

Three Corners Solar Project

MDEP Site Location of Development Act Permit Application

SECTION 6: VISUAL QUALITY AND SCENIC CHARACTER

6.0 VISUAL QUALITY AND SCENIC CHARACTER

T.J. Boyle Associates conducted a Visual Impact Assessment (VIA) to evaluate the effects of the Project on scenic resources of state or national significance (SRSNS). The VIA evaluated the Project under the Site Law standards (06-096 CMR 375.14) to examine each SRSNS in terms of context, significance, existing public use, viewer expectations, Project impact, and the potential effect on public use. This information was used to determine if the Project would significantly compromise views from these resources resulting in an unreasonable adverse effect on scenic character or the existing uses related to scenic character for these resources. The VIA concluded that the Project would not have a significant impact on SRSNS within the viewshed of the Project. Complete findings of the VIA are included as Exhibit 6-1.

Three Corners Solar Project

MDEP Site Location of Development Act Permit Application

SECTION 6: VISUAL QUALITY AND SCENIC CHARACTER

Exhibit 6-1

Visual Impact Assessment



MEMORANDUM

To: Stantec – Attn: Krista Clark
From: Michael Buscher and Jeremy Owens
Date: January 31, 2022
Re: Three Corners Solar Project – Aesthetic Review

I. Introduction

T. J. Boyle Associates, LLC (“TJBA”), a landscape architecture and planning firm located in Burlington, Vermont, was retained by Stantec to conduct an aesthetic analysis to evaluate potential impacts due to the proposed Three Corners Solar Project (the “Project”) located in Unity Township, as well as the Towns of Clinton and Benton, Maine. The Project is a proposed utility scale solar energy facility consisting of photovoltaic (“PV”) panels, with a total installed capacity of 110 megawatts of alternating current (“AC”). The proposed Project solar arrays and supporting infrastructure (electrical equipment, collection substation and operations and maintenance building), are located north of Route 139 (Unity Road).

Power from the Project will be transmitted to the existing Central Maine Power (“CMP”) Albion Road substation in Benton, located southwest of the Project, via the construction of an approximately 5.2 mile long 115-kilovolt generator lead line. This memo is prepared in response to Maine’s regulatory requirements concerning scenic impacts:

- Natural Resources Protection Act (NRPA) 38 MSRA § 480-D (1) requires that “The activity will not unreasonably interfere with existing scenic, aesthetic, recreational or navigational uses.”
- Chapter 315: Assessing and Mitigating Impacts to Existing Scenic and Aesthetic Uses “describes the process for evaluating impacts to existing scenic and aesthetic uses resulting from activities in, on, over, or adjacent to protected natural resources subject to the Natural Resources Protection Act.”
- Standards for Development (Site Location Law) 38 MSRA § 484(3) requires that “The developer has made adequate provision for fitting the development harmoniously into the existing natural environment and that the development will not adversely affect existing uses, [or] scenic character.”
- Chapter 375.14 is the Site Location Law’s regulation describing the evidence that the Environmental Board uses for “determining whether the proposed development will have an unreasonable adverse effect on the scenic character of the surrounding area.”

II. Project Description

Three Corners Solar is proposing the development and operation of the Project located within Unity Township and the Towns of Clinton and Benton, which are within Kennebec County. The proposed Project will be located on undeveloped areas of previously harvested forest and cleared land starting approximately 1.8 miles east of the center of Clinton.

The Project will consist of three main components:

1) Project Solar Array Areas

The Project will be split between 8 fenced array areas. Fences will be a minimum of 7 feet tall to meet safety requirements. Arrays will consist of rows of photovoltaic modules mounted on single-axis tracker racking units fixed to the ground. Rows of panels generally run north-south and track the sun from east to west throughout the day. Solar panel modules would be configured in a single portrait orientation and have a maximum tilt of 52-degrees. Racking systems would be roughly 2 meters (6.6 feet) tall on the high side at maximum tilt. A series of collection lines would connect the separate arrays together and ultimately bring electricity being generated to the Project substation. Most of the collection lines are proposed in an underground configuration. However, the collection line that will connect the easternmost array area to the western portions of the Project are proposed in an overhead configuration on structures with above ground heights expected to be approximately 55 feet high. Other components of the arrays include internal access roads, stormwater management facilities, foundations for the racking systems, and other electrical equipment, such as inverter units to convert electricity from direct current (DC) to alternating current (AC).

2) The Project Substation & Operations Building

Electricity produced by the arrays would be collected at a proposed Project substation where electricity would be ‘stepped up’ to from 34.5 kV to 115 kV to be fed to the generator lead line. Immediately adjacent to the substation is a proposed operations building, with storage for the Project. The substation includes a fenced substation yard of approximately 250 feet by 250 feet. Within the yard there would be typical electrical transmission infrastructure, including a control building. The tallest components of the substation would be lightning protection, including lightning masts which will be approximately 85 feet tall. The operations building would be immediately south of the substation, with a rough footprint of 25 feet by 50 feet.

3) 115 kV Generator Lead Line

An approximately 5.2 mile long 115 kV overhead generator lead line would deliver electricity from the Project substation to CMP’s Albion Road substation. The 115 kV generator lead line is composed of approximately 65 single-pole and three-pole structures, with heights above ground that range from approximately 60 feet up to about 100 feet. The line will cross four roadways as it proceeds south and then west to the existing Albion Road Substation, including Route 139, Bog Road, East Benton Road, and Richards Road. Additionally, the line will cross over Fifteenmile Stream at a point roughly halfway along its route to the substation.

The general arrangement of the Project is illustrated in Figure 1.

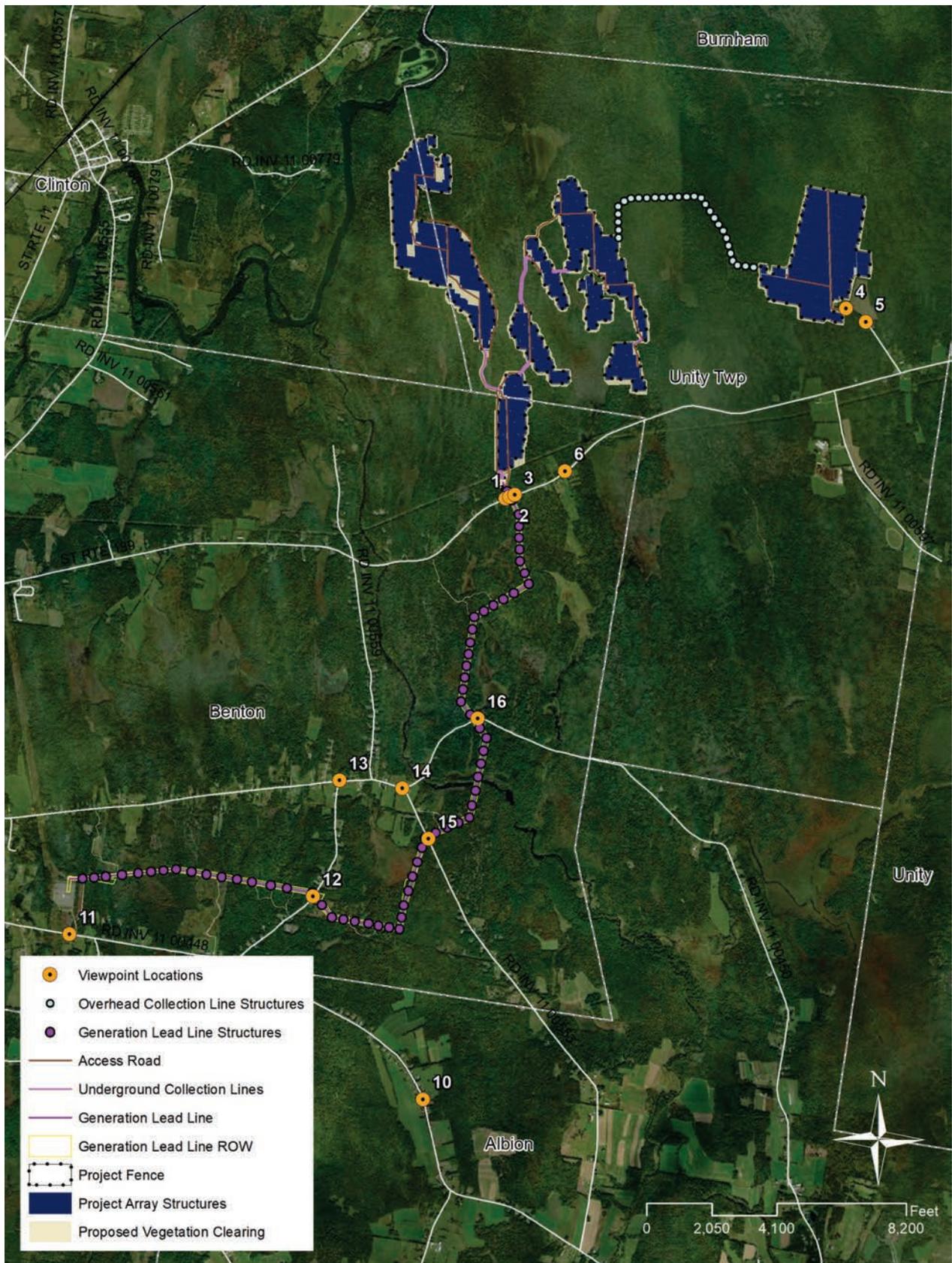


Figure 1: General arrangement and detailed aerial photo of the Project site and surrounding area.

The majority of the Project will be constructed primarily on existing forested land north of Route 139. Two access points will be constructed: one at Bessey Lane at the southwest corner of the array near the proposed collection substation, and one at the end of Palmer Road at the eastern extent of the array. No substantive development currently exists on the site. Other nearby existing infrastructure includes an existing communications tower at the north end of Palmer Road, a transmission line that runs roughly northeast and generally follows Route 139, and low-density residential uses (mainly along roadways) primarily in the vicinity of the proposed 115 kV generator lead line.

