T.J. BOYLE ASSOCIATES
LANDSCAPE ARCHITECTURE & PLANNING

MEMORANDUM

To: John Fiske, Green Mountain Power

From: Jeremy B. Owens

Date: August 17, 2026

Re: GMP Taftsville Substation Rebuild Project – Aesthetic Analysis

I. Project Description

Green Mountain Power ("GMP") is seeking approval under 30 V.S.A. § 248 from the Vermont Public Utility Commission ("Commission") for a Certificate of Public Good to relocate and rebuild GMP's Taftsville Substation and related facilities in the Towns of Woodstock, Hartford, and Hartland, Vermont (the "Project"). The Project consists of removing the existing Taftsville Substation from its current location at 2693 East Woodstock Road, in Woodstock, and rebuilding it at a new location, approximately 0.6 miles to the east in Hartland, Vermont, where a temporary substation currently exists. As described below, the substation relocation requires transmission line modifications, including limited line work in Hartford, Vermont. The Project will increase the reliability of service and improve substation safety and operability for the towns of Woodstock, Hartland, and Quechee.

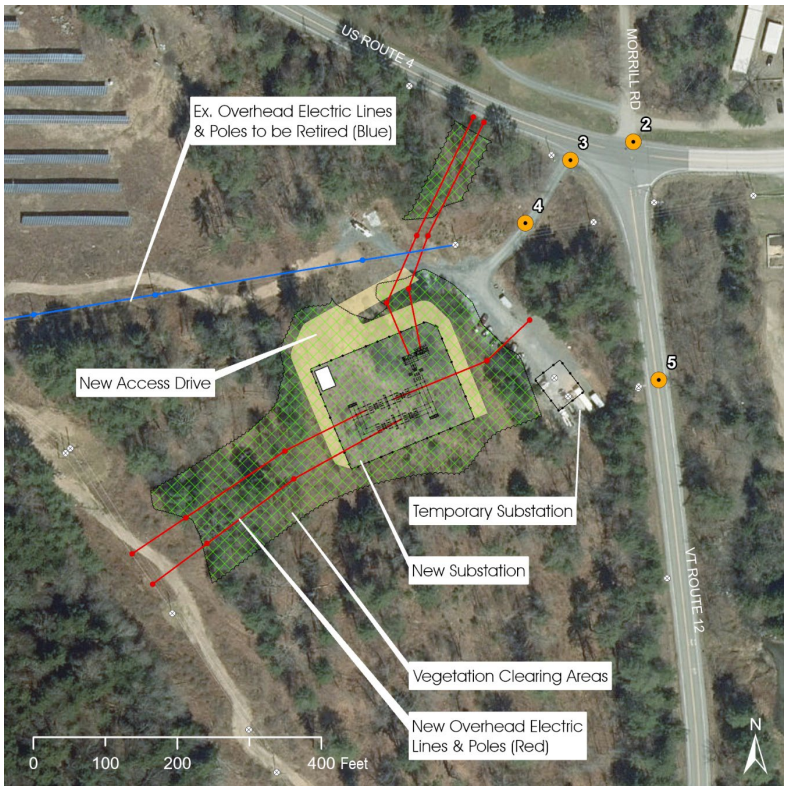


Figure 1: Aerial photo of the new substation site and surrounding area.

The Project involves installing new substation equipment, including a new fence, oil containment system, security, lights, animal fence, surface material, and ground grid near the southeast quadrant of the intersection of US Route 4 and VT Route 12 (see Figure 1). The new equipment includes, but is not limited to, the installation of four new 46 kV transmission line breakers, a new transformer, two new distribution breakers, six new circuit regulators, remote terminal unit, switches, a battery bank for protection and control, a new control building, and other standard equipment necessary for modern substation construction.

The maximum height of the new substation equipment will be approximately 31.5' tall, with an additional 16' lightning rod above. The fenced substation yard will be approximately 27,678 square feet. Additionally,

a permanent access drive is proposed along the northern fence line of the relocated substation, which extends from an existing nearby gravel drive that leads northeast to the intersection of US Route 4 and Vermont Route 12. The construction of the relocated substation and associated access drive will require removal and/or trimming of existing vegetation around the substation, as well as removal of vegetation for two uphill transmission lines that will connect the substation to the existing TL105 transmission corridor, which is uphill approximately 325' southwest of the new substation location. Northeast of the new substation, new tree clearing will also be needed to connect the substation to the distribution circuit along the south side of Route 4. Additionally, a portion of the TL108 transmission line and associated poles just north and northwest of the new substation will be retired.

The existing substation in Taftsville includes three separate galvanized steel structures that will be retired from service and removed. The existing H-Frame structure on the south side of the river (TL107 P1) will be replaced with a new H-Frame structure that is approximately 10' taller than the existing structure. The existing single-pole structure on the north side of the river in Hartford (TL107 P2) will be replaced with a new pole of identical height, and new motorized equipment will be installed on the next structure north (TL107 P3). The existing hydro generation facility interconnection at the existing Taftsville Substation site will be transferred to a distribution feeder, and several spans of transmission conductor will be removed. An existing 45' pole will be replaced with a 50' pole and converted to a riser structure. A pad-mounted Generator Step Up ("GSU") transformer, no more than 4' in height, will be installed south and southwest of the dam, just downhill from a portion of existing retaining wall that will remain between the dam and Route 4. Several other existing poles near the dam will be removed or remain to facilitate appropriate electrical connections with the nearby existing transmission and distribution lines.

See Prefiled Testimony of John Fiske and Exhibits GMP JRF-3 through GMP JRF-10 for more detailed Project information, including proposed new and removed poles and substation elements. An aerial view of the proposed new substation location and surrounding area is depicted in Figure 1.

II. Methodology – Quechee Test

Section 248(b)(5) of Title 30, Vermont Statutes Annotated requires the Commission to make a finding that a proposed electrical transmission Project will not have an undue adverse effect on aesthetics, as outlined in the so-called "Quechee Lakes Decision."[1] As explained in the Commission's order in Docket No. 6860, the Commission applies the Quechee Test in Section 248 proceedings, as follows:

> The Public Utility Commission has adopted the Environmental Board's Quechee analysis for guidance in assessing the aesthetic impacts of proposed projects under Section 248. We have previously explained the components of the Quechee analysis as follows:
>
> > In order to reach a determination as to whether the project will have an undue adverse effect on the aesthetics of the area, the Board employs the two-part test first outlined by the Vermont Environmental Board in Quechee, and further defined in numerous other decisions.
> >
> > Pursuant to this procedure, first a determination must be made as to whether a project will have an adverse impact on aesthetics and the scenic and natural beauty. In order to find that it will have an adverse impact, a project must be out of character with its surroundings. Specific factors used in making this evaluation

[1] Quechee Lakes Corporation, Applications #3W0411-EB and #3W0439-EB at pgs. 18-20

> include the nature of the project's surroundings, the compatibility of the project's design with those surroundings, the suitability of the project's colors and materials with the immediate environment, the visibility of the project, and the impact of the project on open space.
>
> The next step in the two-part test, once a conclusion as to the adverse effect of the project has been reached, is to determine whether the adverse effect of the project is "undue." The adverse effect is considered undue when a positive finding is reached regarding any one of the following factors:
>
> 1. Does the project violate a clear, written community standard intended to preserve the aesthetics or scenic beauty of the area?
>
> 2. Have the applicants failed to take generally available mitigating steps which a reasonable person will take to improve the harmony of the project with its surroundings?
>
> 3. Does the project offend the sensibilities of the average person? Is it offensive or shocking because it is out of character with its surroundings or significantly diminishes the scenic qualities of the area?
>
> Our analysis, however, does not end with the results of the Quechee test. Instead, our assessment of whether a particular project will have an "undue" adverse effect on aesthetics and scenic or natural beauty is "significantly informed by overall societal benefits of the project."[2]

T.J. Boyle Associates interprets the first prong of the Quechee test to first require an assessment of the project's visibility. Visibility establishes the underlying method for which all visual aesthetics are evaluated to comply with the purpose of the Quechee Test. For instance, a project's design, materials and colors may be completely out of character with its surroundings, but if such project is not visible to the general public (or "average person"), then there will be no adverse visual effect. Likewise, when a project is determined to be out of character with its surroundings, one solution that the Quechee Test offers to mitigate this is to visually obscure the project with landscape mitigation or other screening, which itself is a simple reduction or occlusion of project visibility. In this way, TJB interprets the first prong of the Quechee Test to be asking, "What is the project's visibility, and is that visibility out of character with its surroundings?" In our experience, if the Quechee Test were not interpreted in this way then a given project could be considered adverse even if it was completely invisible from surrounding areas, which would be an unreasonable interpretation and inconsistent with the purpose of the test.

Our study area for potential adverse aesthetic effects typically extends approximately two miles from a project location. This distance tells us whether a given project is, or is not, visible from prominent or protected locations in the study area, or, perhaps more importantly, if a project itself is in a prominent or highly visible location.

In conducting the Quechee Analysis and preparing this report, three distinct methods have been used: (1) background data collection, (2) GIS viewshed analysis mapping, and (3) field investigation. The GIS viewshed mapping and field investigation are used to identify areas with potential visibility of the Project.

[2] Petitions of Vermont Electric Power Company, Inc. (VELCO), Vermont Transco, Docket No. 6860, Vt. Pub. Serv. Bd. (Jan. 28, 2005) at 79-81.

