce Hampton, who would have undoubtedly been overwhelmed. Taking positions on either side of the gap, the Confederates were able to rain fire into the Union ranks. However, Hampton's retreat in the face of the onslaught ran into the 4th Virginia as it attempted to organize its defensive line. In the confusion, the Union cavalry rode into the line and the Confederates retreated in confusion back through town with the blue coats in pursuit. Duffié's men were descending the west side of Hansbrough Ridge when Wickham organized a line across Mountain Run to try to stop the Union advance. The pursuit was interrupted, however, when Duffié received an order from General Gregg to come to his aid at Brandy Station. Duffié withdrew, but by the



time he arrived to assist Gregg, Pleasonton had already given the command to withdraw (Hall 2023).

The battlefield's boundary covers 119,324 acres, based on the ABPP study area. The ABPP also identified PotNR boundaries where the study area retains sufficient integrity for NRHP eligibility and a Core Area where the principal action of the battle took place. The Mt. Pony Lines Route 1 Component lies about 0.2 miles south of the CWSAC Core Area and PotNR area of the resource, which extends south of Germanna Highway to encompass the engagement fought at Stevensburg. The buildings and structures in this area generally post-date the Civil War and do not contribute to the resource's eligibility, and modern roadways and existing utilities within the Core Area diminish the integrity of the setting. However, the landscape remains characteristic of the period. It does not appear that any engagement was fought in the Project vicinity (ABT 2023a), although troops may have passed through the area approaching or retreating from the field.

023-5055 has been determined potentially eligible for the NRHP for its association with the events connected to the Battle of Brandy Station. It is also associated with the Hansbrough Ridge portion of the NRHP-eligible Army of the Potomac Winter Encampment, Culpeper and Fauquier Counties, 1863–1864 Multiple Property Documentation (MPD), which is located wholly within 023-5055 (Thompson 2017). 023-5055 is located within the half-mile study tier for Mt. Pony Route 1.

3.4.9 023-5161, ST. STEVEN'S BAPTIST CHURCH

023-5161, located at 19075 York Road in Stevensburg, is situated on a remnant of York Road that was cut off when the road was rerouted to intersect Germanna Highway at a right angle. A low wooden fence separates the church from the old road, with a parking lot located on the west side of the church. There is a cemetery adjacent to the north elevation of the building. The setting is rural, and a large agricultural field borders the church property on the west, while woods and a gravel operation are located to the east (Attachment 4, Figure 9).

St. Stevens Baptist Church was founded on the east side of Stevensburg in 1847 with almost 100 members. It was one of the earliest independent African American churches in Culpeper County. Prior to that time, enslaved peoples in Virginia typically attended white churches in separate sections, and in 1832, a law was passed prohibiting anyone of African descent to conduct religious services. The original church building was destroyed during the Civil War. A second building was also lost to fire before 1886, when the land for the current building on the west side of town was donated by Dr. Edwin Barbour of Stevensburg. A third fire necessitated the construction of the sanctuary that is currently used as a dining room, beginning in 1910 and completed in 1916 (Bly 2020; Historical Marker Database 2020; St. Stevens Baptist Church 2024).

023-5161 was most extensively surveyed in 2009 by Patti Kuhn and Mike Yengling (Kuhn and Yengling 2009c). They noted that the church building is comprised of three connected sections constructed at different times. The center section was described as a wood-framed, front-gabled structure with a standing-seam metal roof constructed circa 1910. The central section was clad in composite siding on the main elevation, while the rear elevation is covered in asphalt sheets pressed to resemble brick. The entrance vestibule to the central church did not appear to be original and was clad in stretcher bond brick. A 1955 concrete masonry unit storage building was attached to the east side of the central church and had a shed roof. A 1990 concrete block



addition on the west side served as the main church building and had a front-gabled roof and was clad in stretcher bond brick veneer. The cemetery contains approximately 50 burials, with the oldest noted by a previous surveyor dating to 1926. ERM visited the resource in 2024 and noted no changes since the previous survey.

VDHR determined 023-5161 not eligible for the NRHP due to the construction of modern additions that have compromised the building's historical integrity. However, ERM included the resource as locally significant for the purposes of this report due to its association with the local African American community. 023-5161 is located within the 1-mile study tier for Mt. Pony Route 1.

3.4.10 023-5162, ZIMMERMAN'S TAVERN

Zimmerman's Tavern is located at 19214 York Road/Route 600 in Stevensburg. The terrain slopes gently to the south and west, with the building located on a low crest, and its site is slightly elevated above the road. To the west of the house are uncultivated fields, bordered by mature trees.

023-5162 was most extensively surveyed in 2008 by Sean Maroney. The resource is a circa 1720s-1730s two-and-a-half story gabled timber-framed vernacular building constructed by Christopher Zimmerman (Attachment 4, Figure 10; provided by VRCIS). Zimmerman was a member of the second colony of German immigrants brought to Virginia in 1717 as laborers for Lieutenant Governor Spotswood's silver and iron mines; Fort Germanna in northern Orange County was a settlement for mine workers. Maroney described the resource as having a gabled, standing-seam metal roof, weatherboard siding, two brick chimneys, and a brick foundation. The resource has had multiple modern and historic additions (Maroney 2008b). There is one non-historic outbuilding associated with the property: a circa 1985 end-gabled horse barn located southwest of the house. ERM visited the resource in October of 2024, however ERM was not able to take photographs. Aerial imagery indicated that no changes have been made to the resource (GoogleEarth Pro 2024)

Zimmerman's Tavern was determined potentially eligible for the NRHP under Criteria A and C in 2019. ERM recommends the resource locally significant for the purposes of this report due to its status as one of the oldest taverns in Culpeper County (Historic Germanna 2013). 023-5162 is located within the 1-mile study tier for Mt. Pony Route 1.

3.4.11 023-5494, HOUSE

023-5494 is located at 19564 Alvere Road, west of Blackjack Road/Route 661, in Stevensburg. The resource is situated on a 210.83-acre lot, which straddles Alvere Road and is surrounded by rural agricultural land in all directions. Farther west lies a dense forest and to the north is an aggregate supplier. Vegetation is minimal, with the only predominant feature consisting of tree lined property boundaries defining neighboring fields.

023-5494 was surveyed in June of 2018 by Dawn Muir for Circa, Cultural Resource Management, LLC. The resource encompasses a dwelling, four barns, a pole barn, and remains of a foundation dating to circa 1938 and an additional shed of unknown date (Muir 2018b). ERM visited the resource in October of 2024, and was not able to see the dwelling from the public right-of-way (Appendix 4, Figure 11). Because of this, ERM conducted additional desktop research. According



to aerial views, the dwelling appears to have a square footprint with a pyramidal standing seam metal roof. A partial-length front porch is on the east elevation and two rear additions are off the west elevation, all of which are visible on aerial imagery (GoogleEarth Pro 2024). The four associated barns, the pole barn, and shed are located approximately 850 feet to the southeast of the dwelling; they are accessible via a dirt and gravel drive south of Alvere Road.

023-5494 was determined eligible for the NRHP by VDHR in May of 2019. The resource is located within the right-of-way study tier for Mt. Pony Route 1.

3.4.12 030-5587, MT. HOLLY RIDGE-MARSH RUN RURAL HISTORIC DISTRICT

The Mt. Holly Ridge-Marsh Run Rural Historic District is located on the east side of the Rappahannock River in southern Fauquier County. The area is predominantly rural, encompassing approximately 15,800 acres of agricultural and forested land, dotted with farms, churches, and cemeteries (Appendix 4, Figure 12). The town of Remington is located adjacent to the district to the northwest.

030-5587 was most extensively surveyed in 2010 by Jane J. Jacobs. Historically, the district contains houses dating to 1787 representing both high-style and vernacular forms, agricultural landscapes that reflect historical patterns of land use, industrial sites such as gold mines and mills, early transportation routes, including the Rappahannock Canal, and social communities such as African American enclaves and crossroads villages (Jacobs 2010). The area is also significant as the site of numerous fords of the Rappahannock River used during the Civil War as part of actions at the battles of Brandy Station, Rappahannock Station II, Kelly's Ford, and other engagements. ERM visited the resource in October 2024 and noted no changes since the previous survey.

The Mt. Holly Ridge-Marsh Run Rural Historic District was determined potentially eligible for the NRHP by VDHR in December of 2016. It is located within the half-mile study tier for the Remington Rebuild.

3.4.13 030-5593, RAPPAHANNOCK RIVER 1862 NORTHERN VIRGINIA CAMPAIGN RURAL HISTORIC DISTRICT

The Rappahannock River 1862 Virginia Campaign Rural Historic District (Historic District) is located in Culpeper and Fauquier counties. It stretches approximately 18 miles along the northeast side of the Rappahannock River from Waterloo to Kelly's Ford, and varies in width from a half-mile to 2 miles.

The historic district encompasses over 16,000 acres of roads, bridges, fields, and woods that are characteristic of the natural and man-made landscape at the time of the Civil War (Appendix 4, Figure 13). Few buildings from the period remain, but the existing farm buildings largely date to the late nineteenth and early twentieth centuries and are not intrusive to the landscape.

030-5593 represents the geographical area that contains the significant sites and related features that played an important role in the 1862 Northern Virginia Campaign of General Robert E. Lee, as he sought to maneuver around Union Major General John Pope's Army of Virginia and draw him away from the Confederate capital of Richmond. Pope used the river as a natural barrier, protecting the river crossings with artillery emplacements along its bluffs in Fauquier County. Over



a period of eight days in August, he maneuvered his forces along the roads that paralleled the river and followed the farm lanes that led to the fords and bridges over the river. He probed across the river into Culpeper County, repulsed an attack by General Stonewall Jackson's division at Waterloo Bridge, and defended the Orange and Alexandria Railroad bridge over the river at the Battle of Rappahannock Station I (023-5049). Despite his efforts, Jackson ultimately was able to cross the river above Waterloo Bridge and raid the Union supply depot at Manassas Junction, forcing Pope to withdraw (Abe 2011). ERM visited the resource in October 2024 and observed no notable changes since the previous survey.

030-5593 has been determined eligible for the NRHP under Criterion A for environmental review purposes, but a formal determination of eligibility has not been made by VDHR. It is located within the 1-mile study tier for the Remington Rebuild.

3.4.14 030-5607, HEDGEMAN-RAPPAHANNOCK RURAL HISTORIC DISTRICT

The Hedgeman-Rappahannock Rural Historic District extends for about 30 miles along both sides of the Rappahannock River in Fauquier and Culpeper counties. The area runs from Waterloo to the river's confluence with the Rapidan River.

030-5607 encompasses approximately 26,290 acres of agricultural and forested land, dotted with farms, villages, mills, mines, churches, cemeteries, and transportation corridors (Appendix 4, Figure 14). The resource was most extensively surveyed by David Brown and Thane Harpole from DATA Investigations LLC in December of 2013 (Brown and Harpole 2013). Contributing resources within the resource reflect the influence of the river and its tributaries on the cultural development of the landscape. The Hedgeman-Rappahannock Rural Historic District overlaps portions of neighboring NRHP-eligible districts, only one of which is within the study tiers of this Project (030-5587). The area is significant as the site of numerous fords of the Rappahannock River and adjacent roads used during the Civil War as part of actions at the battles of Brandy Station, Rappahannock Station II, Kelly's Ford, and other engagements. 030-5607 contains houses dating as early as 1750, representing both high-style and vernacular forms, agricultural landscapes that reflect historical patterns of land use, industrial sites such as gold mines and mills, early transportation routes, including the Rappahannock Canal, and social communities such as African American enclaves and crossroads villages. The most recent survey was conducted in December of 2020 by Robert Taylor for Dutton + Associates, LLC, who noted the district also contains known prehistoric and historic period archaeological sites (Taylor 2020). ERM visited the resource in October 2024, and noted no notable changes since the previous survey.

The Hedgeman-Rappahannock Rural Historic District was surveyed and recommended eligible for the NRHP in 2014 under Criteria A, C, and D. In 2021, VDHR confirmed the district's NRHP eligibility. 030-5607 is located within the 1-mile study tier for the Remington Rebuild.

3.4.15 030-5852, PINEY RIDGE SCHOOL

030-5852 is located at 12274 Strodes Mill Road in Remington. The area is predominately rural, with scattered patches and lines of mature trees and open fields, however, directly northwest lies a salvage yard. The building sits immediately adjacent on the west side of the road and the remaining property is densely wooded (Appendix 4, Figure 15)



Piney Ridge School was first surveyed by Carey Jones in May of 2019 for Preservation Virginia (Jones 2019). During this survey, the school was identified as the former Remington School, which is associated with the Rosenwald Schools. It is a circa 1922, one-story, one-teacher school with rectangular footprint, front-gable roof, and concrete block foundation. The school was clad in stucco and featured an interior-slope brick chimney. Additionally, three secondary resources were also recorded: two privies and a dormitory. Jones noted that the resource was significant under Criteria A and C. ERM visited the resource in 2024, and noted that the school is covered in overgrown vegetation sprouting around the foundation; otherwise, no changes were noted since the 2019 survey.

The Piney Ridge School has not been formally evaluated for the NRHP. Jones noted that the school appeared to meet the criteria for listing on the NRHP as presented in the Rosenwald Schools of Virginia Multiple Property Documentation (012-5041). Michal Tawney surveyed the resource in 2020, and recommended that the resource remain potentially eligible under Criterion A for is importance to the African American community's education in the segregated south as well as Criterion C as one of the few recorded Rosenwald Schools within the county (Tawney 2020). For these reasons, ERM categorized the resource as locally significant. 030-5852 is located within the 1-mile study tier for the Remington Rebuild.

3.4.16 068-0031, MORTON HALL

068-0031 is located at 25137 Oak Green Road in Culpeper and is bound by Old Office Road to the northeast and True Blue Road to the northwest. The area is predominantly cleared with scattered tree breaks and drives dividing the resource into various sections. A grouping of structures is located to the northwest along Oak Green Road (Attachment 4, Figure 16).

Morton Hall was surveyed in September of 1959 by George Worthington III, and was described as a circa 1780 1.5-story Colonial farmhouse with a two-story Italianate wing (Worthington 1959). In 2023, David Brown surveyed the resource and added that the primary dwelling was demolished in the 1980s, but there remains 22 secondary resources. These secondary resources consist of two circa 1940 secondary dwellings, a circa 1966 barn, silo, and agricultural building, a circa 1975 equipment shed, seven circa 1980 silos, a circa 1980 dairy barn, a circa 1830 cemetery, and an undated agricultural building, barn, and two sheds. Additionally, there is a modern circa 2021 shed, a circa 2000 shed, and a circa 2021 barn (Brown 2023a). ERM visited the resource in 2024, however, the resource was not visible form the public right-of-way. Aerial imagery did not show any noticeable changes to the resource since its prior survey.

Morton Hall was determined eligible for the NRHP in 2000. It is located within the right-of-way study tier for the Oak Green Rebuild and Relocation and within the half-mile study tier for the proposed Relocated Oak Green Switching Station.

3.4.17 068-0131, LESSLAND

068-0131, also known as Lessland, is located at 4256 Bushy Mountain Road in Raccoon Ford, on a 3.5-acre plot surrounded by dense woods. The Rapidan River runs just northwest of the resource, and the remaining area is predominately rural with patches of dense forest and cleared land (Attachment 4, Figure 17). This resource is associated with the Rapidan River-Clark Mountain



Rural Historic District (068-5033), which is also a considered resource in this study and is discussed below.

Lessland was most extensively surveyed in 1999 by Ann L. Miller and described as a circa 1870 Italianate style dwelling with 11 associated secondary resources. The dwelling was described as a two-story brick house with a gabled standing-seam metal roof, and a large Ionic portico. The dwelling features five brick chimneys with decorative brick corbeling. The front façade features a door with sidelights and a transom window. Keystones are located over the door and central second story window. The windows are six-over-six. The outbuildings include a circa 1850 office building, circa 1880 icehouse and smoke house, circa 1907 cemetery, a circa 1950 pump house and five sheds, and one undated shed (Miller 1999). Most recently, it was surveyed in 2023 by Stephen Fonzo, and no changes were noted (Fonzo 2023). ERM visited the resource in 2024, and likewise, no noticeable changes were observed.

Lessland was listed on the NRHP and VLR under Criterion C for distinctive architecture in 1999. It is located within the half-mile study tier for the Oak Green Rebuild and Relocation.

3.4.18 068-0473, MT. HOLY BAPTIST CHURCH

068-0473 is located at 24035 Church Hill Road in Culpeper. The parcel on which the building stands contains some mature trees near the road, but is mostly cleared with a maintained lawn. The site is bounded on the north by woods, on the east by a pasture, on the south by Church Hill Road, and on the west by woods. Mt. Holy Baptist Church is a contributing resource to the Rapidan River and Clark Mountain Rural Historic District (068-5033), which is also a considered resource in this study and is discussed below.

Mt. Holy Baptist Church was founded by members of the African American community in 1866, and led by Reverend J. J. Robinson. The members had no building in which to conduct services, but were permitted to worship in a log cabin about a mile and a half from the Hall Farm. In 1871, Mr. Stem Coleman donated land for a church on what is now Church Hill Road. The first church on the site was destroyed by fire about 1884, and a second building was erected in 1886. This building was remodeled between 1902 and 1912. A new concrete block church building was constructed in 1976 a short distance to the north of the old church. The old building was removed sometime between 1994 and 2003 (Find a Grave 2024; Long 2012; NETROnline 2024).

Mt. Holy Baptist Church was previously surveyed in 2023 by David Brown. Bown noted that the resource was a circa 1880 church with a front-gabled, asphalt roof, and concrete block siding and foundation (Attachment 4, Figure 18). It is accessed via a gabled entrance portico located on the southeast elevation (Brown 2023b). ERM visited the resource in October of 2024 and noted additional details. A shed-roof addition on the rear of the southwest elevation has an entrance door that is accessed by a concrete handicap ramp lined with metal balustrade. The portico gable and addition are clad in vinyl siding. Two entrance doors are located on the northeast elevation that open onto a shed roof porch and stairs. A gable roof picnic shelter off the northwest corner of the building was constructed circa 2005. It is supported by square wooden posts and has a concrete slab foundation. At one time, a steeple was located over the portico entrance, but it has been removed (Find a Grave 2024; Long 2012; NETROnline 2024).



CLIENT: Dominion Energy

A cemetery is located on the northeast side of the church, with 112 burials recorded on Find a Grave (2024). Four burials date to before 1950, including the oldest from 1910, but the vast majority date from the 1950s to 2020.

068-0473 has not been formally evaluated for the NRHP, but is included in this report due to its associations with the local African American community. It is located within the 1-mile study tier for the Oak Green Rebuild and Relocation, including the proposed Relocated Oak Green Switching Station.

3.4.19 068-5007, BATTLE OF MORTON'S FORD

068-5007, the Civil War Battle of Morton's Ford, is located in Orange and Culpeper counties. The resource represents the geographical areas that contain the significant sites and related features that played an important role in the Battle of Morton's Ford, which took place February 6–7, 1864 (Attachment 4, Figure 19). The engagement was part of a cover for a raid up the Peninsula toward Richmond. Federal forces attempted to cross the Rapidan River at several locations, including Morton's Ford, where the most intense fighting took place. The attacks stalled on the second day of fighting and the Union withdrew (ABT 2023b; Mahood 2003). The boundaries of the resource are represented by the CWSAC Study Area boundary defined for its 1993 report and subsequent revisions (ABPP 2009; CWSAC 1999).

In the winter of 1864, General Benjamin Butler, in command of the Department of Virginia and North Carolina, became convinced that General Robert E. Lee had sent a significant contingent of his forces at Richmond to North Carolina, leaving the city vulnerable. Over the objections of a number of his generals, but with the blessing of general-in-chief Henry W. Halleck, Butler proceeded with a plan to send three units of the Army of the Potomac across the Rapidan as a distraction from a push by the main body of the army up the Peninsula toward Richmond. Caldwell's Second Corps crossed at Morton's Ford, while the First Corps crossed at Raccoon Ford, and a cavalry unit crossed at Robertson's Ford. Joshua Owen's brigade of Alexander Hays's division was able to make the crossing against a small force protecting the crossing, but Edward Johnson's division of Richard S. Ewell's corps had established entrenchments overlooking the south side of the river and was able to pin Owen between the Confederates and the river. Hays sent the remainder of his division across to hold the crossing, but after an attack by Johnson at dusk, was forced to withdraw across the river overnight. The action at Morton's Ford cost the Union 262 casualties compared to 60 for the Confederates and accomplished nothing, as the First Corps failed to cross the river, Ewell was never in need of reinforcements, and the attack on Richmond never occurred due to a tip from a Union deserter (Mahood 2003; Trinque 1994).

The southeast end of Mt. Pony Route 1 Component lies within a portion of the CWSAC Study Area and PotNR area of the resource, which follows Blackjack Road to the north of the main battlefield used by the Union army in its approach to Morton's Ford. The buildings and structures in this area generally post-date the Civil War and do not contribute to the resource's eligibility, and modern roadways and existing utilities within the avenue of approach during the battle diminish the integrity of the setting. However, the landscape remains characteristic of the period. The Project is well outside the Core Area, over 2.5 miles to the south, where the major action of the battle took place. It does not appear that any engagement was fought in the Project vicinity (ABT 2023b).



068-5007 has been determined potentially eligible for the NRHP for its association with the events connected to the Battle of Morton's Ford. It is located within the right-of-way study tier for Mt. Pony Route 1 and within the half-mile study tier for Mt. Pony Route 2.

3.4.20 068-5033, RAPIDAN RIVER AND CLARK MOUNTAIN RURAL HISTORIC DISTRICT

The resource is a proposed rural historic district located primarily on the south and east sides of the Rapidan River between the towns of Orange and Culpeper in Orange, Culpeper, and Madison counties. The district encompasses over 44,000 acres of agricultural and forested land on rolling hills, dotted with farms, churches, and crossroads communities (Attachment 4, Figure 20).

Historically, the district illustrates a shift from larger to smaller, though still substantial farms over the last three centuries. Prior to the American Revolution, families that would become prominent in local and state history patented land in the district, much of which lies within an area of rich agricultural soils. Tobacco was the principal agricultural pursuit in the early years of settlement, gradually giving way to a mix of grains, livestock, and hay. White farmers often relied on slave labor to work their fields (Cook et al. 2017). From 1810 until the Civil War, enslaved African Americans composed over half of Orange County's population. Numerous mills were established within the district in the eighteenth century to process grains and lumber. The area was also the site of significant military activity during the Civil War, as the Rapidan River and the line of hills on its south side provided a natural defensive position behind which Lee's Army of Northern Virginia was frequently based. The Union army repeatedly attacked the Confederate lines on the south side of the river, engaging in skirmishes at the fords and bridges across the river. After the war, some of Orange County's former slaves were able to purchase land, where "freedmen's villages" were established. Land was sold to other former slaves, and communities like Clifton, Possum Hollow, and an unnamed "colored settlement" developed on these lands, often around churches and trading centers. In the early twentieth century, a number of wealthy northern capitalists and industrialists purchased large tracts of land on which they built or remodeled country estates, often in the Colonial Revival style, reflecting their fascination with the landed gentry of the colonial period in Virginia. Among the mansions constructed during this period within the district are Lovell Farm, Yatton, Green, and Mount Sharon. The district also contains known prehistoric and historic archaeological sites.

Contributing properties to the district include a NRHP-listed Italianate plantation (Lessland, 068-0131) and a NRHP-eligible resource (Morton Hall, 068-0031). In addition, Mt. Holy Baptist Church (068-0473) may have local significance as rural church that served the African American community and is considered a contributing resource to the historic district. Twenty other properties that are considered contributing resources to the district are located within the 1-mile route buffer for the Oak Green Rebuild and Expansion.

The Rapidan River and Clark Mountain Rural Historic District was determined eligible for the NRHP by the VDHR in 2017 under Criterion A for its significance in agriculture, industry, military, African American history, and others, as well as Criterion C for architecture, represented by examples from numerous periods and in many styles. 068-5033 is located within the right-of-way study tier



for the Oak Green Rebuild and Relocation, including the proposed Relocated Oak Green Switching Station, and within the 1-mile study tier for Mt. Pony Route 2.

3.4.21 204-0002, HILL MANSION

Hill Mansion (204-0002) is located on a 2-acre parcel at 501 South East Street in downtown Culpeper. The resource is situated in a dense downtown area with a mixture of residential and commercial buildings. Mature trees are scattered around the resource with a railroad abutting the property's eastern boundary (Attachment 4, Figure 21).

The Hill Mansion consists of a dwelling, detached kitchen, and garden. The resource was most extensively surveyed in January of 1979 by Cynthia MacLeod, who noted it to be a circa 1857 dwelling, which was a well-preserved example of the Italianate style. It served as a Confederate hospital and was later a Union headquarters during the Civil War. MacLeod described the dwelling as a two-story dwelling of brick construction with a brick foundation. It had a one-story porch with Tuscan-style piers on the west elevation and another porch on the north elevation with ornamental cast-iron details. The historic paneled door main entry featured its original stained-glass sidelights and fanlight. The house is regarded locally as one of the most important landmarks for the community. It also retains its historic scored and painted stucco detailing and well-preserved historic interior with original Victorian marble mantels, paneled wood doors, and pine flooring. However, the kitchen to the southeast of the dwelling had been removed at the time of survey. The gardens however still remained intact and in good condition (MacLeod 1979). ERM visited the resource in 2024, and no changes were noted since the previous survey. The Hill Mansion is also part of the NRHP-listed South East Street Historic District (204-0064), which is a considered resource discussed later in this section.

Hill Mansion was listed on the NRHP in 1980 under Criteria A and C for associations with the Civil War during Union occupation and its distinctive Italianate architecture. 204-0002 is located within the half-mile study tier for Tech Park Routes 1, 2, and 3, and the proposed Palomino and Chandler Substations. It is located within the 1 mile study tier for the proposed McDevitt Substation.

3.4.22 204-0003, ST. STEPHEN'S EPISCOPAL CHURCH

St. Stephen's Episcopal Church is located at 115 North East Street in the town of Culpeper and is situated in the NRHP-listed Culpeper Historic District (204-0020), which is a considered resource in this study discussed below. The district is characterized by brick buildings dating from the early 1800s to the 1930s. The church building sits on the east side of North East Street and faces west (Attachment 4, Figure 22). It is separated from the street by a low stone wall topped with iron fencing and an elaborate iron gate supported by stone pillars. The lot on which the building sits is landscaped with mature trees, hedges, seasonal plantings, and a lawn in front. Associated resources include an 1869 Fellowship Hall and graveyard located on the south side of the building, which includes burials dating from at least 1822 (Boyd n.d.).

204-0003 was most recently surveyed in 2012 by Brockington and Associates to update the Culpeper Historic District forms. The church was constructed in 1821, and is the oldest existing church building in Culpeper. It has a standing-seam, front-gabled roof with a Flemish bond brick exterior, and brick foundation. A tall steeple is located on the ridgeline over the primary entrance,



which consists of a wooden door with strap hinges. The church features brick pilasters and corbeling and scrolled brackets that accent the eaves (Brockington 2012a). The church features 14 stained glass windows dating from the late nineteenth to the mid twentieth century. A remodel in 1861 introduced a bell tower and Romanesque Revival elements that harmonized with the existing style. The façade was expanded in 1916 (Boyd n.d.). ERM visited the resource in October of 2024, and noted no changes from the previous survey.

St. Stephen's Episcopal Church was determined eligible for the NRHP by VDHR in 1985, and listed in the VLR in 1995. An NRHP nomination was prepared in 1995, but the property is not currently listed in the NRHP. As a fine early example of the Romanesque style, the church is considered significant at the local level for architecture. Later additions and alterations have not significantly affected the property's integrity. The resource is a contributing resource to the Culpeper Historic District (204-0020). 204-0003 is located within the half-mile study tier for Tech Park Routes 1, 2, and 3. It is located within the 1-mile study tier for the proposed Palomino, Chandler, and McDevitt Substations.

3.4.23 204-0005, BURGANDINE HOUSE

204-0005, located at 807 South Main Street in downtown Culpeper, is situated on the east side of South Main Street near the turnoff onto Orange Road. The resource sits on a rectangular lot in close proximity to neighboring structures. The surrounding area is a predominantly densely populated small urban area with a mixture of commercial and residential buildings. After reviewing aerial imagery and the NRHP nomination (NRHP #97000153), ERM found that it has been mismapped on VCRIS with the location being shown as 809 South Main Street when in fact it is immediately north of this location. The Burgandine House abuts South Main Street and features a roughly square footprint building with heavy brick chimney on the south elevation.

The resource is a circa 1749 one-room log cabin dwelling, which was most comprehensively surveyed in 1997 by Margaret M. Barden (Attachment 4, Figure 23). It was noted in the NRHP nomination that the Burgandine House was present when Culpeper County was established and is one of the oldest houses in Culpeper. The resource was described as a one-and-a-half story plank log dwelling with an asphalt shingle gabled roof, weatherboard siding, and a replacement concrete foundation. It had a Greek Revival front door, six-over-six double-hung sash windows, and casement windows that was accessed via a shed roof porch. A wood shingle-roofed dormer was located on the front elevation with six-over-six windows and a metal storm window (Barden 1997). ERM visited the resource in 2024 and noted that the roof was updated and the dormer has since been removed. In addition, a wooden railing was added to the porch. No other changes were noted.

The Burgandine House was listed in the NRHP in 1997 under Criterion C as the oldest and only surviving log structure from Culpeper's early settlement period and as a rare example of plank log construction. 204-0005 is located within the half-mile study tier for Tech Park Routes 1, 2, and 3, and the proposed Palomino, Chandler, and McDevitt Substations.



3.4.24 204-0006, A.P. HILL BOYHOOD HOME

204-0006 is located at 102 Main Street in Culpeper. The resource is situated near the corner of Main Street and E Davis Street in downtown. The surrounding environment is dominated by commercial buildings and parking lots.

A.P. Boyhood Home is a circa 1820, three-story dwelling that was initially constructed as a Federal style town house, but altered in 1850 into the Italianate Villa style (Attachment 4, Figure 24). The resource was most recently surveyed in November of 2012 by Brockington and Associates. The dwelling is constructed of brick in a Flemish bond pattern. The roof of both the dwelling and cupola are hipped. The windows on the first floor are large four-paned arched fixed windows, while the second and third levels feature two-over-two, double-hung, wood sash windows. The first and third floor windows are topped with segmented arch brick lintels, while the second floor windows have uncambered flat brick arch lintels. There is a thick string course between the first and second floors. The cornice is wood, in an elaborate Italianate style. The original entryway is adorned with a lit transom. The alteration in 1850 included expanding the breadth of the dwelling, adding a third story and cupola. The Italianate cornice was also added at this time. The dwelling underwent additional alterations in the 1970s to convert the first floor into commercial space (Brockington 2012b). ERM visited the resource in 2024, and noted no changes since the most recent survey.

The A.P. Hill Boyhood Home was listed in the NRHP in 1973 under Criteria A and C for its associations with state and regional commercial, military, political and transportation history, and its distinctive Italianate architecture. 204-0006 is located within the 1-mile study tier for Tech Park Routes 1, 2, and 3, and the proposed Palomino, Chandler, and McDevitt Substations.

3.4.25 204-0020, CULPEPER HISTORIC DISTRICT

The NRHP and VLR-listed Culpeper Historic District is located in the town of Culpeper, the county seat of Culpeper County (Attachment 4, Figure 25). The historic district occupies approximately 16 blocks between the Norfolk Southern Railroad tracks on the east, North Blue Ridge Avenue on the west, Edmondson Street on the north, and Stevens Street on the south. The majority of the district is on the east side of Main Street, which runs north-south through the district.

The district was first and most extensively surveyed by the National Preservation Institute in 1987. The district contains 130 contributing buildings, one historic object, and 23 non-contributing buildings. The buildings in the district present a cohesive architectural collection dating primarily to the four decades after the Civil War and exhibiting vernacular Victorian, Italianate, and Neo-Classical styles. The commercial and public buildings are typically constructed of brick and terra cotta, while residential structures are wood. The district is closely linked with transportation developments in the region, including roads, stage routes, and railroads, especially the Orange and Alexandria Railroad (now Norfolk Southern). The presence of the railroad resulted in Culpeper playing an important role in the Civil War, as both armies used the rail line to transport troops and supplies as they battled each other for control of the territory between Washington, D.C. and Richmond, Virginia. Both armies used the town as a staging area and hospital center at different times during the war (Fox et al. 1987).



There are four churches in the district that date to the nineteenth century, including St. Stephen's Episcopal Church (204-0003), which is a considered resource in the study discussed above, and Antioch Baptist Church (204-0020-140), which is a considered resource discussed below. Rows of commercial buildings between Main and Commerce streets are characterized by brick facades with corbelling, arched windows, and decorative wood cornices. The Southern Railroad Station constructed in 1904 is the focal point of the eastern side of the district. A variety of styles are exhibited by the dwellings in the district, including Federal, Queen Anne, Gothic Revival, Italianate, and American Foursquare. To the east of the district is the Culpeper National Cemetery, dedicated in 1866. It contains 14,000 burials from the Civil War, mostly from the Battle of Slaughter Mountain (Fox et al. 1987). ERM visited the district in 2024, and noted no major changes since the 1987 survey.

The Culpeper Historic District was listed in the NRHP and VLR in 1987. The district is significant for its architectural integrity and its associations with state and regional history in the areas of commerce, military, politics, and transportation. 204-0020 is located within the half-mile study tier for Tech Park Routes 1, 2, and 3, and the proposed Palomino and Chandler Substations. It is located within the 1-mile study tier for the proposed McDevitt Substation.

3.4.26 204-0020-0140, ANTIOCH BAPTIST CHURCH

Antioch Baptist Church is located 202 South West Street in Culpeper. It is located in the NRHP-listed Culpeper Historic District and is considered a contributing resource to the district. The district is characterized by brick buildings dating from the early 1800s to the 1930s. The church is located on a narrow lot that is bounded on the north by West Culpeper Street, on the east by South West Street, on the south by a small commercial building with an open lot behind, and on the west by a residential lot (Attachment 4, Figure 26). The building faces South West Street and occupies most of the width of the eastern two-thirds of the lot. The western third of the lot is a maintained lawn.

Antioch Baptist Church was originally known as "The African Church," organized in 1859 from Mount Pony Baptist Church. It is not clear if the organizers were slaves or free blacks, but Culpeper County had 429 free black residents in 1860. The first congregation met in Confederate barracks near the railroad station. Antioch Church was formally founded in 1865 under Reverend Harrison Blair. In addition to his work in the church, Blair was a teacher at a school established by the Beulah Society in Culpeper. The church met at two other locations before constructing the current building in 1886 (Freedmen's Bureau 1867; Historical Marker Database 2021).

204-0020-0140 was most recently surveyed in 2012 by Brockington and Associates to update the Culpeper Historic District forms. It is a one-story frame building with Gothic Revival elements. It has a standing-seam metal, front-gabled roof interrupted at the northeast corner by a square steeple tower with a steeply pitched pyramidal roof. The vinyl clad church is accessed via a double door with a decorative transom with triangular lights. Multi-paned stained glass windows with pointed arches are located throughout the church (Brockington 2012c). ERM visited the resource in October of 2024, and noted no changes since the previous survey.

Antioch Baptist Church has not been formally evaluated for NRHP eligibility. However, it is considered a contributing resource to the NRHP-listed Culpeper Historic District (204-0020), a



considered resource discussed above. ERM classified the church as locally significant for the purposes of this report since it is one of the earliest African American churches in Culpeper. It has played a significant role in the religious and social history of the town's African-American community. 204-0020-0140 is located within the 1-mile study tier for Tech Park Routes 1, 2, and 3, and the proposed Palomino, Chandler, and McDevitt Substations.

3.4.27 204-0021, CORRIE HILL HOUSE

204-0021 is located at 306 North West Street in Culpeper, on a well-maintained 44-acre lot with a variety of mature vegetation. The southern portion of the lot is used for parking.

Corrie Hill House is a two-and-a-half story, circa 1780 dwelling that was originally built as a one-room structure but was expanded in the early nineteenth century (Attachment 4, Figure 27). It was most recently surveyed in 2018 by Maggie Lovitt on behalf of Thunderbird Archaeology. It went through two phases of additions and renovations in the nineteenth century, which would double the structure in size. It sits on a brick foundation and the exterior is clad in weatherboard siding. The side-gabled roof is covered in standing seam metal and features decorated verge boards. The front façade has four symmetrical six-over-six, double-hung, wood sash windows on the outer bays, with two smaller four-over-four, double-hung, wood sash windows in the center bay over the portico. The south elevation features an exposed brick face chimney. The interior brick chimney features patterned corbeling around the crown (Lovitt 2018). ERM surveyed the resource in 2024, and noted no changes since the previous survey.

204-0021 also includes a small, weatherboard clad smokehouse, a gabled stable in poor condition, and a single-room kitchen with a roof clad in standing seam metal.

The Corrie Hill House was listed on the NRHP in 1989 under Criterion C for distinctive architecture. 204-0021 is located within the 1-mile study tier for Tech Park Routes 1, 2, and 3, and the proposed Palomino, Chandler, and McDevitt Substations.

3.4.28 204-0064, SOUTH EAST STREET HISTORIC DISTRICT

The NRHP and VLR-listed South East Street Historic District is located in the town of Culpeper, the county seat of Culpeper County. The historic district lies southeast of the main downtown area and is contiguous on its northern boundary with the Culpeper Historic District. The district encompasses properties on both sides of South East Street between Stevens and Page streets, as well as a portion of the Culpeper National Cemetery on U.S. Avenue.

The district was first surveyed by Genevieve Keller in 1990. Keller wrote that it represents one of the oldest residential streets in Culpeper and contains excellent examples of a variety of domestic architectural styles dating from the mid nineteenth to the mid twentieth centuries (Attachment 4, Figure 28). Among the styles represented are Federal, Gothic Revival, Italianate, and Colonial Revival. The district is also significant for its role in the Civil War, when both armies utilized private residences for headquarters and hospitals, and the surrounding area was used for encampments and burials. The residents of the street were prominent citizens of Culpeper, representing the business and professional class. The national cemetery, established after the Civil War to honor the war dead, is significant for its association with the Civil War and its subsequent memorialization. It is also significant for its architecture, which includes an Empire-style lodge



designed by acclaimed architect and Civil War General Montgomery C. Meigs. The district contains 76 contributing building and 20 non-contributing resources (Keller 1990).

Keller later wrote the NRHP nomination form, describing the earliest houses in the district as dating to the 1830s and 1840s and consisting of typical traditional frame houses with Federal style details that were similar to the farmhouses found in the surrounding countryside. Many of these houses had detached kitchens that continued to be a popular feature of the houses on the street, even into the early twentieth century. By the 1850s, more elaborate dwellings were being erected that represented the ambitions of Culpeper's wealthier citizens. The neighborhood was well situated near the railroad, the courthouse, and the business district of the town, and it continued to attract well-to-do residents after the Civil War. Houses were typically two stories, although some more modest early twentieth century Bungalows and Cape Cods were later constructed. Both vernacular and high-style examples of contemporary architectural styles are represented. Because of their large size, some of the houses have been divided into duplexes or apartments; however, most are well preserved. A few non-contributing structures have been introduced since the 1950s, including an apartment building that replaced one of the historic houses (Keller 2009). ERM visited the district in 2024, and noted no major changes since the 2009 nomination.

The South East Street Historic District was listed in the NRHP and VLR in 2009. The district is significant for its architecture and its associations with the social and economic history of Culpeper. 204-0064 is located within the half-mile study tier for Tech Park Routes 1, 2, and 3, and the proposed Palomino, Chandler, and McDevitt Substations.

3.4.29 204-0069, CULPEPER NATIONAL CEMETERY

204-0069 is located at 305 US Avenue in Culpeper and occupies roughly 17 acres (Attachment 4, Figure 29). US Avenue continues through the cemetery to a small circular drive with a monument in the center. A senior center and residential dwellings are located to the south of the cemetery.

The Culpeper National Cemetery was most thoroughly surveyed by Therese T. Sammartino in 1995. Sammartino noted that the cemetery was established in 1867 and originally contained six burial sections, one of which was set aside for the graves of Civil War soldiers. Graves were originally marked with headboards, which were later replaced with upright marble markers. The cemetery was officially closed on November 17, 1972, but was reopened on January 16, 1978 after a donation made by the Veterans of Foreign Wars. As of August 31, 1995, there were 6,533 graves used for the interment of 7,015 casketed remains and 318 sites used for the interment of 509 cremated remains. Of the 7,524 total interments, 912 were unknown. Interments of both caskets and cremated remains continue. An L-shaped lodge was constructed in 1872. The main portion is one and one-half stories with dormer windows projecting from the mansard roof (Sammartino 1995). ERM surveyed the resource in 2024, and noted no substantial changes to the cemetery since the 1995 survey. However, a preliminary information form was completed in 2005 to expand the boundaries of the resource to include a modern expansion, but was ultimately denied by the VDHR (Martin 2005).

The Culpeper National Cemetery was listed in the NRHP in 1996 under Criteria A and C for associations with the Civil War and for the lodge, which represents a distinctive design by



Quartermaster Mongomery C. Meigs. 204-0069 is located within the half-mile study tier for Tech Park Routes 1, 2, and 3, and the proposed Palomino, Chandler, and McDevitt Substations.

3.4.30 204-0070, GREENWOOD

204-0070 is located at 1931 Orange Road along Route 15 on a 50-acre parcel, roughly 1 mile south from Culpeper. ERM was unable to view the historic portion of the resource due to intervening vegetation. Thus, a photo was taken from within the boundary, but where there currently are modern homes (Attachment 4, Figure 30).

Greenwood was most thoroughly surveyed in 2015 by Emily Anderson. Anderson noted the resource included a one-and-a-half story dwelling constructed in 1823, with brick noggin construction and seven associated resources. The associated resources consisted of a circa 1800 smoke house and dairy, circa 1890 barn and corncrib, a circa 1950 garage, and two circa 1990 carports. Anderson noted extensive details of the resource, including the dwelling being a threebays constructed in the hall-and-parlor plan with a continuous brick foundation. The dwelling was clad in weatherboard siding with some visible portions of the historic beaded weatherboard siding. It was capped with a steeply pitched, side-gabled roof sheathed in asphalt with gabled dormers piercing the northwest and southeast elevations of the roof. Two exterior-end, hipped, brick chimneys with corbeled caps were noted. The dwelling was said to have two one-story flanking additions that extend from the northeast and southwest elevations completed in 1824, resting on a continuous brick foundation. A one-story rear ell addition also extends from the southeast elevation. A final addition extends from the southeast elevation of the dwelling's rear ell addition (Anderson 2015). ERM visited the property in 2024, and could not see it from the public right-ofway. However, aerial views show that a subdivision was constructed in the historic boundary's southern portion starting in 2008, with an additional one constructed between 2016 and 2018 that encompasses the center of the resource boundary. The outbuildings and dwelling appear to still be extant (NETROnline 2024).

Greenwood was listed on the VLR in 1983, and then it was listed on the NRHP in 1985 under Criterion C for being architecturally significant as a well-preserved and rare example of a local vernacular dwelling that evolved into a formal, five-part house. 204-0070 is located within the 1-mile study tier for Mt. Pony Routes 1 and 2, and Tech Park Routes 1, 2, and 3. It is also located within the 1-mile study tier for the proposed Mt. Pony, Palomino, Chandler, and McDevitt Substations.

3.4.31 204-5053, PITTS THEATER

204-5053 is located at 307 South Main Street in Culpeper on a 0.29-acre parcel. The theater is located on the east side of the street, situated between additional commercial buildings within downtown Culpeper (Attachment 4, Figure 31). To the southeast of the resource is a small parking lot.

The resource was first surveyed in June of 2007 by Gregory L. Rutledge, which was the most comprehensive survey of the resource. Rutledge noted that the Pitts Theater is a 1938 Art Deco style movie theater with a symmetrical three-bay composition, with the theater entrance in the center flanked by storefront retail spaces. The marquee features a stylistic blade sign. The



massing of the building has not been altered, but the storefront windows and entrances to the shops have been replaced. Two small additions have been added: a rear one-story concrete masonry shed addition for dressing rooms and a north small addition to the storefronts filling in the space between the theater and the building to the north. The main street façade is one story in height, symmetrical, and features a stepped parapet. A central theater entrance with an open vestibule marks the front façade. The roof of the theater is flat with metal coping on the parapets (Rutledge 2007). ERM visited the property in 2024, and noted no changes since the original survey.

The Pitts Theater was listed on the VLR and the NRHP in 2008 under Criterion C for its distinguished Art Deco style, which is the only example of Art Deco in the town. 204-5053 is located within the half-mile study tier for Tech Park Routes 1, 2, and 3, and the proposed Palomino Substation. It is also located within the 1-mile study tier for the proposed Chandler and McDevitt Substations.

3.4.32 204-5067, LORD CULPEPER HOTEL

204-5067 is located at 401 Main Street in Culpeper on a 0.29-acre parcel. The resource is at the southeast corner of Main Street and E Stevens Street within downtown Culpeper. The parcel includes a small rear parking lot.

The Lord Culpeper Hotel was first surveyed by J. Daniel Pezzoni in 2016. The hotel was built in 1933, and is a three-story Colonial Revival building of steel frame construction with a stretcher-bond brick exterior crowned by a parapet and modillion cornice (Attachment 4, Figure 32). The center portion of the façade projects slightly and has a porch with round columns and a modillion cornice. The porch shelters a sidelight entry surrounded by a fanlight with radial cobweb muntins. There is an interior end brick chimney. An original three-story wing projects to the rear and a two-story wing added in the 1940s projects on the other side to create a U-shaped overall footprint. The hotel includes a poured concrete basement level, a metal-sheathed shed roof over the main section, and an original front terrace of brick (Pezzoni 2016). ERM visited the resource in 2024, and noted no changes since the original survey.

The Lord Culpeper Hotel was listed on the NRHP in 2017 under Criteria A and C for its associations with commerce as a hostelry and Depression-era business initiative, as well as a good example of the Colonial Revival style of hotels that were built throughout smaller towns in Virginia in the 1920s. 204-5067 is located within the half-mile study tiers for Tech Park Routes 1, 2, and 3, and the proposed Palomino Substation. It is also located within the 1-mile study tier for the proposed Chandler and McDevitt Substations.

3.4.33 204-5097, CULPEPER LIGHT AND POWER

204-5097 is located at 414 Spring Street in Culpeper on a 0.96-acre parcel. The resource is located at the west end of the street. The parcel incorporated two buildings and a small amount of land surrounding them. An extension of Spring Street runs along the east side of the parcel. The asphalt driveway continues along the east side of the building and to the rear, and is bounded by a curved concrete retaining wall, which holds back the grassy slope to the north and east.



The Culpeper Municipal Electric Utility building is a 1933 masonry structure built into the steeply sloping hillside, presenting a three-story elevation on the south side and a two-story mass on the north side (Attachment 4, Figure 33). The resource was first, and most thoroughly surveyed by Marcus Pollard and Bryan Townes in 2018. The Moderne Style building was constructed to house the generators and electric components to provide power to the town of Culpeper. The structure is constructed of load bearing brick masonry walls with structural steel components. The exterior of the structure is composed of red brick that is accented by large window openings. Windowsills are composed of cast concrete, and the window openings are topped with headers formed by brick solider courses. The mass of the building consists of a tall center section with single-story wings flanking the central mass to the east and west. The building is capped by a series of flat roofs, which are edged by brick parapet walls, topped by metal cap flashing. Scuppers extend through the structure's brick parapet walls to carry rain runoff. The primary entrance faces to the south and is sheltered under a cantilevered concrete awning, which utilizes curved corners and recessed horizontal bands. The double entry doors are set into the ground level, which is detailed at the exterior through the use of cast concrete walls with incised horizontal courses. The two-story addition on the west side lacks the detail of a cast concrete ground floor (Pollard and Townes 2018). ERM visited the resource in 2024, and noted no changes since the 2018 survey.

Culpeper Light and Power was listed on the NRHP in 2019 under Criterion A with associations with government and industry as Virginia's first municipal electric facility financed by the Public Works Administration (PWA), and association with important tends in municipal electric generation and distribution. It was also listed under Criterion C as an excellent example of a Moderne style municipal complex from the early to mid-twentieth century. 204-5097 is located within the 1-mile study tier for Tech Park Routes 1, 2, and 3, and the proposed Palomino, Chandler, and McDevitt Substations.

3.4.34 288-5001, REMINGTON HISTORIC DISTRICT

The district is located in the town of Remington, roughly a half mile from the Rappahannock River. Remington is laid out in a grid and the district boundaries are drawn to include the majority of historic resources in the town. The district includes 84 properties, with a total of 158 resources, consisting primarily of late nineteenth century and early twentieth century dwellings, churches, and commercial buildings that illustrate the town's growth and development (Attachment 4, Figure 34).

Remington Historic District was nominated for the NRHP by Maral S. Kalbian and Margaret T. Peters in 2004. The Remington Historic District contains four linear areas of residential buildings as well as the part of East Main Street, which is primarily commercial. Although Remington rebuilt in the post-war years, and continued as a small center for commercial and mercantile activities in the immediate post-war years, the tax records for Fauquier County do not list it separately as a town until 1900. Remington was incorporated in 1890, and it was during the two following decades that the town developed. The official incorporation as a town in 1890 marked the debut of the town as an important community in the county. In addition to the churches that had been completed by 1890—the Episcopal, Methodist, and Baptist denominations—a rich collection of



sophisticated dwellings associated with the leading families of Remington provide a testament to its prosperity in the late nineteenth century.

The vast majority of buildings in the 49-acre district include common architectural styles and forms of the period such as Queen Anne, I-house, and L- and T-shaped dwellings. The degree of architectural decoration varies, but in general, the buildings in Remington tend to be fairly ornamental. No commercial or mercantile buildings in Remington survive from the nineteenth century. Since virtually all structures in the town were destroyed during the fierce fighting in the area, Remington was forced to rebuild most of its infrastructure in the post-war years. Because of Remington's convenient location on one of the main north-south rail lines, it became an important shipping point for "sumac, wool, tan bark, scrap iron, railroad ties, [and] lumber." Large volumes of grain and flour were shipped as well, due to the proximity to several mills along the river side. A handful of "store houses" were constructed during the 1870s. None of these commercial buildings survive from the nineteenth century, as many succumbed to fires in 1895, 1919, and 1926. The 1895 fire burned the Embrey Store where the present Farmers Coop Building (288-5001-0026) stands, and it threatened other mercantile structures on Main Street. The 1919 fire burned six stores on Main Street. The June 30, 1926, fire totally destroyed 14 buildings in the business section of Main Street.

Despite devastating fires as well as major floods that occurred in 1937 and 1942, Remington retains a large collection of dwellings and commercial structures that date from the decades from 1920–1945. The railroad continued to play a primary role in the economy of the town and provided important transportation for both agricultural goods and passengers north to Washington and south to Atlanta (Kalbian and Peters 2004). The district was last surveyed in 2017 by Robert Taylor, who noted a few buildings had been altered or demolished but in general, the district retained a majority of its buildings and was in good condition (Taylor 2017b). ERM visited the district in 2024, and noted no substantial changes since the previous survey.

The Remington Historic District was listed on the NRHP in 2005, displaying significance under Criterion A as a commercial center for the southern part of the county with intact commercial buildings from the late nineteenth to early twentieth century. In addition, it is significant under Criterion C for its well-preserved collection of sophisticated buildings and intact historic street plan, which is rare in Virginia Piedmont rural agricultural towns. 288-5001 is located within the 1-mile study tier for the Remington Rebuild.

3.5 HISTORIC RESOURCES FINDINGS FOR MT. PONY LINES

The impacts to each resource in the study tiers associated with the Mt. Pony Lines are discussed below. Photo simulations are provided in Attachment 5.

3.5.1 HISTORIC RESOURCE FINDINGS FOR MT. PONY ROUTE 1

3.5.1.1 023-0018, ROSE HILL

Mt. Pony Route 1 is directly adjacent to 023-0018's southwestern border (Attachment 5, Figure 1). Dominion's existing transmission line #2/#70 bisects the resource before connecting to Mt. Pony Route 1 to the west of 023-0018.



One simulation was prepared for 023-0018 at KOP 101, along Blackjack Road (Attachment 5, Figure 2). As shown in the simulation, the route would be visible from along the resource's southern edge. In addition, the route would be visible from the resource's western edge. The construction of Mt. Pony Route 1 would add a modern element to the southern viewshed that currently consists of open fields. However, the route would only be visible from the southern and western portions of the resource and would likely not be visible from the resource's historic dwelling. In addition, the resource is bisected by the existing transmission line, which is visible from throughout the resource. Still, the construction of Mt. Pony Route 1 would introduce a new, hihg-profile modern element to a rural landscape. Thus, ERM recommends that Mt. Pony Route 1 would have a **Moderate Impact** on 023-0018.

3.5.1.2 023-0084, MOUNT PONY RURAL HISTORIC DISTRICT

Mt. Pony Route 1 crosses through approximately 2.10 miles of 023-0084. The district is located approximately 0.20 mile to the east of the proposed Mt. Pony Substation (Attachment 5, Figure 3). The route would be collocated at this location with Dominion's approved future Lines #2/#70 230 kV upgrade, which will replace the existing transmission line #2/70.

Two simulations were prepared for 023-0084 at KOP 102 and KOP 104, both along Germanna Highway. KOP 102 was taken in close proximity to the route while KOP 104 was taken 0.20 mile to the north of the route. As shown in the simulation, the route is visible from KOP 102. The existing transmission line currently bisects the district, and although Mt. Pony Route 1 would be visible from KOP 102, it would be collocated with an approved future 230 kV line that will replace the current transmission line (Attachment 5, Figure 4). The construction of Mt. Pony Route 1 would add an additional modern element and expand the current footprint where it is collocated with the approved future transmission line. However, the route would not be as prominent in the landscape from the remainder of the resource, as shown from KOP 104 (Attachment 5, Figure 5). At this location, Mt. Pony Route 1 would not be visible. However, Mt. Pony Route 1 would be visible from the western and southern portions of the resource when driving along Germanna Highway and to the south of Germanna Highway, which is privately owned. Still, the addition of the route would add modern elements inside the district's historic boundary by collocating an additional transmission line with the future approved 230 kV transmission line. Thus, ERM recommends that Mt. Pony Route 1 would have a **Moderate Impact** on 023-0084.

3.5.1.3 023-5023, MOUNT CASTLE

Mt. Pony Route 1 bisects 023-5023 for approximately 980 feet (Attachment 5, Figure 6). The route would be collocated at this location with Dominion's approved future Lines #2/#70 230 kV upgrade, which will replace the existing transmission line #2/70.

One simulation was prepared for the resource at KOP 104, along Germanna Highway. This location was chosen because it was the closest point to the route that was accessible from the public right-of-way. Access to the resource itself was not granted. As shown in the simulation, at this location, Mt. Pony Route 1 would not be visible due to intervening vegetation to the south and west of the resource (Attachment 5, Figure 7). However, as the resource is bisected by the route, the route would be prominent from inside the boundaries of the resource, even though it would be collocated with the future approved route. The route would be less visible from the northern



portion of the resource, where the approved future Lines #2/#70 would be more prominent, but the route would be more visible from the southern portion of the resource where the approved future Lines #2/#70 would be located behind the route. Still, the construction of the route would increase the transmission line footprint within the resource boundary. Thus, ERM recommends that Mt. Pony Route 1 would have a **Moderate Impact** on 023-5023.

3.5.1.4 023-5040, CROFTBURN FARM

Mt. Pony Route 1 bisects 023-5040 for approximately 0.36 mile. The resource is located approximately 0.20 mile to the east of the proposed Mt. Pony Substation (Attachment 5, Figure 8). The route would be collocated at this location with Dominion's approved future Lines #2/#70 230 kV upgrade, which will replace the existing transmission line #2/70.

One simulation was prepared for the resource at KOP 102, along Germanna Highway (Attachment 5, Figure 9). As shown in the simulation, the route would be visible, as it bisects the resource. Although the route would be collocated with the approved future Lines #2/#70, the construction of the route would add additional modern elements to the southeastern viewshed, as well as through the resource itself. Thus, ERM recommends that Mt. Pony Route 1 would have a **Moderate Impact** on 023-5040.

3.5.1.5 023-5055, BRANDY STATION BATTLEFIELD

023-5055 is located approximately 640 feet to the north of Mt. Pony Route 1 (Attachment 5, Figure 10). The route would be collocated at this location with Dominion's approved future Lines #2/#70 230 kV upgrade, which will replace the existing transmission line #2/#70. Dominion's existing transmission lines #2/#70 and #2/#2199 already intersect the battlefield in this area. The area between the resource and the route consists of an aggregate supplier plant.

Two simulations were prepared for the resource: KOP 105 along Germanna Highway and KOP 106, located along Batna Road. These locations were chosen because they were the areas closest to the route from the battlefield at locations along public right-of-way. As shown in the simulations, the route would not be visible from these locations within the battlefield (Attachment 5, Figures 11 and 12). However, the route is likely to be visible from within the aggregate supplier plant, where ERM was not able to gain access. This visibility would only be within a small portion of the entire battlefield which is bisected by multiple existing transmission lines and impacted by industrial land use inconsistent with the historic landscape. In addition, the route would be collocated with the approved future Lines #2/#70, which would be more prominent in the landscape. However, because it could be visible from the far southwestern extent of the battlefield within the aggregate supplier plant, ERM recommends that Mt. Pony Route 1 would have a Minimal Impact on 023-5055.

3.5.1.6 023-5161, ST. STEVEN'S BAPTIST CHURCH

St. Steven's Baptist Church is located approximately 0.65 mile to the north-northeast of Mt. Pony Route 1 (Attachment 5, Figure 13). The area between the resource and the route consists of farmland, trees, and Dominion's existing transmission line #2/70. One simulation was taken for the resource at KOP 107, along Germanna Highway (Attachment 5, Figure 14). As shown in the simulation, the Project would not be visible from the resource due to intervening vegetation,



infrastructure, and distance. Thus, ERM recommends that Mt. Pony Route 1 would have **No Impact** on 023-5161.

3.5.1.7 023-5162, ZIMMERMAN'S TAVERN

Zimmerman's Tavern is located approximately 0.66 mile to the northeast of Mt. Pony Route 1 (Attachment 5, Figure 15). The area between the resource and the route consists of farmland, trees, and Dominion's existing transmission line #2/70. One simulation was taken for the resource at KOP 107, along Germanna Highway (Attachment 5, Figure 16). As shown in the simulation, the Project would not be visible from the resource due to intervening vegetation, infrastructure, and distance. Thus, ERM recommends that Mt. Pony Route 1 would have **No Impact** on 023-5162.

3.5.1.8 023-5494, HOUSE

Approximately 1.11 miles of Mt. Pony Route's right-of-way is located just within 023-5494's northern and eastern boundaries (Attachment 5, Figure 17). Approximately 0.88 mile of the route is collocated alongside Dominion's approved future Lines #2/#70 230 kV upgrade, which will replace the existing transmission line #2/#70.

One simulation was prepared for the resource at KOP 108, along Blackjack Road. As shown in the simulation, the route would be visible from the resource when looking to the north and to the east (Attachment 5, Figure 18). The approved future Lines #2/#70 would be collocated along the resource's northern boundary, but the route's location to the east of the resource would be through greenfield. Although there is an existing transmission line (#2/#2199) located approximately 0.20 mile to the east of the resource, Mt. Pony Route 1 would be more prominent in the landscape because of its closer proximity to the resource. Thus, ERM recommends that Mt. Pony Route 1 would have a **Moderate Impact** on 023-5494.

3.5.1.9 068-5007, BATTLE OF MORTON'S FORD

Mt. Pony Route 1 goes through approximately 0.73 mile of 068-5007 before connecting to Dominion's existing transmission line #2/#2199 (Attachment 5, Figure 19).

One simulation was prepared for the resource at KOP 108, along Blackjack Road. As shown in the simulation, the route would be visible in this portion of the battlefield and add a modern element to this portion of the battlefield that currently consists of open field (Attachment 5, Figure 20). Although existing Lines #2/#70, #2/#2199, #70/#2199 already intersect portions of the battlefield and have affected the battlefield's viewshed to the north and east in the area of the route, the route intersects a larger portion of the battlefield. While the route intersects approximately 13 acres of the battlefield's total 6,710 acres, which is minor in comparison to the resource as a whole, it would introduce modern elements that would be more prominent than the existing lines when traversing Blackjack Road. Thus, ERM recommends that Mt. Pony Route 1 would have a **Moderate Impact** on 068-5007.

3.5.1.10 204-0070, GREENWOOD

204-0070 is located approximately 0.95 mile to the west of Mt. Pony Route 1 and approximately 0.85 mile to the west of the proposed Mt. Pony Substation (Attachment 5, Figure 21). The area between the resource and the route consists of intervening infrastructure and vegetation. One



simulation was conducted for the resource, at KOP 112 along Post Oak Drive (Attachment 5, Figure 22). As shown in the simulation, the route would not be visible from the resource due to distance and intervening vegetation and infrastructure. Thus, ERM recommends that Mt. Pony Route 1 would have **No Impact** on Greenwood.

3.5.2 HISTORIC RESOURCE FINDINGS FOR MT. PONY ROUTE 2

3.5.2.1 023-0084, MOUNT PONY RURAL HISTORIC DISTRICT

The Mount Pony Rural Historic District is located approximately 0.25 mile to the east of Mt. Pony Route 2 and approximately 0.20 mile to the east of the proposed Mt. Pony Substation (Attachment 5, Figure 23).

One simulation was prepared for the resource at KOP 103, along Germanna Highway. As shown in the simulation, the top of one structure would be visible from the resource's western boundary (Attachment 5, Figure 24). The route could also be visible farther north, but access to James Madison Highway was unsafe due to traffic patterns. However, the viewshed change in this location would be minor in relation to the district as a whole where there would be no view of the route. Furthermore, Dominion's existing Lines #2/#70 currently bisect the resource. Because the route would not be visible from the majority of the resource, ERM recommends that Mt. Pony Route 2 would have a **Minimal Impact** on 023-0084.

3.5.2.2 023-5040, CROFTBURN FARM

Croftburn Farm is located approximately 0.25 mile to the east of Mt. Pony Route 2 and approximately 0.20 mile to the east of the proposed Mt. Pony Substation (Attachment 5. Figure 25).

One simulation was prepared for the resource at KOP 103, along Germanna Highway. As shown in the simulation, the top of one structure would be visible from the resource's southwestern boundary (Attachment 5, Figure 26). The route could also be visible farther north, along the western edge of the resource boundary. However, this view would be minor. Furthermore, Dominion's existing Lines #2/#70 currently bisect the resource. Thus, ERM recommends that Mt. Pony Route 2 would have a **Minimal Impact** on 023-5040.

3.5.2.3 023-5041, ECKINGTON SCHOOL

Eckington School is located approximately 0.88 mile to the northeast of Mt. Pony Route 2, where the route connects with Dominion's existing transmission line #2/2199 (Attachment 5, Figure 27). One simulation was prepared for the resource at KOP 113 along Mt. Pony Road (Attachment 5, Figure 28). As shown in the simulation, the Project would not be visible from the resource due to intervening vegetation and distance. Thus, ERM recommends that Mt. Pony Route 2 would have **No Impact** on 023-5041.

3.5.2.4 068-5007, BATTLE OF MORTON'S FORD

The Battle of Morton's Ford is located approximately 0.97 mile to the southeast of Mt. Pony Route 2, where the route connects with Dominion's existing transmission line #2/2199 (Attachment 5, Figure 29). Two simulations were conducted for the resource at KOP 110, along Algonquin Trail,



and KOP 109, along Stringfellow Road (Attachment 5, Figures 30 and 31). As shown by the simulations, the Project would not be visible from either area of the battlefield due to intervening vegetation and distance. Thus, ERM recommends that Mt. Pony Route 2 would have **No Impact** on 068-5007.

3.5.2.5 068-5033, RAPIDAN RIVER AND CLARK MOUNTAIN RURAL HISTORIC DISTRICT

The Rapidan River and Clark Mountain Rural Historic District is located approximately 0.97 mile to the southeast of Mt. Pony Route 2, where the route connects with Dominion's existing transmission line #2/2199 (Attachment 5, Figure 32). One simulation was conducted for the resource at KOP 110 along Algonquin Trail (Attachment 5, Figure 33). As shown by the simulation, the Project would not be visible from the district due to intervening vegetation and distance. Thus, ERM recommends that Mt. Pony Route 2 would have **No Impact** on 068-5033.

