Figure 5-137: Buena Vista Simulation 1 – Existing view from the lawn adjacent to the home. Source: GTTE, LLC

Photo simulations prepared by:
GTTE LLC
email:
info@gttellc.com
703 447 1350

Project: Reusens - Roanoke

Location: PL22

Proposed View
(Location of towers not visible are overlaid with yellow tower icon)

Photo Simulations and diagrams represent approximate heights for electric transmission structures from the conceptual design used for the proposed project. These illustrations do not necessarily depict exact structure design or location.

This simulation is designed for viewing on a computer monitor. To achieve the correct scale, the image should be increased or decreased in size until the scale above measures 4". When viewed with the eye at 31" from the screen the image will have the same scale as if the viewer were standing at the camera location.

Figure 5-138: Buena Vista Simulation 1 – Proposed view from the lawn adjacent to the home – (Structures not visible shown in yellow). Source: GTTE, LLC

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American Viscose Plant Historic District (VDHR # 128-0238)

The American Viscose Plant Historic District consists of a 65-acre site located in an urban area of Roanoke near the Roanoke River. The site consists of three large processing plants, each with two spinning units and various additions constructed over the years for storage and support. Offices, employee dining rooms, and the dispensary, as well as finishing and distribution areas are located just north of the plant buildings. Two large, two-story power/boiler houses stand adjacent to the processing plants. Detailing on the buildings is limited by their industrial function, and therefore mainly consists of brick pilasters and structural bays accented with corbelling, as well as segmental arches. A majority of the buildings were constructed between 1916 and 1928 with alterations made through the 1950s.

Operations at the plant began in 1917, then known as the Viscose Corporation of Virginia, with employment at around 1,000 workers, many of whom were young, single women. By 1928, the plant employed 5,500 people and was reported to be the largest rayon manufacturer in the world. The plant was sold in 1941, subsequently becoming the American Viscose Corporation, and operated until 1958. The plant was a major employer in Roanoke in the early twentieth century and was the largest employer of women in the area. It also represents construction techniques and functional designs used for large industrial plants in the early-twentieth century. As such, the site was listed in the NRHP in 2019 under Criterion A for its contribution to the development of industry in Roanoke and under Criterion C for its noteworthy collection of industrial buildings.

In order to assess the potential impact of the Project, visual inspection was conducted of the setting around the district with emphasis on views towards the Project. The American Viscose Plant is located north of the southern terminus of the Project, roughly 0.1 mile away at its nearest point, although the opposite corner of the historic district is roughly 0.55 mile away. The existing Roanoke substation which is the southern terminus of the project is located along this portion of the alignment, roughly 0.15 mile away from the nearest edge of the district. As an industrial complex, there is no formal “front”, however, the primary office buildings and approach to the complex are along the northern edge and face north. The Project alignment generally extends in an east-west orientation across the landscape to the south of the complex. The complex occupies a large flat basin bordered by the Roanoke River to the south and east. The Project approaches the Roanoke substation on the opposite side of the river after descending a ridge that borders the area the east. The landscape also slopes up from the American Viscose Plant in the other three directions as well.

A site visit to the property found that the historic setting of the property is generally intact as it remains a larger industrial complex bordered by rail lines, the river, roads, and other commercial/industrial properties. This includes a wide variety of infrastructure as well. Views of and towards the district from surrounding public ROW are wide and from the surrounding elevated areas and neighborhoods. Views outward from the district are shorter and inhibited by the dense assemblage of buildings and associated structures, however, breaks between buildings permit intermittent views of the surrounding ridges.

Inspection from the roads around and within the historic district found that there is sporadic visibility of the Project existing structures, as well as views of multiple structures and components of other transmission lines that extend into and out of the Roanoke substation that are not included in this project. Generally the visibility of the Project structures is limited to a handful of existing structures due to their siting within the low flood plain area. Several additional structures may be seen from the eastern edges of the district as they extend over an elevated ridgeline to the north and east. Meanwhile, structures on the other transmission lines are generally more visible as they approach the substation from higher landforms to the south.

The existing transmission line structures in the vicinity of the property are steel lattice and range from approximately 100- to 113-feet tall and the proposed replacement structures will be steel monopoles that range from approximately 115-feet to 130-feet tall. As such, there will be an increase in structure height, and structures will generally be replaced on a one-to-one basis near existing structures. As such, it is anticipated that visibility of the Project structures will remain similar to current conditions, although the structures that are already visible may rise higher above the buildings and treelines. However, as the case currently, they will continue to be seen in conjunction with and amongst multiple structures on other transmission lines, as well as a wide variety of other industrial features and infrastructure. This was confirmed with photo simulation from streets throughout the district that show several structures that are currently visible will become increasingly visible and several others that are currently screened by buildings or vegetation may rise above those features, however, all structures will be seen amongst and behind numerous other transmission line structures, industrial infrastructure, and nonhistoric features on the developed landscape. As such, the Project may result in increased visibility of the transmission structures, however, this will not result in a compromise to the setting or viewshed of or from the historic district that is industrial in nature and already includes a wide variety of nonhistoric infrastructure. It is therefore D+A's opinion that the Project will have no more than a ***minimal impact*** on the American Viscose Plant Historic District per VDHR's impact characterization.

Figure 5-139 depicts the location of the American Viscose Plant Historic District in relation to the Project and viewshed buffers, with the location and direction of all representative photographs. **Figures 5-140 through 5-146** are representative photographs of the historic district, as well as those taken from locations within and near the district towards the Project. **Figures 5-147 through 5-152** provide photo simulations of the Project from the historic district.

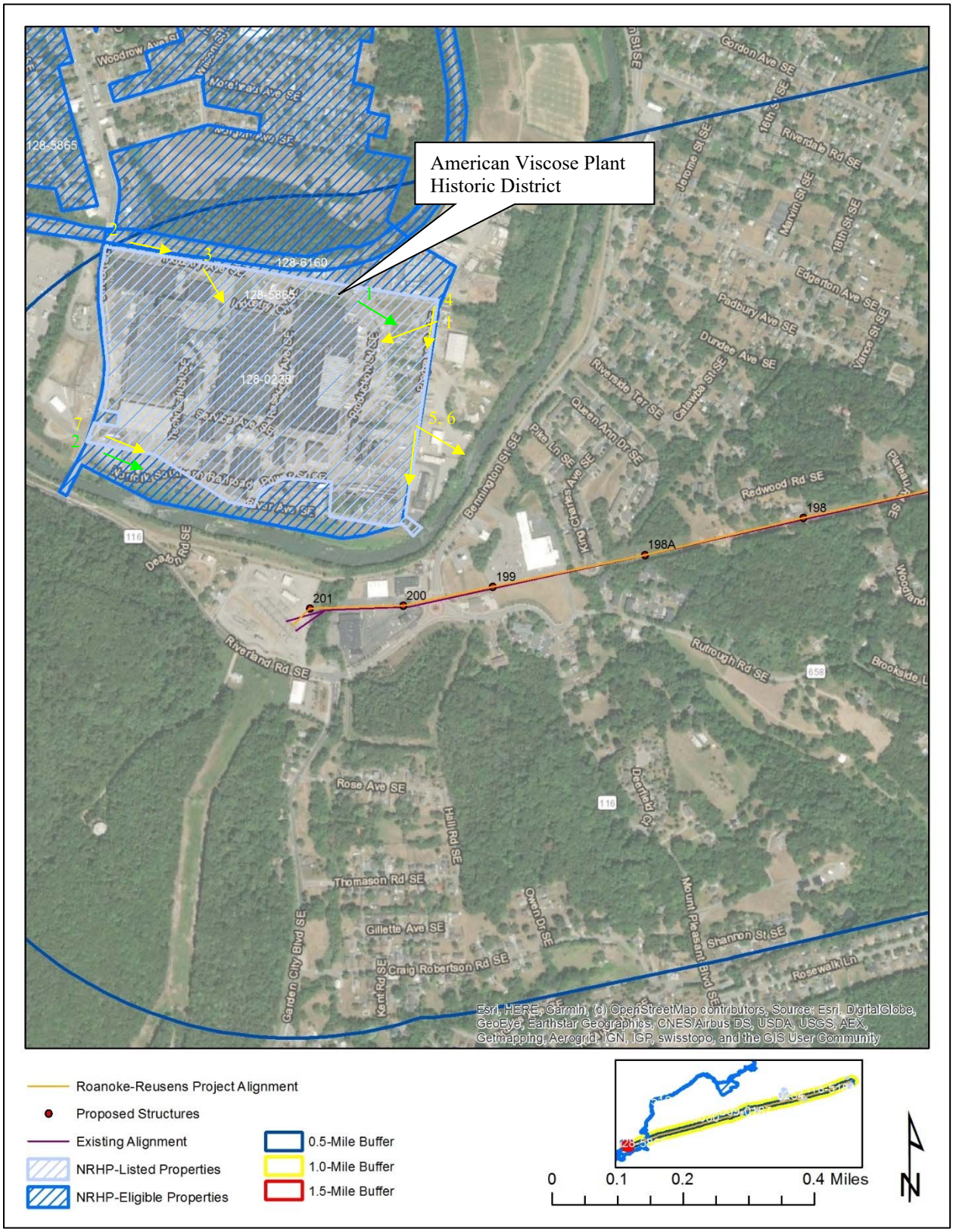

Figure 5-139: Location of American Viscose Plant in relation to the project area (Representative photographs and views towards the project area depicted in yellow, photo sims depicted in green).

Figure 5-140: Photo location 1- Representative view of American Viscose Plan complex, facing southwest.

Figure 5-141: Photo location 2- View from Industry Avenue SE towards the Project (not visible – screened by development), facing east.

Figure 5-142: Photo location 3- View from Industry Avenue SE towards the Project (not visible – screened by development. One existing structure on another line not included in this project visible over building), facing southeast.

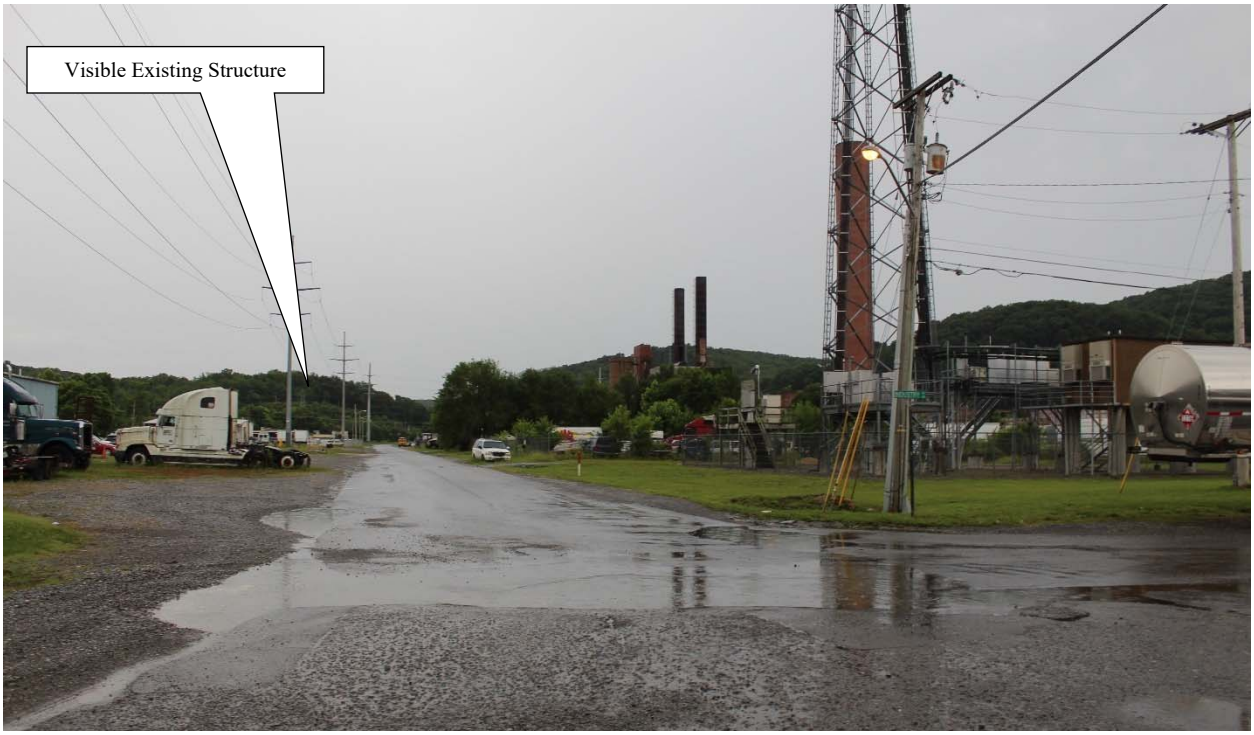

Figure 5-143: Photo location 4- View from intersection of Industry Drive SE and Progress Drive SE towards the Project (one existing structure visible amongst multiple structures on other transmission lines not included in this project), facing south.

Figure 5-144: Photo location 5- View from rear of Progress Drive SE towards the Project (One existing structure visible atop ridgeline), facing east.

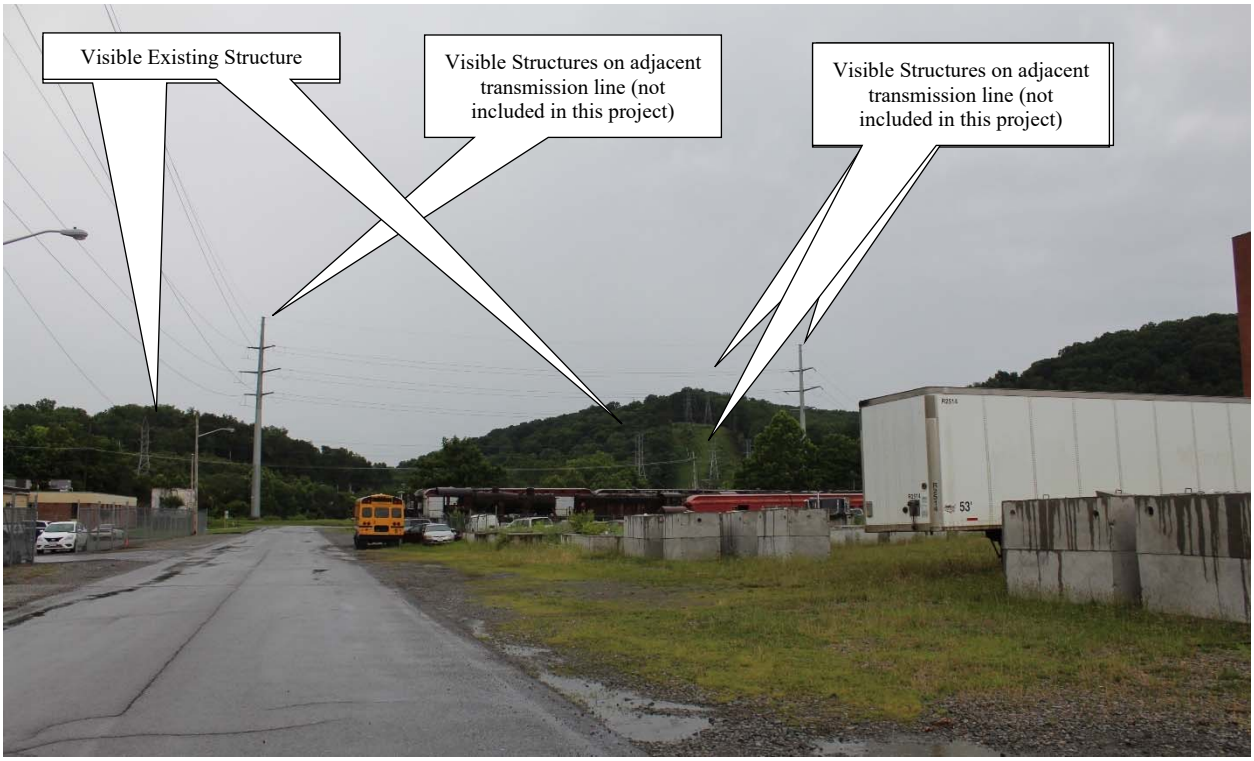

Figure 5-145: Photo location 6- View from Progress Drive SE towards the Project (Two existing structures visible amongst multiple existing structures on other lines not included in this project), facing south.

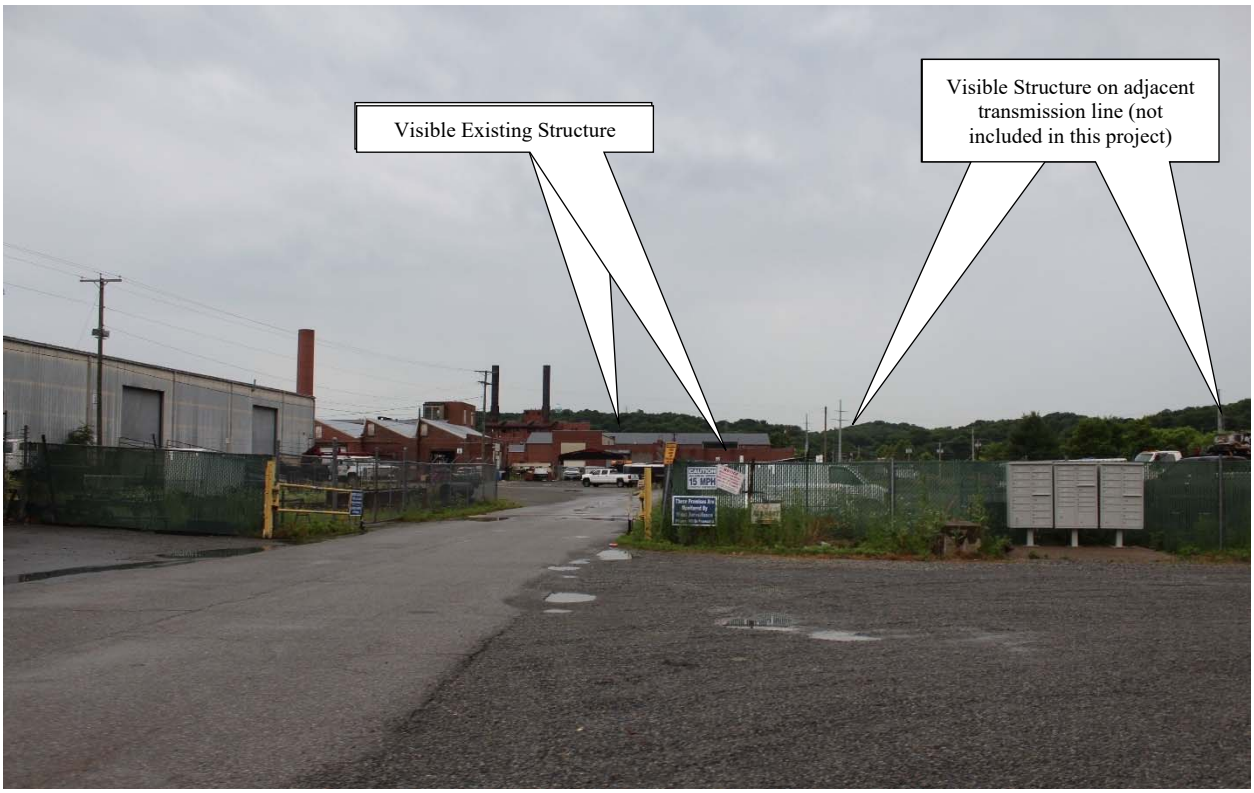

Figure 5-146: Photo location 7- View from intersection of 9th Avenue and River Avenue SE towards the Project (Two existing structures seen on ridgeline in background, multiple existing structures on other lines not included in this project visible in foreground), facing east.

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Photo simulations
prepared by:
GTTE LLC
email:
info@gttellc.com
703 447 1350

Location: PL26

Project: Roanoke-Reusens

Structure	Distance (ft)	Height (ft)
2-197A	3359	115.0
2-198A	2642	130.0
2-198B	2203	124.8
2-199A	2130	130.0
2-200A	2114	115.0

Figure 5-147: American Viscose Plant Simulation 1 – Simulation location, direction of view, and structures modeled from Industry Avenue. Source: GTTE, LLC

Photo simulations prepared by:
GTTE LLC
email:
info@gttellc.com
703 447 1350

Project: Reusens - Roanoke | **Location: PL26** | **Existing View**

Photo Simulations and diagrams represent approximate heights for electric transmission structures from the conceptual design used for the proposed project. These illustrations do not necessarily depict exact structure design or location.

This simulation is designed for viewing on a computer monitor. To achieve the correct scale, the image should be increased or decreased in size until the scale above measures 4". When viewed with the eye at 31" from the screen the image will have the same scale as if the viewer were standing at the camera location.

Figure 5-148: American Viscose Plant Simulation 1 – Existing view from Industry Avenue. Source: GTTE, LLC

Photo simulations prepared by:
GTTE LLC
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info@gttellc.com
703 447 1350

Project: Reusens - Roanoke

Location: PL26

Proposed View
(Location of towers not visible are overlaid with yellow tower icon)

Photo Simulations and diagrams represent approximate heights for electric transmission structures from the conceptual design used for the proposed project. These illustrations do not necessarily depict exact structure design or location.

This simulation is designed for viewing on a computer monitor. To achieve the correct scale, the image should be increased or decreased in size until the scale above measures 4". When viewed with the eye at 31" from the screen the image will have the same scale as if the viewer were standing at the camera location.

Figure 5-149: American Viscose Plant Simulation 1 – Proposed view from Industry Avenue – (Visible structures shown as they would appear. Screened structures shown in yellow). Source: GTTE, LLC

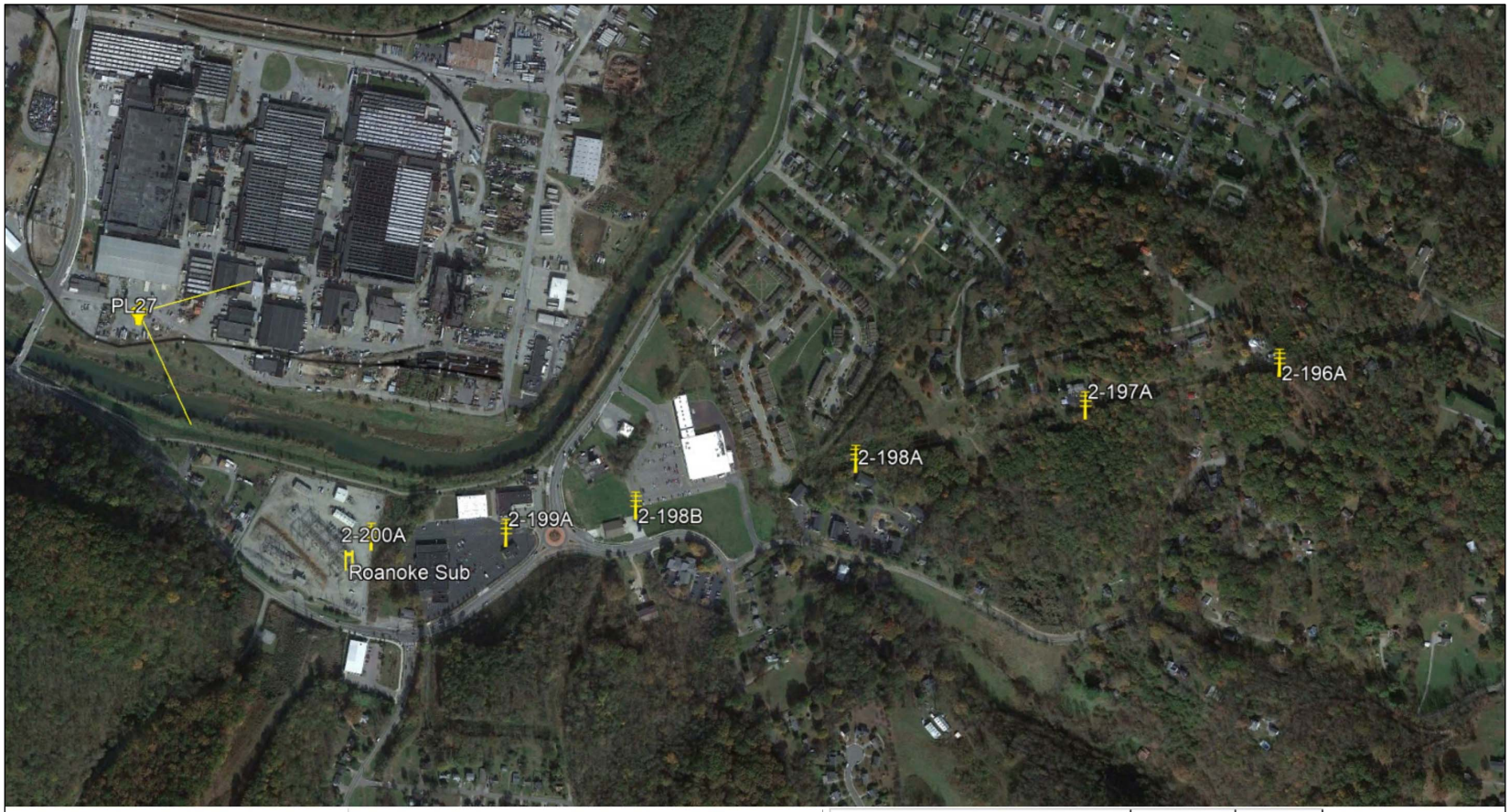

Photo simulations
prepared by:
GTTE LLC
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info@gttellc.com
703 447 1350

Location: PL27

Project: Roanoke-Reusens

Structure	Distance (ft)	Height (ft)
2-196A	5081	105.0
2-197A	4233	115.0
2-198A	3255	130.0
2-198B	2370	124.8
2-199A	1902	130.0
2-200A	1432	115.0

Figure 5-150: American Viscose Plant Simulation 2 – Simulation location, direction of view, and structures modeled from River Avenue. Source: GTTE, LLC

Photo simulations prepared by:
GTTE LLC
email:
info@gttellc.com
703 447 1350

Project: Reusens - Roanoke	Location: PL27	Existing View

Photo Simulations and diagrams represent approximate heights for electric transmission structures from the conceptual design used for the proposed project. These illustrations do not necessarily depict exact structure design or location.

This simulation is designed for viewing on a computer monitor. To achieve the correct scale, the image should be increased or decreased in size until the scale above measures 4". When viewed with the eye at 31" from the screen the image will have the same scale as if the viewer were standing at the camera location.

Figure 5-151: American Viscose Plant Simulation 2 – Existing view from River Avenue. Source: GTTE, LLC

Photo simulations prepared by:
GTTE LLC
email:
info@gttellc.com
703 447 1350

Project: Reusens - Roanoke

Location: PL27

Proposed View
(Location of towers not visible are overlaid with yellow tower icon)

Photo Simulations and diagrams represent approximate heights for electric transmission structures from the conceptual design used for the proposed project. These illustrations do not necessarily depict exact structure design or location.

This simulation is designed for viewing on a computer monitor. To achieve the correct scale, the image should be increased or decreased in size until the scale above measures 4". When viewed with the eye at 31" from the screen the image will have the same scale as if the viewer were standing at the camera location.

Figure 5-152: American Viscose Plant Simulation 2 – Proposed view from River Avenue – (Visible structures shown as they would appear. Screened structures shown in yellow). Source: GTTE, LLC

Mill Mountain Star / The Roanoke Star (VDHR #128-0352)

The Mill Mountain Star stands at the top of Mill Mountain, a foothill to the Blue Ridge Mountains in Roanoke. The star itself is 88.5 feet tall and weighs 10,000 pounds. It is mounted on a 100-foot steel tower containing 60,000 pounds of steel and featuring L-shaped channels, struts, and lateral bracing joined by gusset plates. The tower stands on a 6.5-foot-deep base consisting of 500,000 pounds of concrete. When illuminated, the Star can be seen from at least 50 miles away. The Roanoke River flows along its northern base and downtown Roanoke lies about a mile north of the mountain.

Before the star, the peak of Mill Mountain was home to various attractions that drew tourists to the area. It was purchase by J.B. Fishburne in 1941 to be preserved, and in the 1940s the Roanoke Merchants Association began thinking of ideas for new Christmas decorations. Roanoke's Christmas Street committee is credited with the idea to build the huge neon star on top of the mountain. Constructed and first lit in 1949, the Mill Mountain Star was supposed to be a seasonal decoration but became permanent after the citizens of Roanoke fell in love with the Star and demanded that it remain illuminated every night throughout the year. The Star also serves utilitarian functions – for 17 years it was illuminated red to acknowledge traffic fatalities in the city. Significant for its historic role in civic boosterism and Roanoke's commercial development, the Star was listed in the NRHP in 1999 under Criterion C at the local level, although it is recommended eligible under Criterion A as well.

In order to assess the potential impact of the Project, visual inspection was conducted of the setting around the property with emphasis on views towards the Project. The Mill Mountain Star is located west of the southern terminus of the Project, roughly 0.65 mile away at its nearest point. The star is located near the peak of Mill Mountain which is one of the most elevated vantage points in the area. The star faces north towards downtown Roanoke in the valley below. The Project extends in an east-west orientation from the Roanoke substation set at the east base of Mill Mountain. The star is accessed by a long road up the mountain that terminates at a parking lot for the star and observation deck, as well as a small zoo and municipal park just downhill. Other than small cleared areas, the mountain is thickly wooded.

A site visit to the property found that the historic setting of the property is intact and remains as public park atop an otherwise undeveloped mountain. By its nature, views towards the star are wide and distant from throughout the Roanoke Valley. Likewise, views outward from the star observation deck are wide and open in the direction of Roanoke, but completely inhibited by the mountain in the other directions.

Inspection from the approach to the Mill Mountain Star found that the thickly wooded landscape of the mountain and bordering the access road completely inhibit views of the valley below. From the observation deck, much of the development associated with and around Roanoke is visible, however, the Project is situated to the east of the viewscape and therefore blocked by vegetation.

The existing transmission line structures in the vicinity of the property are steel lattice and range from approximately 100- to 113-feet tall and the proposed replacement structures will be steel monopoles that range from approximately 115-feet to 130-feet tall. As such, there will be an increase in structure height, and structures will generally be replaced on a one-to-one basis near existing structures. However, the Project will remain completely screened by the topography of the mountain and the dense tree cover between it and the star. This was confirmed with photo simulation from the observation deck that shows the project and all structures will remain screened by vegetation and the substantial change in topography. As such, the Project will not result in any change in the setting or viewshed of or from the property. It is therefore D+A's opinion that the Project will have ***no impact*** on the Mill Mountain Star per VDHR's impact characterization.

Figure 5-153 depicts the location of the Mill Mountain Star in relation to the Project and viewshed buffers, with the location and direction of all representative photographs. **Figures 5-154 through 5-158** are representative photographs of the property, as well as those taken from locations within and near the property towards the Project. **Figures 5-159 through 5-161** provide photo simulations of the Project from the property.

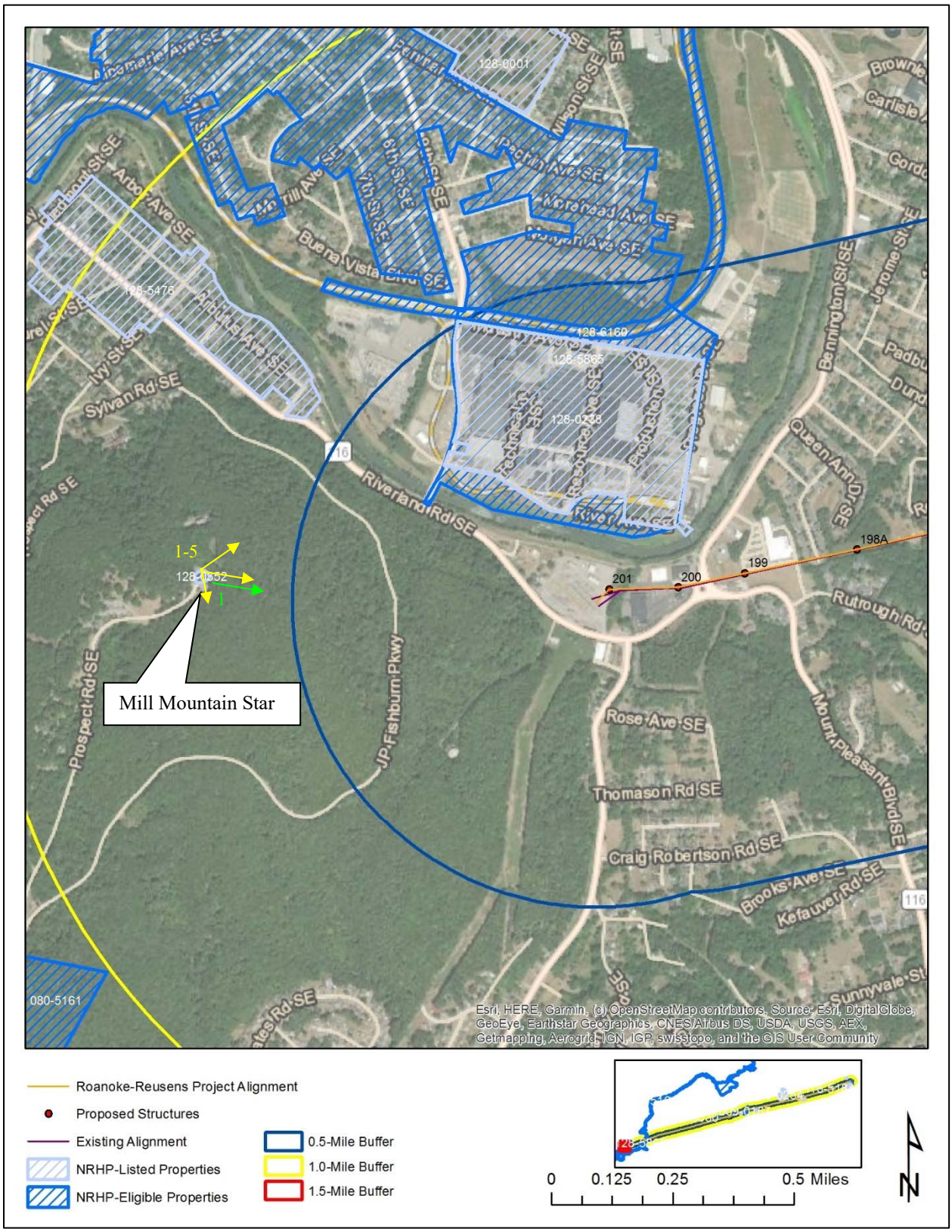

Figure 5-153: Location of Mill Mountain Star in relation to the project area (Representative photographs and views towards the project area depicted in yellow, photo sims depicted in green).