The background data and field investigation are used to characterize the study area. All three methods are used to evaluate whether there are in fact 'adverse' impacts and, if so, whether those impacts could be considered 'undue.'

III. Quechee Test Part I – Evaluation of Potential Adverse Impacts

As noted above, GIS aerial and viewshed mapping was utilized as a preliminary evaluation method, the results of which are attached as Appendix A, Maps 1 through 3. During the field review of the proposed Project, it was observed that the potential visibility indicated on the Vegetated Viewshed Map is generally accurate, and visibility is concentrated in the immediate area near the Project site. Visibility from the vast majority of the study area was determined to be either highly limited or not possible due to intervening vegetation, buildings and/or landform that surrounds the site and exists along roadways in the area.

US Route 4 (Woodstock Road)

The adjacent portion of US Route 4 is a paved United States highway that connects White River Junction to the east with Woodstock and Rutland to the west. US Route 4 also comprises the Crossroad of Vermont Byway, extending for 50 miles along its length from White River Junction to Rutland, Vermont.[3] In the area around the Project, Route 4 runs in a roughly east-west orientation as it proceeds around a bend in the Ottauquechee River. This nearby area of Route 4 is characterized by wooded roadsides, sporadic fields, scattered commercial development, low-density residential structures, and electrical distribution infrastructure alongside the road. The intersection of Route 4 and Vermont Route 12 is located approximately 300' northeast of the Project. The landform visible in the area around the Project includes two hills on either side of Route 12, both of which are somewhat visible from Route 4 as travelers proceed around the bend. The existing views along the nearby area of Route 4 includes some visibility of the existing electrical distribution and transmission poles and associated conductors, most of which are directly along the roadsides. The existing TL108 transmission line passes the north side of the relocated substation (visible from the existing gravel access drive, see Viewpoint 3).

When approaching the proposed Project from the east on Route 4, large existing white pines and other deciduous trees screen most of the Project, including the new substation site and connection to the TL105 transmission line, until travelers are at the intersection with Vermont Route 12 and Morrill Road (see Appendix B, Viewpoint 1). At the closest location, the relocated substation yard will be located approximately 296' southeast of Route 4, and the fenced substation yard is situated approximately 38' higher than this portion of the roadway (see Appendix B – Photographic Inventory, Viewpoints 2 through 4). Existing clearing for the TL108 transmission line and an existing gravel access road that leads southwest from the intersection will allow for potential visibility of the relocated substation. Brief visibility uphill through this corridor will be possible to the southwest for a total distance of approximately 120'. Project elements such as the top of some proposed substation equipment, proposed control building, new distribution poles, and proposed TL105 transmission line structures uphill to the southwest of the substation may be visible from this intersection, though only for westbound travelers. Slightly further west of the intersection, new clearing for the distribution line connection to the substation will also potentially allow for brief visibility of substation components, though any visibility from this limited area will be at approximately 90° from the direction of travel and partially screened by the intervening landform that rises sharply to the southwest. Additionally, some limited visibility may be possible 1,800 northeast of the substation near the intersection with Wood Road, though any visibility from this location will be brief and only visible for westbound travelers. At a speed limit of 45 miles per hour, a limited portion of the relocated

[3] https://nsbfoundation.com/sb/crossroad-of-vermont-byway/ and https://vermontvacation.com/things-to-do/trip-ideas-itineraries/scenic-drives/vermont-byways/

substation will potentially be visible for approximately 3 seconds or less when traveling westbound along Route 4.

When headed eastbound on Route 4, intervening vegetation and buildings will highly screen the relocated substation as travelers approach from the west. Due to intervening vegetation along the south side of Route 4, views of the proposed Project are expected to be less noticeable for eastbound travelers, and will mostly consist of the proposed changes to the roadside distribution structures. Some limited visibility of the proposed substation relocation may be possible through the area immediately north of the substation, though any visibility will be brief and at approximately 90° from the direction of travel. At a speed of 45 miles per hour, a total of approximately 1 seconds of potential visibility of the Project will be possible when heading eastbound along Route 4.

Vermont Route 12

Vermont Route 12 is a paved state highway that connects Hartland to the southeast with US Route 4 near the relocated substation, at which point Route 12 turns west and follows US Route 4 to Woodstock before heading northwest to Randolph and eventually Morrisville. At its closest location, Route 12 passes approximately 245' east of the relocated substation through an area where the road is approximately 40' lower than the proposed substation elevation. This nearby area of Route 12 is characterized by scattered low-density residential properties, steep forested roadsides, and an existing roadside distribution circuit (see Viewpoint 5). As can be seen at Viewpoint 5, prior clearing required for connecting the roadside distribution to the nearby temporary substation reveals the steep terrain along the west side of Route 12.

For both northbound and southbound travelers on Route 12, the proposed relocated substation will be well screened from view due to the intervening terrain, which obstructs visibility to areas further west, including any visibility of the temporary substation. Due to the intervening terrain, and as confirmed by the terrain viewshed (see Appendix A, Map 2), no visibility of the proposed substation equipment is expected from Route 12.

Morrill Road

Morrill Road is a partially paved town road that extends north and then west from the intersection of Routes 4 and 12 for a total distance of approximately 850'. Morrill Road provides access to three residential properties, as well as secondary access to a nearby commercial property. The southern end of Morrill Road is characterized by the presence of the Route 4/Route 12 intersection, nearby roadside distribution infrastructure, and the nearby TL108 transmission line. However, most of Morrill Road is characterized by forested roadside and low-density residential uses. At the closest location, the relocated substation will be approximately 375' from the southern terminus of Morrill Road. This is also the highest point along Morrill Road, which is approximately 40' lower than the proposed substation elevation.

For southbound travelers on Morrill Road, the proposed Project will be partially screened as travelers approach and stop at the busy intersection (see Viewpoint 2). Similar to nearby visibility from the intersection, the existing clearing for the TL108 transmission line and an existing gravel access road that leads southwest from the intersection will allow for potential visibility of the relocated substation. Project elements such as the top of some proposed substation equipment, proposed control building, new distribution poles, and proposed transmission line upgrades southwest of the substation may be visible from the southern end of Morrill Road. View duration at this location would be variable, but may be extended due the requirement to slow and then stop at the intersection.

When heading northbound on Morrill Road, the relocated substation is behind the direction of travel and out of view.

Taftsville Area and Hartford

In addition to the potential relocated substation visibility described above, substantial existing substation equipment that is currently highly visible from Route 4, Covered Bridge Road, the areas adjacent to the Taftsville Covered Bridge, and the Taftsville Village area will be removed, and minimal to no visibility of the proposed GSU transformer will be likely from Route 4 (see Viewpoints 6 through 12). This area is also part of the VTXL trail,[4] which extends approximately 300 miles through Vermont, from Canada to Massachusetts. Though some existing transmission and distribution poles will remain in the Taftsville area, there will be a noticeable reduction of electric infrastructure visible from this area of Route 4 and near the Taftsville Covered Bridge. For more information on the planned equipment removal from Taftsville, see the prefiled testimony of John Fiske.

Changes around the existing Taftsville Substation will also include two new transmission pole structures at the Ottauquechee River crossing. The existing H-Frame structure on the south side of the river (TL107 P1, see Viewpoint 7) will be replaced with a new H-Frame structure that is approximately 10' taller than the existing structure. The existing single-pole structure on the north side of the river in Hartford (TL107 P2, see Viewpoint 12) will be replaced with a new pole of identical height, and some additional equipment will be installed on the next structure north (TL107 P3). These river crossing structures are currently visible from limited portions of Route 4 and Sugar Hill Road on the south side of the river, and from limited portions of River Road and Upper River Road on the north side of the river. Due to the limited increase in overall heights, potential visibility of these crossing structures will remain similar to the existing conditions along these roadways. For further description of the river crossing structures and other proposed changes around the existing Taftsville Substation, please see the prefiled testimony of John Fiske.

Other Surrounding Areas and Distant Views

During the desktop and field review of the proposed Project, it was observed that, due to intervening topography and/or vegetation, surrounding roadways other than those reviewed above will not have significant visibility of the proposed relocated substation, proposed substation removal, or proposed transmission/distribution structure changes.

Private Residences

Based on a review of the proposed relocated substation viewshed (see Appendix A, Map 3), no residences in the immediate substation area are expected to have visibility of the Project due to intervening vegetation and landform. Some potential visibility may be possible for residential properties located approximately 2,945' northeast of the relocated substation. While there may be some visibility of the relocated substation components from this area, these are expected to be at least partially screened by the large intervening white pines and other mature trees that are located northeast of the relocated substation. Visibility of the proposed TL105 transmission lines that ascend the hill to the southwest may also be possible from these residences, though the large existing pines northeast of the substation will provide at least partial screening.

In Taftsville, the existing substation removal will be visible from several residential properties, particularly those along Route 4 near the village center. This removal will result in substantially less visibility of electrical substation equipment in the immediate area. The replacement transmission poles on the north and south

[4] https://vermontbiz.com/news/2024/july/14/gravel-roads-tell-vermonts-story-top-bottom-vtxl-cycling-route

sides of the Ottauquechee River will also be visible from several residences along Route 4, particularly those located northwest of the existing substations where riverside vegetation is relatively thin.