Project site selection involved an intensive site assessment undertaken by Three Corners Solar. The Project location is suitable for a utility-scale solar development because it is in close proximity to existing electrical transmission infrastructure (CMP's Albion Road substation is approximately 3.5 miles to the southwest), and due to the surrounding vegetation, the Project will generally have low visibility from public rights-of-way and private residences.

III. Methodology

Our study area for visibility and potential adverse impacts to the scenic character of the area extends to five miles from the proposed project location. This distance tells us whether the proposed project components are, or are 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. Five miles is an appropriate study area size because of the low-profile of the array and Project components. Visibility beyond 5 miles would have a negligible scenic impact.

In conducting the impact analysis and preparing this report, four distinct methods have been used: (1) background data collection, (2) GIS viewshed analysis mapping, (3) field investigation, and (4) Project visualization. The GIS viewshed mapping and field investigation are used to identify areas with potential visibility of the Project and to identify scenic resources within the area. The background data and field investigation are used to characterize the study area. For the Project visualization, photo simulations are prepared to accurately depict changes within particular views where visibility will potentially be possible. All four methods are used to evaluate whether there are in fact 'adverse' impacts and if so, whether those impacts could be considered 'unreasonable.'

- (1) **Background Data Collection.** Standard data that can help describe the landscape of the Project site, the surrounding area, and the Project are assembled. These data include available Project plans and details, aerial photography, topographical maps, Geographical Information System ("GIS") data including digital elevation model data, water and land cover information, transportation data and primary building data (public, commercial, residential), and applicable regulations such as the town plan and the regional plan.
- (2) **GIS Viewshed Analysis.** Following the background data collection, ESRI ArcGIS software is used to calculate a GIS viewshed or visibility analysis of potential visibility of the Project. Viewshed analysis can identify areas that have potential views of a project, and when mapped it shows the project viewshed.

The analysis applies a line-of-sight method from a prescribed point or points representing the Project (such as the top of an upright solar tracker, substation equipment, or power line

structure), to all other locations within a designated study area. Figure 2 illustrates how line-of-sight determines visibility. The analysis results (portrayed as two viewshed maps), and background data review form the basis for organizing the field investigation.

- a. A “Terrain Viewshed” map (see Appendix A, Map 2 & Map 4) represents how landform may block views of Project upgrades. This analysis only accounts for intervening landform and does not incorporate how vegetation, buildings, hedgerows, street trees or any other vegetation or buildings will screen visibility of the Project.

However, to facilitate interpretation of the results, the map differentiates between areas with and without forest cover, since there will be no distant views if one is standing in the forest. This map represents the maximum area from which the Project could be visible, and in almost every case overstates the probable visibility.

- b. A “Vegetated Viewshed” Map (see Appendix A) represents how vegetation, buildings and other obstructions in the landscape, in addition to landform, may block views to the Project. Within 2 miles of the Project, data used to identify obstructions is based on LiDAR data available from the Maine Office of GIS. Lidar data allows a much more accurate Vegetated Viewshed, because data include specific structure and vegetation heights. This map is a more realistic representation of the area from which the Project is potentially visible.

When properly taken into consideration, these maps indicate areas most likely to have views, indicating areas vulnerable to the greatest impacts, while also identifying areas that are unlikely to have views. The assumptions used to calculate these maps are conservative and tend to over-estimate Project visibility. These maps are considered a preliminary determination of potential visibility that is then verified through field investigation, which more fully evaluates the landscape context, views, and potential impacts. Therefore, it is inappropriate to use these maps as the only basis to evaluate visual extent and impacts. Figure 2 is a cross section showing the difference between the Terrain Viewshed and the Vegetated Viewshed maps.

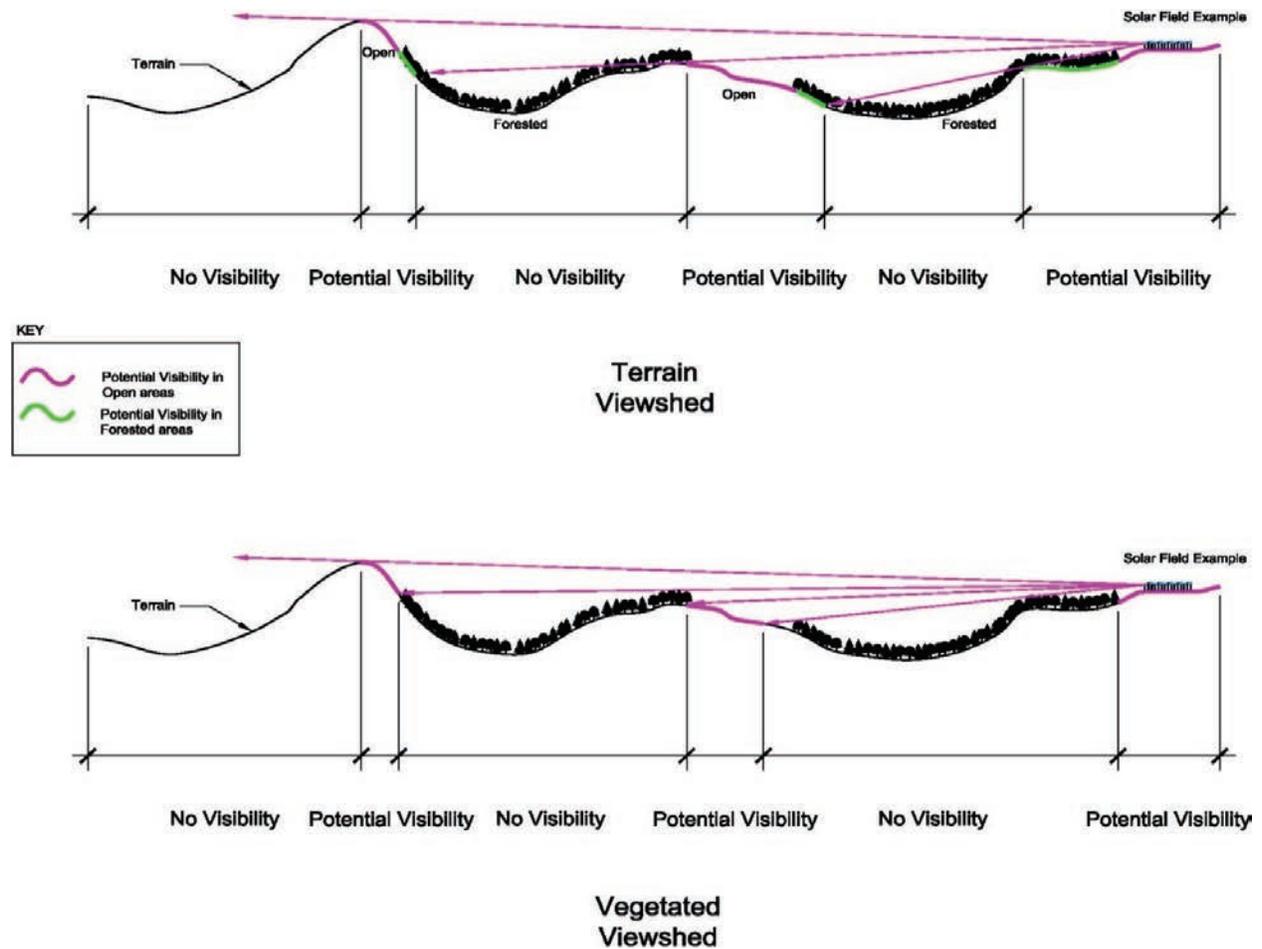


Figure 2 Terrain Viewshed and Vegetated Viewshed Diagrams. (Please note this diagram is for illustrative purposes only to portray the results of a GIS Viewshed analysis and is not representative of the proposed Project.)

- (3) **Field Investigation.** The viewshed maps are used to focus the field investigation on areas most likely to have views of the Project. The purpose of the field investigation is to:
- Verify potential visibility as indicated on the viewshed maps
 - Photograph views toward the Project
 - Photographically document the landscape’s visual character within the study area
 - Record notes concerning each viewpoint where photographs are taken
 - Identify location of photograph viewpoints using a global positioning system (“GPS”) unit

On completion of the field investigation, the GPS data is transferred to a GIS database and synchronization of the data and photograph locations are verified. Photo locations and the actual photos are coordinated through indexed viewpoint numbers. Documentation of the field investigation is then prepared, which includes: (1) mapping of the routes traveled and locations of photograph viewpoints, displayed on mapping within Appendix A and a catalog of photography, included as Appendix B, Photographic Inventory. Unless otherwise noted, all photographs were taken with a Nikon Z6II camera with a Nikkor Z 24-70mm lens, with a

focal length set to 50mm. This is approximately equivalent to 50mm on a 35mm film or FX digital single lens reflex camera, also known as a ‘normal lens’.

- (4) **Project Visualization.** It is normally helpful to create visualizations as an aid to evaluate visual impacts. In many situations, GIS information prepared with the viewshed analysis also can be used to create a three-dimensional (3D) model. The model can help to better understand the visual relationship of the basic landscape features to the Project elements. The advantage of this approach is the ease in representing the view from any viewpoint; the disadvantage is the relative coarseness of the data and the schematic quality of the image.

Photos captured during field investigation also can be used to create realistic photographic quality simulations of a Project. The specific selection of a simulation viewpoint is based on the extent of the Project’s visibility, the probable frequency and sensitivity of viewers, and the availability of a suitable photograph from the field investigation. There may be more than one viewpoint for a particular Project component. However, each simulation attempts to illustrate the most visible condition from a publicly accessible viewpoint for the area it represents. The following process is used to create the simulation.