Figure 5-154: Photo location 1- Representative view of Mill Mountain Star, facing south.

Figure 5-155: Photo location 2- View from Mill Mountain Star approach towards the Project (not visible – screened by vegetation and topography), facing east.

Figure 5-156: Photo location 3- View from Mill Mountain Star observation deck towards the Project (not visible – screened by topography and vegetation), facing north.

Figure 5-157: Photo location 4- View from Mill Mountain Star observation deck towards the Project (not visible – screened by topography and vegetation), facing east.

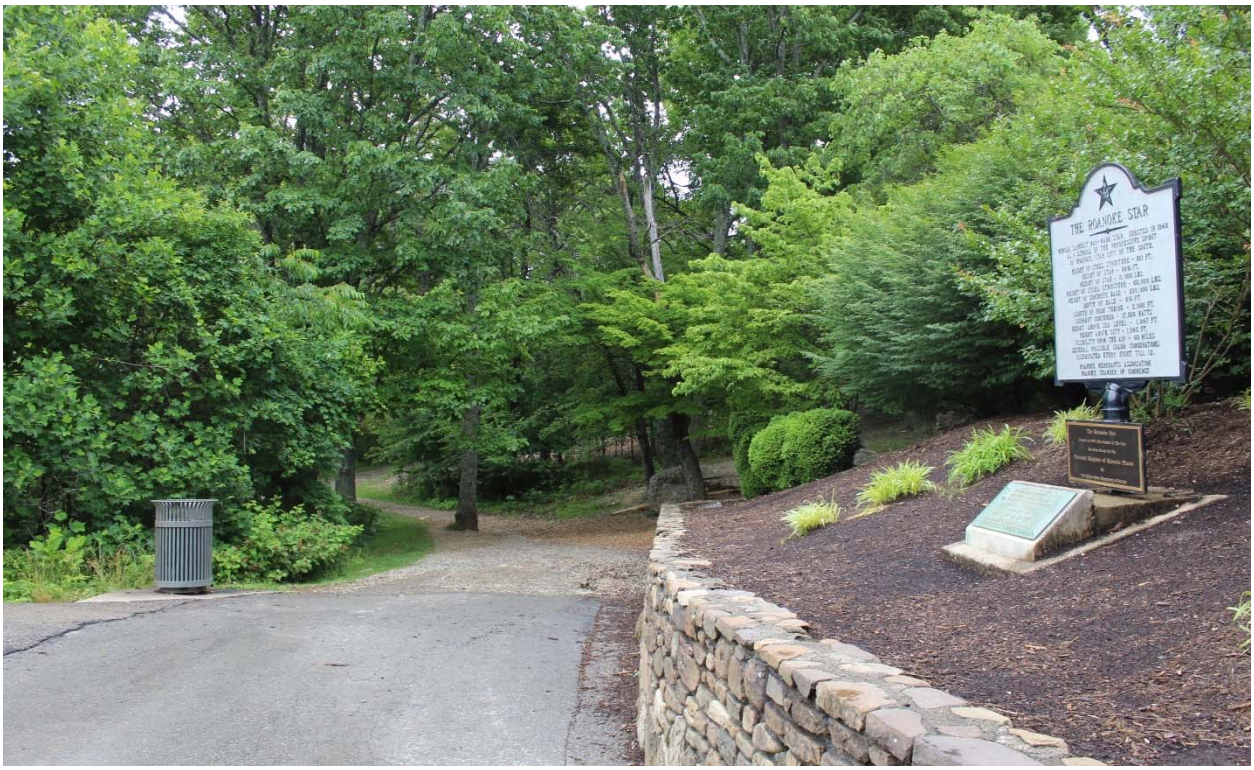

Figure 5-158: Photo location 5- View from Mill Mountain Star walking trail towards the Project (not visible – screened by topography and vegetation), facing east.

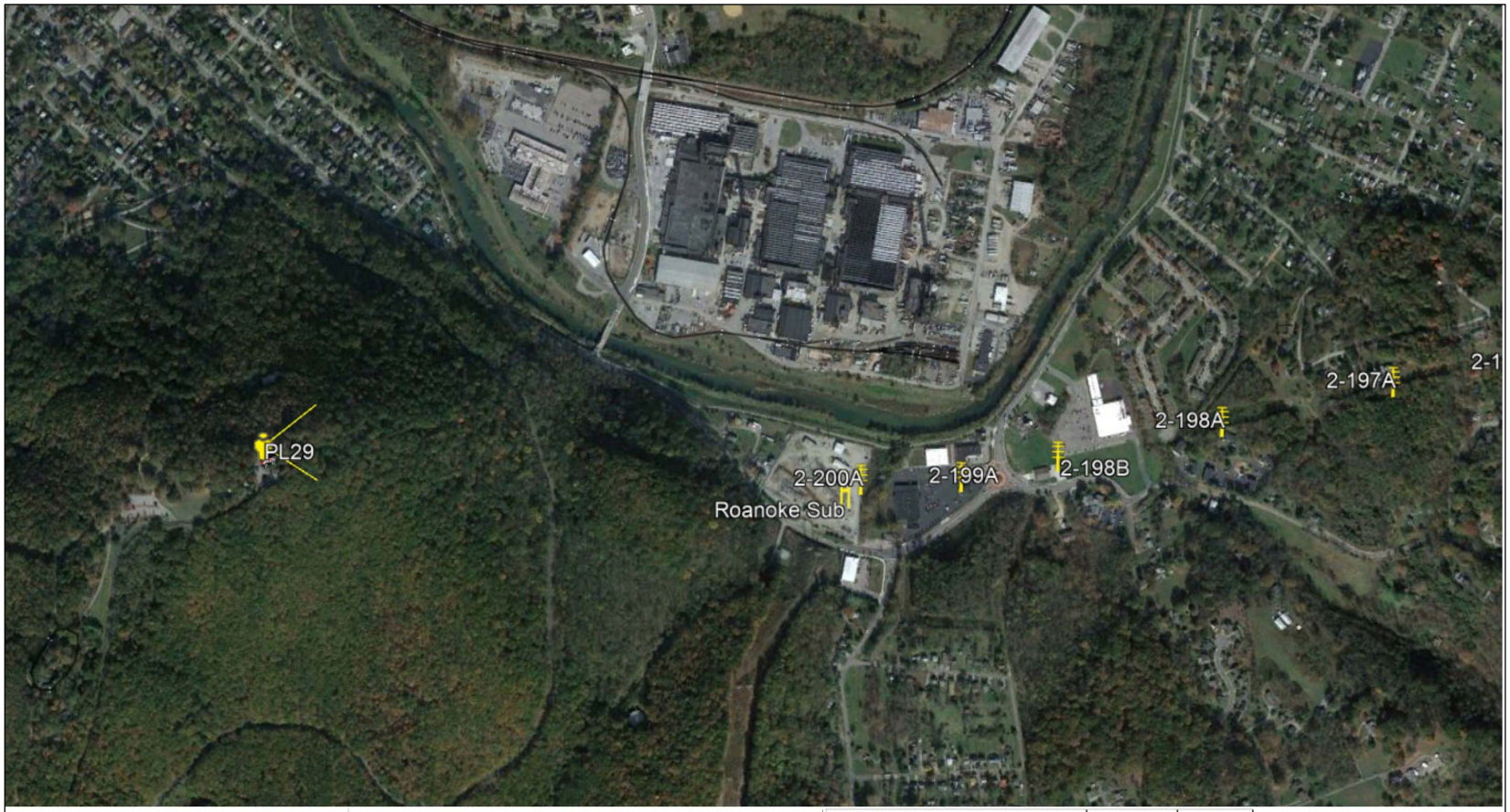

Photo simulations
prepared by:
GTTE LLC
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info@gttellc.com
703 447 1350

Location: PL29

Project: Roanoke-Reusens

Structure	Distance (ft)	Height (ft)
2-198A	5772	130.0
2-198B	4814	124.8
2-199A	4250	130.0
2-200A	3665	115.0
Roanoke Sub	3563	NA

Figure 5-159: Mill Mountain Simulation 1 – Simulation location, direction of view, and structures modeled from the observation deck. Source: GTTE, LLC

Figure 5-160: Mill Mountain Simulation 1 – Existing view from observation deck. Source: GTTE, LLC

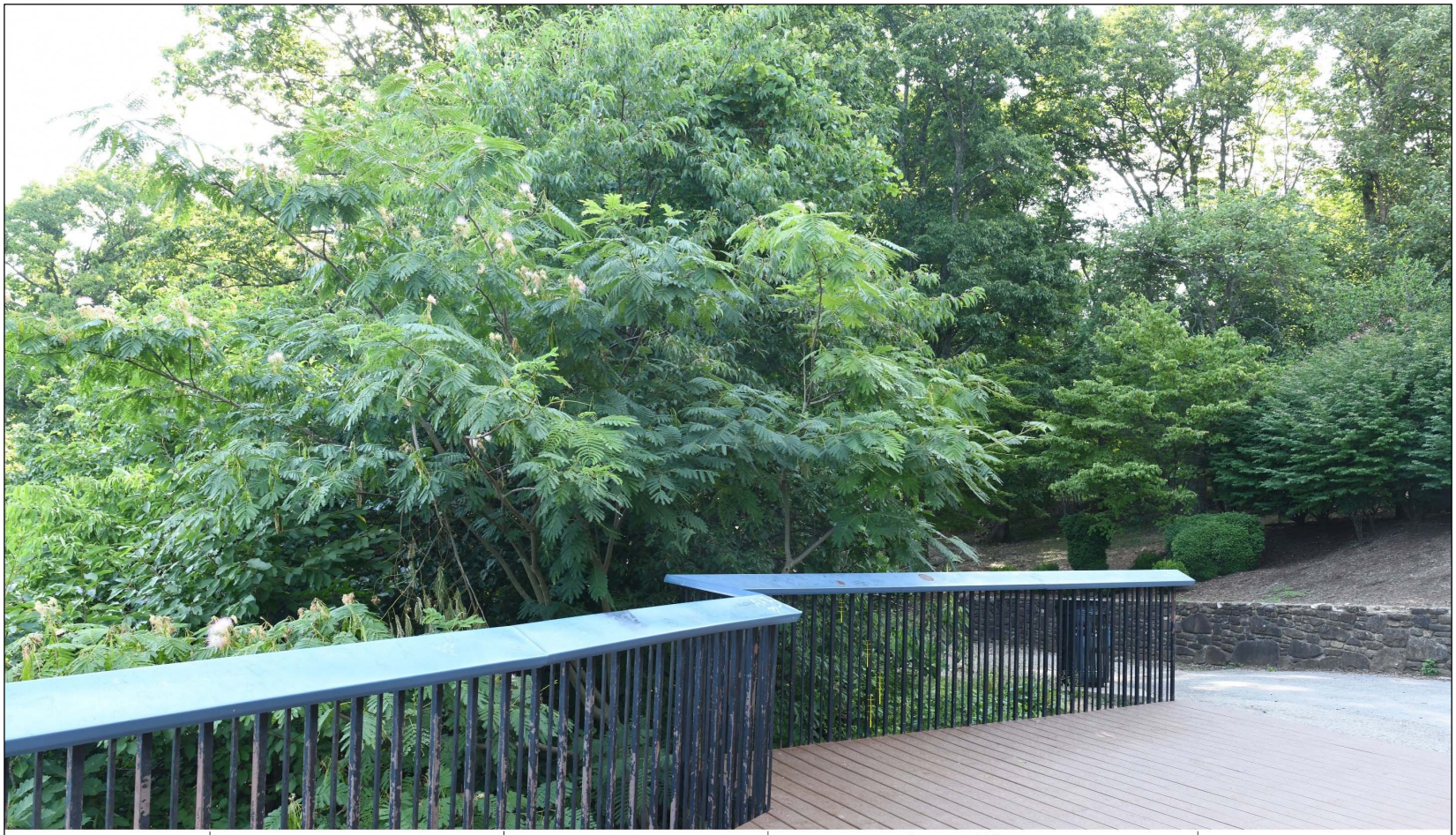

Photo simulations prepared by:
GTTE LLC
email:
info@gttellc.com
703 447 1350

Project: Reusens - Roanoke

Location: PL29

Proposed View
(Location of towers not visible are overlaid with yellow tower icon)

Photo Simulations and diagrams represent approximate heights for electric transmission structures from the conceptual design used for the proposed project. These illustrations do not necessarily depict exact structure design or location.

This simulation is designed for viewing on a computer monitor. To achieve the correct scale, the image should be increased or decreased in size until the scale above measures 4". When viewed with the eye at 31" from the screen the image will have the same scale as if the viewer were standing at the camera location.

Figure 5-161: Mill Mountain Simulation 1 – Proposed view from observation deck – (Structures not visible shown in yellow). Source: GTTE, LLC

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Riverland Historic District (VDHR # 128-5476)

The Riverland Historic District lies on the south side of the Roanoke River in southeast Roanoke and is comprised of single-family dwellings that date from the first two decades of the twentieth century. Streetscapes include roads lined with trees with most houses set fairly close to the street and are characterized by continuity, as few yards are fenced in. Most of the dwellings utilize either American Foursquare or bungalow designs. The foursquares are typically two stories tall with low-pitched hipped roofs often with gabled dormers. Many of them also have full-width, single-story porches along symmetrical facades. Common among the bungalows are modest one-and-a-half to two-story structures with gable roofs, large porches, and Craftsman-style detailing. Most of the structures in the district are of frame construction with a variety of cladding materials, and many feature variations on double hung sash windows. The district retains a relatively high level of material integrity, with alterations mostly limited to the replacement of historic siding with modern materials.

The 50-acre area was owned by the Roanoke Gas & Water Company in 1890, later developed by the Highland Land Company and S.D. Ferguson during the first half of the twentieth century. Most of the dwellings were constructed between 1900 and 1930 to accommodate middle-income families that were typically employed by nearby industries. Elements of these industries are visible from the neighborhood, including the smokestacks of the American Viscose Factory, the sheds of the bridge company, and the train tracks of the Norfolk & Western Railroad. These elements help maintain integrities of feeling and association. The district is associated with the rapid development of industry in the City of Roanoke in the early twentieth century and is significant as a residential neighborhood that provided housing for workers in the major industries. Additionally, it represents a collection of residences that embodies the distinctive characteristics of early twentieth century American architectural styles and that possesses a direct association with industrial development of the city. The district was accordingly listed in the NRHP in 2013 under Criteria A and C.

In order to assess the potential impact of the Project, visual inspection was conducted of the setting around the district with emphasis on views towards the Project. The Riverland Historic District is located west of the southern terminus of the Project, roughly 0.57 mile away at its nearest point, although the far end of the historic district is roughly 1.11 mile away. The district is comprised of a relatively narrow grid of suburban streets and blocks, roughly two blocks wide by four blocks long oriented in a generally east-west configuration while the Project extends in an east-west alignment away from the district to the east. The district occupies a gently sloping landform that drops off more substantially down to the Roanoke River basin to the east. The homes lining the streets in the district are built in a dense pattern and mature trees and landscaping is scattered throughout the individual properties and district as a whole.

A site visit to the property found that the historic setting of the district is generally intact as it remains a suburban residential with limited nonhistoric infill or encroaching development. Views of and towards the district from surrounding public ROW are generally short and limited to close proximity due to the undulating topography of the area and thickly wooded ridges and hills it is

built within. Views outwards from the district are likewise short, and generally limited to the blocks and streets within the district itself due to the dense development pattern. The most distant views are looking up and down the neighborhood roads.

Inspection from the roads around and within the historic district found that there is no visibility of the existing Project transmission line or structures. The homes and vegetation within the district generally screen all views beyond, and because Riverland Road bends around the base of a mountain between the district and the Project, there are no views of the Project or any associated components down this road.

The existing transmission line structures in the vicinity of the property are steel lattice and range from approximately 100- to 113-feet tall and the proposed replacement structures will be steel monopoles that range from approximately 115-feet to 130-feet tall. As such, there will be an increase in structure height, and structures will generally be replaced on a one-to-one basis near existing structures. Despite the increase in height, it is anticipated that the dense development, vegetation, and topography of the intervening landscape will continue to completely screen views in the direction of the Project and prohibit visibility of any structures or components. This was confirmed with photo simulation from the edge of the district nearest to the project that shows all structures will remain screened behind vegetation and the topography of the area. As such, the Project is not anticipated to introduce any change in the setting or viewshed of or from the historic district. It is therefore D+A's opinion that the Project will have ***no impact*** on the Riverland Historic District per VDHR's impact characterization.

Figure 5-162 depicts the location of the Riverland Historic District in relation to the Project and viewshed buffers, with the location and direction of all representative photographs. **Figures 5-163 through 5-168** are representative photographs of the property, as well as those taken from locations within and near the property towards the Project. **Figures 5-169 through 5-171** provide photo simulations of the Project from the property.

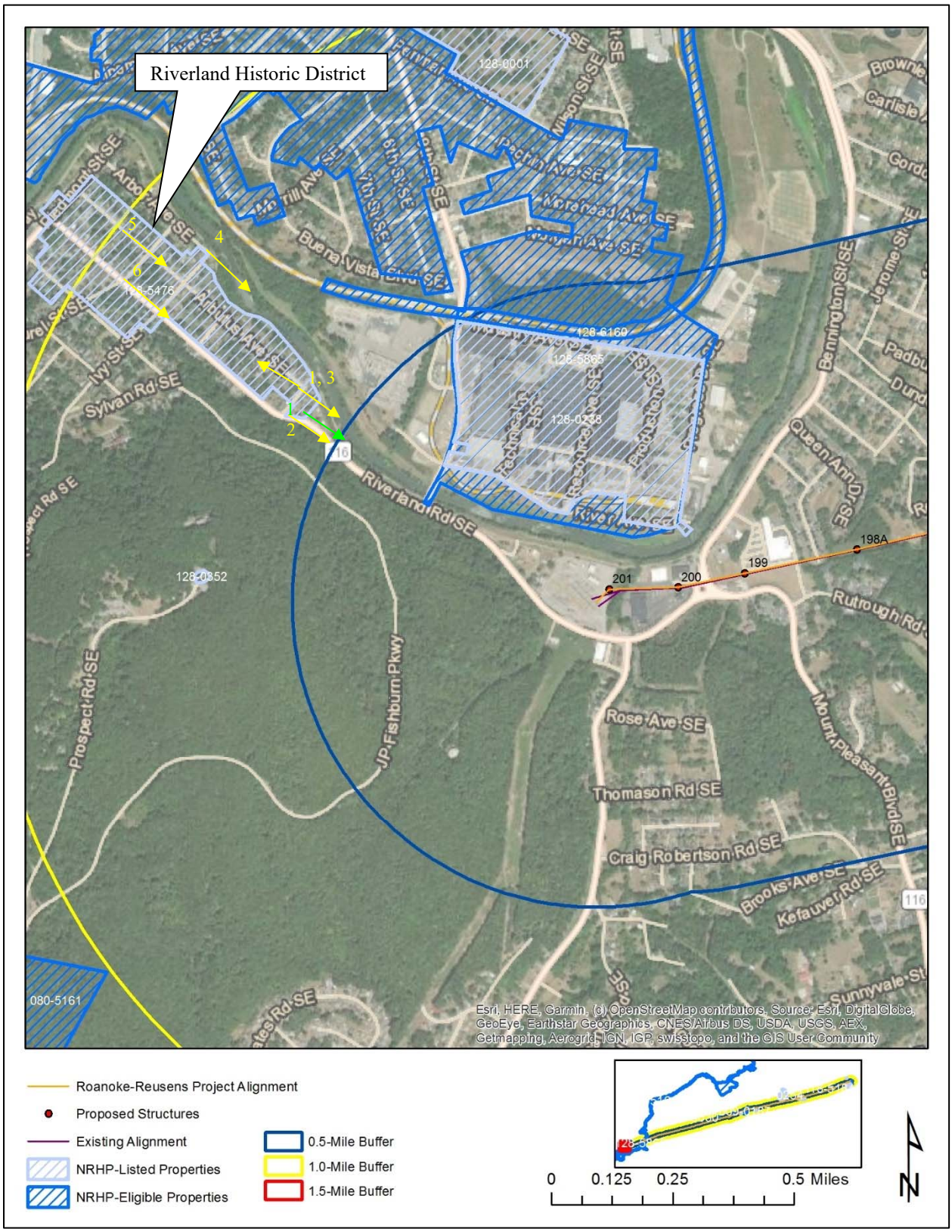

Figure 5-162: Location of Riverland Historic District in relation to the project area (Representative photographs and views towards the project area depicted in yellow, photo sims depicted in green).

Figure 5-163: Photo location 1- Representative view of Riverland Historic District streetscape, facing northwest.

Figure 5-164: Photo location 2- View from Riverland Road towards the Project (not visible – screened by vegetation and topography), facing east.

Figure 5-165: Photo location 3- View from Primrose Street towards the Project (not visible – screened by development, vegetation, and topography), facing southeast.

Figure 5-166: Photo location 4- View from Riverland Road SE towards the Project (not visible – screened by development, vegetation, and topography), facing southeast.

Figure 5-167: Photo location 5- View from intersection of Arbor Avenue and Ivy Street towards the Project (not visible – screened by vegetation and topography), facing southeast.

Figure 5-168: Photo location 6- View from Arbutus Avenue towards the Project (not visible – screened by vegetation and topography), facing southeast.

Photo simulations
prepared by:
GTTE LLC
email:
info@gttellc.com
703 447 1350

Location: PL28

Project: Roanoke-Reusens

Structure	Distance (ft)	Height (ft)
2-198A	5083	130.0
2-198B	4200	124.8
2-199A	3706	130.0
2-200A	3174	115.0
Roanoke Sub	3286	0.0

Figure 5-169: Riverland Historic District Simulation 1 – Simulation location, direction of view, and structures modeled from Riverland Road. Source: GTTE, LLC

Figure 5-170: Riverland Historic District Simulation 1 – Existing view from Riverland Road. Source: GTTE, LLC

Figure 5-171: Riverland Historic District Simulation 1 – Proposed view from Riverland Road – (Structures not visible shown in yellow). Source: GTTE, LLC

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NATIONAL REGISTER OF HISTORIC PLACES-ELIGIBLE PROPERTIES

Located within 0.5 mile of the Project

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Redlands Farm (VDHR# 009-0187)

The Redlands Farm estate it sits on rolling fields in a magnificent stretch of open county in Bedford County. The site is comprised of a main house, a family cemetery, and various outbuildings that form a loose quadrangle to the east of the house. The two-and-a-half story brick house is of Georgian style with some Queen Anne detailing. The metal-sheathed roof is flanked by two exterior end chimneys. The Flemish bond brick walls are interrupted by nine-over-nine double hung sash windows on the first floor and six-over-nine windows on the second floor. The original rectangular side passage plan includes 8 large rooms and a rear wing, as well as a one-story porch on the front elevation. Wings were added to the east and west sections of the house in the twentieth century. On the interior of the structure, most rooms have papered walls, wood floors, and simple carved mantels.

The house was built by James Watts likely after 1810, as evidenced by the Federal style mantels. The estate was owned by the Watts family until Samuel Saunders acquired the property in 1905. Saunders was a longtime member of the Bedford County Board of Supervisors, as well as an innovative farmer whose dairy farm was one of the most successful in the county. The property is also significant for the good condition of its architectural features. As a result, Redlands Farm was recommended eligible for listing in the NRHP under Criteria A and C.

In order to assess the potential impact of the Project, visual inspection was conducted of the setting around the resource property with emphasis on views towards the Project. As the property is gated and not accessible, analysis was conducted from public ROW in the vicinity. The Redlands Farm property is directly crossed by the Project ROW with three existing structures set directly on the property. The alignment generally extends in a northeast-southwest orientation along the northern edge of the property. The house is situated centrally in the large property and faces the road to the south with the Project alignment generally crossing the landscape to the rear. The home is set atop a raised knoll within a shaded homesite and is bordered by open fields and pasture to the front and east side with wooded areas to the west and rear.

A site visit to the property found that the historic setting of the property remains largely intact as it retains a large rural property and the surrounding area remains rural and lightly developed. Because of its setting upon a knoll with a large open field to the front, there is good visibility of the home and property from the road directly in front of the house, however, views from further up and down the road, as well as a road extending along the rear of the property are screened by vegetation on and around the property. While inspection could not be performed from the homesite, it is expected that views from the home outwards would generally be limited to the front and east and be screened by vegetation to the west and rear where the Project is situated.

Inspection from the driveway to the property revealed nearly unobstructed views of one existing structure set in an open field just across the road from the property, as well as several additional structures in the distance extending away from the property to the west. These same structures can be seen from multiple locations along the length of road bordering the front of the property, but are occasional interrupted or screened by vegetation and development. None of the

structures directly on the property or extending to the east are visible from any vantage points along the front of the property due to vegetation and their situation on the downhill side of the landform on which the house is sited. While nearly a half-mile away from the property, inspection from Fancy Farm Road to the rear revealed visibility of additional existing structures extending away from the property to the east, however, those directly on the property remained screened beneath the treeline they are bordered by. Although not accessible for inspection, it is anticipated that vegetation on the property likely inhibits visibility of structures on the property as well as those in close proximity, however, there may be limited visibility of a small number of structures across the landscape at greater distances.

The existing transmission line structures on the Redlands Farm property are steel lattice and range from approximately 92- to 104-feet tall and the proposed replacement structures will remain lattice and range from approximately 100-feet to 130-feet tall. Additional existing structures within one-half mile of the property range from roughly 92- to 115-feet and proposed structures will range from roughly 100- to 155-feet tall. As such, there will be an increase in structure height, substantial for some, and while structures will generally be replaced on a one-to-one basis near existing structures, there will be a slight realignment requiring additional ROW on the property. Under these circumstances, it is anticipated that visibility of the replacement structures will be similar to the existing structures that are currently visible, albeit in a slightly taller and different configuration. It is expected that other structures that are currently screened by topography and vegetation will generally remain as such although there is a potential for some additional visibility above treelines. This was confirmed with photo simulation from the end of the driveway along Peaks Road that shows one structure currently visible will rise higher above an intervening tree, and a second structure in the distance that is currently screened by vegetation will become visible. The Project will also require some additional ROW and clearing along the northern edge of the property, although this is limited to undeveloped wooded areas away from buildings and structures. As such, the Project may introduce a slight change in visibility of the transmission line when looking towards or out from the property, however, views are anticipated to be limited to one or two structures at a time. Coupled with the increase in ROW on the property, it is D+A's opinion that the Project may have as much as a ***moderate impact*** on Redlands Farm per VDHR's impact characterization.

Figure 5-172 depicts the location of Redlands Farm in relation to the Project and viewshed buffers, with the location and direction of all representative photographs. **Figures 5-173 through 5-179** are representative photographs of the property, as well as those taken from locations within and near the property towards the Project. **Figures 5-180 through 5-182** provide photo simulations of the Project from the property.

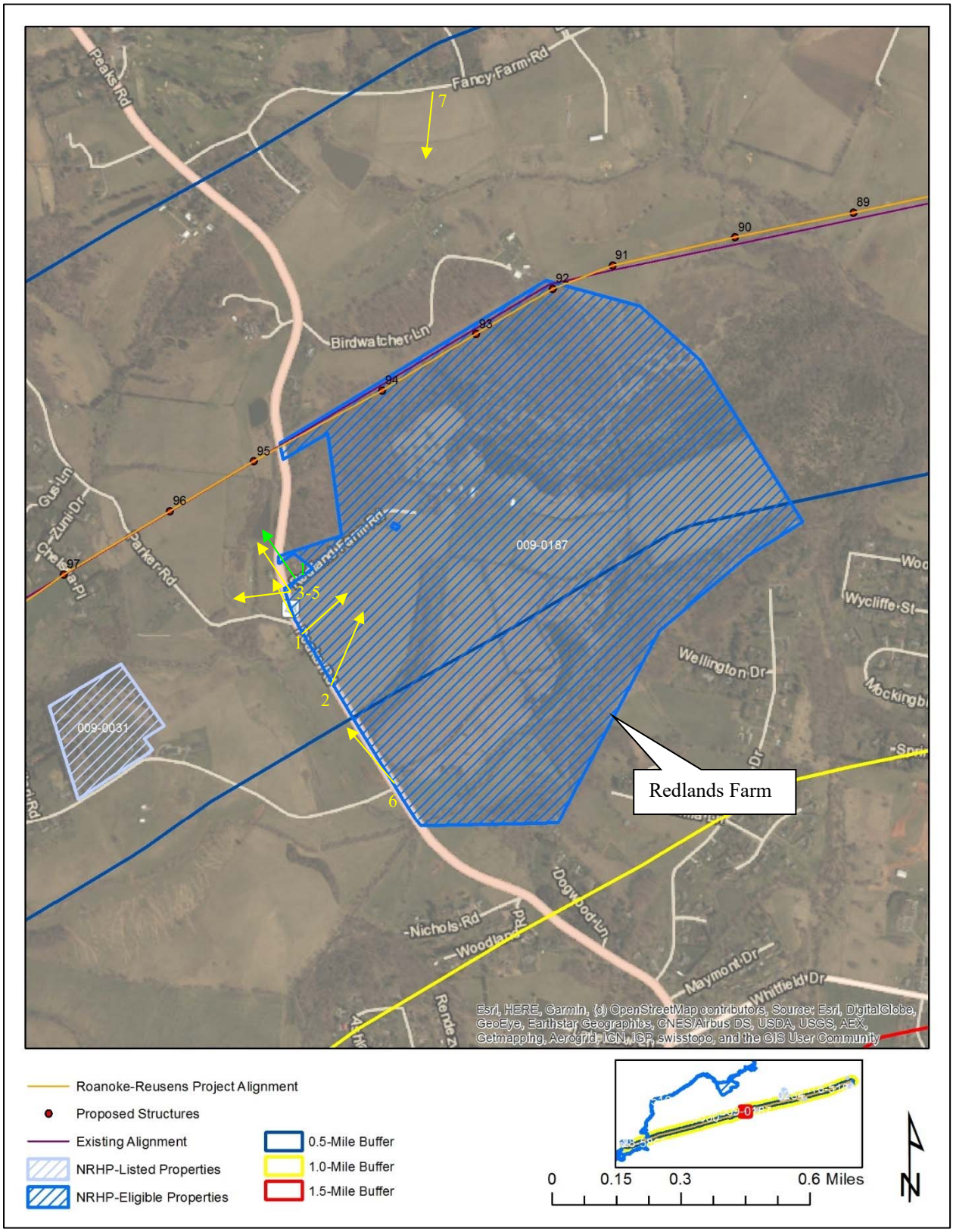

Figure 5-172: Location of Redlands Farm in relation to the project area (Representative photographs and views towards the Project depicted in yellow, Photo Sims depicted in green).

Figure 5-173: Photo location 1- View of Redlands Farm, front façade, facing east.

Figure 5-174: Photo location 2- View of Redlands Farm setting towards the Project (not visible – screened by vegetation and topography), facing northeast.