Suitability of Colors and Materials for the Project

The Project materials and colors for the relocated substation will include galvanized steel equipment and associated frame structures, galvanized steel mesh fence, gravel access drive, metal conductors and wooden pole structures. Other similar materials and colors currently exist at the current substation site and surrounding area, including the galvanized metal materials of the existing substation facilities and associated fences, metal conductors and wooden poles of the existing nearby transmission and distribution lines, and nearby residential structures of various materials and colors that stand out from the environment. The area around the proposed substation relocation includes existing wooden poles and metal transmission and distribution conductors, pole-mounted transformers, an existing gravel drive, and there are several nearby commercial buildings with metal roofs and red and white colors that stand out from the environment. For these reasons, the Project colors and materials are considered compatible with the existing conditions at and around the Project site, though it is acknowledged that the substation relocation site itself is predominantly wooded.

Impact on Open Space

Previous Act 250 and Section 248 decisions do not clearly define the term "open space." The *Two Rivers-Ottauquechee Regional Plan* adopted February 26, 2025 ("Regional Plan")[5] clearly defines open space as, "Any parcel or area of land or water essentially unimproved and set aside, dedicated, designated, or reserved for public or private use or enjoyment, or for the use and enjoyment of owners and occupants of land adjoining or neighboring such open space" (Regional Plan at p. 183).

The *Town Plan for Hartland, Vermont*, readopted May 12, 2025 ("Hartland Town Plan")[6] most clearly states that "[u]ndeveloped land, such as forest and farmland, is one component of open space" (Hartland Town Plan at p. 25). The *Town and Village of Woodstock Vermont Comprehensive Plan*, amended 2023 ("Woodstock Town Plan")[7] refers to "town-designated open space" as well as states that open space includes "not only open fields and meadows, but also wooded hillsides, forests, stream corridors and other natural vistas," and separately refers to open space as "fields, forests, and special places" (Woodstock Town Plan at pgs. 67, 82 and 85). The *Town of Hartford Town Plan*, adopted June 4, 2019 ("Hartford Town Plan")[8] defines open space as "any publicly or privately held, unimproved area of land, water course, or water body that may be used for agriculture, forestry, or outdoor recreation, or remain in a natural state," and includes further information on open space locations in Hartford, none of which are located where the proposed transmission line structures will be upgraded near Upper River Road (Hartford Town Plan at pgs. 221-224). None of these plans clarify how impacts to open space should be described or evaluated, though the preservation of open spaces is clearly important in all four planning documents.

Because the site proposes the removal of existing electrical substation equipment within Taftsville (a village within the town of Woodstock) and relocates the associated equipment to a new location within the town of Hartland, and because the proposed improvements involve reconstruction of an existing transmission structure within the town of Hartford, the impact to open space in the area is somewhat complex. As described above, the existing substation equipment in Taftsville is highly visible and situated along the shore of the Ottauquechee River and adjacent to US Route 4. The removal of this equipment will greatly decrease the amount of electrical transmission infrastructure visible in Woodstock. Also as described above, the

[5] https://www.trorc.org/wp-content/uploads/2025/02/2025-RP.pdf
[6] https://www.trorc.org/wp-content/uploads/2025/05/Hartland-Town-Plan-2025-Readopted-2017.pdf
[7] https://www.trorc.org/wp-content/uploads/2023/07/2023-Woodstock-Town-Plan.pdf
[8] https://www.trorc.org/wp-content/uploads/2013/10/Hartford-Town-Plan-FINAL070419.pdf

relocated substation will introduce new visibility of an electrical substation at an elevated and mostly forested location in the adjacent town of Hartland. However, the new site will be mostly screened from Route 4 and VT Route 12 by intervening mature evergreen and deciduous vegetation that lies northeast and north of the substation. Additionally, the Project only proposes modest changes to an existing transmission line at the southern end of the town of Hartland.

Based on these considerations, and particularly the net reduction in visibility of electrical infrastructure along US Route 4 and associated views of the Ottauquechee River corridor, the Project is considered to have limited impact to "open space" in the area. From a purely visual standpoint, the Project is considered to be a net benefit for views of potential "open space" when viewed from the surrounding area.

Summary of Quechee Test Part I

This review of aesthetic impacts finds that three separate areas of existing substation equipment will be removed from the Taftsville Village area, resulting in a reduction of electrical infrastructure visible from nearby portions of Taftsville, US Route 4, and in Hartford immediately north of the Ottauquechee River. One transmission structure height will increase, which will be noticeable from nearby areas of Taftsville and Hartford, though visibility will be similar to the existing transmission structure (TL107, P1).

The proposed substation relocation and associated structures will be visible from limited portions of US Route 4 and Morrill Road, with minor to no visibility expected from other nearby roadways. Where visible, these proposed Project elements will be mostly screened by intervening evergreen and deciduous vegetation immediately northeast and north of the relocated substation.

The colors and materials of the proposed Project will be compatible with other nearby materials such as the existing transmission and distribution lines and various nearby buildings that currently stand out from the environment. The Project will result in a limited impact to "open space" in the area, and collectively would be a net reduction in visibility of electrical infrastructure. Even though the Project will result in a decrease in electrical infrastructure from the surrounding area, the Project will introduce visibility of new substation infrastructure into an area where there is only limited visibility of transmission and distribution lines, and will remove or trim mature vegetation at the base of a hillside that may be visible from surrounding areas. For this reason, the Project will result in an adverse impact to the aesthetics and scenic and natural beauty of the area. Therefore, a review under the second part of the Quechee Test is provided below.

IV. Quechee Test Part II – Evaluation of Potential Undue Adverse Impacts

i. Community Standards Review

Although Section 248 projects are exempt from municipal zoning and related permits, local plans and regulations are reviewed under the second prong of the Quechee test where it has been determined that a project may have a potential adverse visual impact. Under Quechee, this involves an assessment as to whether or not a project violates a clear, written community standard intended to preserve the aesthetics or scenic beauty of the area. In Docket No. 7508, the Commission held that "[i]n order for a provision to be considered a clear, written community standard, it must be 'intended to preserve the aesthetics or scenic beauty of the area' where the proposed project is located and must apply to specific resources in the proposed project area." The Commission clarified that generalized statements and general scenic resource policies that are not focused on a particular scenic resource or that fail to offer specific guidance or measures to protect the resource cannot be considered "clear written community standards." The Commission has further clarified that any such standard must expressly "designate the [project] parcel as a scenic resource worthy of protection."

The Vermont Supreme Court ("Court") has also shed light on the scope of what qualifies as specific, clear written standards, stating that "[i]n contrast to the Act 250 context, § 248 review supplants rather than supplements local zoning regulation."[9] Accordingly, the Court held that language such as "the purpose of the Rural Conservation Districts is to preserve this distinctive rural character while accommodating low density residential development . . . Agriculture, forestry, very low density single-family residential development, and certain limited uses that are suitable in rural areas are permitted in the district" are "broad and general statements in the Town and Regional Plans [that] are not sufficiently specific to constitute a basis for denying a permit under § 248."[10] The Court clarified the issue further, stating "our case law supports the conclusion that indications in the Town and Regional Plans that development in the Rural Conservation District or outside of the urban center should be compatible with the area's rural character are not clear, written community standards such that violation renders the project's adverse impact undue under § 248(b)(5)."[11] As such, the particular language used within Town and Regional Plans is important for determining whether a standard is clearly written and specifically applies to a given Project.

Available local and regional planning documents were reviewed to determine if the Project would violate a clear written community standard. The following sections of this review discuss the community scenic quality standards as detailed in the Regional Plan, the Hartland Town Plan, the Woodstock Town Plan, and the Hartford Town Plan. The relevant passages from these plans are included in Appendix D – Regional and Town Plan Excerpts.

1. Regional Plan

Chapter 3 – Land Use

B. Future Land Use Areas

Village Settlements

Village Settlements are the most common Regional Growth Areas in the TRO Region. Village Settlements normally consist of a mix of uses at medium to high densities. Density in Village Settlements varies based on the availability of municipal water and sewer. Those Village Settlements that do not have water or sewer are prime candidates for future infrastructure investments. Unlike Regional Centers and Town Centers, Village Settlements are not regional markets or trade centers and typically serve a local clientele. The Region's Village Settlements are core areas in…Taftsville…
(Regional Plan at p. 22)

Rural Areas

While we each may have a picture in our minds of what "rural" is, for this plan "rural," and hence Rural Areas, means lands that consist of a low-density mixed pattern of land uses, primarily homes, interspersed with scattered small-scale businesses, resource-dependent or land-consumptive commercial operations, outdoor recreation, and natural resource uses. The land is predominantly covered by forest, active agricultural land, or fallow agricultural lands transitioning back to forest. Rural lands are largely remote and undeveloped, or developed enough to constitute an existing settlement.

It is in the interest of the Region and in conformance with our towns' plans that scattered development not continue unabated so that the present land use features within Rural Areas can be maintained and remain dominant. State planning goals, to which the Regional Plan must be consistent, direct plans to "maintain the historic settlement pattern of compact village and urban centers separated by rural countryside... (and that) intensive residential development shall be encouraged primarily in areas related to community centers and that strip development along highways should be discouraged."

[9] In re *Petition of Apple Hill Solar LLC*, 2021 VT 69 at ¶ 33
[10] *Id* at ¶¶ 34 and 36.
[11] *Id* at ¶ 37.

Rural Areas, however, can accommodate certain non-residential uses in ways that serve to maintain the vitality of more developed areas and that do not unduly compromise one of the principal objectives for these Areas—to retain rural character.
(Regional Plan at pgs. 26-28)

Goals and Policies: Overall Land Use
Goals
3. Land use planning and regulation maintains our quality of life, environment, and economy.