3.5.2.6 204-0070, GREENWOOD

Greenwood is located approximately 0.90 mile to the northwest of Mt. Pony Route 2 and approximately 0.87 mile to the west of the proposed Mt. Pony Substation (Attachment 5, Figure 34). One simulation was completed for the resource, at KOP 112, along Post Oak Drive. As shown in the simulation, the Project would not be visible from the resource due to distance and intervening vegetation and infrastructure (Attachment 5, Figure 35). Thus, ERM recommends that Mt. Pony Route 2 would have **No Impact** on 204-0070.

3.6 HISTORIC RESOURCES FINDINGS FOR TECH PARK LINES

3.6.1 HISTORIC RESOURCE FINDINGS FOR TECH PARK ROUTE 1

3.6.1.1 023-0084, MOUNT PONY RURAL HISTORIC DISTRICT

Approximately 150 feet of Tech Park Route 1 is located within the northwesternmost corner of Mount Pony Rural Historic District in an area where the route would be collocated with Dominion's approved future Lines #2/#70 230 kV upgrade, which will replace the existing transmission line #2/#70 (Attachment 5, Figure 36). However, Tech Park Route 1 continues to the southwest of the resource, which is greenfield.

One simulation was prepared for the resource at KOP 103, along Germanna Highway. As shown in the simulation, the top of one structure would be visible during off-leaf season at this location (Attachment 5, Figure 37). In addition, the route also bisects approximately 150 feet of the resource where it would collocate with the approved future Lines #2/#70, which would be visible from the northwestern section of the district. Although the existing line bisects the resource, Tech Park Route 1 would introduce modern elements to the western viewshed, which would only be visible from vantage points in the northwestern corner of the resource. This viewshed change would be minor in relation to the district as a whole, most of which would have no view of the route. Thus, ERM recommends that Tech Park Route 1 would have a **Minimal Impact** on 023-0084.



3.6.1.2 023-5023, MOUNT CASTLE

Mount Castle is located approximately 0.94 mile to the southeast of Tech Park Route 1, in an area where the route collocates with Dominion's existing transmission line #2/70 (Attachment 5, Figure 38). One simulation was prepared for the resource, at KOP 104, along Germanna Highway (Attachment 5, Figure 39). As shown in the simulation, the route would not be visible from the resource due to distance. Thus, ERM recommends that Tech Park Route 1 would have **No Impact** on 023-5023.

3.6.1.3 023-5040, CROFTBURN FARM

Approximately 200 feet of Tech Park Route 1 is located within westernmost corner of Croftburn Farm in an area where it would be collocated with Dominion's approved future Lines #2/#70 230 kV upgrade, which will replace the existing transmission line #2/#70 (Attachment 5, Figure 40). However, Tech Park Route 1 continues to the southwest of the resource, which is greenfield.

One simulation was prepared for the resource at KOP 103, along Germanna Highway. As shown in the simulation, the top of one structure would be visible during off-leaf season at this location (Attachment 5, Figure 41). In addition, the route also bisects approximately 150 feet of the resource where it would collocate with the approved future Lines #2/#70, which would be visible from the northwestern section of the resource. Although the existing line bisects the resource, Tech Park Route 1 would introduce modern elements to the western viewshed, which would only be visible in the northwestern corner of the resource. This viewshed change would be minor in relation to the resource as a whole, most of which would have no view of the route. Thus, ERM recommends that Tech Park Route 1 would have a **Minimal Impact** on 023-5040.

3.6.1.4 204-0002, HILL MANSION

Hill Mansion is located approximately 0.27 mile to the north of Tech Park Route 1, approximately 0.32 mile to the northwest of the proposed Palomino Substation, approximately 0.44 mile to the north of the proposed Chandler Substation, and approximately 0.53 mile to the north of the proposed McDevitt Substation (Attachment 5, Figure 42). One simulation was prepared for the resource at KOP 116 on S East Street (Attachment 5, Figure 43). As shown by the simulation, the resource would have no view of the route due to intervening vegetation and buildings that surround the resource. Thus, ERM recommends that Tech Park Route 1 would have **No Impact** on 204-0002.

3.6.1.5 204-0003, SAINT STEPHEN'S EPISCOPAL CHURCH

Saint Stephen's Episcopal Church is located approximately 0.47 mile to the north of Tech Park Route 1, approximately 0.51 mile to the north of the proposed Palomino Substation, approximately 0.63 mile to the north of the proposed Chandler Substation, and approximately 0.72 mile to the north of the proposed McDevitt Substation (Attachment 5, Figure 44). One simulation was prepared for the resource at KOP 117, near the intersection of N Commerce Street and Wausau Place (Attachment 5, Figure 45). As shown by the simulation, the resource would have no view of the route due to intervening buildings and distance. Thus, ERM recommends that Tech Park Route 1 would have **No Impact** on 204-0003.



3.6.1.6 204-0005, BURGANDINE HOUSE

The Burgandine House is located approximately 0.25 mile to the northwest of Tech Park Route 1, approximately 0.34 mile to the northwest of the proposed Palomino Substation, approximately 0.40 mile to the northwest of the proposed Chandler Substation, and approximately 0.50 mile to the northwest of the proposed McDevitt Substation (Attachment 5, Figure 46). One simulation was prepared for the resource at KOP 118, along Sara Leigh Court (Attachment 5, Figure 47). As shown in the simulation, the route would not be visible from the resource due to intervening vegetation, buildings, and distance. Thus, ERM recommends that Tech Park Route 1 would have **No Impact** on 204-0005.

3.6.1.7 204-0006, A.P. HILL BOYHOOD HOME

The A.P. Hill Boyhood Home is located approximately 0.53 mile to the northwest of Tech Park Route 1, approximately 0.59 mile to the northwest of the proposed Palomino Substation, approximately 0.70 mile to the northwest of the proposed Chandler Substation, and approximately 0.80 mile to the northwest of the proposed McDevitt Substation (Attachment 5, Figure 48). One simulation was prepared for the resource at KOP 119, at the intersection of W Davis Street and S Main Street (Attachment 5, Figure 49). As shown in the simulation, the route would not be visible from the resource due to intervening buildings and distance. Thus, ERM recommends that Tech Park Route 1 would have **No Impact** on 204-0006.

3.6.1.8 204-0020, CULPEPER HISTORIC DISTRICT

The Culpeper Historic District is located approximately 0.33 mile to the northwest of Tech Park Route 1, approximately 0.37 mile to the northwest of the proposed Palomino Substation, approximately 0.50 mile to the northwest of the proposed Chandler Substation, and approximately 0.60 mile to the northwest of the proposed McDevitt Substation (Attachment 5, Figure 50). One simulation was prepared from the resource at KOP 120, along US Avenue (Attachment 5, Figure 51). As shown in the simulation, the route would not be visible from the resource due to intervening vegetation and buildings. Thus, ERM recommends that Tech Park Route 1 would have **No Impact** on 204-0020.

3.6.1.9 204-0020-0140, ANTIOCH BAPTIST CHURCH

Antioch Baptist Church is located approximately 0.54 mile to the northwest of Tech Park Route 1, approximately 0.61 mile to the northwest of the proposed Palomino Substation, approximately 0.71 mile to the northwest of the proposed Chandler Substation, and approximately 0.81 mile to the northwest of the proposed McDevitt Substation (Attachment 5, Figure 52). One simulation was prepared for the resource at KOP 121, located at the intersection of S West Street and W Culpeper Street (Attachment 5, Figure 53). As shown in the simulation, the resource would have no view of the route due to distance and intervening buildings. Thus, ERM recommends that Tech Park Route 1 would have **No Impact** on 204-0020-0140.

3.6.1.10 204-0021, CORRIE HILL HOUSE

The Corrie Hill House is located approximately 0.66 mile to the northwest of Tech Park Route 1, approximately 0.72 mile to the northwest of the proposed Palomino Substation, approximately



0.83 mile to the northwest of the proposed Chandler Substation, and approximately 0.92 mile to the northwest of the proposed McDevitt Substation (Attachment 5, Figure 54). One simulation was prepared for the resource at KOP 122, near the intersection of N West Street and W Spencer Street (Attachment 5, Figure 55). As shown in the simulation, the resource would have no view of the route due to distance and intervening buildings. Thus, ERM recommends that Tech Park Route 1 would have **No Impact** on 204-0021.

3.6.1.11 204-0064, SOUTH EAST STREET HISTORIC DISTRICT

The South East Street Historic District is located approximately 115 feet to the northwest of Tech Park Route 1, approximately 0.13 mile to the northwest of the proposed Palomino Substation, approximately 0.17 mile to the northwest of the proposed Chandler Substation, and approximately 0.27 mile to the northwest of the proposed McDevitt Substation (Attachment 5, Figure 56).

Three simulations were prepared for the district: one each at KOP 125 and KOP 124, both along E Chandler Street, and one at KOP 123, located at the intersection of Rosson Lane and S East Street. As shown by the simulation for KOP 125, the route and the proposed Palomino Substation would be visible from the eastern boundary of the district's southern block (Attachment 5, Figure 57). However, this view is only available within a small area where sight lines are permitted through a break in the trees. The route and proposed Palomino Substation are also likely to be visible along the southeastern edge of the resource, where it is in close proximity to the route. However, this area was not accessible to ERM, and E Chandler Street is the closest area to the route from the public right-of-way. The areas closest to the route are privately owned so most visitors would only have the one view of the route from E Chandler Street. In addition, the existing Culpeper Substation, which connects to Dominion's existing Line #70, is located directly adjacent to KOP 125. Both the substation and existing transmission line are visible from the district and have already diminished the district's historic viewshed.

As stated previously, two other KOPs were taken for this resource. KOP 124 was taken from the easternmost point of the district, approximately 770 feet to the east of KOP 125. As shown in the simulation, the route and proposed substations would not be visible from this point due to intervening vegetation and topography (Attachment 5, Figure 58). Furthermore, KOP 123, taken from the district's southern border, would not have a view of the route or proposed substations due to intervening vegetation (Attachment 5, Figure 59). Because the view of the route within the district is small in comparison to the district as a whole, ERM recommends that Tech Park Route 1 would have a **Minimal Impact** on 204-0064.

3.6.1.12 204-0069, CULPEPER NATIONAL CEMETERY

The Culpeper National Cemetery is located approximately 0.25 mile to the northeast of Tech Park Route 1, approximately 0.23 mile to the north of the proposed Palomino Substation, approximately 0.36 mile to the north of the proposed Chandler Substation, and approximately 0.44 mile to the north of the proposed McDevitt Substation (Attachment 5, Figure 60). The existing Culpeper Substation and Dominion's existing Line #70 are located directly south of the cemetery.



CLIENT: Dominion Energy PROJECT NO: 0726778

One KOP was prepared for the resource at KOP 124, along E Chandler Street. This location was chosen because it was the closest point to the route from the resource. It is important to note that the cemetery was expanded in 2005 for additional burials, but is not included as part of the historic boundary. The view from KOP 124 towards the Project includes the cemetery's modern expansion that is not historic. As shown in the simulation, the route and proposed substations would not be visible from the resource due to intervening vegetation, infrastructure, and topography (Attachment 5, Figure 61). Thus, ERM recommends that Tech Park Route 1 would have **No Impact** on 204-0069.

3.6.1.13 204-0070, GREENWOOD

Greenwood is located approximately 0.57 mile to the south of Tech Park Route 1, approximately 0.78 mile to the southwest of the proposed Palomino Substation, approximately 0.63 mile to the southwest of the proposed Chandler Substation, and approximately 0.58 mile to the south of the proposed McDevitt Substation (Attachment 5, Figure 62). One simulation was prepared for the resource at KOP 112, at Post Oak Road. As shown in the simulation, the resource would have no view of the route due to distance and intervening vegetation (Attachment 5, Figure 63). Thus, ERM recommends that Tech Park Route 1 would have **No Impact** on 204-0070.

3.6.1.14 204-5053, PITTS THEATER

Pitts Theater is located approximately 0.40 mile to the northwest of Tech Park Route 1, approximately 0.46 mile to the northwest of the proposed Palomino Substation, approximately 0.57 mile to the northwest of the proposed Chandler Substation, and approximately 0.67 mile to the northwest of the proposed McDevitt Substation (Attachment 5, Figure 64). One simulation was prepared for the resource at KOP 126, in the resource's parking lot, to the north of E Stevens Street. As shown in the simulation, the resource would have no view of the route due to intervening buildings, vegetation, and distance (Attachment 5, Figure 65). Thus, ERM recommends that Tech Park Route 1 would have **No Impact** on 204-5053.

3.6.1.15 204-5067, LORD CULPEPER HOTEL

Lord Culpeper Hotel is located approximately 0.38 mile to the northwest of Tech Park Route 1, approximately 0.45 mile to the northwest of the proposed Palomino Substation, approximately 0.55 mile to the northwest of the proposed Chandler Substation, and approximately 0.65 mile to the northwest of the proposed McDevitt Substation (Attachment 5, Figure 66). One simulation was prepared for the resource at KOP 126, in the Pitts Theater (204-5053) parking lot, to the north of E Stevens Street. As shown in the simulation, the resource would have no view of the route due to intervening buildings, vegetation, and distance (Attachment 5, Figure 67). Thus, ERM recommends that Tech Park Route 1 would have **No Impact** on 204-5067.

3.6.1.16 204-5097, CULPEPER LIGHT & POWER

Culpeper Light & Power is located approximately 0.57 mile to the west-northwest of Tech Park Route 1, approximately 0.65 mile to the northwest of the proposed Palomino Substation, approximately 0.67 mile to the northwest of the proposed Chandler Substation, and approximately 0.77 mile to the northwest of the proposed McDevitt Substation (Attachment 5, Figure 68). One



simulation was prepared for the resource at KOP 128, along Spring Street. As shown in the simulation, the resource would have no view of the route due to intervening buildings, vegetation, and distance (Attachment 5, Figure 69). Thus, ERM recommends that Tech Park Route 1 would have **No Impact** on 204-5097.

3.6.2 HISTORIC RESOURCE FINDINGS FOR TECH PARK ROUTE 2

3.6.2.1 023-0084, MOUNT PONY RURAL HISTORIC DISTRICT

The Mount Pony Rural Historic District is located approximately 0.34 mile to the east of Tech Park Route 2 and approximately 0.20 mile to the east of the proposed Mt. Pony Substation (Attachment 5, Figure 70).

One simulation was prepared for the resource at KOP 103, along Germanna Highway. As shown in the simulation, the top of one structure would be visible during off-leaf season at this location (Attachment 5, Figure 71). In addition, the proposed Mt. Pony Substation and portions of the route could be visible from the westernmost edge of the district. However, the area with sight lines to the route this would be a small percentage of the district as a whole. Furthermore, the district is already bisected by Dominion's approved future Lines #2/#70 (replacing current Lines #2/#70), which would be visible throughout the district, and the existing line has already diminished its historic viewshed in this area. Although the existing line bisects the resource, Tech Park Route 2 would introduce new modern elements to the western viewshed where there currently is open field. Thus, ERM recommends that Tech Park Route 2 would have a **Minimal Impact** on 023-0084.

3.6.2.2 023-5040, CROFTBURN FARM

Croftburn Farm is located approximately 0.34 mile to the east of Tech Park Route 2 and approximately 0.20 mile to the east of the proposed Mt. Pony Substation (Attachment 5, Figure 72).

One simulation was prepared for the resource at KOP 103, along Germanna Highway. As shown in the simulation, the top of one structure would be visible during off-leaf season at this location (Attachment 5, Figure 73). In addition, the proposed Mt. Pony Substation and portions of the route could be visible from the northwestern corner of the resource, close to the line of trees. However, the resource is already bisected by Dominion's approved future Lines #2/#70 (replacing current Lines #2/#70), which would be visible throughout the resource, and the existing line has already diminished its historic viewshed in this area. Although the existing line bisects the resource, Tech Park Route 2 would introduce new modern elements to the western viewshed where there currently is open field. Thus, ERM recommends that Tech Park Route 2 would have a **Minimal Impact** on 023-5040.

3.6.2.3 204-0002, HILL MANSION

Hill Mansion is located approximately 0.27 mile to the north of Tech Park Route 2, approximately 0.32 mile to the northwest of the proposed Palomino Substation, approximately 0.44 mile to the north of the proposed Chandler Substation, and approximately 0.53 mile to the north of the proposed McDevitt Substation (Attachment 5, Figure 74). One simulation was prepared for the



resource at KOP 116 on S East Street (Attachment 5, Figure 75). As shown by the simulation, the resource would have no view of the route due to intervening vegetation and buildings. Thus, ERM recommends that Tech Park Route 2 would have **No Impact** on 204-0002.

3.6.2.4 204-0003, SAINT STEPHEN'S EPISCOPAL CHURCH

Saint Stephen's Episcopal Church is located approximately 0.47 mile to the north of Tech Park Route 2, approximately 0.51 mile to the north of the proposed Palomino Substation, approximately 0.63 mile to the north of the proposed Chandler Substation, and approximately 0.72 mile to the north of the proposed McDevitt Substation (Attachment 5, Figure 76). One simulation was prepared for the resource at KOP 117, near the intersection of N Commerce Street and Wausau Place (Attachment 5, Figure 77). As shown by the simulation, the resource would have no view of the route due to intervening buildings and distance. Thus, ERM recommends that Tech Park Route 2 would have **No Impact** on 204-0003.

3.6.2.5 204-0005, BURGANDINE HOUSE

The Burgandine House is located approximately 0.25 mile to the northwest of Tech Park Route 2, approximately 0.34 mile to the northwest of the proposed Palomino Substation, approximately 0.40 mile to the northwest of the proposed Chandler Substation, and approximately 0.50 mile to the northwest of the proposed McDevitt Substation (Attachment 5, Figure 78). One simulation was prepared for the resource at KOP 118, along Sara Leigh Court (Attachment 5, Figure 79). As shown in the simulation, the route would not be visible from the resource due to distance and intervening buildings. Thus, ERM recommends that Tech Park Route 2 would have **No Impact** on 204-0005.

3.6.2.6 204-0006, A.P. HILL BOYHOOD HOME

The A.P. Hill Boyhood Home is located approximately 0.53 mile to the northwest of Tech Park Route 2, approximately 0.59 mile to the northwest of the proposed Palomino Substation, approximately 0.70 mile to the northwest of the proposed Chandler Substation, and approximately 0.80 mile to the northwest of the proposed McDevitt Substation (Attachment 5, Figure 80). One simulation was prepared for the resource at KOP 119, at the intersection of W Davis Street and S Main Street (Attachment 5, Figure 81). As shown in the simulation, the route would not be visible from the resource due to intervening buildings and distance. Thus, ERM recommends that Tech Park Route 2 would have **No Impact** on 204-0006.

3.6.2.7 204-0020, CULPEPER HISTORIC DISTRICT

The Culpeper Historic District is located approximately 0.33 mile to the northwest of Tech Park Route 2, approximately 0.37 mile to the northwest of the proposed Palomino Substation, approximately 0.50 mile to the northwest of the proposed Chandler Substation, and approximately 0.60 mile to the northwest of the proposed McDevitt Substation (Attachment 5, Figure 82). One simulation was prepared from the resource at KOP 120, along US Avenue (Attachment 5, Figure 83). As shown in the simulation, the route would not be visible from the resource due to intervening vegetation and buildings. Thus, ERM recommends that Tech Park Route 2 would have **No Impact** on 204-0020.



3.6.2.8 204-0020-0140, ANTIOCH BAPTIST CHURCH

Antioch Baptist Church is located approximately 0.54 mile to the northwest of Tech Park Route 2, approximately 0.61 mile to the northwest of the proposed Palomino Substation, approximately 0.71 mile to the northwest of the proposed Chandler Substation, and approximately 0.81 mile to the northwest of the proposed McDevitt Substation (Attachment 5, Figure 84). One simulation was prepared for the resource at KOP 121, located at the intersection of S West Street and W Culpeper Street (Attachment 5, Figure 85). As shown in the simulation, the resource would have no view of the route due to distance and intervening infrastructure. Thus, ERM recommends that Tech Park Route 2 would have **No Impact** on 204-0020-0140.

3.6.2.9 204-0021, CORRIE HILL HOUSE

The Corrie Hill House is located approximately 0.66 mile to the northwest of Tech Park Route 2, approximately 0.72 mile to the northwest of the proposed Palomino Substation, approximately 0.83 mile to the northwest of the proposed Chandler Substation, and approximately 0.92 mile to the northwest of the proposed McDevitt Substation (Attachment 5, Figure 86). One simulation was prepared for the resource at KOP 122, near the intersection of N West Street and W Spencer Street (Attachment 5, Figure 87). As shown in the simulation, the resource would have no view of the route due to distance and intervening buildings. Thus, ERM recommends that Tech Park Route 2 would have **No Impact** on 204-0021.

3.6.2.10 204-0064, SOUTH EAST STREET HISTORIC DISTRICT

The South East Street Historic District is located approximately 115 feet to the northwest of Tech Park Route 2, approximately 0.13 mile to the northwest of the proposed Palomino Substation, approximately 0.17 mile to the northwest of the proposed Chandler Substation, and approximately 0.27 mile to the northwest of the proposed McDevitt Substation (Attachment 5, Figure 88).

Three simulations were prepared for the district: one each at KOP 125 and KOP 124, both along E Chandler Street, and one at KOP 123, located at the intersection of Rosson Lane and S East Street. As shown by the simulation for KOP 125, the route and the proposed Palomino Substation would be visible from the eastern boundary of the district's southern block (Attachment 5, Figure 89). However, this view is only available within a small area where sight lines are afforded by a break in the trees. In addition, the route and proposed Palomino Substation are likely to be visible along the southwestern edge of the resource, where it is in close proximity to the route. However, E Chandler Street is the closest area to the route from the public right-of-way. The areas closest to the route are privately owned and most visitors would only have the one view of the route from E Chandler Street. In addition, the existing Culpeper Substation, which connects to Dominion's existing Line #70, is located directly adjacent to KOP 125. Both the substation and existing transmission line are visible from the district and have already diminished the district's historic viewshed.

As stated previously, two other KOPs were taken for this resource. KOP 124 was taken from the easternmost point of the district, approximately 770 feet to the east of KOP 125. As shown in the simulation, the route and proposed substations would not be visible from this point due to intervening vegetation and topography (Attachment 5, Figure 90). Furthermore, KOP 123, taken



from the district's southern border, would not have a view of the route or proposed substations due to intervening vegetation (Attachment 5, Figure 91). Because views of the route within the district represent a small percentage of the district area as a whole, ERM recommends that Tech Park Route 2 would have a **Minimal Impact** on 204-0064.

3.6.2.11 204-0069, CULPEPER NATIONAL CEMETERY

The Culpeper National Cemetery is located approximately 0.25 mile to the northeast of Tech Park Route 2, approximately 0.23 mile to the north of the proposed Palomino Substation, approximately 0.36 mile to the north of the proposed Chandler Substation, and approximately 0.44 mile to the north of the proposed McDevitt Substation (Attachment 5, Figure 92). One KOP was prepared for the resource at KOP 124, along E Chandler Street. This location was chosen because it was the closest point to the route from the resource. It is important to note that the cemetery was expanded in 2005 for additional burials, but is not included as part of the historic boundary. The view from KOP 124 towards the Project includes the cemetery's modern expansion that is not historic. As shown in the simulation, the route and proposed substations would not be visible from the resource due to intervening vegetation, infrastructure, and topography (Attachment 5, Figure 93). Thus, ERM recommends that Tech Park Route 2 would have **No Impact** on 204-0069.

3.6.2.12 204-0070, GREENWOOD

Greenwood is located approximately 0.57 mile to the south of Tech Park Route 2, approximately 0.78 mile to the southwest of the proposed Palomino Substation, approximately 0.63 mile to the southwest of the proposed Chandler Substation, and approximately 0.58 mile to the south of the proposed McDevitt Substation (Attachment 5, Figure 94). One simulation was prepared for the resource at KOP 112, at Post Oak Road. As shown in the simulation, the resource would have no view of the route due to distance and intervening vegetation (Attachment 5, Figure 95). Thus, ERM recommends that Tech Park Route 2 would have **No Impact** on 204-0070.

3.6.2.13 204-5053, PITTS THEATER

Pitts Theater is located approximately 0.40 mile to the northwest of Tech Park Route 2, approximately 0.46 mile to the northwest of the proposed Palomino Substation, approximately 0.57 mile to the northwest of the proposed Chandler Substation, and approximately 0.67 mile to the northwest of the proposed McDevitt Substation (Attachment 5, Figure 96). One simulation was prepared for the resource at KOP 126, in the resource's parking lot, to the north of E Stevens Street. As shown in the simulation, the resource would have no view of the route due to intervening buildings, vegetation, and distance (Attachment 5, Figure 97). Thus, ERM recommends that Tech Park Route 2 would have **No Impact** on 204-5053.

3.6.2.14 204-5067, LORD CULPEPER HOTEL

Lord Culpeper Hotel is located approximately 0.38 mile to the northwest of Tech Park Route 2, approximately 0.45 mile to the northwest of the proposed Palomino Substation, approximately 0.55 mile to the northwest of the proposed Chandler Substation, and approximately 0.65 mile to the northwest of the proposed McDevitt Substation (Attachment 5, Figure 98). One simulation was



prepared for the resource at KOP 126, in the Pitts Theater (204-5053) parking lot, to the north of E Stevens Street. As shown in the simulation, the resource would have no view of the route due to intervening buildings, vegetation, and distance (Attachment 5, Figure 99). Thus, ERM recommends that Tech Park Route 2 would have **No Impact** on 204-5067.

3.6.2.15 204-5097, CULPEPER LIGHT & POWER

Culpeper Light & Power is located approximately 0.57 mile to the west-northwest of Tech Park Route 2, approximately 0.65 mile to the northwest of the proposed Palomino Substation, approximately 0.67 mile to the northwest of the proposed Chandler Substation, and approximately 0.77 mile to the northwest of the proposed McDevitt Substation (Attachment 5, Figure 100). One simulation was prepared for the resource at KOP 128, along Spring Street. As shown in the simulation, the resource would have no view of the route due to intervening infrastructure and distance (Attachment 5, Figure 101). Thus, ERM recommends that Tech Park Route 2 would have **No Impact** on 204-5097.

3.6.3 HISTORIC RESOURCE FINDINGS FOR TECH PARK ROUTE 3

3.6.3.1 023-0084, MOUNT PONY RURAL HISTORIC DISTRICT

The Mount Pony Rural Historic District is located approximately 0.34 mile to the east of Tech Park Route 3 and approximately 0.20 mile to the east of the proposed Mt. Pony Substation (Attachment 5, Figure 102).

One simulation was prepared for the resource at KOP 103, along Germanna Highway. As shown in the simulation, the top of one structure would be visible during off-leaf season at this location (Attachment 5, Figure 103). In addition, the proposed Mt. Pony Substation and portions of the route could be visible from the very edge of the western border of the district. However, these vantage points would occupy a small percentage of the district as a whole. Furthermore, the district is already bisected by Dominion's approved future Lines #2/#70 (replacing current Lines #2/#70), which would be visible throughout the district, and the existing line has already diminished its historic viewshed in this area. Although the existing line bisects the resource, Tech Park Route 3 would introduce new modern elements to the western viewshed where there currently is open field. Thus, ERM recommends that Tech Park Route 3 would have a **Minimal Impact** on 023-0084.

3.6.3.2 023-5040, CROFTBURN FARM

Croftburn Farm is located approximately 0.34 mile to the east of Tech Park Route 3 and approximately 0.20 mile to the east of the proposed Mt. Pony Substation (Attachment 5, Figure 104).

One simulation was prepared for the resource at KOP 103, along Germanna Highway. As shown in the simulation, the top of one structure would be visible during off-leaf season at this location (Attachment 5, Figure 105). In addition, the proposed Mt. Pony Substation and portions of the route could be visible from the northwestern corner of the resource, close to the line of trees. However, the resource is already bisected by Dominion's approved future Lines #2/#70 (replacing current Lines #2/#70), which would be visible throughout the resource and has diminished its



historic viewshed in this area. Although the existing line bisects the resource, Tech Park Route 3 would introduce modern elements to the western viewshed where there currently is open field. Thus, ERM recommends that Tech Park Route 3 would have a **Minimal Impact** on 023-5040.

3.6.3.3 204-0002, HILL MANSION

Hill Mansion is located approximately 0.27 mile to the north of Tech Park Route 3, approximately 0.32 mile to the northwest of the proposed Palomino Substation, approximately 0.44 mile to the north of the proposed Chandler Substation, and approximately 0.53 mile to the north of the proposed McDevitt Substation (Attachment 5, Figure 106). One simulation was prepared for the resource at KOP 116 on S East Street (Attachment 5, Figure 107). As shown by the simulation, the resource would have no view of the route due to intervening vegetation and buildings. Thus, ERM recommends that Tech Park Route 3 would have **No Impact** on 204-0002.

3.6.3.4 204-0003, SAINT STEPHEN'S EPISCOPAL CHURCH

Saint Stephen's Episcopal Church is located approximately 0.47 mile to the north of Tech Park Route 3, approximately 0.51 mile to the north of the proposed Palomino Substation, approximately 0.63 mile to the north of the proposed Chandler Substation, and approximately 0.72 mile to the north of the proposed McDevitt Substation (Attachment 5, Figure 108). One simulation was prepared for the resource at KOP 117, near the intersection of N Commerce Street and Wausau Place (Attachment 5, Figure 109). As shown by the simulation, the resource would have no view of the route due to intervening buildings and distance. Thus, ERM recommends that Tech Park Route 3 would have **No Impact** on 204-0003.

3.6.3.5 204-0005, BURGANDINE HOUSE

The Burgandine House is located approximately 0.25 mile to the northwest of Tech Park Route 3, approximately 0.34 mile to the northwest of the proposed Palomino Substation, approximately 0.40 mile to the northwest of the proposed Chandler Substation, and approximately 0.50 mile to the northwest of the proposed McDevitt Substation (Attachment 5, Figure 110). One simulation was prepared for the resource at KOP 118, along Sara Leigh Court (Attachment 5, Figure 111). As shown in the simulation, the route would not be visible from the resource due to distance and intervening buildings. Thus, ERM recommends that Tech Park Route 3 would have **No Impact** on 204-0005.

3.6.3.6 204-0006, A.P. HILL BOYHOOD HOME

The A.P. Hill Boyhood Home is located approximately 0.53 mile to the northwest of Tech Park Route 3, approximately 0.59 mile to the northwest of the proposed Palomino Substation, approximately 0.70 mile to the northwest of the proposed Chandler Substation, and approximately 0.80 mile to the northwest of the proposed McDevitt Substation (Attachment 5, Figure 112). One simulation was prepared for the resource at KOP 119, at the intersection of W Davis Street and S Main Street (Attachment 5, Figure 113). As shown in the simulation, the route would not be visible from the resource due to intervening buildings and distance. Thus, ERM recommends that Tech Park Route 3 would have **No Impact** on 204-0006.



3.6.3.7 204-0020, CULPEPER HISTORIC DISTRICT

The Culpeper Historic District is located approximately 0.33 mile to the northwest of Tech Park Route 3, approximately 0.37 mile to the northwest of the proposed Palomino Substation, approximately 0.50 mile to the northwest of the proposed Chandler Substation, and approximately 0.60 mile to the northwest of the proposed McDevitt Substation (Attachment 5, Figure 114). One simulation was prepared from the resource at KOP 120, along US Avenue (Attachment 5, Figure 115). As shown in the simulation, the route would not be visible from the resource due to intervening vegetation and buildings. Thus, ERM recommends that Tech Park Route 3 would have **No Impact** on 204-0020.

3.6.3.8 204-0020-0140, ANTIOCH BAPTIST CHURCH

Antioch Baptist Church is located approximately 0.54 mile to the northwest of Tech Park Route 3, approximately 0.61 mile to the northwest of the proposed Palomino Substation, approximately 0.71 mile to the northwest of the proposed Chandler Substation, and approximately 0.81 mile to the northwest of the proposed McDevitt Substation (Attachment 5, Figure 116). One simulation was prepared for the resource at KOP 121, located at the intersection of S West Street and W Culpeper Street (Attachment 5, Figure 117). As shown in the simulation, the resource would have no view of the route due to distance and intervening buildings. Thus, ERM recommends that Tech Park Route 3 would have **No Impact** on 204-0020-0140.

3.6.3.9 204-0021, CORRIE HILL HOUSE

The Corrie Hill House is located approximately 0.66 mile to the northwest of Tech Park Route 3, approximately 0.72 mile to the northwest of the proposed Palomino Substation, approximately 0.83 mile to the northwest of the proposed Chandler Substation, and approximately 0.92 mile to the northwest of the proposed McDevitt Substation (Attachment 5, Figure 118). One simulation was taken for the resource at KOP 122, near the intersection of N West Street and W Spencer Street (Attachment 5, Figure 119). As shown in the simulation, the resource would have no view of the route due to distance and intervening buildings. Thus, ERM recommends that Tech Park Route 3 would have **No Impact** on 204-0021.

3.6.3.10 204-0064, SOUTH EAST STREET HISTORIC DISTRICT

The South East Street Historic District is located approximately 115 feet to the northwest of Tech Park Route 3, approximately 0.13 mile to the northwest of the proposed Palomino Substation, approximately 0.17 mile to the northwest of the proposed Chandler Substation, and approximately 0.27 mile to the northwest of the proposed McDevitt Substation (Attachment 5, Figure 120).

Three simulations were prepared for the district: one at KOP 125 and KOP 124, both along E Chandler Street, and one at KOP 123, located at the intersection of Rosson Lane and S East Street. As shown by the simulation for KOP 125, the route and the proposed Palomino Substation would be visible from the eastern boundary of the district's southern block (Attachment 5, Figure 121). However, this view is only available within a small area where sight lines are afforded by a break in the trees. In addition, the route and proposed Palomino Substation are likely to be visible along the southwestern edge of the resource, where it is in close proximity to the route. However, E Chandler Street is the closest area to the route from the public right-of-way. The areas closest



to the route are privately owned and most visitors would only have the one view of the route from E Chandler Street. In addition, the existing Culpeper Substation, which connects to Dominion's existing Line #70, is located directly adjacent to KOP 125. Both the substation and existing transmission line are visible from the district and have already diminished the district's historic viewshed.

As stated previously, two other KOPs were taken for this resource. KOP 124 was taken from the easternmost point of the district, approximately 770 feet to the east of KOP 125. As shown in the simulation, the route and proposed substations would not be visible from this point due to intervening vegetation and topography (Attachment 5, Figure 122). Furthermore, KOP 123, taken from the district's southern border, would not have a view of the route or proposed substations due to intervening vegetation (Attachment 5, Figure 123). Because views of the route within the district are limited to a small area in relation to the district as a whole, ERM recommends that Tech Park Route 3 would have a **Minimal Impact** on 204-0064.

3.6.3.11 204-0069, CULPEPER NATIONAL CEMETERY

The Culpeper National Cemetery is located approximately 0.25 mile to the northeast of Tech Park Route 3, approximately 0.23 mile to the north of the proposed Palomino Substation, approximately 0.36 mile to the north of the proposed Chandler Substation, and approximately 0.44 mile to the north of the proposed McDevitt Substation (Attachment 5, Figure 124). One KOP was prepared for the resource at KOP 124, along E Chandler Street. This location was chosen because it was the closest point to the route from the resource. It is important to note that the cemetery was expanded in 2005 for additional burials, but is not included as part of the historic boundary. The view from KOP 124 towards the Project includes the cemetery's modern expansion that is not historic. As shown in the simulation, the route and proposed substations would not be visible from the resource due to intervening vegetation, infrastructure, and topography (Attachment 5, Figure 125). Thus, ERM recommends that Tech Park Route 3 would have **No Impact** on 204-0069.

3.6.3.12 204-0070, GREENWOOD

Greenwood is located approximately 0.58 mile to the southwest of Tech Park Route 3, approximately 0.78 mile to the southwest of the proposed Palomino Substation, approximately 0.63 mile to the southwest of the proposed Chandler Substation, and approximately 0.58 mile to the south of the proposed McDevitt Substation (Attachment 5, Figure 126). One simulation was prepared for the resource at KOP 112, at Post Oak Road. As shown in the simulation, the resource would have no view of the route due to distance and intervening vegetation (Attachment 5, Figure 127). Thus, ERM recommends that Tech Park Route 3 would have **No Impact** on 204-0070.

3.6.3.13 204-5053, PITTS THEATER

Pitts Theater is located approximately 0.40 mile to the northwest of Tech Park Route 3, approximately 0.46 mile to the northwest of the proposed Palomino Substation, approximately 0.57 mile to the northwest of the proposed Chandler Substation, and approximately 0.67 mile to the northwest of the proposed McDevitt Substation (Attachment 5, Figure 128). One simulation was prepared for the resource at KOP 126, in the resource's parking lot, to the north of E Stevens



Street. As shown in the simulation, the resource would have no view of the route due to intervening buildings and distance (Attachment 5, Figure 129). Thus, ERM recommends that Tech Park Route 3 would have **No Impact** on 204-5053.

3.6.3.14 204-5067, LORD CULPEPER HOTEL

Lord Culpeper Hotel is located approximately 0.38 mile to the northwest of Tech Park Route 3, approximately 0.45 mile to the northwest of the proposed Palomino Substation, approximately 0.55 mile to the northwest of the proposed Chandler Substation, and approximately 0.65 mile to the northwest of the proposed McDevitt Substation (Attachment 5, Figure 130). One simulation was prepared for the resource at KOP 126, in the Pitts Theater (204-5053) parking lot, to the north of E Stevens Street. As shown in the simulation, the resource would have no view of the route due to intervening buildings and distance (Attachment 5, Figure 131). Thus, ERM recommends that Tech Park Route 3 would have **No Impact** on 204-5067.

3.6.3.15 204-5097, CULPEPER LIGHT & POWER

Culpeper Light & Power is located approximately 0.57 mile to the west-northwest of Tech Park Route 3, approximately 0.65 mile to the northwest of the proposed Palomino Substation, approximately 0.67 mile to the northwest of the proposed Chandler Substation, and approximately 0.77 mile to the northwest of the proposed McDevitt Substation (Attachment 5, Figure 132). One simulation was prepared for the resource at KOP 128, along Spring Street. As shown in the simulation, the resource would have no view of the route due to intervening buildings, vegetation, and distance (Attachment 5, Figure 133). Thus, ERM recommends that Tech Park Route 3 would have **No Impact** on 204-5097.

3.7 HISTORIC RESOURCE FINDINGS FOR OAK GREEN REBUILD AND RELOCATION

3.7.1 068-0031, MORTON HALL

The Oak Green Rebuild and Relocation is located within the western corner of 068-0031's boundary. This area of the route is located where the existing Dominion transmission lines #2/#11 and #153 currently are located. The Relocated Oak Green Switching Station is also located approximately 50 feet to the southwest of the resource (Attachment 5, Figure 134). The Oak Green Rebuild and Relocation would entail converting and rebuilding the existing 115 kV lines to 230 kV lines as well as relocation of the Oak Green Switching Station.

Two simulations were prepared for the resource at KOP 132, along True Blue Road. The simulation view to the northwest shows that the construction of the Oak Green Rebuild and Relocation would create only minor viewshed changes, with just one new structure visible from the resource's western corner (Attachment 5, Figure 135). The second simulation was taken looking to the southeast (Attachment 5, Figure 136). While this would include three transmission line structures instead of one, it would remove the current Oak Green Switching Station from inside the resource boundary to approximately 50 feet outside the boundary. The dense line of trees surrounding either side of the current transmission line would remain in place, which would continue to block most of the view from within the resource itself. In fact, the relocation of the Oak Green Switching



Station would lessen the impacts of the Project by removing modern infrastructure from a portion of the resource's viewshed. Thus, ERM recommends that the Oak Green Rebuild and Relocation would have a **Minimal Impact** on 068-0031.

3.7.2 068-0131, LESSLAND

Lessland is located approximately 0.30 mile to the southwest of the Oak Green Rebuild and Relocation in an area where the existing Dominion transmission line #2/#11 are currently located (Attachment 5, Figure 137). The Oak Green Rebuild and Relocation would include converting and rebuilding the existing 115 kV lines to 230 kV lines.

One simulation was prepared for the resource at KOP 133, located along Bushy Mountain Road. As shown in the simulation, the rebuild of the route would allow two transmission line structures to be visible from the resource's easternmost corner where currently one is visible (Attachment 5, Figure 138). However, it is important to note that the resource is surrounded by dense vegetation and the route would not be visible from any other portion of the resource. Thus, ERM recommends that the Oak Green Rebuild and Relocation would have a **Minimal Impact** on 068-0131.

3.7.3 068-0473, MT. HOLY BAPTIST CHURCH

Mt. Holy Baptist Church is located approximately 0.74 mile to the southwest of the Oak Green Rebuild and Relocation and approximately 0.73 mile to the southwest of the Relocated Oak Green Switching Station footprint (Attachment 5, Figure 139). One simulation (KOP 134) was taken for this resource, along State Highway 621. As shown in the simulation, the resource would have no view of the Project due to distance and intervening vegetation (Attachment 5, Figure 140). Thus, ERM recommends that the Oak Green Rebuild and Relocation would have **No Impact** on 068-0473.

3.7.4 068-5033, RAPIDAN RIVER AND CLARK MOUNTAIN RURAL HISTORIC DISTRICT

The entirety of the Oak Green Rebuild and Relocation (2.6 miles) is located within the Rapidan River and Clark Mountain Rural Historic District, including the proposed Relocated Oak Green Switching Station. Currently, the proposed route is located within and alongside Dominion's existing transmission lines #2/#11 (Attachment 5, Figure 141).

Three simulations were prepared for the district: KOP 132 along True Blue Road, KOP 135 at the intersection of Bushy Mountain Road and River Road, and KOP 151 along Zachary Taylor Road. As shown by all three simulations, the route replacement would be visible and be more prominent in the landscape than the existing transmission line because it would involve the expansion of the right-of-way (Attachment 5, Figures 142 through 144). However, this would constitute a minor change to the resource's overall setting. Furthermore, the footprint of the route (31.5 acres) is a small fraction of the district as a whole (44,150 acres). Thus, ERM recommends that the Oak Green Rebuild and Relocation would have a **Minimal Impact** on 068-5033.



3.8 HISTORIC RESOURCE FINDINGS FOR REMINGTON REBUILD

3.8.1 023-5049, FREEMAN'S FORD BATTLEFIELD

Freeman's Ford Battlefield is located approximately 0.38 mile to the northwest of the Remington Rebuild and approximately 0.72 mile to the northwest of the existing Remington Substation (Attachment 5, Figure 145). The Remington Rebuild is located along the existing Dominion transmission lines #70/#535.

One simulation was prepared for the resource at KOP 137, along Remington Road. This location was chosen because it was the closest point from inside the battlefield from the public right-of-way. As shown by the simulation, the route would not be visible from this location (Attachment 5, Figure 146). Although there are areas of the battlefield that are closer to the route, there would be no view of the route due to intervening vegetation and distance. Thus, ERM recommends that the Remington Rebuild would have **No Impact** on 023-5049.

3.8.2 023-5050, RAPPAHANNOCK STATION BATTLEFIELD II

The entirety of the Remington Rebuild is located within the Rappahannock Station Battlefield II (0.60 mile), along a segment of the existing Dominion transmission lines #70/#535 (Attachment 5, Figure 147).

Two simulations were prepared for the resource at KOP 130 along Lucky Hill Road, and KOP 164 along Helm Drive. These locations were chosen because they were the closest points from the public right-of-way from inside the battlefield boundaries. As shown by the simulations, the route would not be visible from these locations within the battlefield because of distance and intervening vegetation (Attachment 5, Figures 148 and 149). However, as the route intersects the battlefield, it will result in a change, which would be visible when in close proximity to the route. The construction of the route would involve a small fraction (8.83 acres) of the overall battlefield (11,800 acres), and involves replacing an existing line rather than introducing entirely new infrastructure. Thus, ERM recommends that the Remington Rebuild would have a **Minimal Impact** on 023-5050.

3.8.3 030-5587, MT. HOLLY RIDGE-MARSH RUN RURAL HISTORIC DISTRICT

Approximately 140 feet of the Remington Rebuild is located within the Mt. Holly Ridge-Marsh Run Rural Historic District (Attachment 5, Figure 150). The existing Remington Substation and existing Dominion transmission lines #535/#580/#2039/#2040, and #183 are located within the historic district's boundary.

Two simulations were prepared for the district at KOP 130 along Lucky Hill Road and KOP 131 at Strodes Mill Road. These locations were chosen because they were the closest points from the public right-of-way from inside the rural historic district. As shown by the simulations, the route would not be visible from these locations because of distance and intervening vegetation (Attachment 5, Figures 151 and 152). However, as the route intersects the district, some transmission structures would be added and would be visible when in close proximity to the route. The approximately 140 feet that would intersect the edge of the district constitutes a very small area in comparison to the district as a whole (15,809 acres), which is already bisected by multiple



existing transmission lines that well exceed the approximately 140 feet of the Remington Rebuild (Lines #535/#580/#2039/#2040 intersect the district for 4.12 miles; Line #183 intersects for 1.88 miles). Thus, ERM recommends that the Remington Rebuild would have a Minimal Impact on 030-5587.

3.8.4 030-5593, RAPPAHANNOCK RIVER 1862 NORTHERN VIRGINIA CAMPAIGN RURAL HISTORIC DISTRICT

The Rappahannock River 1862 Northern Virginia Campaign Rural Historic District is located approximately 0.89 mile to the west of the Remington Rebuild where it connects with the existing Dominion transmission lines #535/#580 (Attachment 5, Figure 153). The existing Dominion transmission lines #2/#70 currently traverse the resource for approximately 0.65 mile. One simulation was taken for the resource at KOP 136, along N Franklin Street. As shown from the simulation, there would be no view to the Project from the resource due to intervening vegetation, infrastructure (including Dominion's existing transmission lines), and distance (Attachment 5, Figure 154). Thus, ERM recommends that the Remington Rebuild would have No Impact on 030-5593.

3.8.5 030-5607, HEDGEMAN-RAPPAHANNOCK RURAL HISTORIC DISTRICT

The Hedgeman-Rappahannock Rural Historic District is located approximately 0.67 mile to the northwest of the Remington Rebuild where it connects to Dominion's existing transmission lines #2/70 (Attachment 5, Figure 155). The Dominion existing lines #2/#70 and #535/#580 currently intersect the district for 1.62 miles and 1.85 miles, respectively. One simulation was taken for the resource at KOP 137, along Remington Road (Attachment 5, Figure 156). As shown from the simulation, there would be no view to the Project from the resource due to intervening vegetation and distance. Thus, ERM recommends that the Remington Rebuild would have No Impact on 030-5607.

3.8.6 030-5852, PINEY RIDGE SCHOOL

Piney Ridge School is located approximately 0.60 mile to the south of the Remington Rebuild where it connects with Dominion's existing transmission lines #2/70 and #535/580 (Attachment 5, Figure 157). One simulation was taken for the resource at KOP 131, taken along Strodes Mill Road (Attachment 5, Figure 158). As shown in the simulation, the resource would have no view of the Project due to intervening vegetation and distance. Thus, ERM recommends that the Remington Rebuild would have **No Impact** on 030-5852.

3.8.7 288-5001, REMINGTON HISTORIC DISTRICT

The Remington Rebuild is located approximately 0.84 mile to the east of the Remington Historic District where it connects to Dominion's existing transmission line #32/70 (Attachment 5, Figure 159). Two simulations were taken for the district, at KOP 136 and KOP 139, both along N Franklin Street (Attachment 5, Figures 160 and 161). As shown in the simulations, the Project would not be visible from the district due to intervening vegetation, buildings, and distance. Thus, ERM recommends that the Remington Rebuild would have **No Impact** on 288-5001.



3.9 ARCHAEOLOGY FINDINGS

Seven known archaeological sites are located in the right-of-way or adjacent to the transmission line routes and proposed substations (Table 13): three within what would be the right-of-way of Mt. Pony Route 1 and adjacent to the proposed Mt. Pony Substation (44CU0135, 44CU0137, and 44CU0188); one adjacent to Mt. Pony Route 2 and the proposed Mt. Pony Substation (44CU0135); three within what would be the right-of-way for Tech Park Route 1 (44CU0137, 44CU0221, and 44CU0222); two within what would be the right-of-way for Tech Park Route 2 (44CU0221 and 44CU0222); and finally, four within what would be the right-of-way for Tech Park Route 3 (44CU0219, 44CU0220, 44CU0221, and 44CU0222). No previously recorded sites were identified within what would be the right-of-way for the Oak Green Rebuild and Relocation or the Remington Rebuild. In addition, no previously recorded archaeological sites were identified within or adjacent to the boundaries of the proposed Palomino, Chandler, or McDevitt Substations.

The sites that would be impacted by each route are described below. The descriptions include information on the eligibility of each site for listing in the NRHP as well as an assessment of each site's condition based on desktop review. A confident evaluation of the nature of archaeological deposits at each site and impacts from prior land use activities would require a field survey to verify the desktop analysis.

TABLE 13 ARCHAEOLOGICAL RESOURCES WITHIN THE RIGHT-OF-WAY FOR THE ROUTES

	Route Alternatives						
Considered Site	Mt. Pony Lines		Tech Park Lines			Oak Green	
	Mt. Pony Route 1	Mt. Pony Route 2	Tech Park Route 1	Tech Park Route 2	Tech Park Route 3	Rebuild and Relocation	Remington Rebuild
44CU0135ª	Х	Х					
44CU0137	Х		Х				
44CU0188	Х						
44CU0219					X		
44CU0220					X		
44CU0221 ^{b, c}			Х	Х	X		
44CU0222			Х	Х	X		
Total Resources	3	1	3	2	4	0	0

[&]quot;X" indicates that the site is within the right-of-way of the route.



^a Located adjacent to proposed Mt. Pony Substation

b Located adjacent to or within proposed Chandler Substation

^c Located adjacent to or within proposed McDevitt Substation

3.9.1 MT. PONY LINES

3.9.1.1 MT. PONY ROUTE 1

Three archaeological sites were identified within or adjacent to Mt. Pony Route 1 or the proposed Mt. Pony Substation: 44CU0135, 44CU0137, and 44CU0188.

Site 44CU0135 is a late eighteenth to early nineteenth-century single dwelling site, currently unevaluated for the NRHP. Initially recorded in 2006 during a Phase I archaeological survey by Carol Tyrer, the site is classified as a single dwelling. However, the VCRIS form only mentions a concentration of domestic and architectural artifacts, with no standing structures or structural ruins (Tyrer 2006).

Site 44CU0137 is an eighteenth-century road, currently unevaluated for the NRHP. The site spans approximately 0.3 miles and intersects with James Madison Highway. Initially recorded during a site walk in 2006, it was not formally surveyed at that time. In 2009, a site reconnaissance, including a pedestrian survey by Dovetail (Maroney 2009), confirmed that the road had remained unchanged since its initial recording.

Site 44CU0188 is an Archaic period temporary camp site that is ineligible for the NRHP. The site was recorded in 2017 during a Phase I archaeological survey performed by Circa (Tyrer 2017). The site was determined ineligible based on the frequency of the site type in the area and low density of artifacts.

3.9.1.2 MT. PONY ROUTE 2

One previously recorded archaeological site was identified adjacent to the proposed Mt. Pony Substation, associated with Mt. Pony Route 2: 44CU0135.

Site 44CU0135 is a late eighteenth to early nineteenth-century single dwelling site, currently unevaluated for the NRHP. Initially recorded in 2006 during a Phase I archaeological survey by Carol Tyrer, the site is classified as a single dwelling. However, the summary report (Tyrer 2006) only mentions a concentration of domestic and architectural artifacts, with no standing structures or structural ruins.

3.9.2 TECH PARK LINES

3.9.2.1 TECH PARK ROUTE 1

Three previously recorded archaeological sites were identified within the right-of-way for Tech Park Route 1: 44CU0137, 44CU0221, and 44CU0222.

Site 44CU0137 is an eighteenth-century road, currently unevaluated for the NRHP. The site spans approximately 0.3 miles and intersects with James Madison Highway. Initially recorded during a



CLIENT: Dominion Energy PROJECT NO: 0726778

site walk in 2006, it was not formally surveyed at that time. In 2009, a site reconnaissance,
including a pedestrian survey by Dovetail (Maroney 2009), confirmed that the road had remained
unchanged since its initial recording.
Site 44CU0221 is a late nineteenth to early twentieth-century single dwelling site, featuring structural ruins and an artifact scatter of domestic and architectural items. The site has experienced ground disturbance since its abandonment by residents in 2006. Currently, it remains unevaluated for the NRHP. Documented during a Phase I survey by Applied Archaeology and History Associates, Inc. in 2023, the site was recommended not eligible due to post-2006 ground disturbance and low artifact density (Gollup 2023).
Site 44CU0222 is a multi-component unknown temporal affiliation prehistoric and historic (nineteenth-twentieth century) artifact scatter. Located just 75 feet from site 44CU0220, it is likely that the two sites are related or possibly the same. The site is currently unevaluated for the NRHP. The site was recorded during a Phase I survey performed by Applied Archaeology and History Associates, Inc. in 2023 (Masters 2023a). It was recommended ineligible due to low artifact density and lack of diagnostic artifacts.
3.9.2.2 TECH PARK ROUTE 2
Two previously recorded archaeological sites were identified within the right-of-way for Tech Park Route 2: 44CU0221 and 44CU0222.
Site 44CU0221 is a late nineteenth to early twentieth-century single dwelling site, featuring structural ruins and an artifact scatter of domestic and architectural items. The site has experienced ground disturbance since its abandonment by residents in 2006. Currently, it remains unevaluated for the NRHP. Documented during a Phase I survey by Applied Archaeology and History Associates, Inc. in 2023, the site was deemed ineligible due to post-2006 ground disturbance and low artifact density (Gollup 2023).

Site 44CU0222 is a multi-component unknown temporal affiliation prehistoric and historic (nineteenth-twentieth century) artifact scatter. Located just 75 feet from site 44CU0220, it is likely that the two sites are related or possibly the same. The site is currently unevaluated for the NRHP. The site was recorded during a Phase I survey performed by Applied Archaeology and



CONVERSION PROJECT
History Associates, Inc. in 2023 (Masters 2023a). It was recommended ineligible due to low artifact density and lack of diagnostic artifacts.
3.9.2.3 TECH PARK ROUTE 3
Four previously recorded archaeological sites were identified within the right-of-way for Tech Park Route 3: 44CU0219, 44CU0220, 44CU0221, and 44CU0222.
Site 44CU0219 is a multi-component prehistoric artifact scatter site with an unknown temporal affiliation, as well as a historic (1900–1949) isolated find. Currently, the site has not been evaluated for the NRHP. It was documented during a Phase I survey conducted by Applied Archaeology and History Associates, Inc. in 2023 (Masters 2023b). Due to the low density of artifacts and the absence of diagnostic artifacts, the site was recommended as ineligible.
Site 44CU0220 is a multi-component unknown temporal affiliation prehistoric and historic (nineteenth-twentieth century) artifact scatter. The site has an irregular shape and is located near sites 44CU0219 and 44CU0222, indicating a potential relationship among them. The site is currently unevaluated for the NRHP. The site was recorded during a Phase I survey performed by Applied Archaeology and History Associates, Inc. in 2023 (Masters 2023c). It was recommended ineligible due to low artifact density and lack of diagnostic artifacts.
Site 44CU0221 is a late nineteenth to early twentieth-century single dwelling site, featuring structural ruins and an artifact scatter of domestic and architectural items. The site has experienced ground disturbance since its abandonment by residents in 2006. Currently, it remains unevaluated for the NRHP. Documented during a Phase I survey by Applied Archaeology and History Associates, Inc. in 2023, the site was deemed ineligible due to post-2006 ground disturbance and low artifact density (Gollup 2023).
Site 44CU0222 is a multi-component unknown temporal affiliation prehistoric and historic (nineteenth-twentieth century) artifact scatter. Located just 75 feet from site 44CU0220, it is likely that the two sites are related or possibly the same. The site is currently unevaluated for the NRHP. The site was recorded during a Phase I survey performed by Applied Archaeology and



CLIENT: Dominion Energy
PROJECT NO: 0726778

DATE: 19 February 2025 VERSION: 01

artifact density and lack of diagnostic artifacts.

History Associates, Inc. in 2023 (Masters 2023a). It was recommended ineligible due to low

3.9.3 OAK GREEN REBUILD AND RELOCATION

No previously recorded archaeological sites were identified within the right-of-way for the Oak Green Rebuild and Relocation.

3.9.4 REMINGTON REBUILD

No previously recorded archaeological sites were identified within the right-of-way for the Remington Rebuild.



CLIENT: Dominion Energy
PROJECT NO: 0726778

DATE: 19 February 2025 VERSION: 01

4. CONCLUSION AND RECOMMENDATIONS

The pre-application analysis gathered information on archaeological and historic architectural resources that qualify for consideration according to the VDHR Guidelines for transmission line projects.

Seven known archaeological sites are located within the right-of-way of the transmission line routes or adjacent to the proposed substations reviewed in this study. An assessment of the condition and research potential of those sites is contingent upon archaeological field investigations, which will be conducted at relevant sites once a preferred route for the Project is selected by the SCC. Potential impacts to sites along the preferred route will be assessed as part of the field survey.

Thirty-four aboveground historic resources fall within the VDHR study tiers for the routes under consideration. A comparison of the number of resources impacted and the degree of impact of each route is presented in Table 14. The specific resources affected by each route are covered in the subsections that follow.

TABLE 14 COMPARISON OF PROJECT IMPACTS ON HISTORIC RESOURCES IN THE STUDY AREAS OF THE ALTERNATIVE ROUTES

Route Alternative	Number of Considered Resources in Each Impact Category						
	None	Minimal	Moderate	Severe	Total		
Mt. Pony Route 1	3	1	6		10		
Mt. Pony Route 2	4	2			6		
Tech Park Route 1	13	3			16		
Tech Park Route 2	12	3			15		
Tech Park Route 3	12	3			15		
Oak Green Rebuild and Relocation	1	3			4		
Remington Rebuild	5	2			7		

Final assessments of Project impacts will be dependent on the completion of identification-phase archaeological and historic structure surveys along the routes selected by the SCC followed by review of survey results by VDHR and other consulting parties. For any resources where the agencies concur in a finding of moderate or severe impact, the Company will propose treatments to avoid, minimize, or mitigate those impacts. Treatment options for archaeological sites could include selective structure placement to avoid direct impacts on sites, minor route adjustments to avoid crossing sites, or archaeological data recovery. Treatment options for aboveground historic resources could include detailed site documentation, historic research, and historic preservation studies; preparation of digital media or museum-type exhibits on sites for public interpretation; installation of historic markers or signs; installation of vegetative screening; or contributions to

historical preservation organizations or specific preservation projects. Additional mitigations could be identified through consultation with VDHR and other consulting parties.

4.1 MT. PONY LINES

4.1.1 MT. PONY ROUTE 1

Ten previously recorded historic resources meet the criteria specified in the Guidelines within the VDHR study tiers for Mt. Pony Route 1 (Table 15). The route would have no impact on three resources (023-5161, 023-5162, and 204-0070), a minimal impact on one resource (023-5055), and a moderate impact on six resources (023-0018, 023-0084, 023-5023, 023-5040, 023-5494, and 068-5007).

TABLE 15 IMPACTS ON HISTORIC RESOURCE IN THE VDHR STUDY TIERS FOR MT. PONY ROUTE 1

Buffer (miles)	Resource Category	Resource Number	Description	Impact
1.0 to 1.5	National Historic Landmarks	-	-	-
	National Register Properties (Listed)	204-0070ª	Greenwood	None
0.5 to 1.0	National Register - Eligible	-	-	-
0.5 to 1.0	Locally Significant	023-5161	St. Steven's Baptist Church	None
		023-5162	Zimmerman's Tavern	None
	National Register Properties (Listed)	023-0018	Rose Hill	Moderate
0.0 to 0.5	National Register - Eligible	-	-	-
	Battlefields (Potentially Eligible)	023-5055	Brandy Station Battlefields	Minimal
	National Register Properties	023-5023	Mount Castle	Moderate
	(Listed)	023-5040 ^a	Croftburn Farm	Moderate
0.0 (within ROW)	National Register - Eligible	023-0084ª	Mount Pony Rural Historic District	Moderate
		023-5494	House	Moderate
	Battlefields (Potentially Eligible)	068-5007	Battle of Morton's Ford	Moderate

Source: VDHR 2024

4.1.2 MT. PONY ROUTE 2

Six previously recorded historic resources meet the criteria specified in the Guidelines within the VDHR study tiers for Mt. Pony Route 2 (Table 16). The route would have no impact on four



^a Resource is within the designated tiers for the proposed Mt. Pony Substation

resources (023-5041, 068-5007, 068-5033, and 204-0070) and a minimal impact on two resources (023-5040 and 023-0084).

TABLE 16 IMPACTS ON HISTORIC RESOURCE IN THE VDHR STUDY TIERS FOR MT. PONY ROUTE 2

Buffer (miles)	Resource Category	Resource Number	Description	Impact
1.0 to 1.5	National Historic Landmarks	-	-	-
	National Register Properties	023-5041	Eckington School	None
	(Listed)	204-0070a	Greenwood	None
0.5 to 1.0	National Register - Eligible	068-5033	Rapidan River and Clark Mountain Rural Historic District	None
	Battlefields (Potentially Eligible)	068-5007	Battle of Morton's Ford	None
0.0 to 0.5	National Register Properties (Listed)	023-5040	Croftburn Farm	Minimal
	National Register - Eligible	023-0084	Mount Pony Rural Historic District	Minimal
0.0 (within ROW)	National Historic Landmarks, National Register Properties (Listed and Eligible)	-	-	-

Source: VDHR 2024

4.2 TECH PARK LINES

4.2.1 TECH PARK ROUTE 1

Sixteen previously recorded historic architectural resources meet the criteria specified in the Guidelines within the VDHR study tiers for Tech Park Route 1 (Table 17). The route would have no impact on 13 resources (023-5023, 204-0002, 204-0003, 204-0005, 204-0006, 204-0020, 204-0020-0140, 204-0021, 204-0069, 204-0070, 204-5053, 204-5067, and 204-5097) and a minimal impact on three resources (023-0084, 023-5040, and 204-0064).



^a Resource is within the designated tiers for the proposed Mt. Pony Substation

TABLE 17 IMPACTS ON HISTORIC RESOURCE IN THE VDHR STUDY TIERS FOR TECH PARK ROUTE 1

Buffer (miles)	Resource Category	Resource Number	Description	Impact
1.0 to 1.5	National Historic Landmarks	-	-	-
	National Register Properties	023-5023	Mount Castle	None
	(Listed)	204-0006 ^{a, b, c}	A.P. Hill Boyhood Home	None
		204-0021 ^{a, b, c}	Corrie Hill House	None
0.5 to 1.0		204-0070 ^{a, b, c}	Greenwood	None
		204-5097 ^{a, b, c}	Culpeper Light & Power	None
	Locally Significant	204-0020- 0140 ^{a, b, c}	Antioch Baptist Church	None
	National Register Properties	204-0002 ^{a, b, c}	Hill Mansion	None
	(Listed)	204-0003 ^{a, b, c}	Saint Stephen's Episcopal Church	None
		204-0005 ^{a, b, c}	Burgandine House	None
		204-0020 ^{a, b, c}	Culpeper Historic District	None
0.0 to 0.5		204-0064 ^{a, b, c}	South East Street Historic District	Minimal
		204-0069 ^{a, b, c}	Culpeper National Cemetery	None
		204-5053 ^{a, b, c}	Pitts Theater	None
		204-5067 ^{a, b, c}	Lord Culpeper Hotel	None
	National Register - Eligible	-	-	-
0.0	National Register Properties (Listed)	023-5040	Croftburn Farm	Minimal
(within ROW)	National Register - Eligible	023-0084	Mount Pony Rural Historic District	Minimal

Source: VDHR 2024

4.2.2 TECH PARK ROUTE 2

Fifteen previously recorded historic resources meet the criteria specified in the Guidelines within the VDHR study tiers for Tech Park Route 2 (Table 18). The route would have no impact on 12 resources (204-0002, 204-0003, 204-0005, 204-0006, 204-0020, 204-0020-0140, 204-0021, 204-0069, 204-0070, 204-5053, 204-5067, and 204-5097) and a minimal impact on three resources (023-0084, 023-5040, and 204-0064).