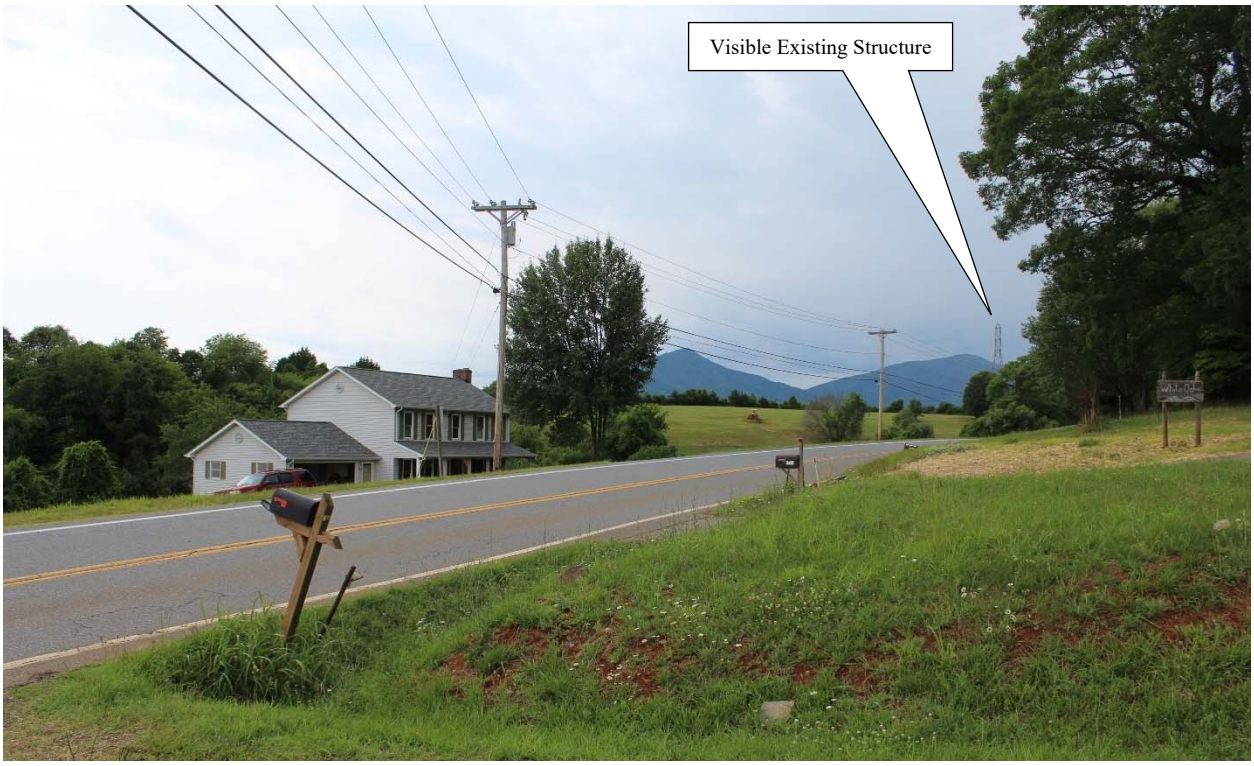

Figure 5-175: Photo location 3- View from front of Redlands Farm property towards the Project (one existing structure visible across open field across road), facing north.

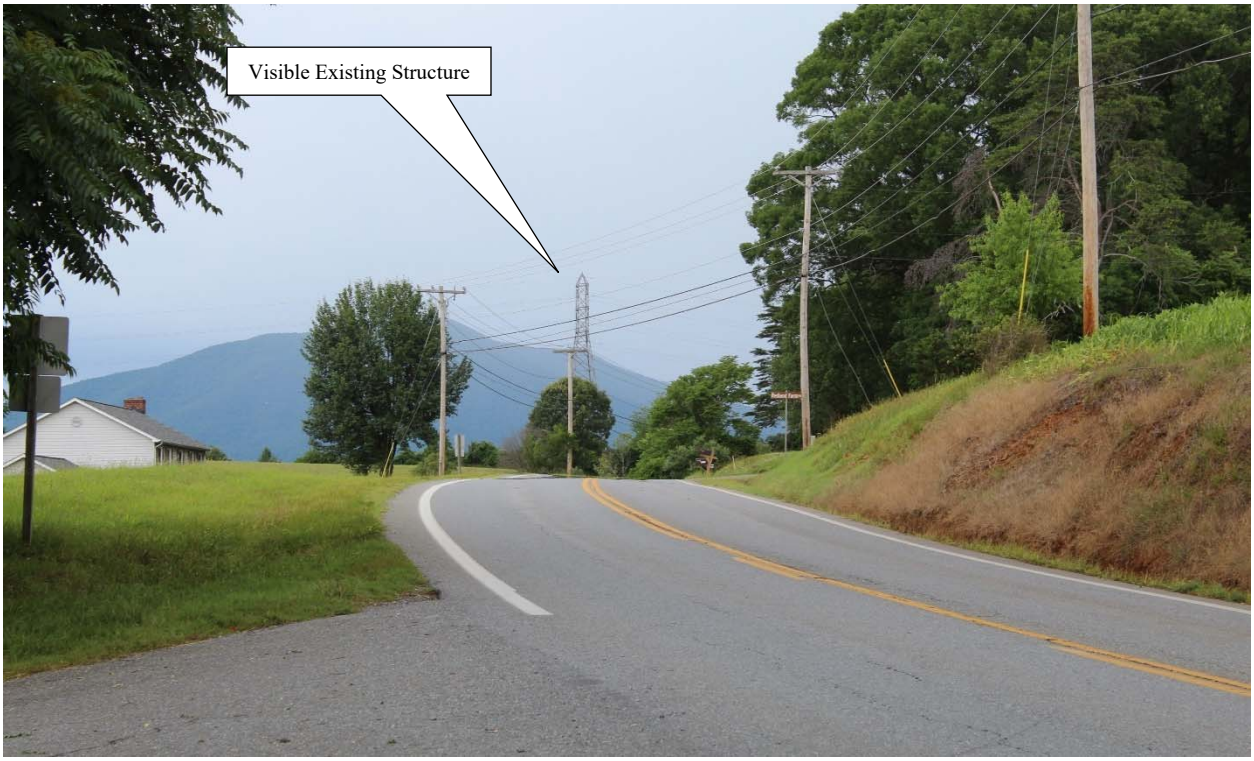

Figure 5-176: Photo location 4- View from front of Redlands Farm property towards the Project (one existing structure visible up road), facing north.

Figure 5-177: Photo location 5- View from Redlands Farm driveway towards the Project (not visible – screened by vegetation and development), facing west.

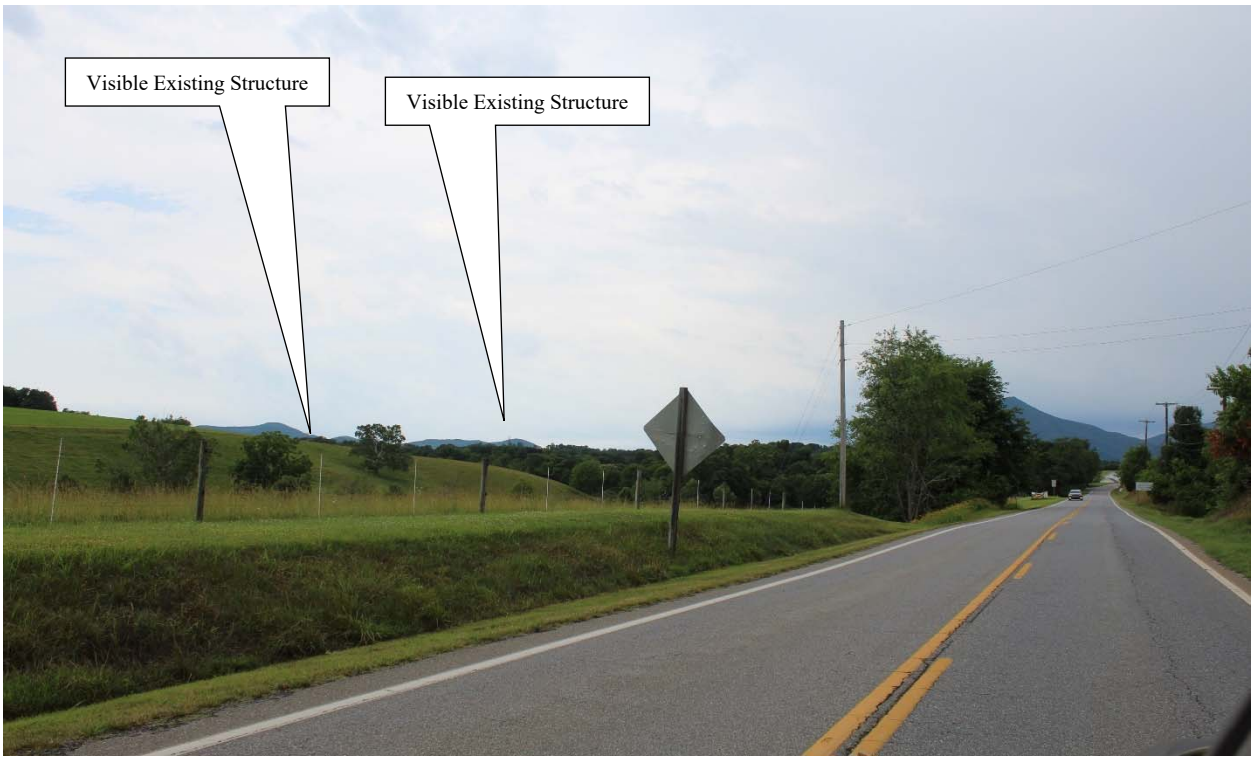

Figure 5-178: Photo location 6- View from southern edge of Redlands Farm property towards the Project (two existing structures visible above treeline in distance), facing northwest.

Figure 5-179: Photo location 7- View from Fancy Farm Road behind Redlands Farm towards the property and the Project (one existing structure visible across open field, one visible above treeline. Other structures below treeline), facing southwest.

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Photo simulations
prepared by:
GTTE LLC
email:
info@gttellc.com
703 447 1350

Location: PL18

Project: Roanoke-Reusens

Structure	Distance (ft)	Height (ft)
2-95	1276	155.0
2-96	1370	110.0

Figure 5-180: Redlands Farm Simulation 1 – Simulation location, direction of view, and structures modeled from driveway. Source: GTTE, LLC

Figure 5-181: Redlands Farm Simulation 1 – Existing view from driveway. Source: GTTE, LLC

Photo simulations prepared by:
GTTE LLC
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info@gttellc.com
703 447 1350

Project: Reusens - Roanoke

Location: PL18

Proposed View
(Location of towers not visible are overlaid with yellow tower icon)

Photo Simulations and diagrams represent approximate heights for electric transmission structures from the conceptual design used for the proposed project. These illustrations do not necessarily depict exact structure design or location.

This simulation is designed for viewing on a computer monitor. To achieve the correct scale, the image should be increased or decreased in size until the scale above measures 4". When viewed with the eye at 31" from the screen the image will have the same scale as if the viewer were standing at the camera location.

Figure 5-182: Redlands Farm Simulation 1 – Proposed view from driveway – (Visible structures shown as they would appear). Source: GTTE, LLC

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Early-Wheat Farm (VDHR# 009-5030)

The Early-Wheat Farm site, located on a hill overlooking fields and woodlands, consists of a main house and various outbuildings, all of which appear to predate 1947. The two-story, three-bay Greek Revival frame dwelling is largely intact. Exterior end chimneys punctuate the hipped roof sheathed in standing seam tin. The structure was originally constructed using a double-pile central hall plan with rear and side wings, however the central hall has been removed and the staircase relocated. Weatherboard siding covers the exterior and an entry porch with a roof balustrade tops the main entrance. The structure also features six-over-six double-hung, wooden sash windows.

The house was constructed in the 1850s by Jubal Early, a Civil War general, and was later acquired by the Wheat family. The property is significant for its association with General Early, its reflection of agricultural patterns in Bedford County, and its well-preserved Greek Revival architecture. As such, it is recommended eligible for listing in the NRHP under Criteria A, B, and C.

In order to assess the potential impact of the Project, visual inspection was conducted of the setting around the resource property with emphasis on views towards the Project. The Early-Wheat Farm property is located north of the Project, roughly 0.04 mile away at its nearest point, although the home is situated centrally within the large property, roughly 0.27 mile. The home is oriented facing north with the Project alignment generally extending in a northeast-southwest orientation through the landscape to the rear. The home is set atop a knoll that slopes down in all directions including to the rear where the Project is situated atop another ridgeline across a small valley.

A site visit to the property found that the historic setting of the property remains largely intact as it retains a large rural property and the surrounding area remains rural and lightly developed. However, in addition to the Project transmission line, another high-voltage transmission line not included in this project extends directly through the property, perpendicularly to the Project and closer to the house. Although the home is set upon an elevated knoll, it is set back from the road with treelines and patches of woodland bordering the road and therefore the home is not visible from public ROW. Views outward from the property are also generally limited to within the property itself although breaks in the vegetation permit limited views of the surrounding hills and landscape.

Inspection from the road along the front of the property revealed that the existing transmission line and structures are generally screened by the terrain and topography, but visible from the southernmost edge of the property that is in close proximity to the alignment. Just south of the property the Project crosses the road and the transmission line is visible as it is suspended over the road, although the existing structures are not visible other than directly from within the cleared ROW. The other transmission line that crosses the property but is not included in this effort is also visible from a length of road in front of the property where it can be seen across an open field. From this vantage, several existing structures and lengths of line can be seen. However, the house cannot be seen in conjunction with either line or from any vantage along the

public ROW. Inspection from the homesite revealed that the topography and vegetation of the property generally screen views in the direction of the Project, however, a length of the transmission line is visible from the yard behind the house. It is expected that existing structures may also be visible from discrete vantage points on the property, however, visibility would likely be limited to one or two structures rising just above the treeline.

The existing transmission line structures in the vicinity of the Early-Wheat Farm property are steel lattice and range from approximately 94- to 95-feet tall and the proposed replacement structures will remain lattice and range from approximately 105-feet to 125-feet tall. The structures will generally be replaced on a one-to-one basis near existing locations. Despite the increase in height, it is anticipated that the majority of the Project and associated components will remain screened from most vantage points in and around the property. Views from within the ROW along the road will permit visibility of the increased structure height, although the structures are expected to remain screened by vegetation and topography from the rest of the road in front of the property. Likewise, it is anticipated that there may remain limited visibility of a small number of structures from discrete vantage points around the house, including increased visibility of some above treelines, however, views will be limited to one or two structures and not include wide and/or unobstructed views of multiple structures. Further, the structures will be set further away and less visible than the existing structures on the perpendicular line that crosses directly through the property. This was confirmed with photo simulation from the rear of the house that shows one structure currently visible just above the treeline in the distance will remain visible and rise higher above the treeline, while additional structures will remain screened beneath the vegetation. As such, the Project may introduce a slight change in visibility of the transmission line, however, it not anticipated to result in a substantial change in the setting or viewshed of or from the property. Therefore, it is D+A's opinion that the Project will have no more than a ***minimal impact*** on the Early-Wheat Farm per VDHR's impact characterization.

Figure 5-183 depicts the location of the Early-Wheat Farm in relation to the Project and viewshed buffers, with the location and direction of all representative photographs. **Figures 5-184 through 5-193** are representative photographs of the property, as well as those taken from locations within and near the property towards the Project. **Figures 5-194 through 5-196** provide photo simulations of the Project from the property.

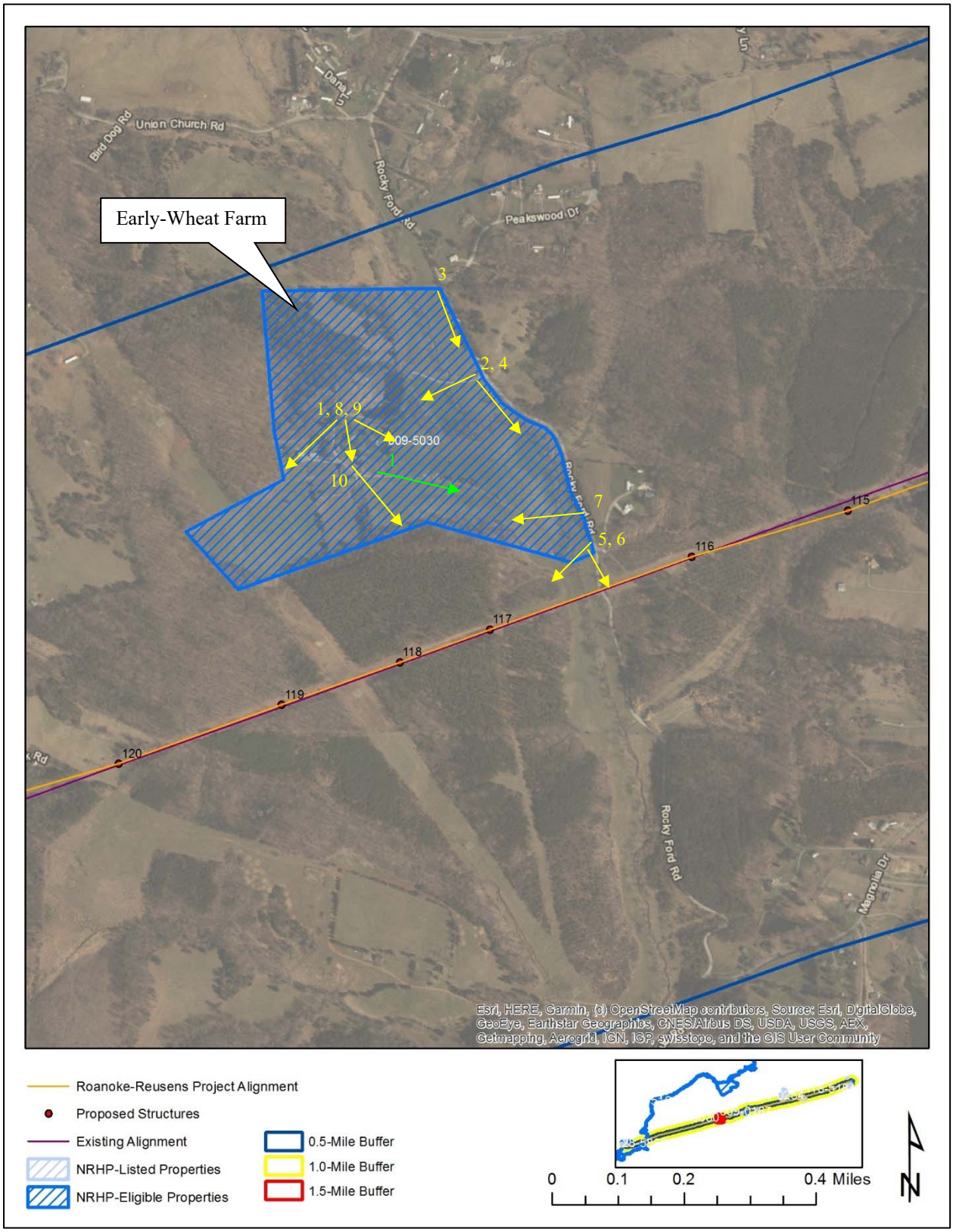

Figure 5-183: Location of the Early-Wheat Farm in relation to the project area (Representative photographs and views towards the Project depicted in yellow, Photo Sims depicted in green).

Figure 5-184: Photo location 1- View of Early-Wheat Farm, front façade, facing south.

Figure 5-185: Photo location 2- View of Early-Wheat Farm setting as seen from the road, facing southwest.

Figure 5-186: Photo location 3- View from northern edge of Early-Wheat Farm property towards the Project (not visible – screened by topography and vegetation), facing south.

Figure 5-187: Photo location 4- View from Early-Wheat Farm property driveway towards the Project (not visible – screened by vegetation), facing south.

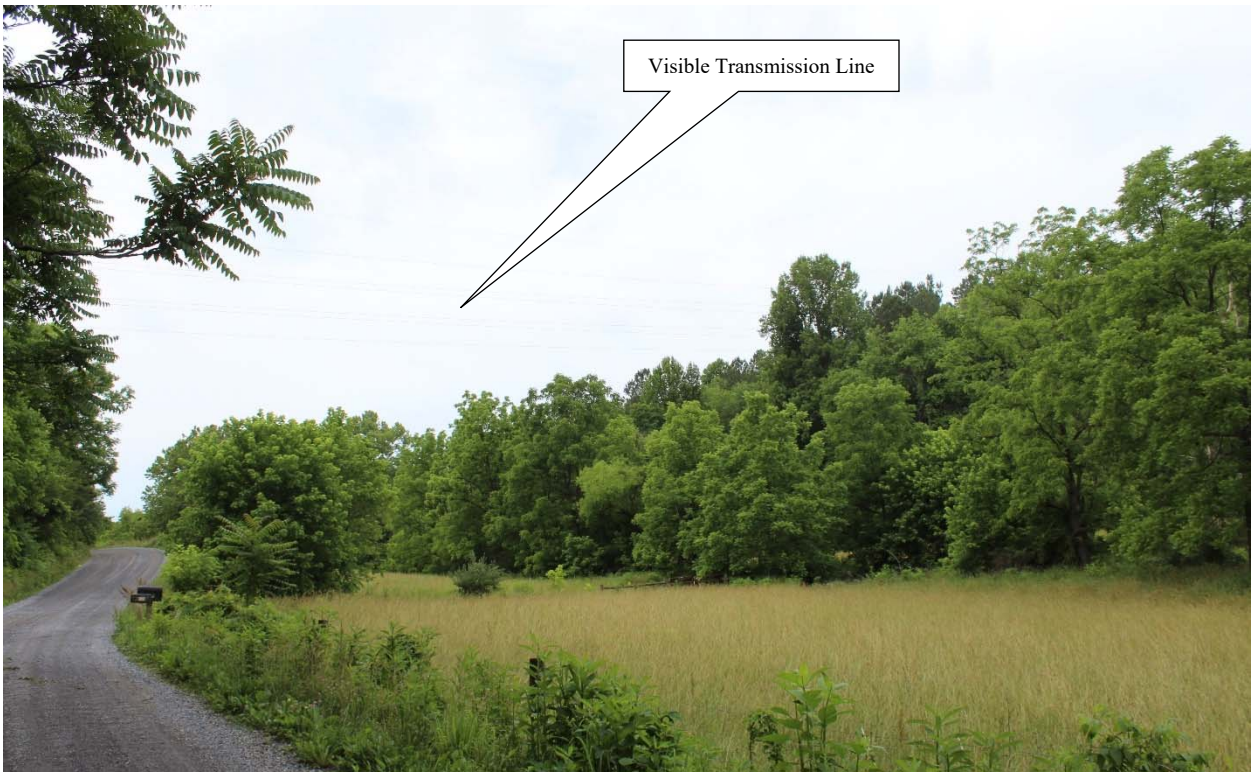

Figure 5-188: Photo location 5- View from southern edge of Early-Wheat Farm property towards the Project (transmission line visible across road, no structures visible), facing south.

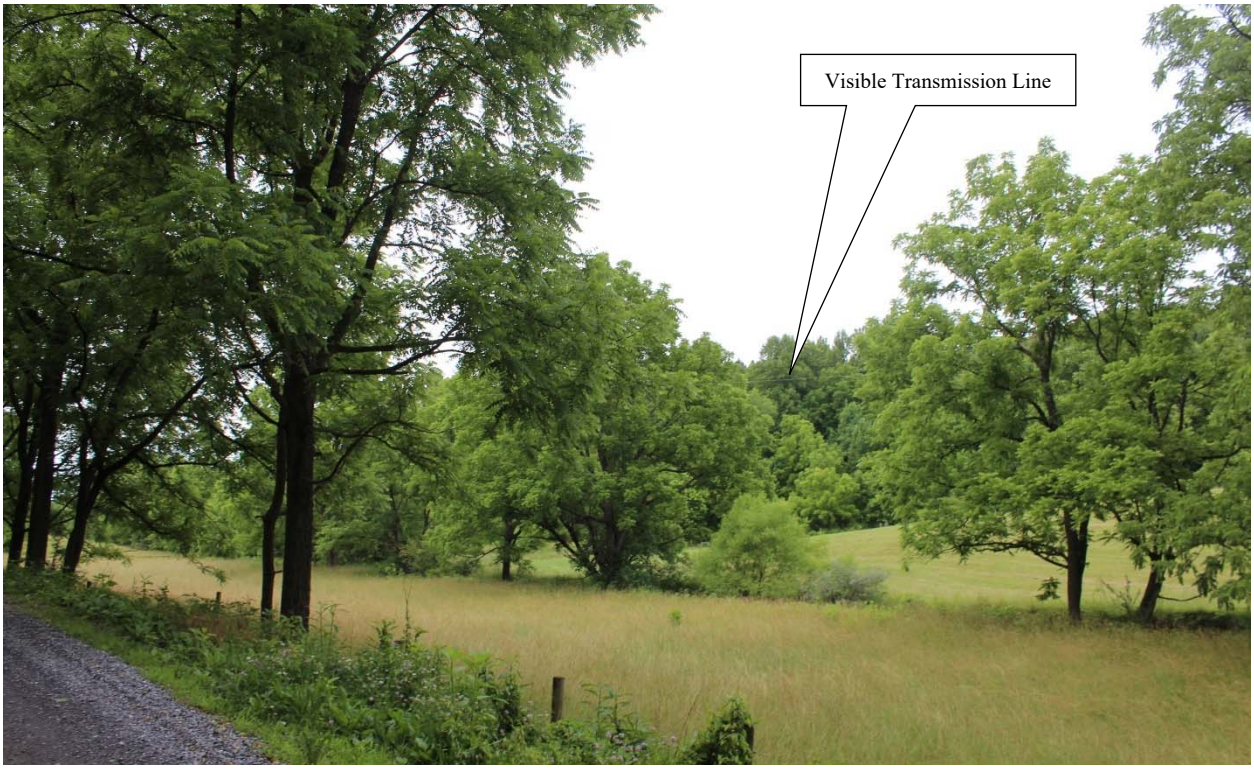

Figure 5-189: Photo location 6- View from southern edge of Early-Wheat Farm property towards the Project (transmission line visible through treeline, no structures visible), facing southwest.

Figure 5-190: Photo location 7- View from road along Early-Wheat Farm property depicting views of existing transmission line structures on property (not included in this project), facing west.

Figure 5-191: Photo location 8- View from Early-Wheat Farm house towards the Project (Not visible – screened by vegetation), facing southeast.

Figure 5-192: Photo location 9- View from Early-Wheat Farm house towards the Project (Not visible – screened by vegetation. Existing structure on another line not included in this project crossing the property is visible), facing south.

Figure 5-193: Photo location 10- View from rear of Early-Wheat Farm house towards the Project (transmission line visible through treeline, no structures visible), facing southeast.

Photo simulations
prepared by:
GTTE LLC
email:
info@gttellc.com
703 447 1350

Location: PL21

Project: Roanoke-Reusens

Structure	Distance (ft)	Height (ft)
2-114A	4278	150.0
2-115A	3172	140.0
2-116A	2240	125.0
2-117A	1348	105.0

Figure 5-194: Early-Wheat Farm Simulation 1 – Simulation location, direction of view, and structures modeled to the rear of the home. Source: GTTE, LLC

Photo simulations prepared by: GTTE LLC email: info@gttellc.com 703 447 1350	**Project: Reusens - Roanoke**	**Location: PL21**	**Existing View**
	Photo Simulations and diagrams represent approximate heights for electric transmission structures from the conceptual design used for the proposed project. These illustrations do not necessarily depict exact structure design or location.	This simulation is designed for viewing on a computer monitor. To achieve the correct scale, the image should be increased or decreased in size until the scale above measures 4". When viewed with the eye at 31" from the screen the image will have the same scale as if the viewer were standing at the camera location.	

Figure 5-195: Early-Wheat Farm Simulation 1 – Existing view from the rear of the home. Source: GTTE, LLC

Photo simulations prepared by: GTTE LLC email: info@gttellc.com 703 447 1350	**Project: Reusens - Roanoke**	**Location: PL21**	**Proposed View** (Location of towers not visible are overlaid with yellow tower icon)
	Photo Simulations and diagrams represent approximate heights for electric transmission structures from the conceptual design used for the proposed project. These illustrations do not necessarily depict exact structure design or location.		This simulation is designed for viewing on a computer monitor. To achieve the correct scale, the image should be increased or decreased in size until the scale above measures 4". When viewed with the eye at 31" from the screen the image will have the same scale as if the viewer were standing at the camera location.

Figure 5-196: Early-Wheat Farm Simulation 1 – Proposed view from the rear of the home – (Visible structure shown as it would appear. Screened structures shown in yellow). Source: GTTE, LLC

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Hopkins House (VDHR# 009-5234)

Built around 1910, the Hopkins House property occupies 400 acres of rural land along the Little Otter River within view of the Peaks of Otter. Surrounded by expanses of rolling pastureland, the house is accessible only via a long farm lane. The two-story structure is an example of a well-preserved Queen Anne-style farmhouse. Shingled, hipped dormers and interior brick chimneys interrupt the high hipped roof covered in standing seam metal. A wraparound porch supported by wooden columns features a turned post balustrade. The asymmetrical façade includes decorative diamond-paned windows, bay windows, and a single-leaf door capped by a transom. The structure remains unaltered aside from the vinyl siding that was applied to the exterior. As a well-preserved example of Queen Anne architecture, the site is recommended eligible for listing in the NRHP under Criterion C.

In order to assess the potential impact of the Project, visual inspection was conducted of the setting around the resource property with emphasis on views towards the Project. The Hopkins House is located north of the Project, roughly 0.49 mile away. The existing Mosely substation is also within the vicinity of the property, roughly 0.55 mile away. The home is oriented facing southeast with the Project alignment generally extending in a northeast-southwest orientation through the landscape to the front and side. The home is set atop a knoll within a shaded homesite that is surrounding by sloping open fields to all sides with the Project extending along a wooded ridge beyond the fields.

A site visit to the property found the home appears to have been vacant for an extended period of time, but the historic setting of the property remains intact as it continues to be set on a large rural property and the surrounding area remains rural and lightly developed. Although the home is set upon a knoll in the center of a large open field, a treeline and other homes set on small lots along the road screen views of and towards the property from public ROW. However, the house may be seen from the beginning of the driveway just inside the treeline. Views outward from the house are also wide and open across the fields to the front and side.

Inspection from the road along the front of the property revealed that the existing transmission line can be seen crossing the road just to the west of the private lane that leads to the house, and the existing substation may be seen across a field to the east, however, the home and associated property are not visible from this vantage due to being setback from the road behind other properties. At no point along public ROW is the Hopkins House visible from the road. Inspection from the driveway to the house revealed that the existing transmission line also crosses the private lane through the wooded area around the separate properties to the front, but again, the Hopkins House is not visible at this point. Once the landscape opens up along the driveway to the house, the transmission line is to the rear and not visible in conjunction with the house. Inspection from various points further along the driveway revealed that the existing transmission line and several structures east of the substation become increasingly visible while ascending towards the house, however, the substation has shorter structures that are behind the wooded area and therefore is not visible. Structures west of the substation remain screened by the intervening treeline. From the homesite, several existing structures east of the substation

can be seen above the treeline as the alignment extends across the ridge in the distance, however, the substation continues to be screened behind the treeline, and the structures west of the substation continue to be screened.

The existing transmission line structures in the vicinity of the Hopkins House are steel lattice and range from approximately 91- to 119-feet tall. The existing structures in the Mosely substation are roughly 38-feet tall. The proposed replacement structures east of the substation will remain lattice and range from approximately 105-feet to 135-feet tall while those west of the substation will be replaced by steel monopoles that are approximately 80-feet tall. The structures east of the substation will generally be replaced on a one-to-one basis near existing locations. Because of the decrease in height west of the substation, additional structures will be needed, but will remain within the existing ROW. Due to the increase in height of the structures east of the substation, it is anticipated that these structures may become increasingly visible from the house above the treeline and one or more additional structures may rise above the treeline in the distance, however, the structures west of the substation would continue to be screened because of the proposed decrease in height. Additionally, it is expected that the views of structures east of the substation may increase from public ROW in the vicinity of the property, however, there will continue to be no visibility of the home in conjunction with the Project. This was confirmed with photo simulation from the homesite that shows a cluster of new structures associated with the substation will become visible, as will an additional structure to the west that is not currently visible but will become so above the treeline. As such, the Project may introduce an increase in visibility of several structures that are already visible and permit views of additional structures, however, these views would be limited to private property. Therefore, it is D+A's opinion that the Project will have no more than a ***moderate impact*** overall on the Hopkins House per VDHR's impact characterization.

Figure 5-197 depicts the location of the Hopkins House in relation to the Project and viewshed buffers, with the location and direction of all representative photographs. **Figures 5-198 through 5-205** are representative photographs of the property, as well as those taken from locations within and near the property towards the Project. **Figures 5-206 through 5-208** provide photo simulations of the Project from the property.