Policies: Village Settlements
2. Commercial uses (including principal retail establishments), services, offices, wholesale business, industry, transport facilities, and community facilities and services are appropriate to locate in these areas.
7. New development shall be planned to be reasonably compatible with existing development, preserve buildings of historic, architectural, or engineering significance, and not unduly impact the character of the area.
(Regional Plan at pgs. 41-42)

Goals, Policies, and Recommendations: Rural Areas
Goals
5. New development must not place undue burdens on municipal or regional facilities, utilities, and services, including transportation systems.
6. New development shall be planned to be reasonably compatible with existing development, preserve buildings of historic, architectural, or engineering significance, and not unduly impact the character of the area.
(Regional Plan at p. 43)

Policies
7. Projects subject to Act 250 must be planned and sited to satisfy the following:
b. Locate non-agricultural buildings next to or within the forest edge (if any), instead of in open fields, to enable new construction to be screened by natural landscape features;
c. Minimize buildings, utilities, or structures blocking or interrupting scenic vistas as viewed from a public highway;
d. Take reasonable steps to protect historic features, wetlands, stream buffers, forest blocks, wildlife crossing areas, necessary wildlife habitat, and habitat connectors
(Regional Plan at pgs. 47-48)

Goals, Policies, and Recommendations: Flood Resilience
Policies
7. Critical facilities such as emergency services, wastewater treatment plants, power substations, and municipal buildings shall not be built in Special Flood Hazard Areas unless floodproofed or elevated to at least 2 feet above the base flood elevation and designed to withstand erosion risk, and they must have dry access above the base flood.
(Regional Plan at p. 51)

Chapter 4 – Economic Development
B. Regional Transportation Characteristics
Highways
The Region contains several key transportation corridors, including Interstates 89 and 91 as well as several state routes that are utilized for statewide trucking. Of the state and federal highways in the Region, Interstates 89 and 91 carry the bulk of traffic (over 10,000 vehicles a day), followed by U.S. Route 4 and U.S. Route 5 (roughly 5,000 to 10,000 vehicles a day). The Region rarely encounters traffic congestion, even during peak hours. Population growth may exacerbate existing congestion along U.S. Route 5 in Hartford, VT-10A in Norwich, and the Route 4 corridor during peak hours.

Although the National Scenic Byways program is no longer funded, there remains three designated Scenic Byways in the Region: the Connecticut River Scenic Byway, the Crossroad of Vermont (Route 4) Byway, and the Scenic Route 100 Byway.
(Regional Plan at p. 54)

Chapter 7 – Historical, Archaeological, and Scenic Resources
D. Scenic Resources

Background

In Vermont, the economic value of scenic resources to tourism cannot be overstated. The landscape of the Region is an economic asset. It represents some of the finest examples of townscapes and rural scenic character in the world, and it has tangible economic value. Tourists spend money in the Region because they are attracted to the scenery, values, and quality of rural life. Tourism is a significant industry in Vermont's economy. The public's commitment to the preservation of our visual resources can be traced to the late 1960s with the passage of Vermont's anti-billboard legislation. All municipal plans prepared and adopted by member towns in the Region consistently stress the goal of maintenance of rural character.

Patterns for Development: A Community Standard

The inherent beauty of the Region is tied to the visual relationship between buildings, the working landscape, and mountains and river valleys. Over the past fifty years, development patterns have emerged that propagate highway strip development. Certain areas immediately adjacent to major highways are examples of development sprawl. In some instances, these areas adversely affect the value of scenic resources for travelers. Such a land use pattern will serve, amongst other factors, to destroy the transition between town village centers and the countryside.

The Region's landscape is also changing due to a gradual reforestation and loss of fields and meadows due to a reduction in agriculture. The resultant land use pattern is a product of economic forces that can permanently alter or pressure that landscape.

Prominent Scenic Landscapes

The following areas are likely to be areas of scenic significance:

1. Shorelands immediate to public lakes, rivers, or ponds;
2. Areas immediately adjacent to scenic corridors;
3. Prominent ridgelines, mountaintops, or excessively steep slopes that can be readily viewed from public corridors;
4. Exceptional agricultural and historic areas;
5. Areas within or immediately adjacent to natural areas (i.e., wetlands) designated by the State; and
6. Areas of high scenic quality that are publicly recognized as exceptionally unique or are noted examples of the dominant characteristics of an area in the Region.
7. Examples of prominent scenic areas within the TRO Region include designated byways.
    - Connecticut River Byway (a National Scenic Byway): Route 5, Hartland to Newbury
    - Crossroads of Vermont Byway: Route 4, Bridgewater to Hartford
    - Scenic Route 100 Byway: Plymouth to Granville

(Regional Plan at pgs. 96-97)

Goal, Policies, and Recommendation: Scenic Resources
Goal
1. The natural and scenic resources of the Region are protected and preserved.

Policies

1. Where development is proposed in areas of scenic value (examples listed under "Prominent Scenic Landscapes"), design plans must:
    a. Maintain the prominent natural feature of the developed area;
    b. Work toward enhancing or retaining views;
    c. Minimize adverse impact on views and areas of historic significance;
    d. Minimize contrasts with areas of historic significance; and
    e. Reflect traditional settlement patterns.

(Regional Plan at pgs. 99-100)

Chapter 9 – Utilities, Facilities, and Services
A. Background

The communities in our Region depend on a system of public, nonprofit, and private utilities, facilities, and services. These are needed to maintain the health and welfare of our citizens, as well as support a sound economy.
(Regional Plan at p. 117)

Goals and Policies: Overall Utilities, Facilities, and Services

Goals

1. The maintenance, expansion, or construction of new facilities and utilities is financially sustainable for governments and taxpayers.
2. Investments in utilities, facilities, and recreation enhance the desired pattern of development which is compact village and urban centers surrounded by open countryside.

Policies

2. The scale, type, and design of major public utilities and facilities shall be consistent with the future land use settlement patterns recommended in this Plan and relevant municipal plans.
(Regional Plan at p. 126)

Chapter 10 – Emergency Management

Goals, Policies, and Recommendations: Emergency Management

6. Critical facilities, including emergency service buildings, substations, medical facilities, town offices, and town and state garages, must be constructed to be disaster resistant and able to withstand expected 100-year storm events with minimal impacts.
(Regional Plan at p. 143)

Regional Plan Appendix D: Transportation Corridors Overview

US Route 4

US Route 4 is one of only three east-west routes across Vermont and carries the highest volumes of the three (the other two are VT Route 9 and US Route 2). In this region the primarily two-lane rural road parallels the Ottauquechee River along the old railroad alignment and winds through many sensitive natural landscapes and a number of vibrant community centers. US Route 4 is on the national highway system and Vermont's tractor truck network, so mobility and safety issues are a top priority. US Route 4 is also Main Street for a number of villages and hamlets. The road is a gateway into Vermont, a Scenic Byway, and tourism destination for experiencing the region's rural landscapes. Many residents' quality of life and the vitality of commercial businesses greatly depend on preserving this unique road and surrounding landscape…

In 2008, the Hartford US Route 4 Corridor Management Plan (Appendix C) was developed by TRORC, the Town of Hartford and the Vermont Agency of Transportation that assessed existing and projected future transportation and land use conditions. The Plan resulted in a set of transportation and land use recommendations which the region has adopted for planning guidance. In 2009, the US Route 4 West Corridor Management Plan (Appendix C) was developed as a follow up project to the 2008 Hartford Corridor Plan and did a similar assessment from Hartland to Bridgewater. This Plan built on the Hartford Corridor Plan by defining Access Management Zones and offered recommendations for access management.
(Regional Plan, Appendix D: Transportation Corridors Overview at p. 1)

2. Hartland Town Plan

OVERVIEW AND STATEMENT OF OBJECTIVES

Major Goals

2. To guide industrial and commercial development in a way that will provide for appropriate economic activities on a scale that largely maintains the Town's existing settlement patterns.
3. To preserve open space, the rural character, and present population distribution of the Town.
(Hartland Town Plan at p. 5)

CHAPTER 1: LAND USE

Siting Issues

Hartland is a rural town with many hills. The tops and sides of those hills are very important to the appearance of the Town. To date, the pattern of settlement has been relatively little construction of structures on the tops of hills, with continuing extensive forestry and agricultural use of the hillsides. The ridgeline may be determined by the contour of the highest elevation, but in most places is actually formed by vegetation, usually trees. Indiscriminate removal of trees breaks the natural ridgeline and detracts from the natural beauty of an area. Structures placed on or near a ridgeline or on a hillside are more visible to others. The views available at a particular house site must be balanced against the desire of the Town to retain scenic areas and maintain

agricultural and forestry resources. Thus, placement of structures, access roads, and utilities needs to be done carefully.

Land Use Goals, and Siting Policies and Recommendations

Land Use Goals:

3. Protect the rural character of Hartland and its natural resources by avoiding sprawling development and incompatible land uses.

Siting Policies:

4. The preservation of open space in the community and along corridors between settlement centers shall be encouraged to preserve the attractiveness of the landscape, and to preserve agricultural, forestry, and recreational uses.
5. Structures, roads, and utilities on hillsides shall be placed downgrade of the ridgeline, placed to preserve agricultural and forestry land uses, and constructed in a manner so as not to exceed (be taller than) the nearby natural or vegetative ridgeline as viewed from public vantage points.
6. If and when different land use is considered for open spaces, especially for fields, planners shall consider ways of preserving or maximizing agricultural, forestry and scenic potential. For example, dwellings, access roads, and utilities should be placed on the perimeter of the open space.
8. As development occurs in the rural areas, it must not only respect the physical limitations imposed by topography and soil characteristics, but shall also be in harmony with the existing landscape and adjoining land uses. Future development shall be guided by and related to the existing pattern of settlement.
(Hartland Town Plan at pgs. 9-11)

Future Land Use Areas

Rural Area

Maintaining the Town's natural resource base, agricultural economy, and forest industry are primary objectives of the Town Plan to be implemented through the Rural Area.