- a. Three-dimensional computer-aided design (“CAD”) drawings of the proposed Project elements and site plan are obtained or created.
- b. The CAD data and aerial photographs of the area are georeferenced and overlaid. Reference markers representing fixed landscape elements visible in the photograph (i.e., existing buildings, utility poles) are added to the CAD data based on their location in the aerial photograph.
- c. A viewpoint or camera view is created within the CAD drawing based on the camera, viewpoint and other characteristics of the photograph. A perspective drawing of the proposed Project is produced that coincides with the perspective of the photograph.
- d. A digital image file for the simulation is created that includes separate layers for the perspective drawing and the simulation photograph. The reference markers are used to evaluate the accuracy of the perspective drawing’s camera view. The perspective drawing settings are fine-tuned to ensure the reference markers coincide with the photograph.
- e. Elements of the perspective drawing that will be visible are rendered into the photograph using texture and colors that occur on the site or are specified in the Project documents or from other similar project materials.

TJBA evaluates data from the steps above and compares existing conditions with plans for the proposed Project. The following sections of this report describe in detail the collection and evaluation of data and the resulting conclusions.

IV. Evaluation of Visibility

The Project is located within the Central Maine Embayment sub-region of the Acadian Plains and Hills ecoregion, a diverse region of rolling plains with hills and some high hills.¹ The Project is also near, but not adjacent to, the Sebasticook River. In general, the study area can be characterized as a relatively flat landscape, with gently rolling hills. Other than at the northeast extent of the Project, where some existing

¹ http://ecologicalregions.info/data/vt/new_eng_front.pdf

agricultural/cleared fields exist at the northwestern extent of Palmer Road, the Project is located within a forested area. Roadways in the area include a mix of scattered residential development along the roads. The lack of significant variation in terrain helps reduce potential visibility of the Project and allows existing surrounding vegetation to screen most views of the Project.

TJBA conducted a field investigation site visit on January 4, 2022. As indicated by the viewshed mapping, field investigation found that visibility to the Project site is significantly obstructed from the surrounding area. Observations were made from roadways adjacent to the proposed Project and roadways adjacent to open agricultural fields or clearings within the surrounding 5-mile study area.

The closest location with visibility of the Project elements along Route 139 (Unity Road) at the Bessey Lane entrance to the Project site (see Appendix B, Viewpoints 1 through 3). For this stretch of roadway (approximately 250' in length), clearing of the vegetation for the proposed array, substation, and generator lead line will allow brief visibility of Project elements as travelers proceed in either direction along the road. A 115 kV generator lead line structure is proposed approximately 40' north of the road. To further understand visibility of the Project from this location, a photographic simulation was prepared from this location (see Appendix C, Simulation 1).

At the east extent of the Project, a second entrance will access the Project at the northwestern extent of Palmer Road. Palmer Road provides access to several residential homes, as well as an existing communications tower and agricultural fields (see Appendix B, Viewpoints 4 and 5). Due to the low profile of the proposed array structures, existing vegetation will significantly screen the proposed Project array from Palmer Road and the nearby residential uses.

There will be a view of the eastern Project array from Route 139 at a location approximately 2,100' east of the Bessey Lane entrance (see Appendix B, Viewpoint 6). From this location, travelers heading northeast will have a view of the array as it ascends a low background hill, and will be visible when heading in this direction for a distance of approximately 750'. To further understand visibility from this location, a photographic simulation was prepared from this location (see Appendix C, Simulation 2).

Further from the array, some visibility of the proposed array and associated generation lead line structures will be possible from US Route 202 (Albion Road), in two general areas southeast of the Project site at a distance of approximately 3.4 miles (see Viewpoint 7) and 3.1 miles (see Viewpoint 8). At approximately 4.5 miles away, the western extent of Town Farm Road will also have potential visibility (see Viewpoint 9). To the south, a view of the Project array will be possible from Benton Road at a distance of approximately 3.8 miles away. There are also a few areas of visibility to the northwest along Upper Bellsqueeze Road (4.85 miles away, see Viewpoint 17), Hill Road at the intersection with Rogers Road (4.6 miles away, see Viewpoint 18), and Hill Road (3.7 miles away, see Viewpoint 19).

To further understand Project visibility from these distances, a photographic simulation was prepared from Viewpoint 7 (see Appendix C, Simulation 3). As can be seen in the simulation, at these distances the Project components will be visible in the far middleground of the landscape, and are not expected to be significantly visible due to the low profile of the Project array structures and limited visibility of the tops of generator lead line structures.

Lastly, a series of Viewpoints were documented along the proposed 115 kV generator lead line route, which crosses four roadways as it proceeds approximately 5.2 miles from the Project substation to CMP's existing Albion Road substation. The interconnection with CMP's existing substation will occur on the substation's north side, which is well screened from public view due to intervening vegetation and existing electrical infrastructure (see Viewpoint 11). Proceeding east from the Albion Road substation, the line will cross

Richards Road, and will require the removal of an existing mobile home to make room for a new three-pole angle structure and associated guy wires (see Viewpoint 12). The line then proceeds east and then north towards East Benton Road, and some of the tops of proposed structures will be visible from East Benton Road at the intersections with Richards Road (see Viewpoint 13) and Bog Road (see Viewpoint 14). Where the lead line crosses East Benton Road in an otherwise forested area, an angle structure and associated guy wires will be approximately 50' from the roadway (see Viewpoint 15).

Roughly halfway along the route to the Project's substation, the generator lead line crosses Fifteenmile Stream where the river makes a large 'S' bend. The river crossing is located in a relatively inaccessible area, and no significant visibility is expected. Further north, the line crosses Bog Road in a forested area with scattered wetlands (see Viewpoint 15), and the line continues through a similar setting until it crosses Route 139 (Viewpoints 1, 2 and 3) and connects to the Project substation.

Considering the large study area and size of the Project, visibility of the proposed array from surrounding areas will be highly limited. Most visibility will be from Route 139 near the Project substation (Viewpoints 1, 2, 3 and 6), with minor visibility of the array from the Project's east entrance, as well as some visibility from much further distances to the southeast (Viewpoints 7 through 9), south (Viewpoint 10), and northwest (Viewpoints 17 through 19). As can be seen in Appendix A, Map 3 Solar Vegetated Viewshed, visibility from other areas is highly limited due to intervening vegetation and terrain.

Significant visibility of the proposed overhead collection line is not anticipated from other locations in the study area due to the expected size of the structures (55' tall or less) and the mature vegetation that will remain alongside this alignment (see Appendix A, Map 4 Collection Vegetated Viewshed).

Visibility of the proposed substation will likewise be minor, with most visibility being from the adjacent portion of Route 139 (Viewpoints 1 and 2). Adjacent vegetation will provide significant screening of the substation infrastructure (see Appendix A, Map 5 Substation Vegetated Viewshed).

Lastly, the 115 kV generation lead line will have some visibility from surrounding areas, particularly at locations where the line crosses roadways, but also at further distances. In particular, the tops of the proposed 115 kV structures will be visible, but at less than 100', these structures will be consistent with the height of adjacent mature vegetation.

V. Inventory and Analysis of Scenic Resources

NRPA applications are required to complete the MDEP Visual Evaluation Field Survey Checklist, which requires the identification of scenic resources with potential visibility of the Project. Potential visibility is determined using the Terrain and Vegetated Visibility maps, supplemented with field verification. Scenic resources as defined in Chapter 315.10 have been identified within 5 miles of the Project.

Several conservation easement areas were identified as potentially having limited visibility, particularly visibility of the tops of proposed poles of the generator lead line. These would be viewed from a distance and, where visible, would appear similar to other distribution and transmission structures in the landscape. Many of these conservation easements do not include information about legal public access or whether scenery of or from the site is part of the conservation agreement. All of these are all listed as "private".

VI. MDEP Visual Evaluation Field Survey Checklist

(Natural Resources Protection Act, 38 M.R.S.A. §§ 480 A - Z)

Name of applicant: Three Corners Solar, LLC

Application Type: MDEP Site Location of Development Act / NRPA

Activity Type: (brief activity description): Construction and Operation of a 110-Megawatt Solar Energy Generation Project.

Activity Location: Town: Unity Township, Towns of Benton and Clinton **County:** Kennebec

GIS Coordinates, if known: See Project Plans and Location Maps

Date of Survey: January 4, 2022 **Observers:** Michael Buscher & Danielle Ade, T.J. Boyle Associates LLC

Phone: (802) 658-3555.

Distance Between the Proposed Visibility Activity and Resource (in Miles)

1. **Would the activity be visible from:** 0-1/4 1/4-1 1+

A. National Natural Landmark or other outstanding natural feature?

There are no known National Natural Landmarks within the study area that have visibility of the Project.

Unity Wetlands: Although not a National Natural Landmark, Unity Wetlands is noted as a focus area of Statewide Ecological Significance. It includes over 42,000 acres of land within portions of the towns Albion, Benton, Burnham, Clinton, Freedom, Unity, and all of Unity Township. The Project site is within Unity Wetlands, and as such visibility of the Project will be possible.

Unity Wetlands is significant because of the diversity of natural features, especially wetland and riparian-associated species and habitats. It encompasses a large expanse of wetlands and uplands and is one of the largest remaining unfragmented blocks of land in central Maine. However, there are no known conserved areas or locations with designated public access within the Project. While scenic value is an attribute of the focus area (it “Provides scenic vistas and open space that raise property values”), scenery it is not the cause for conservation and protection of the area.² At the most, it is anticipated that use of the Project area specifically as part of the Unity Wetlands is extremely low, and overall visibility of the Project from other areas is limited. It is anticipated that the Project will have little if any impact to any use or visibility of the Unity Wetlands resource.

B. A State or National Wildlife Refuge, Sanctuary, or Preserve or a State Game Refuge?

There are no known State or National Wildlife Refuge, Sanctuary, or Preserve or a State Game Refuge within the study area that have visibility of the Project.

² https://www.maine.gov/dacf/mnap/focusarea/unity_wetlands_focus_area.pdf

C. A state or federal trail?

There are no known state or federal trails within the study that have visibility of the Project.