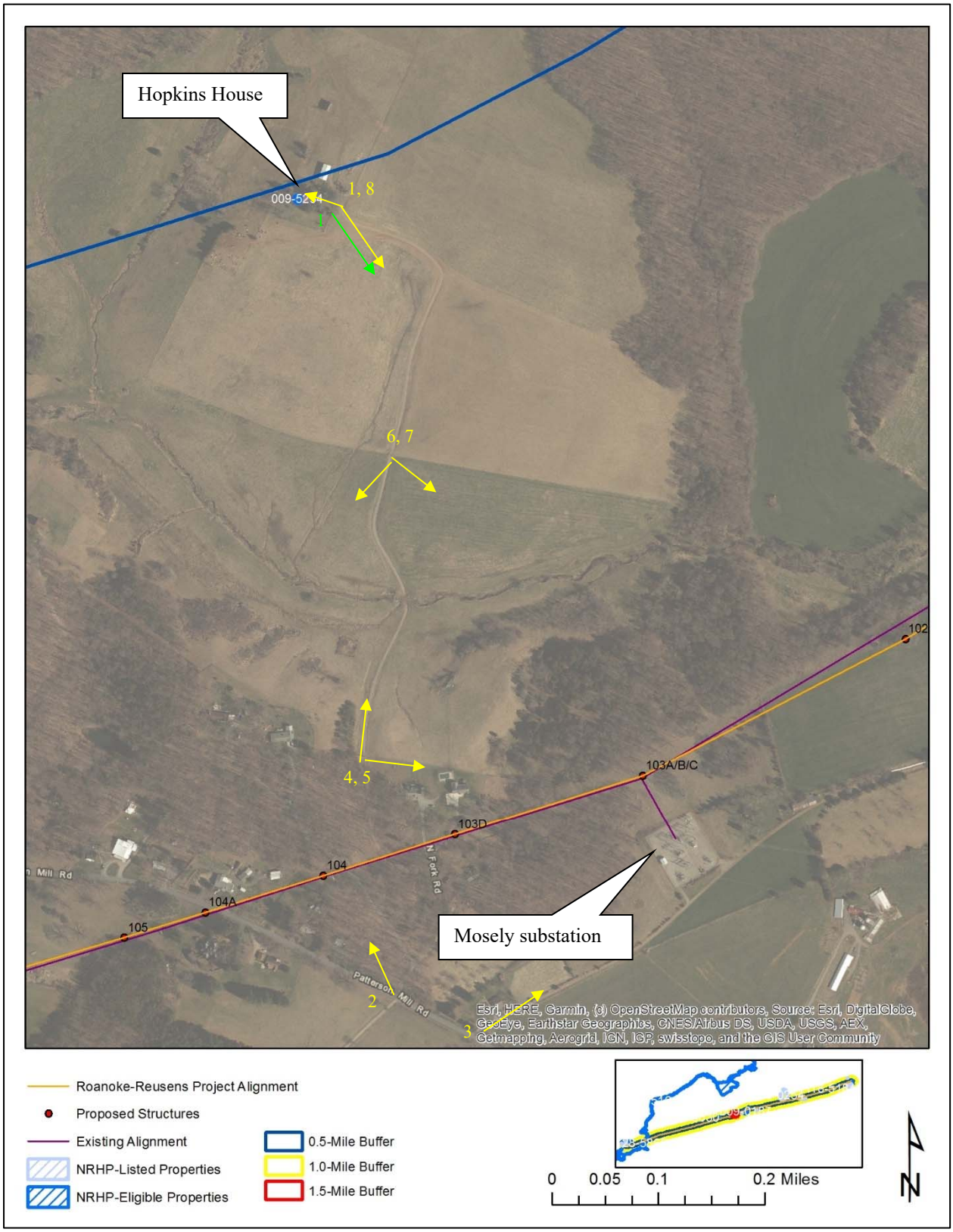

Figure 5-197: Location of the Hopkins House in relation to the project area (Representative photographs and views towards the Project depicted in yellow, Photo Sims depicted in green).

Figure 5-198: Photo location 1- View of Hopkins House, front façade, facing northwest.

Figure 5-199: Photo location 2- View of towards the Hopkins House as seen from the road, facing northwest.

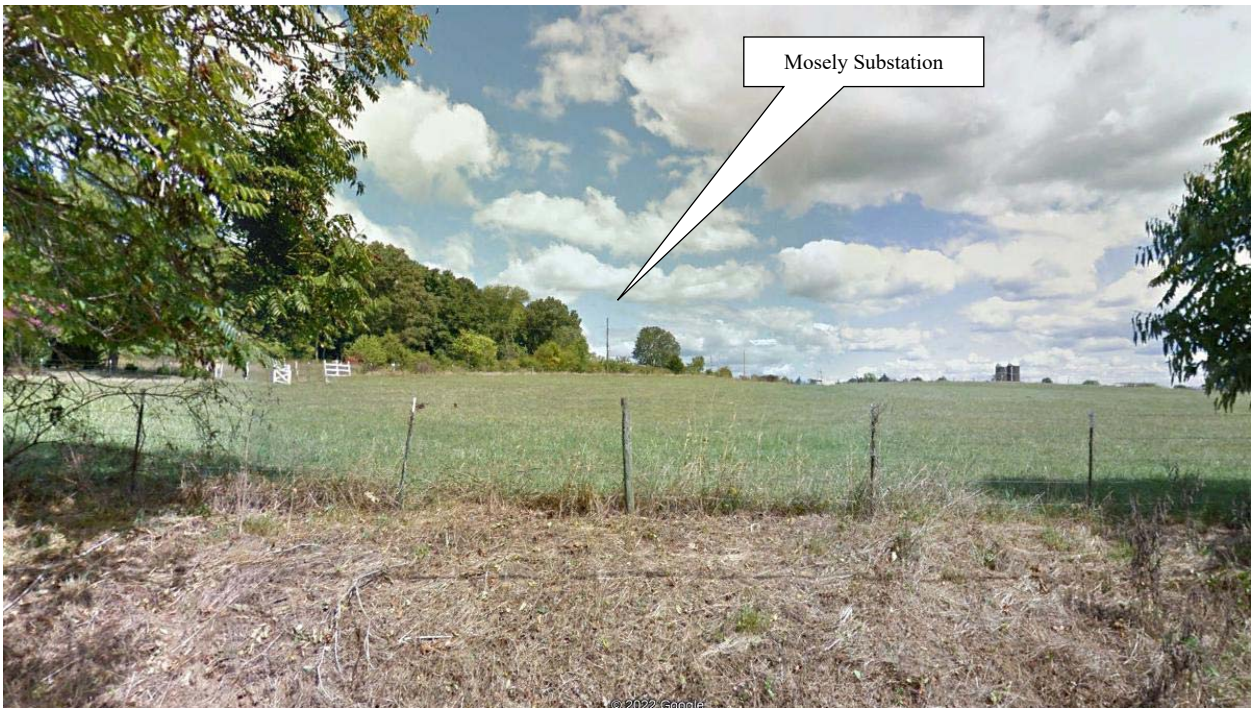

Figure 5-200: Photo location 3- View from road towards the Project (existing substation and several structures visible. Hopkins House not visible), facing north.

Figure 5-201: Photo location 4- View of Hopkins House from beginning of driveway (Project to the rear), facing north.

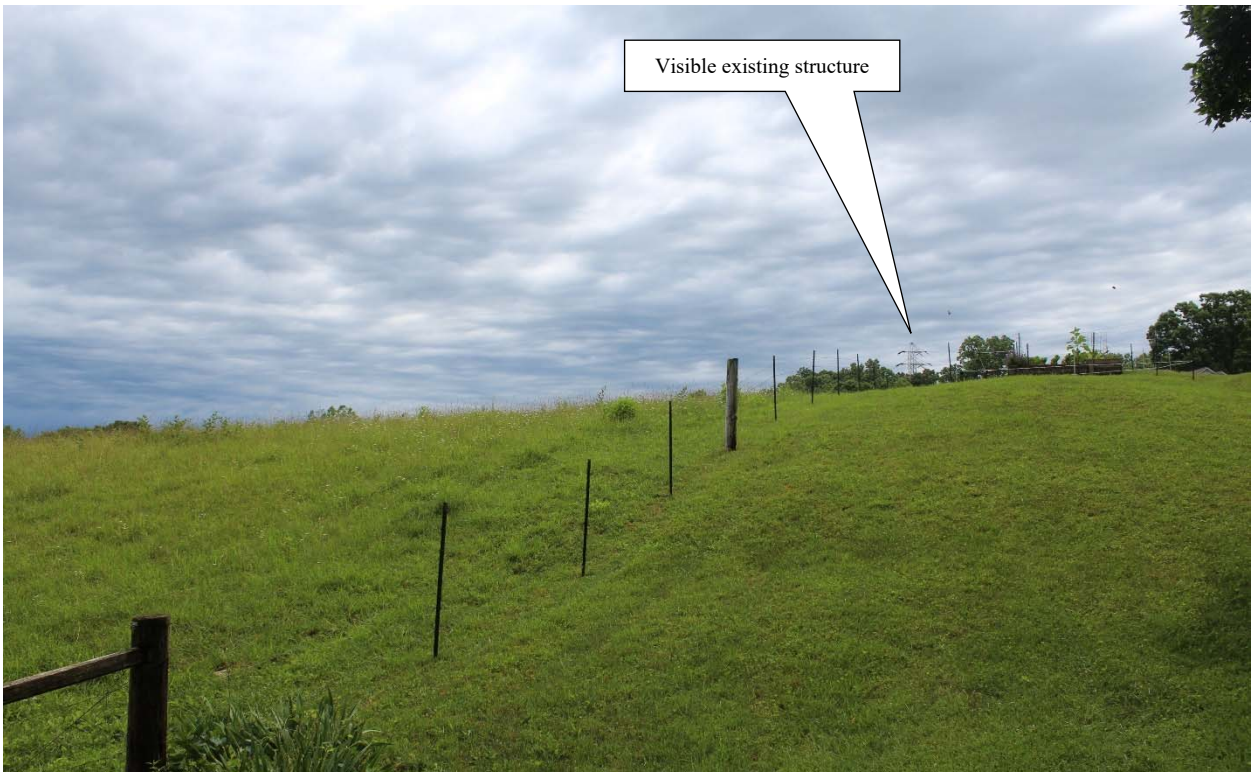

Figure 5-202: Photo location 5- View from beginning of driveway towards the Project (one existing structure visible), facing east.

Figure 5-203: Photo location 6- View from driveway approaching Hopkins House towards the Project (one existing structure visible above treeline east of substation), facing southeast.

Figure 5-204: Photo location 7- View from driveway approaching Hopkins House towards the Project (not visible – screened by vegetation), facing southwest.

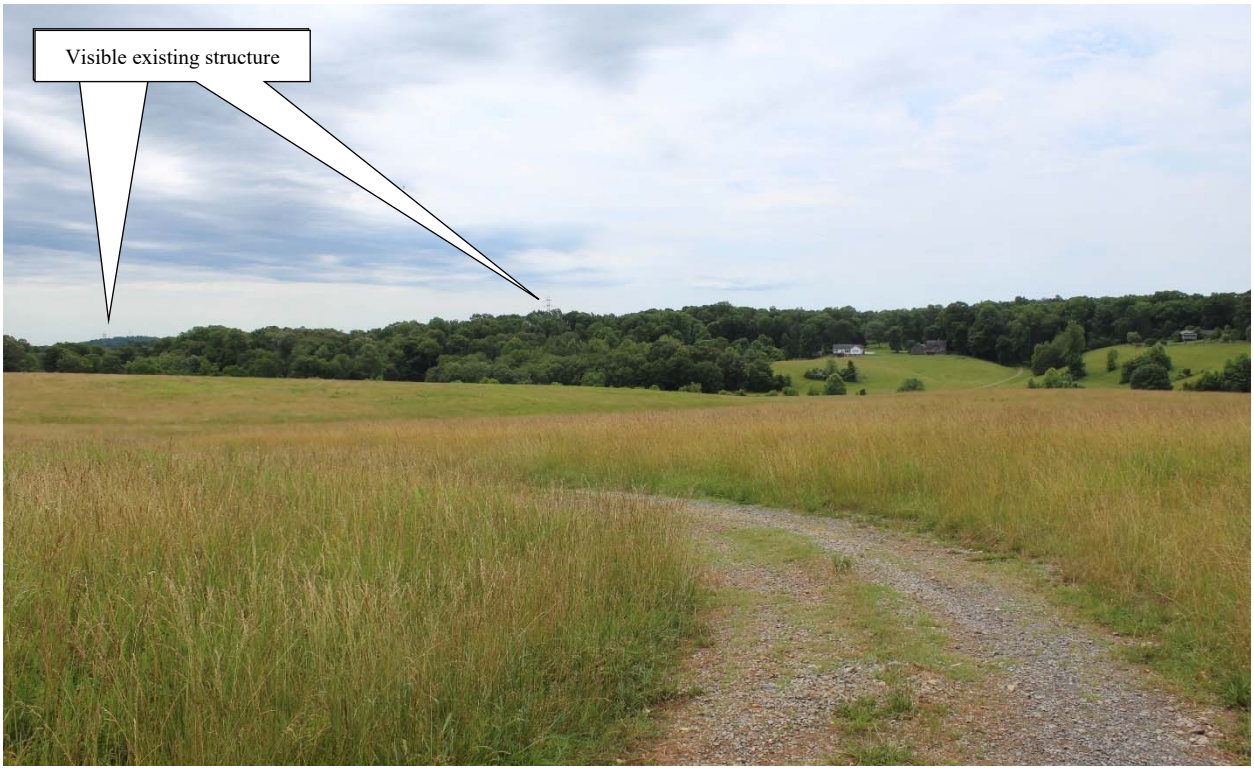

Figure 5-205: Photo location 8- View from Hopkins House homesite towards the Project (two structures visible above treeline east of Mosely substation), facing southeast.

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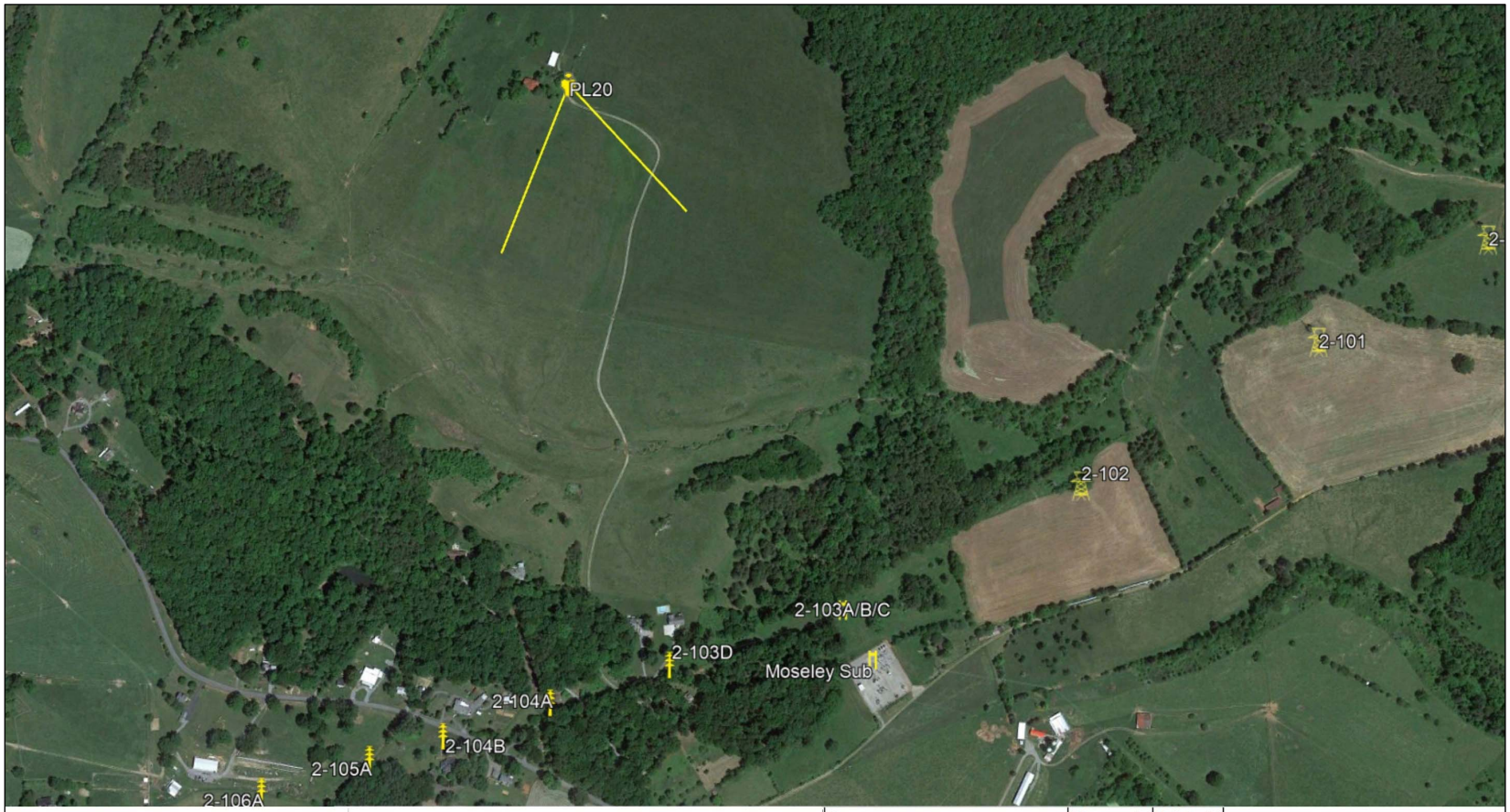

Photo simulations
prepared by:
GTTE LLC
email:
info@gttellc.com
703 447 1350

Location: PL20

Project: Roanoke-Reusens

Structure	Distance (ft)	Height (ft)
2-103A/B/C	2567	135.0
Moseley Sub	2820	0.0
2-103D	2548	105.0
2-104A	2672	80.0
2-104B	2867	80.0
2-105A	3040	80.0

Figure 5-206: Hopkins House Simulation 1 – Simulation location, direction of view, and structures modeled from homesite. Source: GTTE, LLC

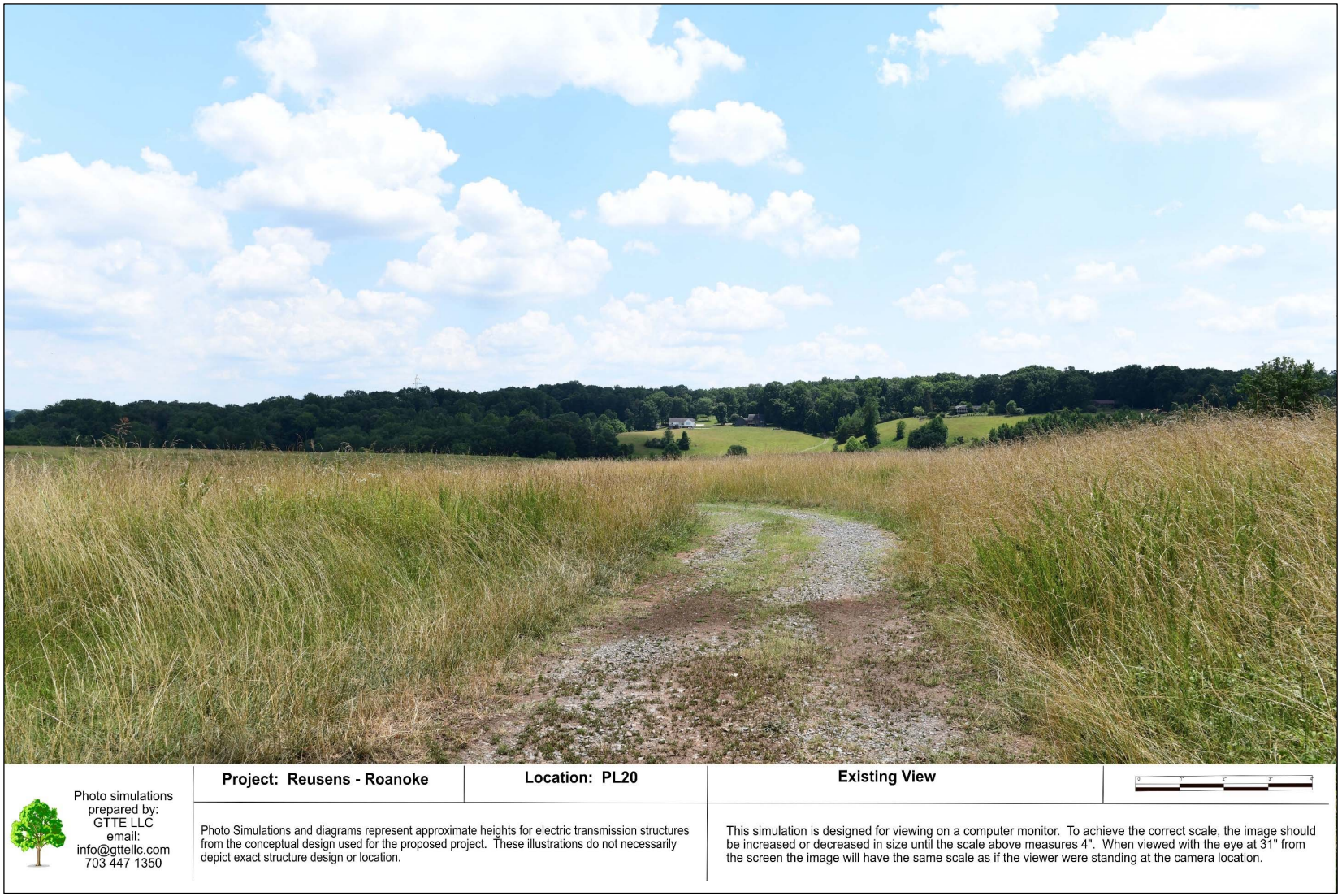

Figure 5-207: Hopkins House Simulation 1 – Existing view from homesite. Source: GTTE, LLC

Photo simulations prepared by: GTTE LLC email: info@gttellc.com 703 447 1350	**Project: Reusens - Roanoke**	**Location: PL20**	**Proposed View** (Location of towers not visible are overlaid with yellow tower icon)
	Photo Simulations and diagrams represent approximate heights for electric transmission structures from the conceptual design used for the proposed project. These illustrations do not necessarily depict exact structure design or location.		This simulation is designed for viewing on a computer monitor. To achieve the correct scale, the image should be increased or decreased in size until the scale above measures 4". When viewed with the eye at 31" from the screen the image will have the same scale as if the viewer were standing at the camera location.

Figure 5-208: Hopkins House Simulation 1 – Proposed view from homesite – (Visible structures shown as they would appear. Screened structures shown in yellow). Source: GTTE, LLC

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Wright Farm (VDHR# 009-5352)

Wright Farm consists of a collection of buildings occupying a cleared ridge in Bedford County. The main house is two-story frame dwelling covered by a side-gable roof. The structure has no discernable style, and other than the unusual four-bay door-window-window-door façade is not particularly notable. More significant structures on the property are the barn and milking parlor. The one-story frame barn has two metal-sheathed roofed wings and a lower metal-sheathed gable roof wing. The weatherboard siding is interrupted by multiple window openings on the milking parlor elevations and a basement-level cow shed addition on the north end. The one-story cinder block milking parlor features an integral but separate milk room of post-war construction built using a perpendicular L-plan placement, which is unusual for the county. The structure is topped by a metal-sheathed gable roof. Other features include metal-framed windows, a cupola, and a cinder block flue.

Elmo Wright acquired the farm sometime in the late nineteenth or early twentieth century, although only the main house is thought to predate 1918. The farm is more notable for its barn and milking parlor, however. The barn was constructed in 1927 after the original burned down, and the milking parlor was constructed in the 1950s. The barn housed the farm's milk room before the current milking parlor was built, and before Wright's death in 1952 the milk was sold to creameries in Bedford. In the 1960s, C.D. Saunders collected the farm's milk to sell to the Maryland-Virginia Milking Association. The barn and milking parlor are associated with the evolution of dairy farming in the county, and the site therefore is recommended eligible for listing in the NRHP under Criteria A and C.

In order to assess the potential impact of the Project, visual inspection was conducted of the setting around the resource property with emphasis on views towards the Project. The Wright Farm property is located south of the Project, roughly 0.16 mile away at its nearest point, although the home is set on the opposite side of the property, roughly 0.28 mile away. The existing Centerville substation is also within the vicinity of the property, roughly 0.31 mile away. The home is oriented facing east with the Project alignment generally extending in an east-west orientation through the landscape to the side. The home is situated on a rolling landscape bordered by open fields with the Project extending through the open fields beyond the property.

A site visit to the property found the historic setting of the property is partially intact as it retains open fields to the rear, however, the driveway to the property is now lined by several modern homes set on small lots and the existing substation is set along the road at the end of the driveway. Another transmission line not included in this project that leads from the substation crosses directly through the property in front of the house. Because the home is set back from the road with subdivided properties in between, it is not easily visible from public ROW, although glimpses of its larger associated barn may be seen from discrete vantage points along the road in the vicinity. Views outward from the property are wider and more open to the rear awhile the landscape and develop interrupts views to the sides and front.

Inspection from the road in the vicinity of the property revealed that the existing transmission line, multiple structures, and the Centerville substation are highly visible. The substation is set immediately adjacent to the road and the alignment crosses the road, leading in and out of the substation through mostly open fields. However, the home and associated resources are mostly screened by intervening development and the rolling terrain, but can be seen in conjunction with the transmission line and components from various vantage points. Inspection from the driveway leading to the property revealed that the substation and several existing structures remain visible when approaching the house, although to the side and rear when the home is to the front. However, another transmission line not included in this Project is visible as crosses directly through the property in front of the house. Inspection from the homesite found that visibility of the existing transmission line and structures remains wide and open, with multiple structures visible across the field to the rear of the house and the existing substation with multiple structures visible just to the side of the property.

The existing transmission line structures in the vicinity of the Wright Farm are steel lattice and range from approximately 92- to 115-feet tall. The existing structures in the Centerville substation are roughly 64-feet tall. The proposed replacement structures will remain primarily lattice with one monopole, and range from approximately 100-feet to 150-feet tall. The structures will generally be replaced on a one-to-one basis near existing locations, although a slight shift in alignment will be required, moving the alignment and ROW slightly further away from the property. Despite the increase in height and slight shift in alignment, it is anticipated that visibility from the property will remain generally similar to existing conditions that already include multiple structures and components across open field. This was confirmed with photo simulation from the building complex that revealed the structures visible across the open field to the rear will increase in height, but no additional structures become visible in the distance. As such, the Project may introduce a slight change in visibility of structures, however, they would remain in a similar configuration and be within a setting and viewshed that already contains multiple structures, substation infrastructure, and modern development. Therefore, it is D+A's opinion that the Project will have no more than a ***minimal impact*** on the Wright Farm per VDHR's impact characterization.

Figure 5-209 depicts the location of the Wright Farm in relation to the Project and viewshed buffers, with the location and direction of all representative photographs. **Figures 5-210 through 5-217** are representative photographs of the property, as well as those taken from locations within and near the property towards the Project. **Figures 5-218 through 5-220** provide photo simulations of the Project from the property.

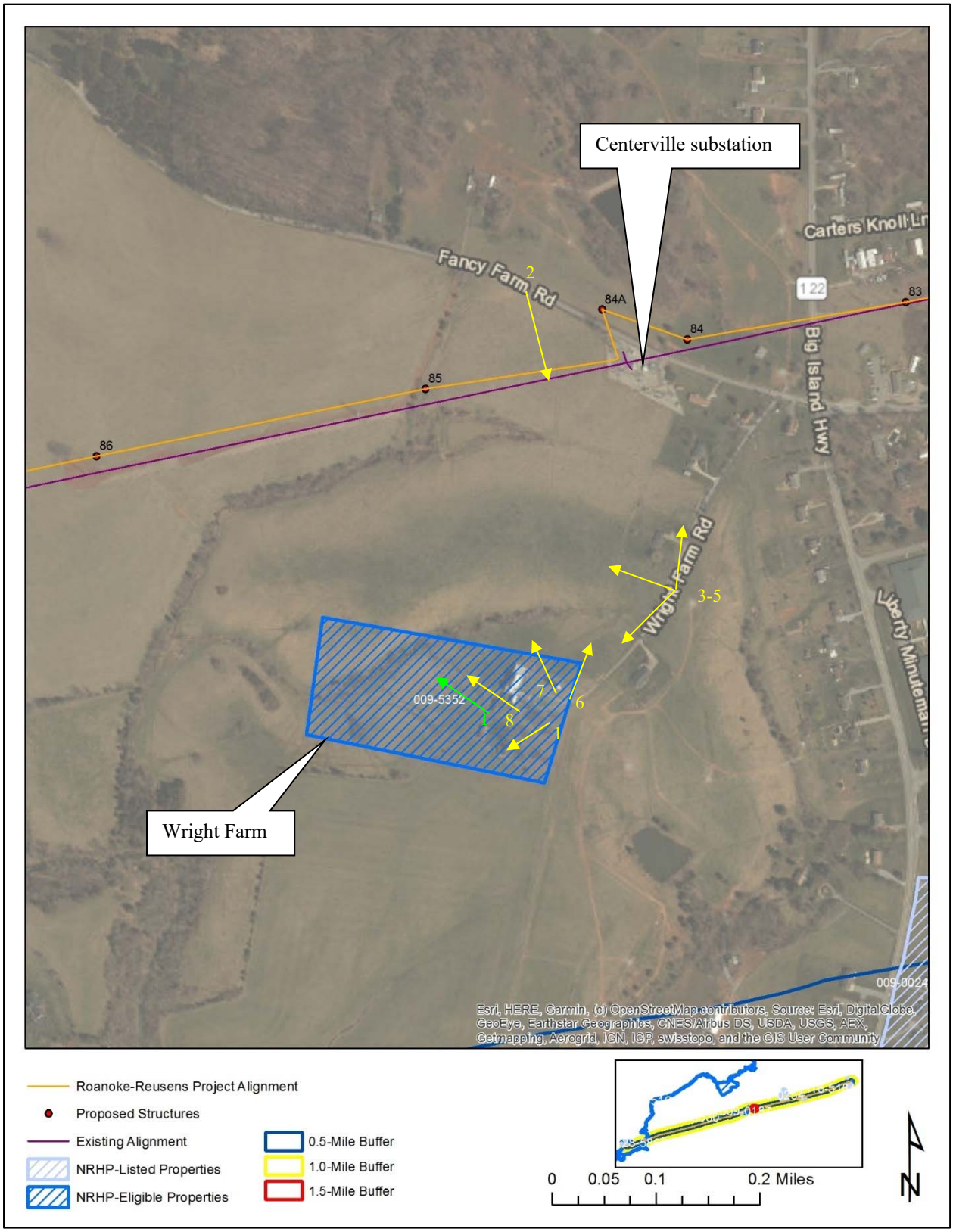

Figure 5-209: Location of the Wright Farm in relation to the project area (Representative photographs and views towards the Project depicted in yellow, Photo Sims depicted in green).

Figure 5-210: Photo location 1- View of Wright Farm house, front façade, facing southwest.

Figure 5-211: Photo location 2- View from the road towards Wright Farm and the Project (substation and multiple structures visible), facing southeast.

Figure 5-212: Photo location 3- View from driveway towards the property (Project is to the rear, a separate transmission line is visible in foreground), facing south.