Rural Area Policies:

5. Any development in the District on previously undeveloped hilltops or extending more than 800 feet into previously undeveloped lots, merits additional review and greater restrictions. Mandatory provisions shall include that no structures may break the natural tree canopy or disturb the silhouette of high points of land (as seen from public highways), and buildings not screened by vegetation will reduce their visibility through muted colors and less reflective materials.
(Hartland Town Plan at pgs. 19-20)

CHAPTER 2: NATURAL, HISTORIC and SCENIC RESOURCES

Agriculture and Forestry Resources

Both agricultural and forested land provides the residents of Hartland with exceptional scenic and recreational opportunities.
Undeveloped land, such as forest and farmland, is one component of open space. Besides playing a key role in the visual character of the Town, open space land provides wildlife habitat and migratory corridors for animals.
(Hartland Town Plan at p. 25)

Scenic and Aesthetic Resources

Hartland has a number of natural and recreational areas. The North Hartland Flood Control Dam and Recreational Area, Lull's Brook Fish and Game Area, Sumner's Falls, the Hartland Town Forest, Class 4 roads and trails, Eshqua Bog, Densmore Hill Wildlife Management Area, and the Connecticut River are all available to Hartland residents. Swimming, boating, hiking, fishing, and nature observation are among the recreational opportunities these areas provide. Protection of these resources is very desirable.
Maintaining the scenic and recreational features of Hartland and preserving the character of the Town continues to be a challenge. Development at the intersections of major roadways or along their length may lead to sprawl if not monitored closely. Unprotected open space can be quickly sold off and subdivided, changing both the scenic nature of the Town and eliminating important natural resources. Activities along highly visible portions of rivers or hillsides, such as clear cutting of forests or development, can severely alter the beauty of Hartland. Further, poorly sited development atop hills, including houses, transmission towers, and power lines, can all make the town less attractive for residents and tourists.

Balancing the need for growth and prosperity in Hartland with that of sustaining the scenic character of the Town is an important task shared by the Selectboard, Planning Commission, and Conservation Commission, as well as the residents they represent.

Scenic and Aesthetic Resources Goals, Policies, and Recommendations
Scenic Goals:
1. To preserve Hartland's scenic and aesthetic resources, including recreational and natural areas, views and vistas, traditional land use patterns, and overall character.

Scenic Policies:
1. Open space and natural resources which relate to the historical, cultural, and scenic character of the Town should be preserved.
2. Growth or activities that would contribute to sprawling development along major roads and highways is discouraged.
3. The scenic value of ridgelines, hilltops, and hillsides should be maintained.
(Hartland Town Plan at pgs. 30-31)

CHAPTER 5: TRANSPORTATION
Scenic Roads
…A scenic road ordinance does not regulate adjacent land use. Scenic easements are one possible method to explore for ensuring the future enjoyment of these important viewsheds by the public.
(Hartland Town Plan at p. 56)

CHAPTER 6: ENERGY
PERMITTING CONSIDERATIONS
Section 248
3. Significant Areas: All new generation, transmission, and distribution facilities shall be sited and designed to avoid or, if no other reasonable alternative exists, to otherwise minimize and mitigate adverse impacts to the following:

- Municipally designated scenic roads and viewsheds.

6. Site Selection: Site selection should not be limited to generation facilities alone; other elements of the facility need to be considered as well. These include access roads, site clearing, onsite power lines, substations, lighting, and off-site power lines. Development of these elements shall be done in such a way as to minimize any negative impacts. Unnecessary site clearing and highly visible roadways can have greater visual impacts than the energy generation facility itself. In planning for facilities, designers should take steps to mitigate their impact on natural, scenic and historic resources and improve the harmony with their surroundings.
(Hartland Town Plan at pgs. 69-70)

ENERGY GOALS, POLICIES AND RECOMMENDATIONS
Energy Policies
1. Hartland municipal officials should participate in the Public Service Board's review of new and expanded generation and transmission facilities in Hartland to ensure that local energy, resource conservation, and development objectives are identified and considered in future utility development.
3. Developers should make all possible efforts to minimize damage to important natural areas as identified in the Natural, Historical, and Scenic Resource chapter of this Town Plan.
4. New facilities should be located as close to existing roads as possible to avoid any increase in the services provided by the town.
7. Power generation, transmission, and distribution facilities or service areas should be encouraged only when they complement the recommended land use patterns set forth in this plan.
10. Discourage the construction of visually intrusive transmission towers…
(Hartland Town Plan at p. 75)

3. Woodstock Town Plan

PREFACE
Several specific goals and objectives surface repeatedly throughout the Plan, all designed to lead the community to a sustainable future. These are:

1. To encourage a rational pattern of development which underscores the importance of forests, agriculture, and the historical uniqueness of Woodstock, while balancing the needs and demands of residential, recreational, commercial, and light industrial uses;
5. To protect the historic settlement pattern of one main village center and smaller hamlets, surrounded by rural areas

SCENIC STATEMENT

The scenic rural character, so vital to our lifestyles, consists of a great variety of features. Densely settled areas provide focal points of human activity, clearly defined within the space beyond…The scenic corridor of the Ottauquechee River provides a second visual focal point. Scattered cemeteries, historic bridges, farmscapes, and stone walls give us a perspective on our rich heritage and may provide us with a third.

This landscape is changing through both natural and cultural processes. Reforestation and vegetation growing along country roads limit both the diversity of this landscape and the views to it. Poorly sited or unsightly development will taint or obstruct key views.
(Woodstock Town Plan Preface)

CHAPTER THREE: Community Facilities and Services

Utilities

Electrical Power
The Town should develop a clear understanding of the degree of dependence of the Town upon the transmission line from Taftsville to the Village and alternatively what fraction of normal and peak loads can be supplied by alternate routes.

Utility Lines
Woodstock has identified the unsightliness of utility lines as undesirable and proposes that Woodstock encourage Green Mountain Power, Fairpoint, ECFiber and Comcast to run transmission lines along one side of a Town Highway and encourages that all development and subdivisions install underground utilities.
(Woodstock Town Plan at pgs. 14-15)

Action Program

Goal 11: Minimize unsightly overhead utility lines.
Objective 11.1. Bury and hide utility lines.
Action 11.1.2. Encourage utilities to lay out rural lines so they are hidden from view.
(Woodstock Town Plan at p. 22)

CHAPTER FOUR: Economic Development

TAFTSVILLE

In 1997, a Residential/Office District was established to allow office use for property located along the south side of Route 4. The residents have expressed a desire to maintain the character of Taftsville… In the aftermath of Tropical Storm Irene, the Taftsville Covered Bridge has been fully restored and once again serves as a vital transportation link and tourist draw.
(Woodstock Town Plan at p. 27)

CHAPTER EIGHT: Historic Preservation and Visual Environment

Historic preservation and the preservation of the visual environment for Woodstock include eight broad goals:
1. Recognize and protect outlying and isolated visual and historical resources throughout the Town;
2. Protect identified visual and historical resources within the Village;
3. Protect open space and other environmental resources that are scenic or historic or both;
4. Protect the integrity and authenticity of Woodstock's aesthetic and historical character and its place in history;

PROTECT HISTORICAL RESOURCES

Although most attention has been paid to the historical resources of the Village, the outlying areas of the Town have been addressed in a thorough and systematic survey. Completion of a thorough survey of the Town was a major accomplishment. The survey identified several districts, such as South Woodstock and Taftsville, which ought to be protected as such.

PROTECT ENVIRONMENTAL RESOURCES

Environmental surroundings are crucial elements in the preservation of historical resources. Views and other vistas, open space, green spaces, river views and access, are all key elements that bear upon historic preservation both in the Village and in the Town. The Town's rural agricultural character is essential…
(Woodstock Town Plan at pgs. 60-61)

Action Program
Goal 2: Protect open spaces which are scenic or historic
Goal 6: Allow placement of alternative energy devices while maintaining character of historic districts.
Action 6.1.3. Assure alternative energy devices are placed in least visible area of property.
(Woodstock Town Plan at pgs. 63-64)

CHAPTER TEN: Natural Elements

OPEN SPACE

U.S. Route 4 (a major East-West artery) and State Routes 12 and 106, are well-traveled corridors leading to and from Woodstock. Currently the character of these roads varies from residential and commercial development to relatively sparsely populated open spaces. Recent years have seen increased development along these routes that pass directly through the center of Woodstock Village and the Town's hamlets. Resulting loss of scenic differentiation between the Village and hamlets and the rural countryside that surrounds them could unduly impact the aesthetic and environmental quality of the entire town. Woodstock should establish a clear definition of commercial and open space zones along Routes 4, 12, and 106. Concepts for these zones should include provisions for scenic vistas, preservation of agricultural lands, river corridor conservation zones, and creative use of setback requirements to create a clear "greenway" through which travelers to Woodstock would move.

VILLAGE PARKS/OPEN SPACES

… The openness of our riverscape and neighborhoods must be preserved, unbroken by solid fences, private docks, and other structures.