D. A public site or structure listed on the National Register of Historic Places?

There are no known public sites or structures listed on the National Register of Historic Places within the study that have visibility of the Project.

E. A National or State Park?

There are no known National or State Parks within the study that have visibility of the Project.

F. 1) A municipal park or public open space?

There are no known municipal or public parks within the study that have visibility of the Project.

2) A publicly owned land visited, in part, for the use, observation, enjoyment and appreciation of natural or man-made visual qualities?

There are no known publicly owned lands visited, in part, for the use, observation, enjoyment and appreciation of natural or man-made visual qualities within the study that have visibility of the Project.

3) A public resource, such as the Atlantic Ocean, a great pond or a navigable river?

Fifteenmile Stream:

The proposed 115 kV generator lead line crosses Fifteenmile Stream south of Bog Road. While the river may be navigable, there are no entries for canoeing or scenic attribute fields in the Scenic River GIS database for Fifteenmile Stream.

Visibility of the Project will likely be limited to the generator lead line crossing and associated nearby pole structures. Some visibility of other Project elements such as the array vary as paddlers navigate along the Project site but is considered highly unlikely due to the low elevation of the stream, low profile of other Project elements, and prevalence of vegetation along the stream.

The Project is anticipated to have a low to moderate visual impact along portions of the stream adjacent to the lead line crossing and structures. Views towards the generator lead line will be significantly limited or softened by existing vegetation, particularly during leaf-on conditions, and will only likely occur at or near the crossing.

2. What is the closest estimated distance to a similar activity?

There is an existing 76.5-MW solar facility, approximately 33 miles to the west of the Project in the Town of Farmington, Maine. There are several additional solar projects also being planned within the state.

3. What is the closest distance to a public facility intended for a similar use?

It is unknown whether there are comparable publicly owned solar facilities within Maine.

4. Is the visibility of the activity seasonal? (i.e., screened by summer foliage, but visible during other seasons) Yes No

Although summer foliage will significantly decrease the extent of visibility of the Project at locations where views will be possible, such as along Route 139, summer foliage will not entirely screen visibility.

5. Are any of the resources checked in question 1 used by the public during the time of year during which the activity will be visible? Yes No

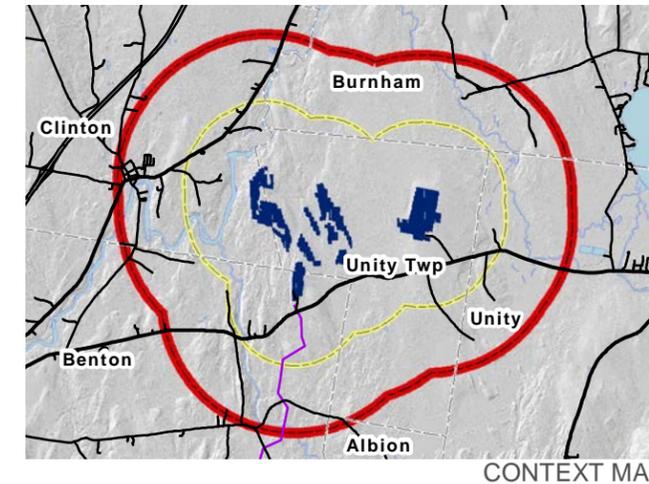
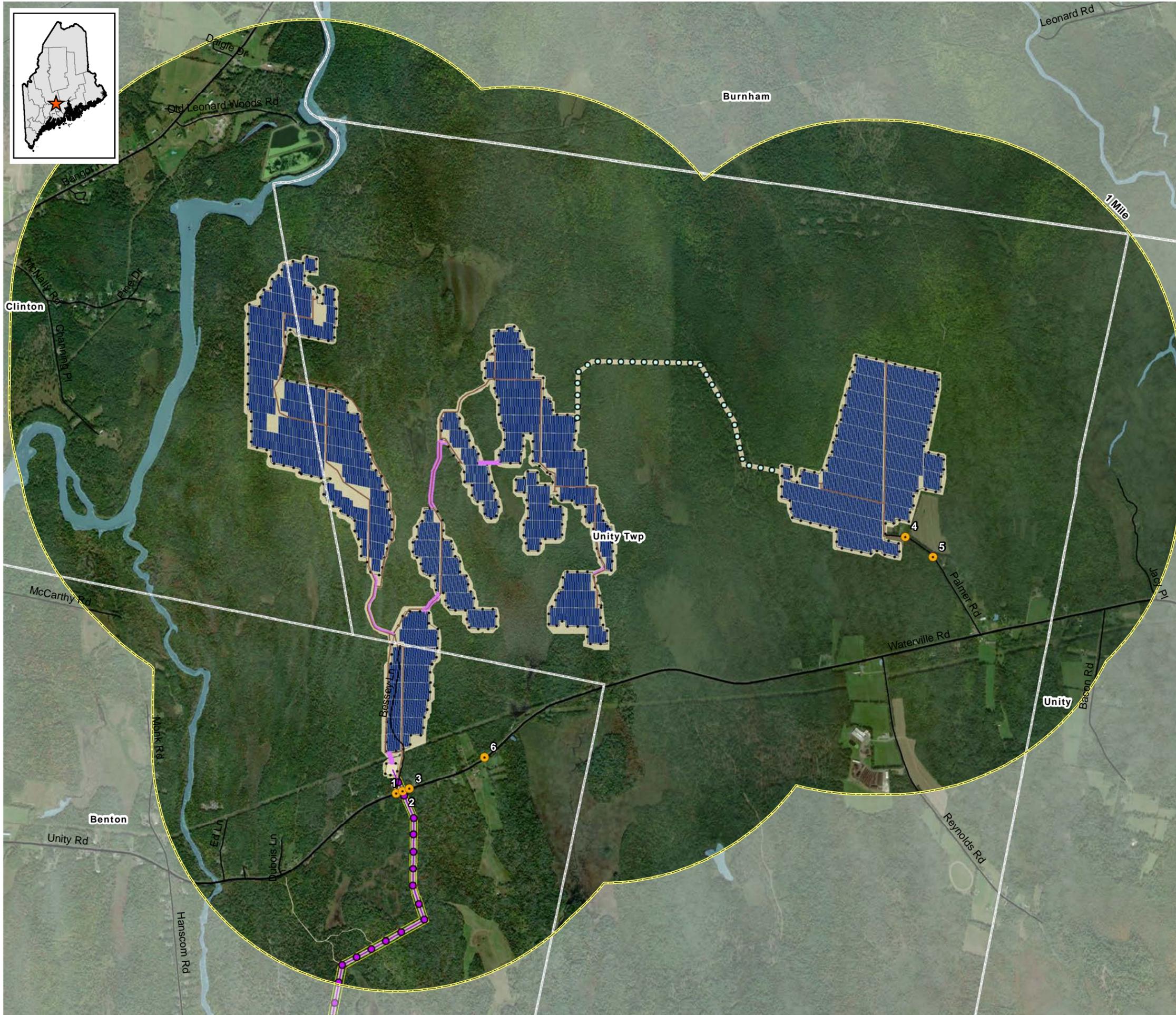
Chapter 375.14 notes that the DEP shall take into consideration “whether the proposed development will have an unreasonable adverse effect on the scenic character of the surrounding area.” Generally, we assume this statement incorporates the areas beyond the specific resources noted in Chapter 315. Areas with potential visibility are described in Section IV. above, and generally include roadways and non-forested areas at high elevation. While the Project will be visible, it is generally only visible near the proposed Bessey Lane entrance, when near the generator lead line road crossings, or from a few locations to the southeast and northwest at distances further than 3 miles. When visible at long distances, such as 3 miles or more, the Project is not likely to be readily apparent in the landscape. The vast majority of the 5-mile study area will not have visibility of the Project components.

Based on the general lack of visibility, and specifically the forested landscape that will remain around the proposed Project array, substation, generator lead line and other elements, the proposed Project will not have an unreasonable adverse effect on the scenic character of the surrounding area.

VII. Findings and Conclusions

Overall, T.J. Boyle Associates found the proposed Project will have very limited visibility within the 5-mile study area. Public views will be restricted to short-duration views along nearby roadways, and brief distant views where the Project is not likely to be readily apparent. The general lack of visibility can be attributed to careful planning and siting in the selection of the Project site, Project design that incorporates infrastructure that is low in profile, and the surrounding existing vegetation that will screen the Project.

We conclude that the Project meets the Standards for Development, pursuant to 38 MSRA § 484(3) insofar that “the developer has made adequate provision for fitting the development harmoniously into the existing natural environment and that the development will not adversely affect the existing uses, [and] scenic character” of the area. Pursuant to 38 MSRA § 480-D, the proposed “activity will not unreasonably interfere with existing scenic, aesthetic, recreational or navigational uses.”