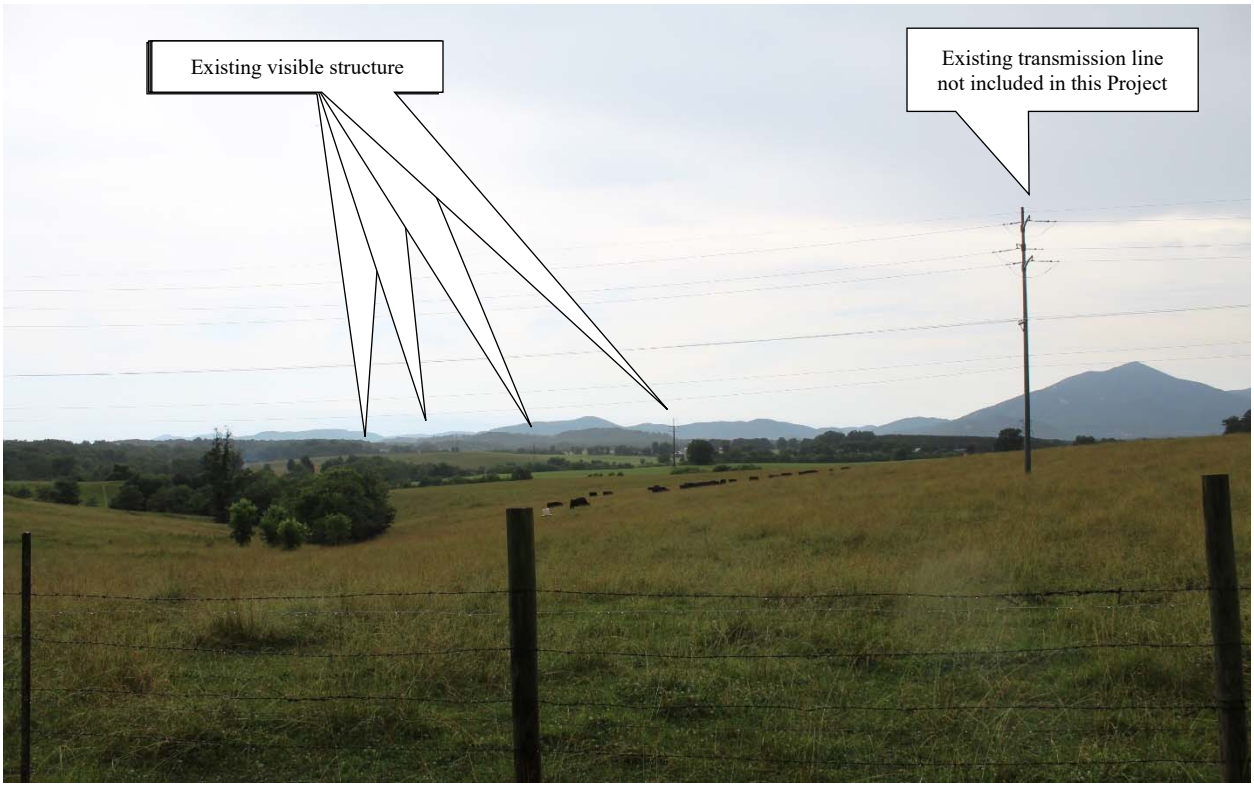

Figure 5-213: Photo location 4- View from driveway towards the Project (several existing structures visible across open field), facing west.

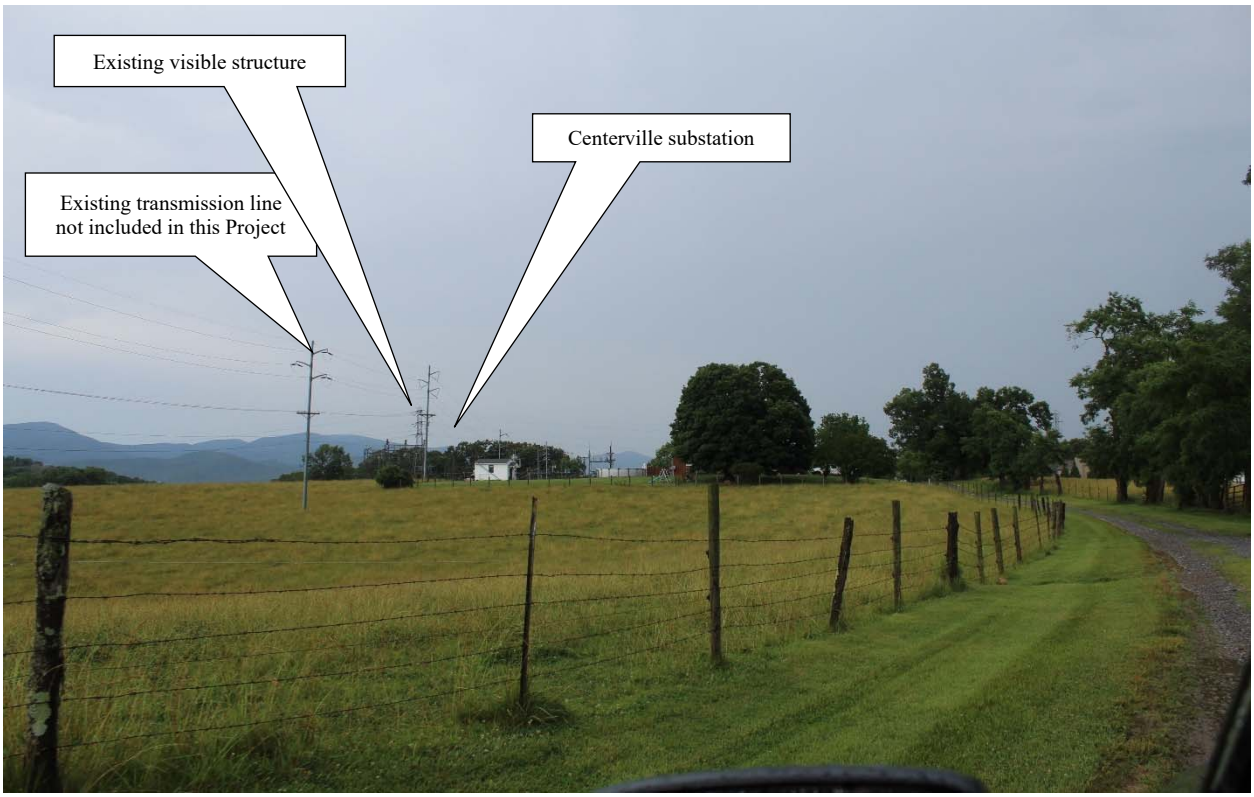

Figure 5-214: Photo location 5- View from driveway towards the Project (several existing structures and substation visible across open field), facing north.

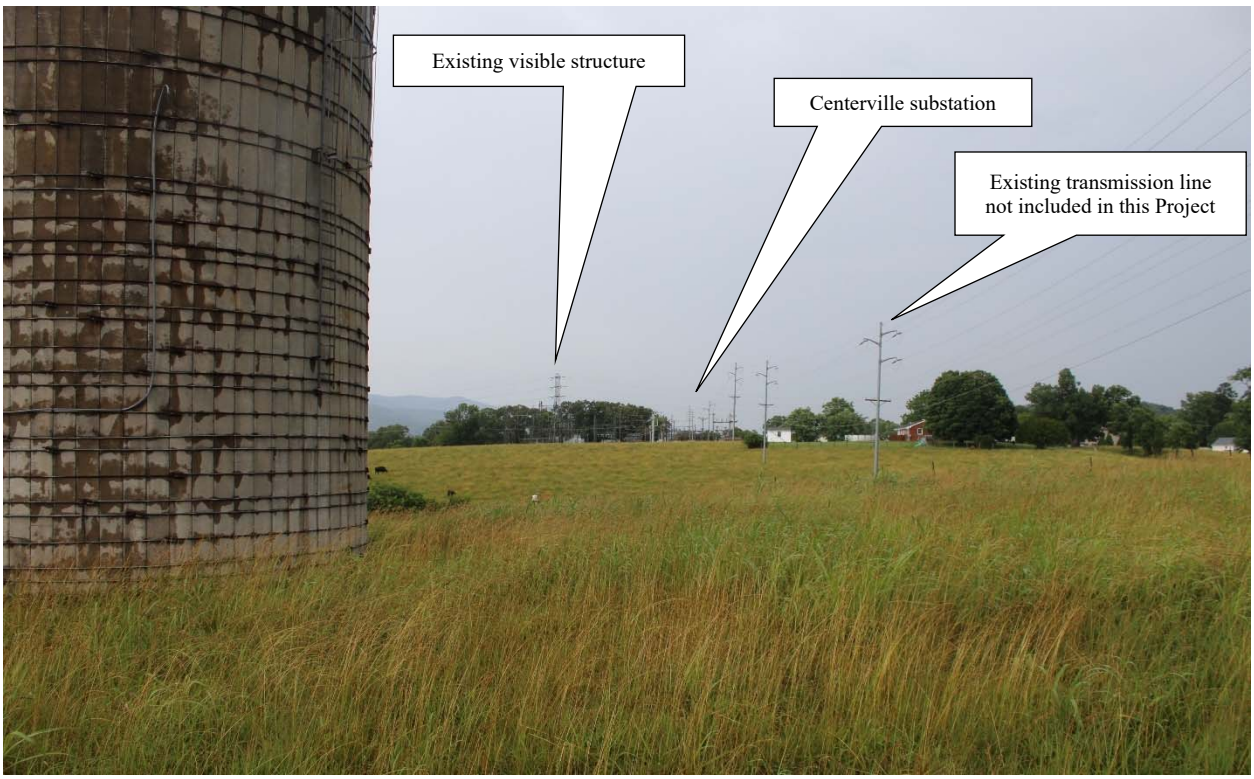

Figure 5-215: Photo location 6- View from homesite towards the Project (several existing structures and substation visible across open field), facing north.

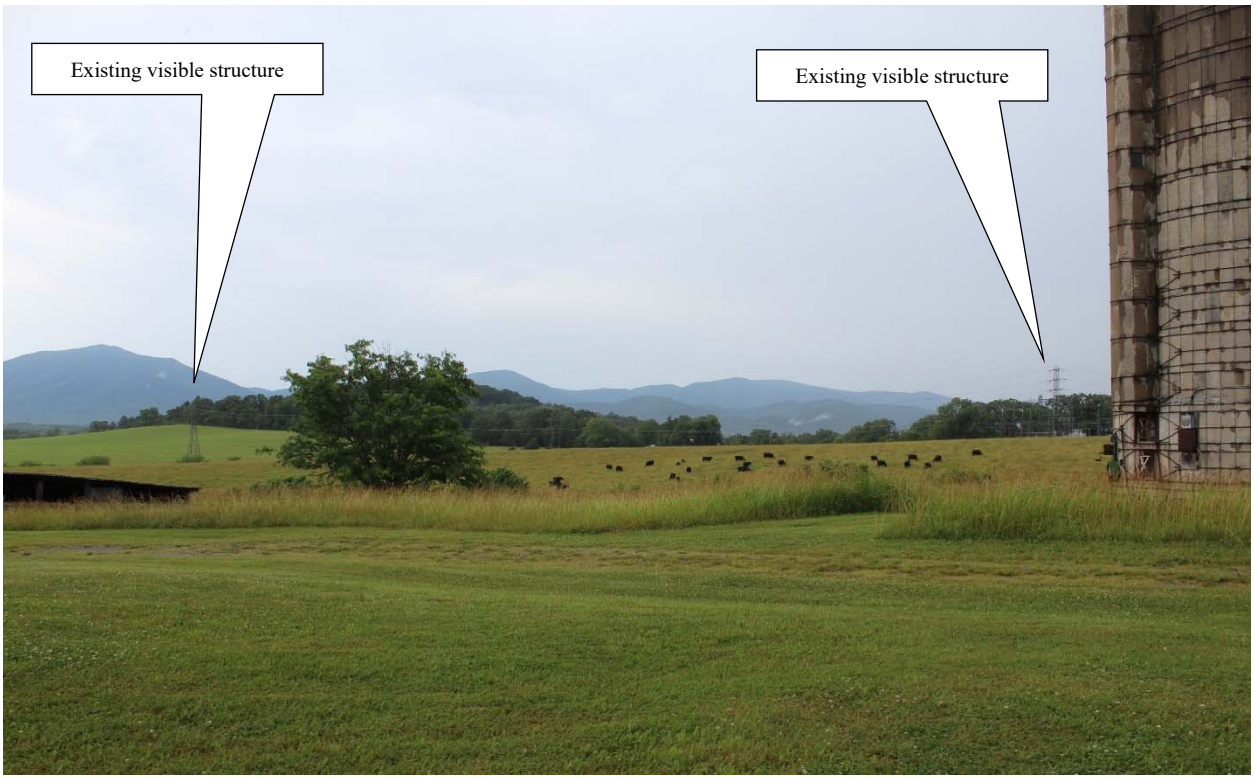

Figure 5-216: Photo location 7- View from homesite towards the Project (several existing structures visible across open field), facing northwest.

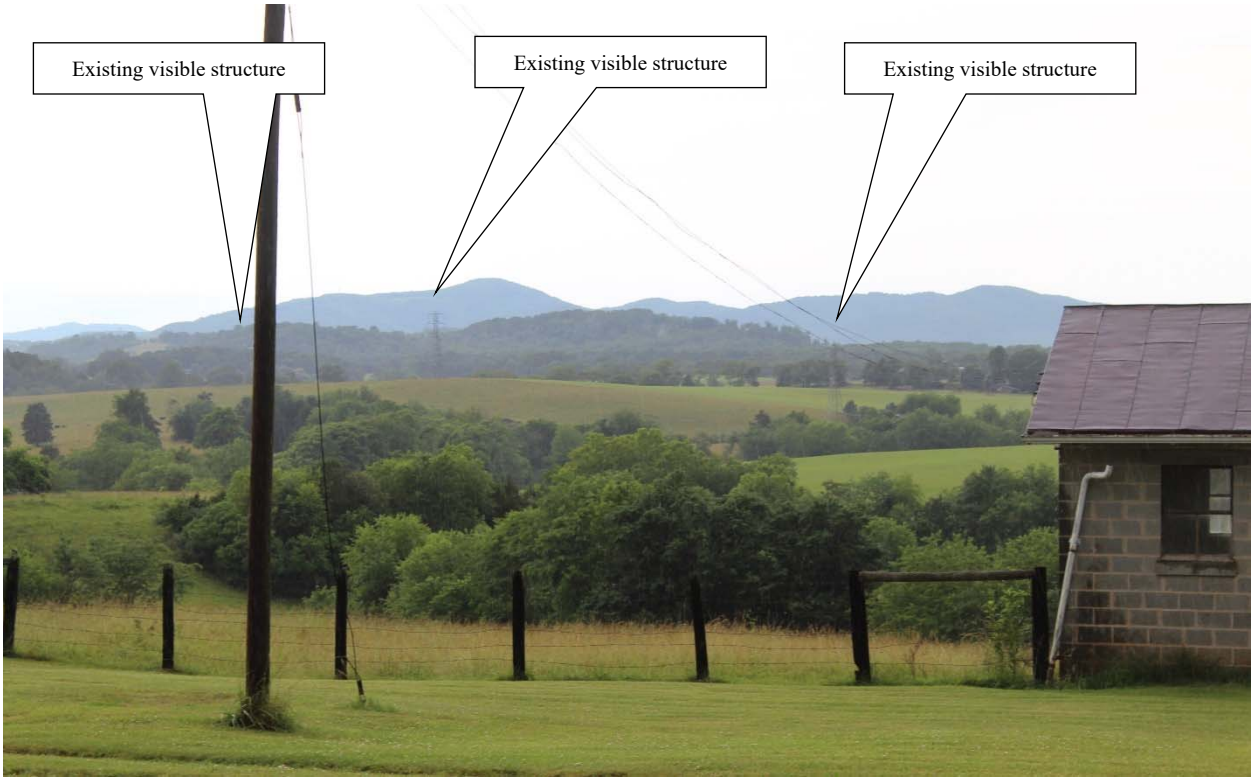

Figure 5-217: Photo location 8- View from driveway towards the Project (several existing structures visible across open field), facing northwest.

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Photo simulations
prepared by:
GTTE LLC
email:
info@gttellc.com
703 447 1350

Location: PL16

Project: Roanoke-Reusens

Structure	Distance (ft)	Height (ft)
2-86	1945	150.0
2-87	2910	130.0
2-88	4005	110.0

Figure 5-218: Wright Farm Simulation 1 – Simulation location, direction of view, and structures modeled to rear of building complex. Source: GTTE, LLC

Photo simulations prepared by: GTTE LLC email: info@gttellc.com 703 447 1350	**Project: Reusens - Roanoke**	**Location: PL16**	**Existing View**
	Photo Simulations and diagrams represent approximate heights for electric transmission structures from the conceptual design used for the proposed project. These illustrations do not necessarily depict exact structure design or location.		This simulation is designed for viewing on a computer monitor. To achieve the correct scale, the image should be increased or decreased in size until the scale above measures 4". When viewed with the eye at 31" from the screen the image will have the same scale as if the viewer were standing at the camera location.

Figure 5-219: Wright Farm Simulation 1 – Existing view to rear of building complex. Source: GTTE, LLC

Photo simulations prepared by: GTTE LLC email: info@gttellc.com 703 447 1350	**Project: Reusens - Roanoke**	**Location: PL16**	**Proposed View** (Location of towers not visible are overlaid with yellow tower icon)
	Photo Simulations and diagrams represent approximate heights for electric transmission structures from the conceptual design used for the proposed project. These illustrations do not necessarily depict exact structure design or location.		This simulation is designed for viewing on a computer monitor. To achieve the correct scale, the image should be increased or decreased in size until the scale above measures 4". When viewed with the eye at 31" from the screen the image will have the same scale as if the viewer were standing at the camera location.

Figure 5-220: Wright Farm Simulation 1 – Proposed view to rear of building complex – (Visible structures shown as the would appear). Source: GTTE, LLC

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Hurt Barn (VDHR# 009-5362)

The Hurt Barn stands on the north side of Fancy Farm Road in an area of rolling pastures and is a part of a collection of prosperous farms north of Bedford. The one-and-a-half story frame building sits on a poured concrete foundation and is covered by a metal-sheathed gambrel roof. The exterior of the structure is clad in weatherboard siding. The barn is laid out in an L-shaped plan with the principal north-south wing containing the dairy parlor and a smaller, hip-roofed, perpendicular wing at the northeast corner containing the milk room. The plan also includes a one-story, shed-roofed wing on the north side of the structure and a porch on the south side of the milk room wing. Other features include two-over-two and nine-pane windows, batten and x-braced doors, and a beaded tongue-in-grove ceiling in the milking parlor.

Constructed around 1920, the barn is in good condition. It is one of the county's most sophisticated farm buildings architecturally, and it is also notable for its high level of integrity. Considering this, the site is recommended eligible for listing in the NRHP under Criteria A and C.

In order to assess the potential impact of the Project, visual inspection was conducted of the setting around the resource property with emphasis on views towards the Project. The Hurt Barn is located north of the Project, roughly 0.44 mile away. The barn is set back from the road in an open field on the side of a driveway leading to a modern home built just to the rear. The Project alignment extends in a generally east-west orientation through the landscape across the road to the south of the barn. While much of the landscape across the road from the barn is open, a modern home within a small patch of woods is situated immediately across the road and driveway from the barn.

A site visit to the property found the historic setting has been compromised by subdivision and modern development. It is now set adjacent to a modern driveway on a property recently developed with a modern home that is set just to the rear. A historic home is set down the road from the barn on another property, however, it is unclear if this is the home the barn was historically associated with. Views of the barn are fairly open and distant from the road in both directions while views outward from the barn also tend to be distant with the exception of immediately across the road to the front where a modern home and patch of woods screens views of the landscape beyond.

Inspection from the road in front of the barn revealed that the modern home and patch of woods completely screens views in the direction of the Project and that no existing structures can be seen from this point. Inspection from up and down the road in both directions from the property revealed more unobstructed views of and towards the existing transmission line structures. In both directions, multiple existing structures can be seen across the mostly open landscape.

The existing transmission line structures in the vicinity of the Hurt Barn are steel lattice and range from approximately 92- to 95-feet tall and the proposed replacement structures will remain lattice and range from approximately 100-feet to 135-feet tall. The structures will generally be replaced on a one-to-one basis near existing locations, although a slight shift in alignment will be

required, moving the alignment and ROW slightly closer to the property. Despite the increase in height and slight shift in alignment, it is anticipated that visibility from the property will remain generally similar to existing conditions. Views from the road directly in front of the barn will continue to be screened by a home and patch of woods, while views from up and down the road that already include multiple structures and components will remain as such, albeit with taller structures. This was confirmed with photo simulation that shows the structures currently visible across open field will rise higher in relation to the distant treeline, however, structures further in the distance that are currently screened by intervening vegetation will remain so. As such, the Project may introduce a slight change in visibility of structures, however, they would remain in a similar configuration and be within a setting and viewshed that already contains multiple structures. Therefore, it is D+A's opinion that the Project will have no more than a ***minimal impact*** on the Hurt Barn per VDHR's impact characterization.

Figure 5-221 depicts the location of the Hurt Barn in relation to the Project and viewshed buffers, with the location and direction of all representative photographs. **Figures 5-222 through 5-226** are representative photographs of the property, as well as those taken from locations within and near the property towards the Project. **Figures 5-227 through 5-229** provide photo simulations of the Project from the property.

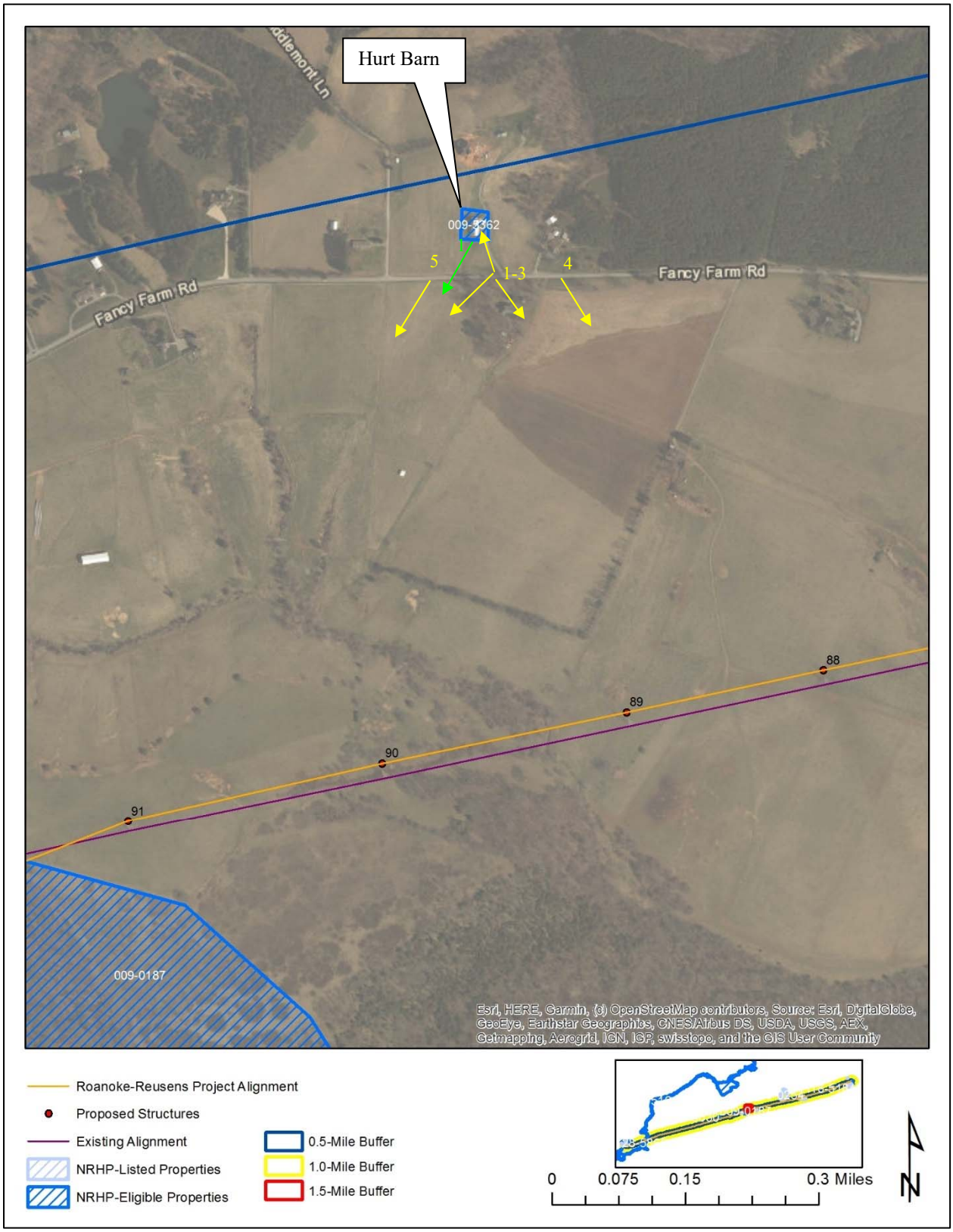

Figure 5-221: Location of the Hurt Barn in relation to the project area (Representative photographs and views towards the Project depicted in yellow, Photo Sims depicted in green).

Figure 5-222: Photo location 1- View of Hurt Barn, front façade, facing north.

Figure 5-223: Photo location 2- View from the road in front of Hurt Barn towards the Project (not visible – screened by vegetation), facing southwest.

Figure 5-224: Photo location 3- View from road in front of the Hurt Barn towards the Project (not visible – screened by vegetation and development), facing south.

Figure 5-225: Photo location 4- View from road east of the property towards the Project (several existing structures visible across open field and above treeline), facing southeast.

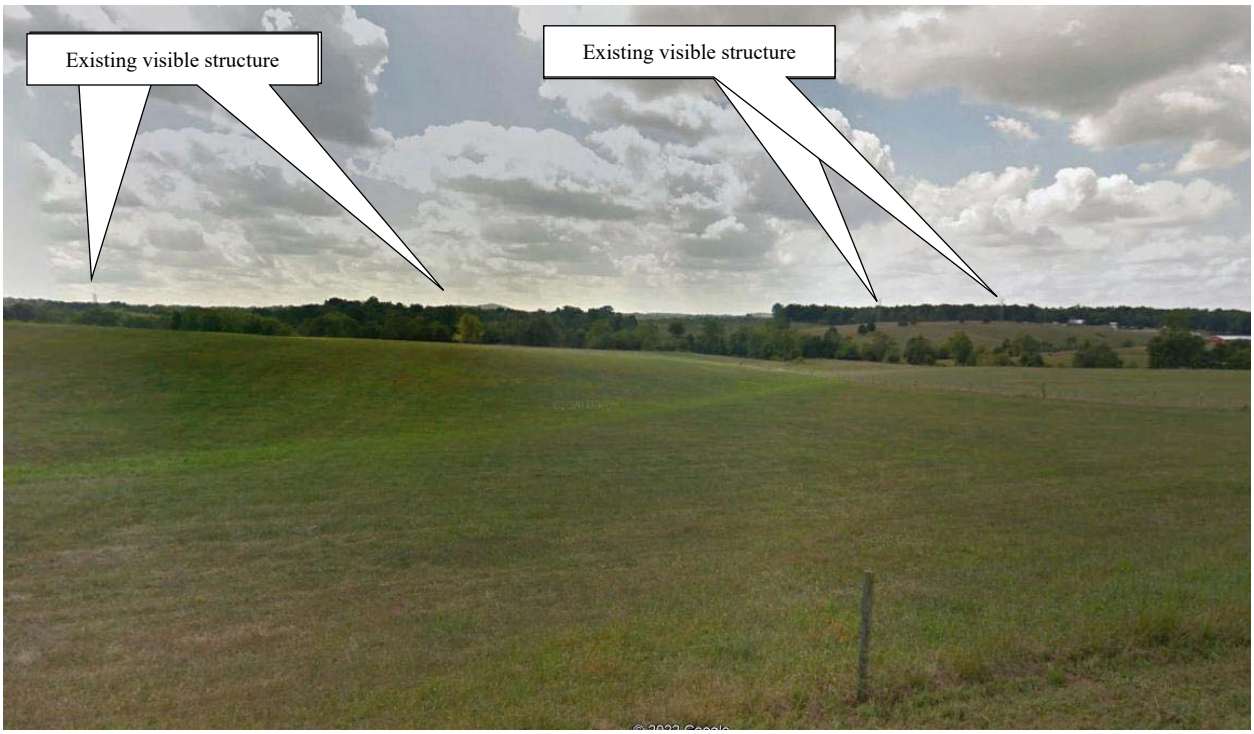

Figure 5-226: Photo location 5- View from road west of the property towards the Project (several existing structures visible across open field), facing southwest.

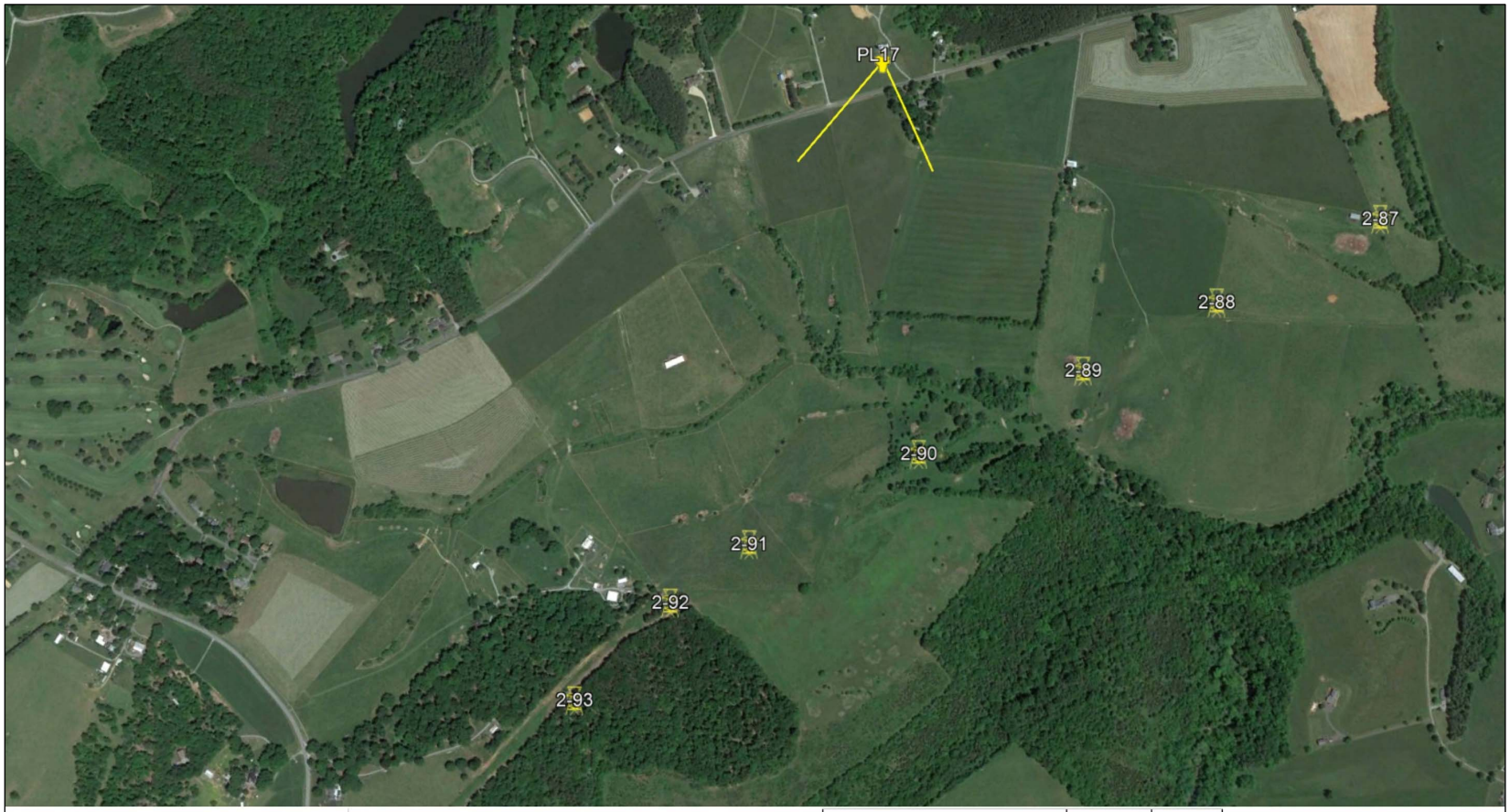

Photo simulations
prepared by:
GTTE LLC
email:
info@gttellc.com
703 447 1350

Location: PL17

Project: Roanoke-Reusens

Structure	Distance (ft)	Height (ft)
2-90	2510	135.0
2-91	3191	125.0
2-92	3704	100.0
2-93	4518	115.0
2-94	5543	130.0
2-95	6930	155.0

Figure 5-227: Hurt Barn Simulation 1 – Simulation location, direction of view, and structures modeled to the front. Source: GTTE, LLC

Photo simulations prepared by: GTTE LLC email: info@gttellc.com 703 447 1350	**Project: Reusens - Roanoke**	**Location: PL17**	**Existing View**
	Photo Simulations and diagrams represent approximate heights for electric transmission structures from the conceptual design used for the proposed project. These illustrations do not necessarily depict exact structure design or location.		This simulation is designed for viewing on a computer monitor. To achieve the correct scale, the image should be increased or decreased in size until the scale above measures 4". When viewed with the eye at 31" from the screen the image will have the same scale as if the viewer were standing at the camera location.

Figure 5-228: Hurt Barn Simulation 1 – Existing view to the front. Source: GTTE, LLC

Photo simulations prepared by: GTTE LLC email: info@gttellc.com 703 447 1350	**Project: Reusens - Roanoke**	**Location: PL17**	**Proposed View** (Location of towers not visible are overlaid with yellow tower icon)
	Photo Simulations and diagrams represent approximate heights for electric transmission structures from the conceptual design used for the proposed project. These illustrations do not necessarily depict exact structure design or location.		This simulation is designed for viewing on a computer monitor. To achieve the correct scale, the image should be increased or decreased in size until the scale above measures 4". When viewed with the eye at 31" from the screen the image will have the same scale as if the viewer were standing at the camera location.