^a Resource is within the designated tiers for the proposed Palomino Substation

^b Resource is within the designated tiers for the proposed Chandler Substation

^c Resource is within the designated tiers for the proposed McDevitt Substation

TABLE 18 IMPACTS ON HISTORIC RESOURCE IN THE VDHR STUDY TIERS FOR TECH PARK ROUTE 2

Buffer (miles)	Resource Category	Resource Number	Description	Impact
1.0 to 1.5	National Historic Landmarks	-	-	-
	National Register Properties (Listed)	204-0006 ^{a, b, c}	A.P. Hill Boyhood Home	None
0.5.4.0		204-0021 ^{a, b, c}	Corrie Hill House	None
0.5 to 1.0		204-0070 ^{a, b, c}	Greenwood	None
		204-5097 ^{a, b, c}	Culpeper Light & Power	None
	Locally Significant	204-0020-0140 ^{a, b, c}	Antioch Baptist Church	None
	National Register Properties	023-5040	Croftburn Farm	Minimal
	(Listed)	204-0002 ^{a, b, c}	Hill Mansion	None
		204-0003 ^{a, b, c}	Saint Stephen's Episcopal Church	None
		204-0005 ^{a, b, c}	Burgandine House	None
		204-0020 ^{a, b, c}	Culpeper Historic District	None
0.0 to 0.5		204-0064 ^{a, b, c}	South East Street Historic District	Minimal
		204-0069 ^{a, b, c}	Culpeper National Cemetery	None
		204-5053 ^{a, b, c}	Pitts Theater	None
		204-5067 ^{a, b, c}	Lord Culpeper Hotel	None
	National Register - Eligible	023-0084	Mount Pony Rural Historic District	Minimal
0.0 (within ROW)	National Historic Landmarks, National Register Properties (Listed and Eligible)	-	-	-

Source: VDHR 2024

4.2.3 TECH PARK ROUTE 3

Fifteen previously recorded historic resources meet the criteria specified in the Guidelines within the VDHR study tiers for Tech Park Route 3 (Table 19). The route would have no impact on 12 resources (204-0002, 204-0003, 204-0005, 204-0006, 204-0020, 204-0020-0140, 204-0021, 204-0069, 204-0070, 204-5053, 204-5067, and 204-5097) and a minimal impact on three resources (023-0084, 023-5040, and 204-0064).



^a Resource is within the designated tiers for the proposed Palomino Substation

^b Resource is within the designated tiers for the proposed Chandler Substation

^c Resource is within the designated tiers for the proposed McDevitt Substation

TABLE 19 IMPACTS ON HISTORIC RESOURCE IN THE VDHR STUDY TIERS FOR TECH PARK ROUTE 3

Buffer (miles)	Resource Category	Resource Number	Description	Impact
1.0 to 1.5	National Historic Landmarks	-	-	-
	National Register Properties (Listed)	204-0006 ^{a, b, c}	A.P. Hill Boyhood Home	None
0.5. 4.0		204-0021 ^{a, b, c}	Corrie Hill House	None
0.5 to 1.0		204-0070 ^{a, b, c}	Greenwood	None
		204-5097 ^{a, b, c}	Culpeper Light & Power	None
	Locally Significant	204-0020-0140 ^{a, b, c}	Antioch Baptist Church	None
	National Register Properties	023-5040	Croftburn Farm	Minimal
	(Listed)	204-0002 ^{a, b, c}	Hill Mansion	None
		204-0003 ^{a, b, c}	Saint Stephen's Episcopal Church	None
		204-0005 ^{a, b, c}	Burgandine House	None
		204-0020 ^{a, b, c}	Culpeper Historic District	None
0.0 to 0.5		204-0064 ^{a, b, c}	South East Street Historic District	Minimal
		204-0069 ^{a, b, c}	Culpeper National Cemetery	None
		204-5053 ^{a, b, c}	Pitts Theater	None
		204-5067 ^{a, b, c}	Lord Culpeper Hotel	None
	National Register - Eligible	023-0084	Mount Pony Rural Historic District	Minimal
0.0 (within ROW)	National Historic Landmarks, National Register Properties (Listed and Eligible)	-	-	-

Source: VDHR 2024

4.3 OAK GREEN REBUILD AND RELOCATION

Four previously recorded historic resources meet the criteria specified in the Guidelines within the VDHR study tiers for the Oak Green Rebuild and Relocation (Table 20). The route would have no impact on one resource (068-0473) and a minimal impact on three resources (068-0031, 068-0131, and 068-5033).



^a Resource is within the designated tiers for the proposed Palomino Substation

^b Resource is within the designated tiers for the proposed Chandler Substation

^c Resource is within the designated tiers for the proposed McDevitt Substation

TABLE 20 IMPACTS ON HISTORIC RESOURCE IN THE VDHR STUDY TIERS FOR THE OAK GREEN REBUILD AND RELOCATION

Buffer (miles)	Resource Category	Resource Number	Description	Impact
1.0 to 1.5	National Historic Landmarks	-	-	-
0.5 to 1.0	National Register Properties (Listed)	-	-	-
	Locally Significant	068-0473a	Mt. Holy Baptist Church	None
0.0 to 0.5	National Register Properties (Listed)	068-0131	Lessland	Minimal
	National Register - Eligible	-	-	-
	National Register - Eligible	068-0031ª	Morton Hall	Minimal
0.0 (within ROW)		068-5033ª	Rapidan River and Clark Mountain Rural Historic District	Minimal

Source: VDHR 2024

4.4 REMINGTON REBUILD

Seven previously recorded historic resources meet the criteria specified in the Guidelines within the VDHR study tiers for the Remington Rebuild (Table 21). The route would have no impact on five resources (023-5049, 030-5593, 030-5607, 030-5852, and 288-5001) and a minimal impact on two resources (023-5050 and 030-5587).

CLIENT: Dominion Energy CLIENT: Dominion Energy
PROJECT NO: 0726778

DATE: 19 February 2025 VERSION: 01

^a Resource is within the designated tier for the Relocated Oak Green Switching Station

TABLE 21 IMPACTS ON HISTORIC RESOURCE IN THE VDHR STUDY TIERS FOR THE REMINGTON REBUILD

Buffer (miles)	Resource Category	Resource Number	Description	Impact
1.0 to 1.5	National Historic Landmarks	-	-	-
	National Register Properties (Listed)	288-5001	Remington Historic District	None
0.5 to 1.0	National Register - Eligible	030-5593	Rappahannock River 1862 Northern Virginia Campaign Rural Historic District	None
		030-5607	Hedgeman-Rappahannock Rural Historic District	None
	Locally Significant	030-5852	Piney Ridge School	None
	National Register - Eligible	-	-	-
0.0 to 0.5	Battlefields (Potentially Eligible)	023-5049	Freeman's Ford Battlefield	None
0.0 (within ROW)	Battlefields (Potentially Eligible)	023-5050	Rappahannock Station Battlefield II	Minimal
	Rural Historic Districts (Potentially Eligible)	030-5587	Mt. Holly Ridge-Marsh Run Rural Historic District	Minimal

Source: VDHR 2024

4.5 FUTURE INVESTIGATIONS

The next stage of assessing impacts on historic resources will be to conduct an identificationphase field survey to identify and assess resources along the specific route selected by the SCC that could be impacted by the Project. Survey will be conducted in accordance with the following guidelines:

- Guidelines for Assessing Impacts of Proposed Electrical Transmission Lines and Associated Facilities on Historic Resources in the Commonwealth of Virginia (VDHR 2008);
- Guidelines for Conducting Historic Resources Survey in Virginia (VDHR 2017);
- National Register Bulletin 15: How to Apply the National Register Criteria for Evaluation (National Park Service [NPS] 1995).

The survey teams will be led by individuals meeting the Secretary of the Interior's professional qualifications standards for archaeology and architectural history, respectively. Teams will traverse the length of the Project corridor, revisiting previously recorded archaeological and historic architectural resources and documenting additional as-of-yet unrecorded resources in the survey area defined in the Guidelines for the Project design. The archaeological survey will adhere to VDHR survey standards (VDHR 2017) and will entail systematic coverage of the approved route. All material culture, including artifacts and features, that could be 50 years old or older will be recorded. Sites will be delineated within the proposed right-of-way and investigations will include



subsurface testing sufficient to inform recommendations of potential eligibility for the NRHP under Criterion D. Each site will be fully documented with appropriate mapping, digital photography, and artifact collection/analysis. Site forms will be prepared for VCRIS submittal along with full descriptions in the technical report. The historic architectural survey will likewise adhere to VDHR standards. While the NPS Bulletin 15 (NPS 1995) defines a historic property as a resource that is 50 years or older, for the purposes of this Project, survey will include those 45 years or older to accommodate the length of time needed to complete the permitting phase for the Project. Furthermore, the survey will also record those resources that may have reached significance prior to the 50 (45) year age in accordance with NPS guidance if they are integral parts of districts or have merit to be considered eligible for the NRHP on their own. Digital photographs will be taken to record resources' overall appearance and details. Sketch maps will be drawn depicting the relationship of dwellings to outbuildings and associated landscape features. Additional information on the structures' appearance and integrity will be recorded to assist in making recommendations of NRHP eligibility. Historic maps, aerial photographs, and tax assessor data will be consulted to assist in dating the resources. Resources identified in the field effort will be reported to the VDHR, VCRIS numbers will be obtained, and shapefiles and database information will be provided. Sufficient information will be collected to make recommendations for each identified historic resource regarding eligibility for listing on the NRHP and to assess Project impacts.



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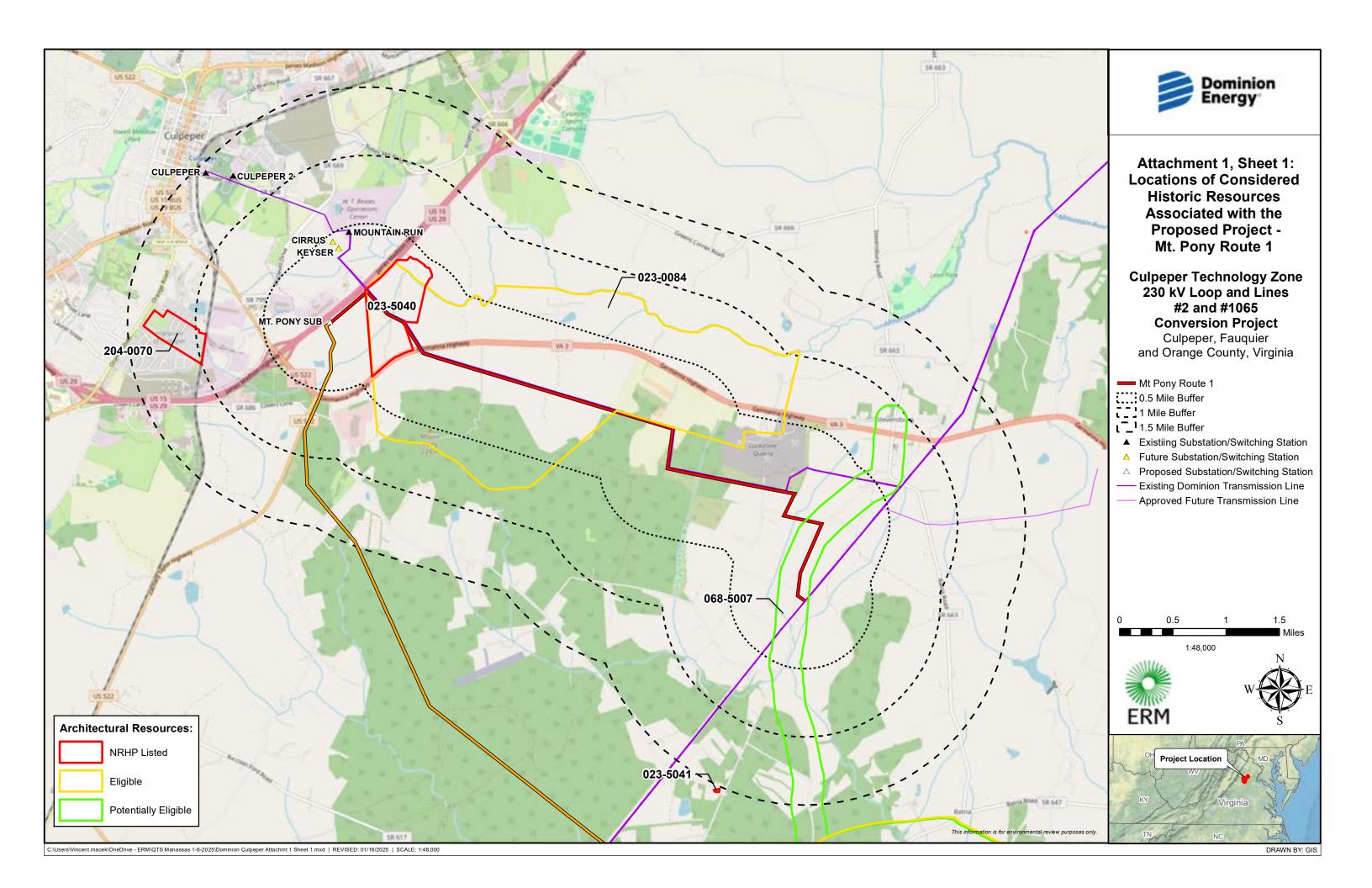
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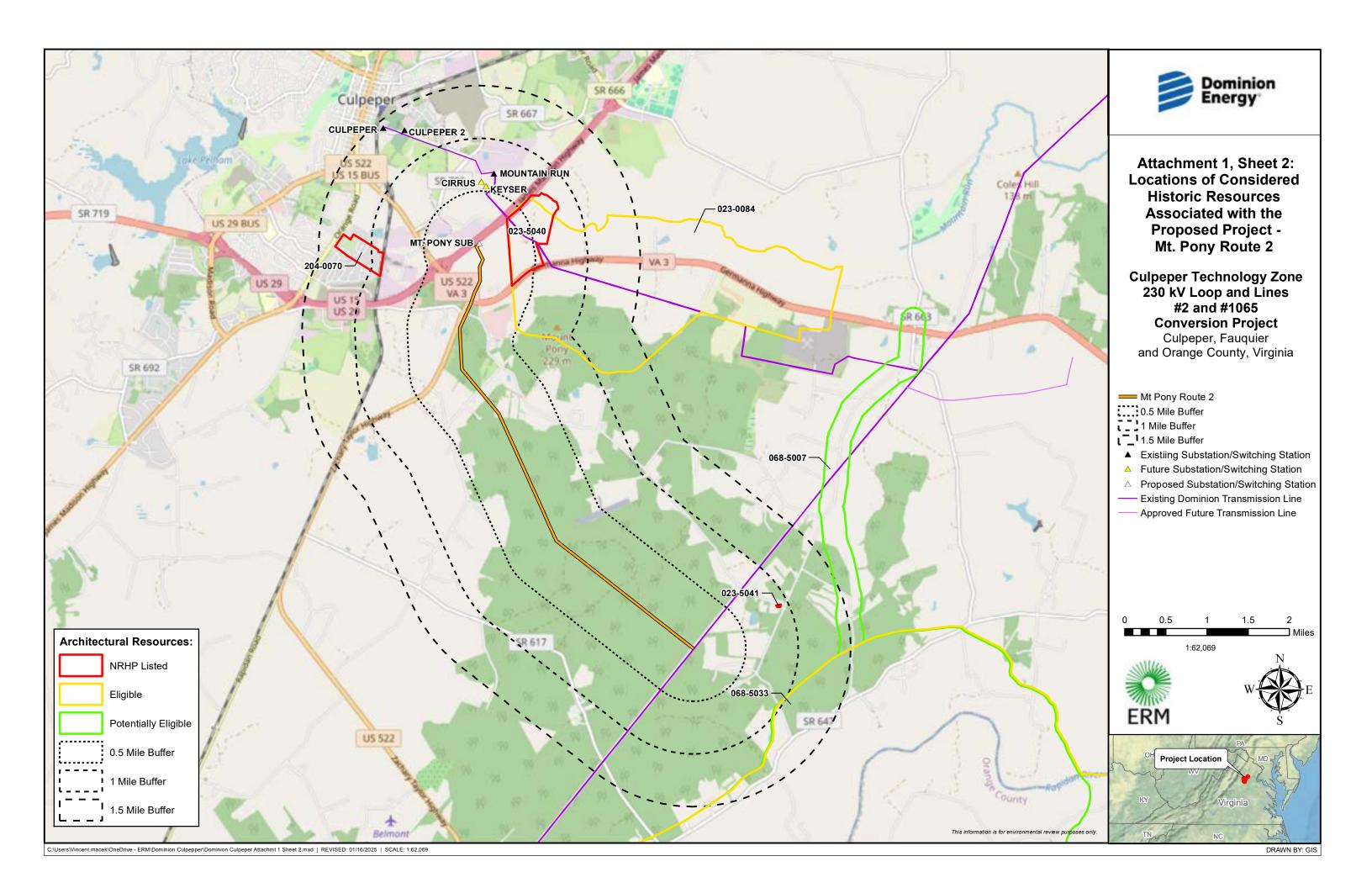
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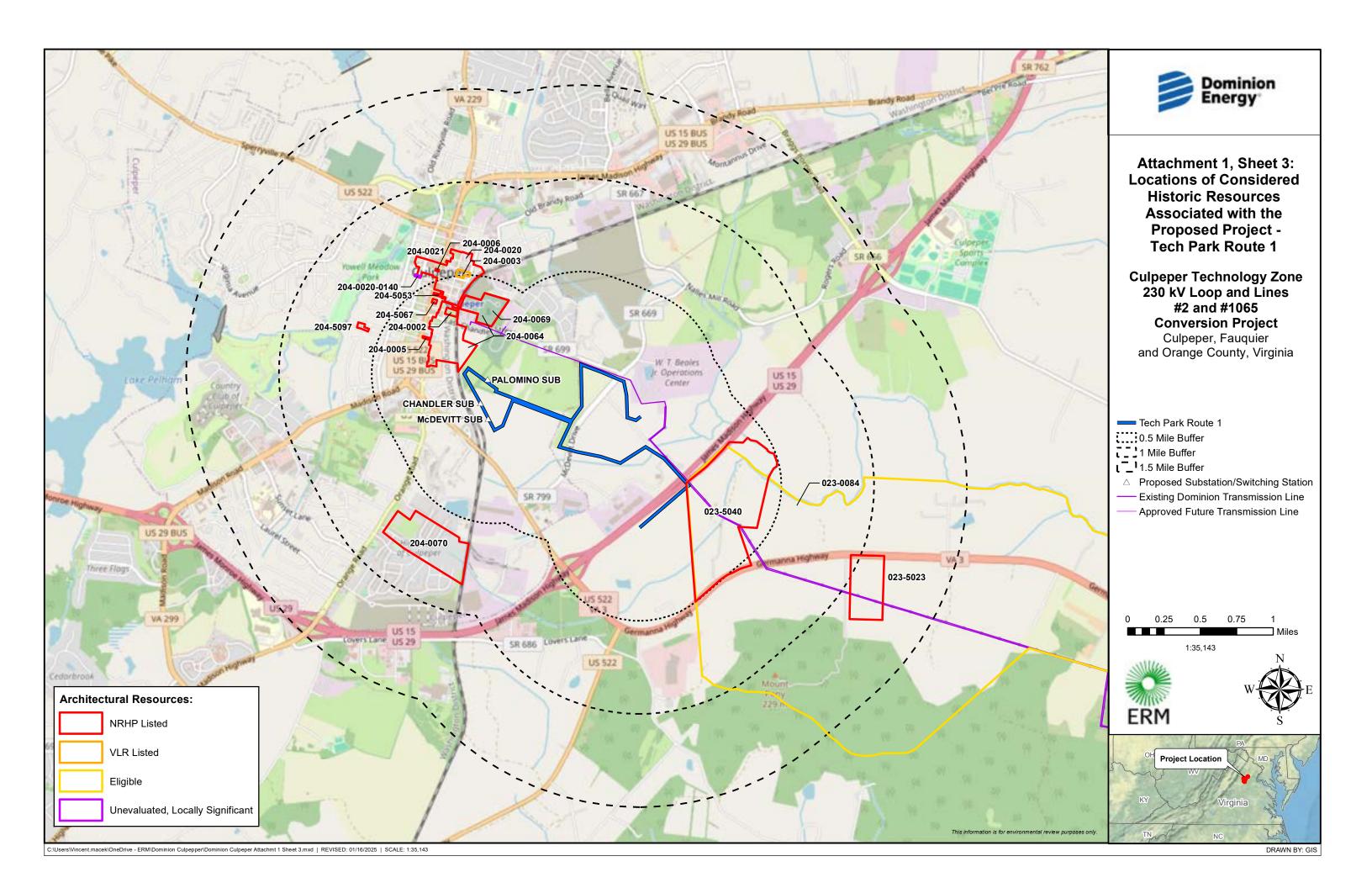


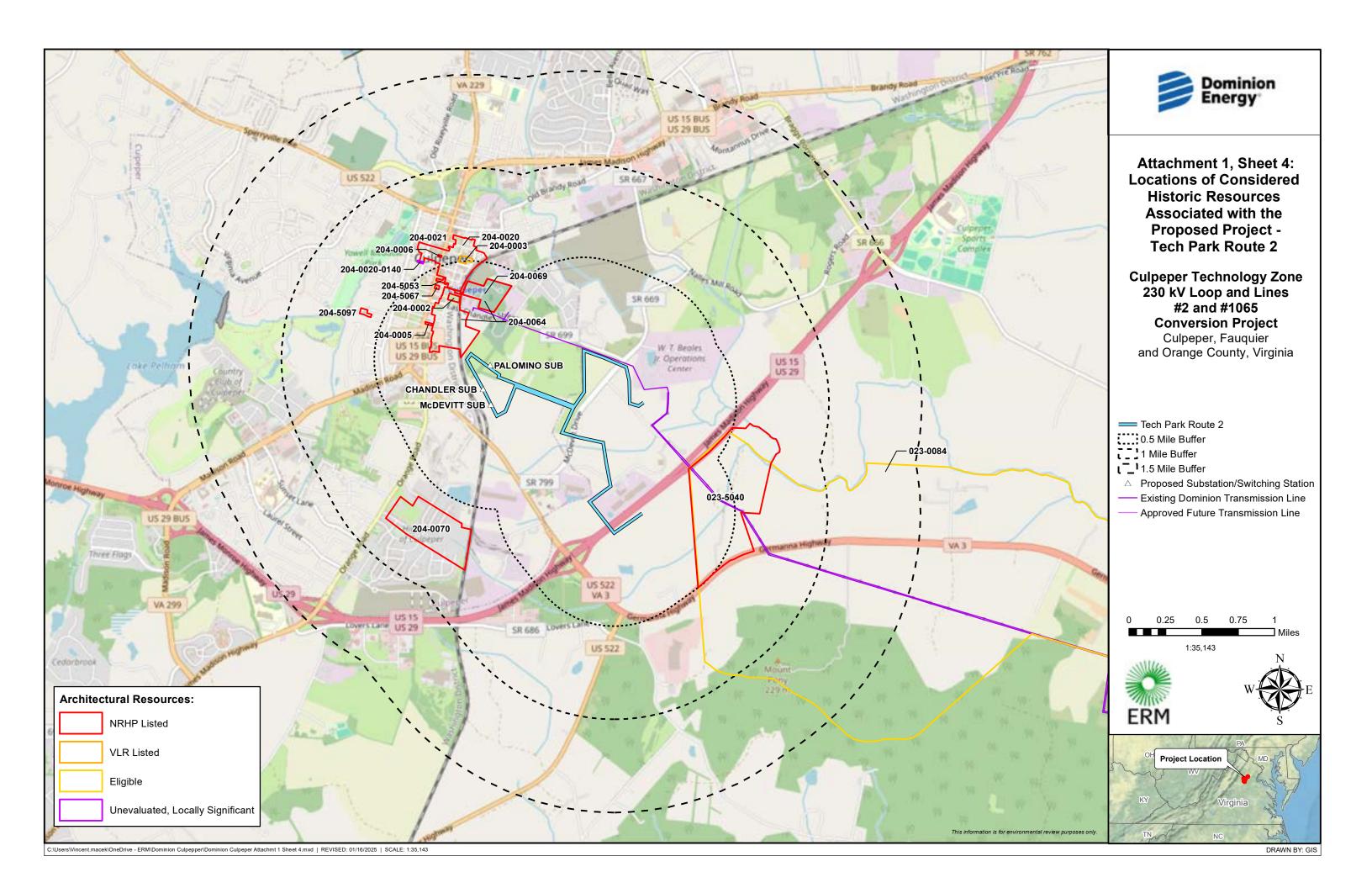


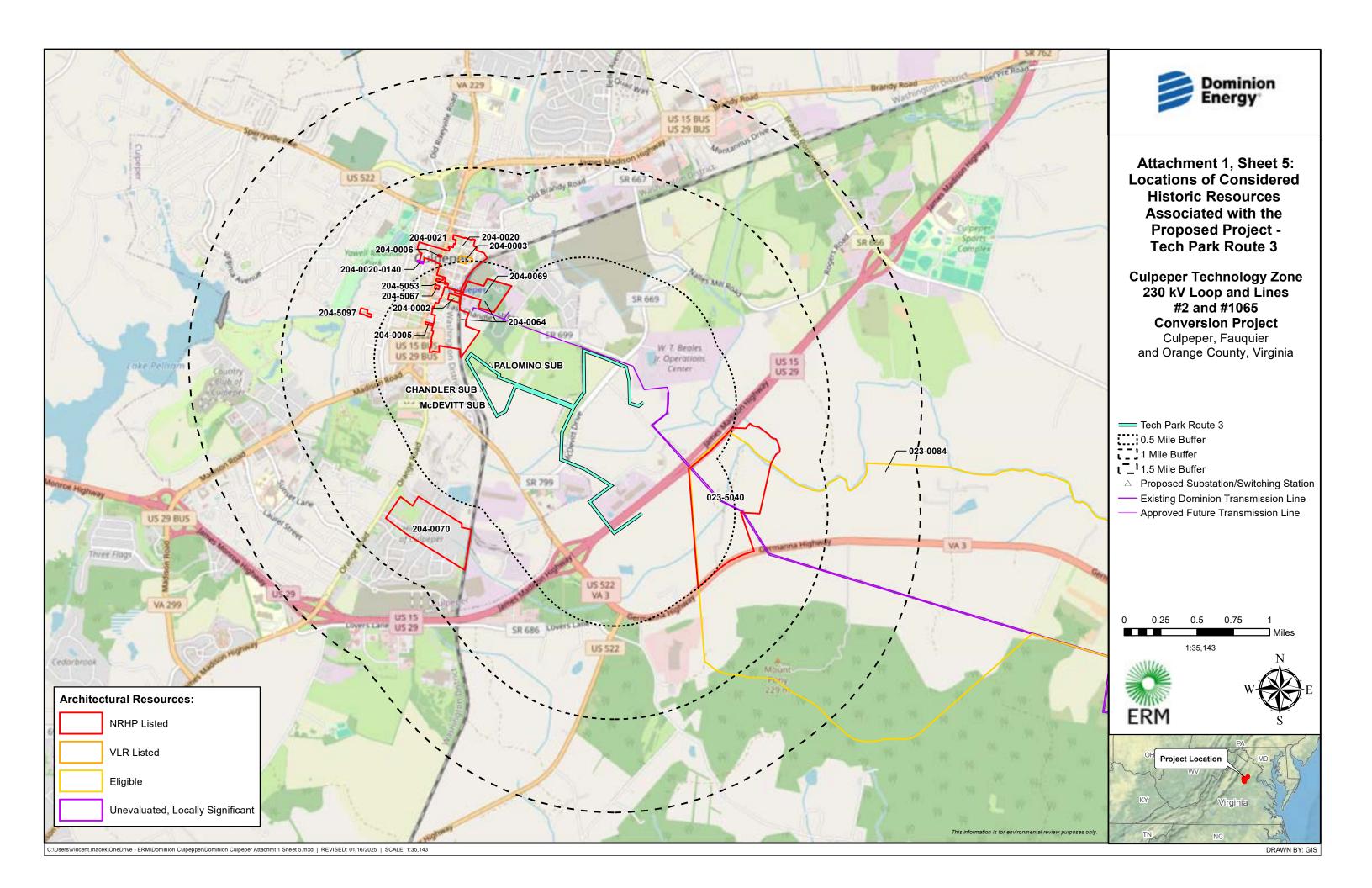
ATTACHMENT 1 LOCATIONS OF CONSIDERED HISTORIC RESOURCES ASSOCIATED WITH PROPOSED PROJECT



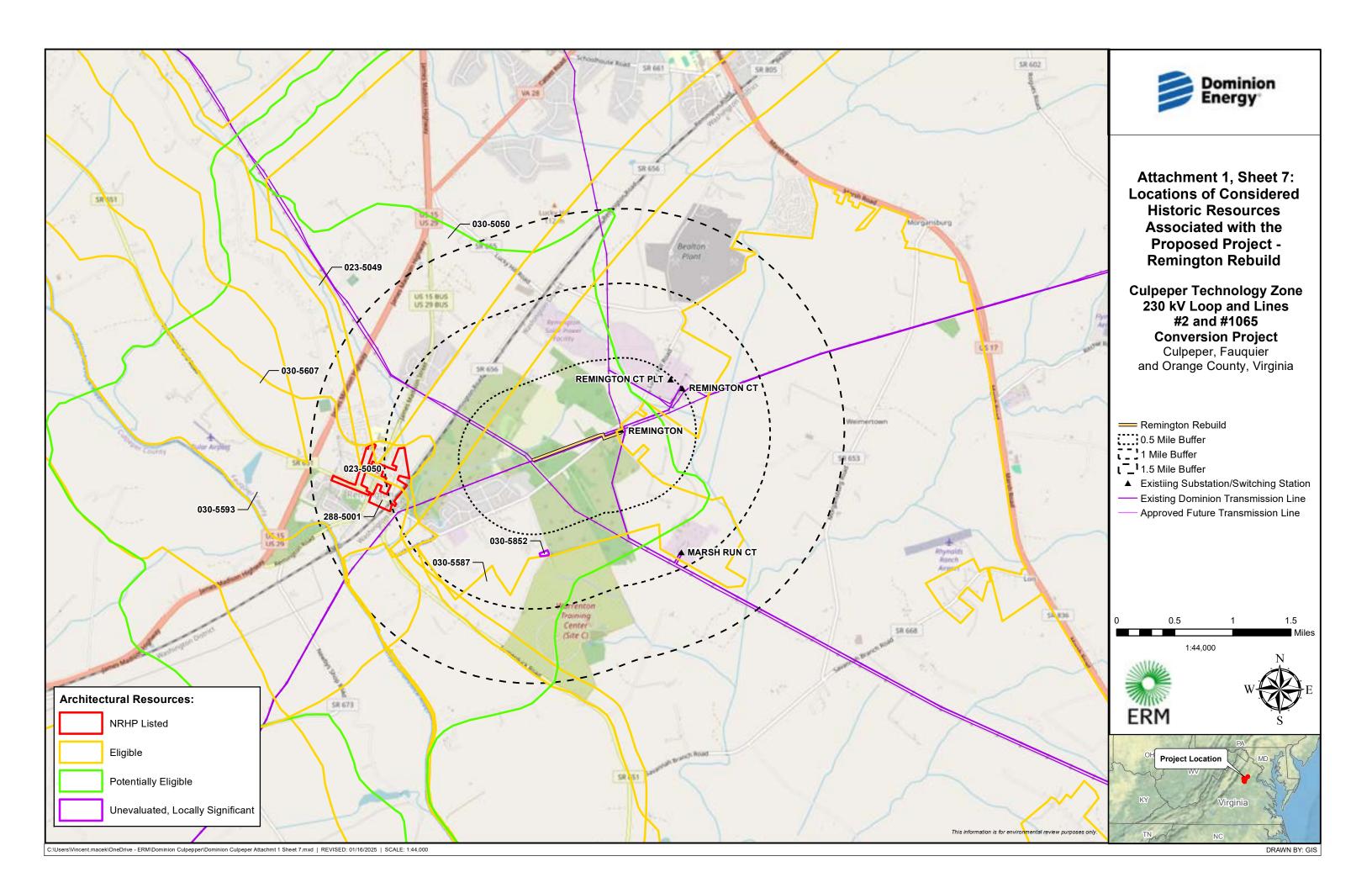














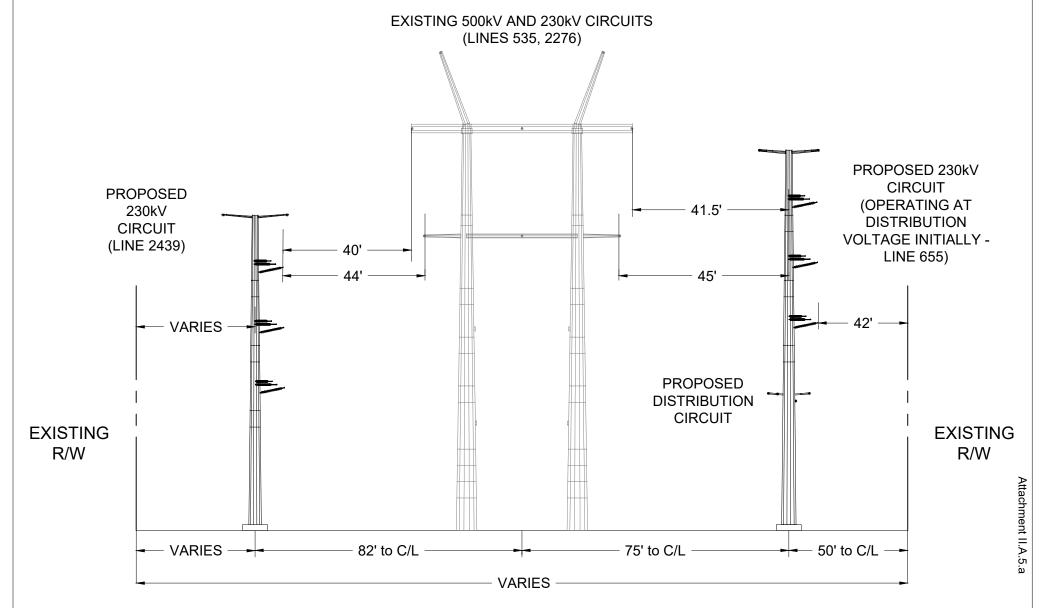
ATTACHMENT 2 CULTURAL RESOURCES SURVEYS WITHIN 1 MILE OF ROUTES





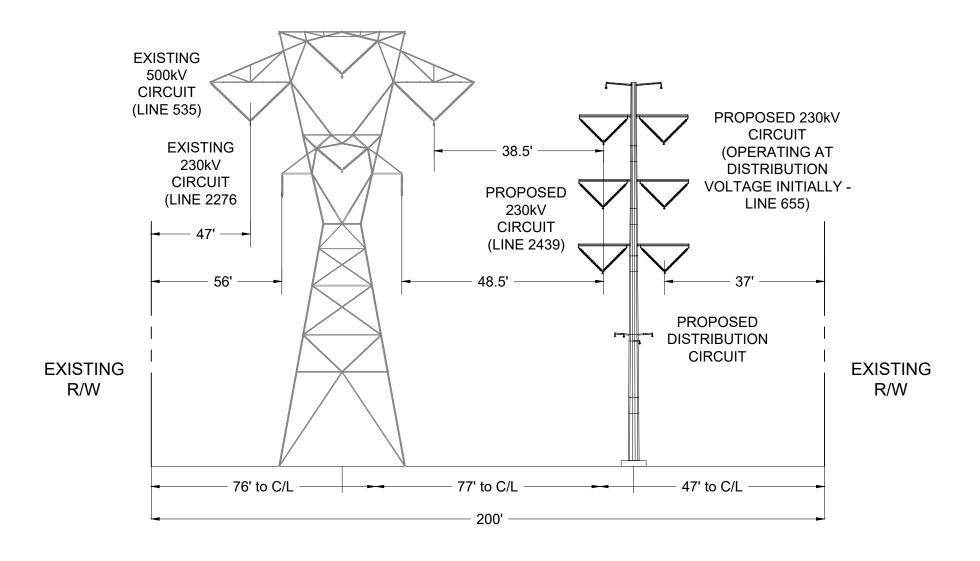
ATTATCHMENT 3 TYPICAL DESIGN AND LAYOUT

PROPOSED CONFIGURATION (LOOKING TOWARD MT. PONY FROM REMINGTON SUBSTATION)



TYPICAL RIGHT OF WAY

PROPOSED CONFIGURATION (LOOKING TOWARD MT. PONY FROM REMINGTON SUBSTATION)

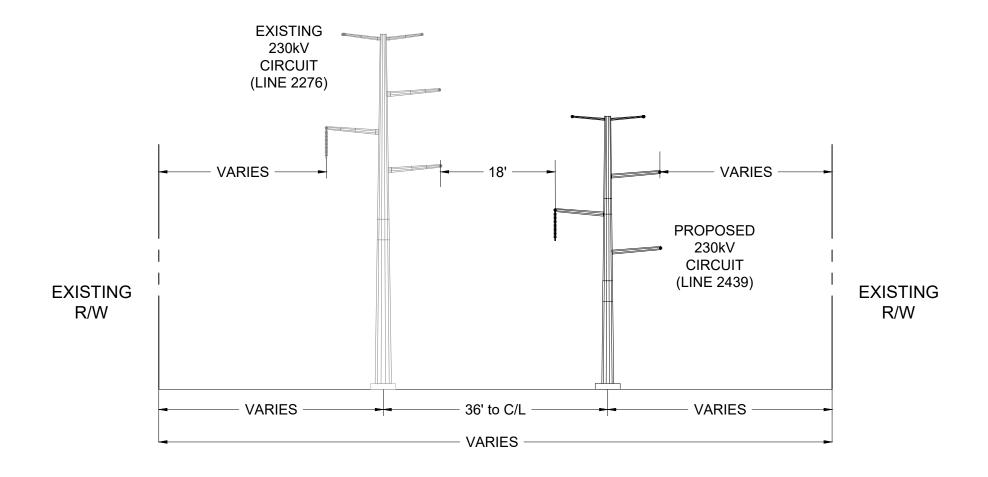


TYPICAL RIGHT OF WAY

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

achment II.A.b.t

PROPOSED CONFIGURATION (LOOKING TOWARD MT. PONY FROM REMINGTON SUBSTATION)

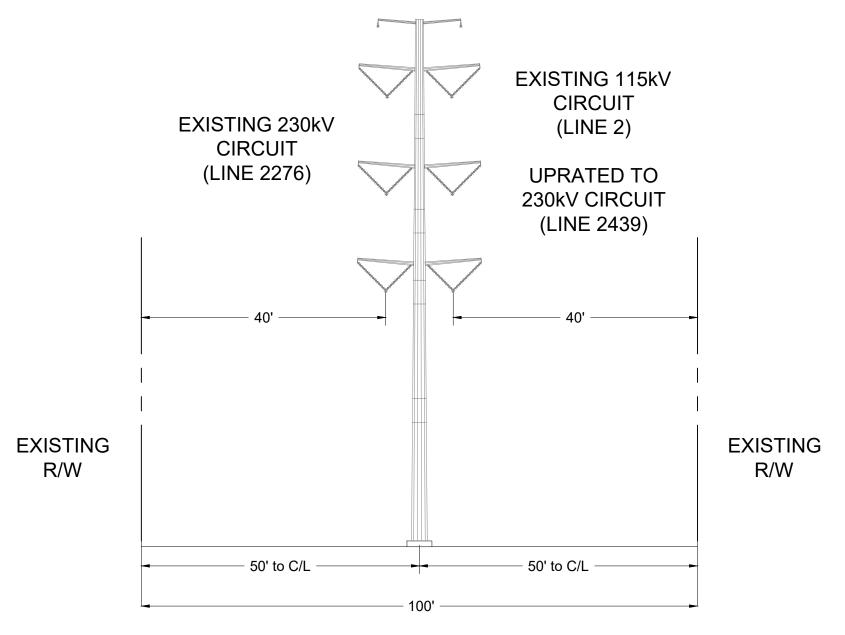


TYPICAL RIGHT OF WAY

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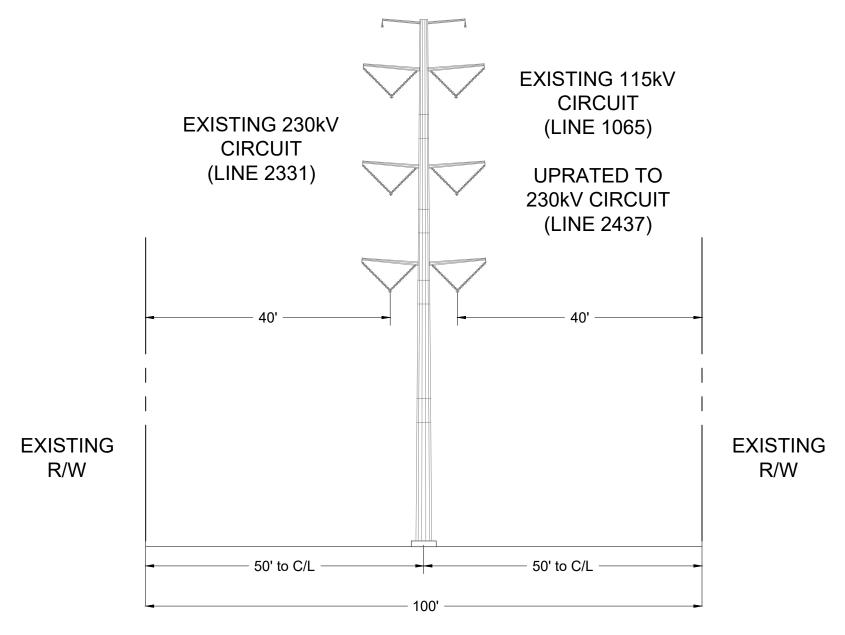
achment II.A.5.0

EXISTING CONFIGURATION (LOOKING TOWARD MT. PONY FROM REMINGTON SUBSTATION)



TYPICAL RIGHT OF WAY

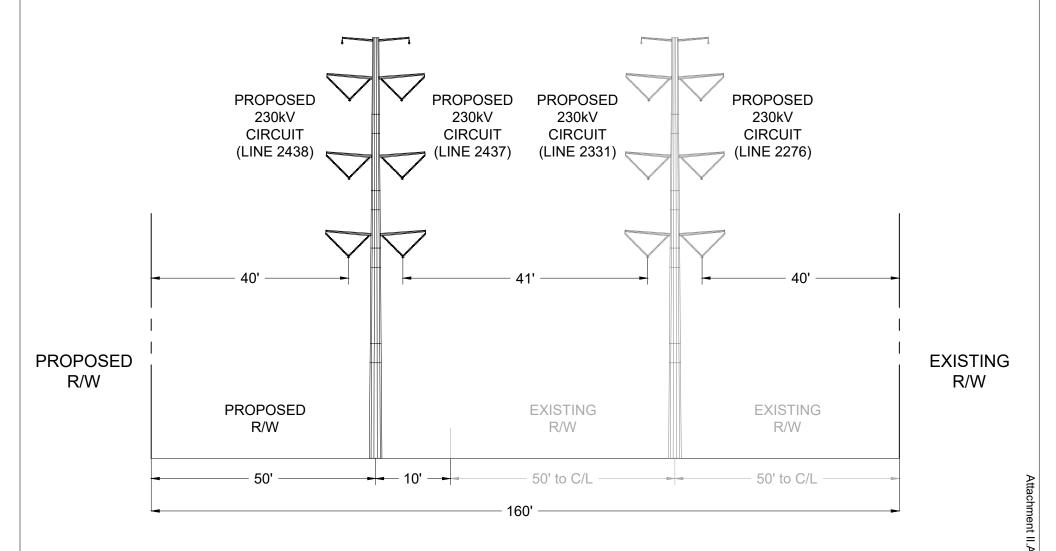
EXISTING CONFIGURATION (LOOKING TOWARD MT. PONY FROM REMINGTON SUBSTATION)



TYPICAL RIGHT OF WAY

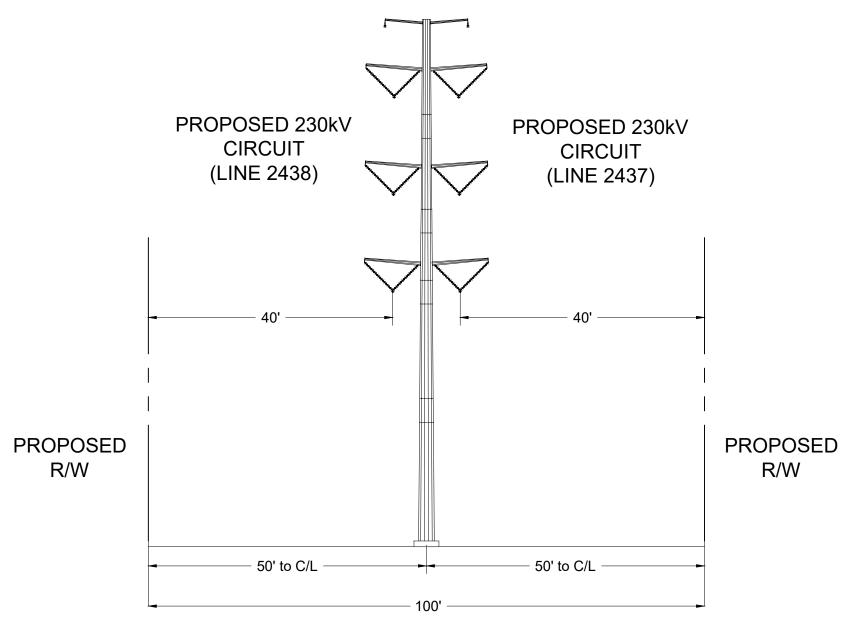
Attachment II.A.5.e

PROPOSED CONFIGURATION (LOOKING TOWARD MT. PONY FROM REMINGTON SUBSTATION)



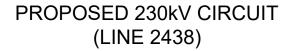
TYPICAL RIGHT OF WAY

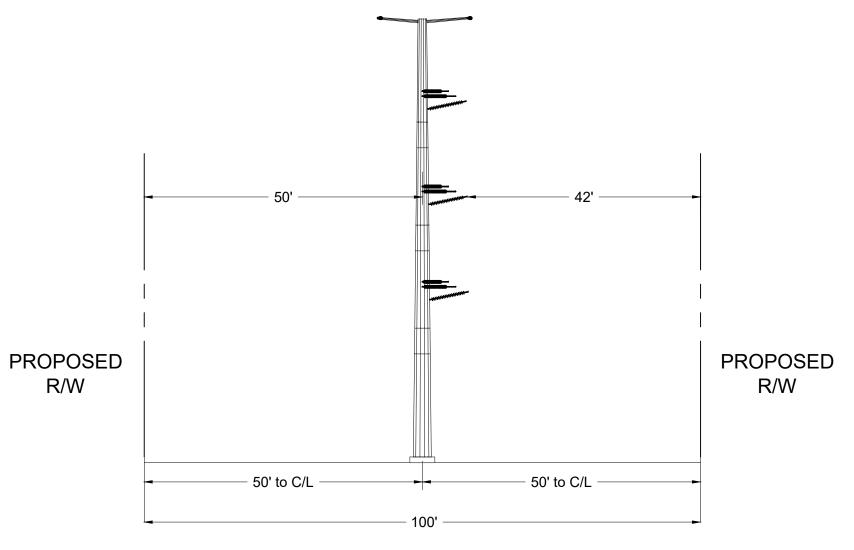
PROPOSED CONFIGURATION (LOOKING TOWARD MT. PONY FROM REMINGTON SUBSTATION)



TYPICAL RIGHT OF WAY

PROPOSED CONFIGURATION (LOOKING TOWARD MT. PONY FROM OAK GREEN SUBSTATION)

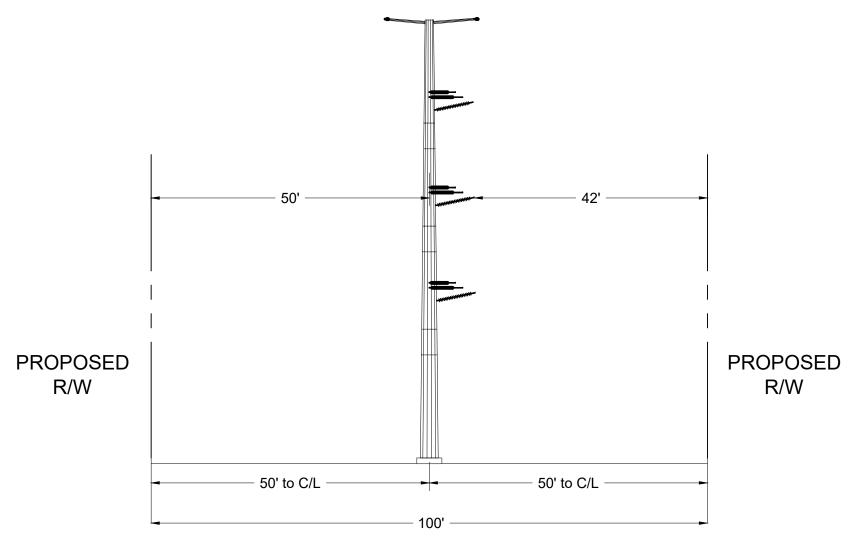




TYPICAL RIGHT OF WAY

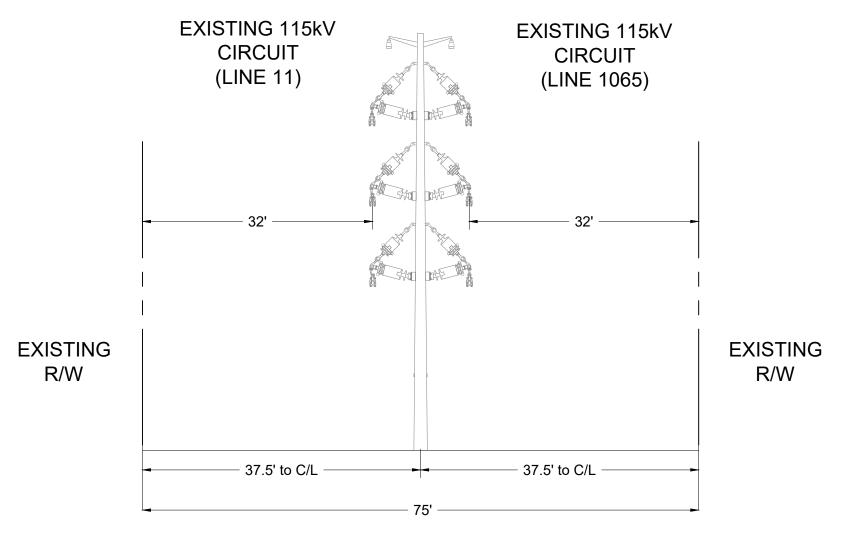
PROPOSED CONFIGURATION (LOOKING TOWARD MT. PONY FROM OAK GREEN SUBSTATION)

PROPOSED 230kV CIRCUIT (OPERATING AT 115kV - LINE 11)



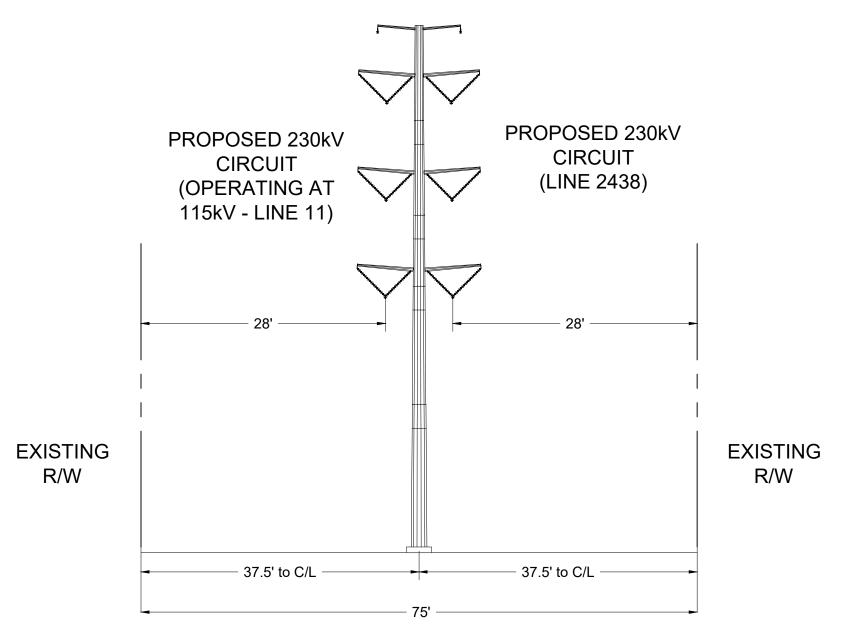
TYPICAL RIGHT OF WAY

EXISTING CONFIGURATION (LOOKING TOWARD MT. PONY FROM OAK GREEN SUBSTATION)



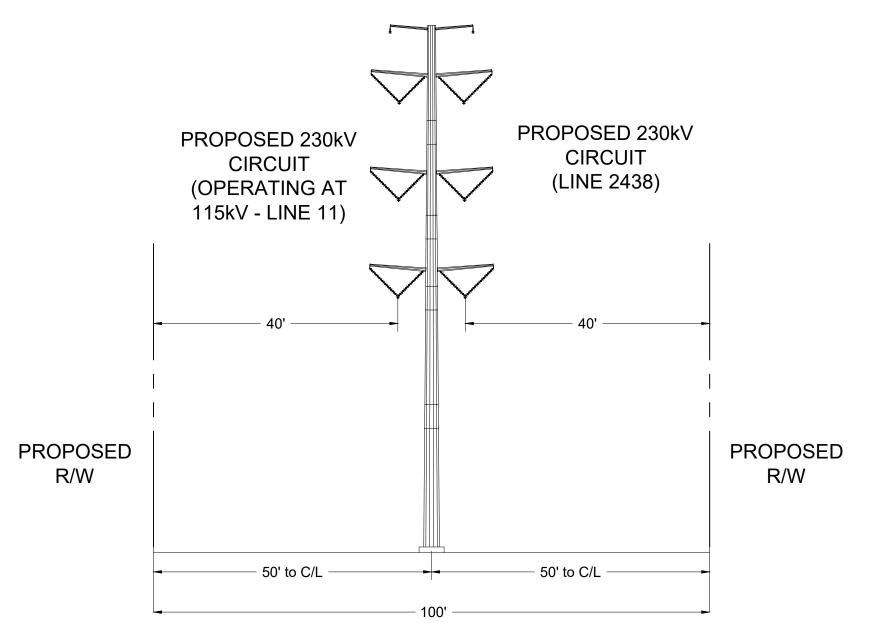
TYPICAL RIGHT OF WAY

PROPOSED CONFIGURATION (LOOKING TOWARD MT. PONY FROM OAK GREEN SUBSTATION)



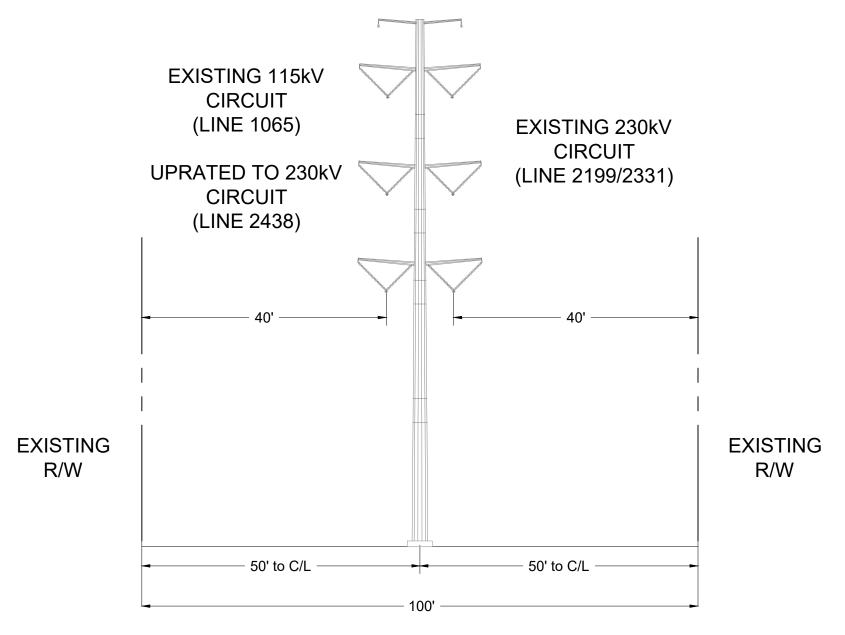
TYPICAL RIGHT OF WAY

PROPOSED CONFIGURATION (LOOKING TOWARD MT. PONY FROM OAK GREEN SUBSTATION)



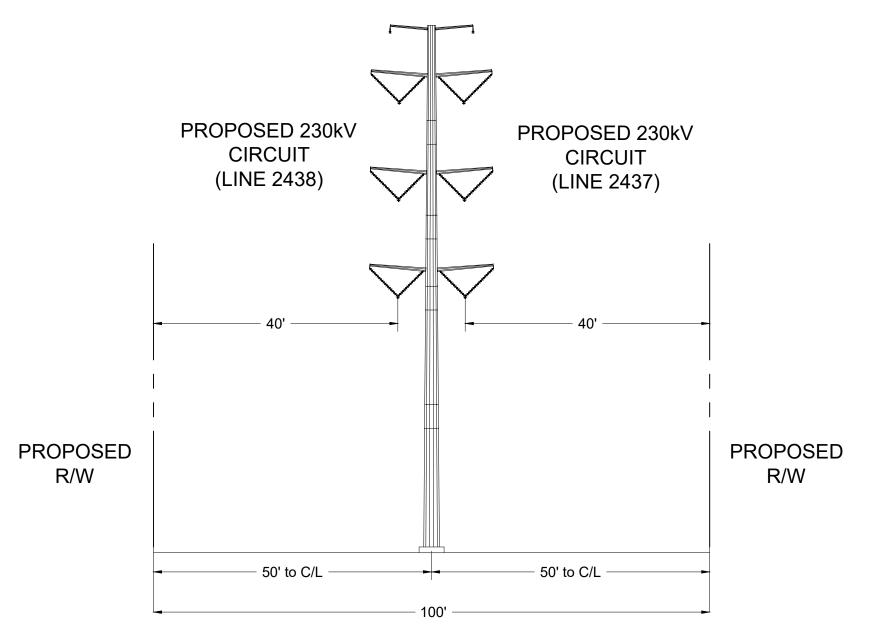
TYPICAL RIGHT OF WAY

EXISTING CONFIGURATION (LOOKING TOWARD MT. PONY FROM OAK GREEN SUBSTATION)



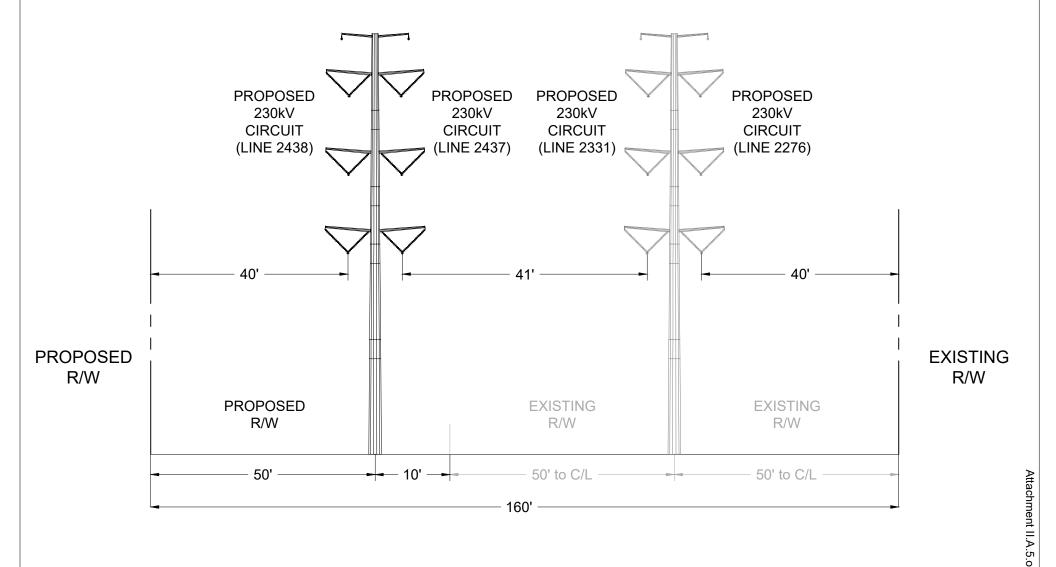
TYPICAL RIGHT OF WAY

PROPOSED CONFIGURATION (LOOKING TOWARD MT. PONY FROM OAK GREEN SUBSTATION)



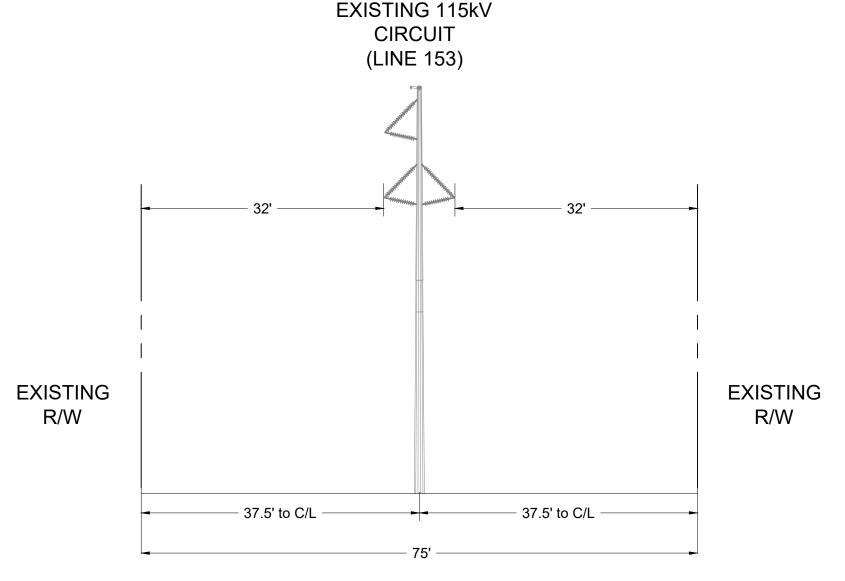
TYPICAL RIGHT OF WAY

EXISTING CONFIGURATION (LOOKING TOWARD MT. PONY FROM OAK GREEN SUBSTATION)



TYPICAL RIGHT OF WAY

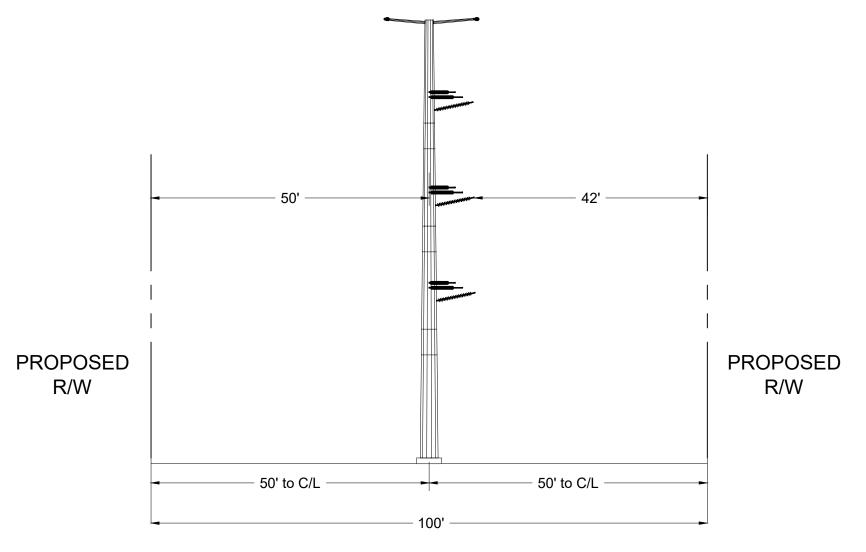
EXISTING CONFIGURATION (LOOKING TOWARD PINE GLADE FROM OAK GREEN SUBSTATION)