Three Corners Solar

Appendix A

MAP 1: AERIAL CONTEXT MAP

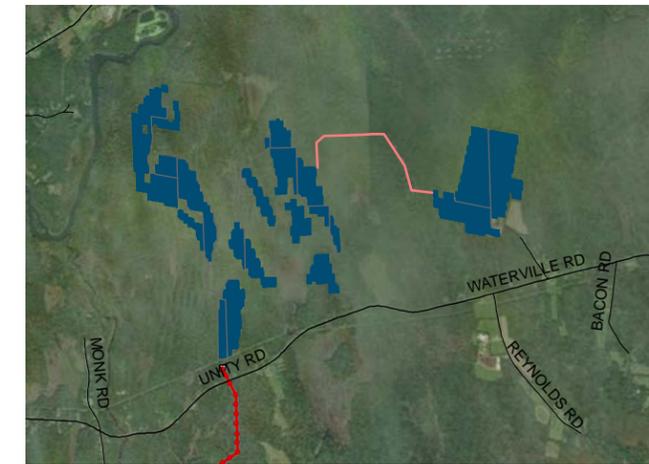
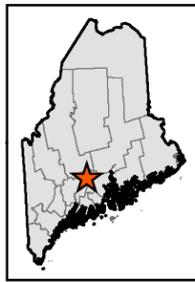
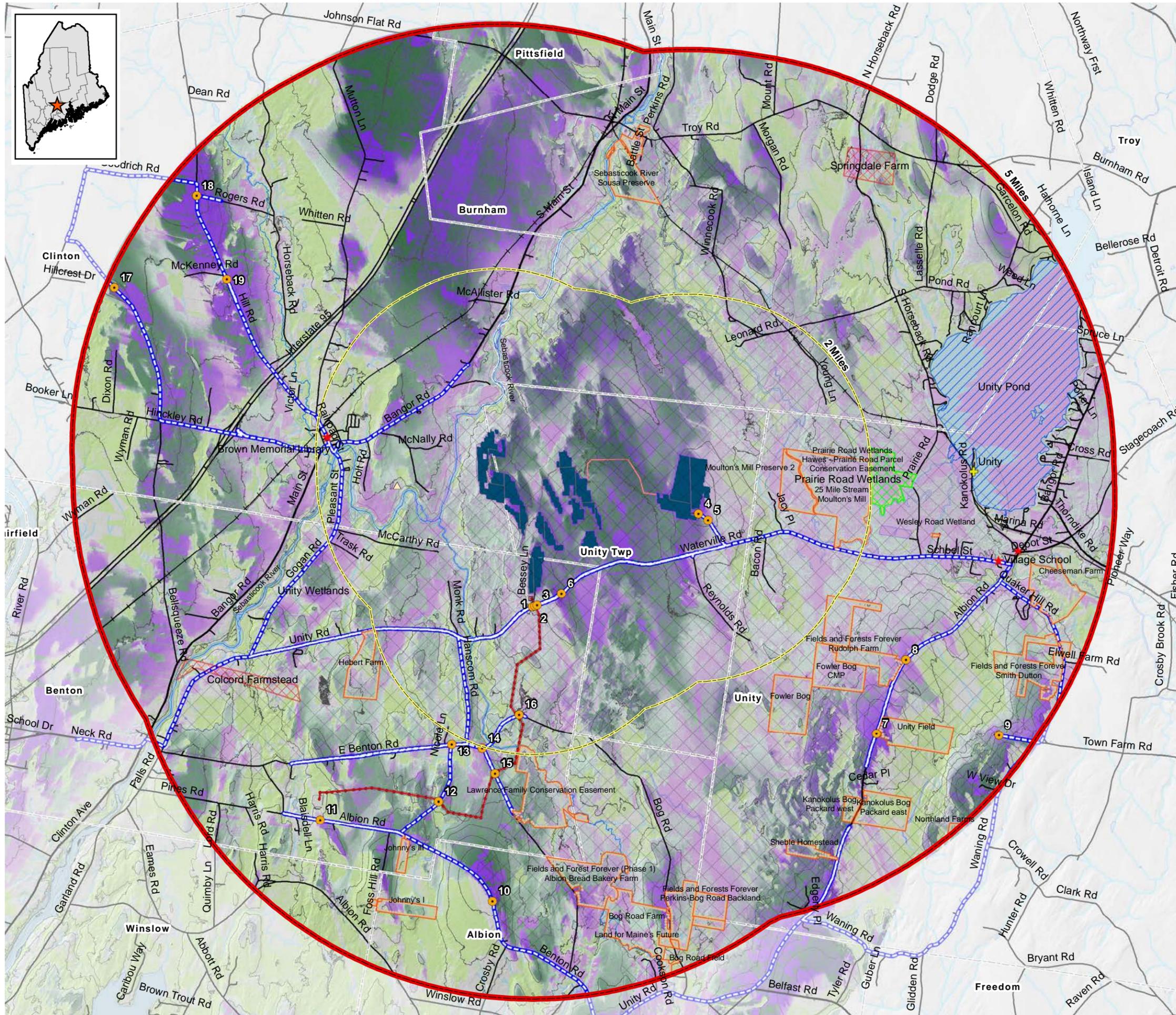
January 2022

LEGEND

- Viewpoint Location
- Generation Lead Line Structures
- Overhead Collection Line Structures
- Underground Collection Lines
- Generation Lead Line
- Access Road
- Hydrology
- 1-Mile Radius
- Project Fence
- Generation Lead Line ROW
- Project Array Structures
- Proposed Vegetation Clearing
- P_Substation



Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



SITE MAP

Three Corners Solar

Appendix A

MAP 2: TERRAIN VIEWSHED MAP

[5-Mile Study Area]

January 2022

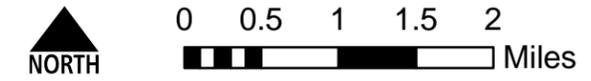
LEGEND

- Viewpoint Location
- ★ National Historic Places
- + Boat Launches
- Inventory Route
- 50' Contours
- Scenic Rivers
- 2-Mile Buffer
- 5-Mile Study Area - Proposed Array
- Proposed Solar Array Layout
- National Historic Properties
- Finest Lakes
- Wildlife Management Areas
- Conserved Land
- Focus Areas - State Significance

Visibility within Non-Forested Areas

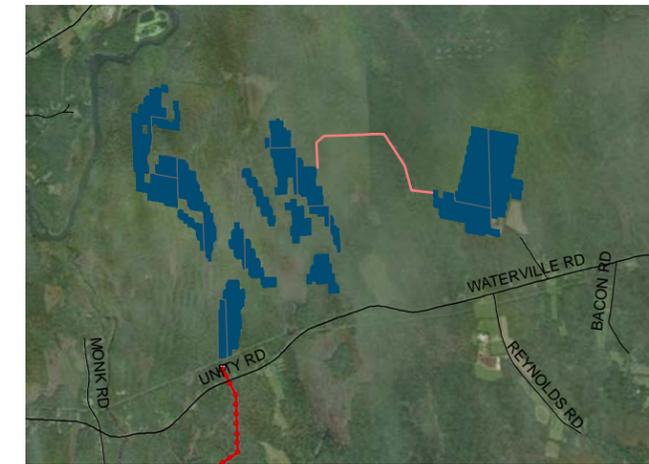
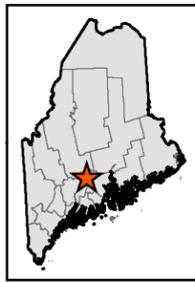
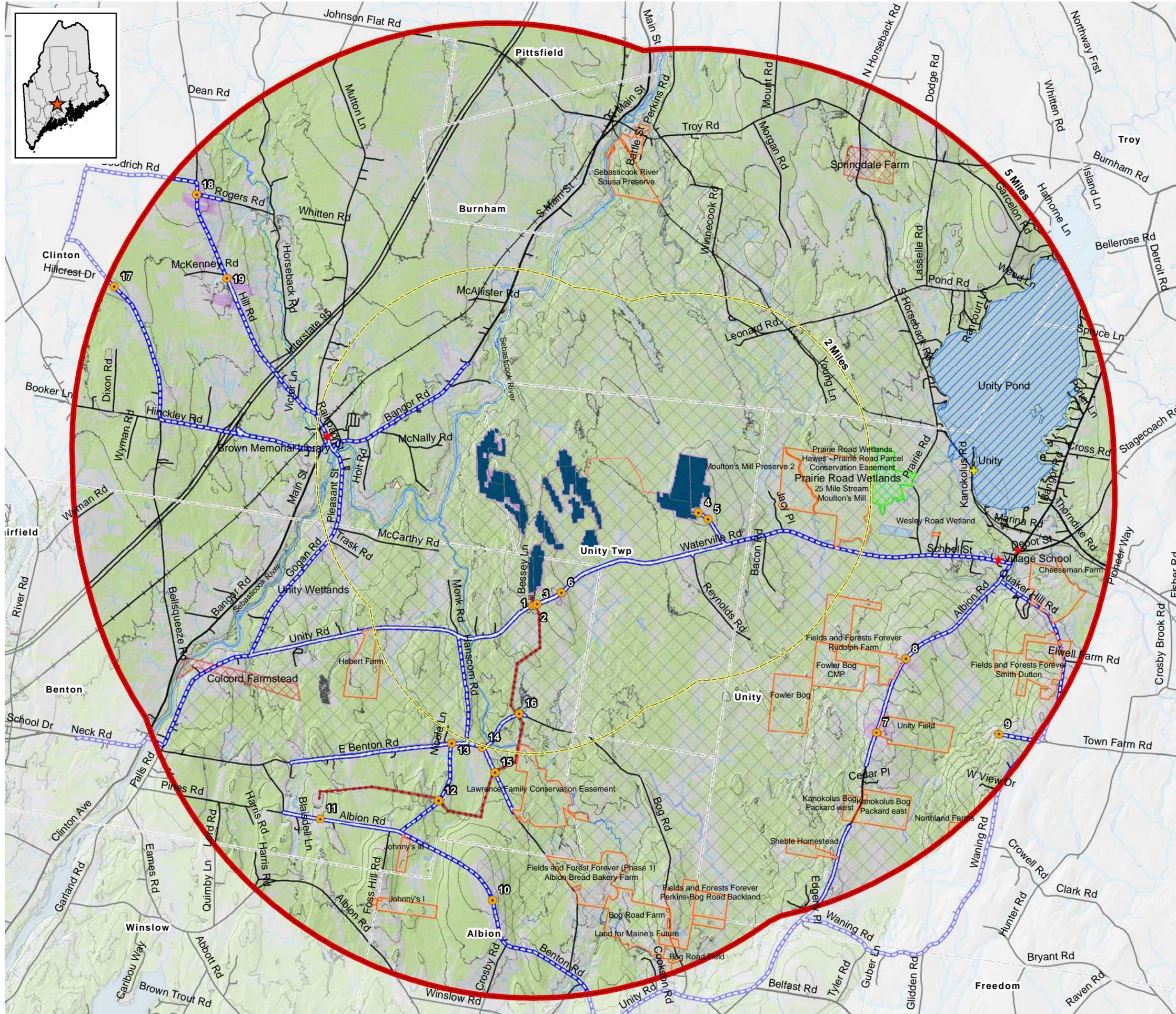


Visibility within Forested Areas



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.