Figure 5-229: Hurt Barn Simulation 1 – Proposed view to the front – (Visible structures shown as they would appear. Screened structures shown in yellow). Source: GTTE, LLC

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Blue Ridge Parkway Historic District (VDHR# 080-5161)

The first long-distance rural parkway developed by the NPS, the Blue Ridge Parkway Historic District is a 469-mile-long route running between Shenandoah National Park in Virginia and the Great Smoky Mountains National Park in North Carolina. Construction began in 1935, two years after planning started in 1933, and the parkway was not completely finished until 1987. It consists of two, asphalt-paved lanes, gravel shoulders, and grass pull-over areas, as well as seventeen recreation areas and a variety of exhibits and interpretational signage. Elevation on the parkway ranges from 650 feet near Lynchburg, Virginia to nearly 6,050 feet near Mount Pisgah, North Carolina.

The Blue Ridge Parkway was designed to both serve as a scenic link between two major national parks, and to give people work, as it was conceived during the Great Depression. The lead landscape architect on the project was likely Stanley Abbott and almost all of the work on the parkway was done by hand rather than by machine. It is known for its natural views of mountains and valleys, almost entirely interrupted by modern development. It does pass through some areas of development, but the views are mostly protected by dense vegetation. The parkways is significant for its associations with important trends in landscape architecture and highway construction and important events in U.S. social history, community planning and development, and recreation. In addition, it has maintained all seven aspects of integrity. As such, it was nominated for listing in the NRHP in 2016 under Criteria A and C.

In order to assess the potential impact of the Project, visual inspection was conducted of the setting in the vicinity of the Project, with emphasis on views towards the Project. However, while the Blue Ridge Parkway is directly crossed by the Project alignment, a roughly 14-mile length of the road where the crossing is located has been closed for an extended period of time due to slope failures (NPS Update June 9, 2022: *The Roanoke section of Parkway from U.S. 220 (milepost 121.4) to Adney Gap (milepost 135.9) which was previously open to cyclists and pedestrians is now fully closed to all visitors and recreation of any kind. Due to heavy equipment and contractors working in the area, a full closure is in place and enforceable under 36 CFR 1.5(f).*). As such, it was not accessible for inspection and assessment is therefore limited to desktop review.

This review revealed that the setting of the parkway in the general vicinity of the Project has been subject to extensive suburban development associated with the outskirts of Roanoke. The Project alignment crosses the parkway perpendicularly 0.35 mile north of its intersection with Hardy Road and roughly one mile south of the intersection with Stewartsville Road. Although the existing transmission line is flanked by treelines in the immediate vicinity of its crossing with the Blue Ridge Parkway, the parkway is otherwise bordered by high-density suburban residential development in this area.

Based upon the landscape, vegetation, and development patterns, it is anticipated that the existing transmission line is likely visible from a short length of the parkway to each side of the ROW, with most extensive views when directly in the ROW. The nearest existing structure is just

130-feet from the edge of the parkway. However, the treelines flanking the Project alignment likely inhibit more distant views. The existing structures in the vicinity of the parkway are steel lattice that range from 92- to 135-feet tall and the replacement structures will remain lattice and range from approximately 120- to 155-feet tall and generally be replaced on a one-to-one basis near existing structure locations. Despite the increase in height, it is anticipated that visibility of the Project will remain similar to existing conditions with only minimal change in visibility limited to the short length of the parkway directly within the project ROW that already includes views of existing structures. Further, as a long, linear resource that stretches nearly 470 miles through a variety of landscapes and developments, the setting is diverse and includes both natural and heavily developed viewsheds. As such, the Project may introduce a slight change in visibility of several structures already visible, however, will not introduce a substantial change in setting or viewshed of the overall length of the parkway corridor. Therefore, it is D+A's opinion that the Project will have no more than a ***minimal impact*** on the Blue Ridge Parkway per VDHR's impact characterization.

Figure 5-230 depicts the location of the Blue Ridge Parkway in relation to the Project and viewshed buffers.

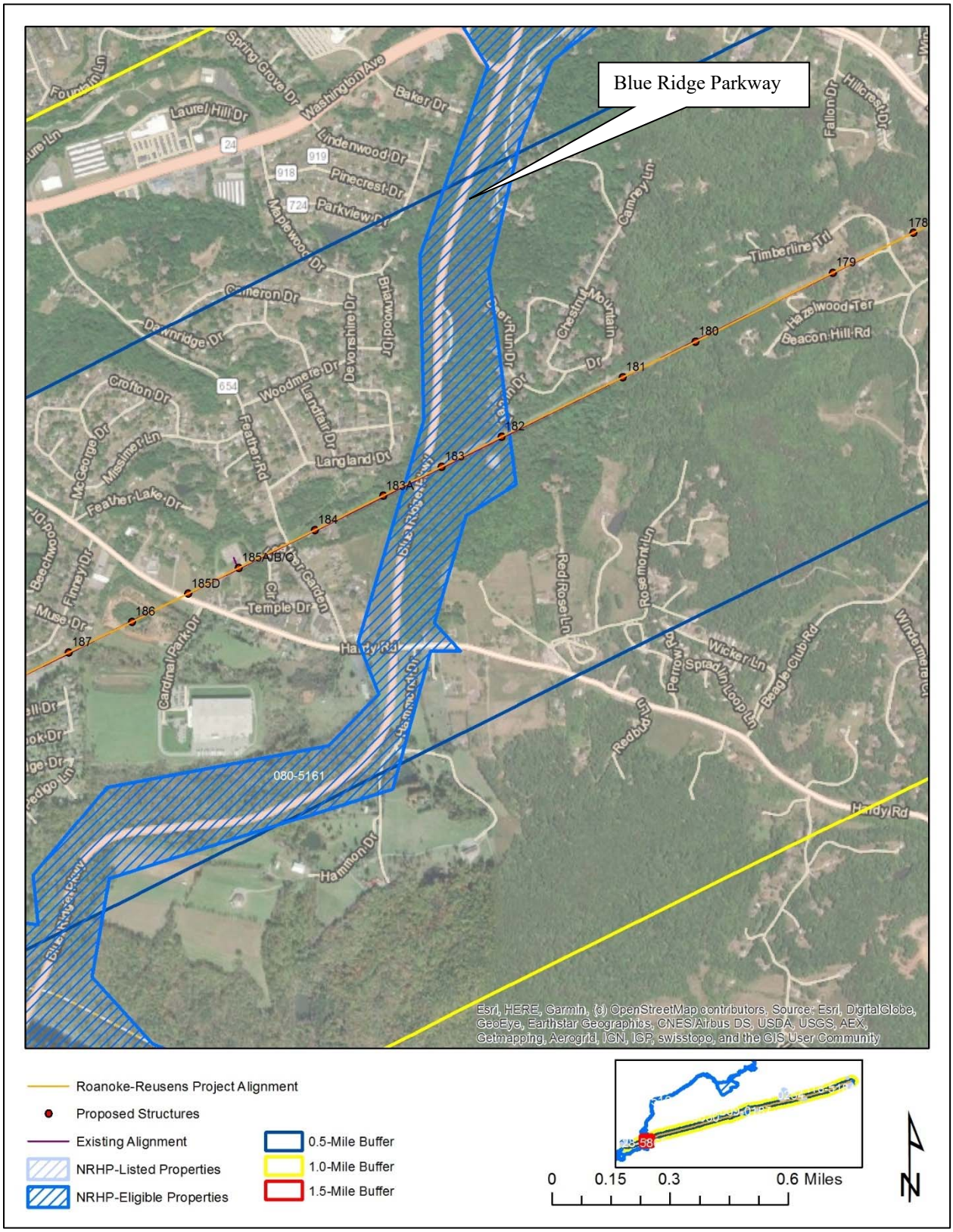

Figure 5-230: Location of the Blue Ridge Parkway in relation to the project area.

Reusens Dam, Reusens Hydroelectric Power Plant (VDRH# 118-0218)

The Reusens Dam, the main dam of the Reusens Hydroelectric Project, was constructed in 1903 spans the James River at the north edge of the Lynchburg city limits off of Route 501. It is a gravity structure made of granite block and concrete, supported by regularly positioned concrete piers. The dam measures approximately 416 feet long and 24 feet high. A steel framework allows for electrically operated steel gates, each 44 feet long and almost 17 feet high. The dam represents local early twentieth century development and is emblematic of early twentieth century construction methods. It is also in good condition and has maintained historic integrity. For these reasons, in 2021 it was recommended eligible for listing in the NRHP under Criteria A and C.

In order to assess the potential impact of the Project, visual inspection was conducted of the setting around the resource property with emphasis on views towards the Project. The Reusens Dam is located just downhill, approximately 0.13 mile from the Reusens substation which is the northern terminus of the Project alignment. The alignment generally extends in a southwesterly direction away from the substation. The substation is set atop a steep bluff above the James River where the Reusens Dam is located. The bluff is mostly open and grassy, however, the substation is bordered by wooded areas to each side.

A site visit to the property found that the historic setting of the property remains largely intact as it stretches across the river in a lightly developed industrial area. Because the dam spans the river with slopes to both sides, it is visible from a distance at river level as well as above. Views outward from the dam are long up and down the river, however, short to each side due to the steep slope of the terrain.

Inspection from the south side of the river found that an existing transmission line not included in this Project is highly visible as it crosses the river directly above the dam. The existing Reusens substation which is the northern terminus of the Project is visible up the steep bluff from the dam, however, the Project alignment that extends from the substation is screened by topography and the angle of view. Inspection was not possible from the north side of the dam or river as it is all private property with no public access or vantage points.

The existing transmission line structure within the Reusens substation is 80-feet tall and the first existing Project structure beyond it is steel lattice that is 95-feet tall and the proposed structure will remain lattice and be roughly 130-feet tall. The structure will be replaced on a one-to-one basis near the existing location. Despite the increase in height, it is anticipated that the structure and all additional structures will remain completely screened from view from the dam by the topography and angle of view. This was confirmed with photo simulation from the south side of the dam that shows all structures will remain screened by the steep bluff bordering the river. As such, the Project will not introduce any change of viewshed or setting of or from the property. It is further noted that as a hydroelectric dam, transmission lines and structures are an integral component of the dam's operation and design. It is therefore D+A's opinion that the proposed project will have ***no impact*** on the Reusens Dam.

Figure 5-231 depicts the location of the Reusens Dam in relation to the Project and viewshed buffers, with the location and direction of all representative photographs. **Figures 5-232 through 5-235** are representative photographs of the property, as well as those taken from locations within and near the property towards the Project. **Figures 5-236 through 5-238** provide photo simulations of the Project from the property.

Figure 5-231: Location of the Reusens Dam in relation to the project area (Representative photographs and views towards the Project depicted in yellow, Photo Sims depicted in green).

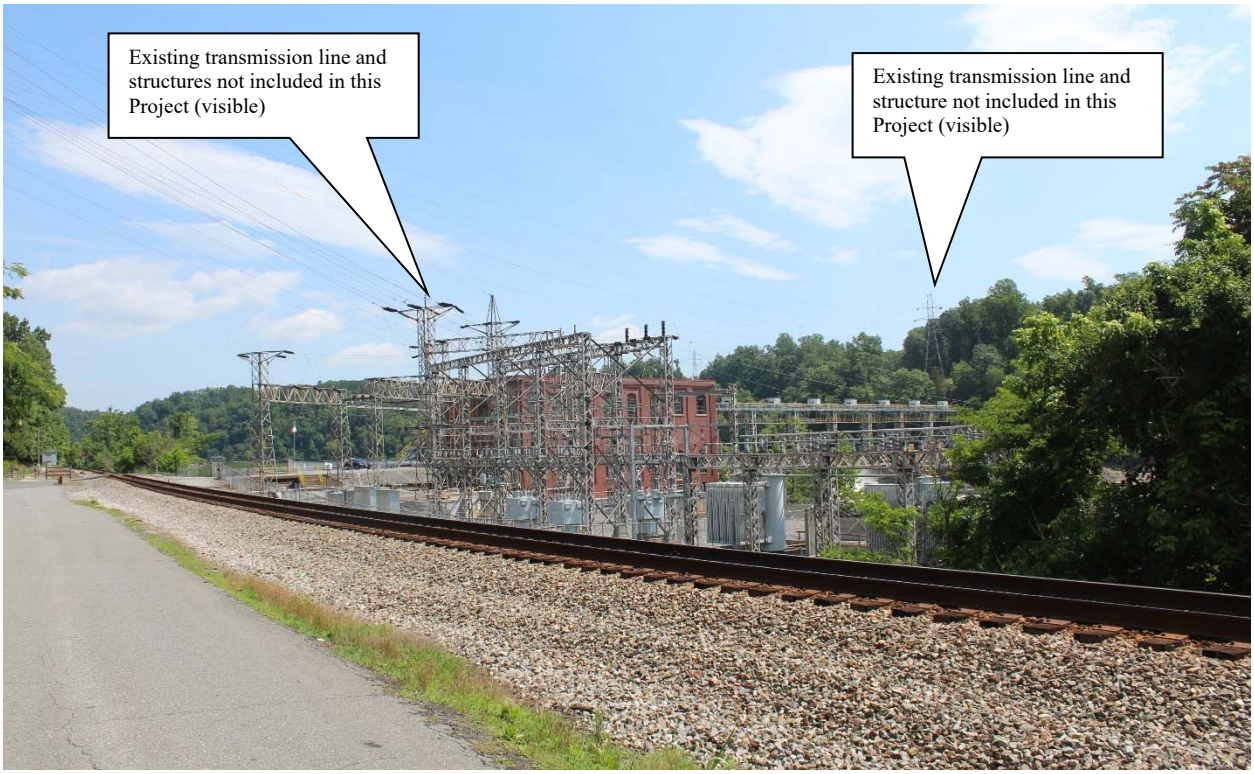

Figure 5-232: Photo location 1- Reusens Dam, facing northwest.

Figure 5-233: Photo location 2- Reusens Dam setting from VES Road (Project not visible), facing northwest.

Figure 5-234: Photo location 3- View from VES Road near Reusens Dam towards the Project (not visible – screened by topography and vegetation), facing west.

Figure 5-235: Photo location 4- View from Reusens Dam towards the Project (existing Reusens substation visible, Project structures not visible beyond terrain), facing south.

Photo simulations
prepared by:
GTTE LLC
email:
info@gttellc.com
703 447 1350

Location: PL1

Project: Roanoke-Reusens

Structure	Distance (ft)	Height (ft)
2-1	1516	130.0
2-2A	2710	160.0
2-3A	4161	150.0
2-4A	4947	145.0

Figure 5-236: Reusens Dam Simulation 1 – Simulation location, direction of view, and structures modeled from the south side of river. Source: GTTE, LLC

Photo simulations prepared by:
GTTE LLC
email:
info@gttellc.com
703 447 1350

Project: Reusens - Roanoke	Location: PL1	Existing View

Photo Simulations and diagrams represent approximate heights for electric transmission structures from the conceptual design used for the proposed project. These illustrations do not necessarily depict exact structure design or location.

This simulation is designed for viewing on a computer monitor. To achieve the correct scale, the image should be increased or decreased in size until the scale above measures 4". When viewed with the eye at 31" from the screen the image will have the same scale as if the viewer were standing at the camera location.

Figure 5-237: Reusens Dam Simulation 1 – Existing view from the south side of river. Source: GTTE, LLC

Photo simulations prepared by:
GTTE LLC
email:
info@gttellc.com
703 447 1350

Project: Reusens - Roanoke	Location: PL1	Proposed View (Location of towers not visible are overlaid with yellow tower icon)
Photo Simulations and diagrams represent approximate heights for electric transmission structures from the conceptual design used for the proposed project. These illustrations do not necessarily depict exact structure design or location.		This simulation is designed for viewing on a computer monitor. To achieve the correct scale, the image should be increased or decreased in size until the scale above measures 4". When viewed with the eye at 31" from the screen the image will have the same scale as if the viewer were standing at the camera location.

Figure 5-238: Reusens Dam Simulation 1 – Proposed view from the south side of river – (Structures not visible shown in yellow). Source: GTTE, LLC

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Cobbs-Metcalfe-Overstreet House (VDHR # 118-5184)

The Cobbs-Metcalfe-Overstreet House was constructed ca. 1780 and now sits on a 14.6-acre tract located in a suburban area. The one-and-a-half-story, three-bay brick house rests on a continuous stone foundation and is topped by a metal-sheathed gable roof. It features wood double hung sash windows and an interior chimney. A porch with a shed roof was a later addition to the symmetrical front elevation. The house is laid out in central hall plan with one-room, one-and-a-half-story frame structure sitting just behind it connected by a breezeway. Various portions of the house, including the front northeast side, the east gable side, and the chimney have collapsed and been replaced by modern materials. The property also includes the Overstreet Family cemetery and a collapsed barn.

The house was rehabilitated in 2004 and in the same year recommended eligible for listing in the NRHP under Criterion C for its architectural significance.

In order to assess the potential impact of the Project, visual inspection was conducted of the setting around the resource property with emphasis on views towards the Project. The Cobbs-Metcalfe-Overstreet House property is directly crossed by the Project ROW with one existing structure set directly on the property. The home is oriented facing generally north and the alignment generally extends in a northeast-southwest orientation across the landscape to the rear. The house is situated centrally in a mostly open lawn with scattered landscaping and vegetation throughout. The existing structure on the property rests at edge of the cleared homesite and additional structures are beyond wooded areas that border the property to all sides.

A site visit to the property found that the historic setting of the property remains largely intact although now rests on a relatively small parcel. Because the home is set at the end of a long driveway, back from the road, it is not visible from public ROW and views from public ROW in the direction of the house are short and screened by thickly wooded areas. Views outward from the property are likewise screened by woods that border the property and are thus limited primarily to within the open yard area.

Inspection from the beginning of the driveway to the property found that the wooded areas bordering the property coupled with the bend in the lane prevent visibility of the existing transmission line or any associated structures. The one existing structure located directly on the property comes into view when approaching the home, however, additional structures up and down the alignment remain screened by the treelines. The structure on the property remains visible throughout most of the homesite, with unobstructed views from some vantages and more limited views above and through vegetation or improvements from others.

The existing transmission line structure on the Cobbs-Metcalfe-Overstreet House property is a steel lattice structure that is approximately 90-feet tall and the proposed replacement structure will be a monopole that is 135-feet tall. Additional existing structures within one-half mile of the property are steel lattice that range from roughly 92- to 94-feet and proposed structures will be

monopoles that range from roughly 100- to 135-feet tall. All structures, including the one on the property, will be replaced on a one-to-one basis near the existing locations. Due to the increase in height, it is anticipated that visibility of the structure on the property will increase from throughout the property, but will likely remain screened from the road and thus not be seen in conjunction with the home from public ROW. As the next closest structure that is currently screened by vegetation is proposed to only increase from 92- to 95-feet, it is expected to remain screened and no additional structures set further from the property are expected to become visible from the property. This was confirmed with photo simulation from the driveway that shows the one currently visible structure located on the property will rise higher above the treeline and change in configuration. As such, the Project may introduce a change in visibility of the transmission line and structure on the property, however, views are anticipated to remain limited to this one structure and thus not substantially alter the setting or viewshed of or from the property. It is therefore D+A's opinion that the Project will have no more than a ***minimal impact*** on the Cobb's-Metcalfe-Overstreet House per VDHR's impact characterization.

Figure 5-239 depicts the location of the Cobbs-Metcalfe-Overstreet House in relation to the Project and viewshed buffers, with the location and direction of all representative photographs. **Figures 5-240 through 5-246** are representative photographs of the property, as well as those taken from locations within and near the property towards the Project. **Figures 5-247 through 5-249** provide photo simulations of the Project from the property.

Figure 5-239: Location of Cobbs-Metcalfe-Overstreet House in relation to the project area (Representative photographs and views towards the Project depicted in yellow, Photo Sims depicted in green).

Figure 5-240: Photo location 1- View of Cobbs-Metcalfe-Overstreet House setting and existing structure on the property, facing south.

Figure 5-241: Photo location 2- View from beginning of driveway to the property towards the Project (not visible – screened by vegetation), facing southwest.

Figure 5-242: Photo location 3- View from driveway towards the Project (not visible – screened by vegetation), facing southwest.

Figure 5-243: Photo location 4- View from driveway towards the Project (not visible – screened by vegetation), facing southeast.

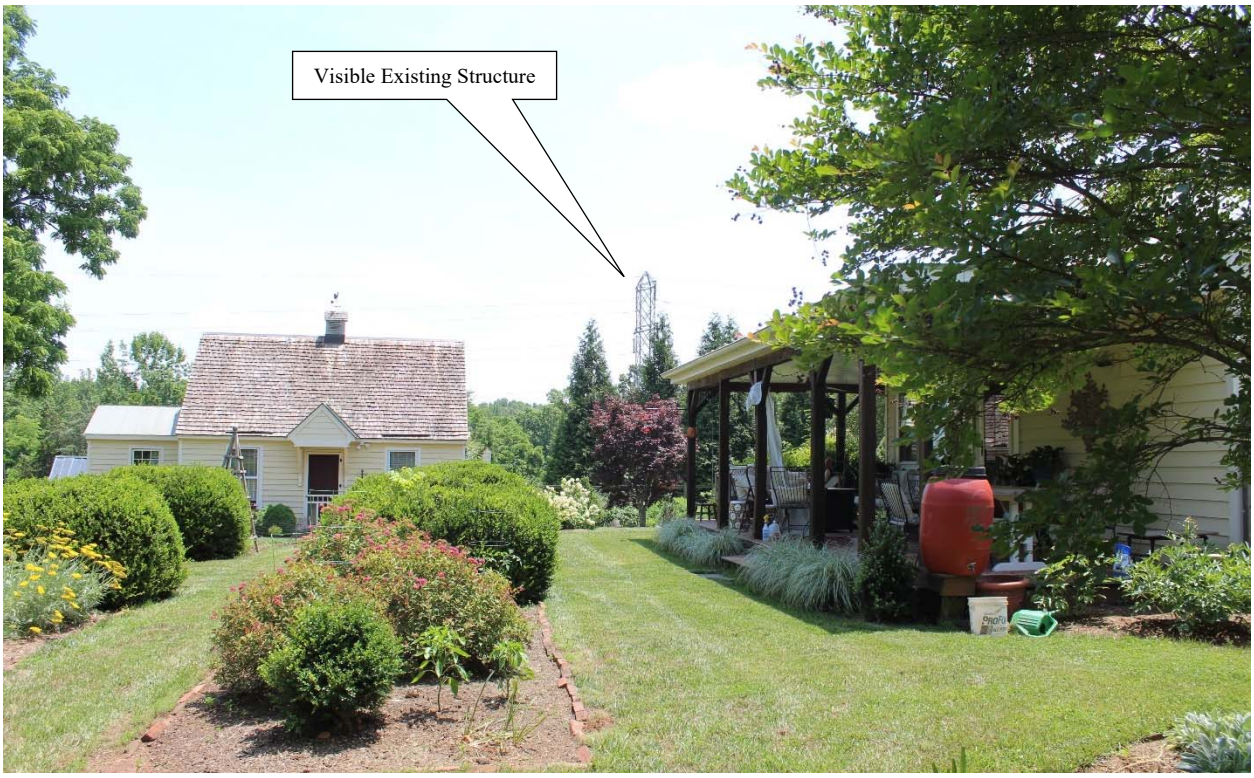

Figure 5-244: Photo location 5- View from homesite towards the Project (existing structure on property visible), facing south.

Figure 5-245: Photo location 6 - View from homesite towards the Project (existing structure on property visible), facing south.

Figure 5-246: Photo location 7- View from homesite towards the Project (not visible – screened by vegetation), facing southwest.

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Photo simulations
prepared by:
GTTE LLC
email:
info@gttellc.com
703 447 1350

Location: PL8

Project: Roanoke-Reusens

Structure	Distance (ft)	Height (ft)
2-20A	327	135.0

Figure 5-247: Cobbs-Metcalfe House Simulation 1 – Simulation location, direction of view, and structures modeled from driveway. Source: GTTE, LLC

Figure 5-248: Cobbs-Metcalfe House Simulation 1 – Existing view from driveway. Source: GTTE, LLC

Photo simulations prepared by: GTTE LLC email: info@gttellc.com 703 447 1350	**Project: Reusens - Roanoke**	**Location: PL8**	**Proposed View** (Location of towers not visible are overlaid with yellow tower icon)
	Photo Simulations and diagrams represent approximate heights for electric transmission structures from the conceptual design used for the proposed project. These illustrations do not necessarily depict exact structure design or location.		This simulation is designed for viewing on a computer monitor. To achieve the correct scale, the image should be increased or decreased in size until the scale above measures 4". When viewed with the eye at 31" from the screen the image will have the same scale as if the viewer were standing at the camera location.

Figure 5-249: Cobbs-Metcalfe House Simulation 1 – Proposed view from driveway – (Visible structure shown as it would appear). Source: GTTE, LLC

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CSX Railroad (VDHR # 118-5546)

The CSX Railroad connects Richmond to Covington, approximately 15 miles east of the Virginia-West Virginia border. The railroad consists of steel rail lines and wooden ties on a flat stone grade. Construction began around 1836 following the decision by the Virginia General Assembly to incorporate the existing Louisa Railroad to form the Virginia Central Railroad. By the late-nineteenth century, the railroad proved to be crucial to the success of the West Virginian mineral and lumber industries. Parts of the line were damaged during the Civil War but were promptly replaced as it functioned as the main supply line for the Confederacy during the War. The railroad has lost much of its material integrity, but it retains a strong association to the historic theme of railroad development. As such, it is recommended potentially eligible for listing in the NRHP under Criterion A.

In order to assess the potential impact of the Project, visual inspection was conducted of the setting around the resource property with emphasis on views towards the Project. The CSX Railroad is located just downhill, approximately 0.13 mile from the Reusens Substation which is the northern terminus of the Project alignment at its nearest point, although the resource corridor extends away from the Project, roughly 0.7 mile away at the far end. The alignment generally extends in a southwesterly direction away from the substation and resource corridor. The substation is set atop a steep bluff above the James River that the railroad corridor parallels. The bluff along the rail corridor is mostly steep and wooded, although is cleared at the ROW leading into the Reusens Substation.

A site visit to the property found that the historic setting of the property remains largely intact as it stretches along the side of the river in a lightly developed industrial area. Because the railroad is at-grade, it is primarily visible only from immediately adjacent to the corridor, although it can be seen from roads and other vantage points above. Views outward from the railroad are long up and down the river, however, short to each side due to the steep slope of the terrain.

Inspection from along the length of the corridor found that a number of existing transmission lines not included in this Project are highly visible in the area, including a line that parallels the railroad as well as a line that crosses the river above the Reusens Dam. The existing Reusens Substation which is the northern terminus of the Project is visible from most vantages along the corridor, however, the Project alignment and associated structures that extend from the substation is screened by topography and the angle of view. From no point along the line are any structures outside of those in the substation visible.

The existing transmission line structure within the Reusens Substation is 80-feet tall and the first existing Project structure beyond it is steel lattice that is 95-feet tall and the proposed structure will remain lattice and be roughly 130-feet tall. The structure will be replaced on a one-to-one basis near the existing location. Despite the increase in height, it is anticipated that the structure and all additional structures will remain completely screened from view from the railroad corridor by the topography and angle of view. This was confirmed with photo simulation from adjacent to the railroad corridor that shows all structures will remain screened behind the bluff

bordering the river. As such, the Project will not introduce any change of viewshed or setting of or from the property which already includes multiple other transmission lines and structures and has an inherently industrial character itself. It is therefore D+A's opinion that the proposed Project will have ***no impact*** on the CSX Railroad.

Figure 5-250 depicts the location of the CSX Railroad in relation to the Project and viewshed buffers, with the location and direction of all representative photographs. **Figures 5-251 through 5-256** are representative photographs of the property, as well as those taken from locations within and near the property towards the Project. **Figures 5-257 through 5-259** provide photo simulations of the Project from the property.

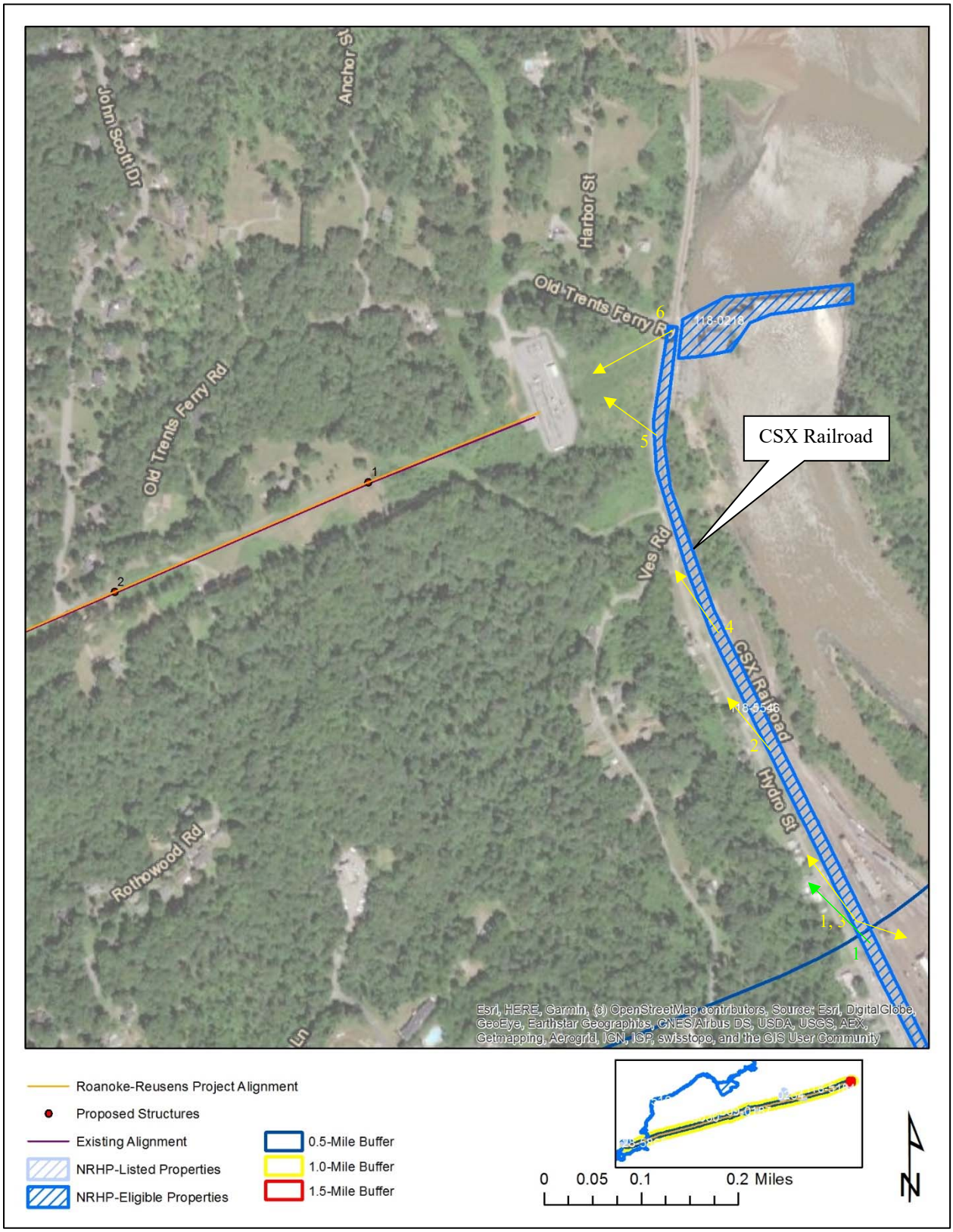

Figure 5-250: Location of the CSX Railroad in relation to the project area (Representative photographs and views towards the Project depicted in yellow, Photo Sims depicted in green).

Figure 5-251: Photo location 1- Representative view of the CSX Railroad, facing southeast.