TYPICAL RIGHT OF WAY

PROPOSED CONFIGURATION (LOOKING TOWARD PINE GLADE FROM OAK GREEN SUBSTATION)

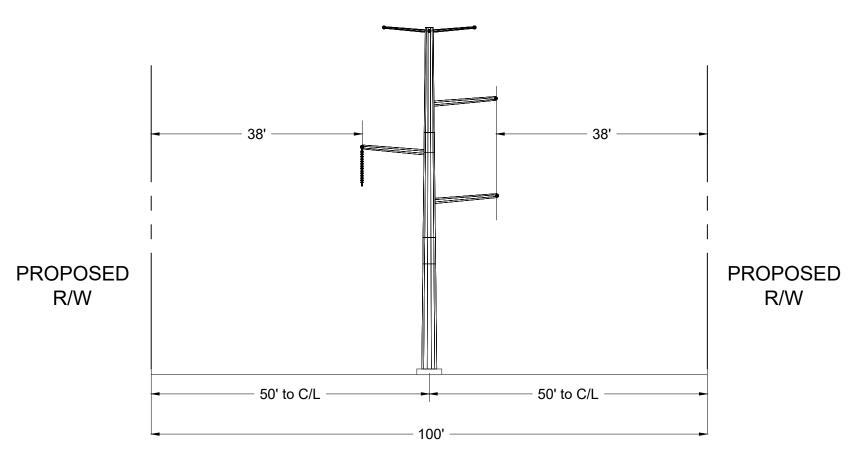
PROPOSED 230kV CIRCUIT (OPERATING AT 115kV - LINE 153)



TYPICAL RIGHT OF WAY

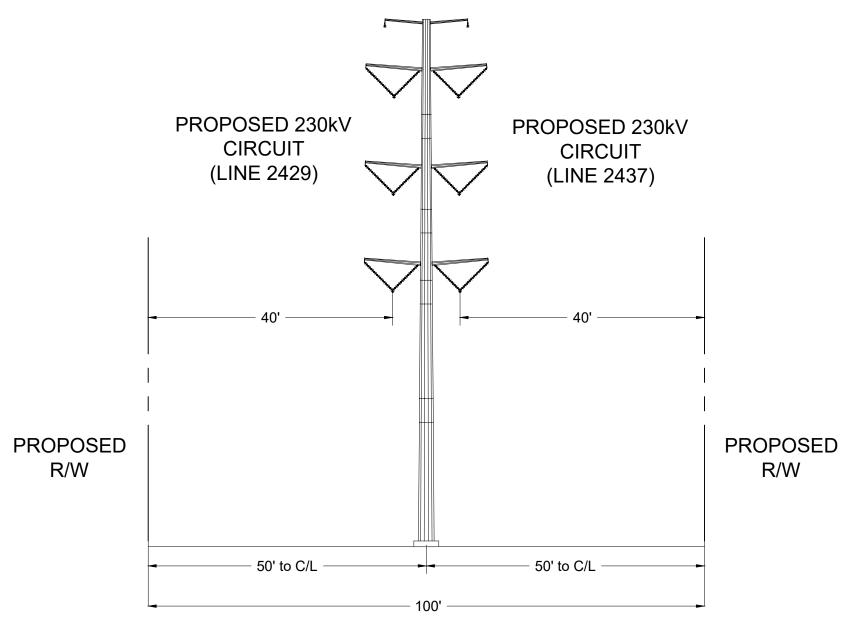
PROPOSED CONFIGURATION (LOOKING TOWARD PINE GLADE FROM OAK GREEN SUBSTATION)

PROPOSED 230kV CIRCUIT (OPERATING AT 115kV - LINE 153)



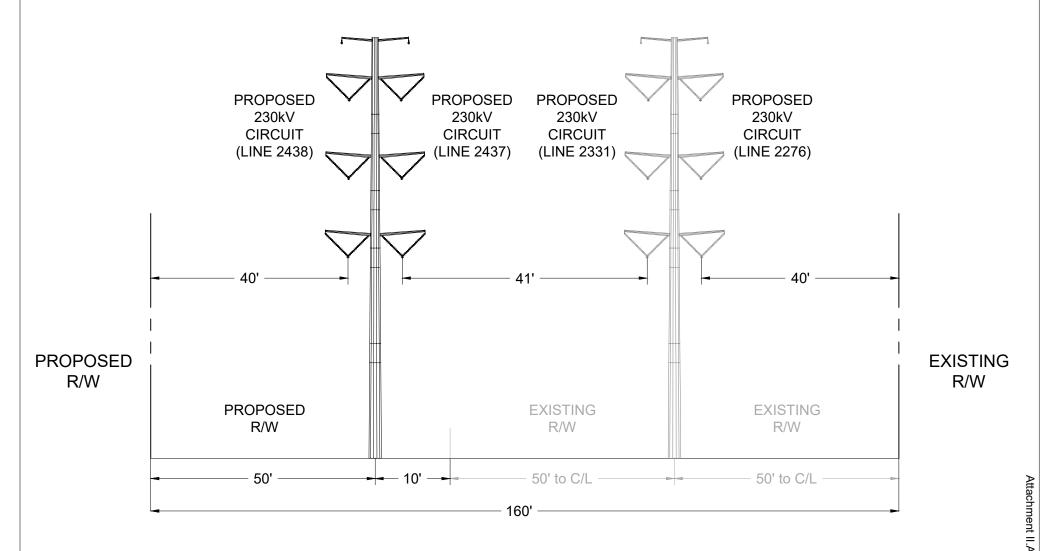
TYPICAL RIGHT OF WAY

PROPOSED CONFIGURATION (LOOKING TOWARD MCDEVITT FROM MT. PONY SUBSTATION)



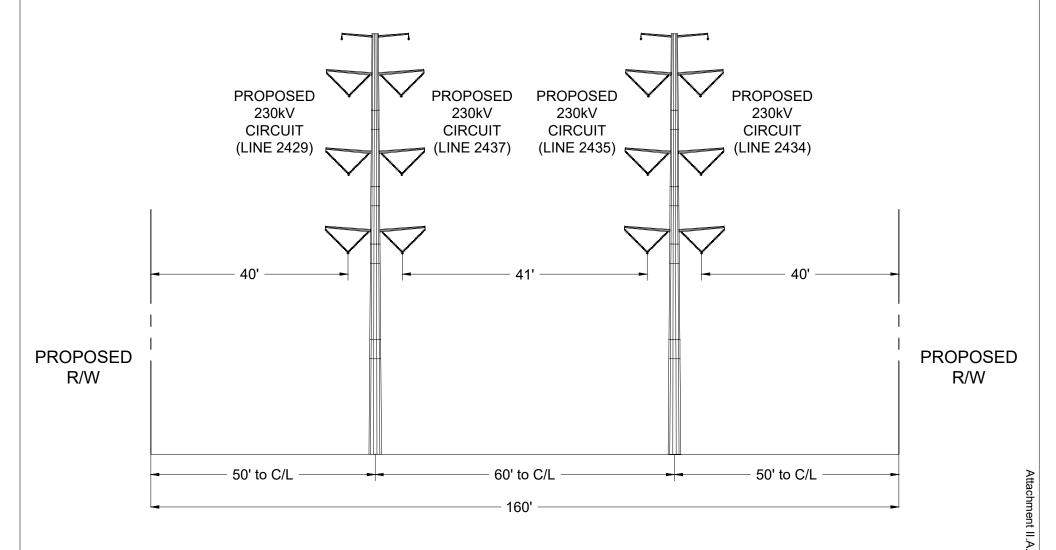
TYPICAL RIGHT OF WAY

PROPOSED CONFIGURATION (LOOKING TOWARD MCDEVITT FROM MT PONY SUBSTATION)



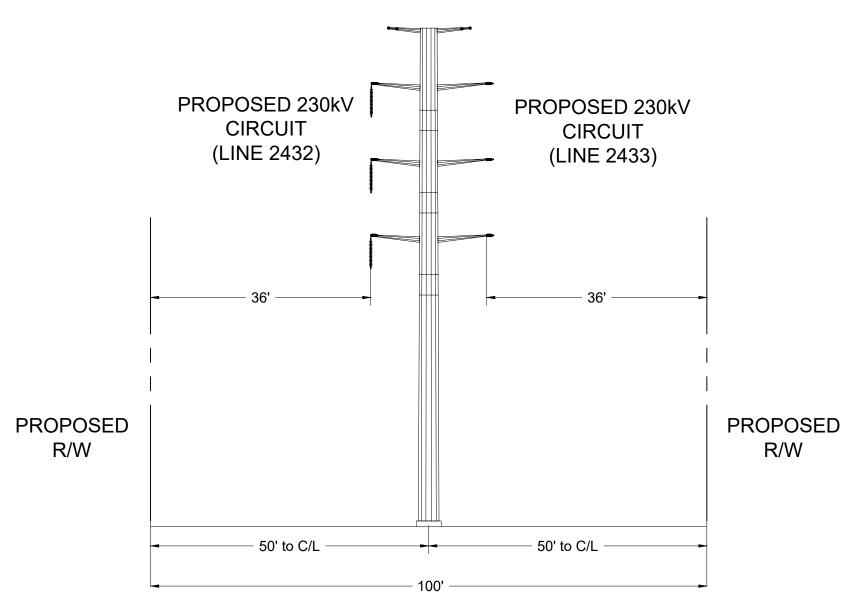
TYPICAL RIGHT OF WAY

PROPOSED CONFIGURATION (LOOKING TOWARD MCDEVITT FROM MT. PONY SUBSTATION)



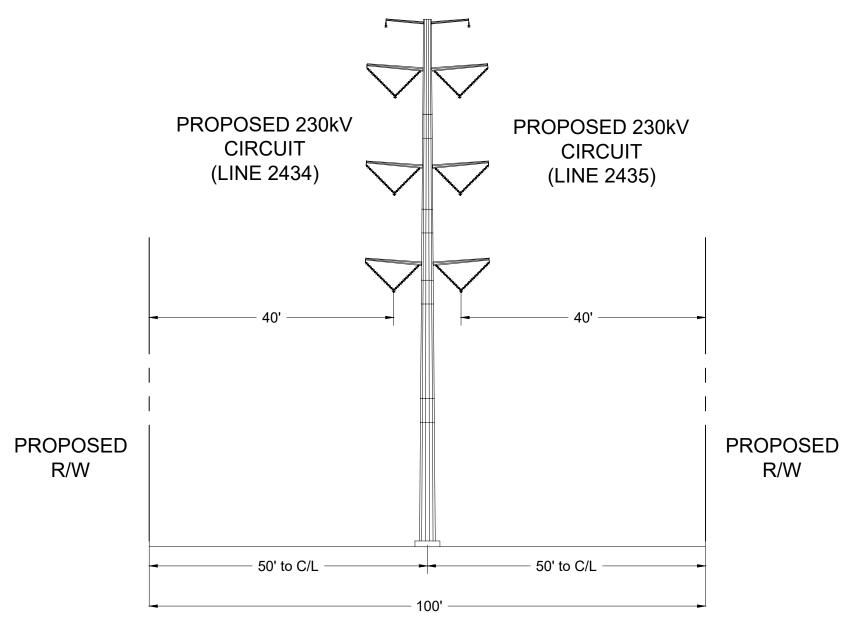
TYPICAL RIGHT OF WAY

PROPOSED CONFIGURATION (LOOKING TOWARD PALOMINO FROM CHANDLER SUBSTATION)



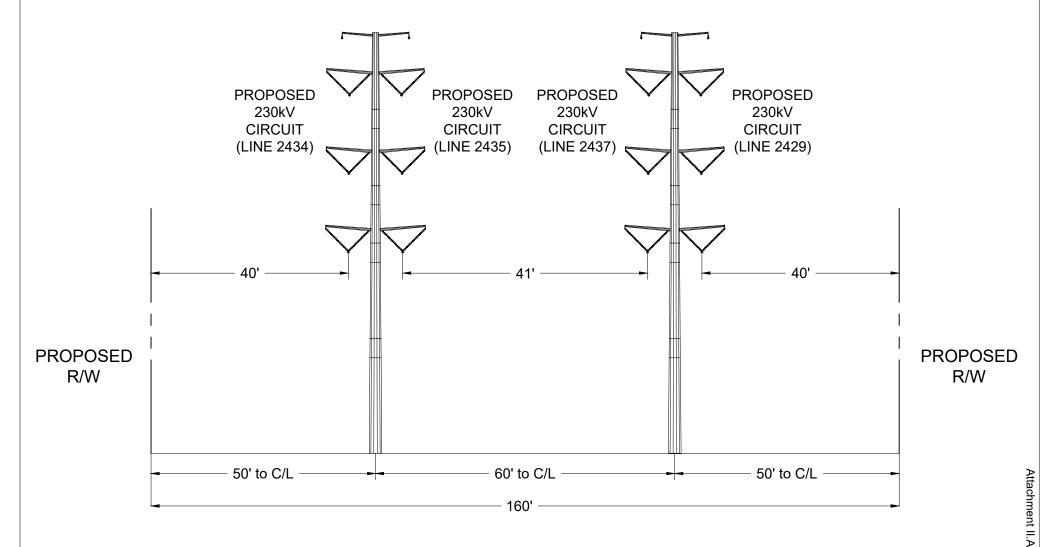
TYPICAL RIGHT OF WAY

PROPOSED CONFIGURATION (LOOKING TOWARD CIRRUS FROM PALOMINO SUBSTATION)



TYPICAL RIGHT OF WAY

PROPOSED CONFIGURATION (LOOKING TOWARD CIRRUS FROM PALOMINO SUBSTATION)



TYPICAL RIGHT OF WAY



ATTACHMENT 4 HISTORIC RESOURCE PHOTOS

Figure 1. 023-0018, Rose Hill Farm/Game Preserve, East Elevation, View to the West.



Figure 2. 023-0084, Mount Pony Rural Historic District, Overview, View to the West.



Figure 3. 023-5023, Mount Castle, Resource Not Visible from ROW, View to the South.



Figure 4. 023-5040, Croftburn Farm, Southwest Elevation, View to the Northeast.

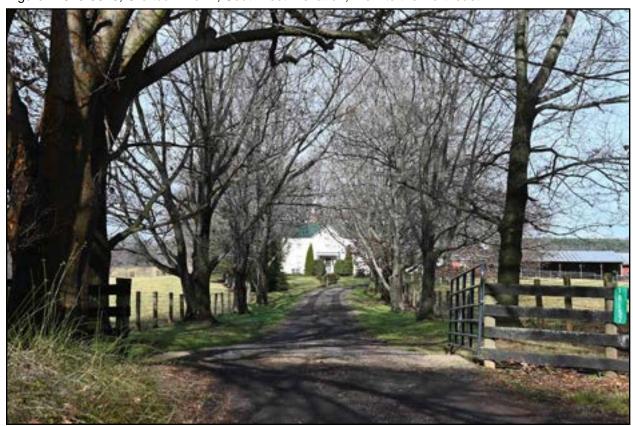


Figure 5. 023-5041, Eckington School, South and East Elevations, View to the Northwest.



Figure 6. 023-5049, Rappahannock Station Battlefield I, Overview, View to the Northeast.



Figure 7. 023-5050, Rappahannock Station Battlefield II, Overview, View to the Northwest.



Figure 8. 023-5055, Brandy Station Battlefield, Overview, View to the North.



Figure 9. 023-5161, St. Steven's Baptist Church, Southwest Elevation, View to the Northeast.



Figure 10. 023-5162, Zimmerman's Tavern, West and North Elevations, View to the Southeast.



Photo courtesy of VCRIS form 023-5162

Figure 11. 023-5494, House, East Elevations, View to the West.



Figure 12. 030-5587, Holly Ridge-Marsh Run Rural HD, Overview, View to the Southeast.



Figure 13. 030-5593, Rappahannock River 1862 Northern VA Campaign Rural HD, Overview, View to the Southwest.



Figure 14. 030-5607, Hedgeman-Rappahannock Rural HD, Overview, View to the South.



Figure 15. 030-5852, Piney Ridge School, Southwest and Southeast Elevations, View to the Northeast.



Figure 16. 068-0031, Morton Hall, Resource Not Visible from ROW, View to the East.



Figure 17. 068-0131, Lessland, North and East Elevations, View to the Southwest.



Figure 18. 068-0473, Mt. Holy Baptist Church, Southwest and Southeast Elevations, View to the North.



Figure 19. 068-5007, Battle of Morton's Ford, Overview, View to the Southeast.



Figure 20. 068-5033, Rapidan River and Clark Mountain Rural Historic District, Overview, View to the South.



Figure 21. 204-0002, Hill Mansion, Northwest Elevation, View to the Southeast.



Figure 22. 204-0003, St. Stephen's Episcopal Church, Northwest Elevation, View to the Southeast.



Figure 23. 204-0005, Burgandine House, Northwest Elevation, View to the Southeast.



Figure 24. 204-0006, A.P. Boyhood Home, Southwest and Southeast Elevations, View to the Northwest.



Figure 25. 204-0020, Culpeper Historic District, Taken on US Avenue, View to the Northwest.



Figure 26. 204-0020-0140, Antioch Baptist Church, East Elevation, View to the West.



Figure 27. 204-0021, Corrie Hill House, East Elevation, View to the West.



Figure 28. 204-0064, South East Street Historic District, Overview, View to the East.



Figure 29. 204-0069, Culpeper National Cemetery, Overview, View to the Southeast.



Figure 30. 204-0070, Greenwood, Private and Unable to View from the Public ROW, View to the North.



Figure 31. 204-5053, Pitts Theater, West Elevation, View to the East.



Figure 32. 204-5067, Lord Culpeper Hotel, West Elevation, View to the Northeast.

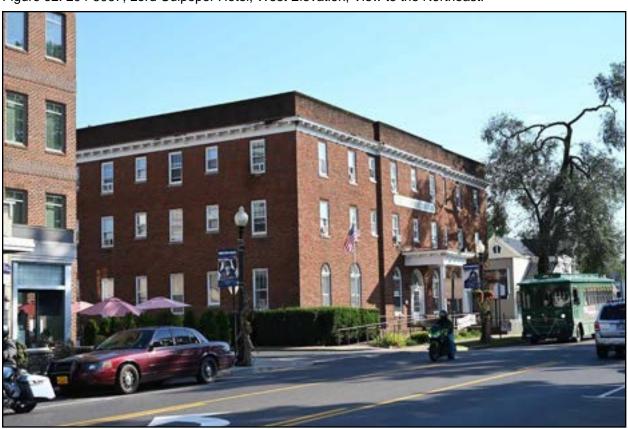


Figure 33. 204-5097, Culpeper Light and Power, South and East Elevations, View to the Northwest.



Figure 34. 288-5001, Remington Historic District, Overview, View to the Northeast.





ATTACHMENT 5 PHOTO SIMULATIONS

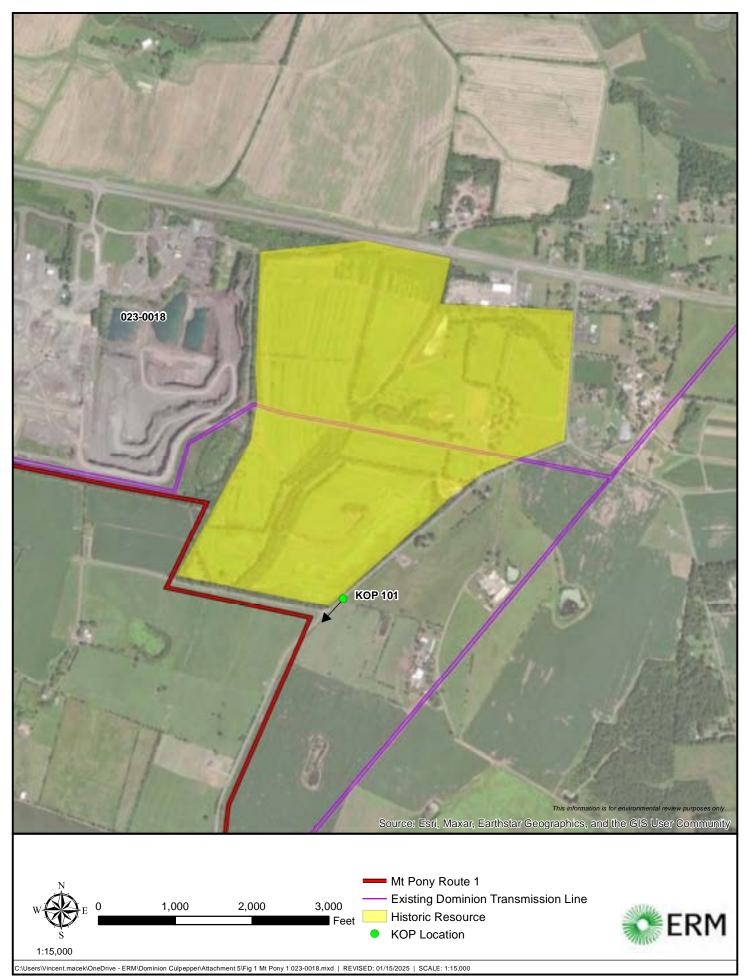
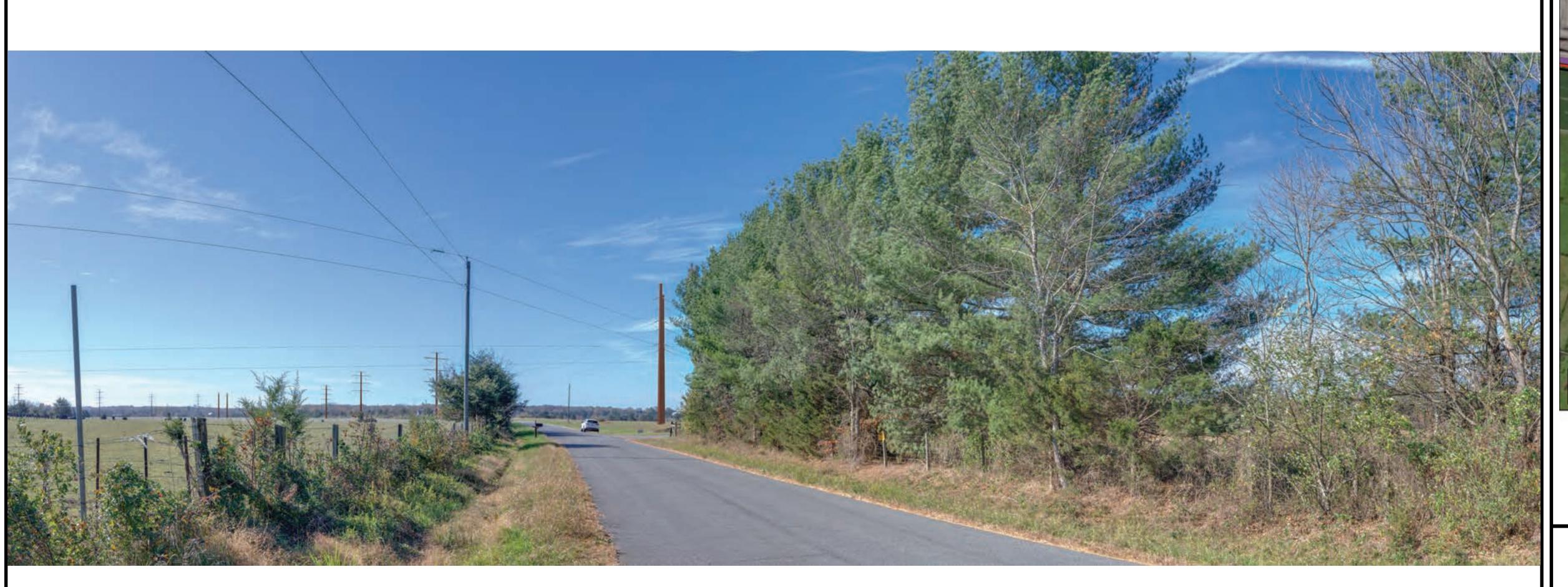


Figure 1. Aerial photograph depicting land use and photo view for 023-0018.



EXISTING CONDITIONS



PROPOSED CONDITIONS

Culpeper Technology Zone 230 kV Loop and Lines #2 and #1065 Conversion Project Culpeper, Fauquier, & Orange Counties, Virginia



KOP 101

Blackjack Rd

Figure 2

Route: Mt. Pony Route 1

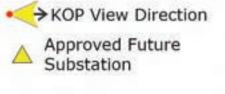
Date:11/06/2024 Time: 10:46 am

Viewing Direction: Southwest

Distance to closest feature: 0.07 miles



Legend



 Existing Dominion
 Energy Electric
 Transmission Line — Mt Pony Route 1

Right of Way

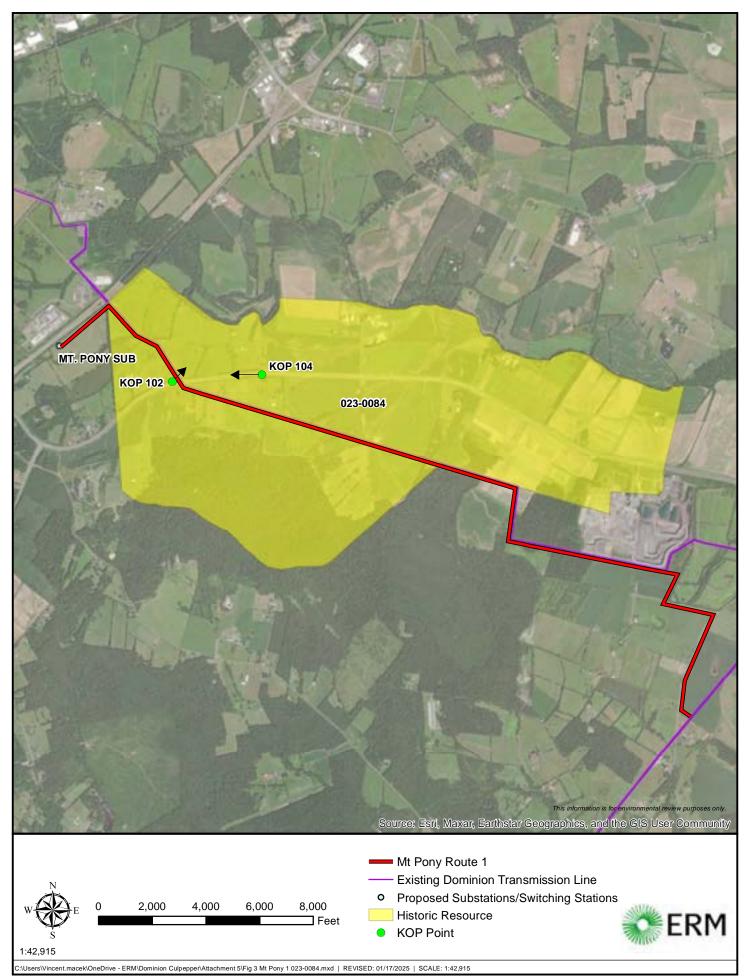


Figure 3. Aerial photograph depicting land use and photo view for 023-0084.







KOP 102

Germanna Hwy

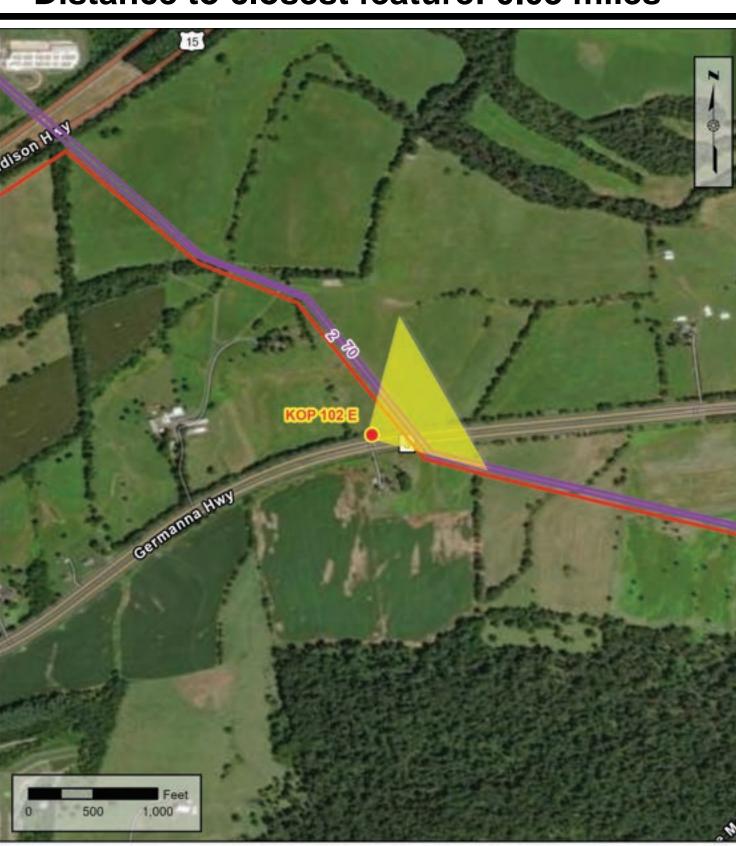
Figure 4

Route: Mt. Pony Route 1

Date:10/08/2024 Time: 12:43 pm

Viewing Direction: East

Distance to closest feature: 0.03 miles



Legend

◆ KOP View Direction - Mt Pony Route 1 Existing Dominion
Energy Electric Transmission Line







KOP 104

Germanna Hwy

Figure 5

Route: Mt. Pony Route 1

Date:10/08/2024 Time: 12:58 pm

Viewing Direction: West

Distance to closest feature: 0.07 miles



Legend

◆ KOP View Direction **Existing Dominion** - Energy Electric Transmission Line

— Mt Pony Route 1 Right of Way

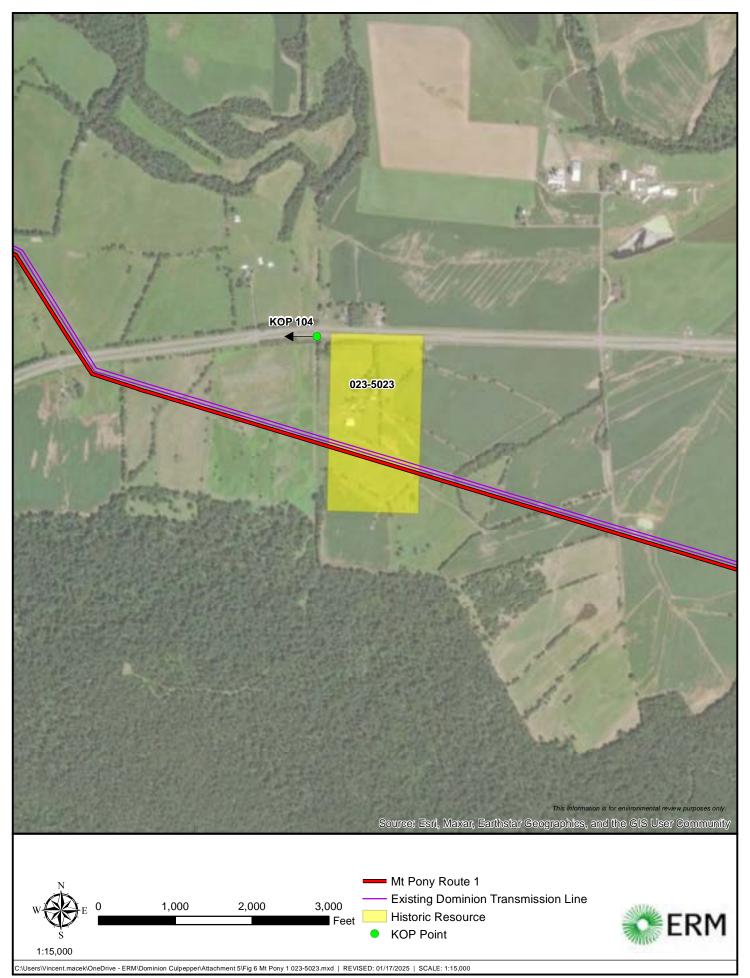


Figure 6. Aerial photograph depicting land use and photo view for 023-5023.







KOP 104

Germanna Hwy

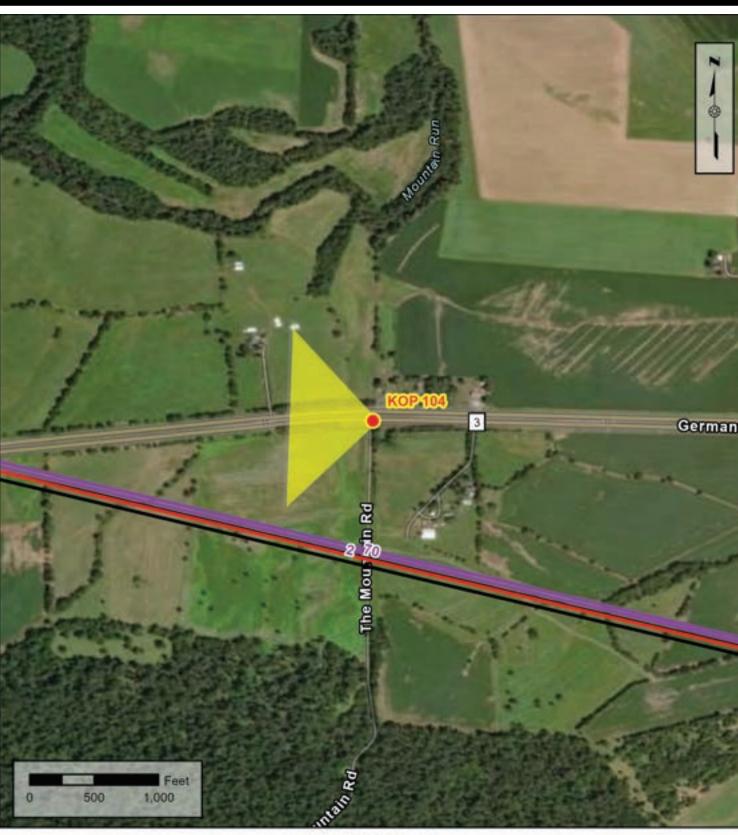
Figure 7

Route: Mt. Pony Route 1

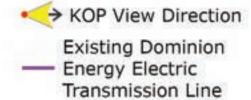
Date:10/08/2024 Time: 12:58 pm

Viewing Direction: West

Distance to closest feature: 0.07 miles



Legend



— Mt Pony Route 1 Right of Way

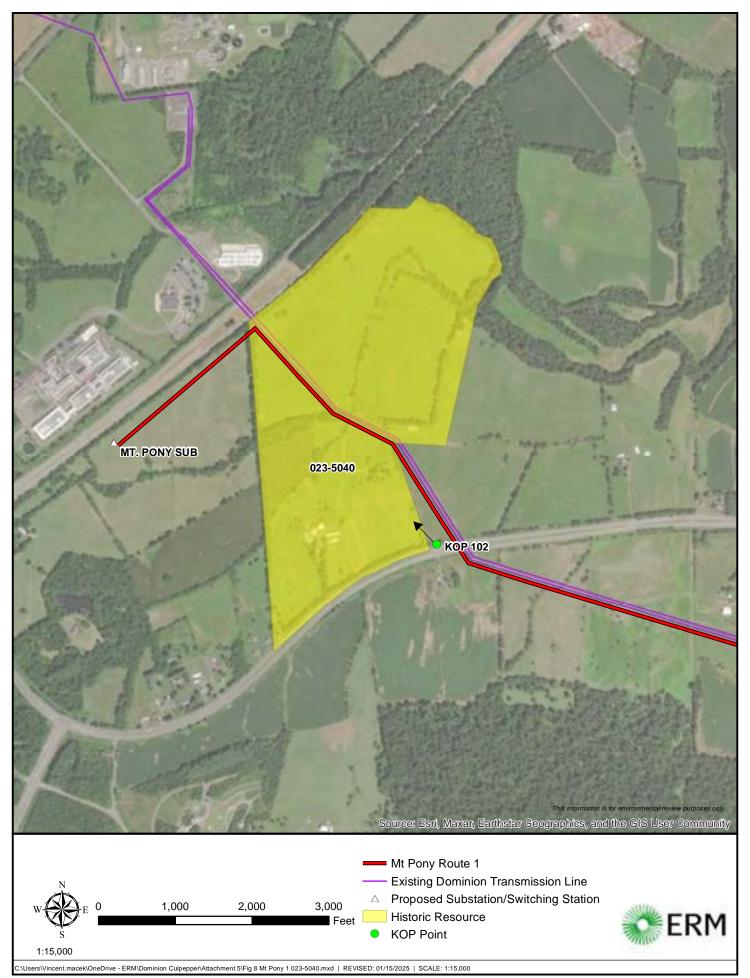


Figure 8. Aerial photograph depicting land use and photo view for 023-5040.







KOP 102

Germanna Hwy

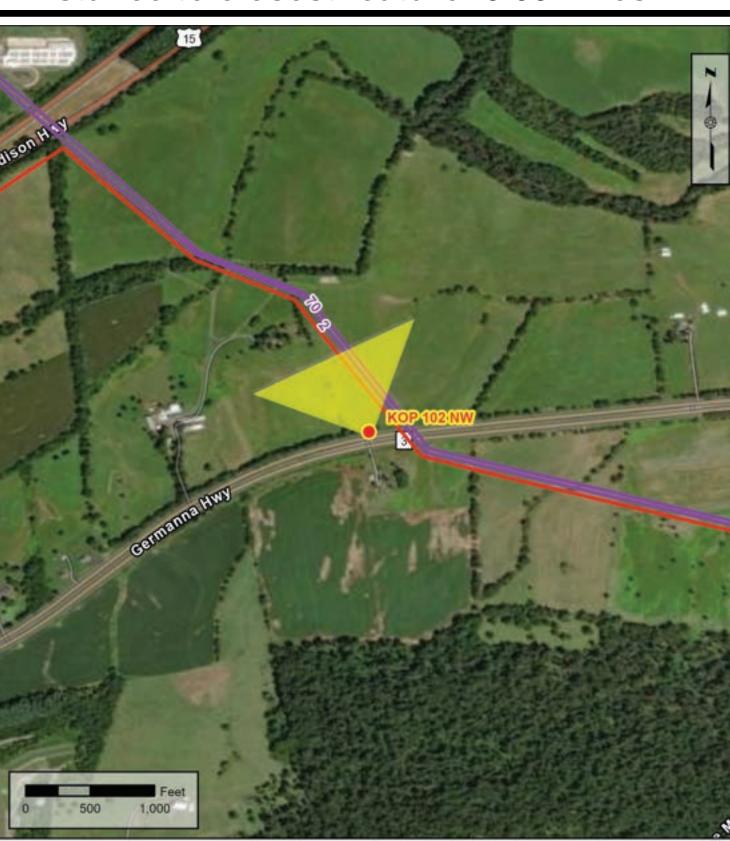
Figure 9

Route: Mt. Pony Route 1

Date:10/08/2024 Time: 12:43 pm

Viewing Direction: Northwest

Distance to closest feature: 0.03 miles



Legend

— Mt Pony Route 1 ◆ KOP View Direction Existing Dominion
 Energy Electric Transmission Line

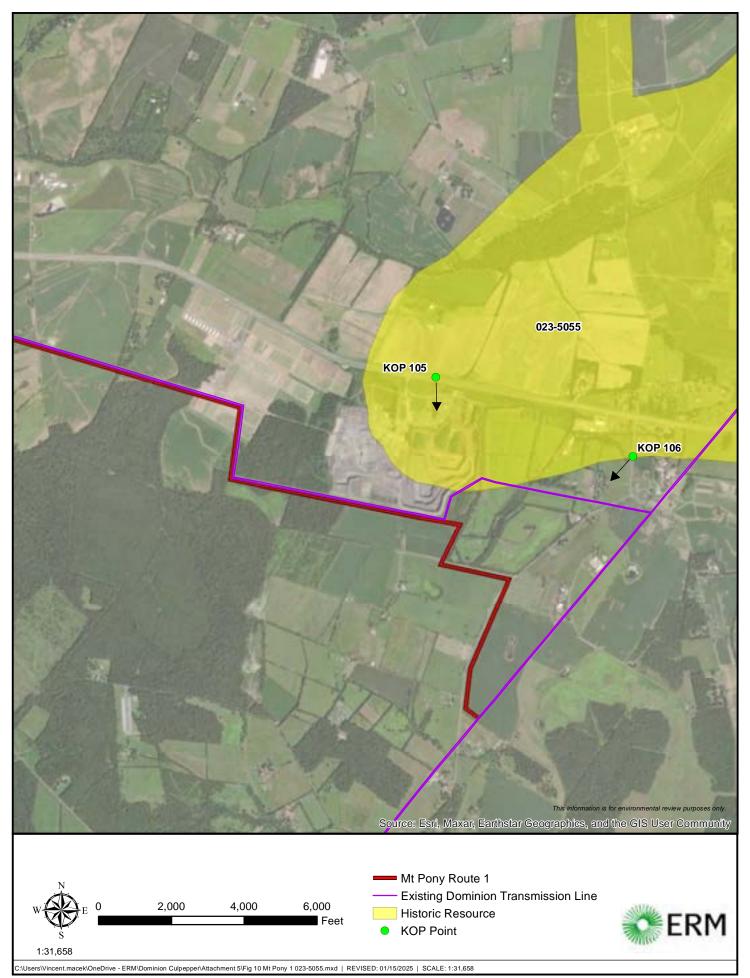


Figure 10. Aerial photograph depicting land use and photo view for 023-5055.







KOP 105

Germanna Hwy

Figure 11

Route: Mt. Pony Route 1

Date:11/06/2024 Time: 11:34 am

Viewing Direction: South

Distance to closest feature: 0.57 miles



Legend

→ KOP View Direction **Existing Dominion** — Energy Electric Transmission Line

— Mt Pony Route 1 Right of Way







KOP 106

Batna Rd

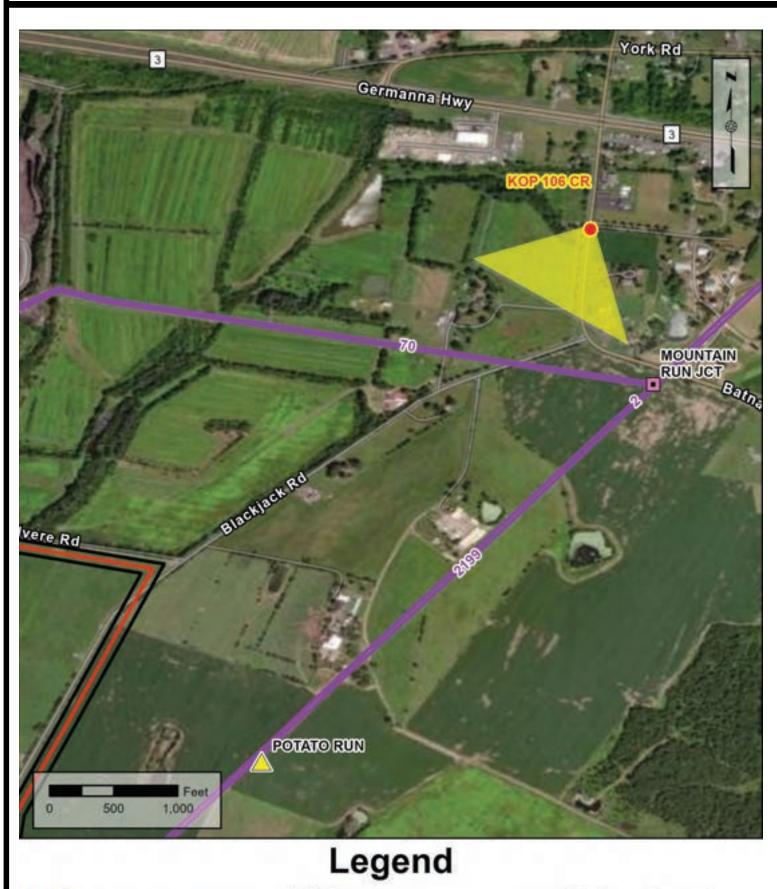
Figure 12

Route: Mt. Pony Route 1

Date:08/23/2024 Time: 9:45 am

Viewing Direction: Southwest

Distance to closest feature: 0.71 miles



◆ KOP View Direction Approved Future

Junction **Existing Dominion** Energy Electric
 Transmission Line

— Mt Pony Route 1 Right of Way

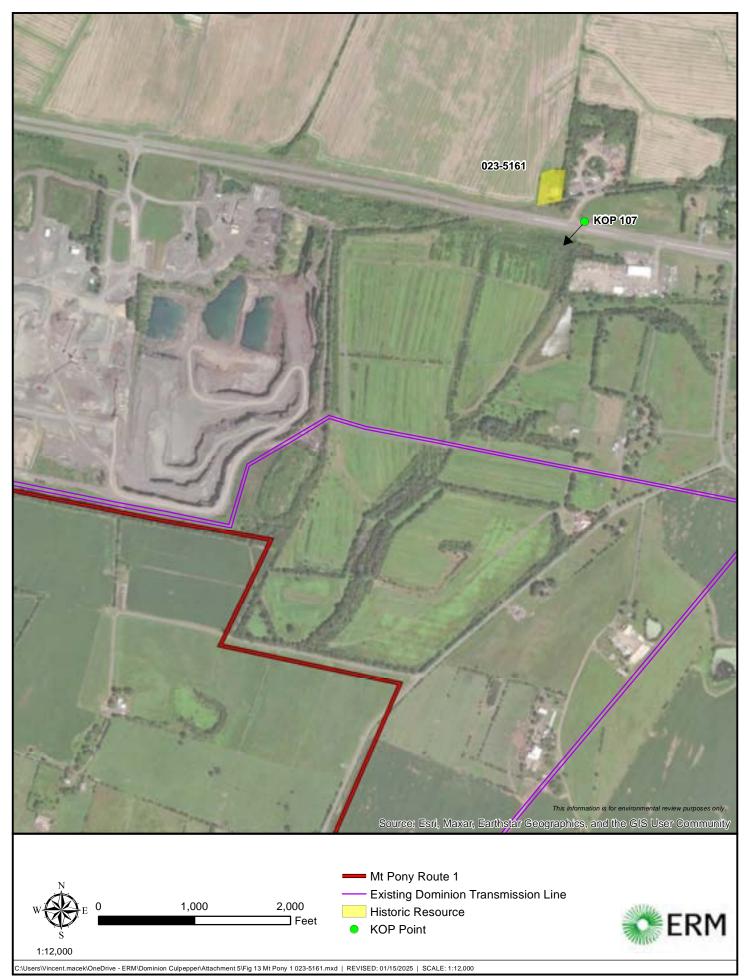


Figure 13. Aerial photograph depicting land use and photo view for 023-5161.







KOP 107

Germanna Hwy

Figure 14

Route: Mt. Pony Route 1

Date:11/06/2024 Time: 11:11 am

Viewing Direction: Southwest

Distance to closest feature: 0.69 miles



Legend

→ KOP View Direction **Existing Dominion** — Energy Electric Transmission Line

- Mt Pony Route 1 Right of Way

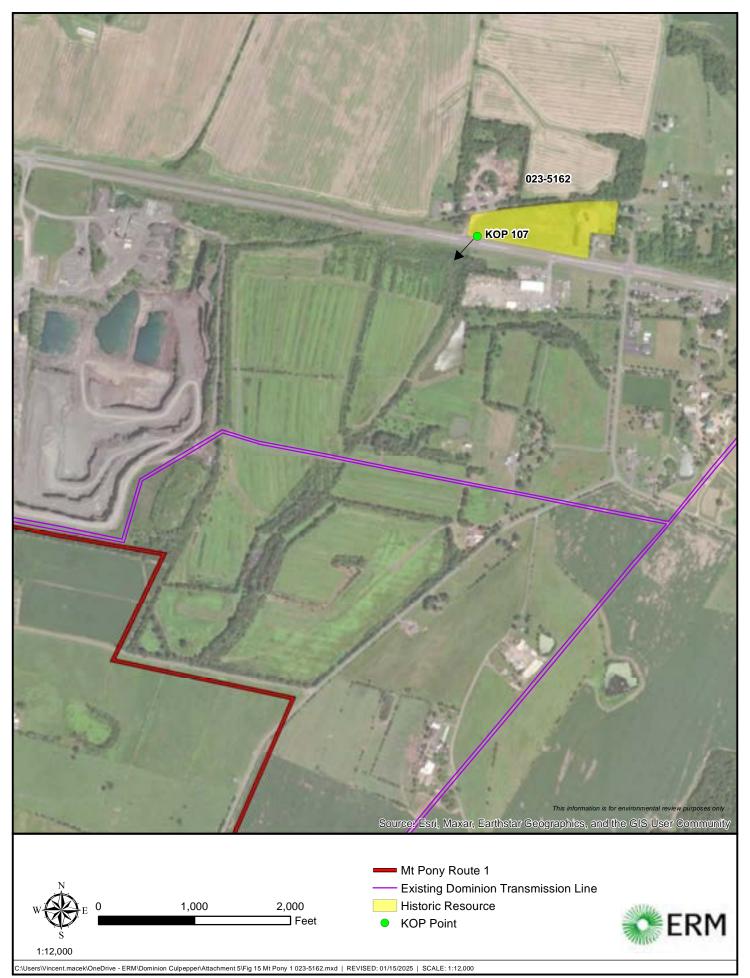


Figure 15. Aerial photograph depicting land use and photo view for 023-5162.







KOP 107

Germanna Hwy

Figure 16

Route: Mt. Pony Route 1

Date:11/06/2024 Time: 11:11 am

Viewing Direction: Southwest

Distance to closest feature: 0.69 miles



Legend

→ KOP View Direction **Existing Dominion** — Energy Electric Transmission Line

- Mt Pony Route 1 Right of Way

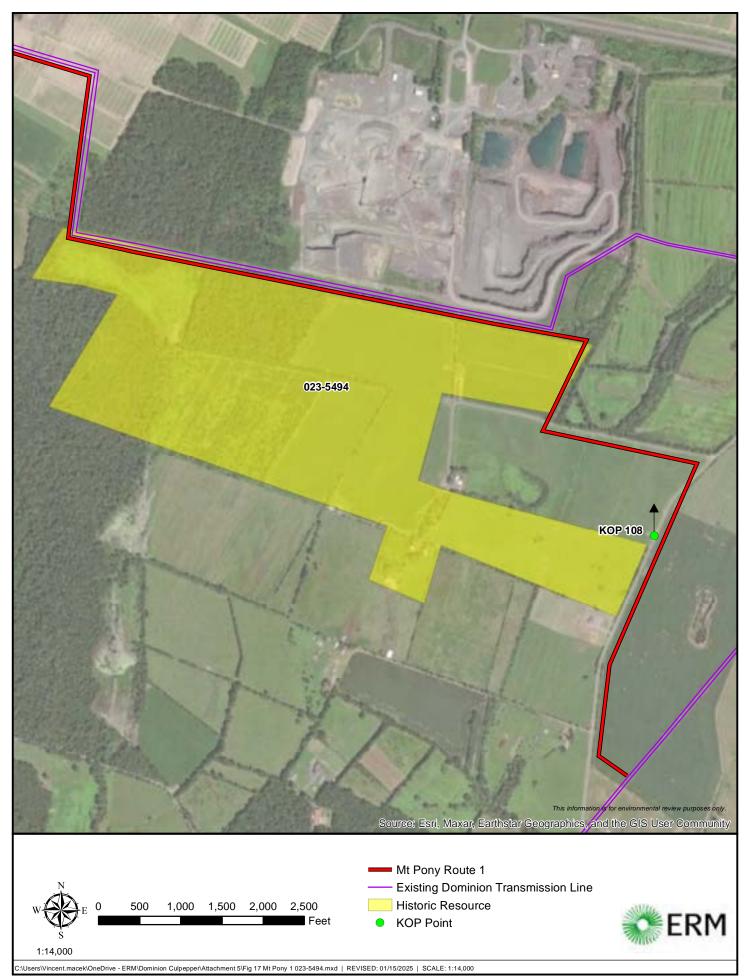


Figure 17. Aerial photograph depicting land use and photo view for 023-5494.



Approved Future 230 kV Lines (not part of current project) **PROPOSED CONDITIONS**

Culpeper Technology Zone 230 kV Loop and Lines #2 and #1065 Conversion Project Culpeper, Fauquier, & Orange Counties, Virginia



KOP 108

Blackjack Rd

Figure 18

Route: Mt. Pony Route 1

Date:08/23/2024 Time: 9:26 am

Viewing Direction: Northwest

Distance to closest feature: 0.02 miles



Legend

← KOP View Direction Approved Future Substation

Existing Dominion - Energy Electric Transmission Line — Mt Pony Route 1

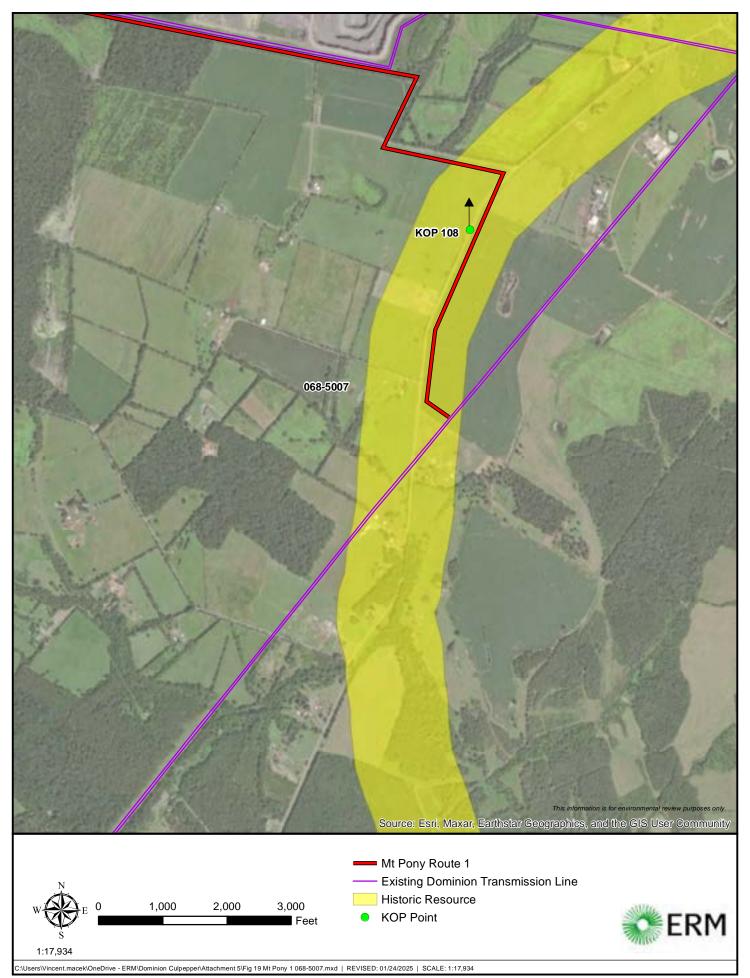


Figure 19. Aerial photograph depicting land use and photo view for 068-5007.



Approved Future 230 kV Lines (not part of current project) **PROPOSED CONDITIONS**

Culpeper Technology Zone 230 kV Loop and Lines #2 and #1065 Conversion Project Culpeper, Fauquier, & Orange Counties, Virginia



KOP 108

Blackjack Rd

Figure 20

Route: Mt. Pony Route 1

Date:08/23/2024

Time: 9:26 am

Viewing Direction: Northwest

Distance to closest feature: 0.02 miles



Legend

← KOP View Direction Approved Future Substation

Existing Dominion - Energy Electric Transmission Line — Mt Pony Route 1

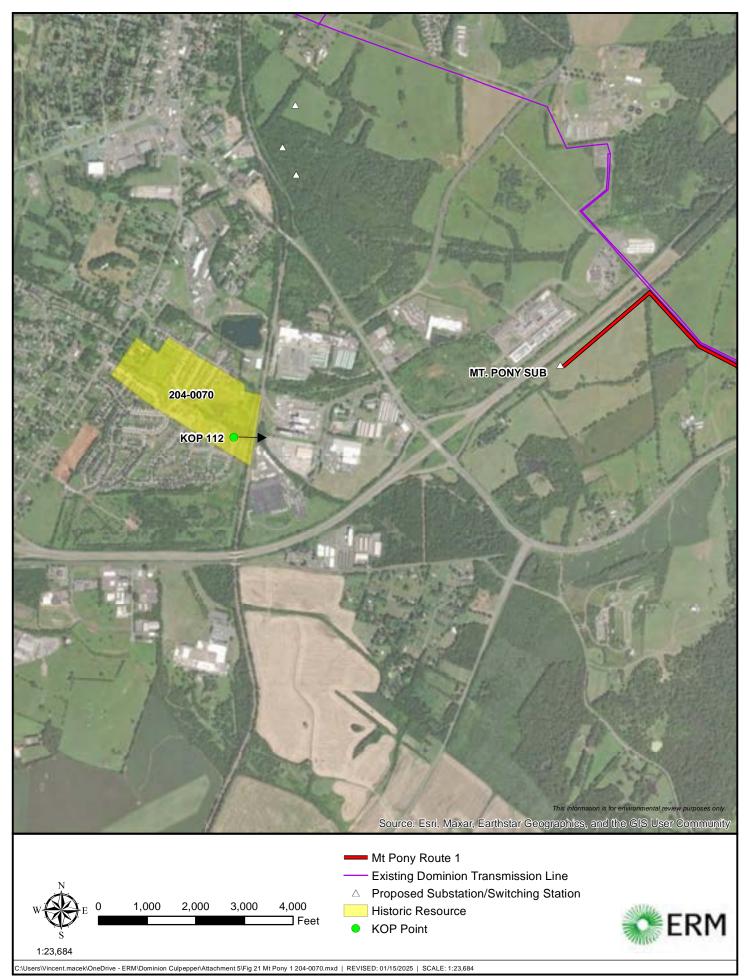


Figure 21. Aerial photograph depicting land use and photo view for 204-0070.







KOP 112

Post Oak Dr

Figure 22

Route: Mt. Pony Route 1

Date:10/09/2024 Time: 11:39 am

Viewing Direction: East

Distance to closest feature: 1.03 miles



Note: Project components illustrated are based on proposed preliminary designs The images contained on this page show the proposed project within a wider landscape context and are not representative of scale and distance when viewed from the actual view point.

Transmission Line

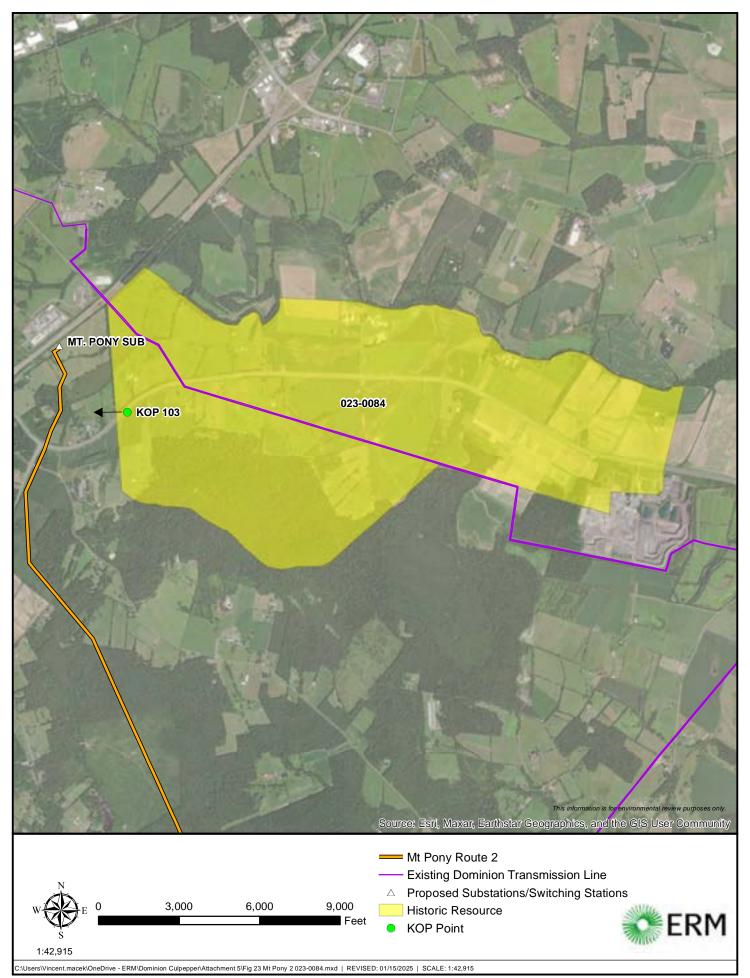


Figure 23. Aerial photograph depicting land use and photo view for 023-0084.







KOP 103

Germanna Hwy

Figure 24

Route: Mt. Pony Route 2

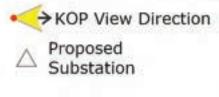
Date:12/17/2024 Time: 12:04 pm

Viewing Direction: Southwest

Distance to closest feature: 0.34 miles



Legend



 Existing Dominion
 Energy Electric
 Transmission Line — Mt Pony Route 2 Right of Way

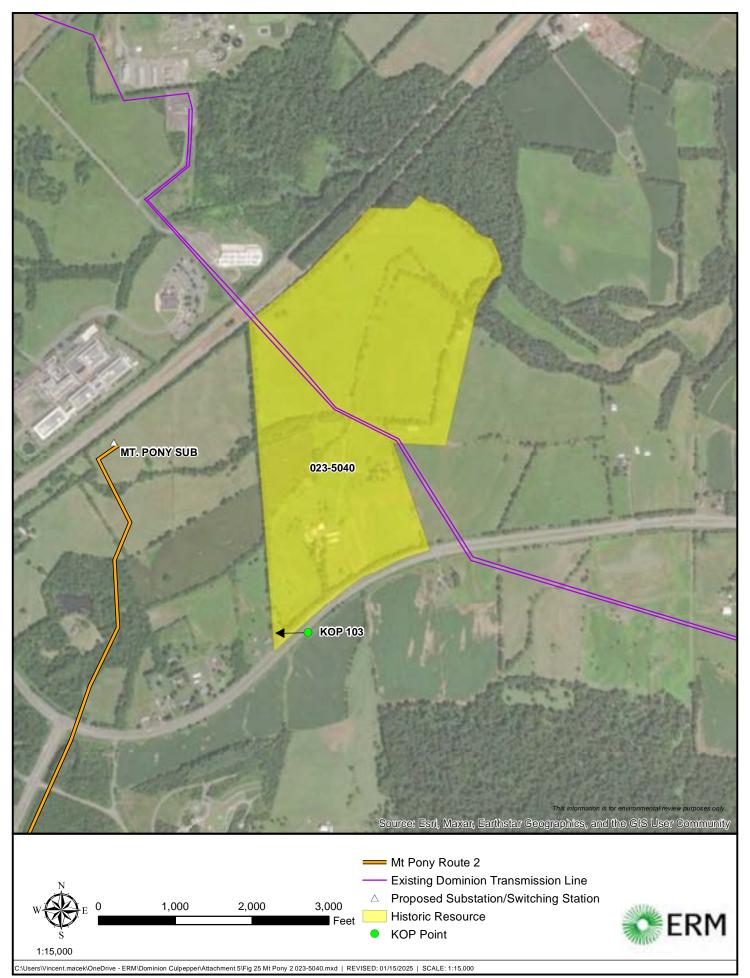


Figure 25. Aerial photograph depicting land use and photo view for 023-5040.







KOP 103

Germanna Hwy

Figure 26

Route: Mt. Pony Route 2

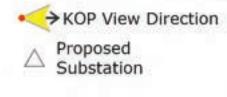
Date:12/17/2024 Time: 12:04 pm

Viewing Direction: Southwest

Distance to closest feature: 0.37 miles



Legend



 Existing Dominion
 Energy Electric
 Transmission Line — Mt Pony Route 2

Right of Way



Figure 27. Aerial photograph depicting land use and photo view for 023-5041.