SCENIC RIDGELINE DISTRICT

Woodstock's Scenic Ridgeline District was established in 1992 in response to the adverse visual impacts of development on the scenic qualities of the Town's prominent ridges and hillsides, which contribute significantly to the Town's aesthetic identity. Conditional use review and approval are now required for any proposed development within 500 feet of the Town's primary ridges, as identified on the Scenic Ridgeline Map…
(Woodstock Town Plan at pgs. 82-85)

Action Program
Goal 2: Preserve the character of Woodstock's community and natural environment which is threatened by incremental development and subdivision.

Goal 5: Protect open spaces and scenic vistas.
Objective 5.1. Identify, map, and prioritize Town open spaces and significant scenic vistas.

Goal 6: Preserve the Village and hamlet's public/private open spaces.
Objective 6.1. Maintain the "sense of place" and scenic value that's created by the Town's open spaces, including those within the Village and outlying hamlets.
(Woodstock Town Plan at pgs. 88, 90-91)

CHAPTER TWELVE: Transportation

SCENIC ROADWAYS

Woodstock has many local and state roadways highly valued based on their scenic character. Motorists traveling along US Route 4 can traverse a landscape of green hills bordered by rural development and the scenic Ottauquechee River… It is important to preserve the scenic resources of our roadways. When opportunities develop, it will be a priority to enhance a road's scenic character. Transportation or adjacent land projects that would prove to degrade roadways identified as having scenic resources will be discouraged.
(Woodstock Town Plan at pgs. 107-108)

Action Program
Goal 6: Preserve scenic roadways. Include the consideration of scenic resources in all public and private investment decisions.
Objective 6. Identify scenic roads. Support Scenic Byway program.

Action 6.1.1. Create a map within the transportation plan that highlights scenic roads.
Action 6.1.2. Consider scenic resource impacts in all road and development projects.
Action 6.1.3. Emphasize a review of scenic resource impacts on River Road, Pomfret Road, US Route 4, VT Route 12, and VT Route 106.
(Woodstock Town Plan at p. 112)

CHAPTER THIRTEEN: Land Use

RESIDENTIAL/OFFICE

The purpose of this land use area is to recognize the need for mixed-use transitions between areas that are primarily commercial in nature and areas that are primarily residential in nature… Uses in this land use area are intended to be mixed in nature, including residences, offices, public facilities, and home occupations/enterprises.
(Woodstock Town Plan at p. 118)

4. Hartford Town Plan

CHAPTER I – HISTORIC RESOURCES

Scenic Roads

The designation of scenic roads can also aid a town in the preservation of rural environs of its historic structures. There are no scenic roads designated in Hartford at present.
(Hartford Town Plan at p. 8)

Goal 2: Balance historic preservation and modern needs: Develop practical guidelines that preserve historic character while allowing for modern upgrades and uses.
(Hartford Town Plan at p. 15)

CHAPTER II – LAND USE

Scenic Areas

The protection of the Town's scenic beauty is not just important to Hartford resident's quality of life but also to visitors who contribute to the sizeable tourism economy.
(Hartford Town Plan at p. 22)

VISION FOR THE FUTURE OF HARTFORD

Through various public participation processes over the past twenty years, the following have repeatedly risen to the top as major themes:

3. Protect scenic areas, open space, and wildlife corridors.
4. Preserve Hartford's historic settlement pattern, defined by compact villages surrounded by rural countryside.
5. Maintain the character of Hartford's rural countryside and support agriculture, forestry, and recreational uses in these areas, as well as carefully planned low-density residential uses.
6. Maintain and enhance Hartford's heritage of working farm and forest lands as part of a sustainable, environmentally sound, local resource-based economy.
7. Maintain and enhance the open space and recreational "infrastructure" important for long-term health and quality of life of Hartford residents.
(Hartford Town Plan at p. 41)

LAND USE PLAN

Rural Lands

During the last century, hillside farming in Hartford and throughout Vermont declined and much of farmland transitioned to forest land. Rural Lands represent the traditional working landscape that makes up much of rural Hartford, characterized by open**,** agricultural and forested land along the valley floor, forested hillsides and hilltops, hillside farming, and low-density residential development…Development should be designed and configured to protect sensitive lands, reinforce the rural character and historic working landscape of these lands, with residential and nonresidential development taking into consideration opportunities for agricultural use, including farms, recreational agriculture, agri-tourism, and farm stands, and forestry.
(Hartford Town Plan at p. 46)

GOALS, STRATEGIES AND ACTIONS

Goals, Strategies and Actions for Rural Areas

Goal 1: Maintain the character of Hartford's rural countryside and support agriculture, forestry, and recreational uses in these areas as well as carefully planned low-density residential uses.

Goals, Strategies and Actions that Affect Both Rural and Village Areas

Goal 1: Maintain and enhance open space and recreational "infrastructure" important for long-term health and quality of life for Hartford residents.

> **Strategy 1:** Carefully plan and design new residential development in rural lands districts to protect important agricultural land and other scenic and natural resources.

Goal 2: Preserve Hartford's historic settlement pattern, defined by compact villages surrounded by rural countryside.

(Hartford Town Plan at p. 48)

CHAPTER VIII – TRANSPORTATION

BICYCLE TRANSPORTATION

Valley roads with gentle grades and lower traffic volumes include Old River Road, Quechee Main Street and Connecticut River Road. Other more challenging rides on roads with scenic views and relatively low traffic volumes include Jericho Street, Jericho Road, Dothan Road, Old Quechee Road, Quechee/West Hartford Road and Quechee/Hartland Road.

(Hartford Town Plan at p. 182)

CHAPTER IX – NATURAL RESOURCES

SETTING

Like many Vermont communities, Hartford has a diverse landscape: three major rivers, narrow river valleys with hillsides rising above with a mixture of farmland and forests. Scenic views abound. Hartford is home of one of Vermont's most scenic and highly visited natural attractions, Quechee Gorge, a 165-foot canyon of the Ottauquechee River.

(Hartford Town Plan at p. 196)

GEOGRAPHIC FEATURES

Hillsides and Ridges

Hartford's forested hillsides and ridgelines are largely undeveloped and are important assets. They define our Village Centers, bestow scenic vistas, provide open space, and play an important role in maintaining Hartford's rural character.

(Hartford Town Plan at p. 199)

SCENIC RESOURCES AND RURAL CHARACTER

The protection of the Town's scenic beauty and rural character is an important attribute, not just for Hartford residents, but for visitors to Hartford as well…In 2008, the Zoning Regulations were amended to designate a Rural Lands Overlay District throughout the rural areas of Hartford to ensure that new development is done in such a way that it protects rural character, scenic views and natural resources.

Scenic Byways

There are currently ten scenic byways in Vermont of which two pass through the Town of Hartford; the Connecticut River Scenic Byway (Route 5) and the Crossroad of Vermont Byway (Route 4).

Scenic Areas

In the early 1990s, the Hartford Conservation Commission identified the following list of important scenic areas in Hartford:

1. The Hillside Road area in Quechee, that is, the area bounded by:
    a. the Pomfret town line to the west;
    b. the Woodstock and Hartland town lines to the south;
    c. the Ottauquechee River to the east; and
    d. Wheelock Road and the northern end of Quechee Lakes Greenbelt #7-GB02-001 to the north.

(Hartford Town Plan at pgs. 217-218)

Analysis of the Regional Plan and Town Plans

In general, the Regional Plan covers a wide range of topics for the region, including land use, housing, economics, cultural resources, energy generation and consumption, as well as other community issues. No clearly written standards or recommendations were found in the Regional Plan indicating specifically that the existing substation site or proposed substation relocation sites are considered to be a scenic resource. Route 4 is clearly called out as a scenic roadway, though no specific measures for protecting views from the roadway were found that pertain to the Project areas. Because the Project will remove highly visible substation facilities within a village area and relocate it to a less visible rural area, the Project will help improve scenery along the Route 4 scenic byway while only minimally impacting the character of the nearby rural area. Additionally, the Project will remove most electrical infrastructure from an area adjacent to a river and relocate the infrastructure to an area that is not on a ridgeline or excessively steep slope and that, while partially visible, is not readily viewed from public corridors, as envisioned in the Regional Plan.

Regarding the various Town Plans, the Project does not compromise any specific standards related to the aesthetics of the Project areas. Much like the Regional Plan, these plans recognize the Route 4 scenic byway, and discourage development on ridgelines. The Hartland Town Plan encourages the protection of "open space" within rural areas, and discourages the sky-lining of new development as seen from public vantages. The Woodstock Town Plan clearly recognizes the historic nature of the Taftsville Village, and highly encourages efforts to reduce visibility of electric infrastructure, such as burying electric utility lines. The Hartford Town Plan does not specifically address utility corridors and associated transmission line upgrades such as those proposed north of the Ottauquechee River, though it is clear that the river represents a boundary to the Hillside Road "scenic area." All three towns emphasize the protection of the existing character of rural areas in each respective town, though no distinct scenic protections were found that the proposed Project would violate.