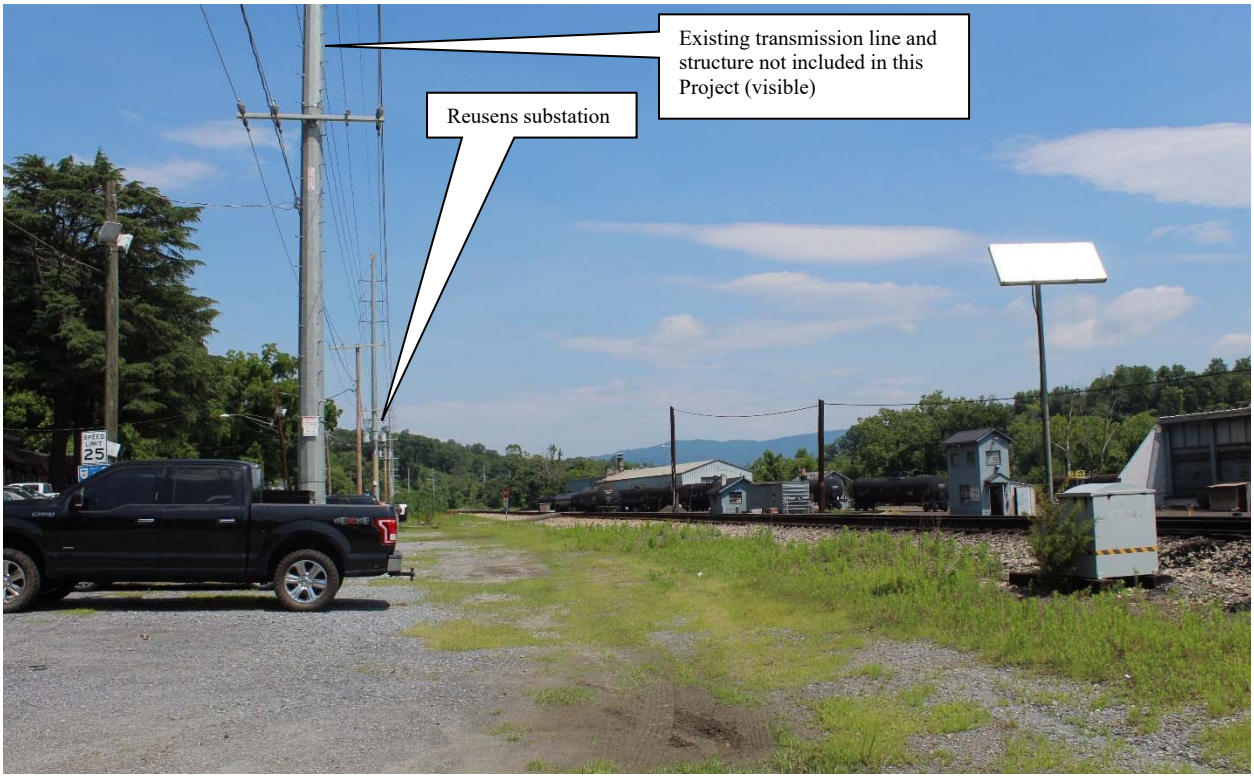

Figure 5-252: Photo location 2- View from CSX Railroad corridor towards the Project (Reusens substation visible, no structures to be replaced visible), facing northwest.

Figure 5-253: Photo location 3- View from CSX Railroad corridor towards the Project (Reusens substation visible, no structures to be replaced visible), facing northwest.

Figure 5-254: Photo location 4- View from CSX Railroad corridor towards the Project (Reusens substation visible, no structures to be replaced visible), facing northwest.

Figure 5-255: Photo location 5- View from CSX Railroad corridor towards the Project (Reusens substation visible, no structures to be replaced visible), facing northwest.

Figure 5-256: Photo location 6- View from CSX Railroad at Reusens Dam towards the Project (existing Reusens substation visible, Project structures not visible beyond terrain), facing south.

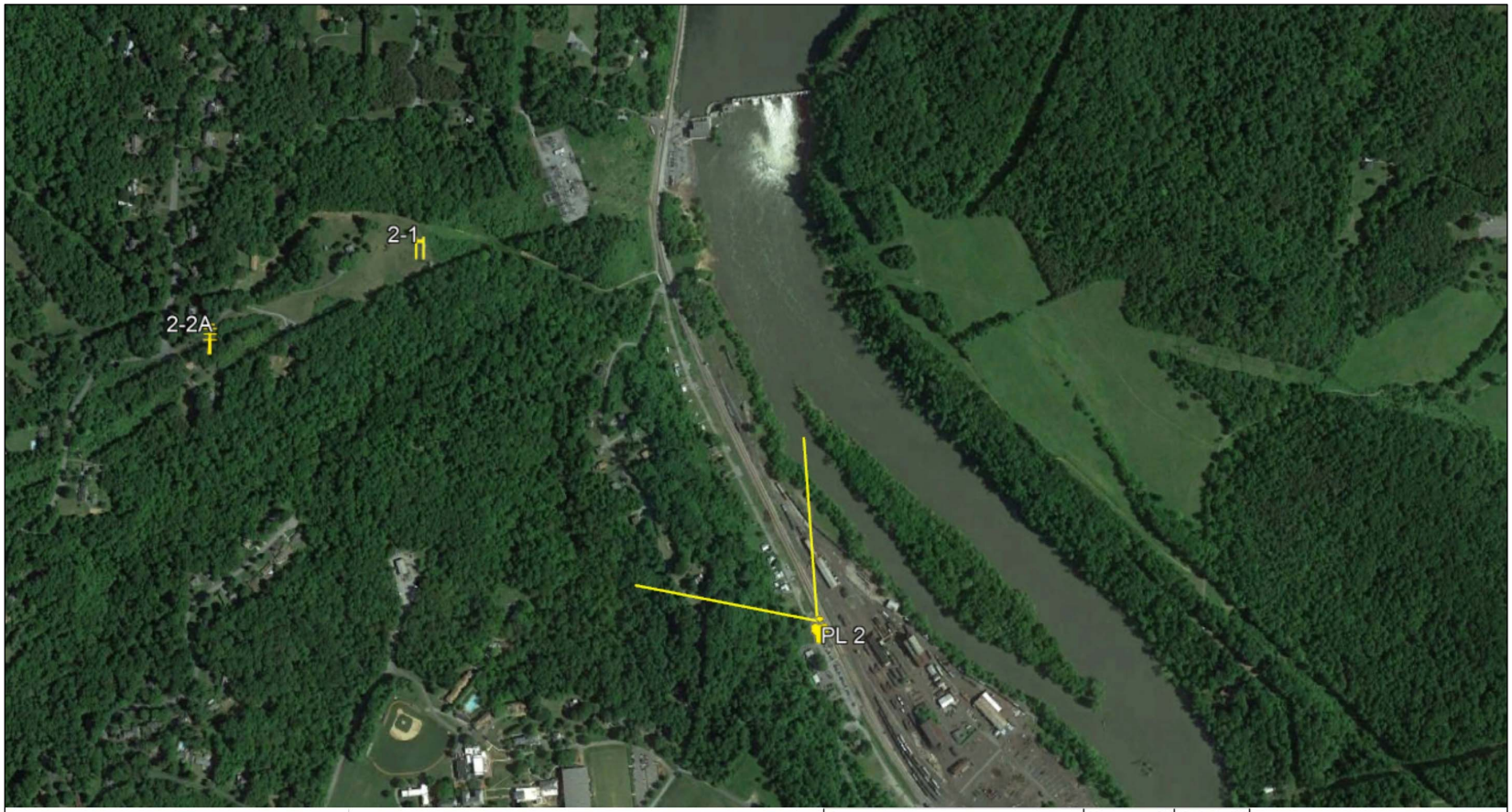

Photo simulations
prepared by:
GTTE LLC
email:
info@gttellc.com
703 447 1350

Location: PL2

Project: Roanoke-Reusens

Structure	Distance (ft)	Height (ft)
2-1	2928	130.0

Figure 5-257: CSX Railroad Simulation 1 – Simulation location, direction of view, and structures modeled from Hydro Street. Source: GTTE, LLC

Photo simulations prepared by: GTTE LLC email: info@gttellc.com 703 447 1350	**Project: Reusens - Roanoke**	**Location: PL2**	**Existing View**
	Photo Simulations and diagrams represent approximate heights for electric transmission structures from the conceptual design used for the proposed project. These illustrations do not necessarily depict exact structure design or location.		This simulation is designed for viewing on a computer monitor. To achieve the correct scale, the image should be increased or decreased in size until the scale above measures 4". When viewed with the eye at 31" from the screen the image will have the same scale as if the viewer were standing at the camera location.

Figure 5-258: CSX Railroad Simulation 1 – Existing view from Hydro Street. Source: GTTE, LLC

Photo simulations prepared by: GTTE LLC email: info@gttellc.com 703 447 1350	**Project: Reusens - Roanoke**	**Location: PL2**	**Proposed View** (Location of towers not visible are overlaid with yellow tower icon)
	Photo Simulations and diagrams represent approximate heights for electric transmission structures from the conceptual design used for the proposed project. These illustrations do not necessarily depict exact structure design or location.		This simulation is designed for viewing on a computer monitor. To achieve the correct scale, the image should be increased or decreased in size until the scale above measures 4". When viewed with the eye at 31" from the screen the image will have the same scale as if the viewer were standing at the camera location.

Figure 5-259: CSX Railroad Simulation 1 – Proposed view from Hydro Street – (Structures not visible shown in yellow). Source: GTTE, LLC

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Southeast Neighborhood Historic District (VDHR # 128-5865)

The Southeast Neighborhood Historic District is located above the floodplain of the Roanoke River and adjacent to the American Viscose Corporation factory site, with Mill Mountain standing southwest of the district. The surrounding urban area of Roanoke includes residential areas, commercial buildings, and parks. The district is comprised of single- and multiple-family dwellings, churches, and commercial buildings. Mostly constructed in the early-twentieth century, it features a variety of architectural styles popular in residential structures in the 1920s including frame vernacular, Colonial Revival, American Foursquare, and Craftsman. The structures range in heigh from one to two stories tall and setbacks appear to be generally uniform.

The buildings create a coherent historic cultural landscape that illustrates the urban growth and spatial development of Roanoke. The district is linked to the prosperity of Roanoke and its twentieth century industries, particularly the rayon plant. Additionally, it represents a noteworthy collection of popular styles of domestic architecture from the first half of the twentieth century that maintains sufficient integrity to convey historic architectural associations. As such, the district is recommended eligible for listing in the NRHP under Criteria A and C.

In order to assess the potential impact of the Project, visual inspection was conducted of the setting around the resource property with emphasis on views towards the Project. The Southeast Neighborhood Historic District is a large area located north of the Project, roughly 0.08 mile away at its nearest point, although the majority of the district and contributing resources are located further to the north, as far away as 1.3 mile away at the far edge of the district boundary. Overall, only a small portion of the historic district, comprised of the former American Viscose Company industrial complex is located within 0.5 mile of the Project. Of the residential portions of the district roughly half is located within one mile of the Project while the rest is located beyond one mile. The alignment generally extends in an east-west orientation across the landscape to the south of the district, on the opposite side of the Roanoke River. The district occupies multiple slopes and ridgelines uphill from the north side of the river. The district is densely developed in both the industrial and residential areas, with buildings set in close proximity to the network of streets and well as to one another.

A site visit to the property found that the historic setting of the district is generally intact with little nonhistoric infill. Views throughout the district are generally short due to the undulating topography and dense development pattern. Views outward are similarly short, with only occasional long-distant views from streets and blocks at the edges of ridgelines.

Inspection from a variety of vantage points throughout the district found that the existing transmission line is generally screened and not visible. In fact, existing structures were found to visible almost exclusively from the industrial area of the American Viscose Company campus at the lower edge of the district in closest proximity to the Project. From this area, several existing structures can be seen in the vicinity of the Roanoke substation that serves as the southern terminus of the project, however, are seen in conjunction with other transmission lines and

structures that extend into and out of this substation but are not included in this project. Visible structures are also seen in conjunction with extensive industrial infrastructure associated with the plant. The only views of the existing Project transmission line from the residential areas of the district are from the extreme southern edge near the bridge over the Virginia Railroad into the American Viscose Company plant. However, again, they are seen in conjunction with multiple other transmission lines and industrial infrastructure. The Project alignment was found to be screened from all other inspected vantage points throughout the historic district, including Morningside Park, by the dense development pattern, vegetation, and topography.

The existing transmission line structures within the vicinity of the district are steel lattice and range from approximately 94- to 114-feet tall and the proposed replacement structures will be monopoles and range from approximately 105-feet to 130-feet tall. The structures will generally be replaced on a one-to-one basis near the existing locations. Despite the increase in structure height, it is anticipated that visibility of the line and structures will remain similar from locations throughout the historic district. The structures may become increasingly visible from throughout the industrial area, however, are anticipated to remain screened behind development, vegetation, and topography from the vast majority of the historic district. This was confirmed with photo simulation throughout the district, including from 9th Street where all structures will continue to be screened as they currently are; from Morningside Park where one structure currently visible will be increasingly visible, but no additional structures will rise to visibility; from Buena Vista Boulevard where several currently visible structures will be increasingly visible but seen amongst and behind extensive other nonhistoric infrastructure; as well as from the American Viscose Plant complex at the lower edge of the district where additional structures may become visible, but will also be seen in conjunction with and amongst extensive industrial infrastructure and nonhistoric development. As such, the Project is not expected to introduce a noticeable change in setting and viewshed of and from the district. It is therefore D+A's opinion that the Project will have no more than a ***minimal impact*** on the Southeast Neighborhood Historic District per VDHR's impact characterization.

Figure 5-260 depicts the location of the Southeast Neighborhood Historic District in relation to the Project and viewshed buffers, with the location and direction of all representative photographs. **Figures 5-261 through 5-270** are representative photographs of the historic district, as well as those taken from locations within the district towards the Project. **Figures 5-271 through 5-582** provide photo simulations of the Project from the historic district.

Figure 5-260: Location of Southeast Neighborhood Historic District in relation to the project area (Representative photographs and views towards the project area depicted in yellow, photo sims depicted in green).

Figure 5-261: Photo location 1- Representative view of Southeast Neighborhood Historic District along Pechin Avenue SE, facing northwest.

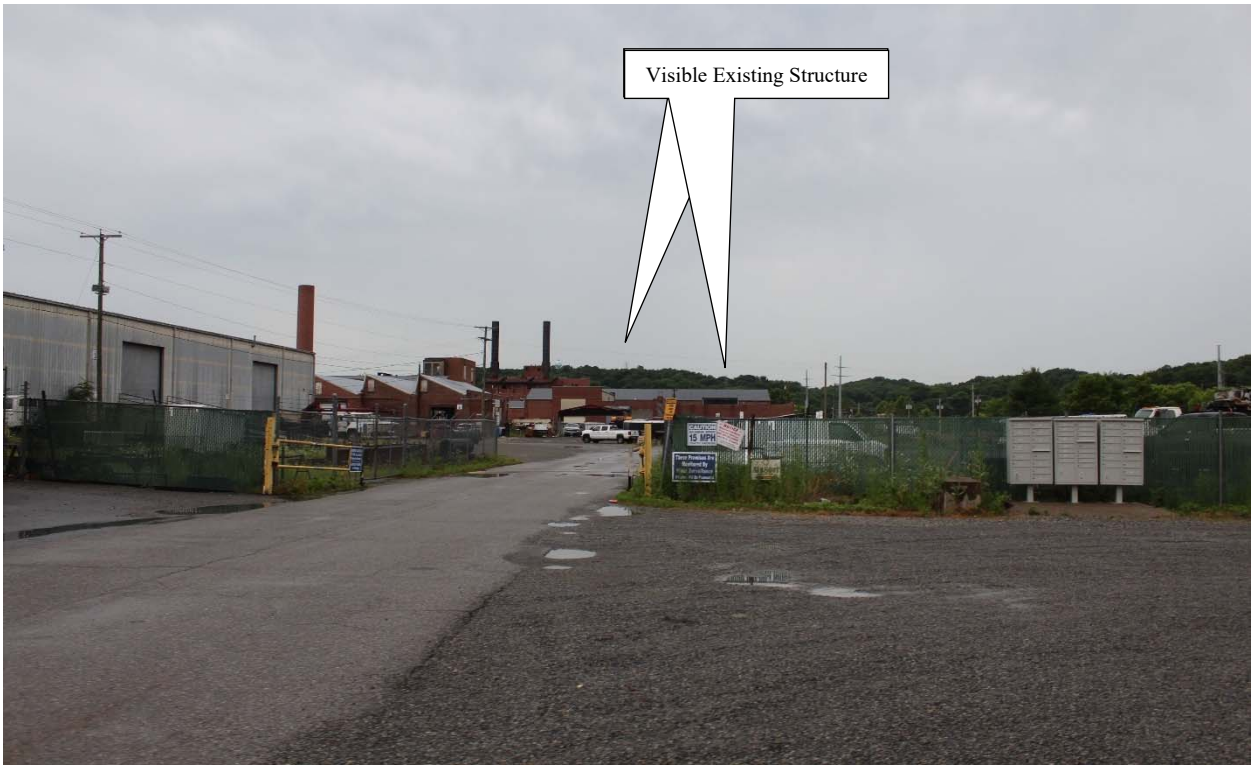

Figure 5-262: Photo location 2- View from American Viscose Company complex within historic district towards the Project (several existing structures visible along ridgeline and behind buildings), facing southeast.

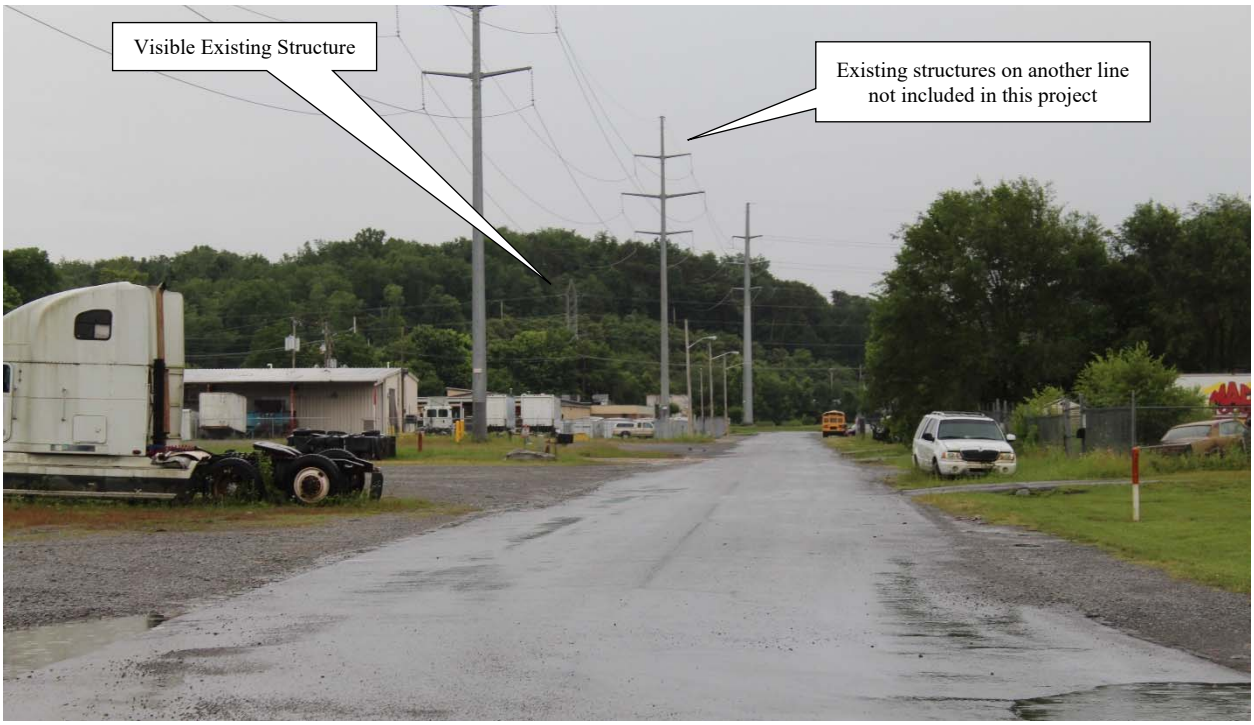

Figure 5-263: Photo location 3- View from American Viscose Company portion of historic district towards the Project (one existing structure visible amongst multiple other structures not included in this project), facing south.

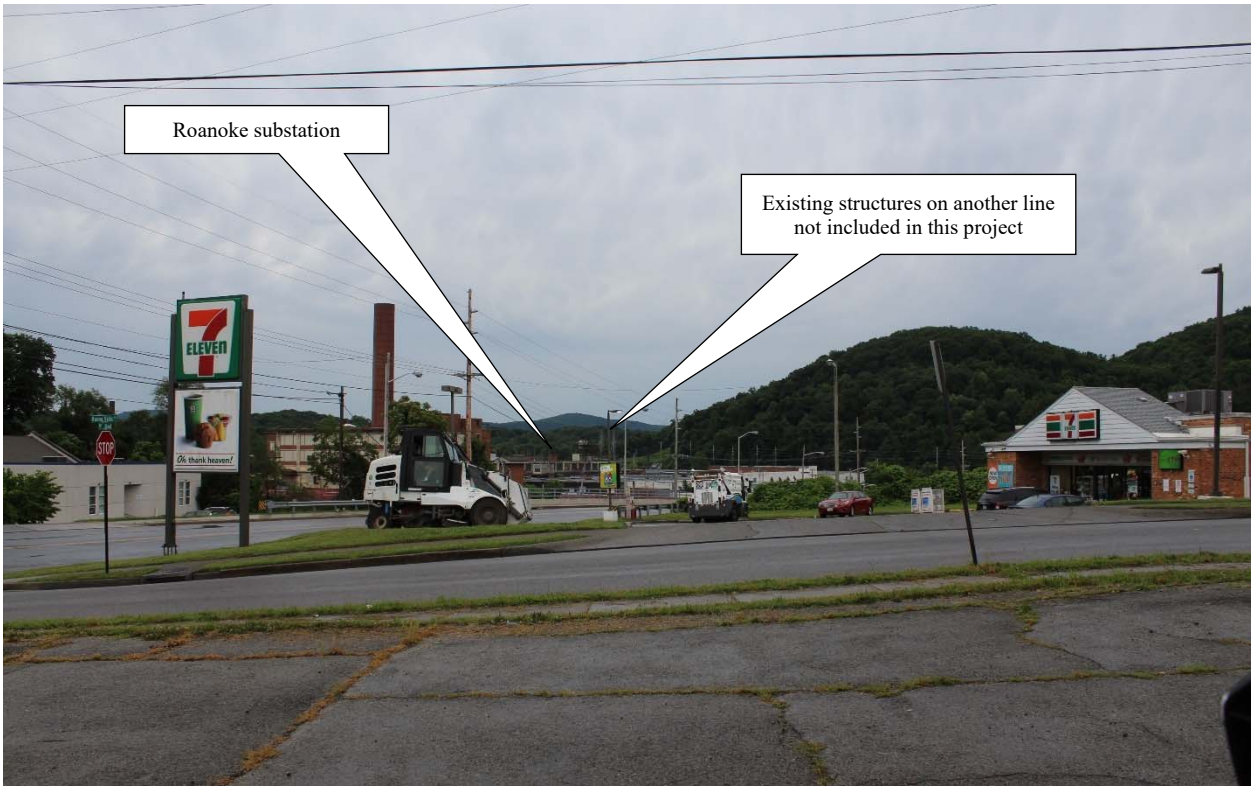

Figure 5-264: Photo location 4- View from edge of residential area along Buena Vista Boulevard towards the Project (Roanoke substation visible in conjunction with other structures not included in this project), facing south.

Figure 5-265: Photo location 5- View from Moorehead Avenua and Morrill Avenue towards the Project (not visible – screened be vegetation and development), facing southeast.

Figure 5-266: Photo location 6- View from 9th Street SE at Penmar Avenue SE towards the Project (not visible – screened below topography), facing southeast.

Figure 5-267: Photo location 7- View from 9th Street SE at Pechin Avenue SE towards the Project (Roanoke substation visible amongst other structures not included in this project. No Project structures visible), facing southeast.

Figure 5-268: Photo location 8- View from Morningside Avenue at Moorehead Avenue SE towards the Project (not visible – screened by development and vegetation), facing southeast.

Figure 5-269: Photo location 9- View from Morgan Avenue along Morningside Park towards the Project (not visible – screened by vegetation and topography), facing southeast.

Figure 5-270: Photo location 10- View from Morgan Avenue along Morningside Park towards the Project (not visible – screened by vegetation and topography), facing south.

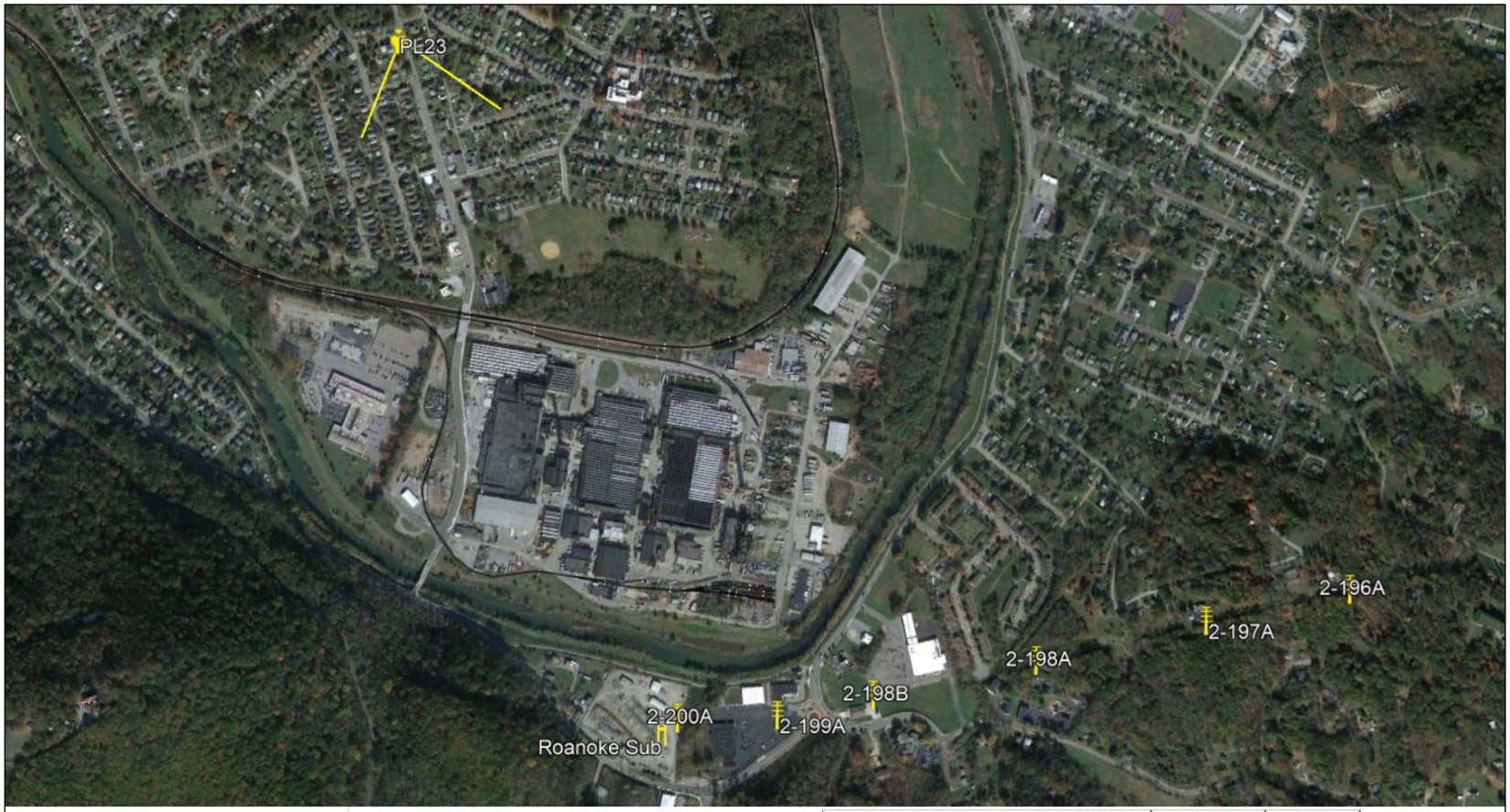

Photo simulations
prepared by:
GTTE LLC
email:
info@gttellc.com
703 447 1350

Location: PL23

Project: Roanoke-Reusens

Structure	Distance (ft)	Height (ft)
2-198A	5313	130.0
2-198B	4826	124.8
2-199A	4616	130.0
2-200A	4368	115.0

Figure 5-271: Southeast Neighborhood Historic District Simulation 1 – Simulation location, direction of view, and structures modeled from 9th Street. Source: GTTE, LLC

Photo simulations prepared by:
GTTE LLC
email:
info@gttellc.com
703 447 1350

Project: Reusens - Roanoke	Location: PL23	Existing View

Photo Simulations and diagrams represent approximate heights for electric transmission structures from the conceptual design used for the proposed project. These illustrations do not necessarily depict exact structure design or location.

This simulation is designed for viewing on a computer monitor. To achieve the correct scale, the image should be increased or decreased in size until the scale above measures 4". When viewed with the eye at 31" from the screen the image will have the same scale as if the viewer were standing at the camera location.

Figure 5-272: Southeast Neighborhood Historic District Simulation 1 – Existing view from 9th Street. Source: GTTE, LLC

Photo simulations prepared by:
GTTE LLC
email:
info@gttellc.com
703 447 1350

Project: Reusens - Roanoke

Location: PL23

Proposed View
(Location of towers not visible are overlaid with yellow tower icon)

Photo Simulations and diagrams represent approximate heights for electric transmission structures from the conceptual design used for the proposed project. These illustrations do not necessarily depict exact structure design or location.

This simulation is designed for viewing on a computer monitor. To achieve the correct scale, the image should be increased or decreased in size until the scale above measures 4". When viewed with the eye at 31" from the screen the image will have the same scale as if the viewer were standing at the camera location.

Figure 5-273: Southeast Neighborhood Historic District Simulation 1 – Proposed view from 9th Street – (Structures not visible shown in yellow). Source: GTTE, LLC

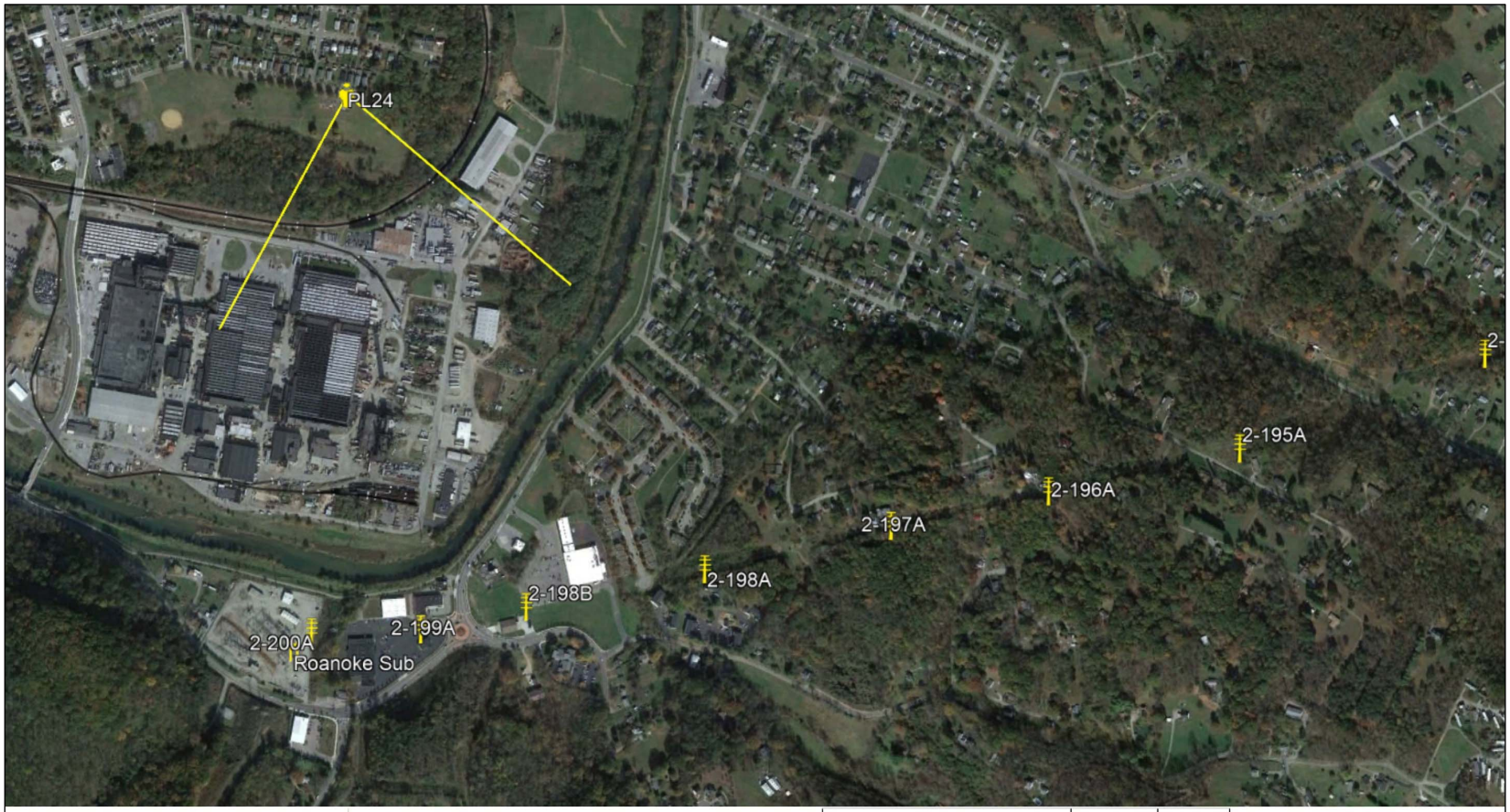

Photo simulations
prepared by:
GTTE LLC
email:
info@gttellc.com
703 447 1350

Location: PL24

Project: Roanoke-Reusens

Structure	Distance (ft)	Height (ft)
2-198A	3240	130.0
2-198B	2952	124.8
2-199A	2931	130.0
2-200A	2924	115.0

Figure 5-274: Southeast Neighborhood Historic District Simulation 2 – Simulation location, direction of view, and structures modeled from Morningside Park. Source: GTTE, LLC

Photo simulations prepared by:
GTTE LLC
email:
info@gttellc.com
703 447 1350

Project: Reusens - Roanoke	Location: PL24	Existing View

Photo Simulations and diagrams represent approximate heights for electric transmission structures from the conceptual design used for the proposed project. These illustrations do not necessarily depict exact structure design or location.