KOP 113

Mt Pony Rd

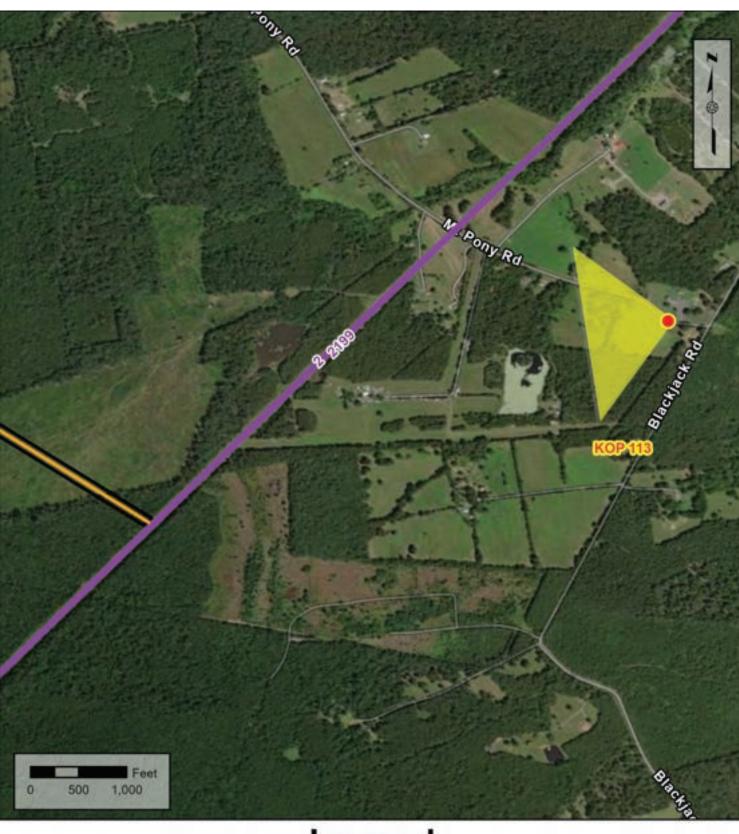
Figure 28

Route: Mt. Pony Route 2

Date:08/23/2024 Time: 10:17 am

Viewing Direction: West

Distance to closest feature: 0.89 miles



Legend

◆ KOP View Direction **Existing Dominion** — Energy Electric Transmission Line

— Mt Pony Route 2 Right of Way

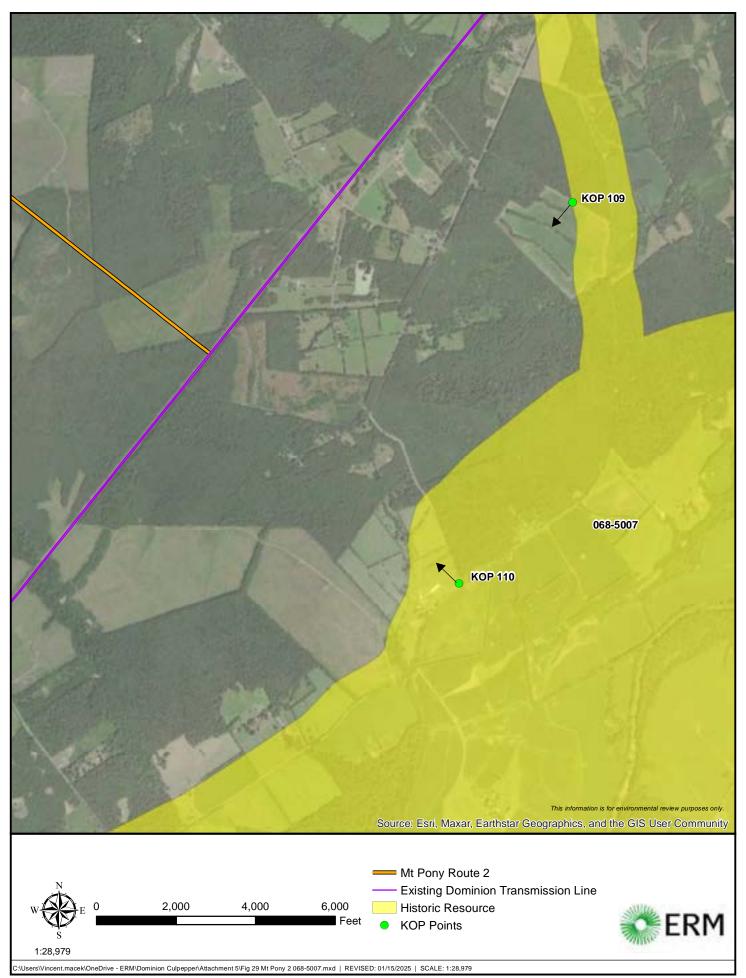


Figure 29. Aerial photograph depicting land use and photo view for 068-5007.







KOP 109

Stringfellow Rd

Figure 30

Route: Mt. Pony Route 2

Date:08/23/2024 Time: 10:00 am

Viewing Direction: Southwest

Distance to closest feature: 1.47 miles



Legend

→ KOP View Direction **Existing Dominion** — Energy Electric

Transmission Line

— Mt Pony Route 2 Right of Way







KOP 110

Algonquin Trl

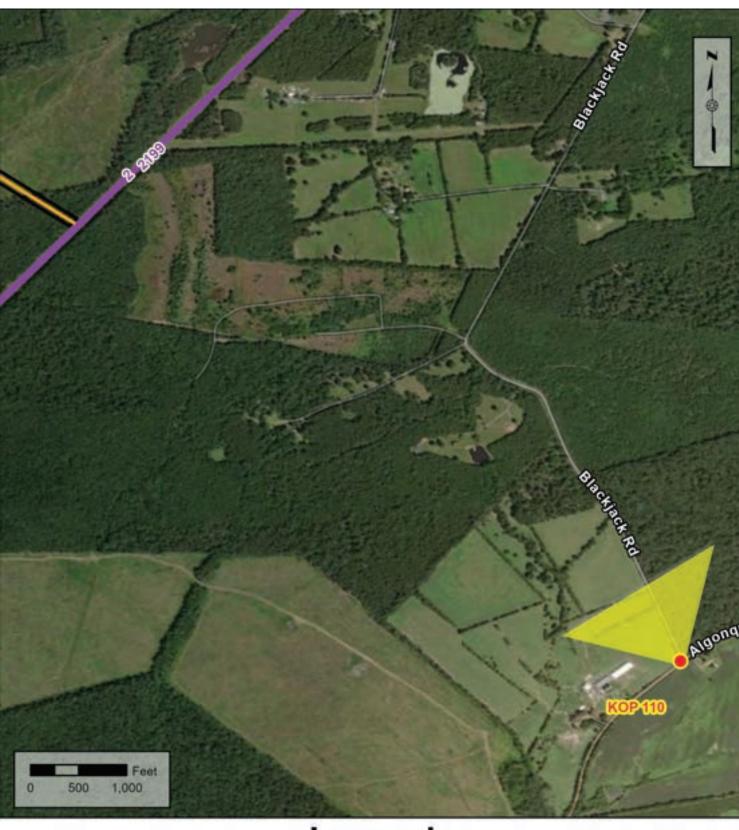
Figure 31

Route: Mt. Pony Route 2

Date:10/07/2024 Time: 12:24 pm

Viewing Direction: Southwest

Distance to closest feature: 1.27 miles



Legend

→ KOP View Direction **Existing Dominion** — Energy Electric Transmission Line

— Mt Pony Route 2 Right of Way

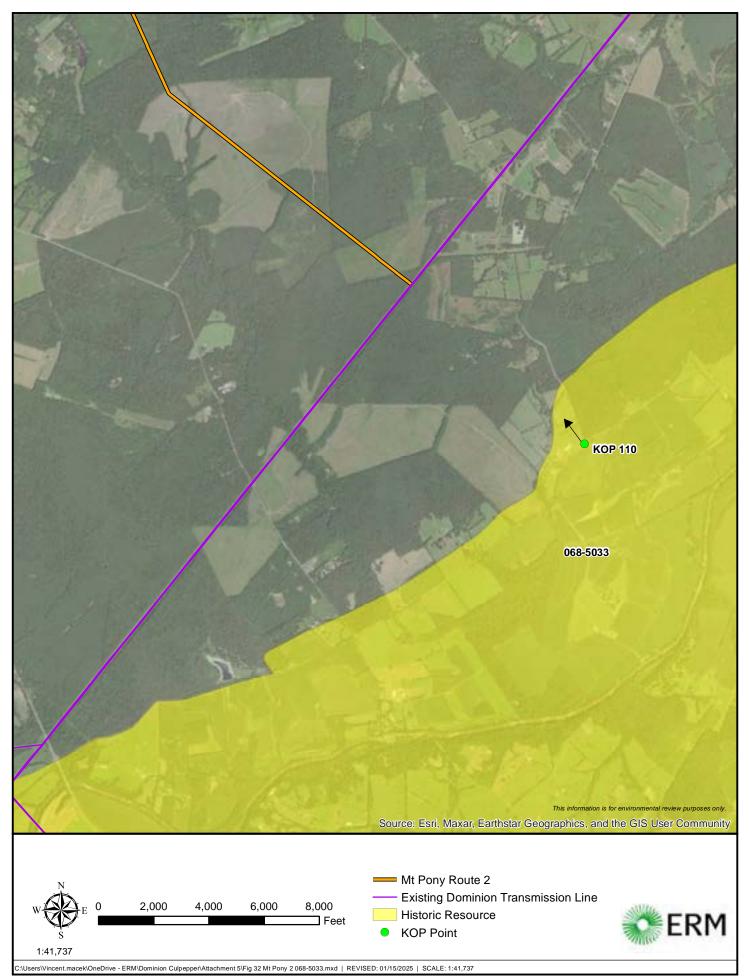


Figure 32. Aerial photograph depicting land use and photo view for 068-5033.







KOP 110

Algonquin Trl

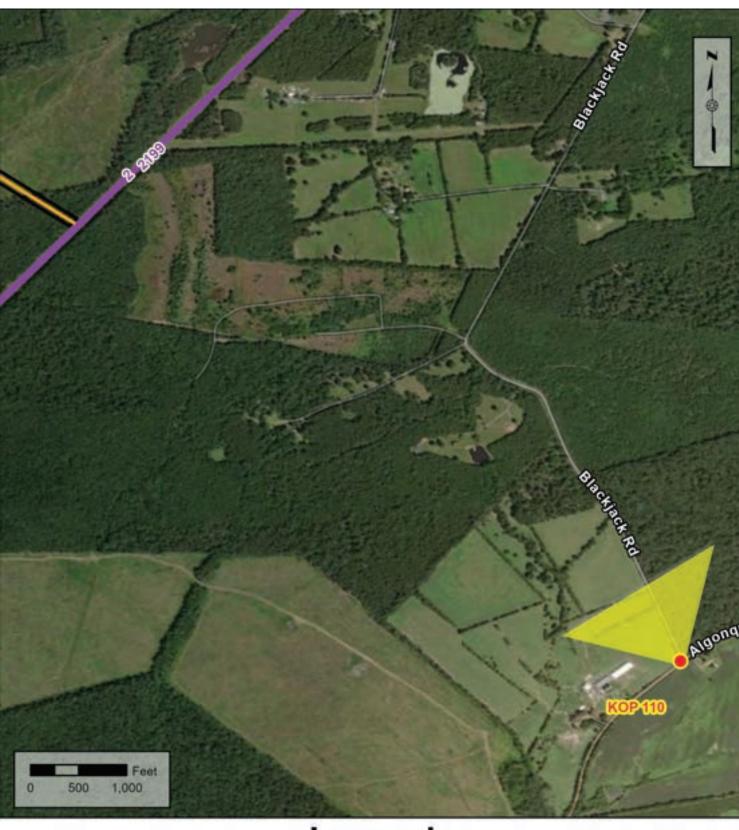
Figure 33

Route: Mt. Pony Route 2

Date:10/07/2024 Time: 12:24 pm

Viewing Direction: Southwest

Distance to closest feature: 1.27 miles



Legend

→ KOP View Direction **Existing Dominion** — Energy Electric Transmission Line

— Mt Pony Route 2 Right of Way

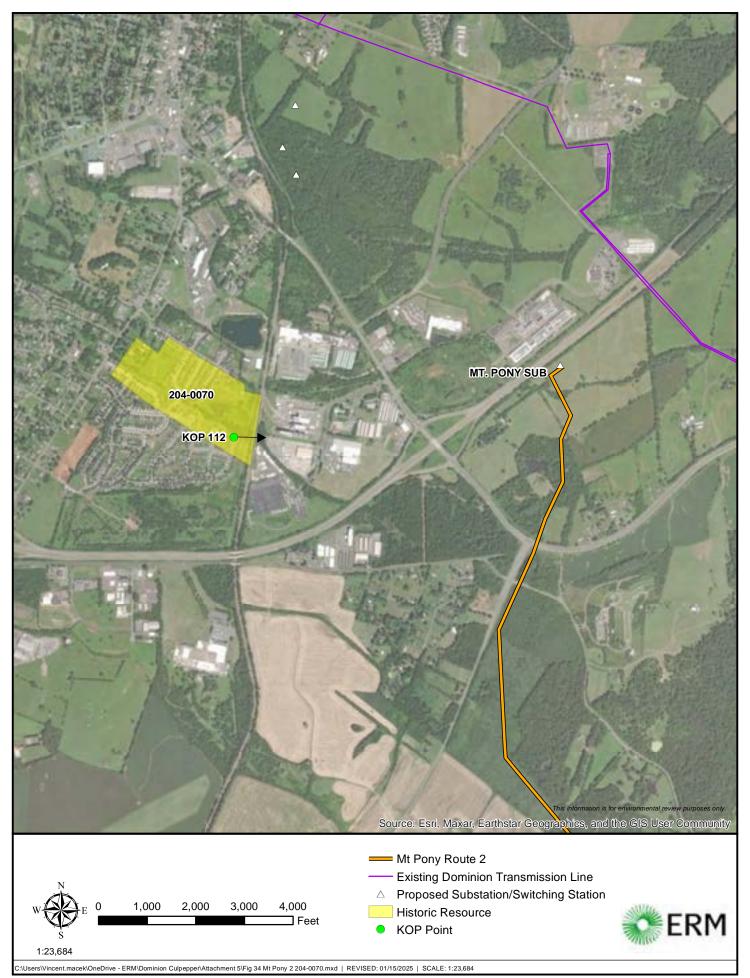


Figure 34. Aerial photograph depicting land use and photo view for 204-0070.







KOP 112

Post Oak Dr

Figure 35

Route: Mt. Pony Route 2

Date:10/09/2024 Time: 11:39 am

Viewing Direction: East

Distance to closest feature: 0.99 miles



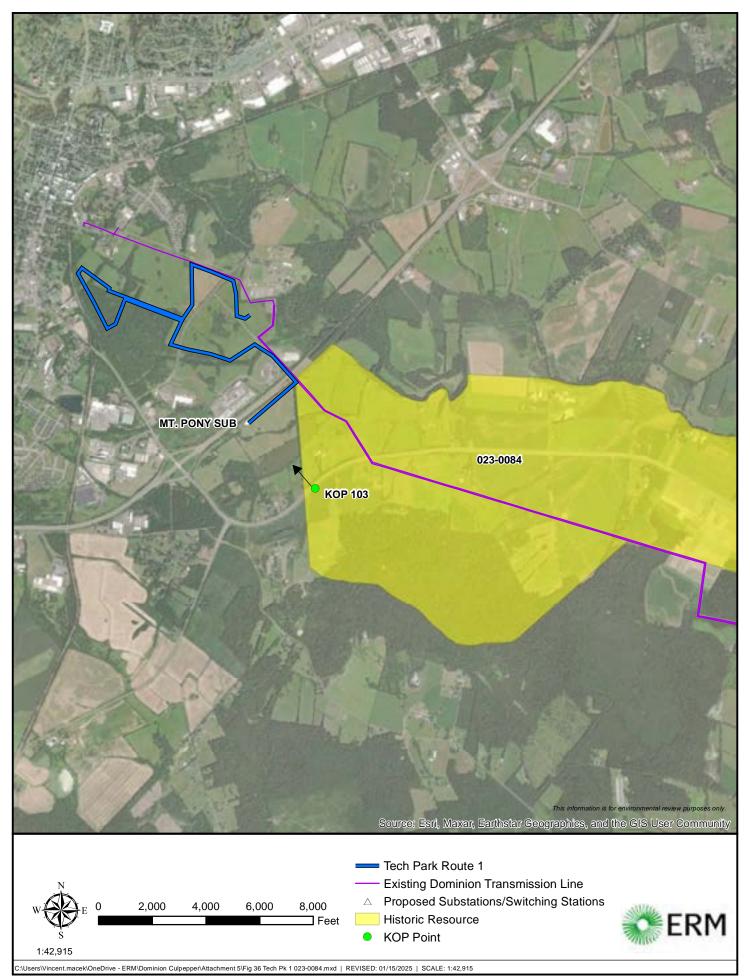
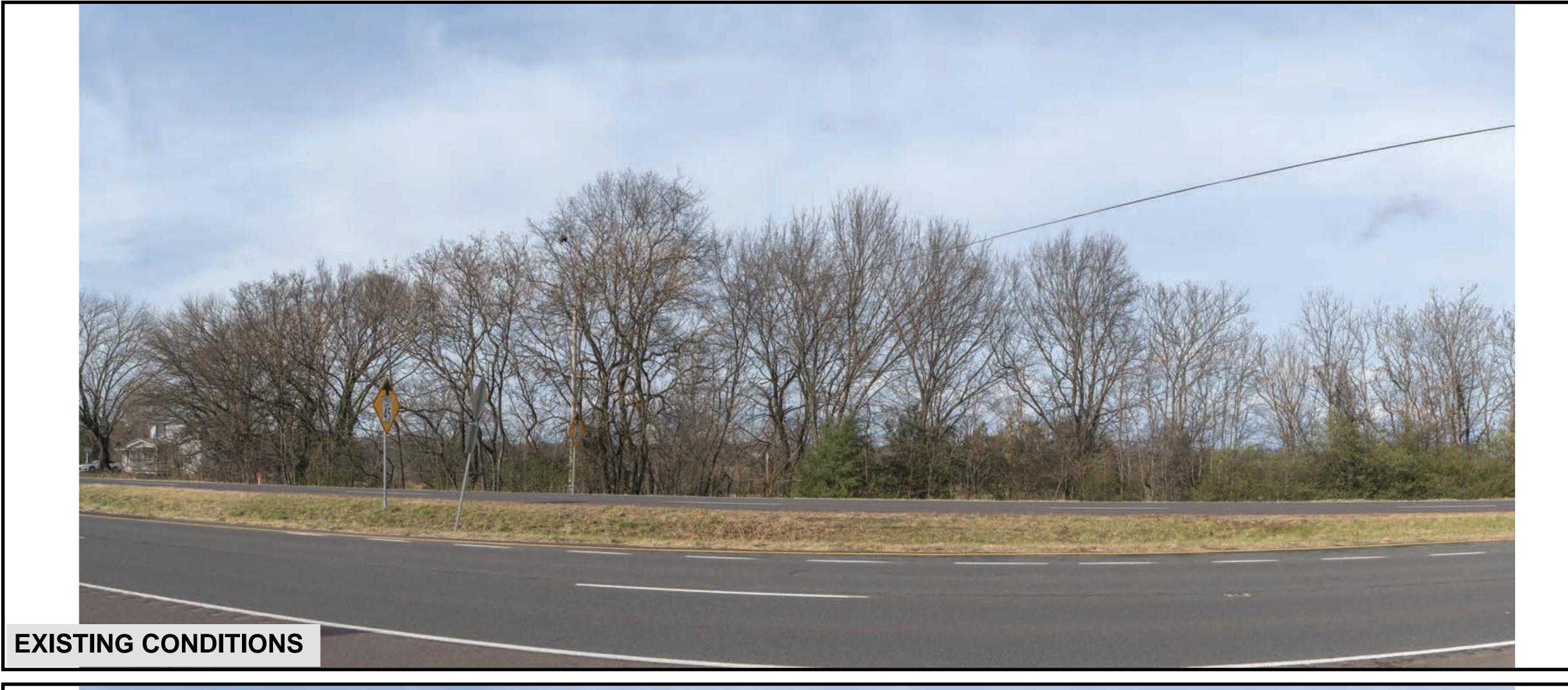


Figure 36. Aerial photograph depicting land use and photo view for 023-0084.







KOP 103

Germanna Hwy

Figure 37

Route: Tech Park Route 1

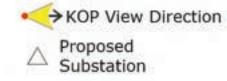
Date:12/17/2024 Time: 12:04 pm

Viewing Direction: Northwest

Distance to closest feature: 0.51 miles



Legend



 Existing Dominion
 Energy Electric Transmission Line - Tech Park Route 1

Right of Way

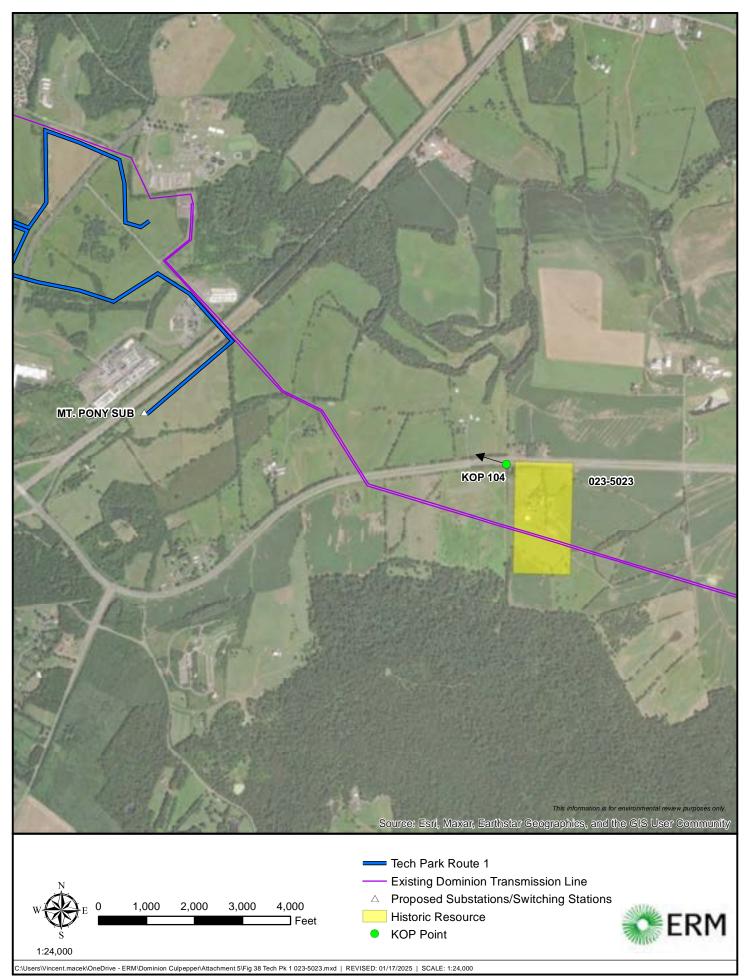


Figure 38. Aerial photograph depicting land use and photo view for 023-5023.







KOP 104

Germanna Hwy

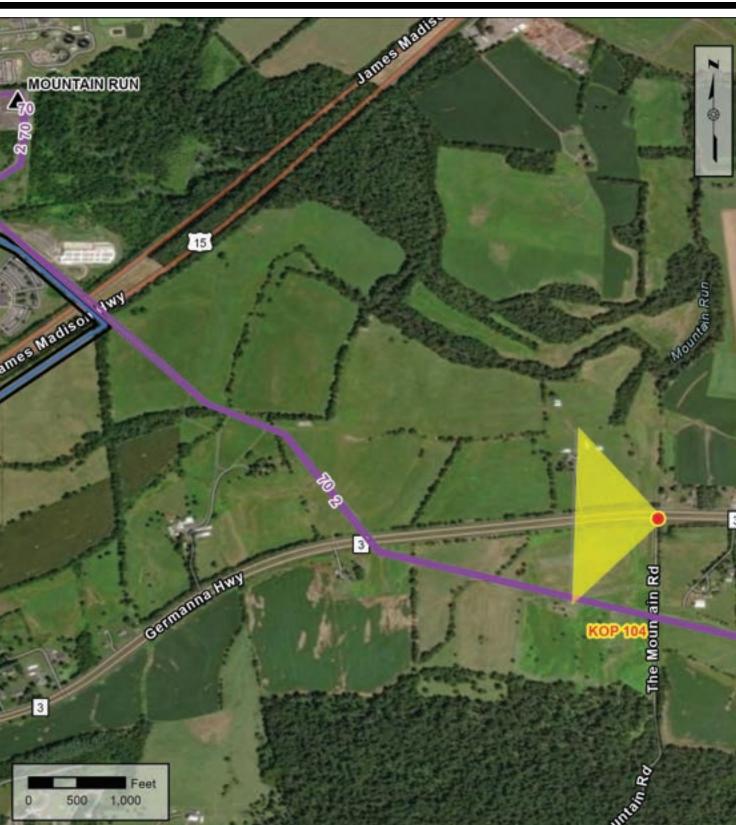
Figure 39

Route: Tech Park Route 1

Date:10/08/2024 Time: 12:58 pm

Viewing Direction: West

Distance to closest feature: 0.93 miles



Legend

◆KOP View Direction ▲ Existing Substation

 Existing Dominion
 Energy Electric
 Transmission Line - Tech Park Route 1

Right of Way

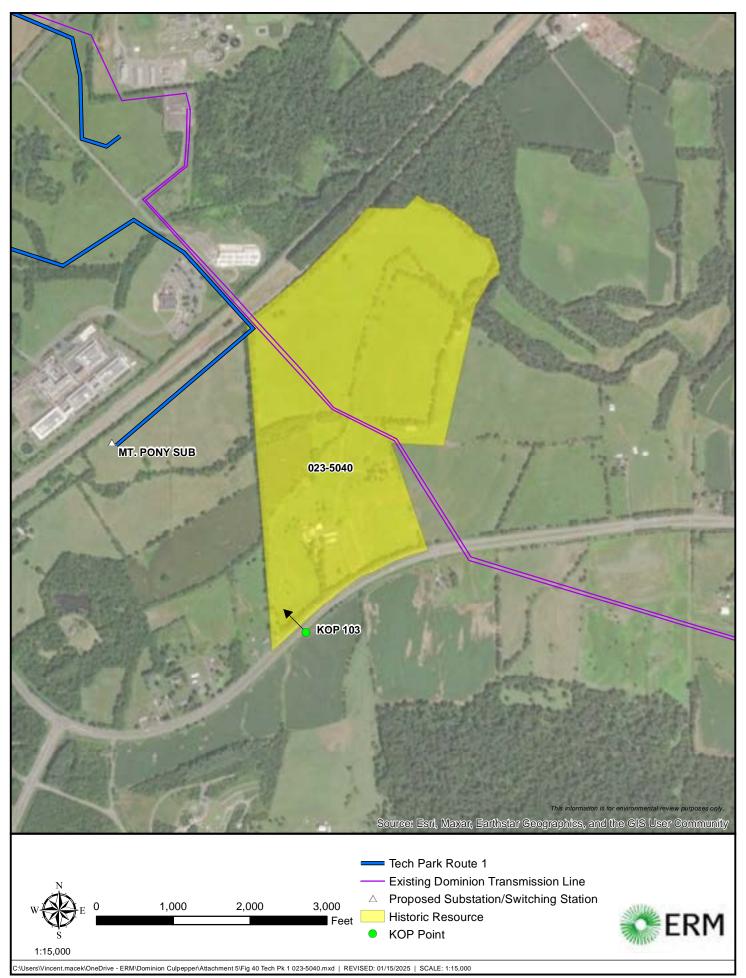


Figure 40. Aerial photograph depicting land use and photo view for 023-5040.







KOP 103

Germanna Hwy

Figure 41

Route: Tech Park Route 1

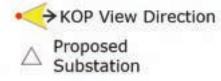
Date:12/17/2024 Time: 12:04 pm

Viewing Direction: Northwest

Distance to closest feature: 0.51 miles



Legend



 Existing Dominion
 Energy Electric Transmission Line - Tech Park Route 1

Right of Way



Figure 42. Aerial photograph depicting land use and photo view for 204-0002.







KOP 116

S East St

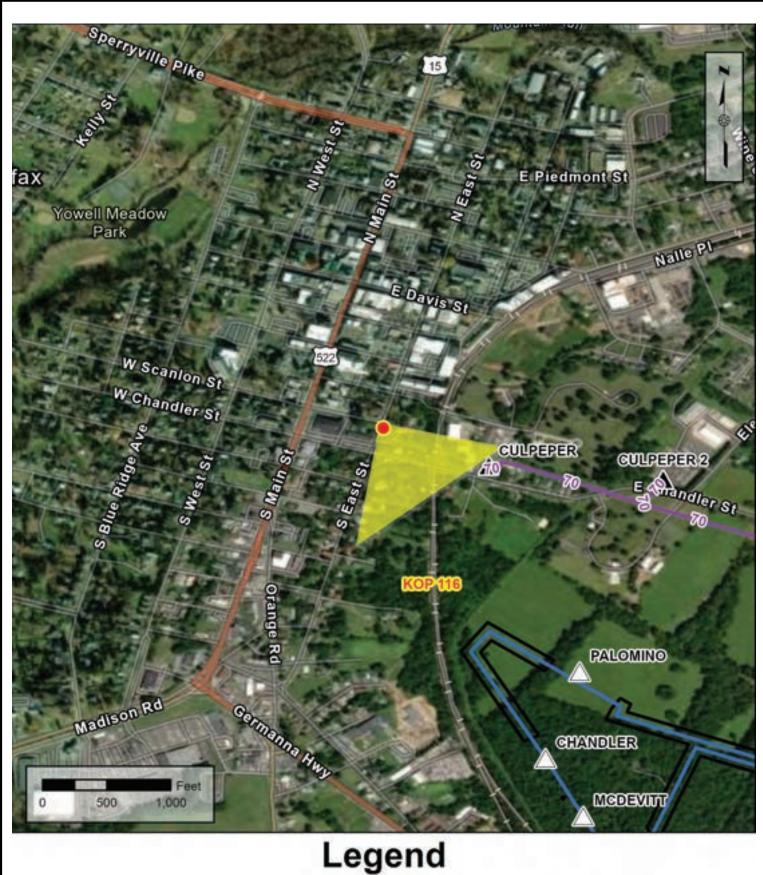
Figure 43

Route: Tech Park Route 1

Date:10/07/2024 Time: 2:07 pm

Viewing Direction: Southeast

Distance to closest feature: 0.32 miles



◆ KOP View Direction ▲ Existing Substation Proposed

Substation

Existing Dominion Right of Way - Energy Electric Transmission Line

Tech Park Route 1

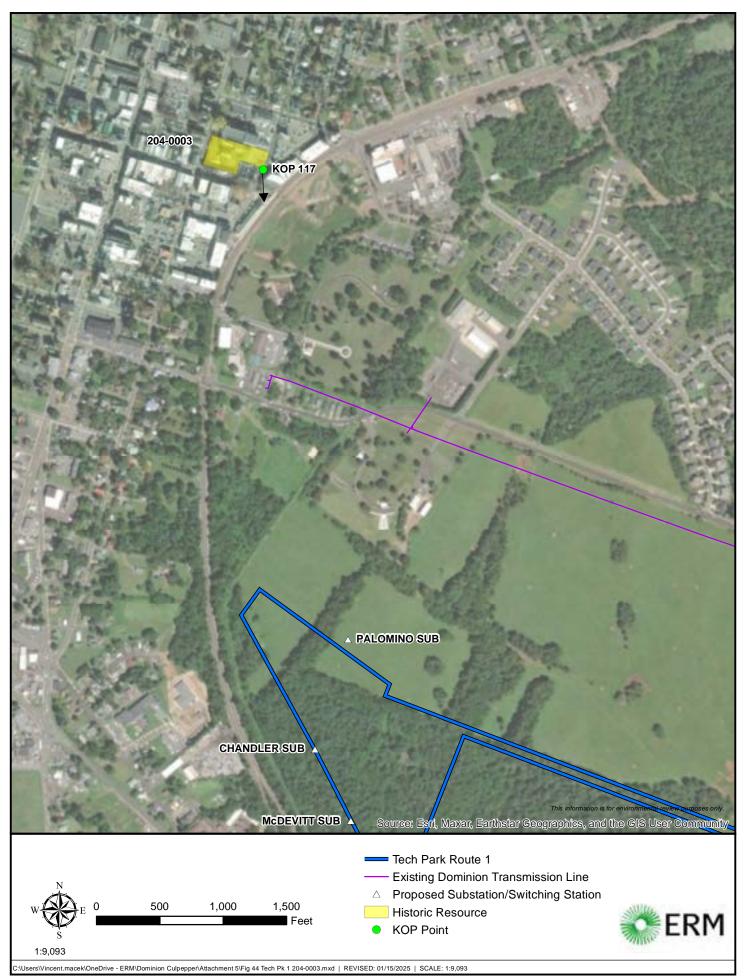
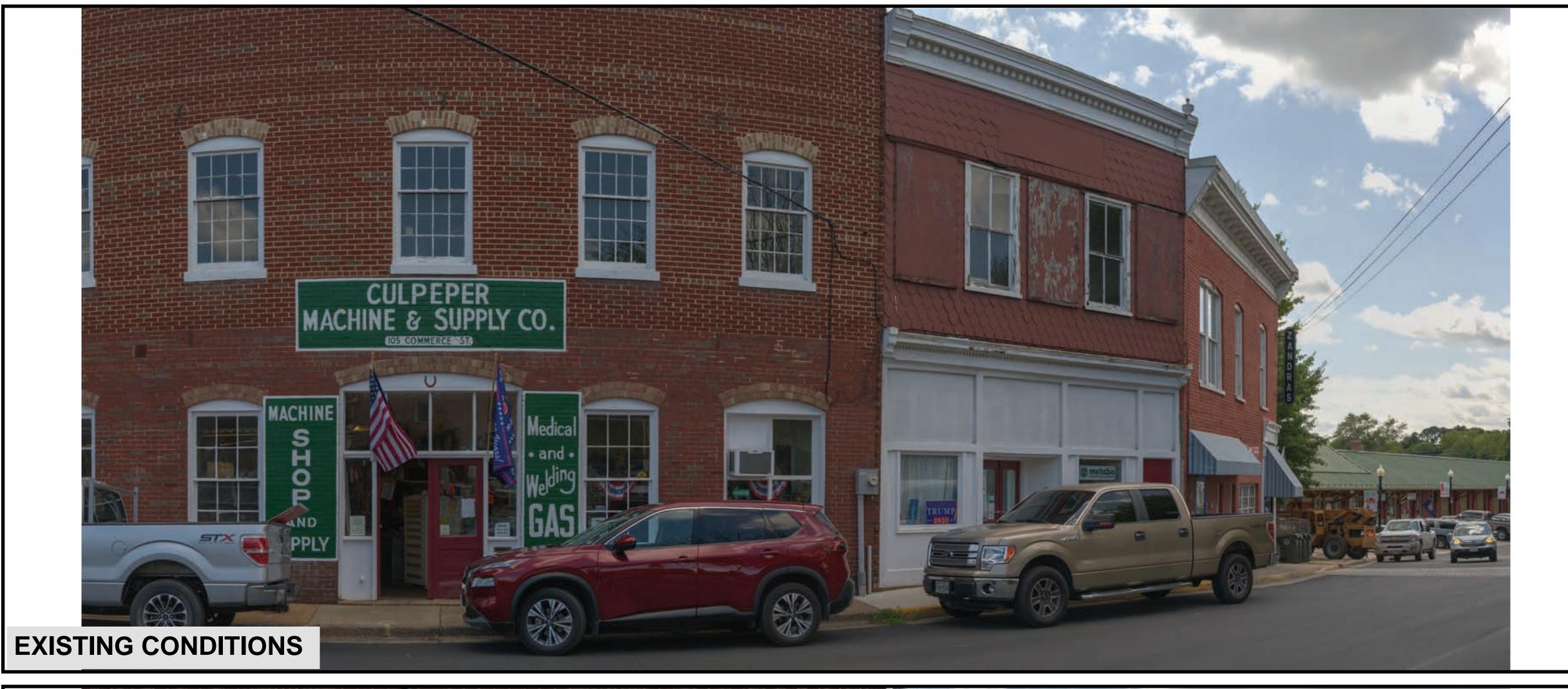


Figure 44. Aerial photograph depicting land use and photo view for 204-0003.







KOP 117

N Commerce St

Figure 45

Route: Tech Park Route 1

Date:08/22/2024 Time: 12:41 pm

Viewing Direction: Southeast

Distance to closest feature: 0.49 miles



Legend ◆ KOP View Direction

▲ Existing Substation Proposed Substation

Existing Dominion - Energy Electric Transmission Line

- Tech Park Route 1

Right of Way



Figure 46. Aerial photograph depicting land use and photo view for 204-0005.







KOP 118

Sara Leigh Ct

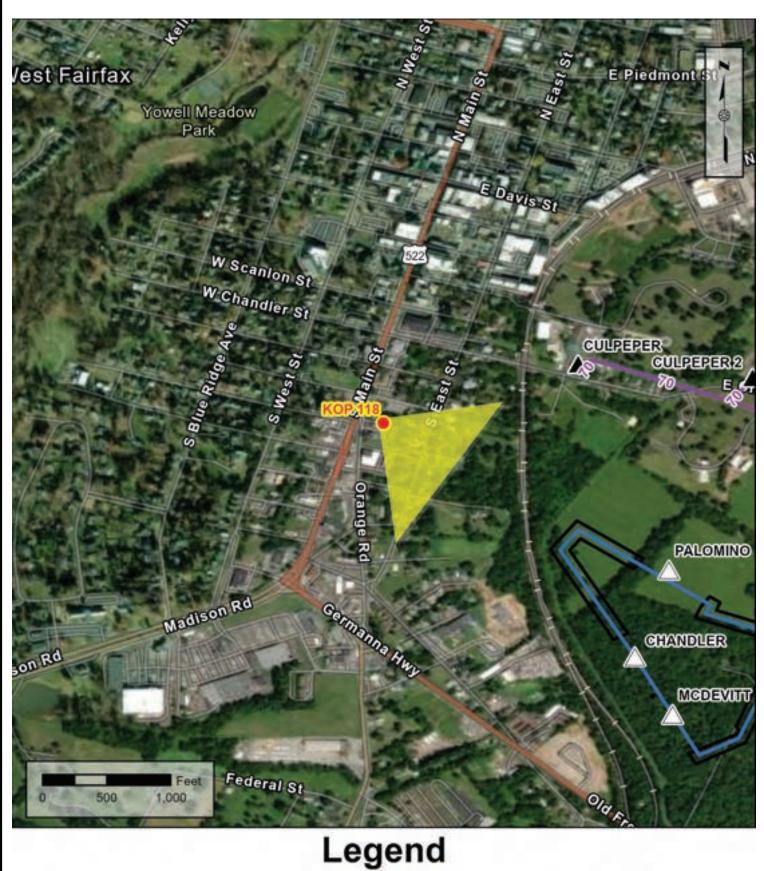
Figure 47

Route: Tech Park Route 1

Date:10/08/2024 Time: 3:06 pm

Viewing Direction: Southeast

Distance to closest feature: 0.28 miles



◆ KOP View Direction

▲ Existing Substation Proposed Substation

Existing Dominion - Energy Electric Transmission Line

Right of Way - Tech Park Route 1



Figure 48. Aerial photograph depicting land use and photo view for 204-0006.







KOP 119

S Main St

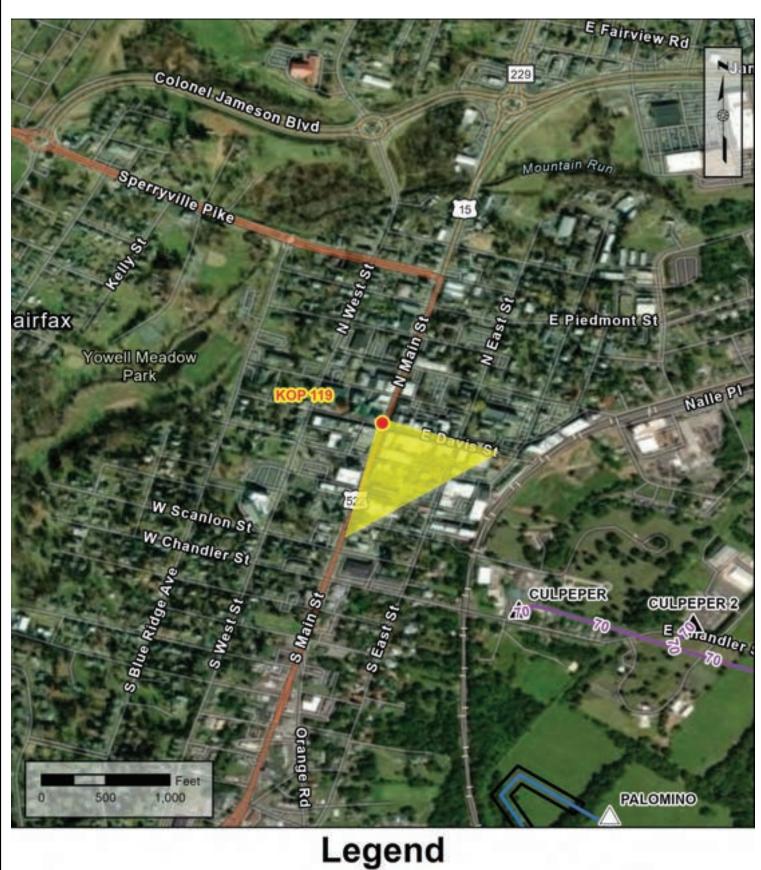
Figure 49

Route: Tech Park Route 1

Date:08/22/2024 Time: 1:03 pm

Viewing Direction: Southeast

Distance to closest feature: 0.82 miles



◆ KOP View Direction

▲ Existing Substation Proposed Substation

Existing Dominion - Energy Electric Transmission Line

- Tech Park Route 1

Right of Way

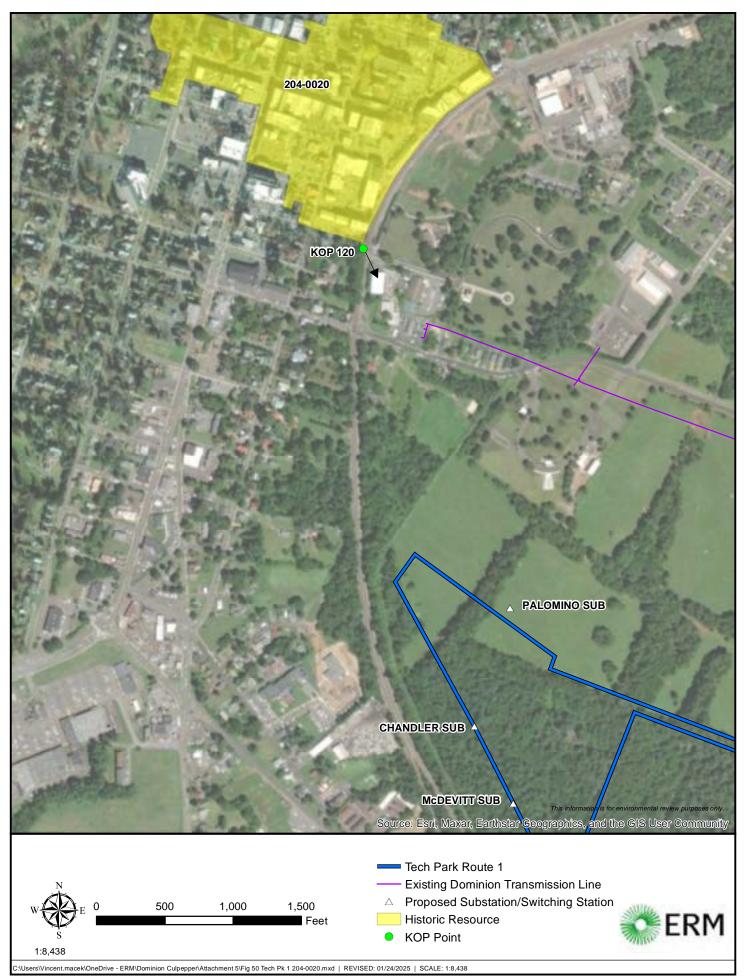


Figure 50. Aerial photograph depicting land use and photo view for 204-0020.







KOP 120

U S Ave

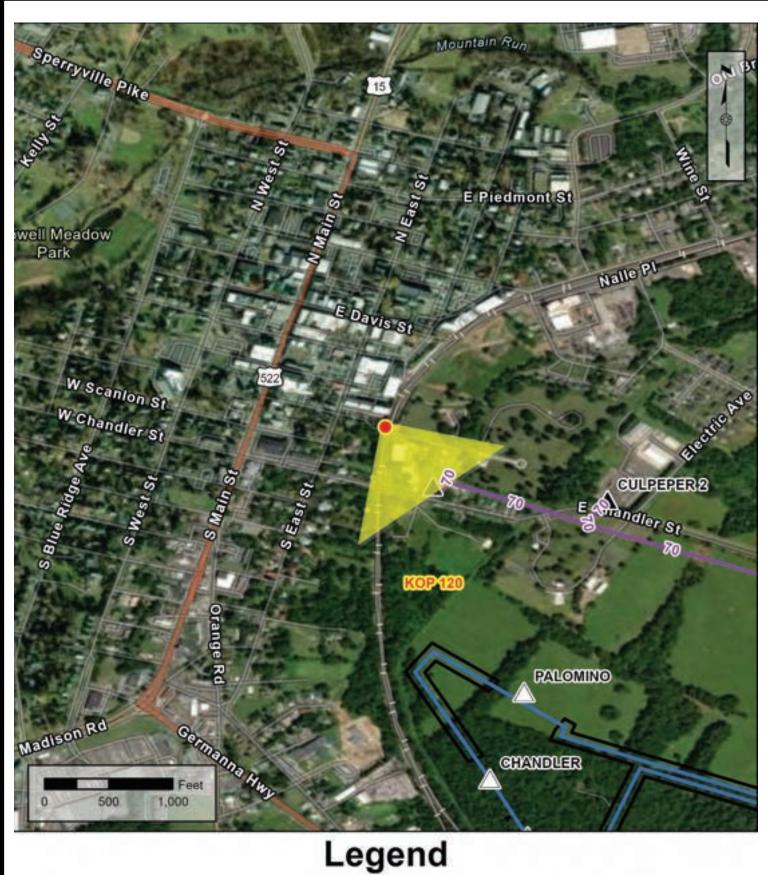
Figure 51

Route: Tech Park Route 1

Date:10/07/2024 Time: 1:53 pm

Viewing Direction: Southeast

Distance to closest feature: 0.34 miles



→ KOP View Direction

▲ Existing Substation Proposed Tech Park Route 1 Substation

Right of Way **Existing Dominion** - Energy Electric Transmission Line



Figure 52. Aerial photograph depicting land use and photo view for 204-0020-0140.







KOP 121

S West St

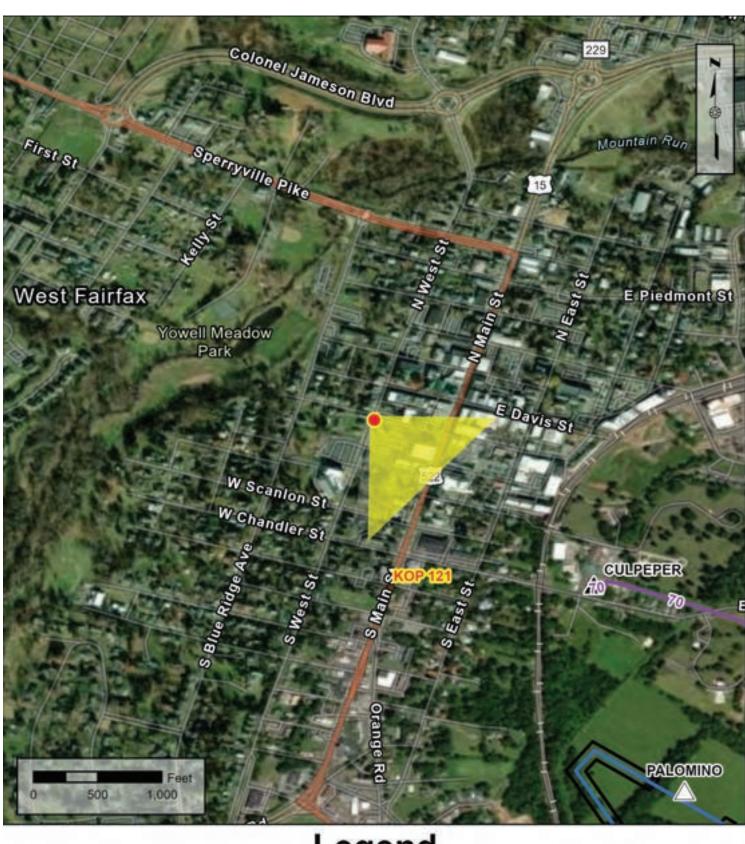
Figure 53

Route: Tech Park Route 1

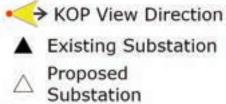
Date:10/07/2024 Time: 3:32 pm

Viewing Direction: Southeast

Distance to closest feature: 0.55 miles



Legend



Existing Dominion - Energy Electric Transmission Line

Right of Way

Tech Park Route 1



Figure 54. Aerial photograph depicting land use and photo view for 204-0021.







KOP 122

N West St

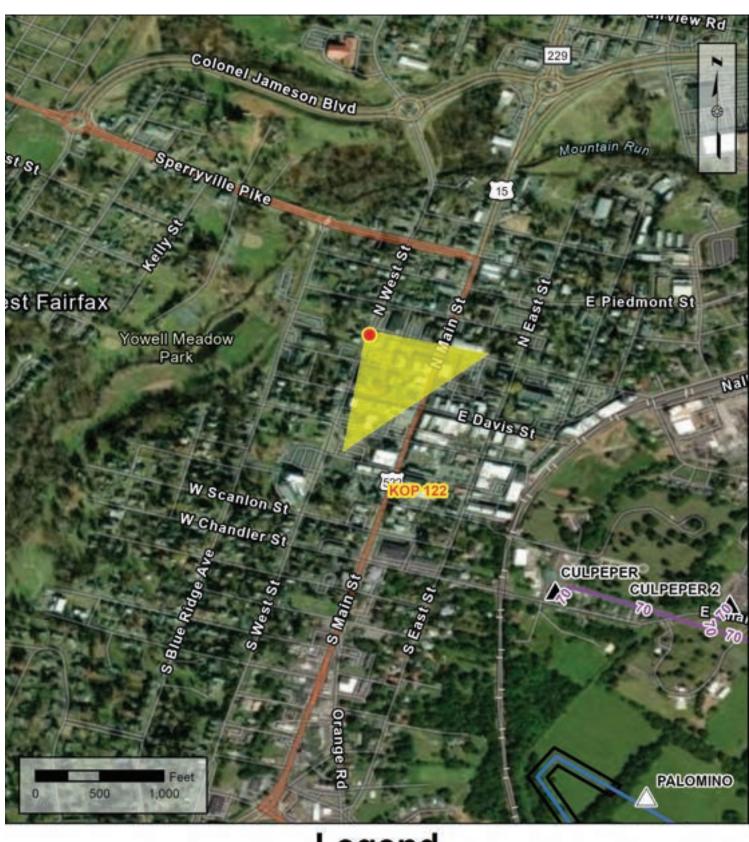
Figure 55

Route: Tech Park Route 1

Date:10/07/2024 Time: 3:20 pm

Viewing Direction: Southeast

Distance to closest feature: 0.66 miles



Legend ◆ KOP View Direction

▲ Existing Substation Proposed Substation

Existing Dominion - Energy Electric Transmission Line

- Tech Park Route 1

Right of Way

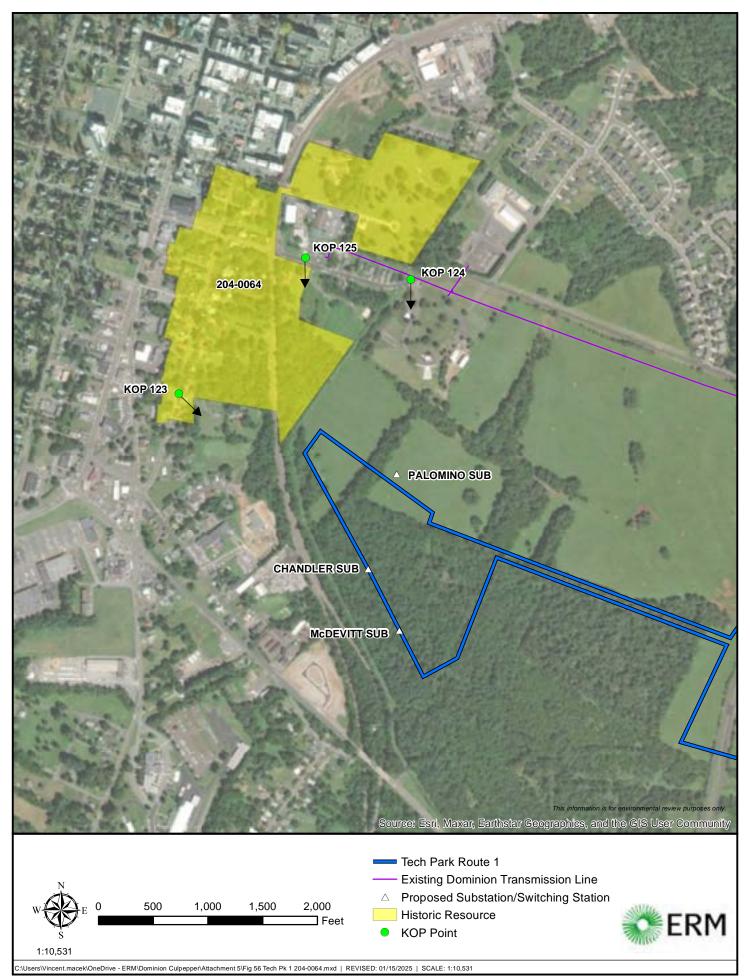


Figure 56. Aerial photograph depicting land use and photo view for 204-0064.







KOP 125

E Chandler St

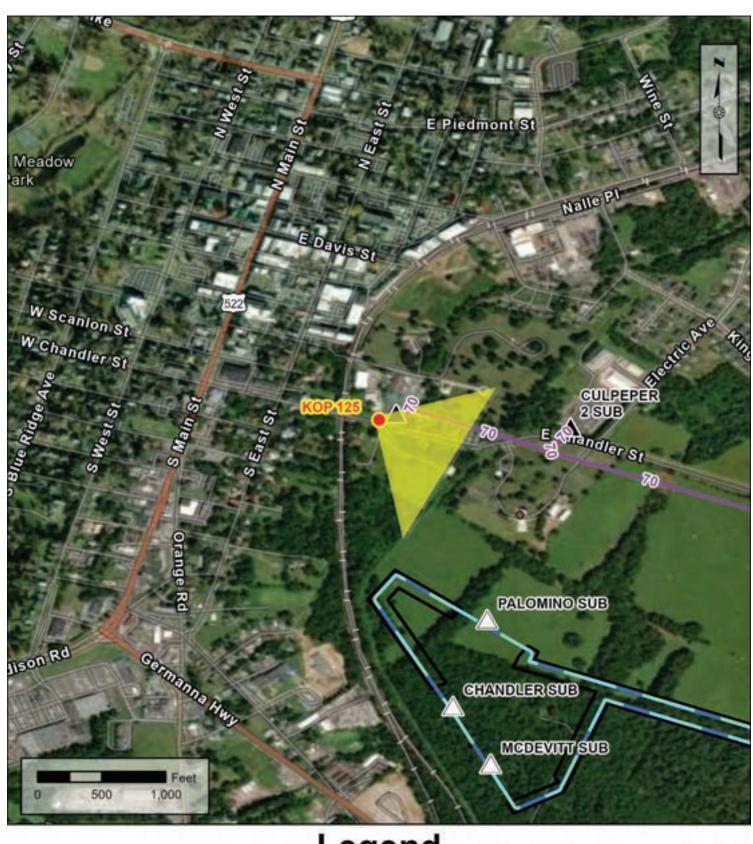
Figure 57

Route: Tech Park Route 1

Date:10/07/2024 Time: 2:30 pm

Viewing Direction: Southeast

Distance to closest feature: 0.24 miles



Legend

◆ KOP View Direction ▲ Existing Substation Proposed Substation

Existing Dominion - Energy Electric Transmission Line

___ Tech Park All Routes Right of Way







KOP 124

E Chandler St

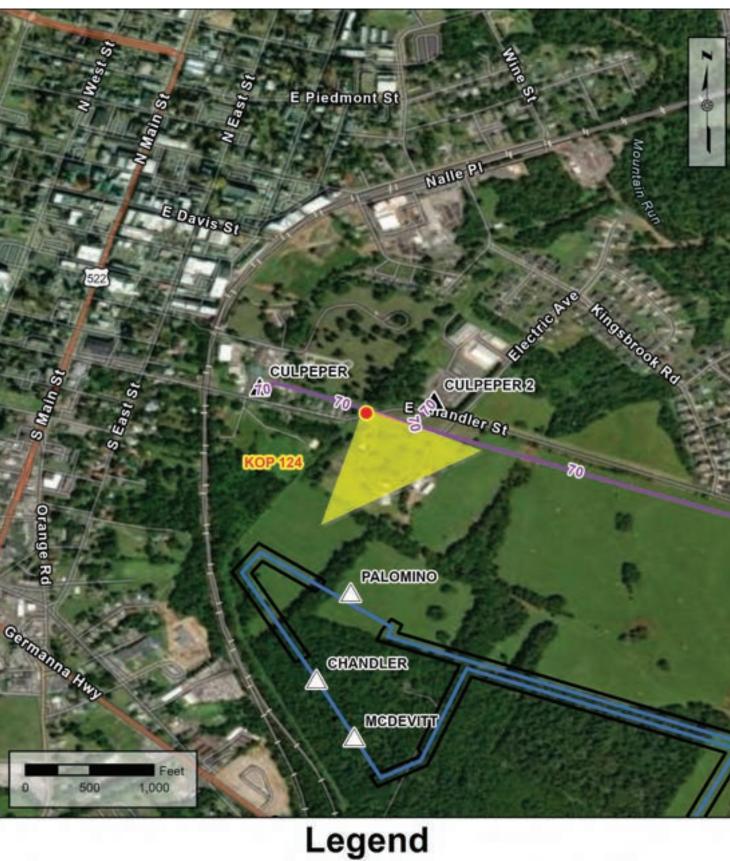
Figure 58

Route: Tech Park Route 1

Date:10/07/2024 Time: 2:41 pm

Viewing Direction: Southeast

Distance to closest feature: 0.24 miles



→ KOP View Direction

▲ Existing Substation Proposed Substation

Existing Dominion - Energy Electric Transmission Line

Tech Park Route 1

Right of Way







KOP 123

Rosson Ln

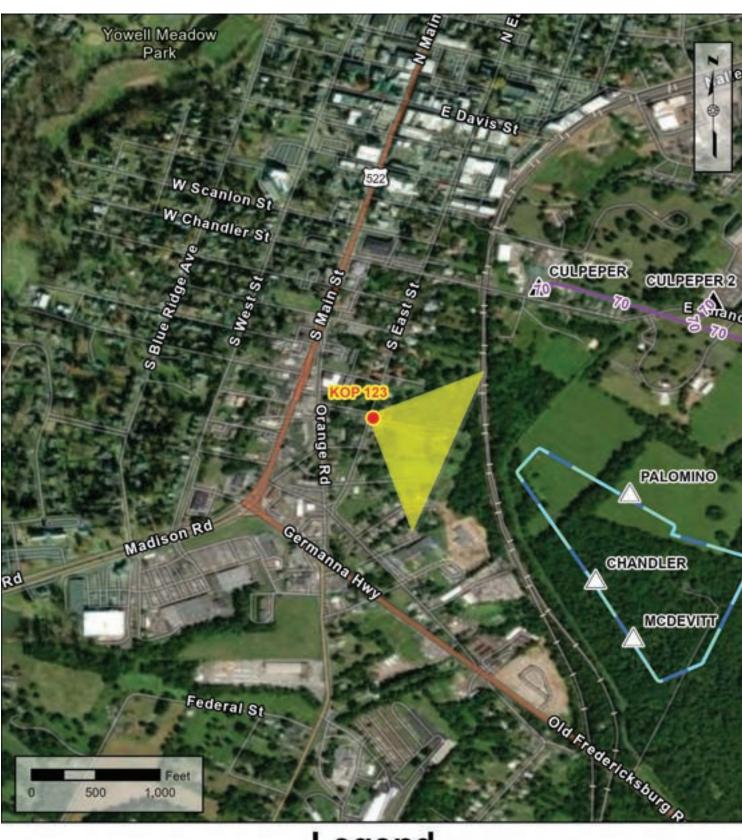
Figure 59

Route: Tech Park Route 1

Date:10/08/2024 Time: 2:46 pm

Viewing Direction: Southeast

Distance to closest feature: 0.19 miles



Legend ◆ KOP View Direction

▲ Existing Substation Proposed Substation

Existing Dominion - Energy Electric Transmission Line ___ Tech Park All Routes

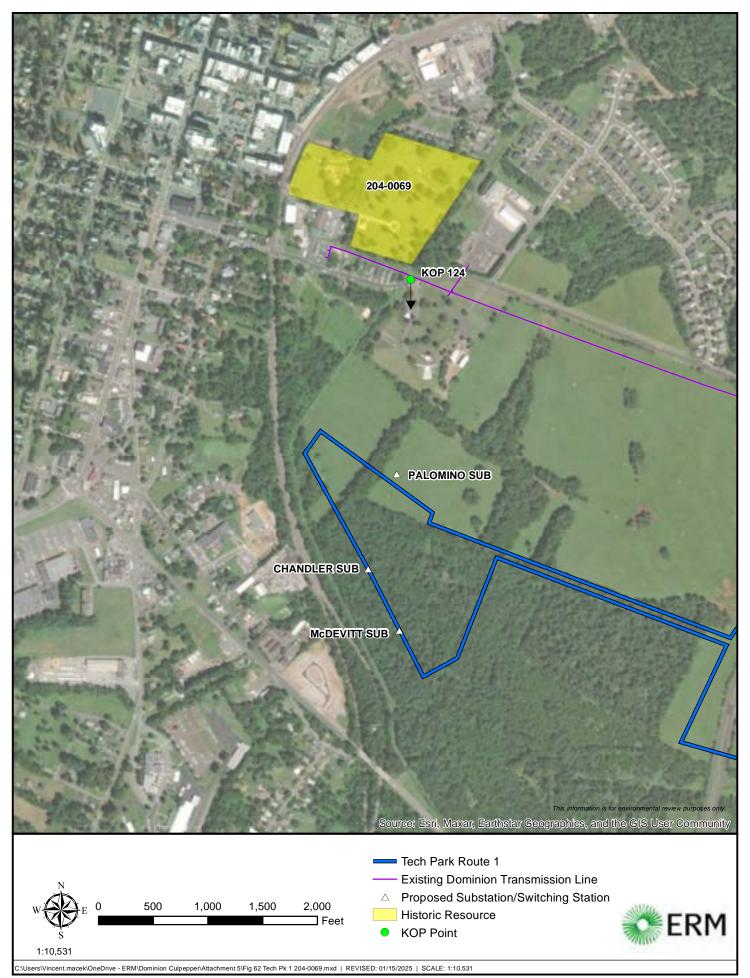


Figure 60. Aerial photograph depicting land use and photo view for 204-0069.