SITE MAP

Three Corners Solar

Appendix A

MAP 3: VEGETATED VIEWSHED MAP

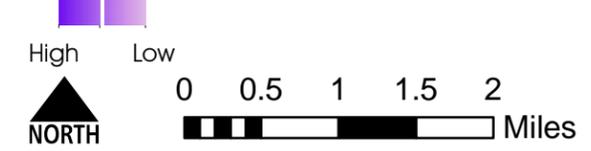
[5-Mile Study Area]

January 2022

LEGEND

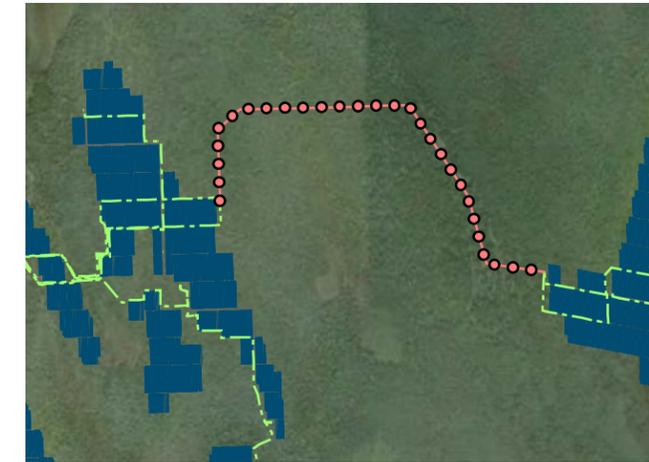
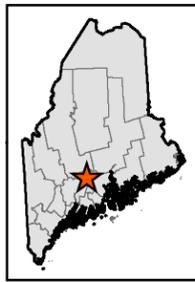
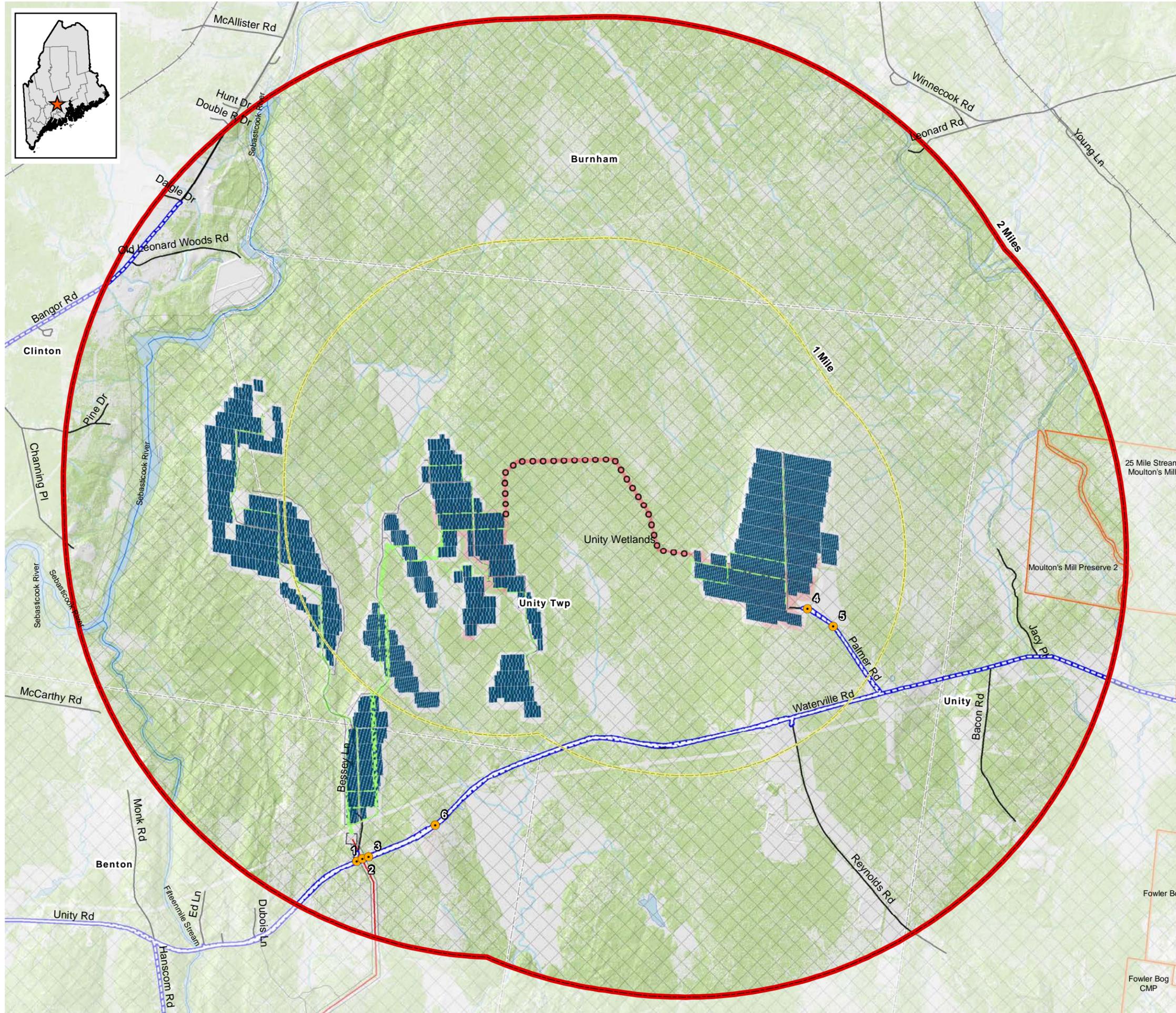
- Viewpoint Location
- ★ National Historic Places
- + Boat Launches
- Proposed Transmission Structures
- Inventory Route
- Overhead Collection Line
- 115kV Generator Lead
- 50' Contours
- Scenic Rivers
- Proposed Solar Array Layout
- Substation
- 5-Mile Study Area - Proposed Array
- National Historic Properties
- Finest Lakes
- Wildlife Management Areas
- Conserved Land
- Focus Areas - State Significance

Visibility within Non-Forested Areas



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.



SITE MAP

Three Corners Collection Structures

Appendix A

MAP 4: VEGETATED VIEWSHED MAP

[2-Mile Study Area]

January 2022

LEGEND

- Viewpoint Location
- Proposed Collection Structures
- Inventory Route
- Overhead Collection Line
- 115kV Generator Lead
- Underground Collection Line
- Array Access Road
- Scenic Rivers
- 2-Mile Study Area - Collection Structures
- 1-Mile Buffer
- Hydrology
- Obstructions
- Conserved Land
- Focus Areas - State Significance
- Proposed Solar Array Layout
- Substation
- Town Boundary

Visibility within Non-Forested Areas

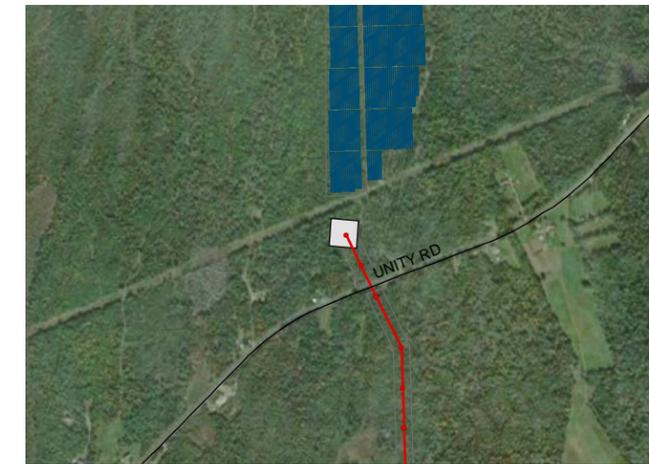
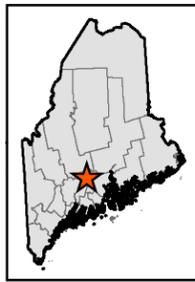
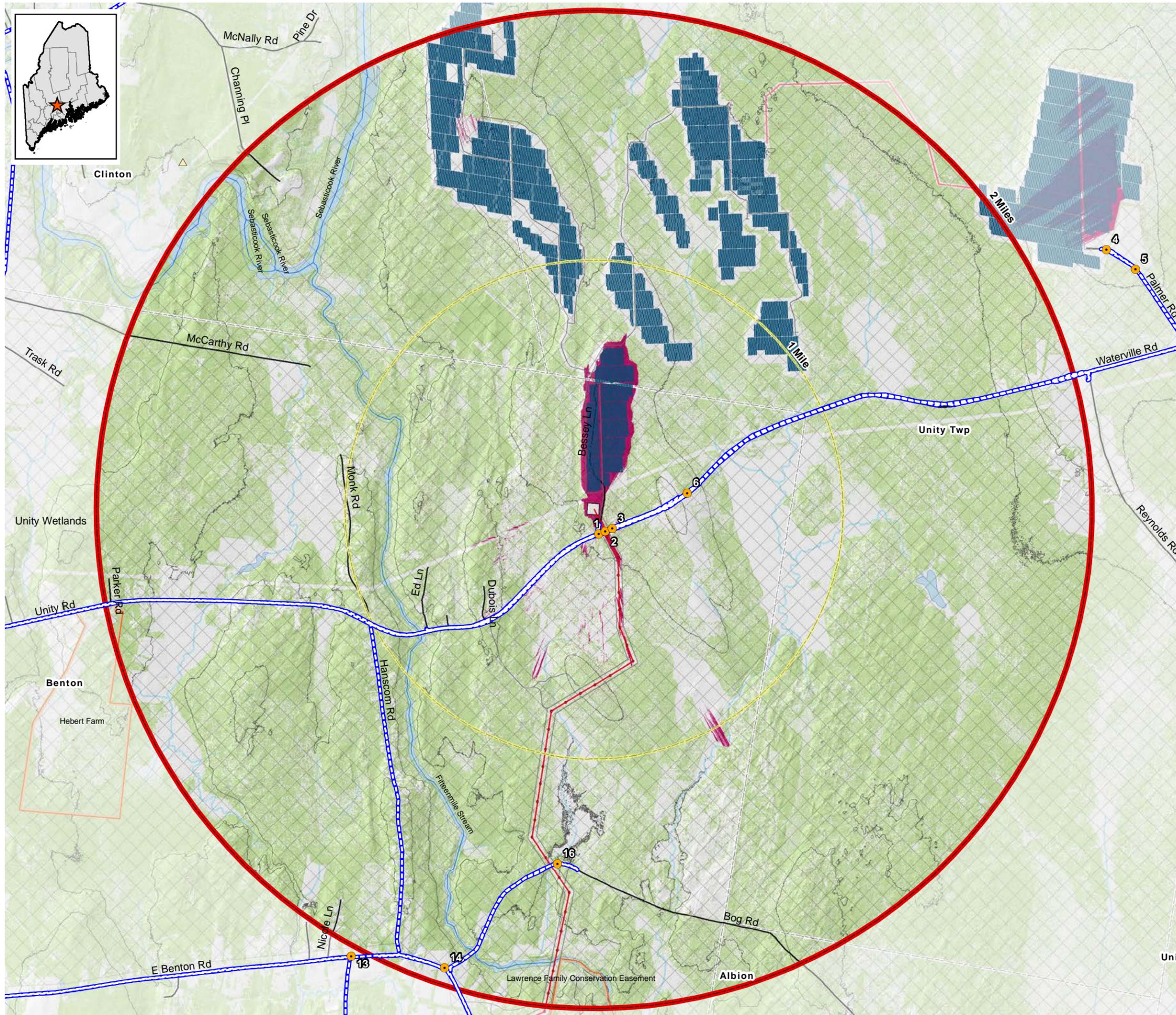
■ High ■ Low