This simulation is designed for viewing on a computer monitor. To achieve the correct scale, the image should be increased or decreased in size until the scale above measures 4". When viewed with the eye at 31" from the screen the image will have the same scale as if the viewer were standing at the camera location.

Figure 5-275: Southeast Neighborhood Historic District Simulation 2 – Existing view from Morningside Park. Source: GTTE, LLC

Photo simulations prepared by: GTTE LLC email: info@gttellc.com 703 447 1350	**Project: Reusens - Roanoke**	**Location: PL24**	**Proposed View** (Location of towers not visible are overlaid with yellow tower icon)
	Photo Simulations and diagrams represent approximate heights for electric transmission structures from the conceptual design used for the proposed project. These illustrations do not necessarily depict exact structure design or location.		This simulation is designed for viewing on a computer monitor. To achieve the correct scale, the image should be increased or decreased in size until the scale above measures 4". When viewed with the eye at 31" from the screen the image will have the same scale as if the viewer were standing at the camera location.

Figure 5-276: Southeast Neighborhood Historic District Simulation 2 – Proposed view from Morningside Park – (Visible structure shown as it would appear. Screened structures shown in yellow). Source: GTTE, LLC

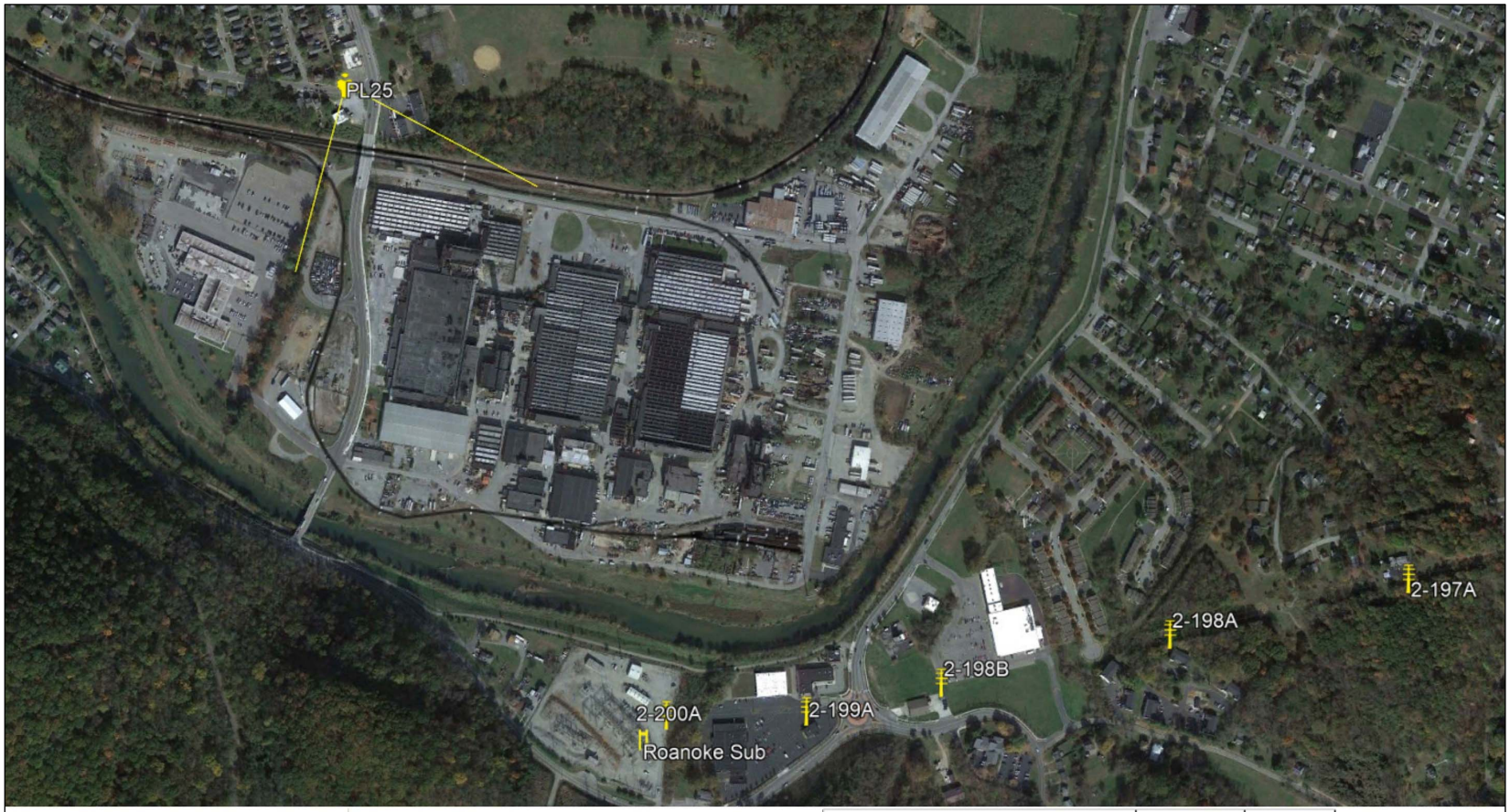

Photo simulations
prepared by:
GTTE LLC
email:
info@gttellc.com
703 447 1350

Location: PL25

Project: Roanoke-Reusens

Structure	Distance (ft)	Height (ft)
2-198A	4229	130.0
2-198B	3597	124.8
2-199A	3311	130.0
2-200A	3007	115.0

Figure 5-277: Southeast Neighborhood Historic District Simulation 3 – Simulation location, direction of view, and structures modeled from Buena Vista Boulevard. Source: GTTE, LLC

Figure 5-278: Southeast Neighborhood Historic District Simulation 3 – Existing view from Buena Vista Boulevard. Source: GTTE, LLC

Photo simulations prepared by: GTTE LLC email: info@gttellc.com 703 447 1350	**Project: Reusens - Roanoke**	**Location: PL25**	**Proposed View** (Location of towers not visible are overlaid with yellow tower icon)
	Photo Simulations and diagrams represent approximate heights for electric transmission structures from the conceptual design used for the proposed project. These illustrations do not necessarily depict exact structure design or location.		This simulation is designed for viewing on a computer monitor. To achieve the correct scale, the image should be increased or decreased in size until the scale above measures 4". When viewed with the eye at 31" from the screen the image will have the same scale as if the viewer were standing at the camera location.

Figure 5-279: Southeast Neighborhood Historic District Simulation 3 – Proposed view from Buena Vista Boulevard – (Visible structures shown as they would appear. Screened structures shown in yellow). Source: GTTE, LLC

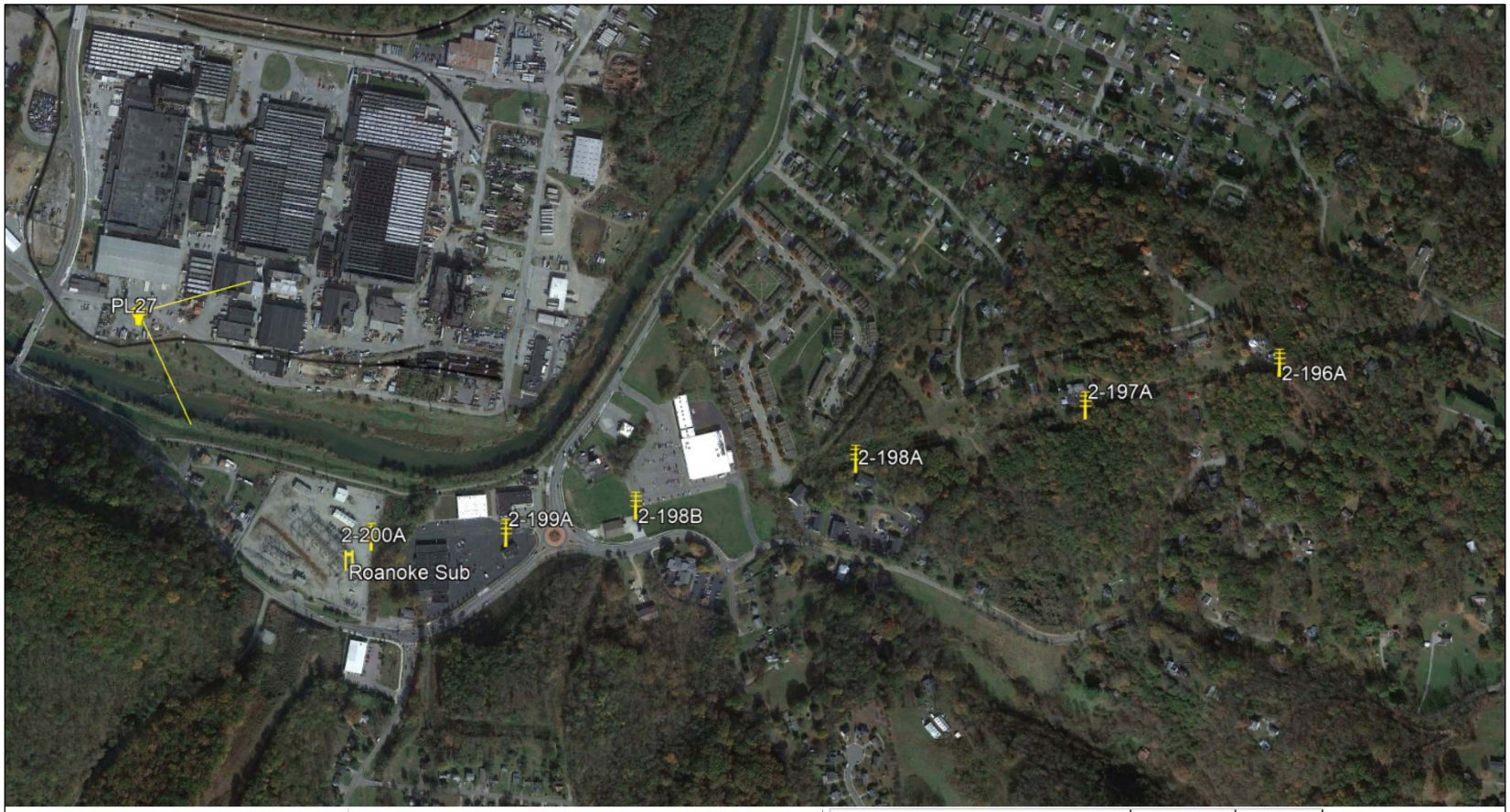

Photo simulations
prepared by:
GTTE LLC
email:
info@gttellc.com
703 447 1350

Location: PL27

Project: Roanoke-Reusens

Structure	Distance (ft)	Height (ft)
2-196A	5081	105.0
2-197A	4233	115.0
2-198A	3255	130.0
2-198B	2370	124.8
2-199A	1902	130.0
2-200A	1432	115.0

Figure 5-280: Southeast Neighborhood Historic District Simulation 4 – Simulation location, direction of view, and structures modeled from American Viscose Plant complex. Source: GTTE, LLC

Figure 5-281: Southeast Neighborhood Historic District Simulation 4 – Existing view from American Viscose Plant complex. Source: GTTE, LLC

Photo simulations prepared by:
GTTE LLC
email:
info@gttellc.com
703 447 1350

Project: Reusens - Roanoke

Location: PL27

Proposed View
(Location of towers not visible are overlaid with yellow tower icon)

Photo Simulations and diagrams represent approximate heights for electric transmission structures from the conceptual design used for the proposed project. These illustrations do not necessarily depict exact structure design or location.

This simulation is designed for viewing on a computer monitor. To achieve the correct scale, the image should be increased or decreased in size until the scale above measures 4". When viewed with the eye at 31" from the screen the image will have the same scale as if the viewer were standing at the camera location.

Figure 5-282: Southeast Neighborhood Historic District Simulation 4 – Proposed view from American Viscose Plant – (Visible structures shown as they would appear. Screened structures shown in yellow). Source: GTTE, LLC

The Virginian Railway / The Norfolk Southern Railway (VDHR # 128-6160)

The Virginian Railway, now known as the Norfolk Southern Railway was constructed between 1907 and 1909 after the Tidewater Railway and the Deepwater Railway Company merged. The line extended from Deepwater, West Virginia to Sewell's Point at Hampton Roads, Virginia. It consists of stone ballast, one set of steel rails, and wood ties. A trestle with concrete piers, abutments, and wingwalls carries the line over an extension of Tayloe Road SE in southeastern Roanoke. The portion running through Roanoke is located in an industrialized part of the city that features an industrial park and modest residences in the Morningside neighborhood above the river. It provided freight service for regional natural resource extractive industries, along with passenger service. The rail merged with the Norfolk & Western Railway in 1959 and continues in active service as part Norfolk Southern's transportation system.

The Norfolk Southern Railway conveys an association with the historic economic development of Virginia's southwestern region and of American capitalism, Additionally, it signifies role of transportation in the twentieth century development of commerce and extractive industries in the region. As such, it is recommended eligible for listing in the NRHP under Criterion A at the state and local levels.

In order to assess the potential impact of the Project, visual inspection was conducted of the setting around the resource property with emphasis on views towards the Project. The Virginia Railway is located across the Roanoke River from the Project alignment, approximately 0.41 mile from the Roanoke substation which is the southern terminus of the Project alignment. The alignment generally extends in an easterly direction away from the substation and the railroad corridor. The substation is set on a small terrace on the south side of the Roanoke River while the railroad corridor generally extends along the upper edge of the floodplain on the north side of the river. The landscape between the railroad and the Project is generally flat and densely developed with a large industrial complex and associated infrastructure.

A site visit to the property found that the historic setting of the property remains largely intact as it maintains its historic alignment through a densely developed industrial area. Due to the densely developed nature of the area between the railroad and the river, and the sloped landscape on the opposite side, views of and towards the railroad are generally short and limited to the immediate vicinity, although a long stretch of it may also be seen from 9th Avenue SE which crosses the corridor on an elevated bridge. Views outward from the railroad are also short and limited to the adjacent development, although the hills and mountains beyond may be seen above the buildings and infrastructure.

Inspection from accessible vantages along or near the railroad corridor revealed that the existing transmission line and structures are generally screened by intervening development within the industrial complex between it and the Project alignment. Visibility of existing structures is limited to a short stretch at the edge of the industrial complex where several existing structures may be seen through a gap in the buildings. However, the structures are seen amongst and behind a number of structures on other transmission lines that extends in and out of the Roanoke

substation that are not included in this Project. At this point, the Virginia Railway corridor bends to the north, away from the Project, and there are no publicly accessible vantages points in the vicinity.

The existing transmission line structures in the vicinity of the railway corridor are steel lattice and range from approximately 100- to 113-feet tall and the proposed replacement structures will be steel monopoles that range from approximately 115-feet to 130-feet tall. As such, there will be an increase in structure height, and structures will generally be replaced on a one-to-one basis near existing structures. As such, it is anticipated that visibility of the Project structures will remain similar to current conditions, although the structures that are already visible may rise higher above the buildings. However, as the case currently, they will continue to be seen in conjunction with and amongst multiple structures on other transmission lines, as well as a wide variety of other industrial features and infrastructure. This was confirmed with photo simulation from the corridor near Industry Avenue that shows several structures already visible will rise higher above the distant treeline and rooftops, while other structures currently screened will remain so. As such, the Project may result in increased visibility of the transmission structures, however, this will not result in a compromise to the setting or viewshed of or from the railroad that is industrial in nature and already includes a wide variety of nonhistoric infrastructure. It is therefore D+A's opinion that the Project will have no more than a ***minimal impact*** on the Virginia Railway per VDHR's impact characterization.

Figure 5-283 depicts the location of the Virginia Railway in relation to the Project and viewshed buffers, with the location and direction of all representative photographs. **Figures 5-284 through 5-287** are representative photographs of the property, as well as those taken from locations within and near the property towards the Project. **Figures 5-288 through 5-290** provide photo simulations of the Project from the property.

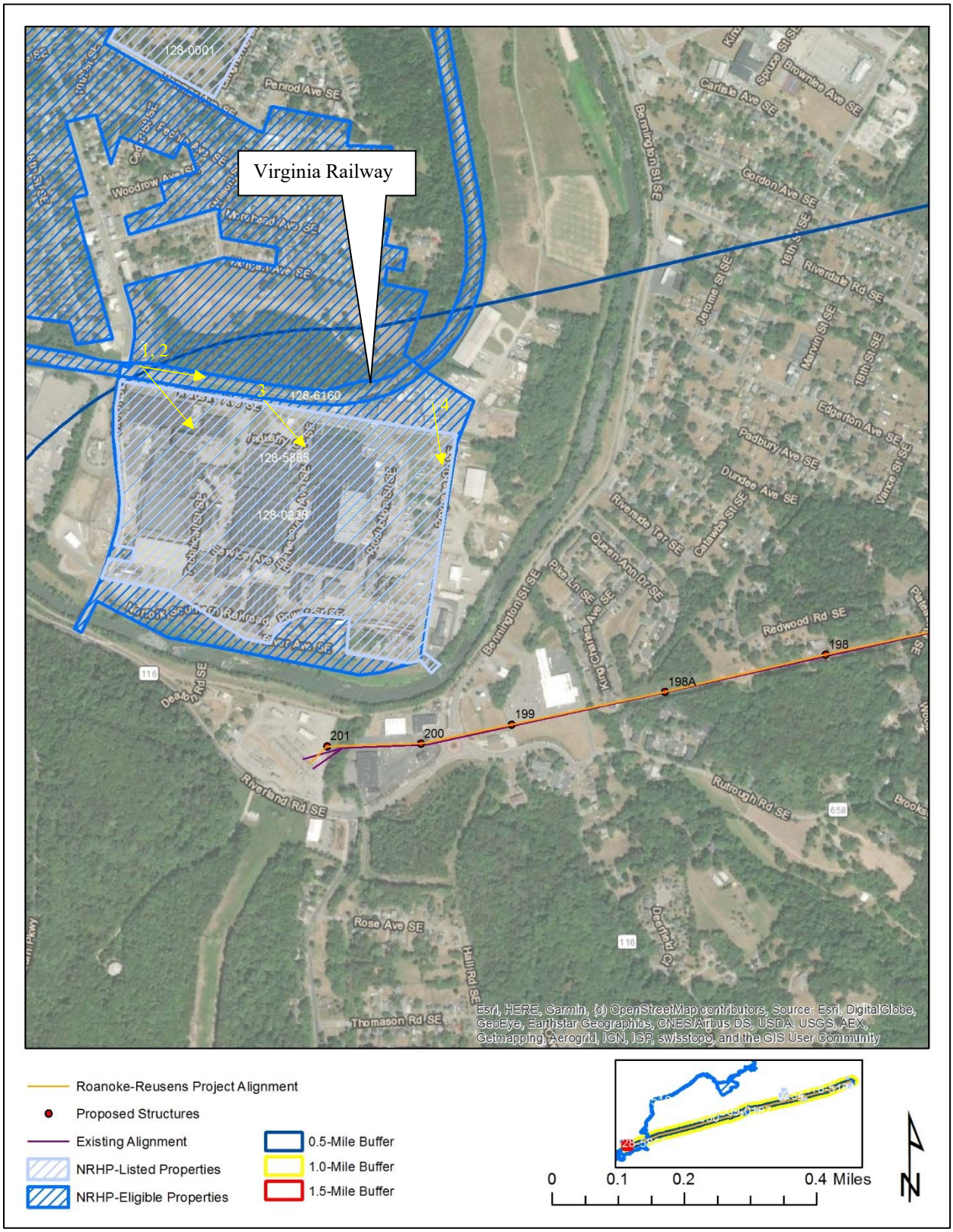

Figure 5-283: Location of the Virginia Railway in relation to the project area (Representative photographs and views towards the Project depicted in yellow, Photo Sims depicted in green).

Figure 5-284: Photo location 1- Representative view of the Virginia Railway at 9th Street, facing east.

Figure 5-285: Photo location 2- View from Virginia Railway corridor at 9th Street SE towards the Project (not visible – screened by development), facing southeast.

Figure 5-286: Photo location 3- View from Virginia Railway corridor along Industry Avenue towards the Project (not visible – screened by development), facing southeast.

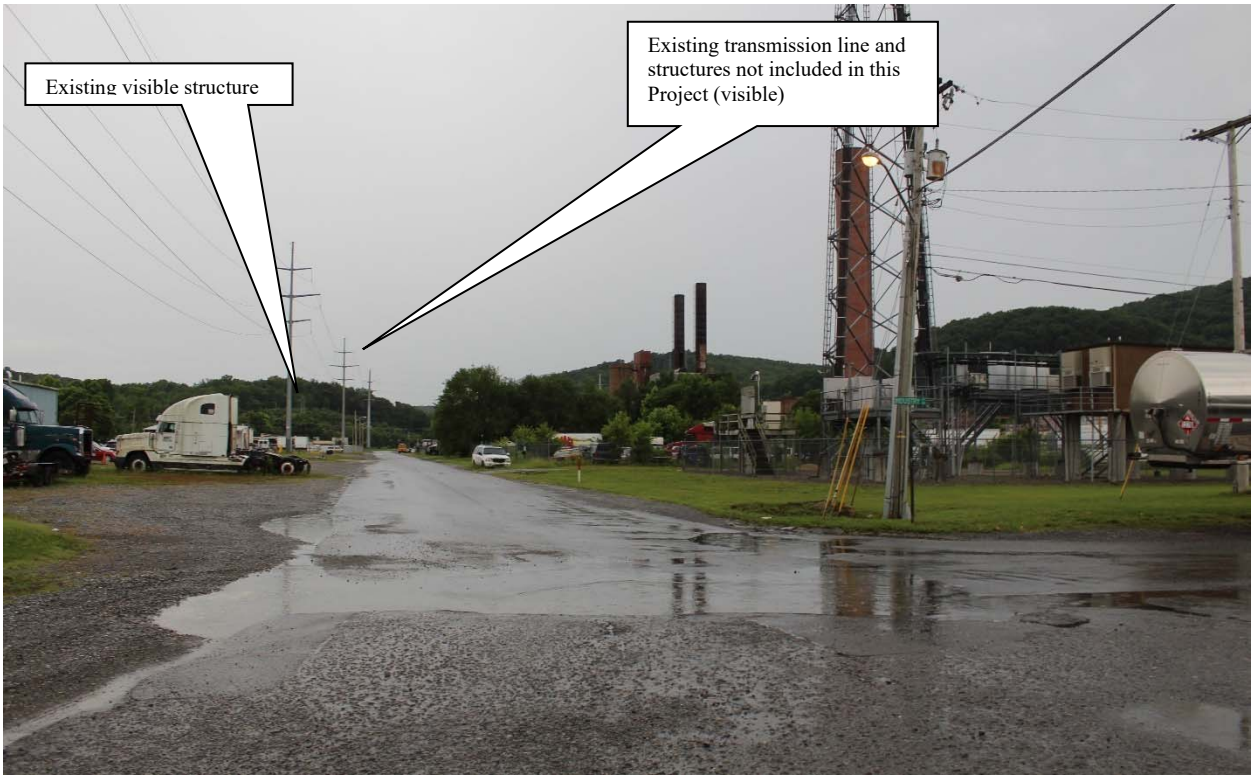

Figure 5-287: Photo location 4- View from Virginia Railway corridor at Progress Drive towards the Project (one existing structure visible amongst multiple structures on another line not included in this project), facing south.

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Photo simulations
prepared by:
GTTE LLC
email:
info@gttellc.com
703 447 1350

Location: PL26

Project: Roanoke-Reusens

Structure	Distance (ft)	Height (ft)
2-197A	3359	115.0
2-198A	2642	130.0
2-198B	2203	124.8
2-199A	2130	130.0
2-200A	2114	115.0

Figure 5-288: Virginia Railroad Simulation 1 – Simulation location, direction of view, and structures modeled from along Industry Avenue. Source: GTTE, LLC

Photo simulations prepared by: GTTE LLC email: info@gttellc.com 703 447 1350	**Project: Reusens - Roanoke**	**Location: PL26**	**Existing View**
	Photo Simulations and diagrams represent approximate heights for electric transmission structures from the conceptual design used for the proposed project. These illustrations do not necessarily depict exact structure design or location.		This simulation is designed for viewing on a computer monitor. To achieve the correct scale, the image should be increased or decreased in size until the scale above measures 4". When viewed with the eye at 31" from the screen the image will have the same scale as if the viewer were standing at the camera location.

Figure 5-289: Virginia Railroad Simulation 1 – Existing view from along Industry Avenue. Source: GTTE, LLC

Photo simulations prepared by:
GTTE LLC
email:
info@gttellc.com
703 447 1350

Project: Reusens - Roanoke

Location: PL26

Proposed View
(Location of towers not visible are overlaid with yellow tower icon)

Photo Simulations and diagrams represent approximate heights for electric transmission structures from the conceptual design used for the proposed project. These illustrations do not necessarily depict exact structure design or location.

This simulation is designed for viewing on a computer monitor. To achieve the correct scale, the image should be increased or decreased in size until the scale above measures 4". When viewed with the eye at 31" from the screen the image will have the same scale as if the viewer were standing at the camera location.

Figure 5-290: Virginian Railroad Simulation 1 – Proposed view from along Industry Avenue – (Visible structures shown as they would appear. Screened structures shown in yellow). Source: GTTE, LLC

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6. SUMMARY OF POTENTIAL IMPACTS

As part of this pre-application analysis of cultural resources for the approximately 43-mile Reusens to Roanoke 138 kV transmission line to be rebuilt, potential impacts to previously recorded historic properties that meet criteria for consideration within the VDHR-defined buffered tiers were assessed in accordance with the VDHR guidelines. For the purposes of this analysis, an impact is one that alters, either directly or indirectly, those qualities or characteristics that qualify a particular property for listing in the NRHP and does so in a manner that diminishes the integrity of a property's materials, workmanship, design, location, setting, feeling, and/or association. With respect to transmission lines, direct impacts typically are associated with ground disturbance resulting from ROW clearing and structure construction. Indirect impacts typically are associated with the introduction of new visual elements or changes to the physical features of a property's setting or viewshed. According to VDHR guidance, impacts are characterized as such:

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

With regards to architectural resources, a total of twenty-four (24) historic properties that are either designated an NHL, listed in, or determined eligible for listing in the NRHP are located within the defined study tiers. This includes no (0) properties designated an NHL located within 1.5 miles of the Project or closer, thirteen (13) properties listed in the NRHP and no battlefields located within 1.0 mile of the Project or closer, and eleven (11) properties that have been determined eligible for listing in the NRHP within 0.5 mile of the Project or closer. One additional property, a cemetery, has not been previously recorded but was brought to attention by a local property owner and is adjacent to the Project ROW.

Field inspection reveals that the existing transmission line to be rebuilt as part of this Project extends through a diverse landscape of urban, suburban and rural development, broad and open farmland, and rolling and wooded hills. As such, visibility of and towards the Project also ranges from highly visible across open landscapes, to partially visible above treelines and through breaks in development, to completely screened by intervening conditions. Because the Project involves the rebuild of the line with taller structures, there is the potential for

increased visibility from some resources and vantages where the existing line and structures are already visible, as well as the potential for new visibility of structures from some vantages where the existing line is currently screened, however, these situations are less common and limited to discrete locations. ***Therefore, it is D+A's opinion that there is the potential for as much as moderate impact to four historic properties according to VDHR's impact characterization, however, the impact to most resources will be no more than minimal.***

Table 6-1 below provides a list of all considered architectural resources within the defined study-tiers around the Project along with a summary of their proximity to the alignment and recommended level of impact.

Table 6-1: Potential Impacts Summary for Architectural Resources.

VDHR ID #	Resource Name	NRHP Status	Distance to Project	Impact
009-0006	Elk Hill	NRHP-Listed/ Preservation Easement	Directly Crossed	Minimal
009-0024	Otterburn	NRHP-Listed	0.44 mile	Minimal
009-0031	Three Otters, 1485 Three Otters Rd	NRHP-Listed	0.19 mile	Moderate
009-0056	Old Rectory/Rectory for St. Stephen's Episcopal Church	NRHP-Listed	0.53 mile	Moderate
009-0187	Redlands Farm	NRHP-Eligible/ Preservation Easement	Directly Crossed	Moderate
009-0254	Cifax Rural Historic District	NRHP-Listed	0.24 mile	Minimal
009-5030	Early-Wheat Farm	NRHP-Eligible	0.04 mile	Minimal
009-5234	Hopkins House	NRHP-Eligible	0.49 mile	Moderate
009-5283	Bowling Eldridge House, Ridgecrest	NRHP-Listed	0.84 mile	No Impact
009-5352	Wright Farm	NRHP-Eligible	0.16 mile	Minimal
009-5362	Hurt Barn	NRHP-Eligible	0.44 mile	Minimal
080-5161	Blue Ridge Parkway Historic District	NRHP-Eligible	Directly Crossed	Minimal
118-0218	Reusens Dam/Reusens Hydroelectric Power Plant	NRHP-Eligible	0.13 mile	Minimal

VDHR ID #	Resource Name	NRHP Status	Distance to Project	Impact
118-0219	Locust Grove/Locust Hill	NRHP-Listed	Directly Crossed	Minimal
118-0224	Virginia Episcopal School, Virginia Episcopal School Historic District	NRHP-Listed	0.45 mile	Minimal
118-5184	Cobbs-Metcalfe-Overstreet House	NRHP-Eligible	Directly Crossed	Minimal
118-5240	Caskie Cottage/Presbyterian Orphans Home	NRHP-Listed	0.34 mile	No Impact
118-5546	CSX Railroad	NRHP-Eligible	0.13 mile	Minimal
128-0001	Buena Vista/ George Plater Tayloe House/Roanoke	NRHP-Listed	0.79 mile	No Impact
128-0238	American Viscose Company, American Viscose Plant Historic District	NRHP-Listed	0.1 mile	Minimal
128-0352	Mill Mountain Star/The Roanoke Star	NRHP-Listed	0.65 mile	No Impact
128-5476	Riverland Historic District	NRHP-Listed	0.57 mile	No Impact
128-5865	Southeast Neighborhood Historic District	NRHP-Eligible	0.08 mile	Minimal
128-6160	Norfolk Southern/The Virginian Railway	NRHP-Eligible	0.41 mile	Minimal

With regards to archaeology, there are two previously recorded sites within or immediately adjacent to the Project ROW. These two sites are both prehistoric occupation sites, one of which has been determined eligible for listing in the NRHP by the VDHR and one that has not been formally evaluated. One additional site, the Mountain View Church Cemetery, has not been previously recorded or investigated, but was brought to attention by a local property owner and is located within or adjacent to the Project ROW. No archaeological investigations were conducted as part of this effort so potential impacts to these sites remains unknown. Portions of the Project ROW have been subject to previous Phase I survey although not the entire alignment. ***As such, it is D+A's opinion that portions of the Project ROW that have not been subject to previous survey should be investigated as additional project engineering and details become available, and sites and cemeteries located within the ROW should be assessed for impacts.***

Table 6-2: Summary of potential impacts summary for archaeological resources.

VDHR#	NRHP Status	Proximity to Project Area	Impacts
44RN0005 (Prehistoric Camp)	Not Evaluated	Directly Crossed	TBD
44RN0220 (Prehistoric Camp)	VDHR: Eligible	Directly Crossed	TBD
Not Assigned (Mountain View Church Cemetery)	Not Evaluated	Adjacent to ROW	TBD

7. REFERENCES

National Park Service
2009 "Civil War Sites Advisory Commission Report Update and Resurvey," American Battlefield Protection Program

Virginia Department of Historic Resources
2008 *Guidelines for Assessing Impacts of Proposed Electric Transmission Lines and Associated Facilities on Historic Resources in the Commonwealth of Virginia*

Virginia Department of Historic Resources
2021 Virginia Cultural Resource Information System (VCRIS) database and GIS server.

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