KOP 124

E Chandler St

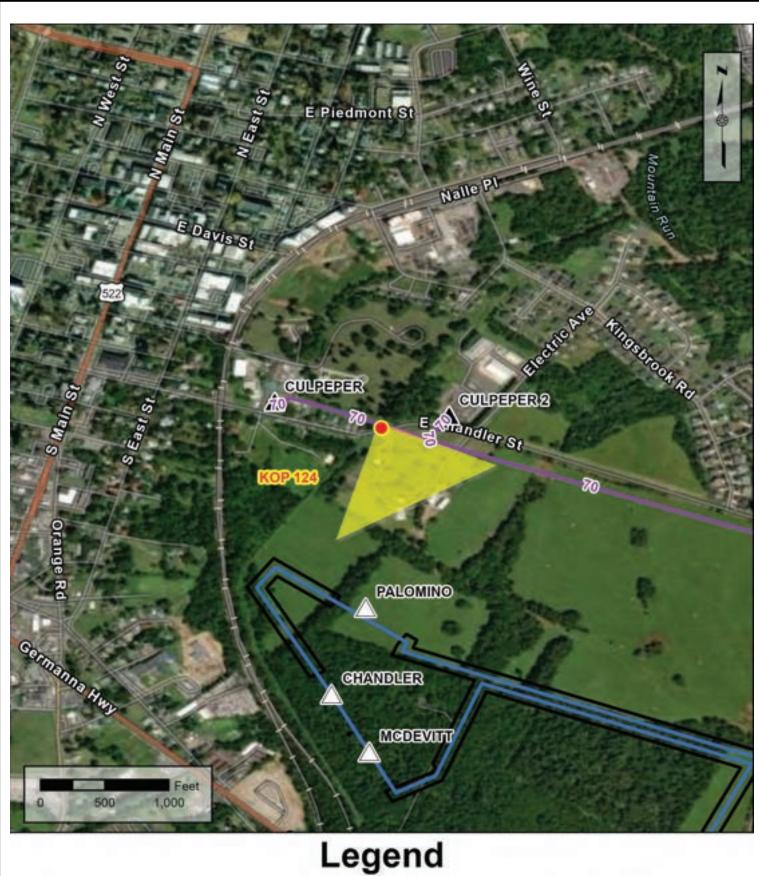
Figure 61

Route: Tech Park Route 1

Date:10/07/2024 Time: 2:41 pm

Viewing Direction: Southeast

Distance to closest feature: 0.24 miles



→ KOP View Direction

▲ Existing Substation Proposed Substation

Right of Way **Existing Dominion** - Energy Electric Transmission Line Tech Park Route 1

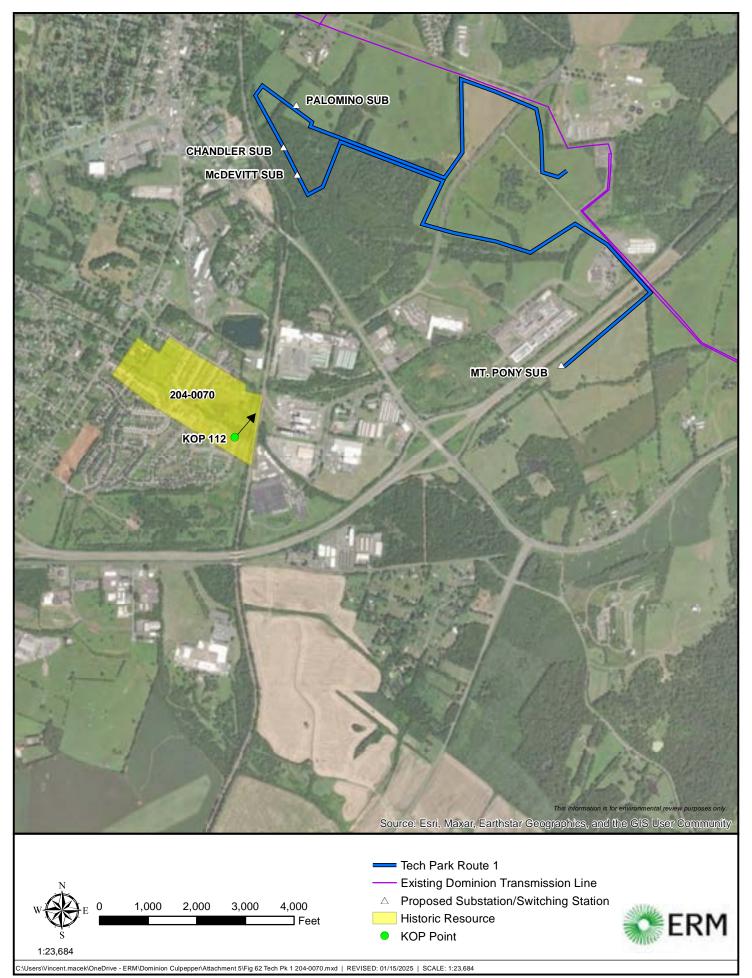


Figure 62. Aerial photograph depicting land use and photo view for 204-0070.







KOP 112

Post Oak Dr

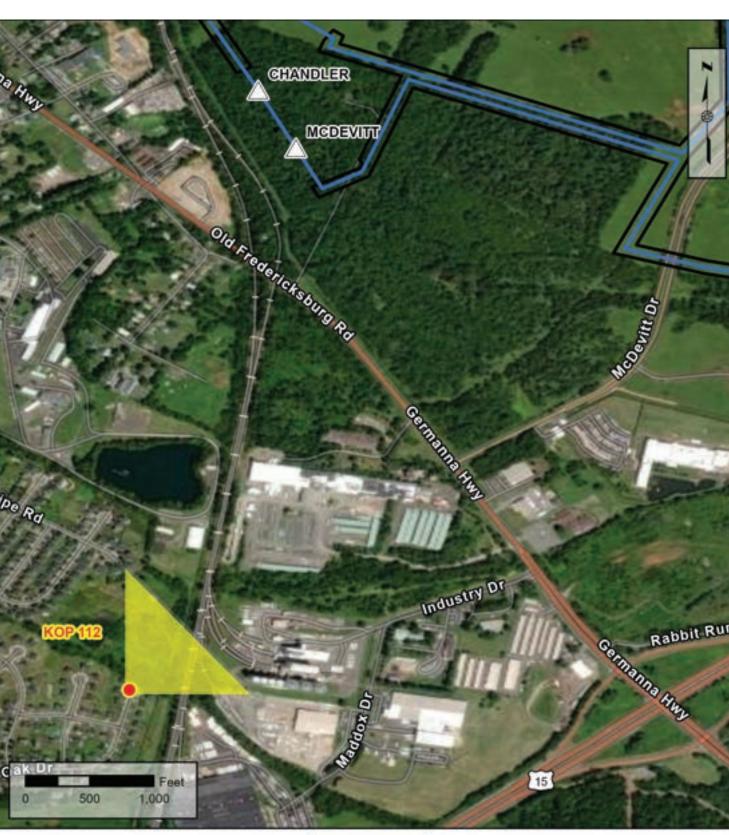
Figure 63

Route: Tech Park Route 1

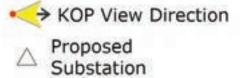
Date:10/09/2024 Time: 11:39 am

Viewing Direction: Northeast

Distance to closest feature: 0.96 miles



Legend



- Tech Park Route 1 Right of Way

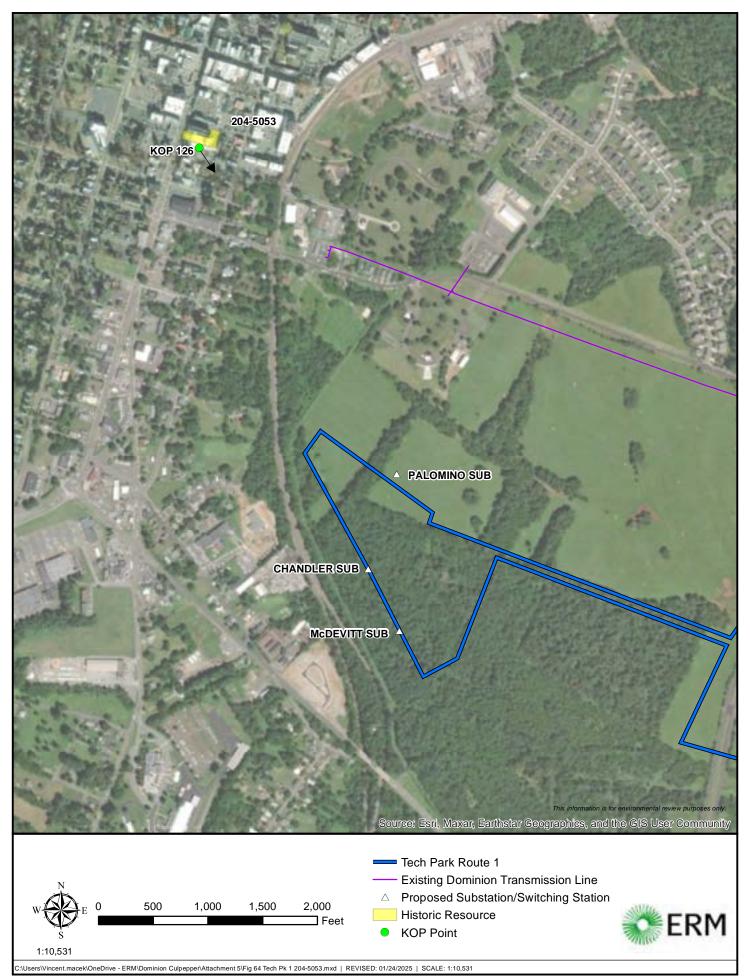


Figure 64. Aerial photograph depicting land use and photo view for 204-5053.







KOP 126

E Stevens St

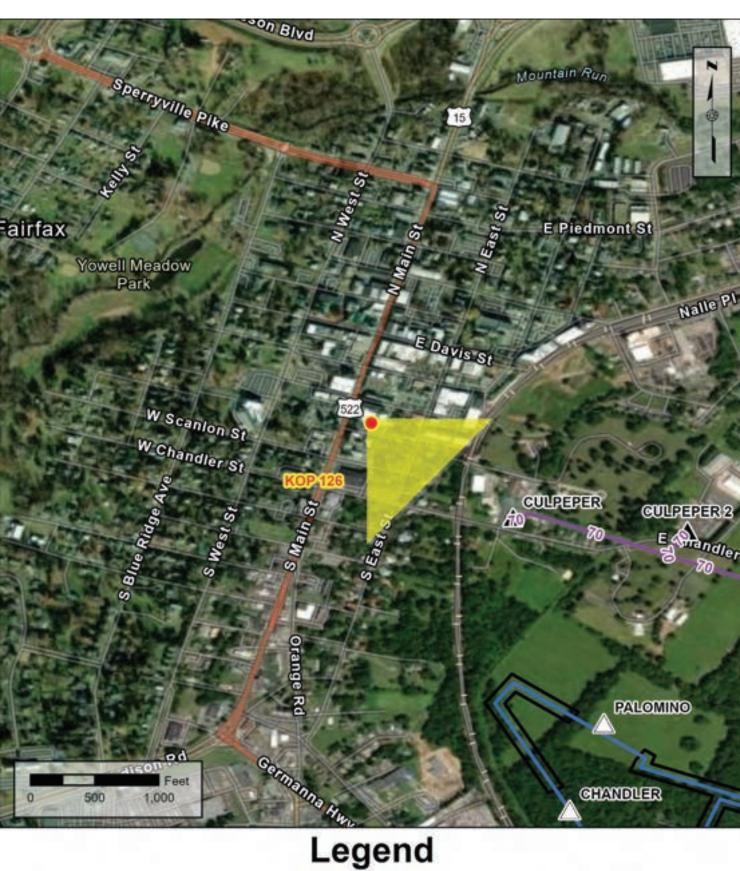
Figure 65

Route: Tech Park Route 1

Date:10/07/2024 Time: 3:53 pm

Viewing Direction: Southeast

Distance to closest feature: 0.42 miles



◆ KOP View Direction ▲ Existing Substation Proposed Substation

Existing Dominion - Energy Electric Transmission Line - Tech Park Route 1

Right of Way



Figure 66. Aerial photograph depicting land use and photo view for 204-5067.







KOP 126

E Stevens St

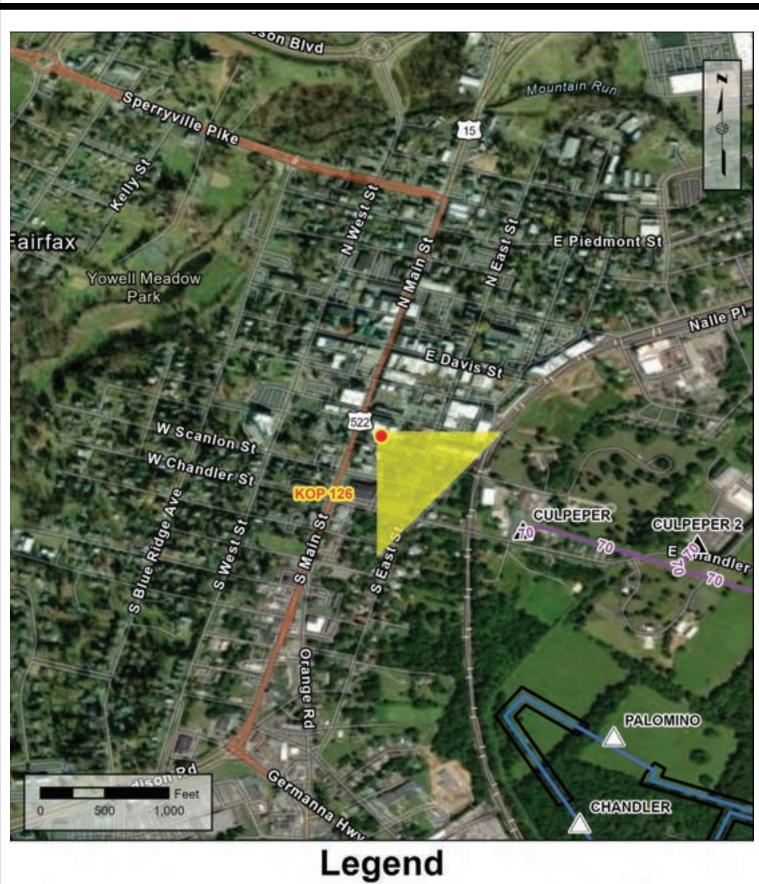
Figure 67

Route: Tech Park Route 1

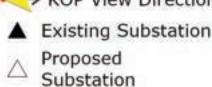
Date:10/07/2024 Time: 3:53 pm

Viewing Direction: Southeast

Distance to closest feature: 0.42 miles



◆ KOP View Direction



Existing Dominion - Energy Electric Transmission Line

Right of Way

Note: Project components illustrated are based on proposed preliminary designs The images contained on this page show the proposed project within a wider landscape context and are not representative of scale and distance when viewed from the actual view point.

- Tech Park Route 1

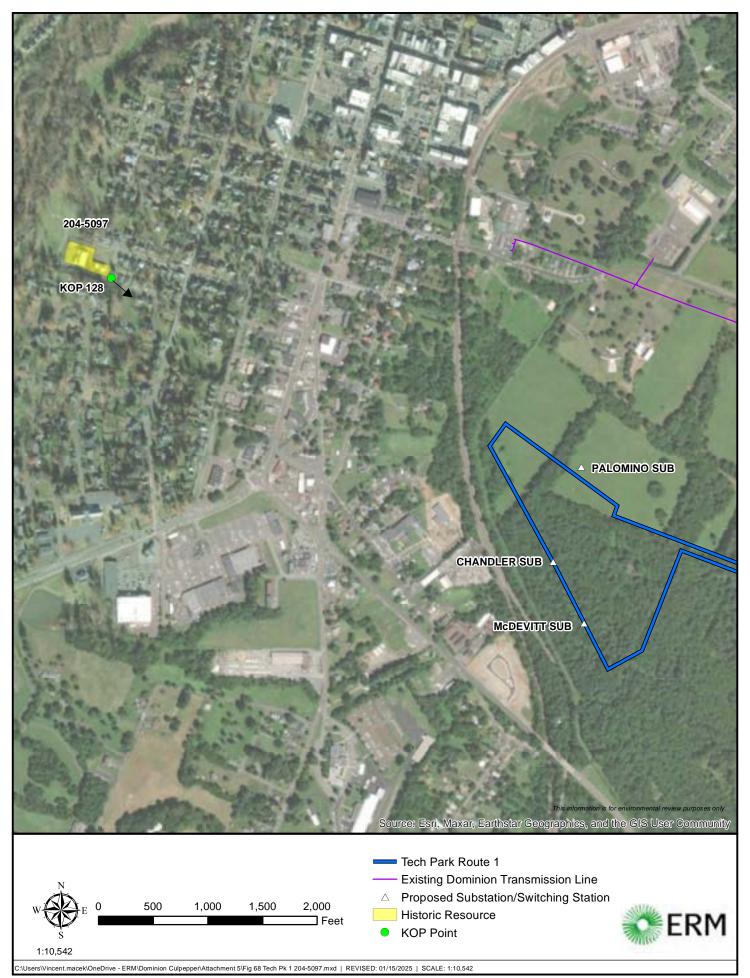


Figure 68. Aerial photograph depicting land use and photo view for 204-5097.







KOP 128

Spring St

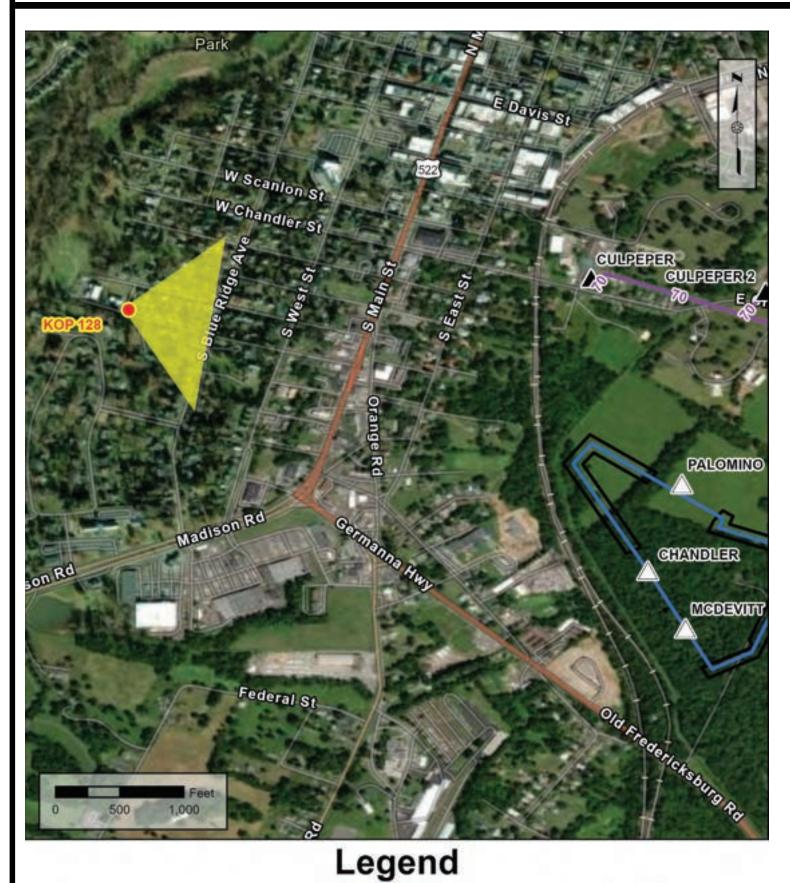
Figure 69

Route: Tech Park Route 1

Date:10/08/2024 Time: 3:22 pm

Viewing Direction: East

Distance to closest feature: 0.56 miles



◆ KOP View Direction ▲ Existing Substation Proposed

Substation

Existing Dominion - Energy Electric Transmission Line

Right of Way - Tech Park Route 1

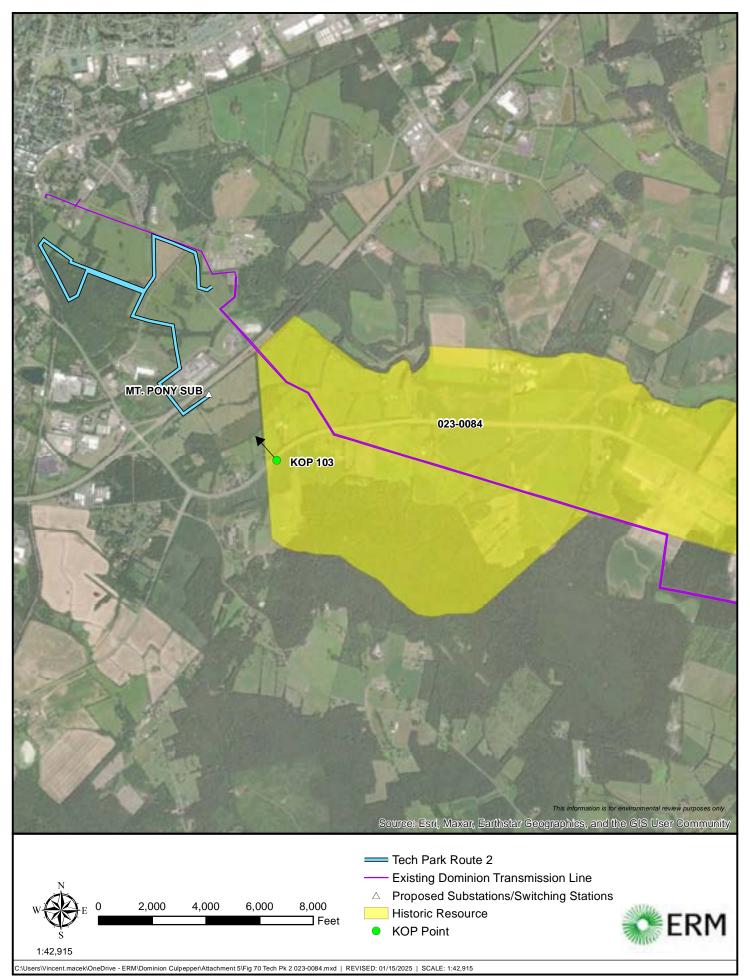


Figure 70. Aerial photograph depicting land use and photo view for 023-0084.







KOP 103

Germanna Hwy

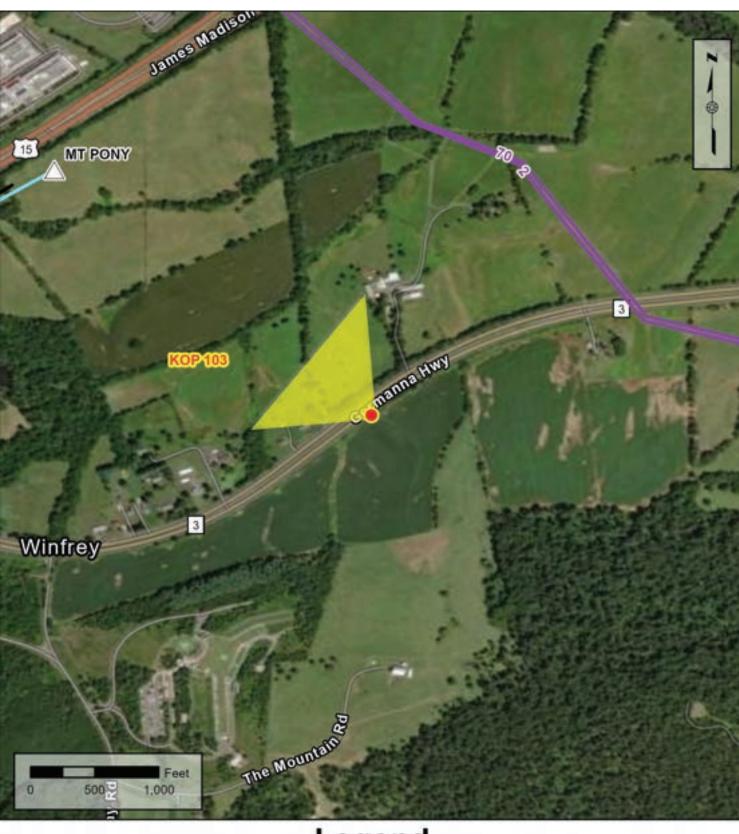
Figure 71

Route: Tech Park Route 2

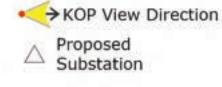
Date:12/17/2024 Time: 12:04 pm

Viewing Direction: Northwest

Distance to closest feature: 0.51 miles



Legend



 Existing Dominion
 Energy Electric Transmission Line Tech Park Route 2

Right of Way

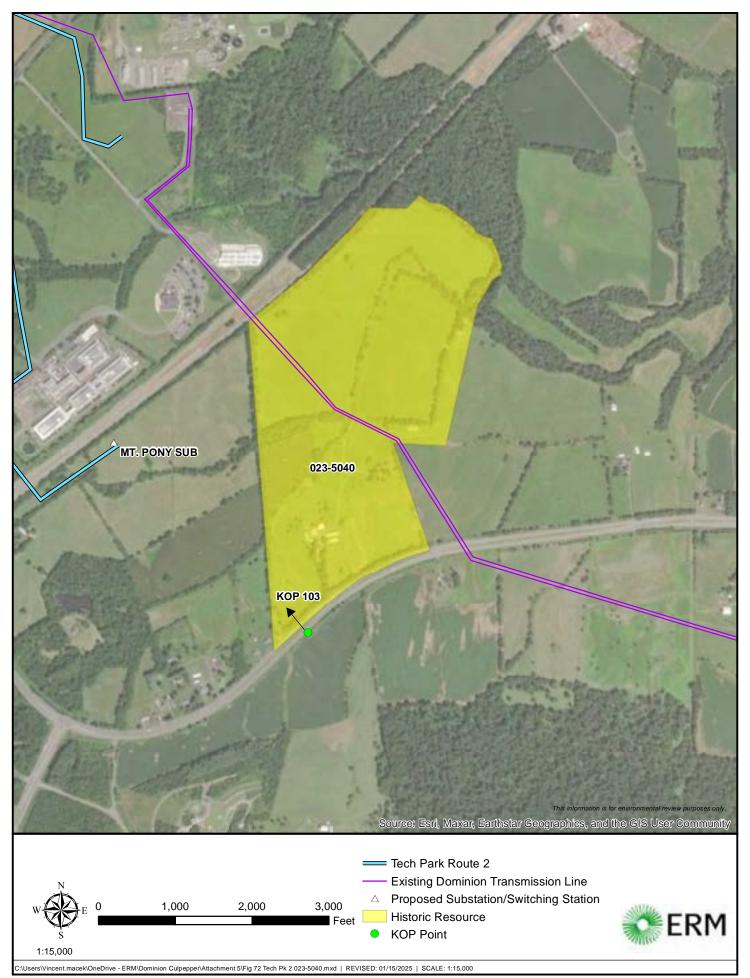
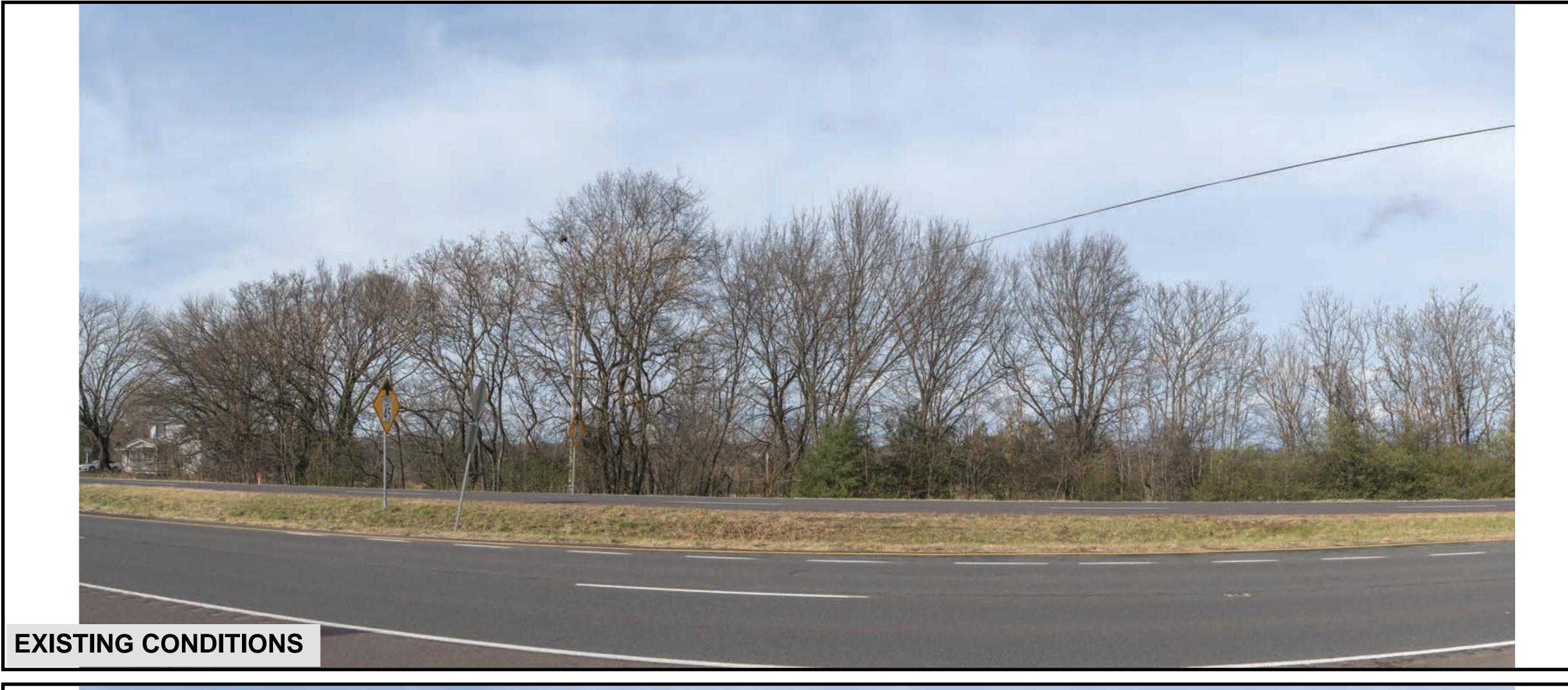


Figure 72. Aerial photograph depicting land use and photo view for 023-5040.







KOP 103

Germanna Hwy

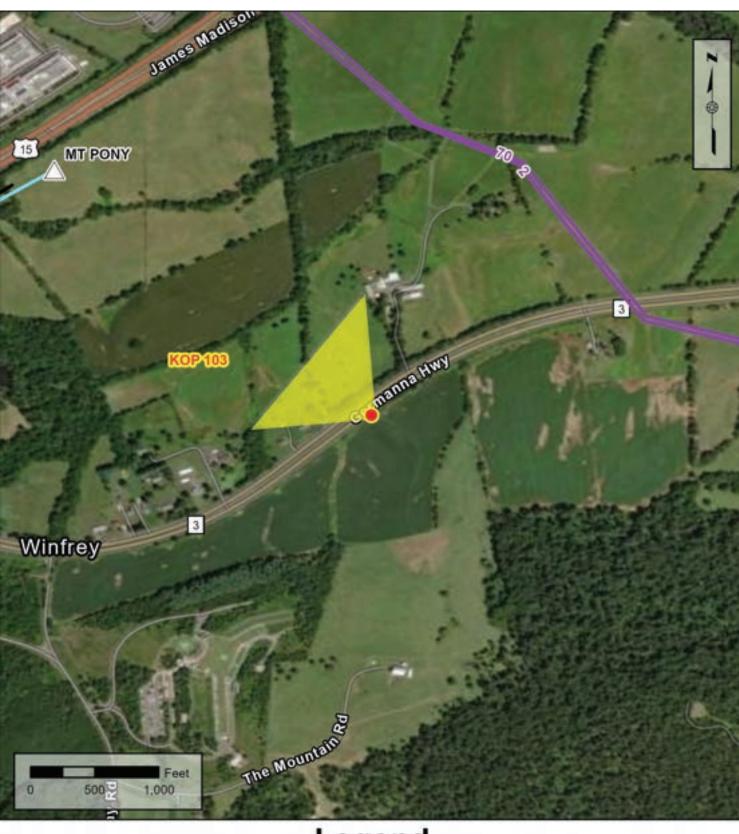
Figure 73

Route: Tech Park Route 2

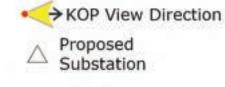
Date:12/17/2024 Time: 12:04 pm

Viewing Direction: Northwest

Distance to closest feature: 0.51 miles



Legend



 Existing Dominion
 Energy Electric Transmission Line Tech Park Route 2

Right of Way



Figure 74. Aerial photograph depicting land use and photo view for 204-0002.







KOP 116

S East St

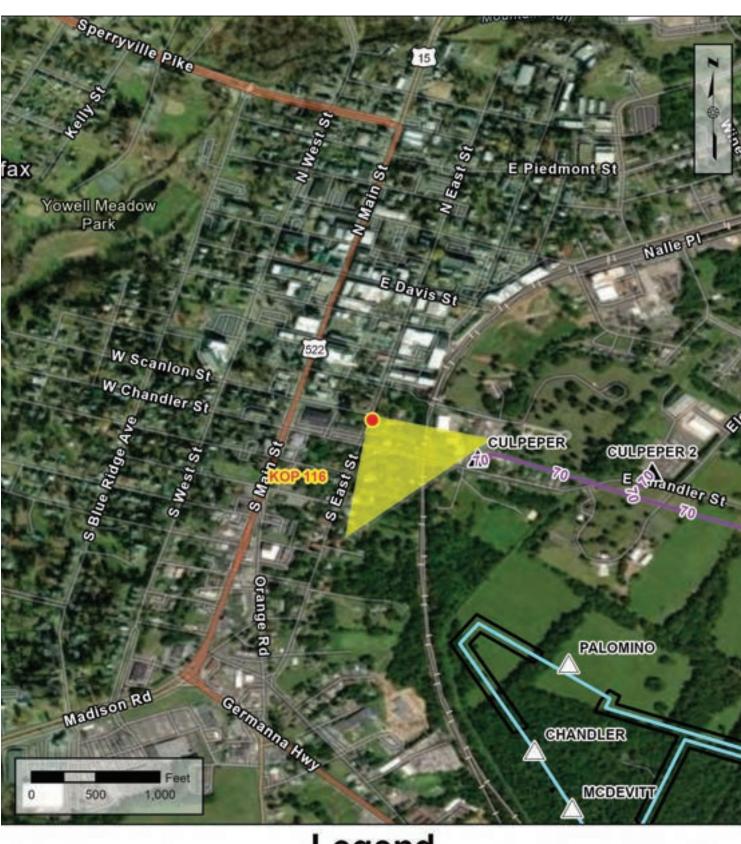
Figure 75

Route: Tech Park Route 2

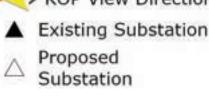
Date:10/07/2024 Time: 2:07 pm

Viewing Direction: Southeast

Distance to closest feature: 0.32 miles



Legend ◆ KOP View Direction

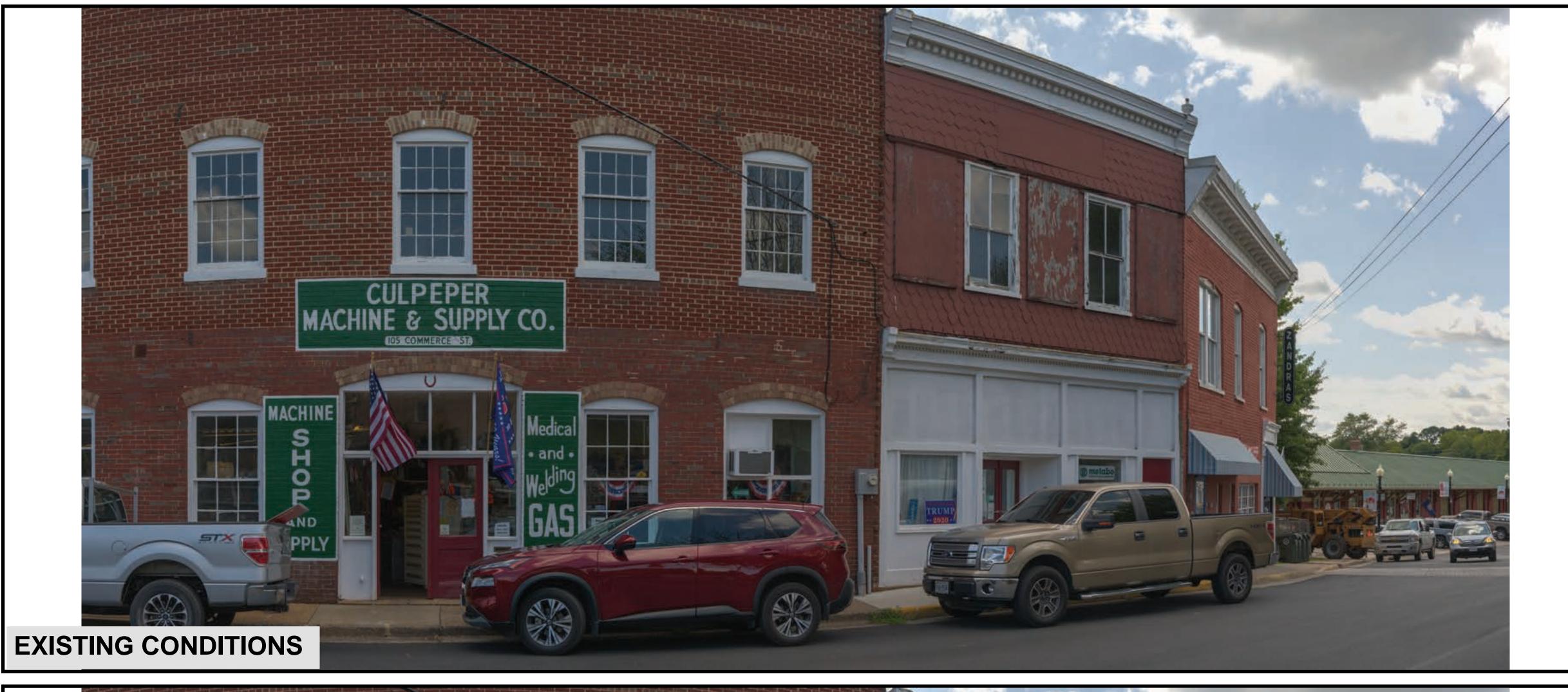


Existing Dominion - Energy Electric Transmission Line Tech Park Route 2

Right of Way



Figure 76. Aerial photograph depicting land use and photo view for 204-0003.







KOP 117

N Commerce St

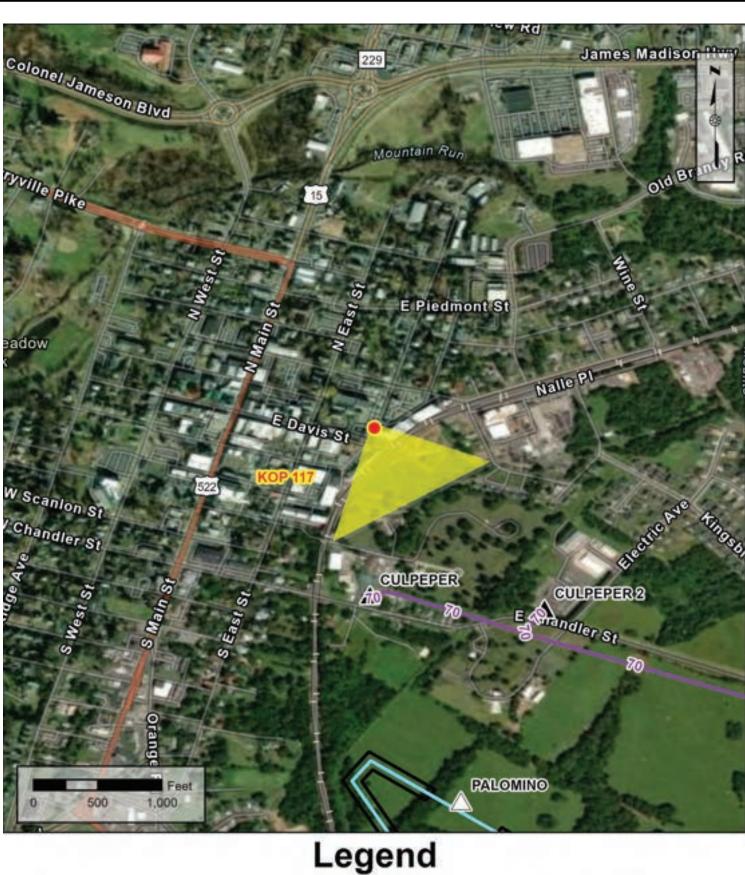
Figure 77

Route: Tech Park Route 2

Date:08/22/2024 Time: 12:41 pm

Viewing Direction: Southeast

Distance to closest feature: 0.49 miles



◆ KOP View Direction

▲ Existing Substation Proposed Substation

Right of Way **Existing Dominion** - Energy Electric Transmission Line - Tech Park Route 2



Figure 78. Aerial photograph depicting land use and photo view for 204-0005.







KOP 118

Sara Leigh Ct

Figure 79

Route: Tech Park Route 2

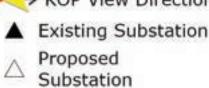
Date:10/08/2024 Time: 3:06 pm

Viewing Direction: Southeast

Distance to closest feature: 0.28 miles



◆ KOP View Direction



Existing Dominion Right of Way - Energy Electric Transmission Line

Tech Park Route 2



Figure 80. Aerial photograph depicting land use and photo view for 204-0006.







KOP 119

S Main St

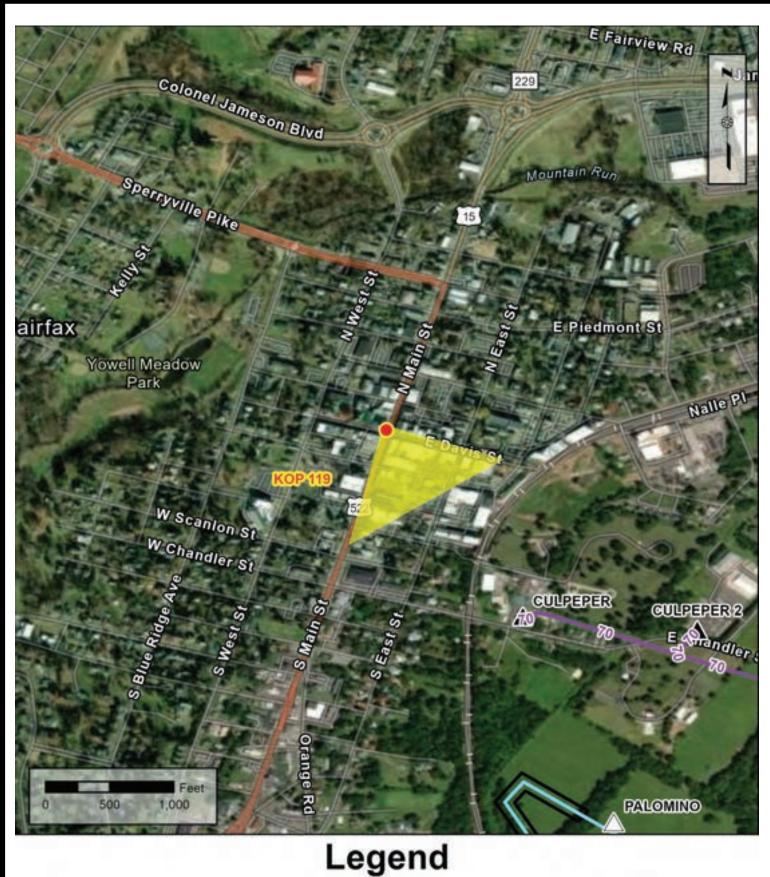
Figure 81

Route: Tech Park Route 2

Date:08/22/2024 Time: 1:03 pm

Viewing Direction: Southeast

Distance to closest feature: 0.82 miles



◆ KOP View Direction

▲ Existing Substation Proposed Substation

Right of Way **Existing Dominion** - Energy Electric Transmission Line

Tech Park Route 2

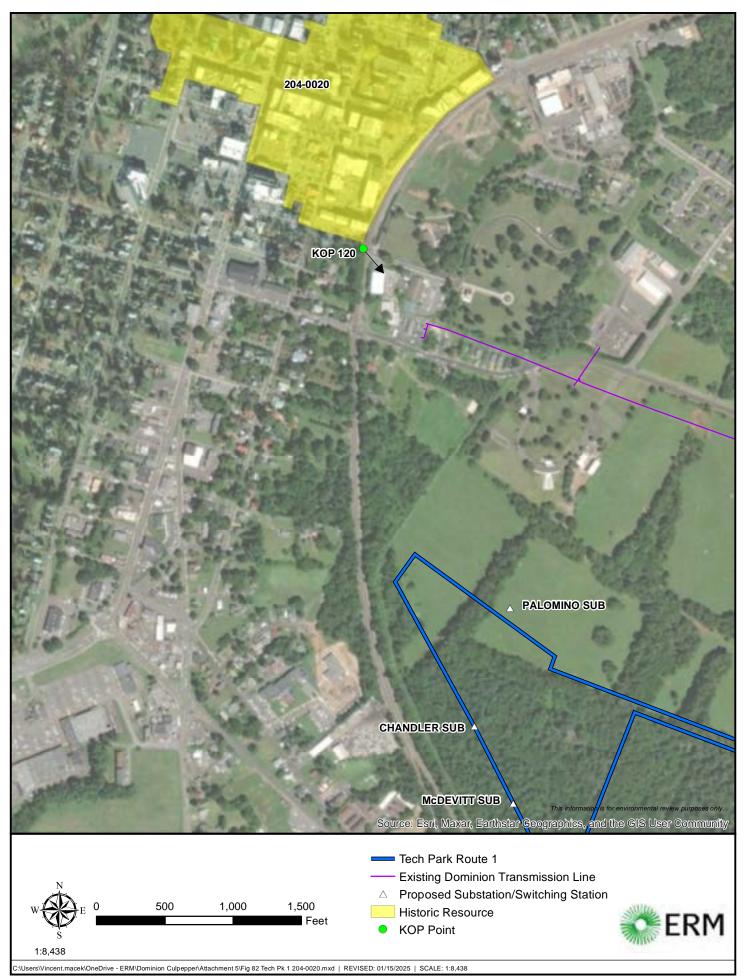


Figure 82. Aerial photograph depicting land use and photo view for 204-0020.







KOP 120

U S Ave

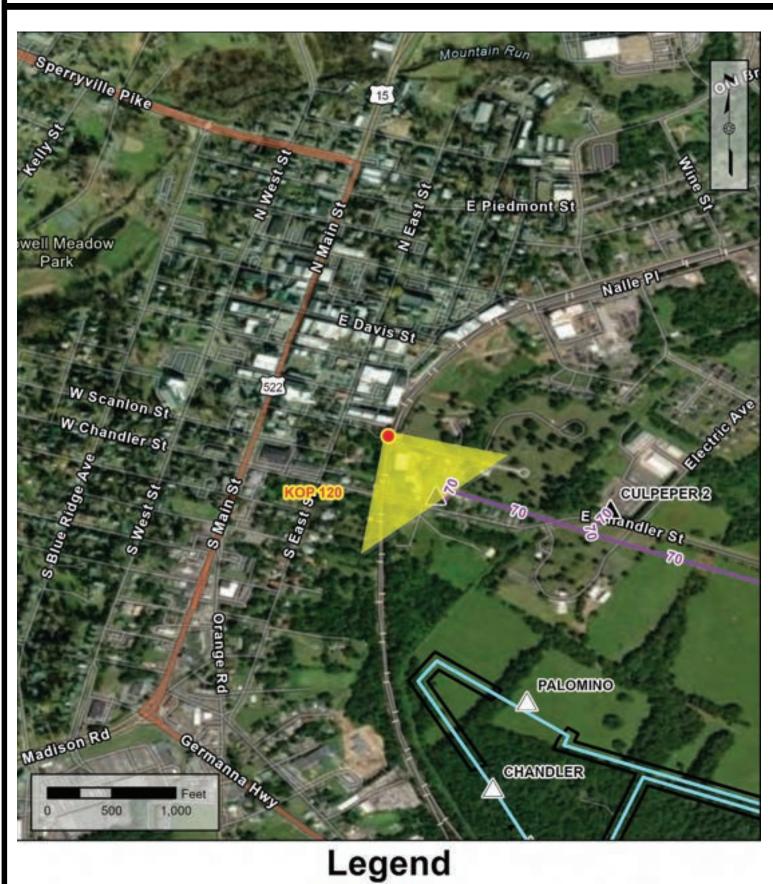
Figure 83

Route: Tech Park Route 2

Date:10/07/2024 Time: 1:53 pm

Viewing Direction: Southeast

Distance to closest feature: 0.34 miles



→ KOP View Direction

Existing Substation Proposed Substation

Right of Way **Existing Dominion** - Energy Electric Transmission Line

Tech Park Route 2



Figure 84. Aerial photograph depicting land use and photo view for 204-0020-0140.







KOP 121

S West St

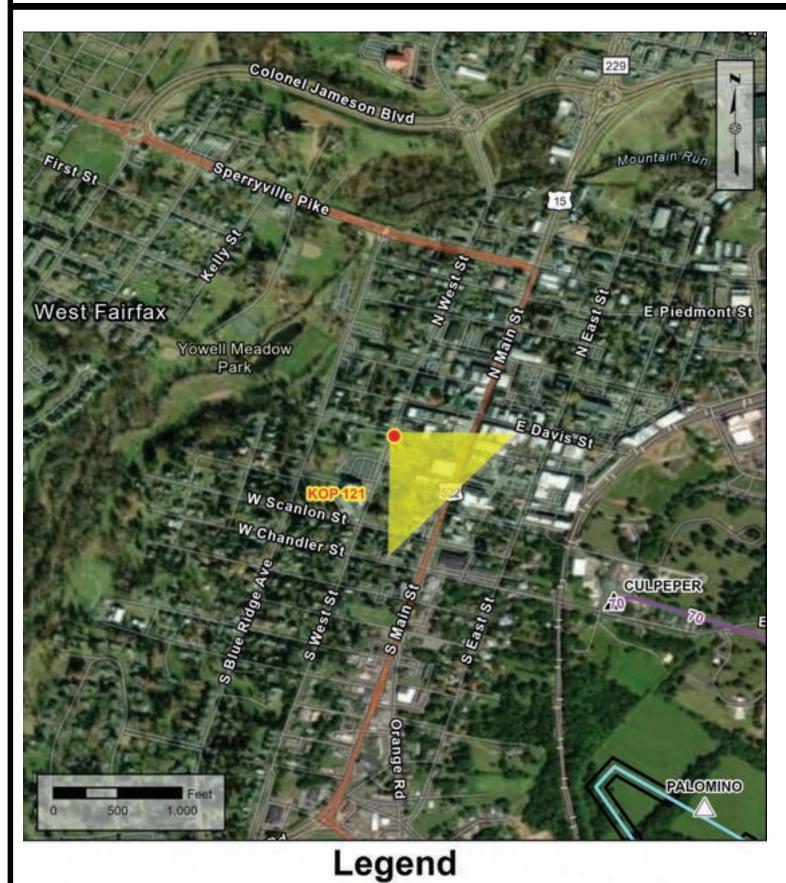
Figure 85

Route: Tech Park Route 2

Date:10/07/2024 Time: 3:32 pm

Viewing Direction: Southeast

Distance to closest feature: 0.55 miles



◆ KOP View Direction ▲ Existing Substation Proposed Substation

Existing Dominion - Energy Electric Transmission Line - Tech Park Route 2

Right of Way

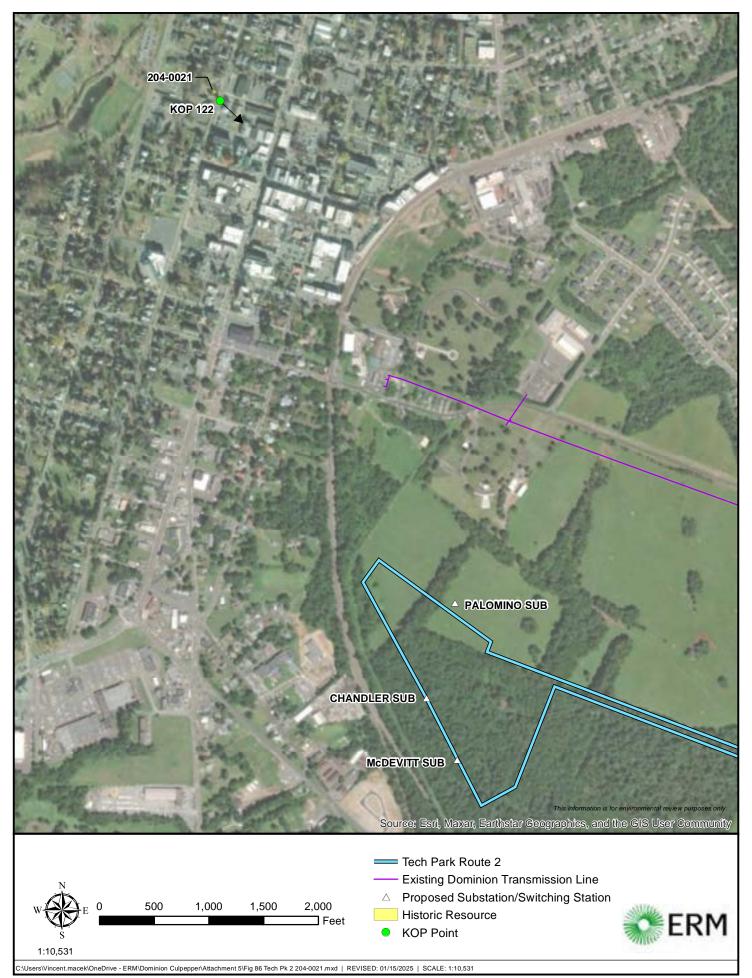


Figure 86. Aerial photograph depicting land use and photo view for 204-0021.







KOP 122

N West St

Figure 87

Route: Tech Park Route 2

Date:10/07/2024 Time: 3:20 pm

Viewing Direction: Southeast

Distance to closest feature: 0.66 miles



◆ KOP View Direction

▲ Existing Substation Proposed Substation

Right of Way **Existing Dominion** - Energy Electric Transmission Line

- Tech Park Route 2

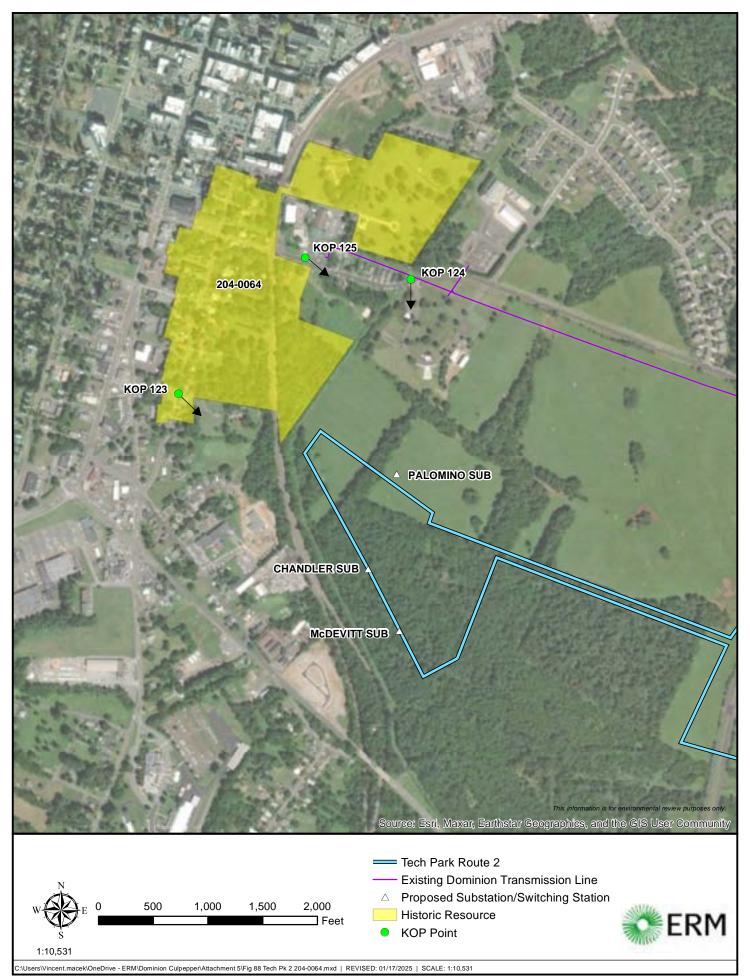


Figure 88. Aerial photograph depicting land use and photo view for 204-0064.







KOP 125

E Chandler St

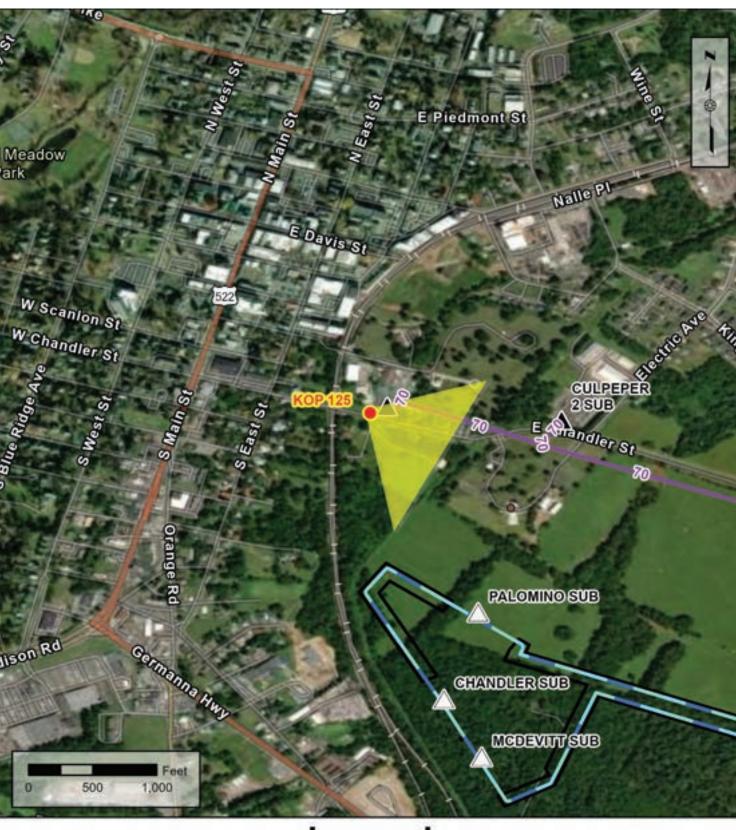
Figure 89

Route: Tech Park Route 2

Date:10/07/2024 Time: 2:30 pm

Viewing Direction: Southeast

Distance to closest feature: 0.24 miles



Legend

◆ KOP View Direction ▲ Existing Substation Proposed Substation

Existing Dominion - Energy Electric Transmission Line

___ Tech Park All Routes Right of Way







KOP 124

E Chandler St

Figure 90

Route: Tech Park Route 2

Date:10/07/2024 Time: 2:41 pm

Viewing Direction: Southeast

Distance to closest feature: 0.24 miles



→ KOP View Direction

Existing Substation Proposed Substation

Existing Dominion - Energy Electric Transmission Line

Tech Park Route 2

Right of Way







KOP 123

Rosson Ln

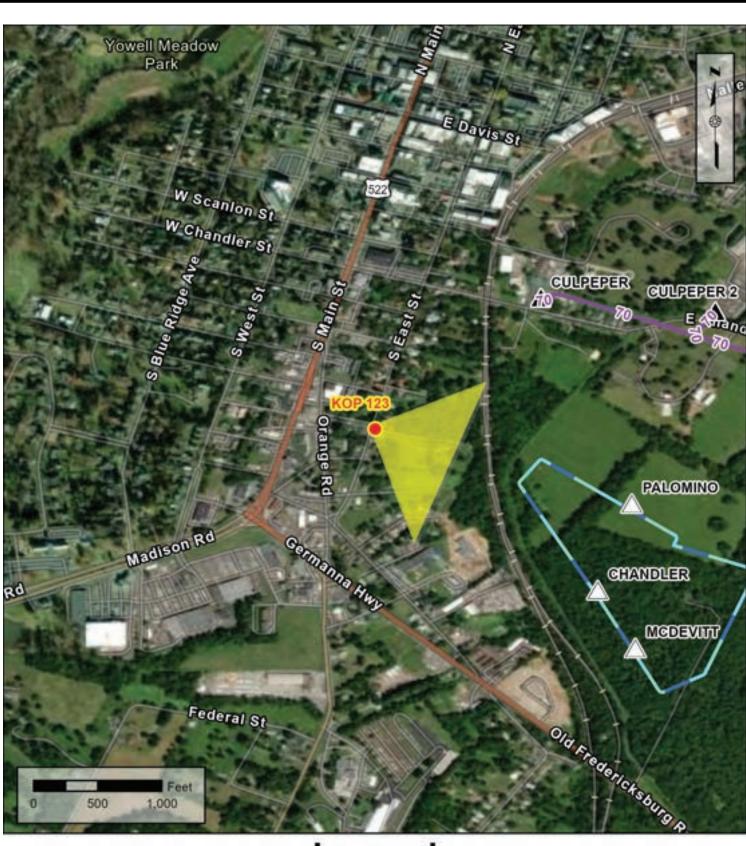
Figure 91

Route: Tech Park Route 2

Date:10/08/2024 Time: 2:46 pm

Viewing Direction: Southeast

Distance to closest feature: 0.19 miles



Legend

◆ KOP View Direction ▲ Existing Substation Proposed Substation

Existing Dominion - Energy Electric Transmission Line ___ Tech Park All Routes

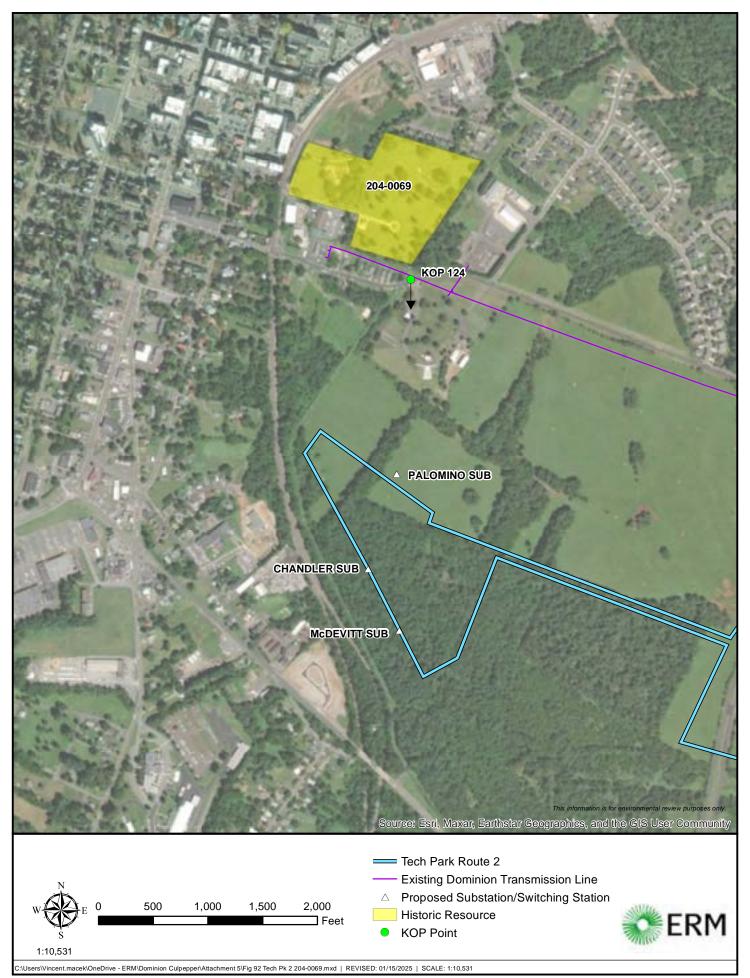


Figure 92. Aerial photograph depicting land use and photo view for 204-0069.