Based on this review of the Regional Plan and Town Plans, the proposed Project will not violate any clearly written community standard intended to preserve the aesthetics or scenic beauty of the area. As such, it is determined that the Project as proposed is compatible with these Plans.

ii. Generally Available Mitigating Steps which a Reasonable Person would Take to Improve the Harmony of the Project with its Surroundings

The Project includes mitigating elements that help to reduce potential adverse aesthetic impacts. Mitigation for the Project includes the following components:

- The Project proposes removal of substantial electrical equipment that is clearly visible in close proximity from the center of a historic village area (Taftsville) and the US Route 4 Crossroad of Vermont Byway.
- The proposed substation relocation area in Hartland is sited to take advantage of large evergreen and deciduous vegetation that will help screen the bulk of the facility from US Route 4 and nearby surrounding areas.

iii. Shocking or Offensive

When evaluating whether a project will offend the sensibilities of the average person, the criterion to make this assessment is related back to the first part of the Quechee Test: how the project 'fits' within its surroundings. An 'average person' is considered a disinterested party, not an affected neighbor. The

threshold for a project to be shocking or offensive is high, and a project will need to be entirely inconsistent with the surrounding land uses or exceptionally out of scale with the surroundings.

Although the Project is considered adverse to the aesthetics and scenic and natural beauty of the area, particularly due to limited new visibility of electrical substation infrastructure in Hartland, the Project will not offend the sensibilities of the average person and it will not be offensive or shocking. This determination is based on factors that were assessed during the aesthetic analysis:

- The Project is an upgrade to an existing electrical substation facility that is an established component of the nearby visual landscape. Where visible, new transmission and distribution components will be similar to existing transmission and distribution infrastructure.
- The Project will be a net reduction in the visibility of electrical components throughout the Project area, particularly when viewed from the US Route 4 scenic byway and the Taftsville area.

For the above reasons, we find that the proposed Project will not be shocking or offensive.

V. Conclusions of the Aesthetic Analysis

In review, the findings of this analysis conclude the overall visual impact of the GMP Taftsville Substation Rebuild Project will result in an ADVERSE impact to the aesthetics of the area in which it is being proposed. However, these impacts will NOT be considered UNDUE for the following reasons:

1) The conformance review found that the Project will not violate a clear, written community standard intended to preserve the aesthetics or scenic beauty of the area.

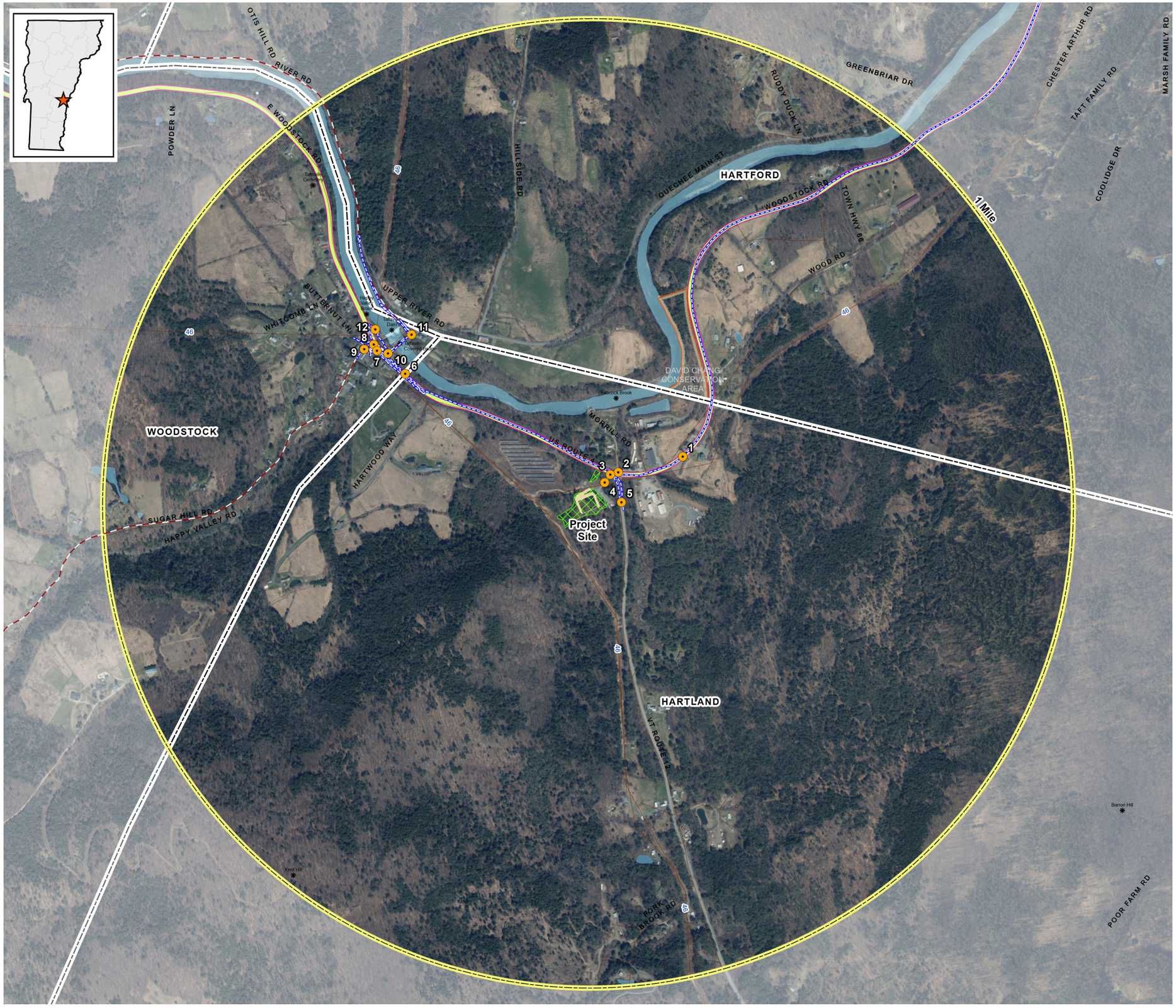
2) The Project incorporates reasonable mitigation steps to mitigate the Project, including:
    a. Removal of substantial electrical equipment that is clearly visible in close proximity from the center of a historic village area (Taftsville) and the US Route 4 Crossroad of Vermont Byway.
    b. Relocation of the substation to a site that takes advantage of large evergreen and deciduous vegetation that will help screen the bulk of the facility from US Route 4 and nearby surrounding areas.

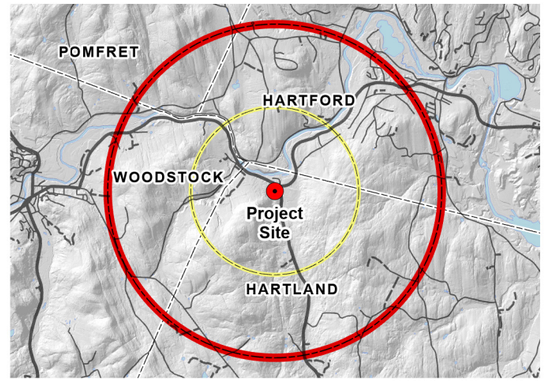
3) The Project will not be shocking or offensive:
    a. The Project is an upgrade to an existing electrical substation facility that is an established component of the nearby visual landscape. Where visible, new transmission and distribution components will be similar to existing transmission and distribution infrastructure.
    b. The Project will be a net reduction to the existing visibility of electrical components throughout the Project area, particularly when viewed from the US Route 4 scenic byway and the Taftsville area.

In conclusion, the GMP Taftsville Substation Rebuild Project meets the Quechee Test insofar as its impact on aesthetics will NOT be UNDULY ADVERSE.

VI. List of Appendices

Appendix A - Map 1 Aerial
Appendix A - Map 2 Terrain Viewshed
Appendix A - Map 3 Vegetated Viewshed
Appendix B - Photographic Inventory
Appendix C - Cross Sections
Appendix D - Regional and Town Plan Excerpts