0 0.5 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.



SITE MAP

Three Corners Substation

Appendix A

MAP 5: VEGETATED VIEWSHED MAP

[2-Mile Study Area]

January 2022

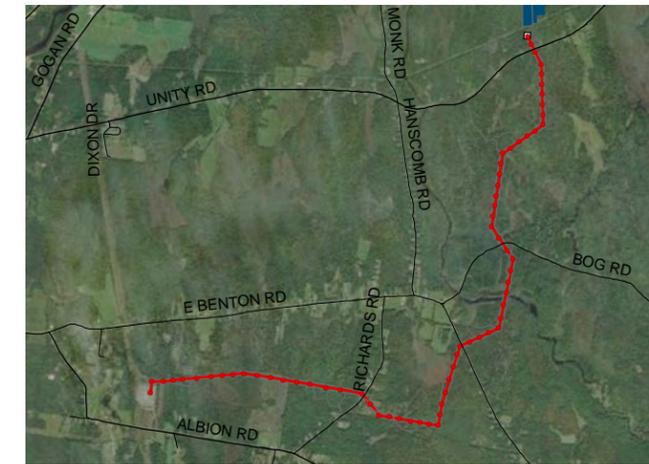
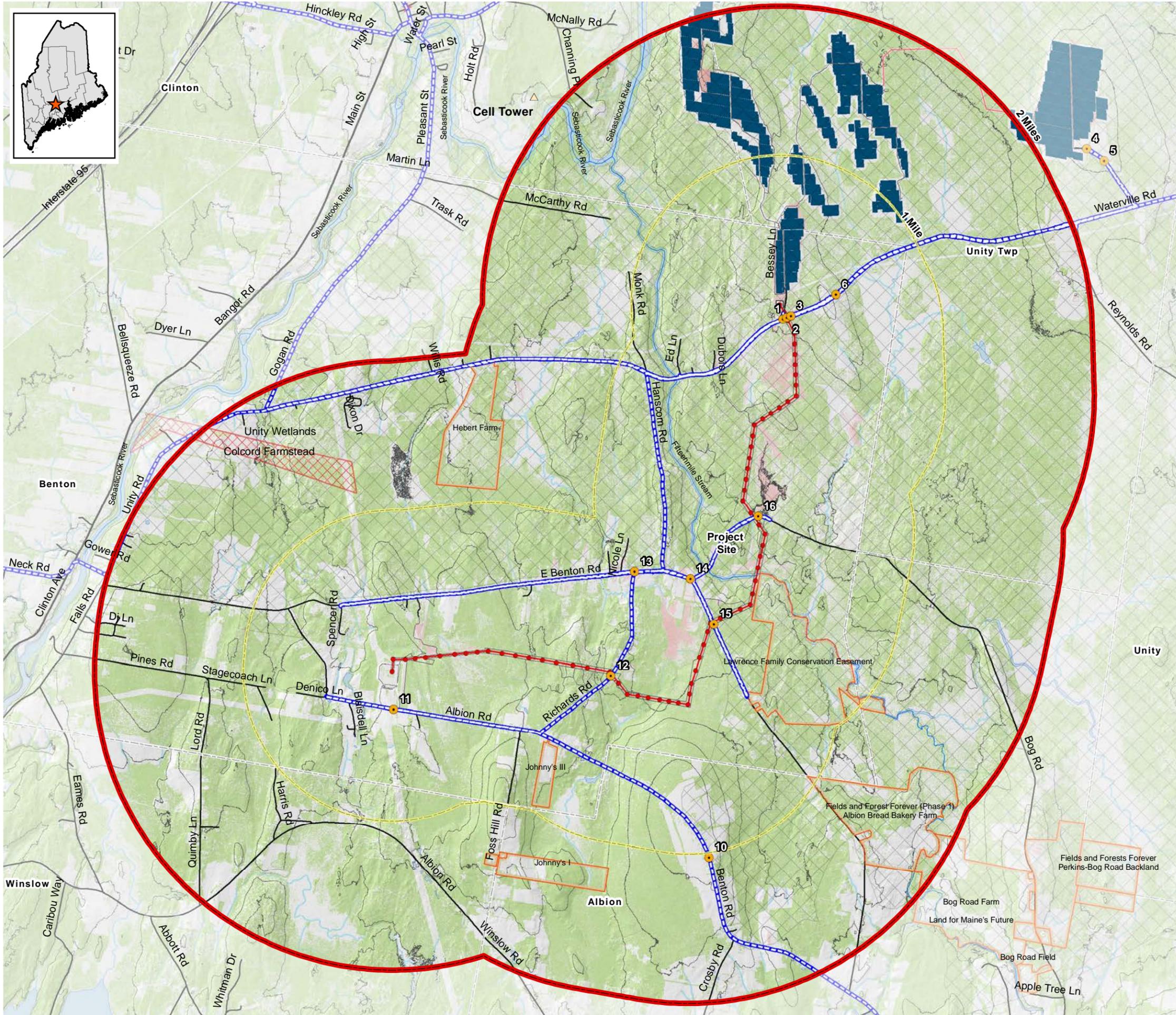
LEGEND

- Viewpoint Location
 - Inventory Route
 - 115kV Generator Lead
 - Array Access Road
 - Scenic Rivers
 - Substation
 - 2-Mile Study Area
 - 1-Mile Buffer
 - Hydrology
 - Obstructions
 - Proposed Solar Array Layout
 - Conserved Land
 - Focus Areas - State Significance
- Visibility within Non-Forested Areas
- High Low



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.



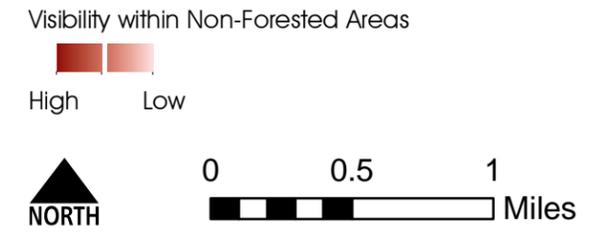
SITE MAP

Three Corners 115 kV Generator Lead Line

Appendix A MAP 6: VEGETATED VIEWSHED MAP

[2-Mile Study Area]
January 2022

- LEGEND**
- Viewpoint Location
 - ★ National Historic Places
 - Proposed Transmission Structures
 - Inventory Route
 - Scenic Rivers
 - Transmission Line Access Road
 - 115kV Generator Lead Line
 - 2-Mile Study Area - Generator Lead Line
 - 1-Mile Buffer
 - Hydrology
 - Obstructions
 - National Historic Properties
 - Conserved Land
 - Focus Areas - State Significance
 - Proposed Solar Array Layout
 - Substation



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.



Viewpoint 1a: 180° panoramic view from Route 139 (Unity Road) at the Bessey Lane entrance to the Project site, panning from southwest (left) to northeast (right). The orange rectangle represents the image below, which is captured with a 50mm equivalent lens.



Viewpoint 1a: View looking north from Route 139 at the entry point to the Project site, as represented by the orange rectangle in the image above. (50mm equivalent)



Viewpoint 1b: 180° panoramic view from Route 139 (Unity Road) at the Bessey Lane entrance to the Project site, panning from northeast (left) to southwest (right). The orange rectangle represents the image below, which is captured with a 50mm equivalent lens.



Viewpoint 1b: View looking southeast from Route 139 at the entry point to the Project site, as represented by the orange rectangle in the image above. The proposed 115 kV generator lead line will cross the road and head south at this location. (50mm equivalent)



Viewpoint 2: 180° panoramic view from Route 139 (Unity Road) just east of the Bessey Lane entrance, panning from southwest (left) to northeast (right). The orange rectangle represents the image below, which is captured with a 50mm equivalent lens.