KOP 124

E Chandler St

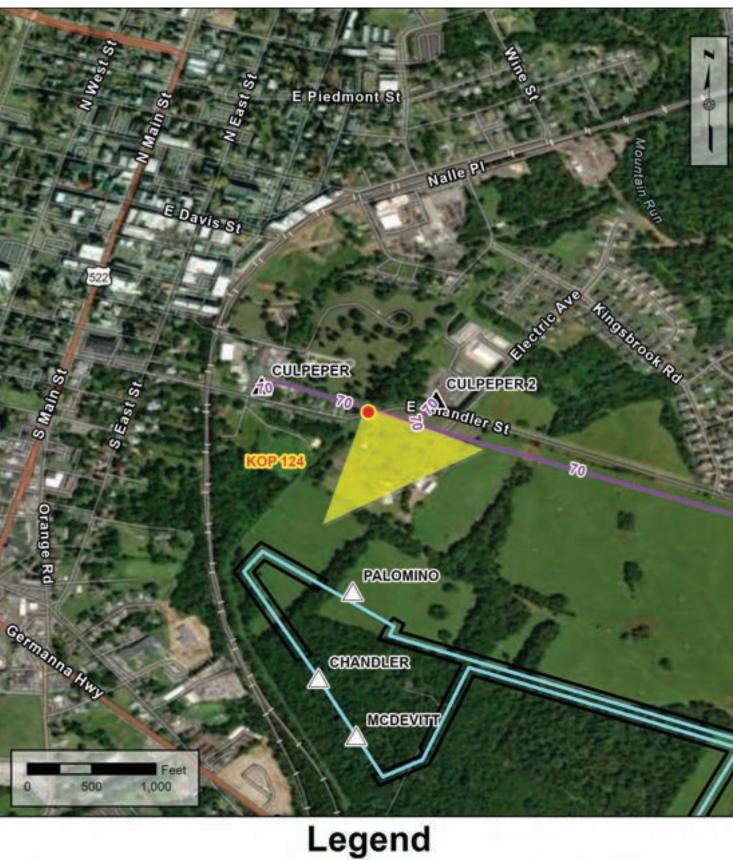
Figure 93

Route: Tech Park Route 2

Date:10/07/2024 Time: 2:41 pm

Viewing Direction: Southeast

Distance to closest feature: 0.24 miles



Existing Dominion → KOP View Direction

Existing Substation Proposed Substation

Right of Way - Energy Electric Transmission Line Tech Park Route 2

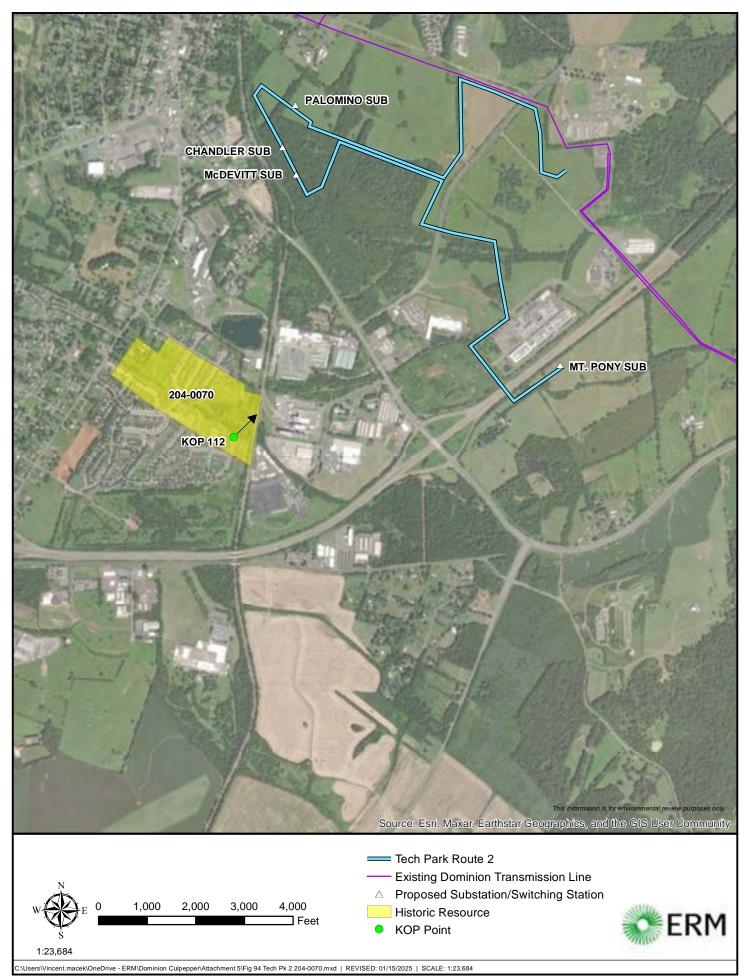


Figure 94. Aerial photograph depicting land use and photo view for 204-0070.







KOP 112

Post Oak Dr

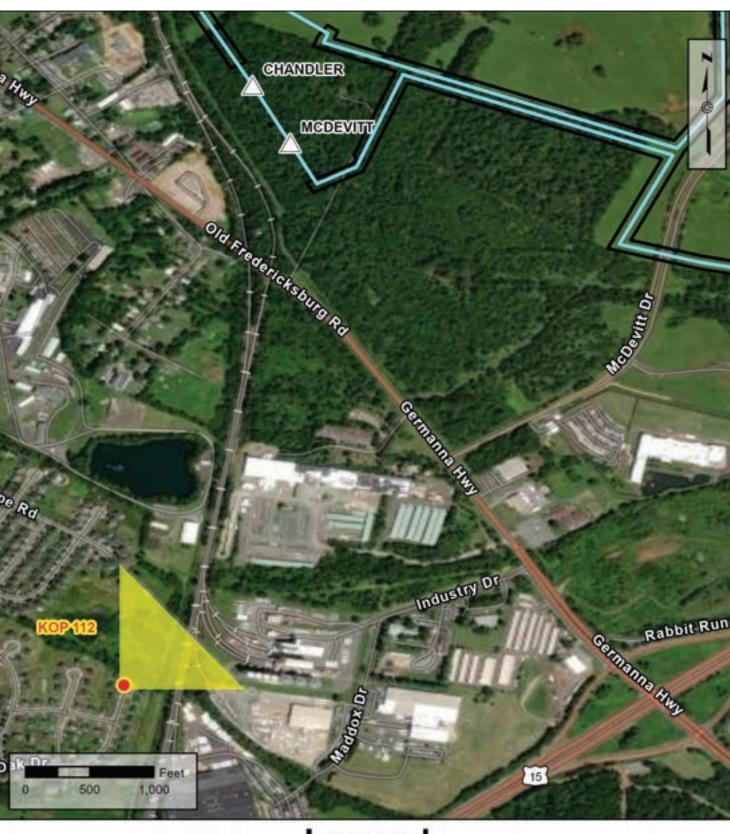
Figure 95

Route: Tech Park Route 2

Date:10/09/2024 Time: 11:39 am

Viewing Direction: Northeast

Distance to closest feature: 0.96 miles



Legend

◆ KOP View Direction △ Proposed Substation

Tech Park Route 2 Right of Way

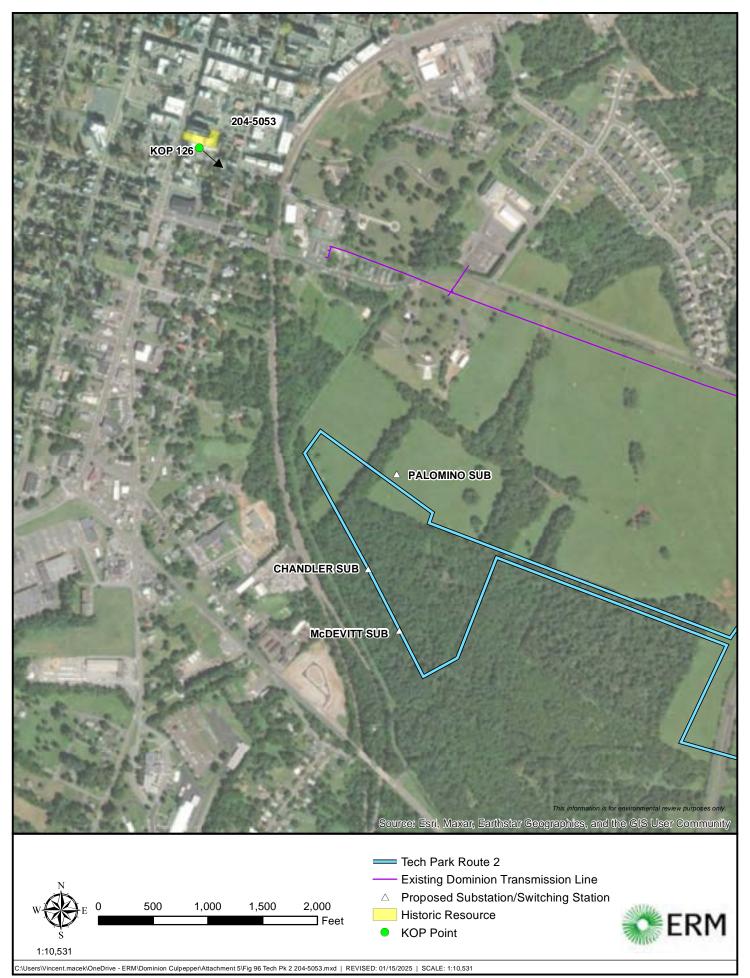


Figure 96. Aerial photograph depicting land use and photo view for 204-5053.







KOP 126

E Stevens St

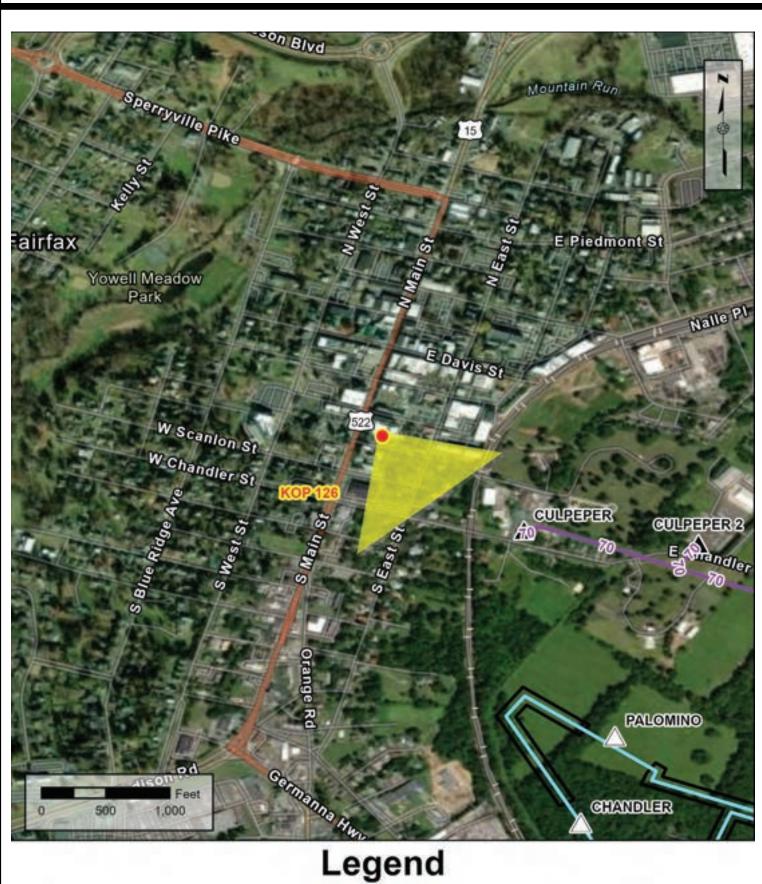
Figure 97

Route: Tech Park Route 2

Date:10/07/2024 Time: 3:53 pm

Viewing Direction: Southeast

Distance to closest feature: 0.42 miles



◆ KOP View Direction

▲ Existing Substation Proposed Substation

Existing Dominion - Energy Electric Transmission Line - Tech Park Route 2

Right of Way

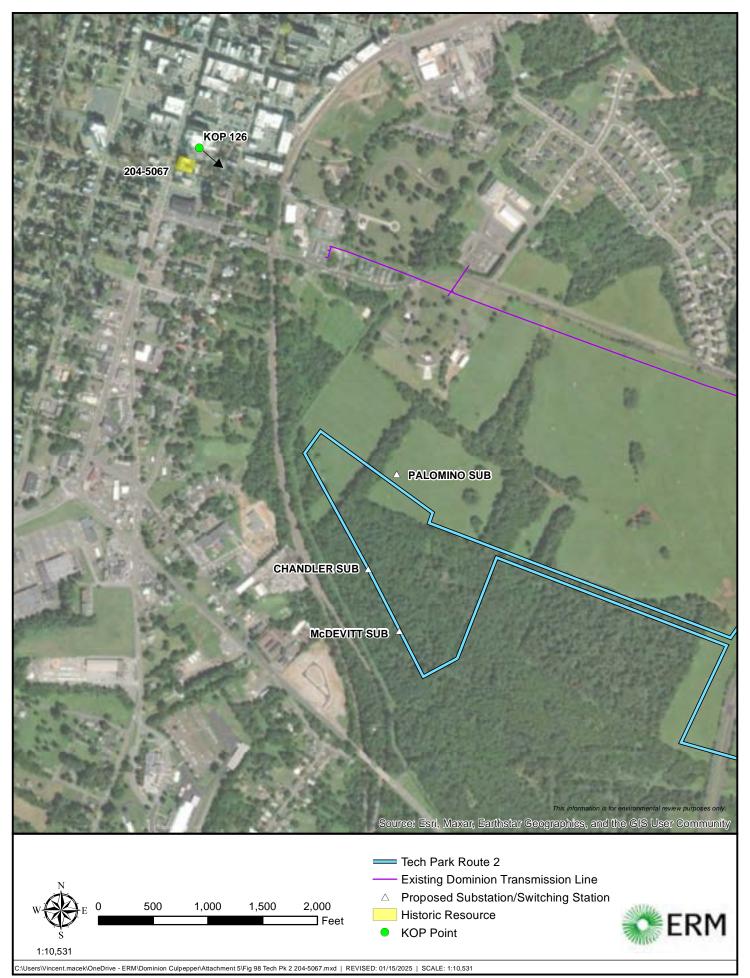


Figure 98. Aerial photograph depicting land use and photo view for 204-5067.







KOP 126

E Stevens St

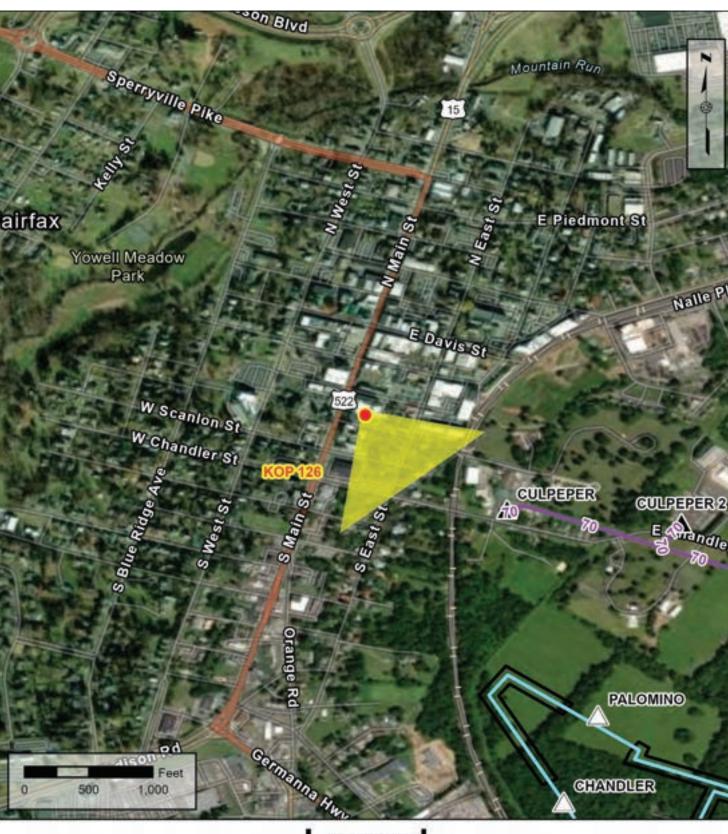
Figure 99

Route: Tech Park Route 2

Date:10/07/2024 Time: 3:53 pm

Viewing Direction: Southeast

Distance to closest feature: 0.42 miles



Legend

◆ KOP View Direction ▲ Existing Substation Proposed Substation

Existing Dominion - Energy Electric Transmission Line - Tech Park Route 2

Right of Way

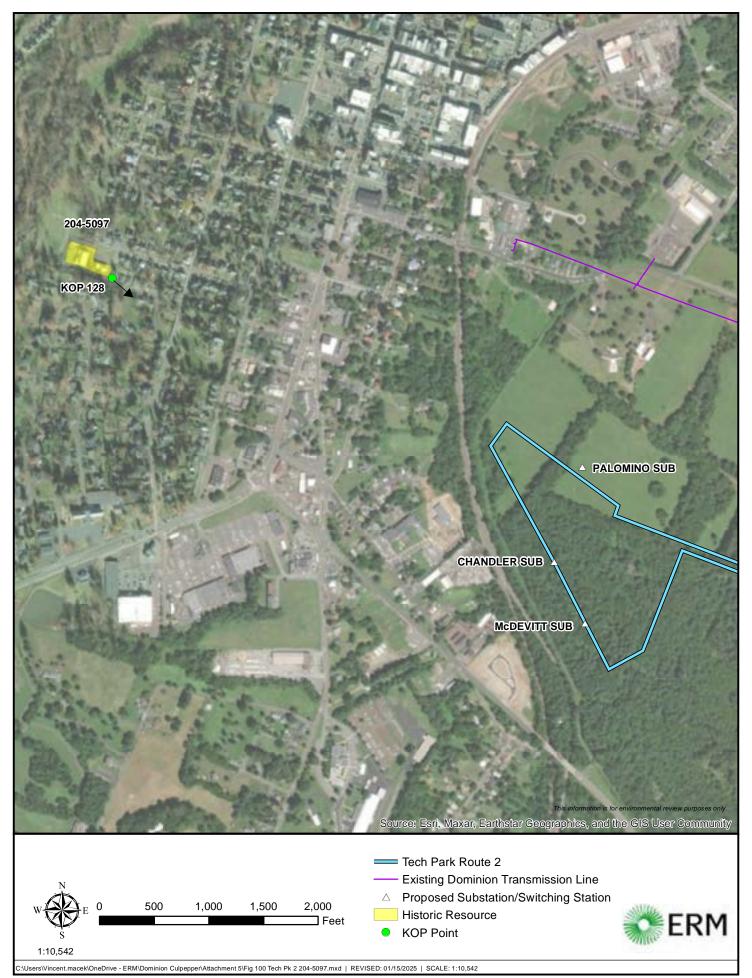


Figure 100. Aerial photograph depicting land use and photo view for 204-5097.







KOP 128

Spring St

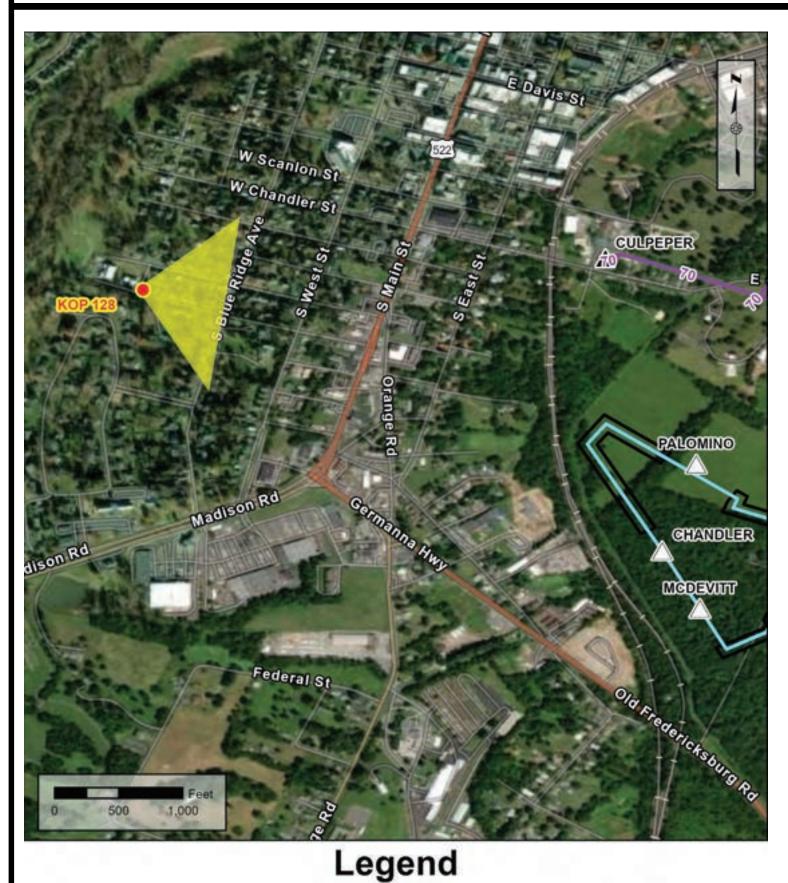
Figure 101

Route: Tech Park Route 2

Date:10/08/2024 Time: 3:22 pm

Viewing Direction: East

Distance to closest feature: 0.56 miles



◆ KOP View Direction ▲ Existing Substation Proposed Substation

Existing Dominion - Energy Electric Transmission Line - Tech Park Route 2

Right of Way

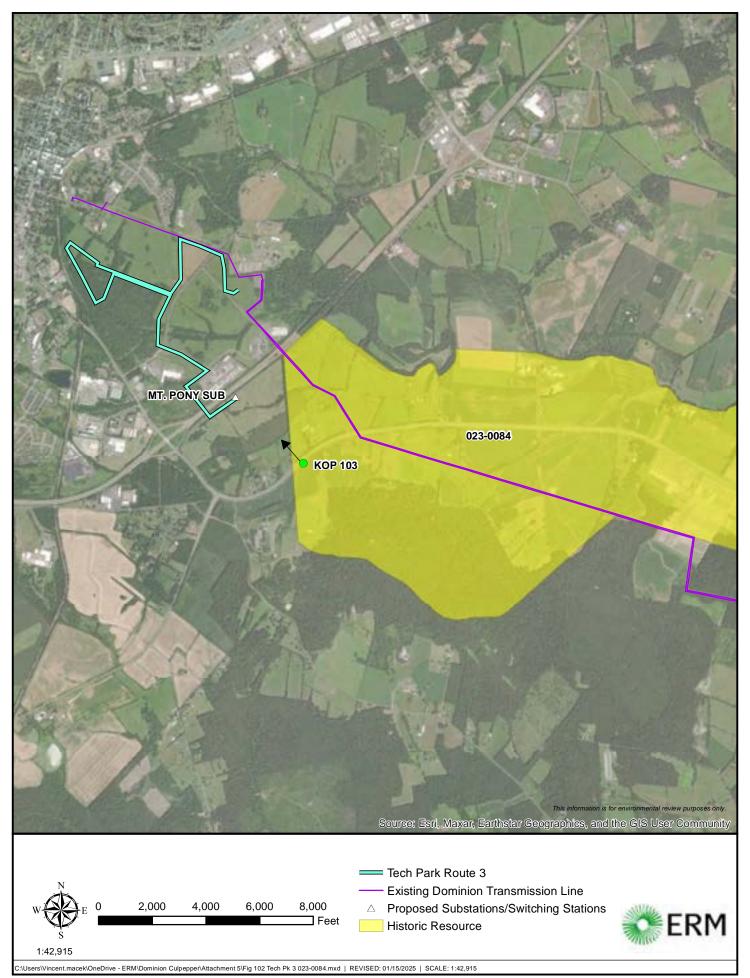


Figure 102. Aerial photograph depicting land use and photo view for 023-0084.







KOP 103

Germanna Hwy

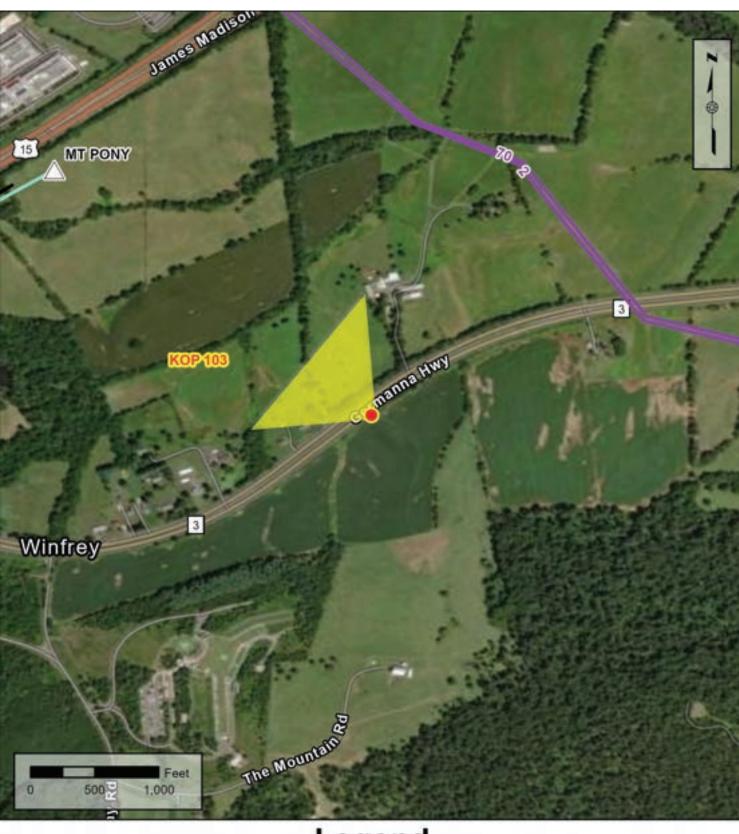
Figure 103

Route: Tech Park Route 3

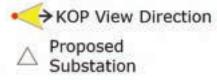
Date:12/17/2024 Time: 12:04 pm

Viewing Direction: Northwest

Distance to closest feature: 0.51 miles



Legend



 Existing Dominion
 Energy Electric Transmission Line Tech Park Route 3

Right of Way

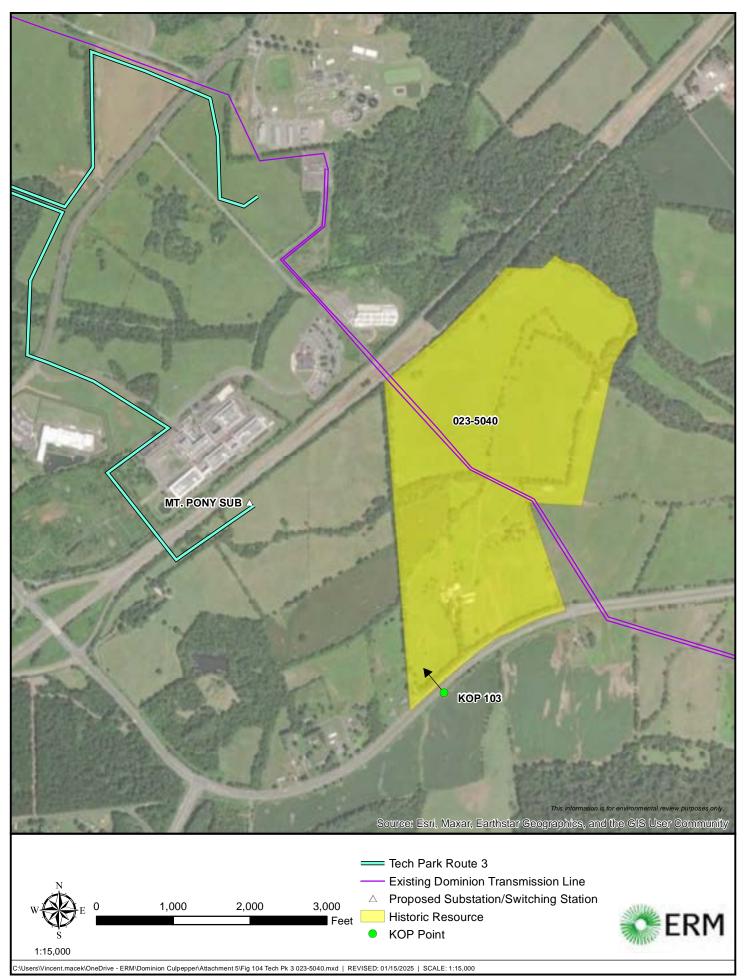


Figure 104. Aerial photograph depicting land use and photo view for 023-5040.







KOP 103

Germanna Hwy

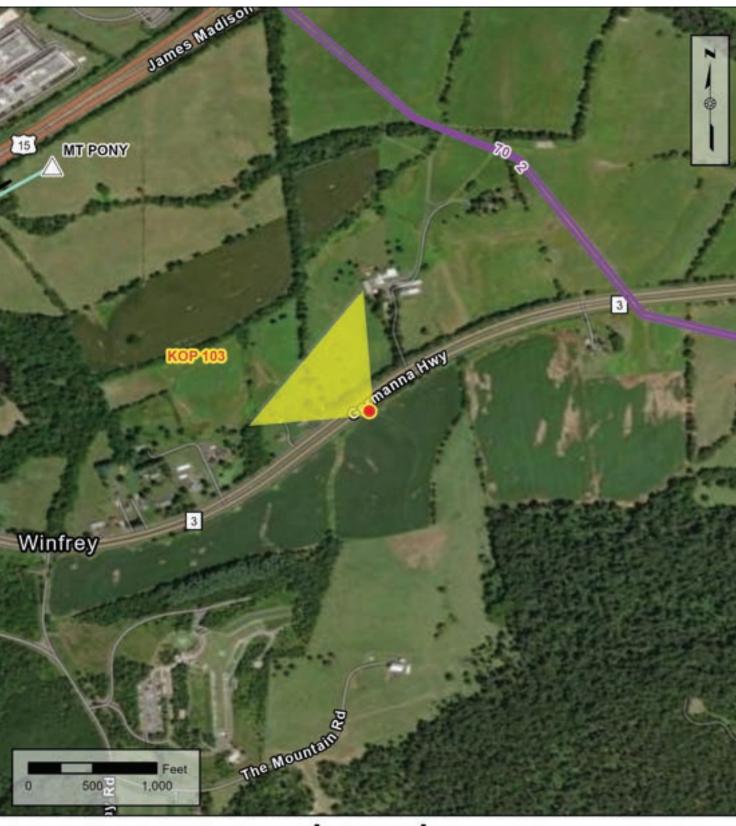
Figure 105

Route: Tech Park Route 3

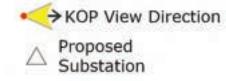
Date:12/17/2024 Time: 12:04 pm

Viewing Direction: Northwest

Distance to closest feature: 0.51 miles



Legend



 Existing Dominion
 Energy Electric Transmission Line Tech Park Route 3

Right of Way



Figure 106. Aerial photograph depicting land use and photo view for 204-0002.







KOP 116

S East St

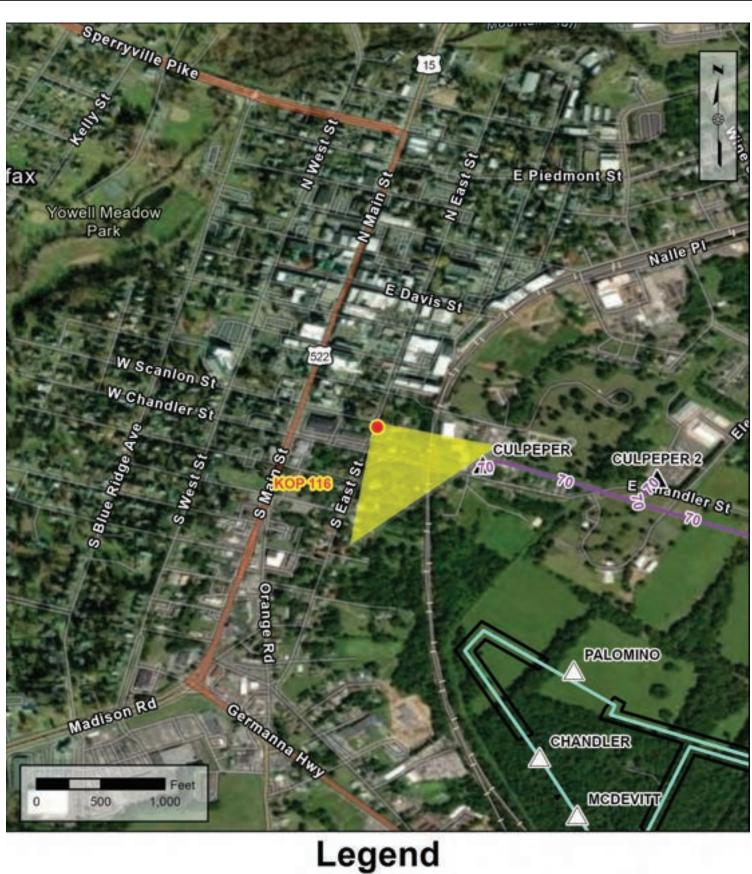
Figure 107

Route: Tech Park Route 3

Date:10/07/2024 Time: 2:07 pm

Viewing Direction: Southeast

Distance to closest feature: 0.32 miles



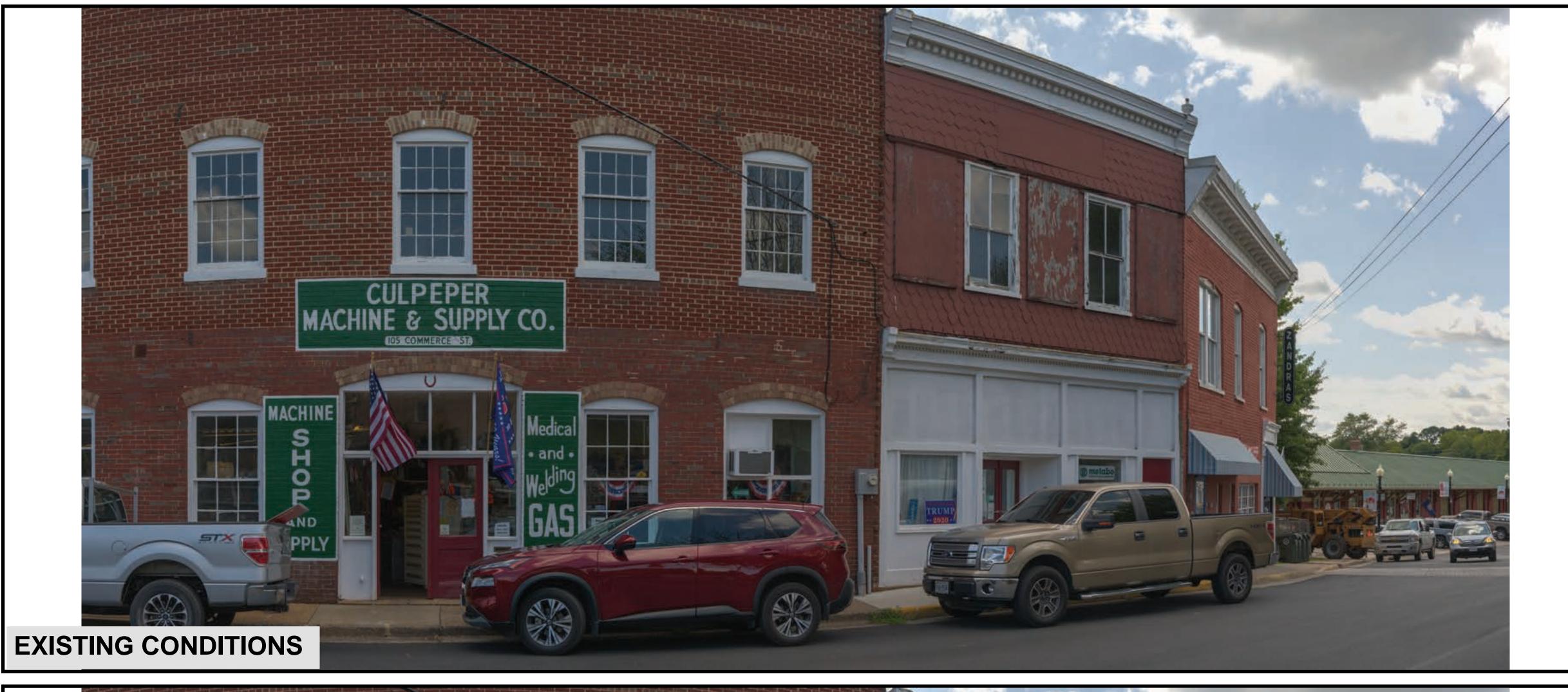
Existing Dominion ◆ KOP View Direction

▲ Existing Substation Proposed Substation

Right of Way - Energy Electric Transmission Line Tech Park Route 3



Figure 108. Aerial photograph depicting land use and photo view for 204-0003.







KOP 117

N Commerce St

Figure 109

Route: Tech Park Route 3

Date:08/22/2024 Time: 12:41 pm

Viewing Direction: Southeast

Distance to closest feature: 0.49 miles



◆ KOP View Direction

▲ Existing Substation Proposed Substation

Right of Way **Existing Dominion** - Energy Electric Transmission Line Tech Park Route 3



Figure 110. Aerial photograph depicting land use and photo view for 204-0005.







KOP 118

Sara Leigh Ct

Figure 111

Route: Tech Park Route 3

Date:10/08/2024 Time: 3:06 pm

Viewing Direction: Southeast

Distance to closest feature: 0.28 miles



Legend ◆ KOP View Direction

▲ Existing Substation Proposed Substation

Existing Dominion - Energy Electric Transmission Line

Right of Way Tech Park Route 3



Figure 112. Aerial photograph depicting land use and photo view for 204-0006.







KOP 119

S Main St

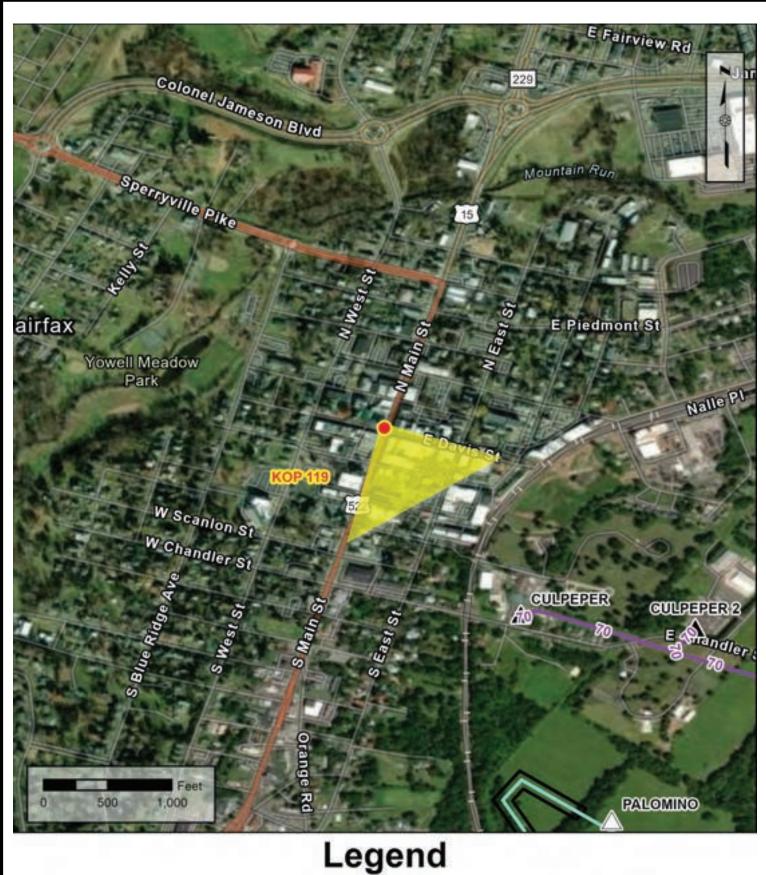
Figure 113

Route: Tech Park Route 3

Date:08/22/2024 Time: 1:03 pm

Viewing Direction: Southeast

Distance to closest feature: 0.82 miles



◆ KOP View Direction

▲ Existing Substation Proposed Substation

Existing Dominion - Energy Electric Transmission Line Tech Park Route 3

Right of Way



Figure 114. Aerial photograph depicting land use and photo view for 204-0020.







KOP 120

U S Ave

Figure 115

Route: Tech Park Route 3

Date:10/07/2024 Time: 1:53 pm

Viewing Direction: Southeast

Distance to closest feature: 0.34 miles



Legend → KOP View Direction

Existing Substation Proposed Substation

Right of Way **Existing Dominion** - Energy Electric

Transmission Line Tech Park Route 3



Figure 116. Aerial photograph depicting land use and photo view for 204-0020-0140.







KOP 121

S West St

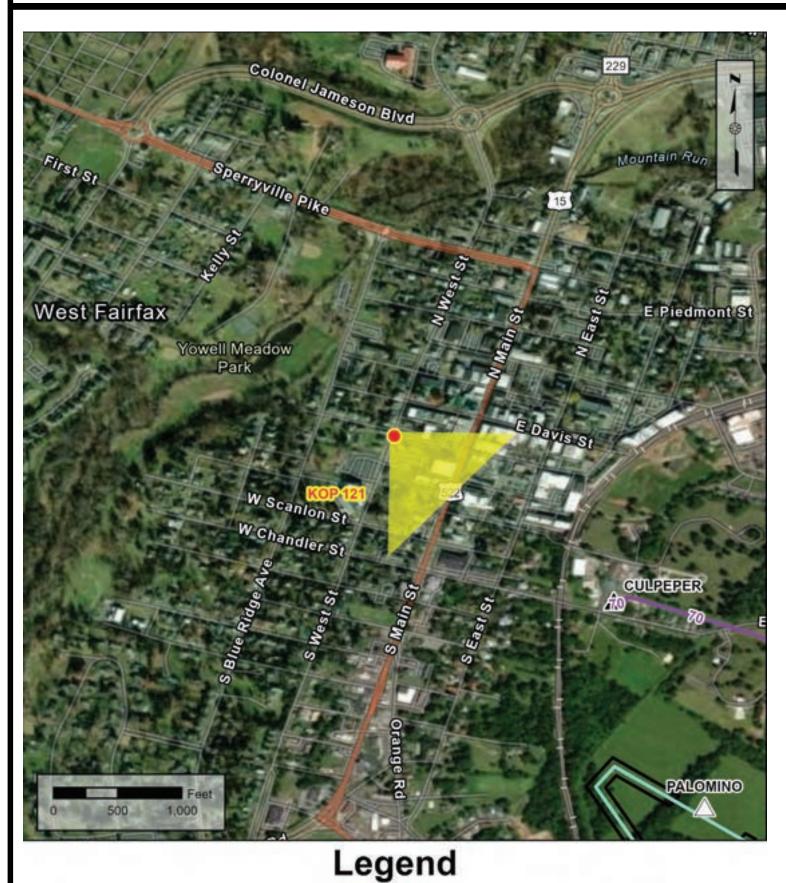
Figure 117

Route: Tech Park Route 3

Date:10/07/2024 Time: 3:32 pm

Viewing Direction: Southeast

Distance to closest feature: 0.55 miles



◆ KOP View Direction ▲ Existing Substation

Proposed Substation

Right of Way **Existing Dominion** - Energy Electric Transmission Line

Tech Park Route 3

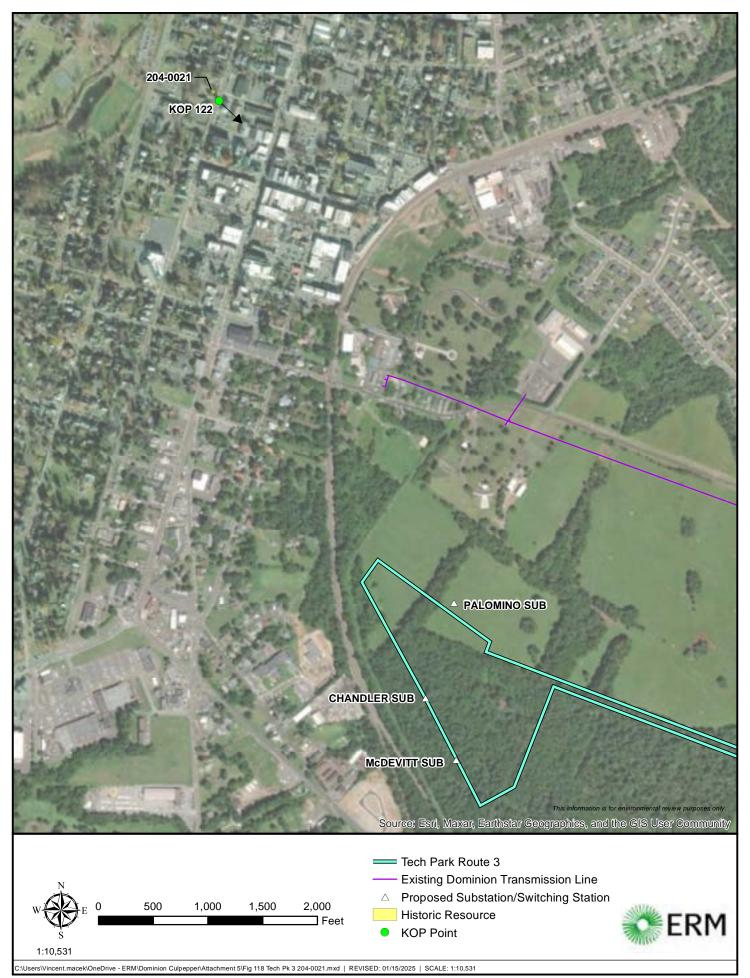


Figure 118. Aerial photograph depicting land use and photo view for 204-0021.







KOP 122

N West St

Figure 119

Route: Tech Park Route 3

Date:10/07/2024 Time: 3:20 pm

Viewing Direction: Southeast

Distance to closest feature: 0.66 miles



◆ KOP View Direction

▲ Existing Substation Proposed Substation

Existing Dominion - Energy Electric Transmission Line Tech Park Route 3

Right of Way

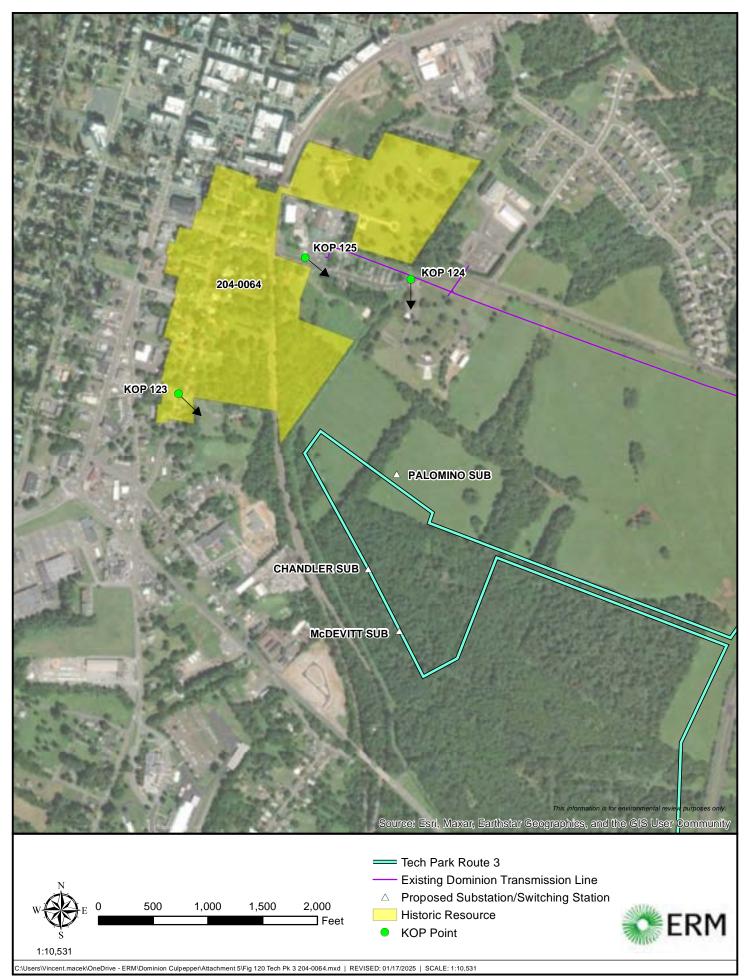


Figure 120. Aerial photograph depicting land use and photo view for 204-0064.







KOP 125

E Chandler St

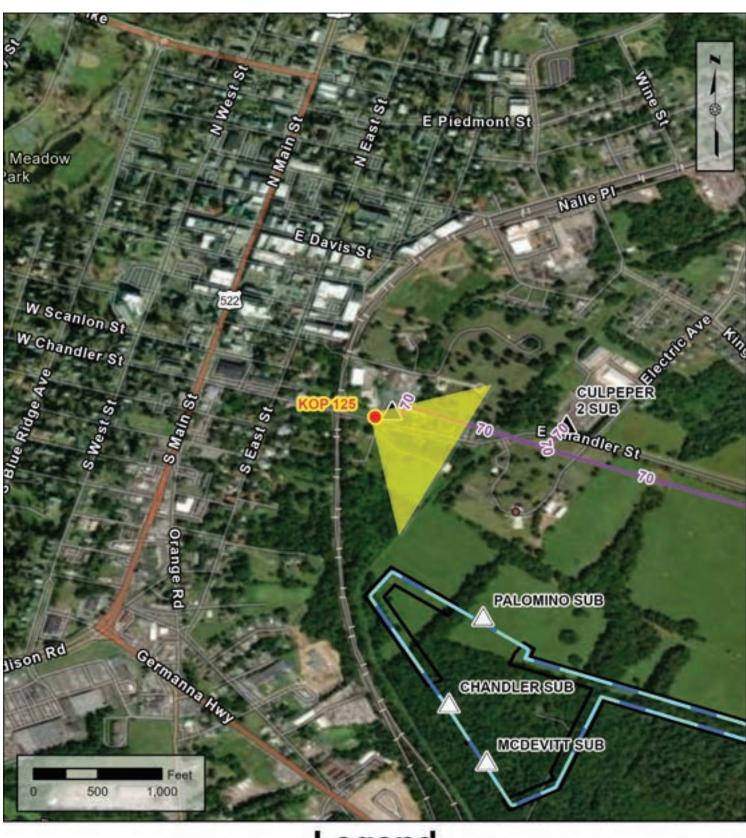
Figure 121

Route: Tech Park Route 3

Date:10/07/2024 Time: 2:30 pm

Viewing Direction: Southeast

Distance to closest feature: 0.24 miles



Legend ◆ KOP View Direction

▲ Existing Substation Proposed Substation

Existing Dominion - Energy Electric Transmission Line

___ Tech Park All Routes Right of Way







KOP 124

E Chandler St

Figure 122

Route: Tech Park Route 3

Date:10/07/2024 Time: 2:41 pm

Viewing Direction: Southeast

Distance to closest feature: 0.24 miles



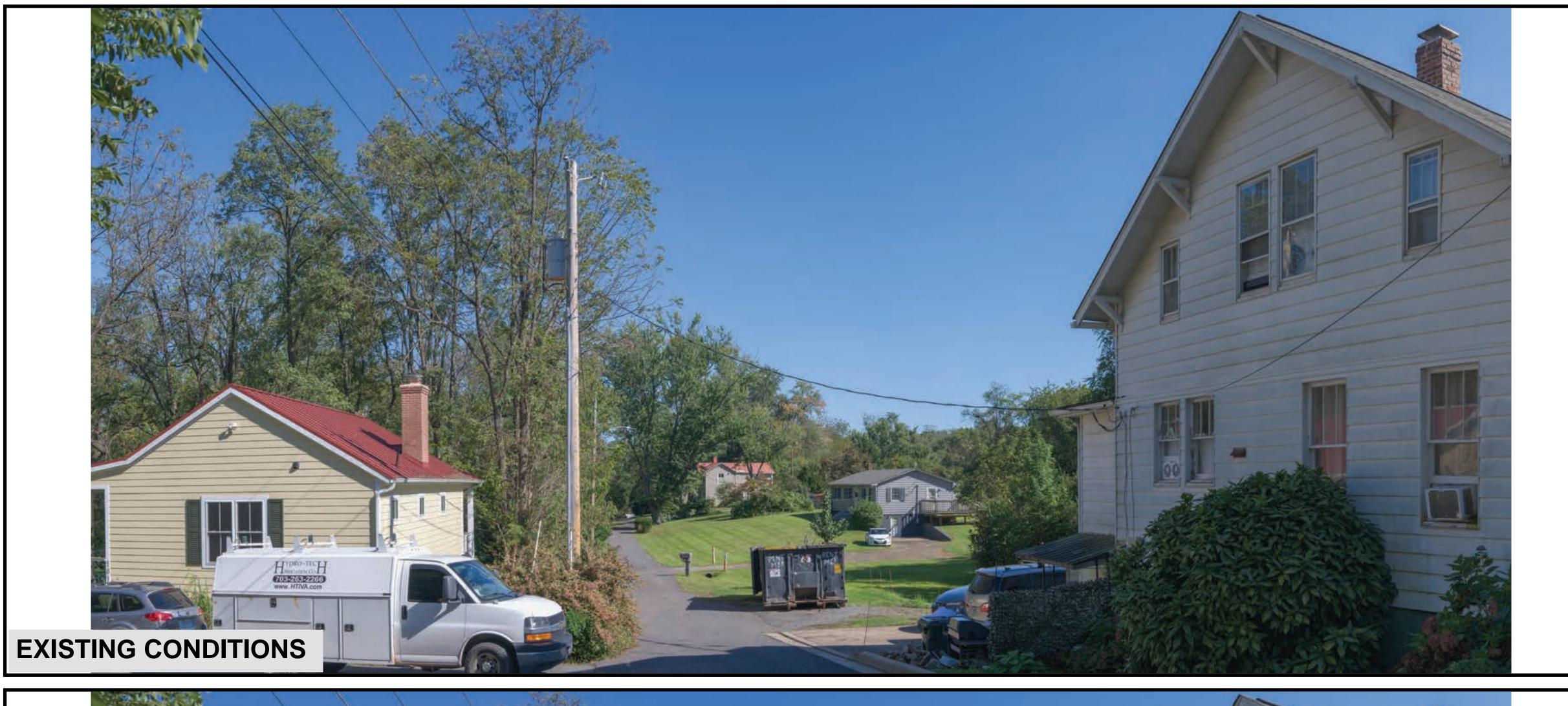
→ KOP View Direction Existing Substation

Proposed

Substation

Existing Dominion - Energy Electric Transmission Line Tech Park Route 3

Right of Way







KOP 123

Rosson Ln

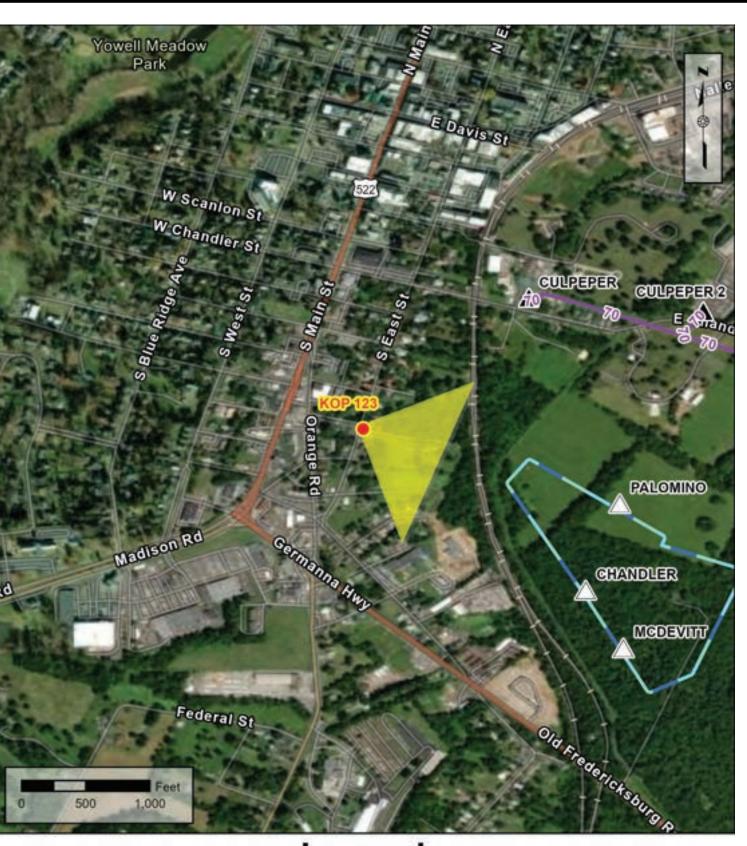
Figure 123

Route: Tech Park Route 3

Date:10/08/2024 Time: 2:46 pm

Viewing Direction: Southeast

Distance to closest feature: 0.19 miles



Legend

◆ KOP View Direction ▲ Existing Substation Proposed Substation

Existing Dominion - Energy Electric Transmission Line

___ Tech Park All Routes

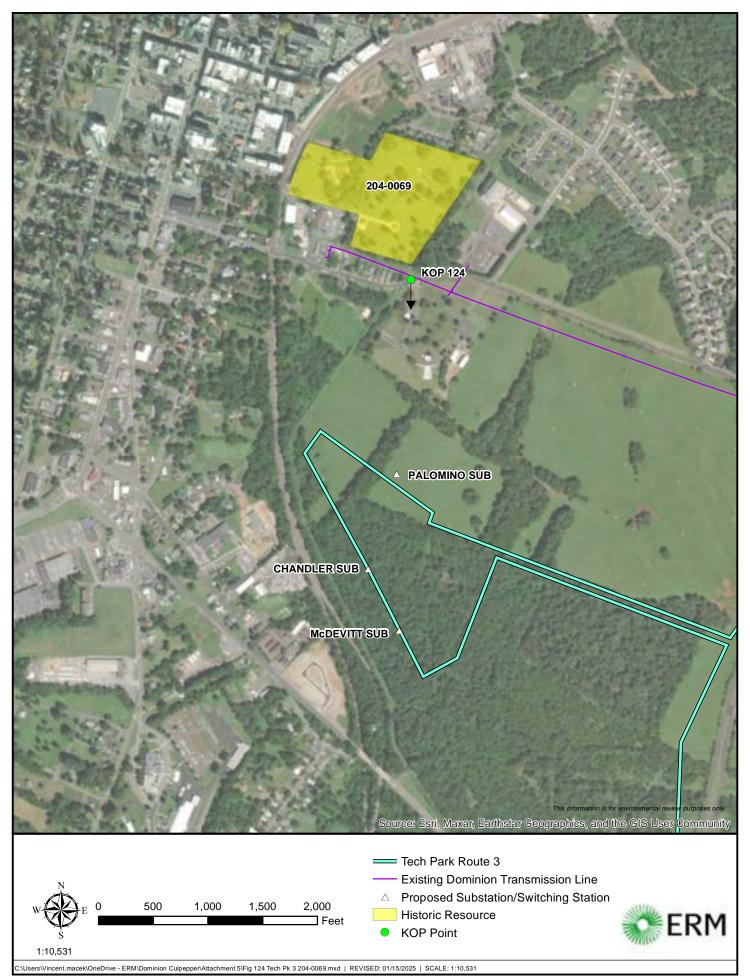


Figure 124. Aerial photograph depicting land use and photo view for 204-0069.







KOP 124

E Chandler St

Figure 125

Route: Tech Park Route 3

Date:10/07/2024 Time: 2:41 pm

Viewing Direction: Southeast

Distance to closest feature: 0.24 miles



→ KOP View Direction

Existing Substation Proposed Substation

Right of Way **Existing Dominion** - Energy Electric Transmission Line

Tech Park Route 3

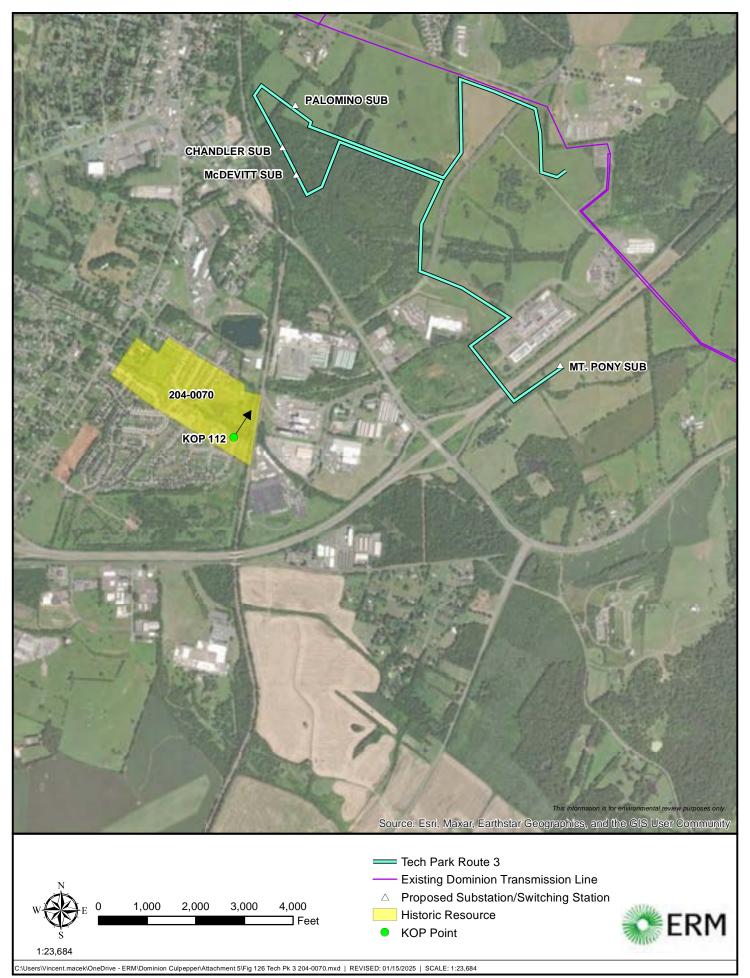


Figure 126. Aerial photograph depicting land use and photo view for 204-0070.







KOP 112

Post Oak Dr

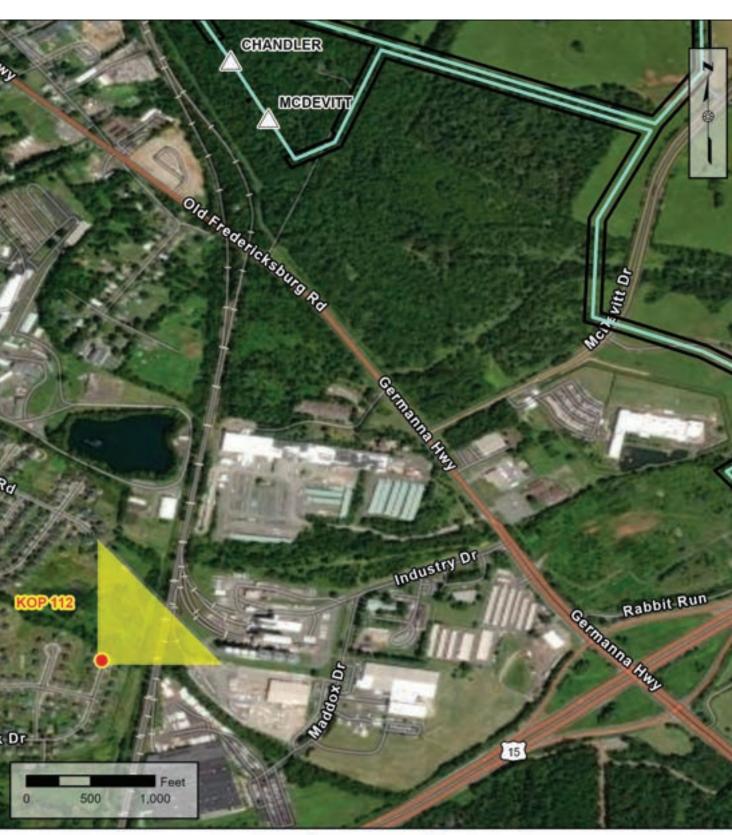
Figure 127

Route: Tech Park Route 3

Date:10/09/2024 Time: 11:39 am

Viewing Direction: Northeast

Distance to closest feature: 0.96 miles



Legend

◆ KOP View Direction △ Proposed Substation

Tech Park Route 3 Right of Way



Figure 128. Aerial photograph depicting land use and photo view for 204-5053.