CONTEXT MAP

GMP Taftsville Substation Rebuild

Appendix A

MAP 1: AERIAL CONTEXT MAP

August 2026

LEGEND

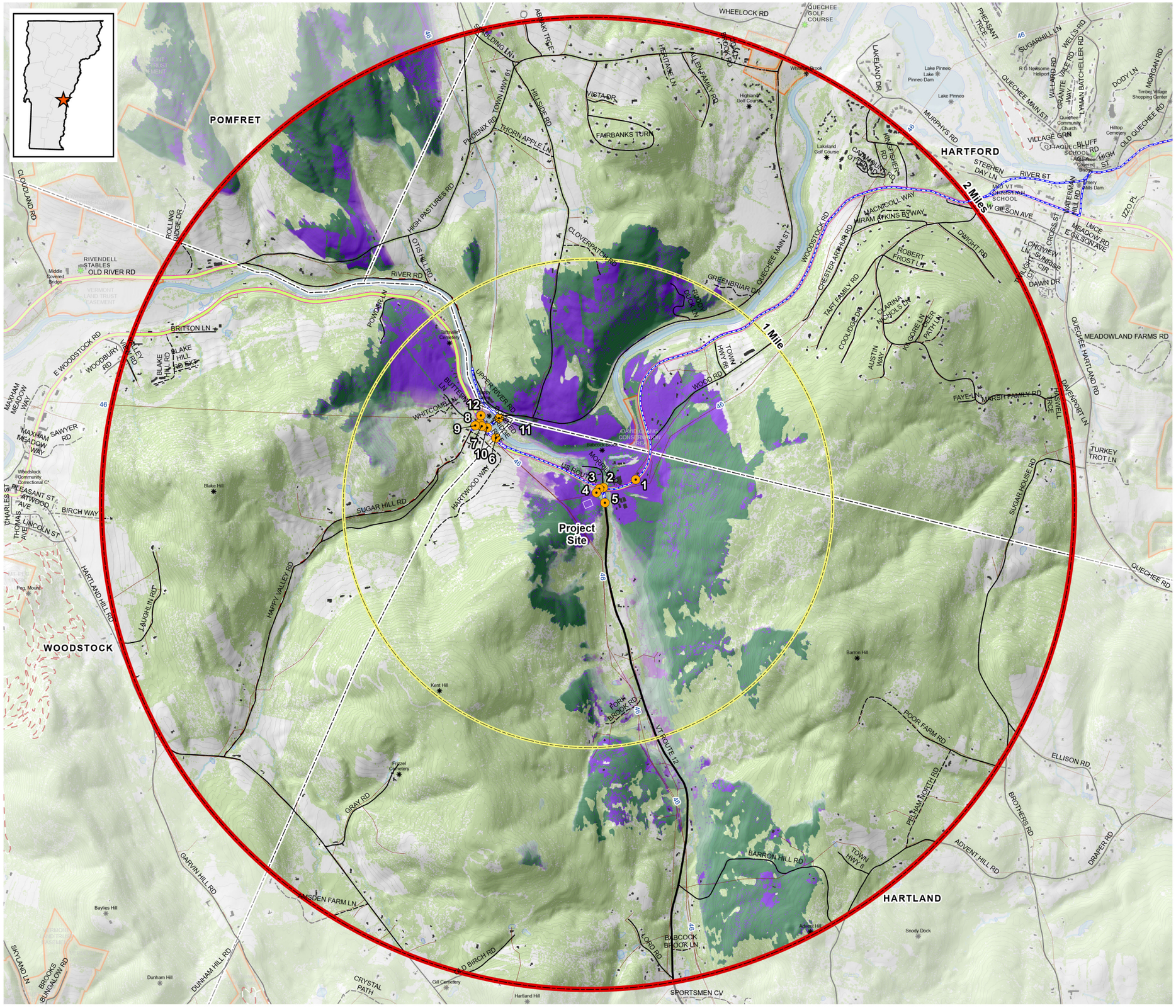
- Viewpoint Location
- Landmarks
- Utility Lines
- Inventory Route
- Vermont Scenic Byways and Highways
- Vermont Trails
- Proposed Vegetation Clearing
- 1-Mile Radius
- Town Boundary
- Vermont Protected Lands
- Hydrology

NORTH

0 0.25 Miles

Service Layer Credits: EGC_services\IMG_VCGI_CLR_SP_CACHE: VCGI

T.J. BOYLE ASSOCIATES
LANDSCAPE ARCHITECTURE & PLANNING



SITE MAP

GMP Taftsville Substation Rebuild

Appendix A

MAP 2: TERRAIN VIEWSHED MAP

[2-Mile Study Area]

August 2026

LEGEND

- Viewpoint Location
- Landmarks
- Recreation Sites
- Inventory Route
- 20' Contours
- Vermont Scenic Byways and Highways
- Vermont Trails
- 2-Mile Study Area
- Town Boundary
- Hydrology
- Vermont Protected Lands

Potential Visibility within Non-Forested Areas

Low — High

Potential Visibility within Forested Areas

Low — High

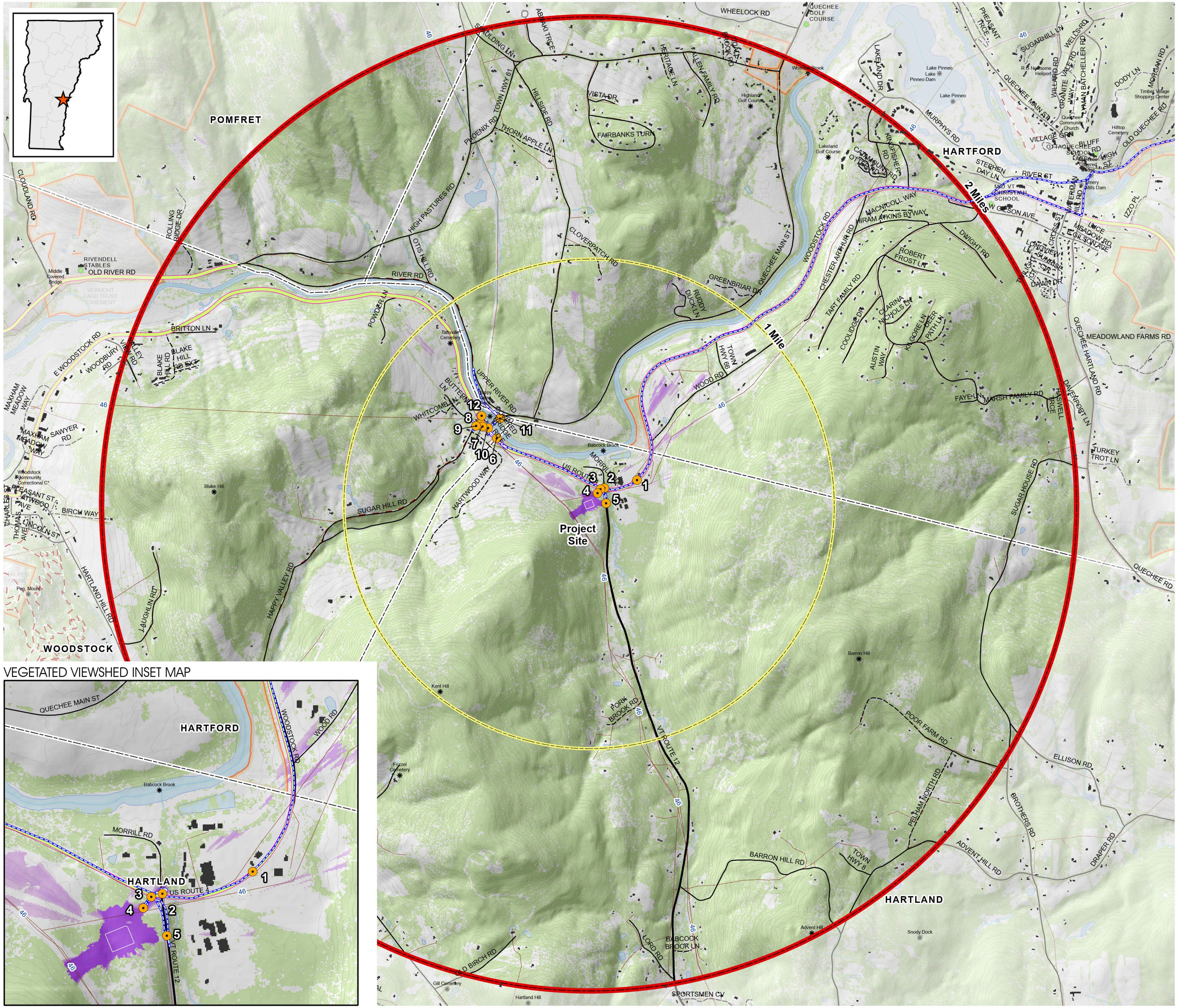
NORTH

0 0.25 0.5 0.75 Miles

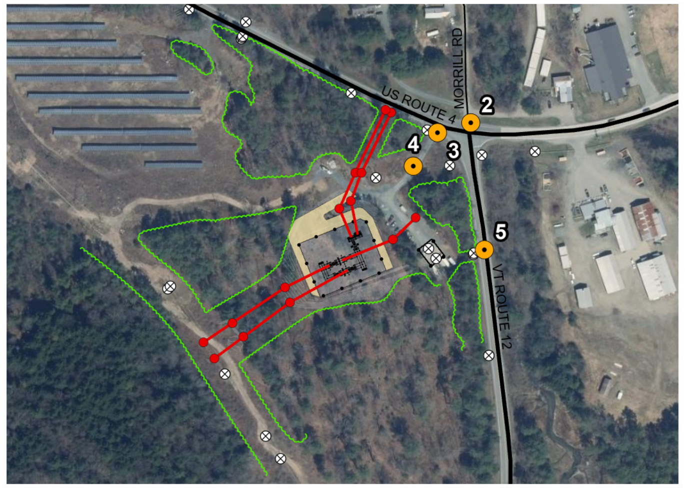
GIS viewshed mapping is a preliminary means of visual analysis. While beneficial for preliminary orientation and investigation, because of data assumptions and omissions, viewshed maps are not a definitive indication of visibility. Potential visibility needs to be confirmed through field investigation and other visualization techniques.

Elevation data derived from LiDAR data and/or the National Elevation Dataset.

T.J. BOYLE ASSOCIATES
LANDSCAPE ARCHITECTURE & PLANNING



VEGETATED VIEWSHED INSET MAP



SITE MAP

GMP Taftsville Substation Rebuild

Appendix A

MAP 3: VEGETATED VIEWSHED MAP

[2-Mile Study Area]

August 2026

LEGEND

- Viewpoint Location
- Landmarks
- Recreation Sites
- Inventory Route
- Utility Lines
- 20' Contours
- Vermont Scenic Byways and Highways
- Vermont Trails
- 1-Mile Radius
- 2-Mile Study Area
- Town Boundary
- Hydrology
- Vermont Protected Lands

Potential Visibility within Non-Forested Areas

Low High

NORTH

0 0.25 0.5 0.75 Miles

GIS viewshed mapping is a preliminary means of visual analysis. While beneficial for preliminary orientation and investigation, because of data assumptions and omissions, viewshed maps are not a definitive indication of visibility. Potential visibility needs to be confirmed through field investigation and other visualization techniques.

Elevation and obstruction data derived from LiDAR data, aerial imagery, the National Elevation Dataset and the National Land Cover Database.

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