KOP 126

E Stevens St

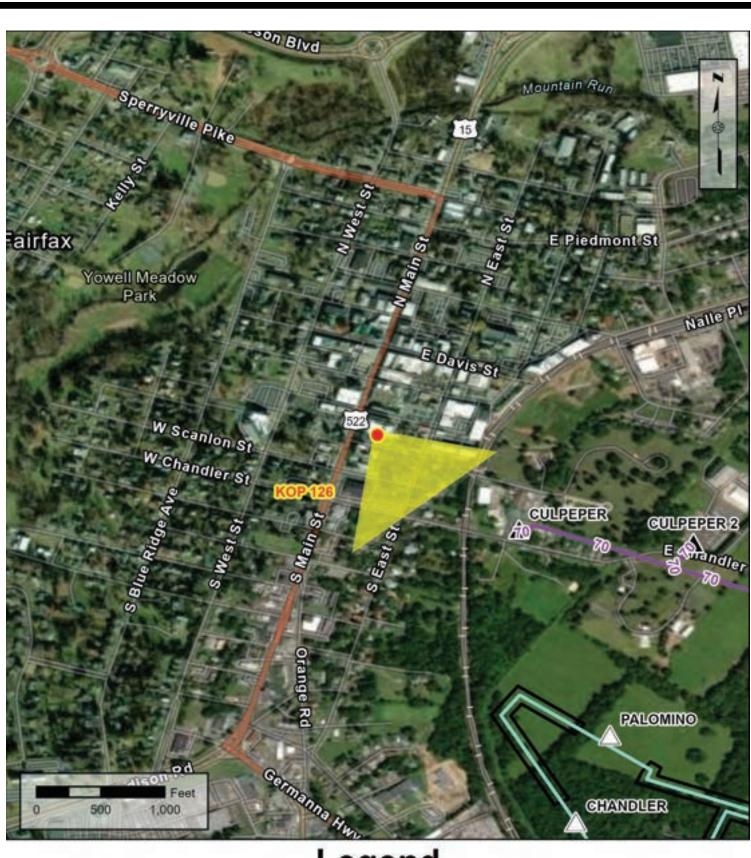
Figure 129

Route: Tech Park Route 3

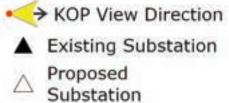
Date:10/07/2024 Time: 3:53 pm

Viewing Direction: Southeast

Distance to closest feature: 0.42 miles



Legend



Existing Dominion - Energy Electric Transmission Line Tech Park Route 3

Right of Way

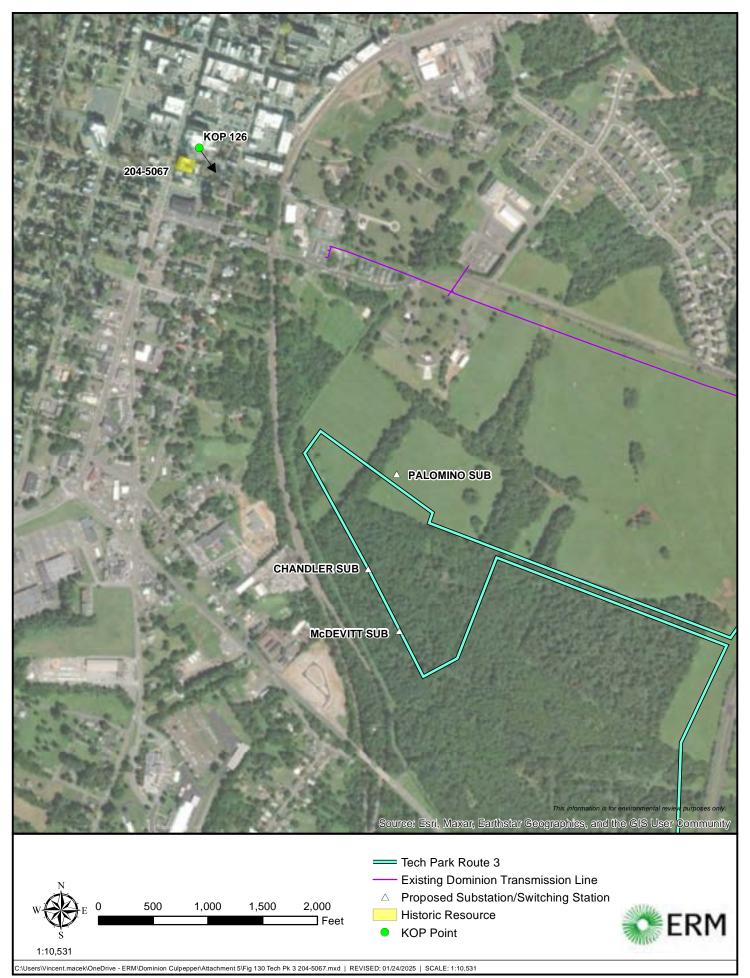


Figure 130. Aerial photograph depicting land use and photo view for 204-5067.







KOP 126

E Stevens St

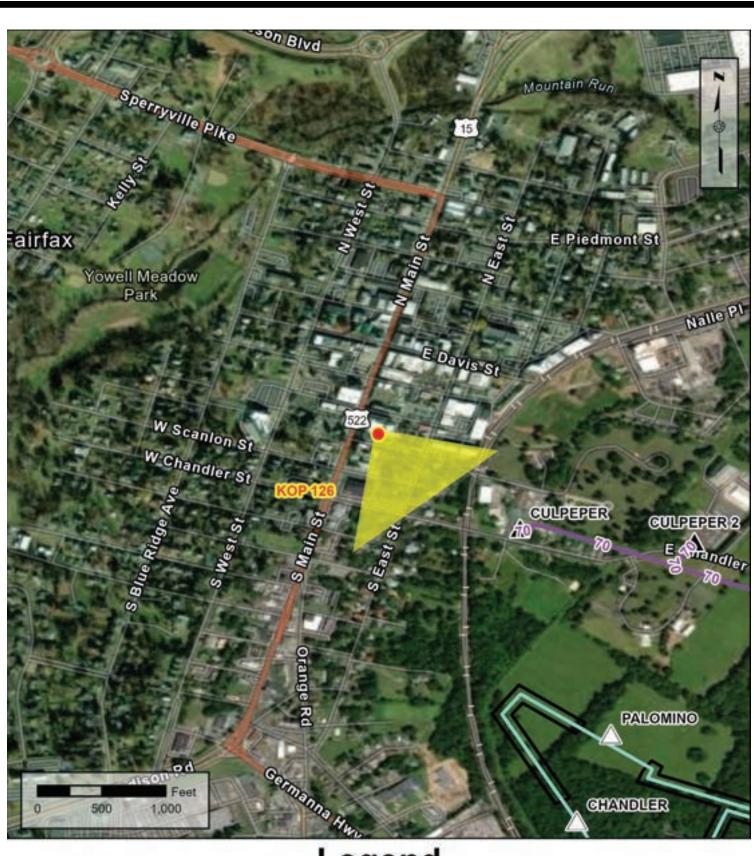
Figure 131

Route: Tech Park Route 3

Date:10/07/2024 Time: 3:53 pm

Viewing Direction: Southeast

Distance to closest feature: 0.42 miles



Legend

◆ KOP View Direction ▲ Existing Substation Proposed Substation

Existing Dominion - Energy Electric Transmission Line Tech Park Route 3

Right of Way

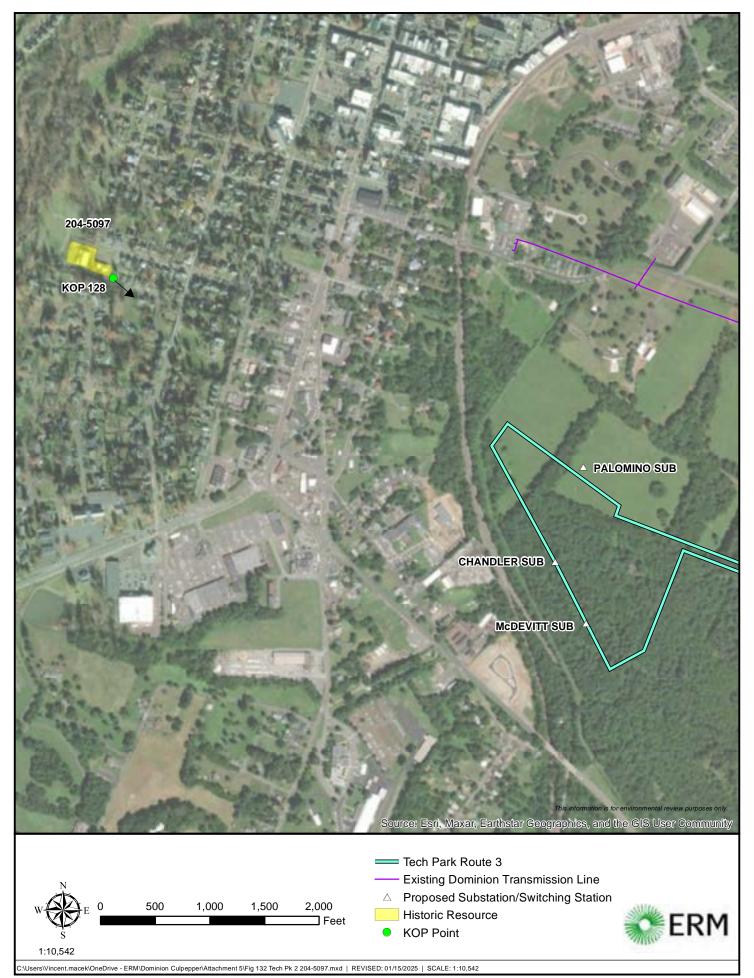


Figure 132. Aerial photograph depicting land use and photo view for 204-5097.







KOP 128

Spring St

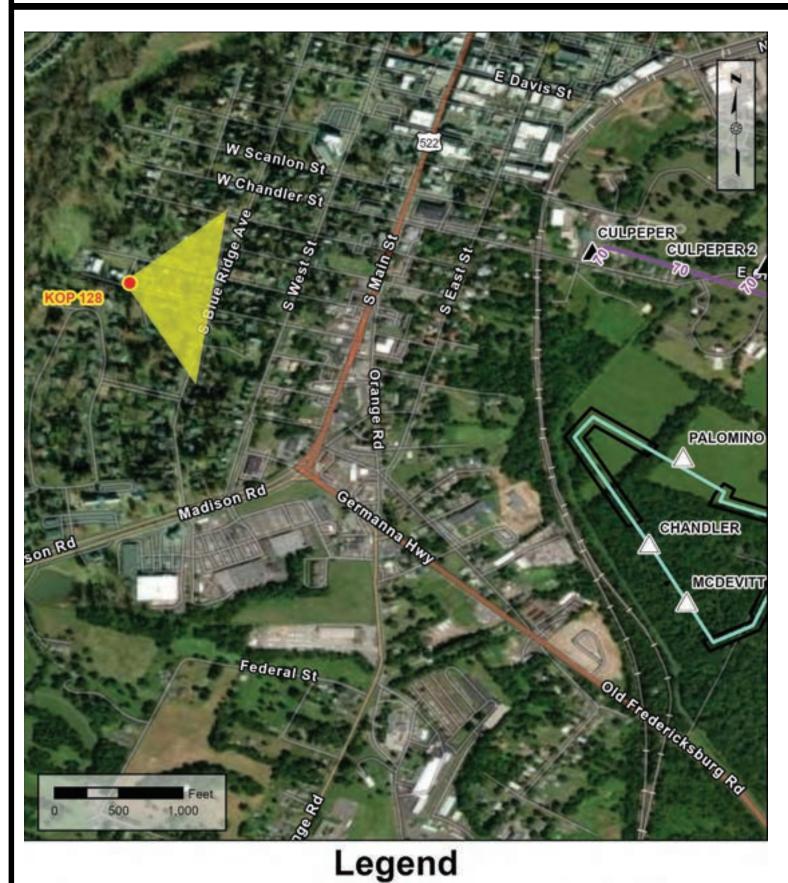
Figure 133

Route: Tech Park Route 3

Date:10/08/2024 Time: 3:22 pm

Viewing Direction: East

Distance to closest feature: 0.56 miles



◆ KOP View Direction ▲ Existing Substation Proposed Substation

Existing Dominion - Energy Electric Transmission Line Tech Park Route 3

Right of Way

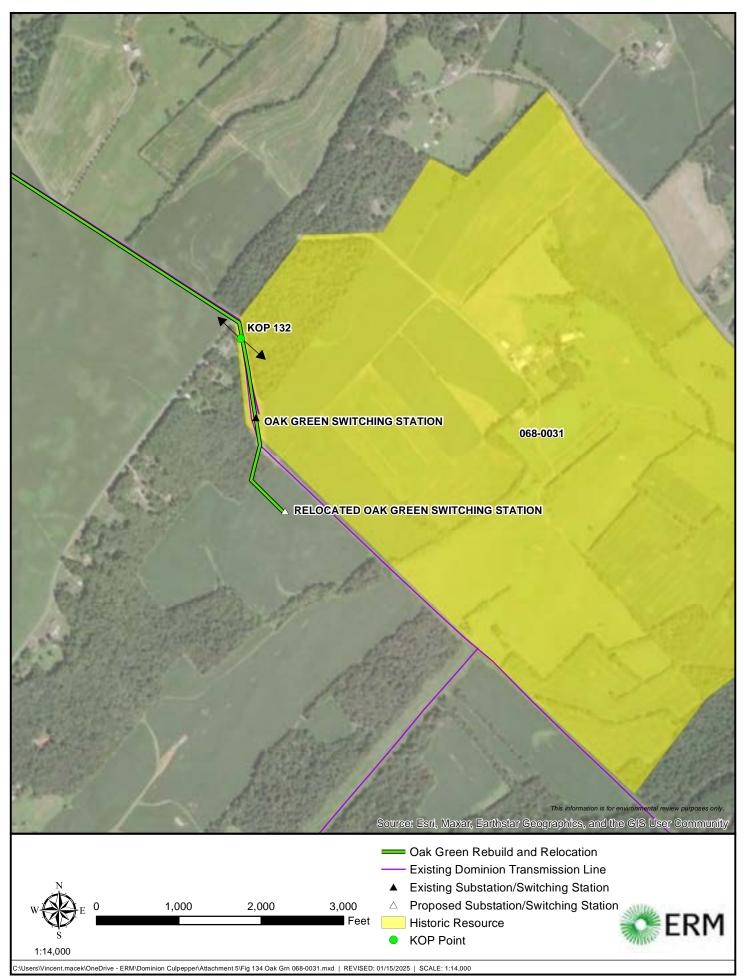


Figure 134. Aerial photograph depicting land use and photo view for 068-0031.



PROPOSED CONDITIONS

Culpeper Technology Zone 230 kV Loop and Lines #2 and #1065 Conversion Project Culpeper, Fauquier, & Orange Counties, Virginia



KOP 132

True Blue Rd

Figure 135

Route: Oak Green Rebuild and Relocation

Date:08/22/2024 Time: 10:51 am

Viewing Direction: Northwest

Distance to closest feature: 0.00 miles



Proposed Substation

◆ KOP View Direction Existing Substation

Existing Dominion
Energy Electric Transmission Line

Oak Green Rebuild and Relocation Right of Way

Note: Project components illustrated are based on proposed preliminary designs The images contained on this page show the proposed project within a wider landscape context and are not representative of scale and distance when viewed from the actual view point.

Legend







KOP 132

True Blue Rd

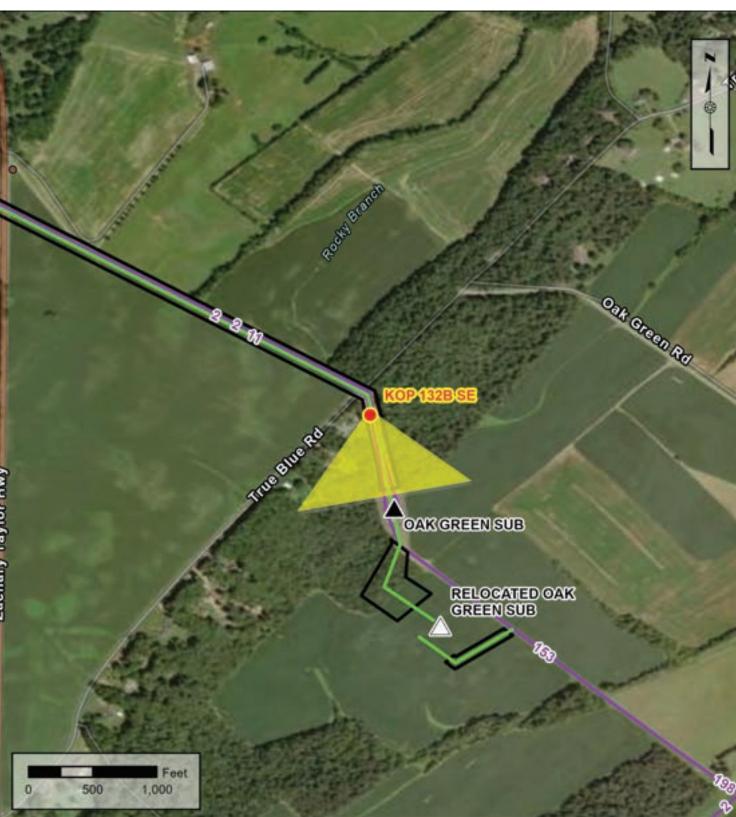
Figure 136

Route: Oak Green Rebuild and Relocation

Date:08/22/2024 Time: 10:51 am

Viewing Direction: Southeast

Distance to closest feature: 0.00 miles



◆ KOP View Direction Existing Substation △ Proposed Substation

Existing Dominion - Energy Electric Transmission Line

Legend

Oak Green Rebuild and Relocation Right of Way



Figure 137. Aerial photograph depicting land use and photo view for 068-0131.







KOP 133

Bushy Mountain Rd

Figure 138

Route: Oak Green Rebuild and Relocation

Date:10/07/2024 Time: 11:37 am

Viewing Direction: Northeast

Distance to closest feature: 0.30 miles



Legend

← KOP View Direction **Existing Dominion** - Energy Electric Transmission Line

Oak Green Rebuild and Relocation Right of Way

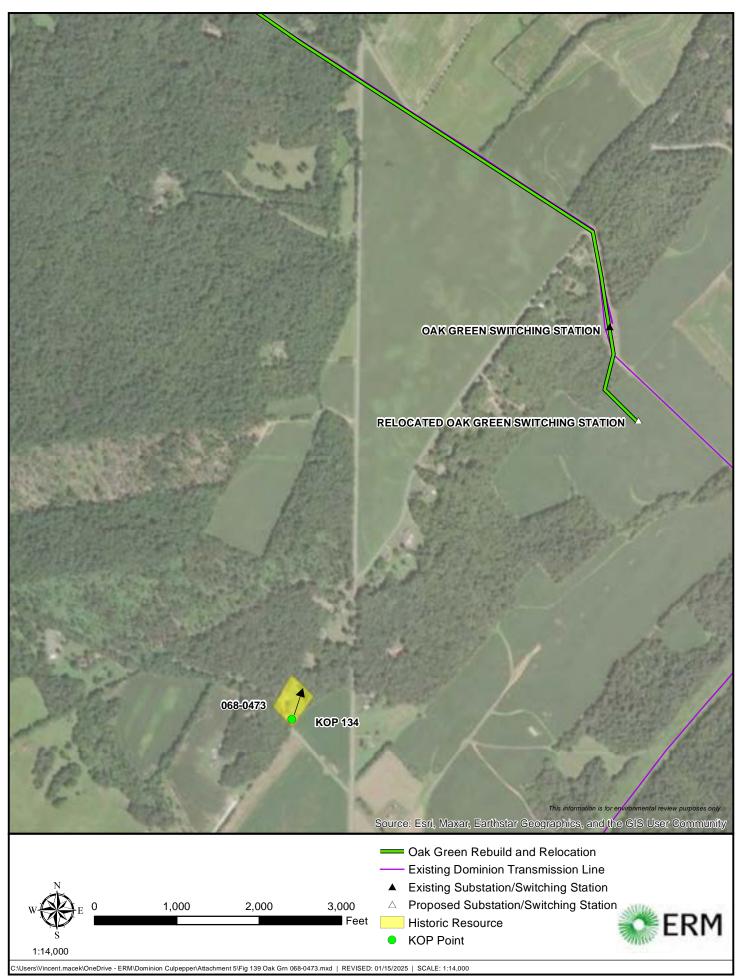


Figure 139. Aerial photograph depicting land use and photo view for 068-0473.







KOP 134

State Hwy 621

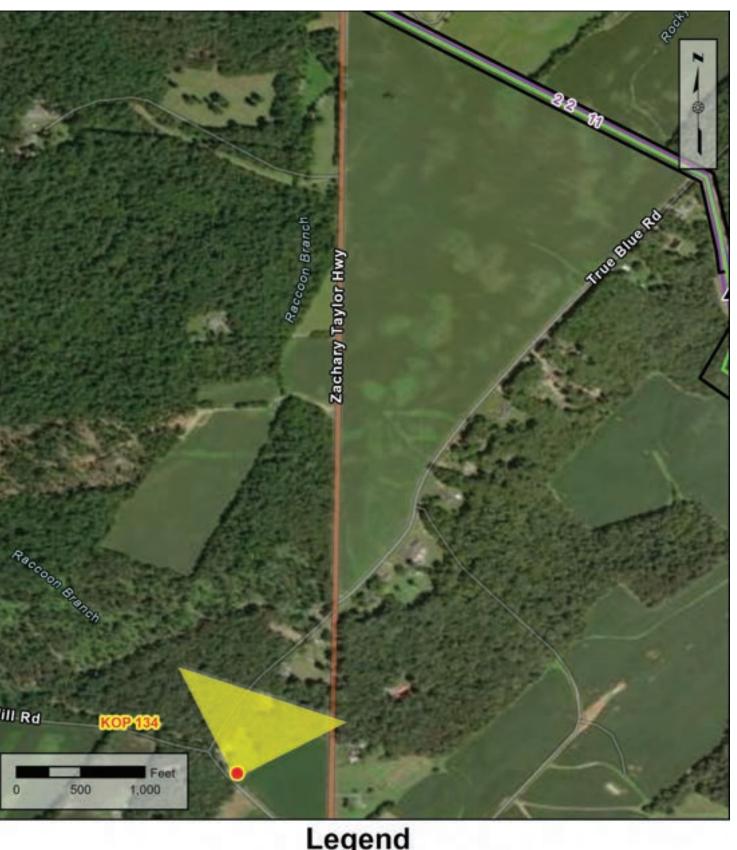
Figure 140

Route: Oak Green Rebuild and Relocation

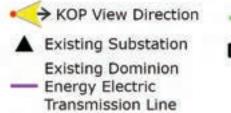
Date:10/07/2024 Time: 11:54 am

Viewing Direction: Northeast

Distance to closest feature: 0.82 miles



Legend



 Oak Green Rebuild and Relocation Right of Way



Figure 141. Aerial photograph depicting land use and photo view for 068-5033.







KOP 132

True Blue Rd

Figure 142

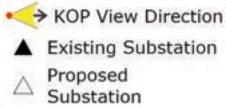
Route: Oak Green Rebuild and Relocation

Date:08/22/2024 Time: 10:51 am

Viewing Direction: Northwest

Distance to closest feature: 0.00 miles



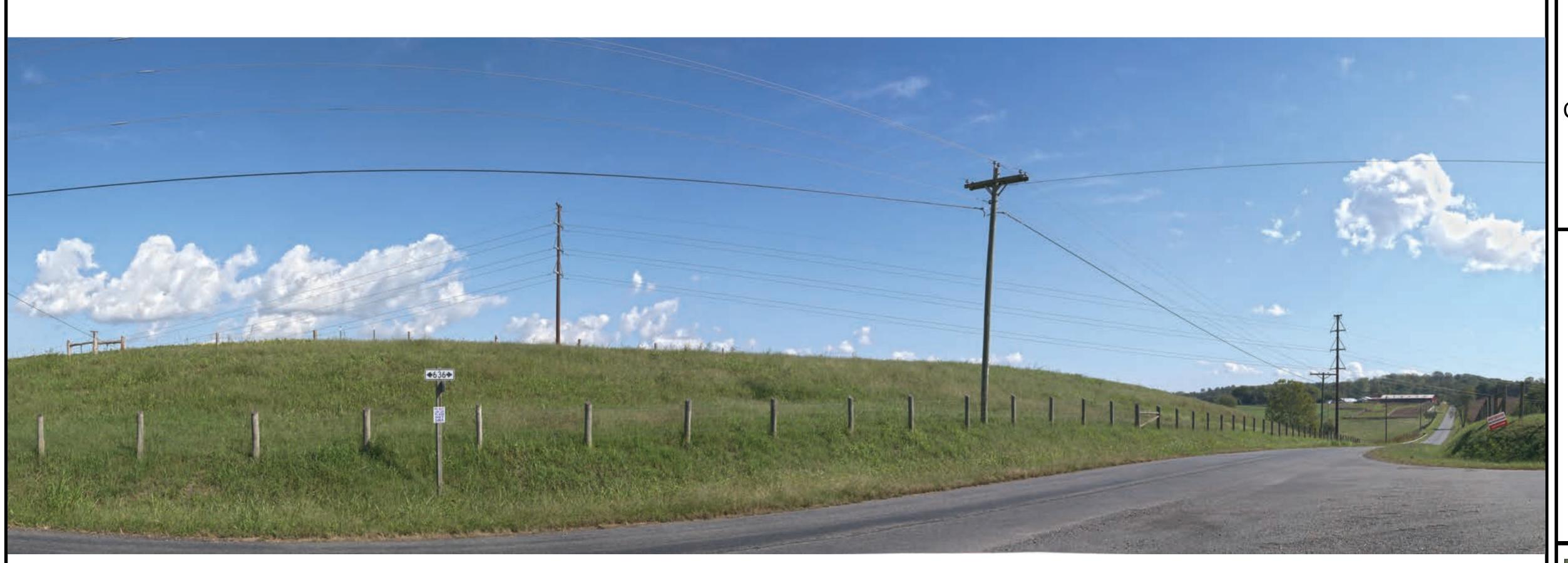


Existing Dominion
Energy Electric Transmission Line

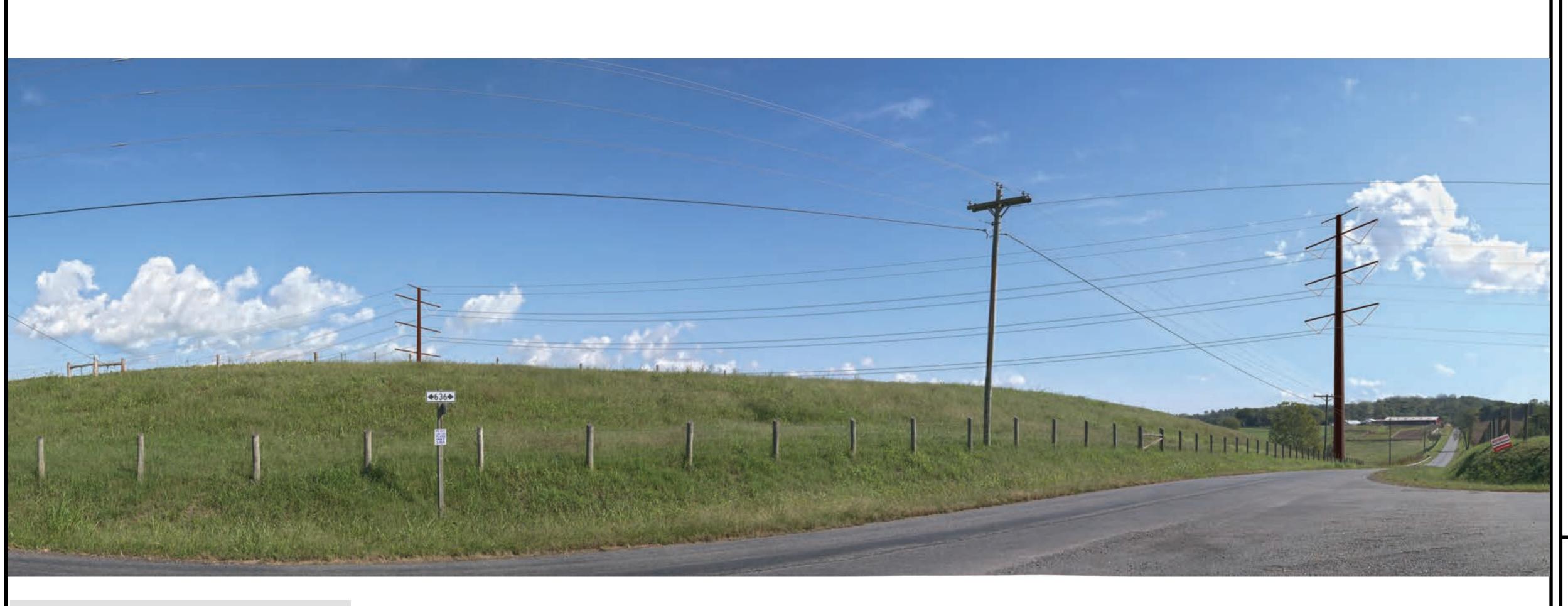
Oak Green Rebuild and Relocation Right of Way

Note: Project components illustrated are based on proposed preliminary designs The images contained on this page show the proposed project within a wider landscape context and are not representative of scale and distance when viewed from the actual view point.

Legend



EXISTING CONDITIONS



PROPOSED CONDITIONS

Culpeper Technology Zone 230 kV Loop and Lines #2 and #1065 Conversion Project Culpeper, Fauquier, & Orange Counties, Virginia



KOP 135

River Rd

Figure 143

Route: Oak Green Rebuild and Relocation

Date:10/07/2024 Time: 11:21 am

Viewing Direction: Northeast

Distance to closest feature: 1.18 miles



Legend

◆ KOP View Direction **Existing Dominion** - Energy Electric

Oak Green Rebuild and Relocation

Right of Way Transmission Line







KOP 151

Zachary Taylor Hwy

Figure 144

Route: Oak Green Rebuild and Relocation

Date:10/07/2024 Time: 11:04 am

Viewing Direction: Southwest

Distance to closest feature: 0.23 miles



Legend

◆ KOP View Direction ▲ Existing Substation **Existing Dominion**

Transmission Line

Oak Green Rebuild and Relocation Right of Way Energy Electric

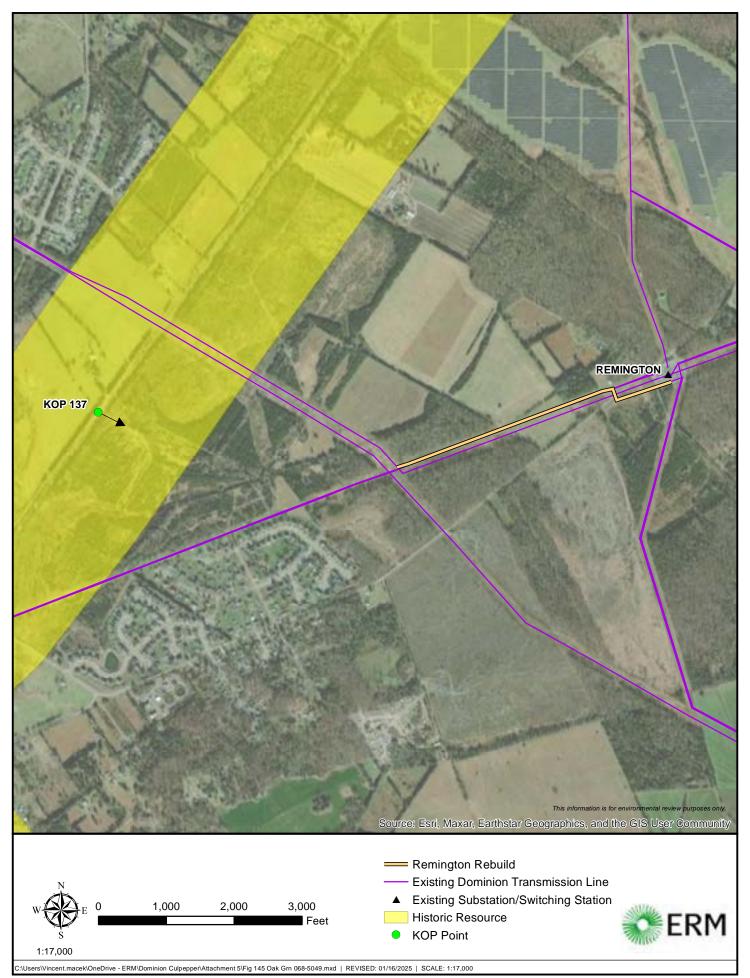


Figure 145. Aerial photograph depicting land use and photo view for 068-5049.







KOP 137

Remington Rd

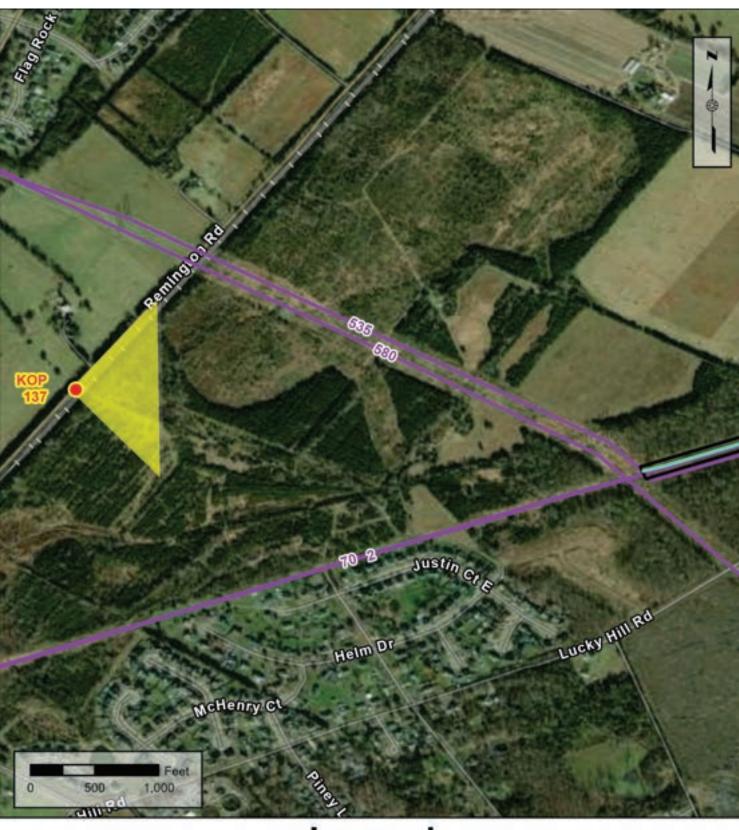
Figure 146

Route: Remington Rebuild

Date:10/08/2024 Time: 11:29 am

Viewing Direction: East

Distance to closest feature: 0.67 miles



Legend

→ KOP View Direction **Existing Dominion** — Energy Electric Transmission Line

- Remington Rebuild Right of Way

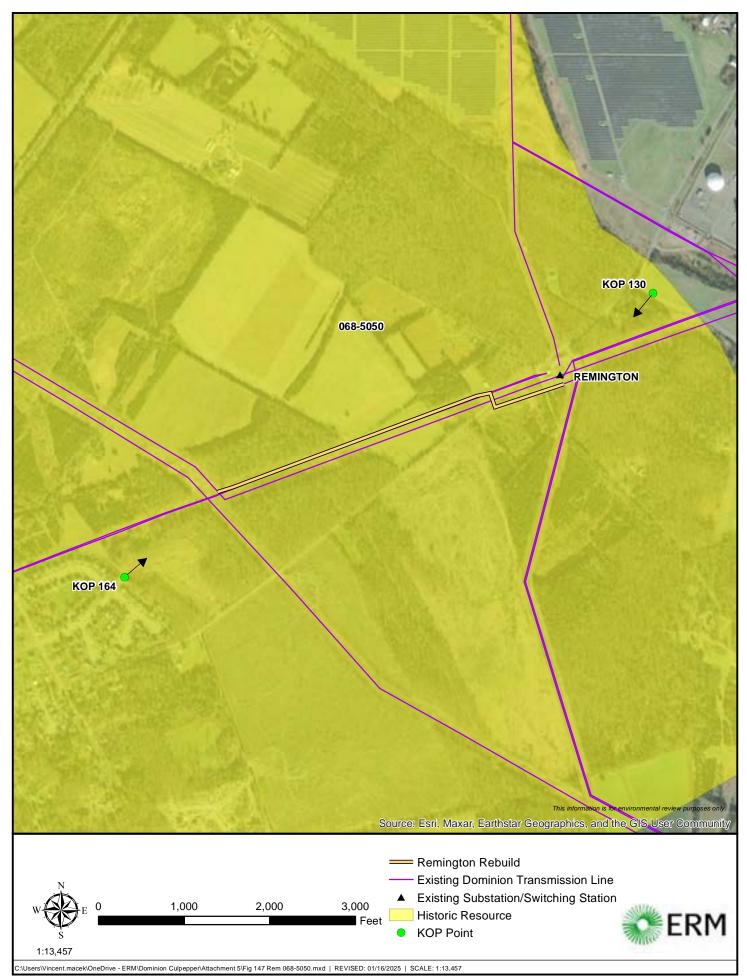


Figure 147. Aerial photograph depicting land use and photo view for 068-5050.







KOP 130

Lucky Hill Rd

Figure 148

Route: Remington Rebuild

Date:08/21/2024 Time: 3:48 pm

Viewing Direction: Southwest

Distance to closest feature: 0.22 miles



Legend

←
→
KOP View Direction ▲ Existing Substation

 Existing Dominion
 Energy Electric
 Transmission Line - Remington Rebuild

Right of Way







KOP 164

Helm Dr

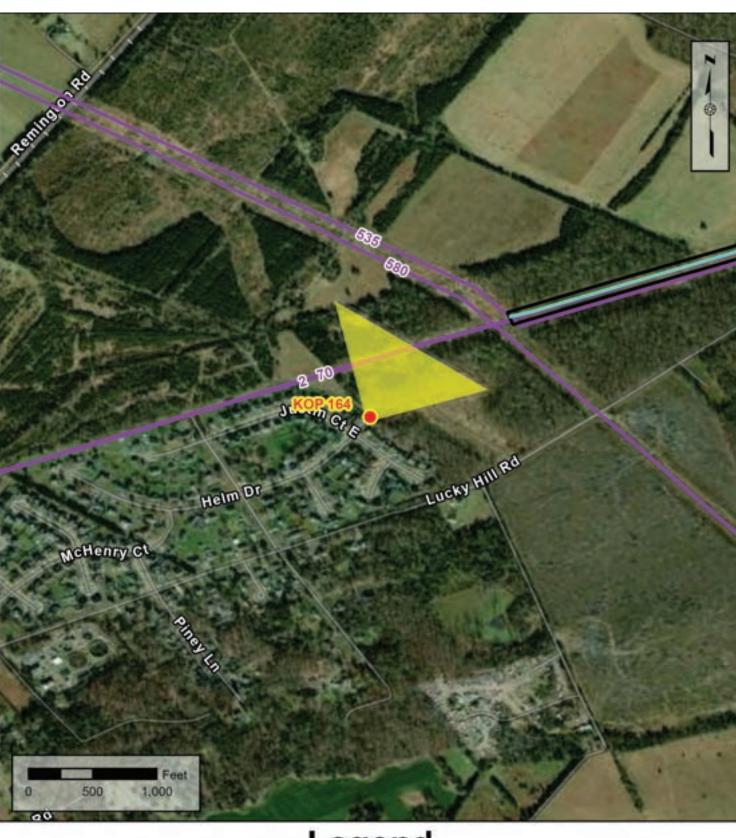
Figure 149

Route: Remington Rebuild

Date:08/21/2024 Time: 3:31 pm

Viewing Direction: Northeast

Distance to closest feature: 0.44 miles



Legend

← KOP View Direction **Existing Dominion** - Energy Electric Transmission Line

- Remington Rebuild Right of Way

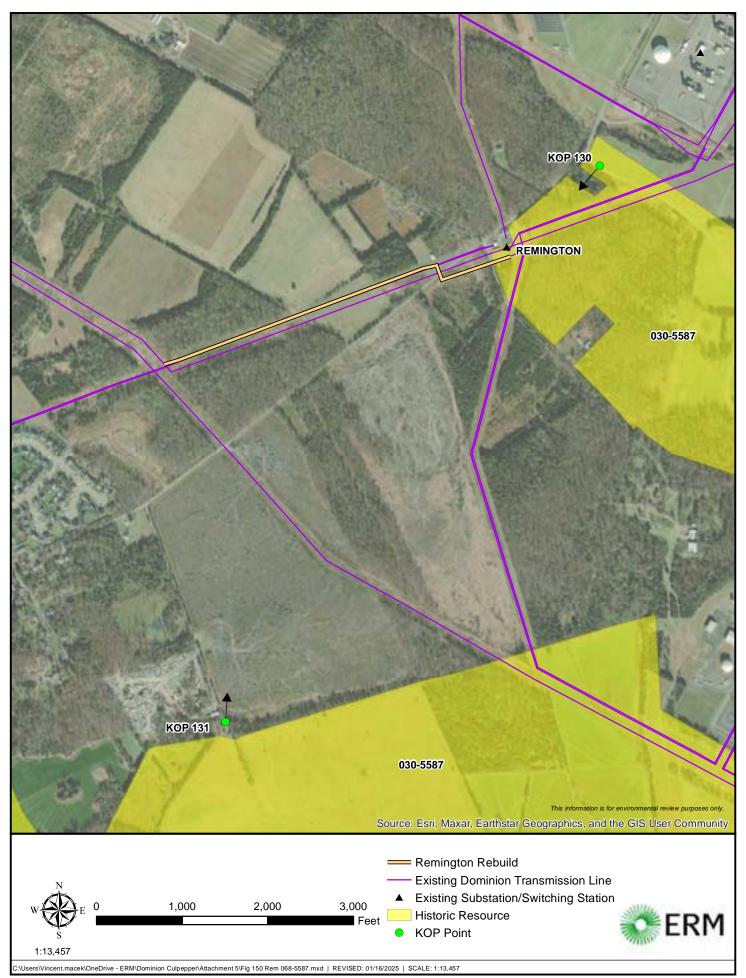


Figure 150. Aerial photograph depicting land use and photo view for 068-5587.







KOP 130

Lucky Hill Rd

Figure 151

Route: Remington Rebuild

Date:08/21/2024 Time: 3:48 pm

Viewing Direction: Southwest

Distance to closest feature: 0.22 miles



Legend

←
→
KOP View Direction ▲ Existing Substation

 Existing Dominion
 Energy Electric
 Transmission Line - Remington Rebuild

Right of Way







KOP 131

Strodes Mill Rd

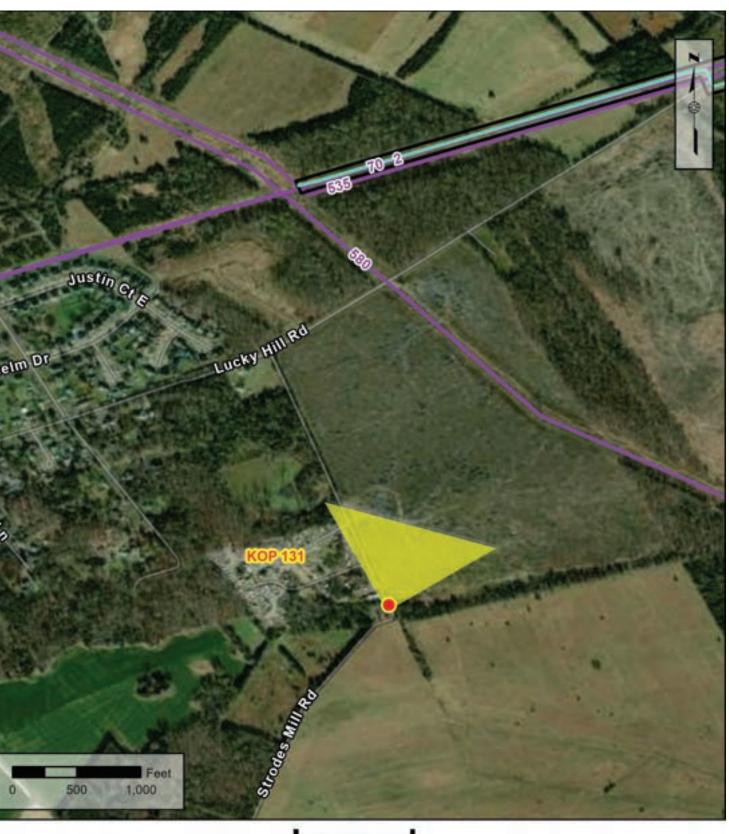
Figure 152

Route: Remington Rebuild

Date:08/21/2024 Time: 2:51 pm

Viewing Direction: Northeast

Distance to closest feature: 0.63 miles



Legend

← KOP View Direction **Existing Dominion** — Energy Electric Transmission Line

- Remington Rebuild Right of Way

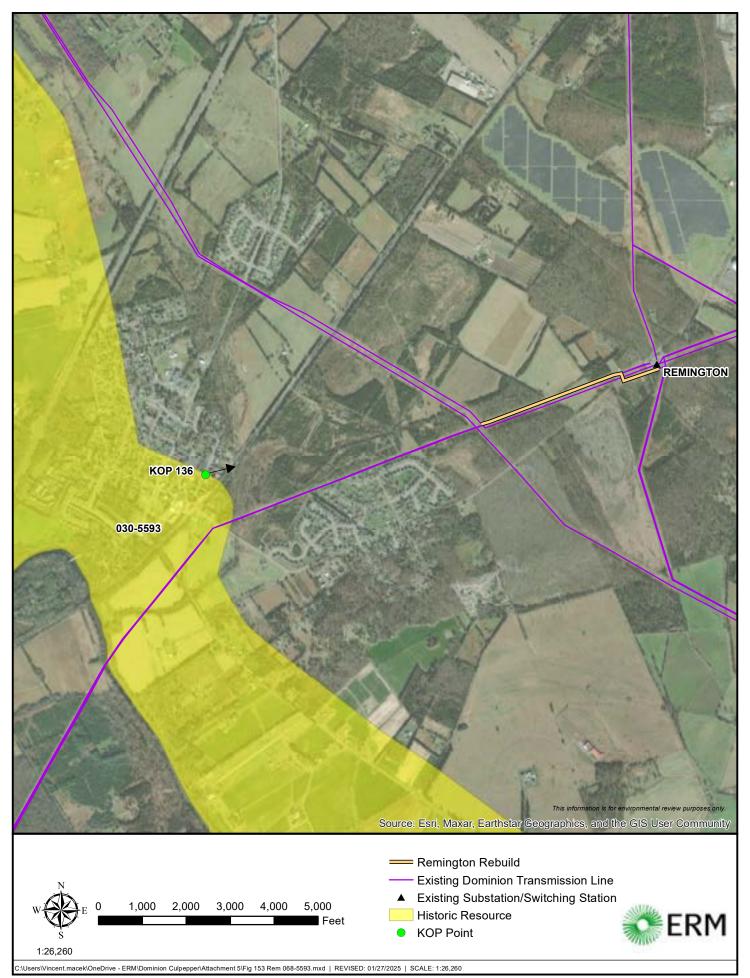


Figure 153. Aerial photograph depicting land use and photo view for 068-5593.







KOP 136

N Franklin St

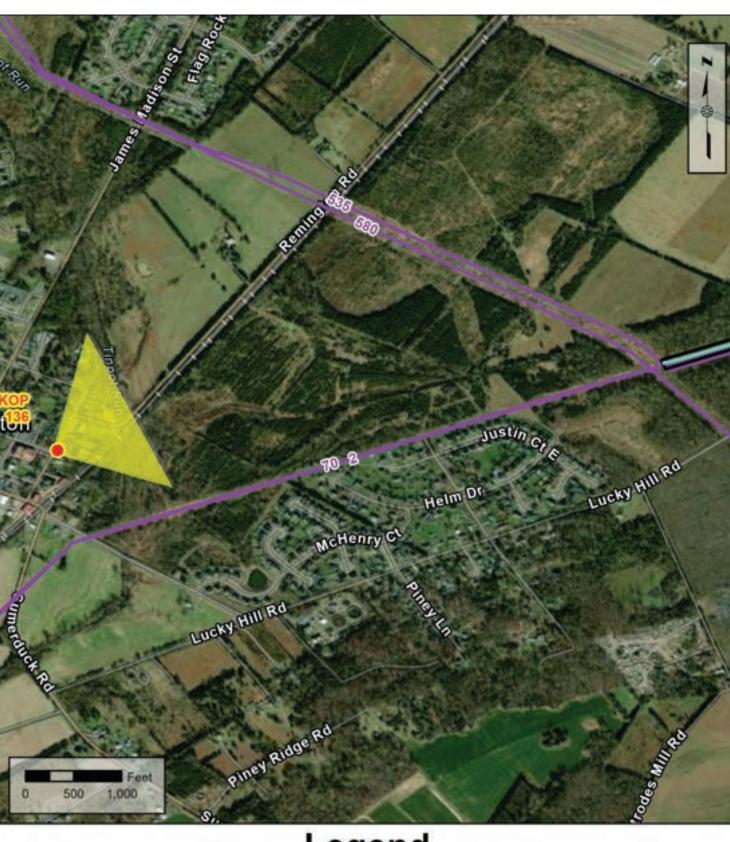
Figure 154

Route: Remington Rebuild

Date:10/08/2024 Time: 11:12 am

Viewing Direction: Northeast

Distance to closest feature: 0.95 miles



Legend

← KOP View Direction **Existing Dominion** — Energy Electric Transmission Line

— Remington Rebuild Right of Way

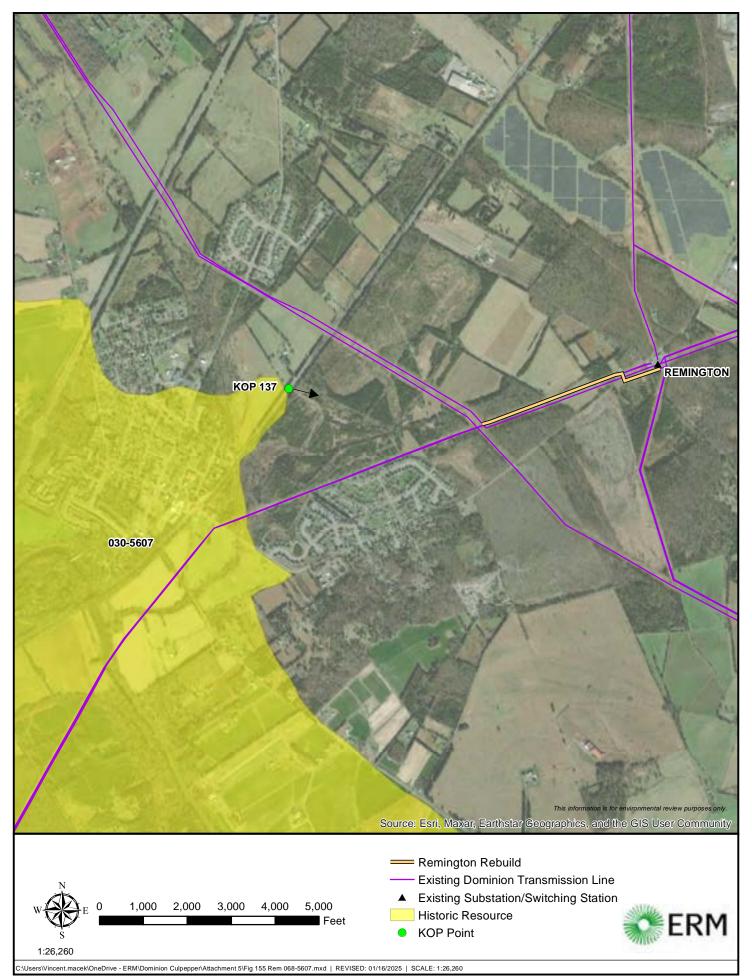


Figure 155. Aerial photograph depicting land use and photo view for 068-5607.







KOP 137

Remington Rd

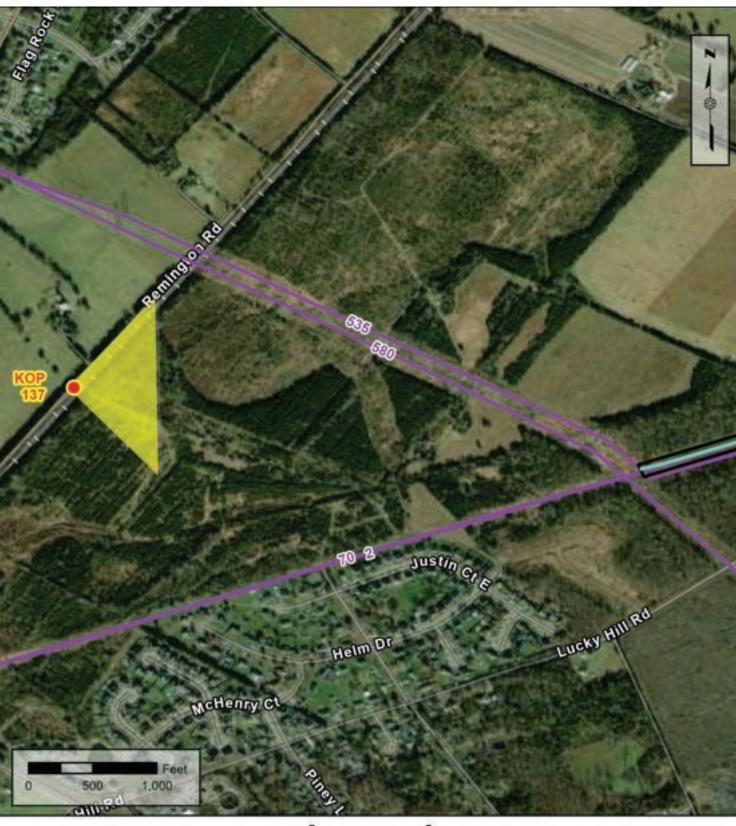
Figure 156

Route: Remington Rebuild

Date:10/08/2024 Time: 11:29 am

Viewing Direction: East

Distance to closest feature: 0.67 miles



Legend

→ KOP View Direction **Existing Dominion** — Energy Electric

Transmission Line

- Remington Rebuild Right of Way

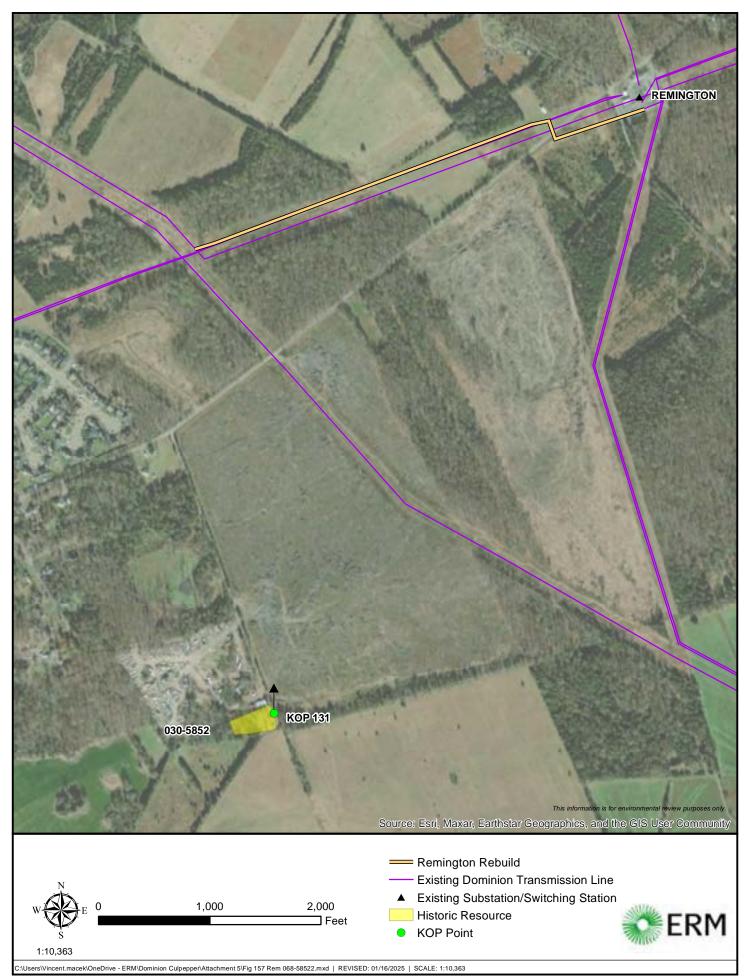


Figure 157. Aerial photograph depicting land use and photo view for 030-5852.







KOP 131

Strodes Mill Rd

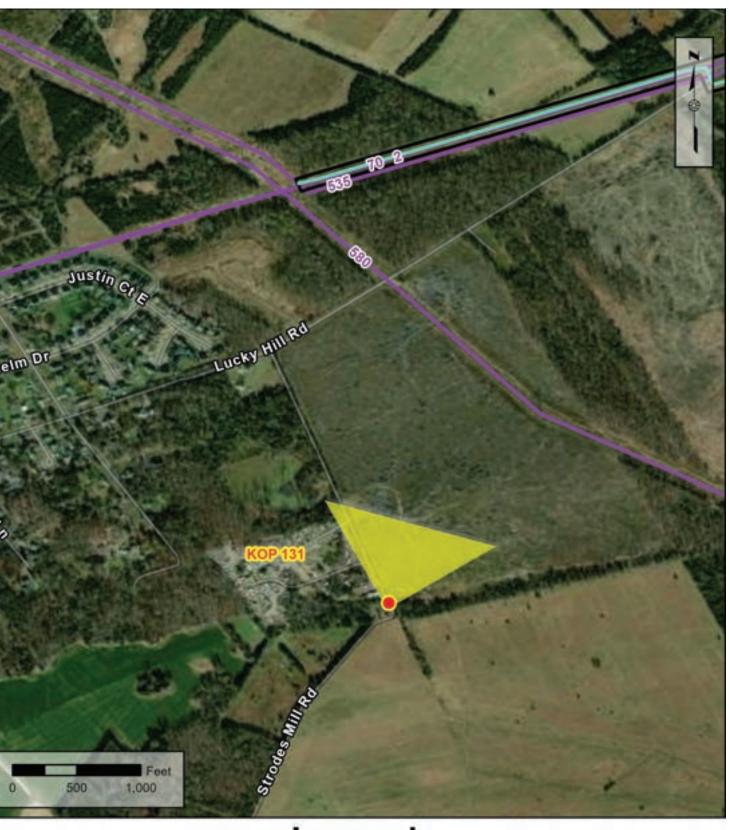
Figure 158

Route: Remington Rebuild

Date:08/21/2024 Time: 2:51 pm

Viewing Direction: Northeast

Distance to closest feature: 0.63 miles



Legend

← KOP View Direction **Existing Dominion** — Energy Electric Transmission Line

- Remington Rebuild Right of Way

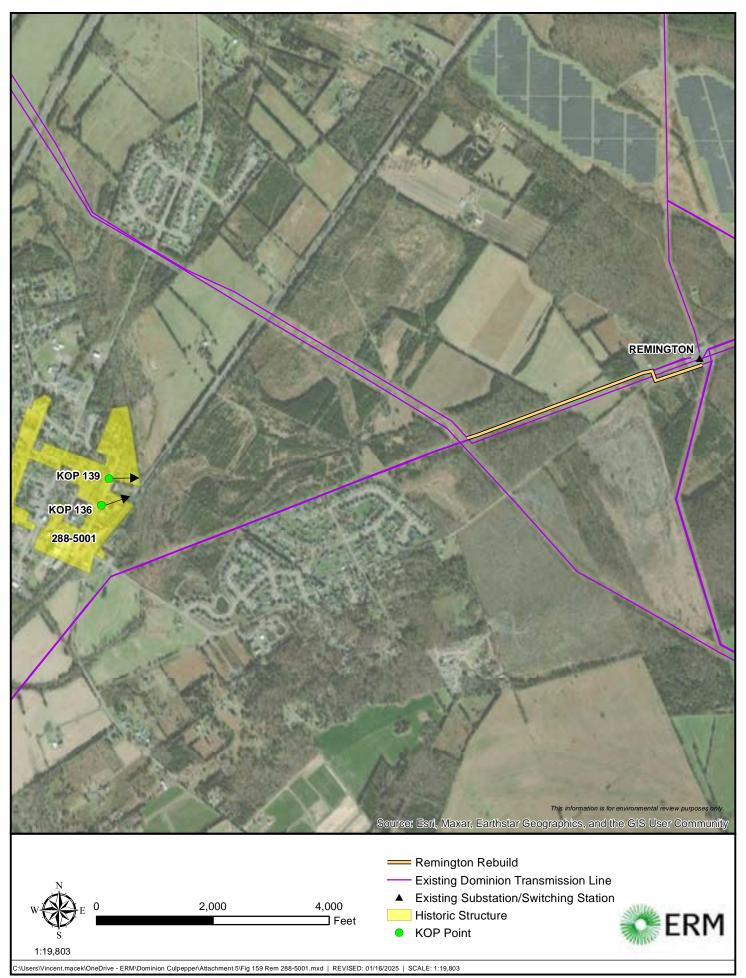


Figure 159. Aerial photograph depicting land use and photo view for 288-5001.







KOP 136

N Franklin St

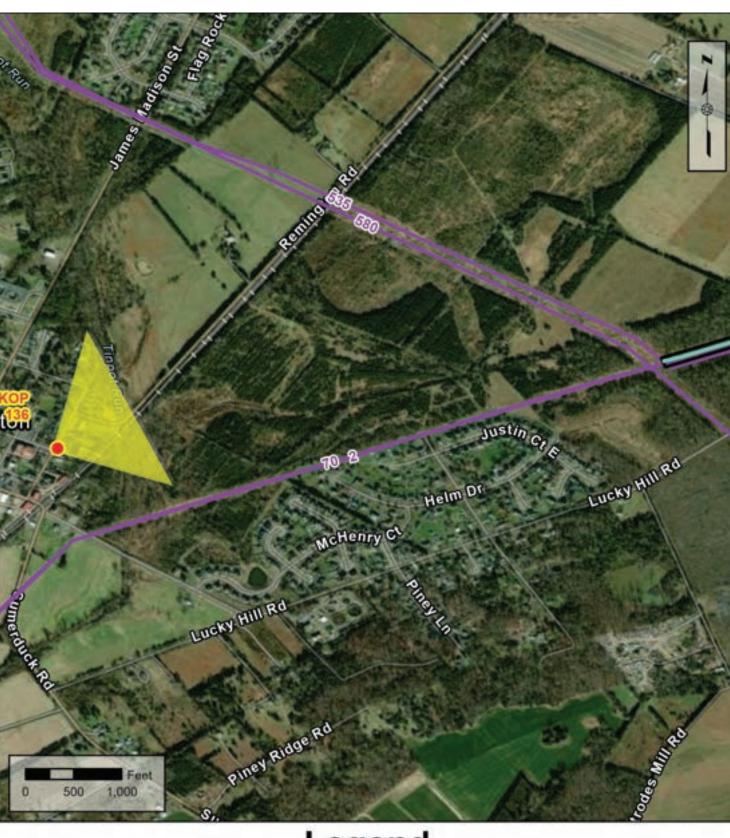
Figure 160

Route: Remington Rebuild

Date:10/08/2024 Time: 11:12 am

Viewing Direction: Northeast

Distance to closest feature: 0.95 miles



Legend

← KOP View Direction **Existing Dominion** — Energy Electric Transmission Line

— Remington Rebuild Right of Way







KOP 139

N Franklin St

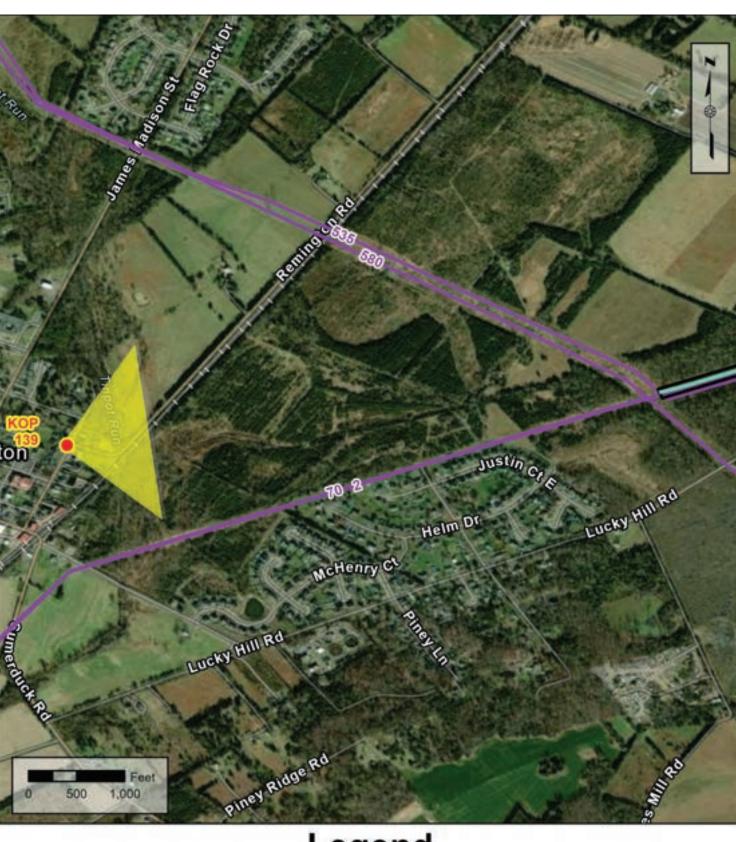
Figure 161

Route: Remington Rebuild

Date:08/22/2024 Time: 2:18 pm

Viewing Direction: East

Distance to closest feature: 0.92 miles



Legend

→ KOP View Direction **Existing Dominion** — Energy Electric Transmission Line

- Remington Rebuild Right of Way



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Indonesia Taiwan

Ireland Tanzania

Italy Thailand

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Kazakhstan UK

Kenya US

Malaysia Vietnam

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Mozambique