Viewpoint 2: View looking northwest from Route 139 towards the proposed Project substation. The 115 kV generator lead line will cross the road and head south at this location. (50mm equivalent)



Viewpoint 3: 180° panoramic view from Route 139 (Unity Road) just east of the Bessey Lane entrance, panning from southwest (left) to northeast (right). The orange rectangle represents the image below, which is captured with a 50mm equivalent lens.



Viewpoint 3: View looking west from Route 139 towards the proposed Project access at Bessey Lane. The 115 kV generator lead line conductors will be visible crossing the road and leading south (left). (50mm equivalent)



Viewpoint 4: 180° panoramic view from the Project’s east entrance at the northwest extent of Palmer Road, panning from southwest (left) to northeast (right). An existing communications tower is visible at right. The orange rectangle represents the image below, which is captured with a 50mm equivalent lens.



Viewpoint 4: View looking southwest from Palmer Road near the proposed Project access. The array will be located in the foreground field. (50mm equivalent)



Viewpoint 5: 180° panoramic view from near the last residential structure on Palmer Road, panning from northwest (left) to southeast (right). The existing communications tower is behind vegetation at left. The orange rectangle represents the image below, which is captured with a 50mm equivalent lens.



Viewpoint 5: View looking northwest along Palmer Road the proposed Project area. No significant visibility will be possible due to intervening vegetation. (50mm equivalent)



Viewpoint 6: 180° panoramic view from Route 139 (Unity Road) approximately 2,100' east of the Bessey Lane entrance, panning from northwest (left) to southeast (right). The orange rectangle represents the image below, which is captured with a 50mm equivalent lens.



Viewpoint 6: View looking northeast from Route 139 towards the proposed Project. The array will be visible on the background hillside. (50mm equivalent)



Viewpoint 7: 180° panoramic view from US Route 202 (Albion Road) approximately 3.4 miles southeast of the nearest Project array, panning from southwest (left) to northeast (right). The orange rectangle represents the image below, which is captured with a 50mm equivalent lens.

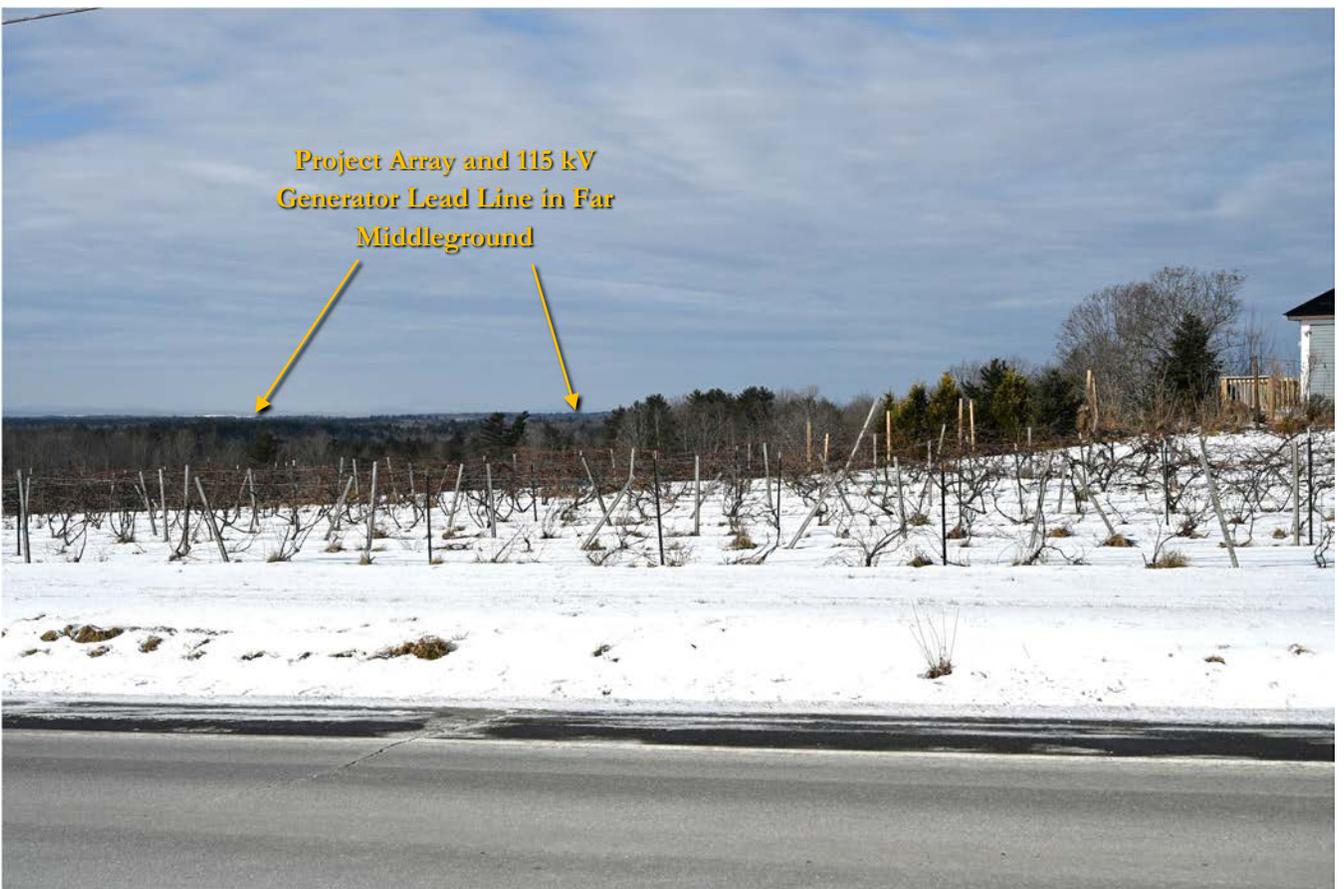


**Project Array and 115 kV
Generator Lead Line in Far
Middleground**

Viewpoint 7: View looking northwest from US Route 202 towards the proposed Project. Some areas of the proposed array and 115 kV generator lead line will be visible in the far middleground. (50mm equivalent)



Viewpoint 8: 180° panoramic view from US Route 202 (Albion Road) approximately 3.1 miles southeast of the nearest Project array, panning from southwest (left) to northeast (right). Stone Tree Farm & Cidery is visible at center. The orange rectangle represents the image below, which is captured with a 50mm equivalent lens.



Viewpoint 8: View looking northwest from US Route 202 towards the proposed Project. Some areas of the proposed array and 115 kV generator lead line will be visible in the far middleground at left. (50mm equivalent)



Viewpoint 9: 180° panoramic view from near the western extent of Town Farm Road approximately 4.5 miles southeast of the nearest Project array, panning from southwest (left) to northeast (right). The orange rectangle represents the image below, which is captured with a 50mm equivalent lens.



Viewpoint 9: View looking northwest from near the western extent of Town Farm Road towards the proposed Project. Some areas of the proposed array and 115 kV generator lead line will be visible in the far middleground. (50mm equivalent)



Viewpoint 10: 180° panoramic view from Benton Road approximately 3.8 miles south of the nearest Project array, panning from southwest (left) to northeast (right). The orange rectangle represents the image below, which is captured with a 50mm equivalent lens.



Viewpoint 10: View looking north from Benton Road towards the proposed Project. Some areas of the proposed array will be visible in the far middleground (through the gap in the foreground trees). (50mm equivalent)



Viewpoint 11: 180° panoramic view from Albion Road just south of Central Maine Power’s existing Albion Road substation, panning from northwest (left) to southeast (right). The orange rectangle represents the image below, which is captured with a 50mm equivalent lens.



Viewpoint 11: View looking north from Albion Road towards Central Maine Power’s existing Albion Road substation. The Project’s 115 kV generator lead line will connect to the north side of this substation, behind the evergreen trees at center. (50mm equivalent)



Viewpoint 12: 200° panoramic view from Richards Road just south of the proposed 115 kV generator lead line crossing, panning from west (left) to southeast (right). The orange rectangle represents the image below, which is captured with a 50mm equivalent lens.



Viewpoint 12: View looking north from Richards Road towards the proposed 115 kV generator lead line structure location. The existing residential use will be removed to make room for a new three-pole angle structure and associated guy wires. (50mm equivalent)



Viewpoint 13: 180° panoramic view from East Benton Road at the intersection with Richards Road, panning from east (left) to west (right). The orange rectangle represents the image below, which is captured with a 50mm equivalent lens.



Viewpoint 13: View looking southwest from East Benton Road towards the proposed 115 kV generator lead line, which is approximately 0.75 miles away. The tops of one to two proposed structures are expected to be visible above the intervening treetops. (50mm equivalent)



Viewpoint 14: 180° panoramic view from East Benton Road at the intersection with Bog Road, panning from southeast (left) to west (right). The orange rectangle represents the image below, which is captured with a 50mm equivalent lens.



Viewpoint 14: View looking southeast from East Benton Road towards the proposed 115 kV generator lead line, which is approximately 0.3 miles away. The tops of one to two proposed structures are expected to be visible above the intervening treetops as travelers head southeast around the bend. (50mm equivalent)



Viewpoint 15: 200° panoramic view from East Benton Road at the 115 kV generator lead line crossing, panning from southeast (left) to northwest (right). The orange rectangle represents the image below, which is captured with a 50mm equivalent lens



Viewpoint 15: View looking northwest from East Benton Road towards the proposed 115 kV generator lead line structure #31 and associated guy wires. The vegetation at center left will be removed. (50mm equivalent)



Viewpoint 16: 180° panoramic view from Bog Road at the 115 kV generator lead line crossing, panning from southeast (left) to northwest (right). The orange rectangle represents the image below, which is captured with a 50mm equivalent lens



Viewpoint 16: View looking west from Bog Road towards the proposed 115 kV generator lead line crossing. (50mm equivalent)

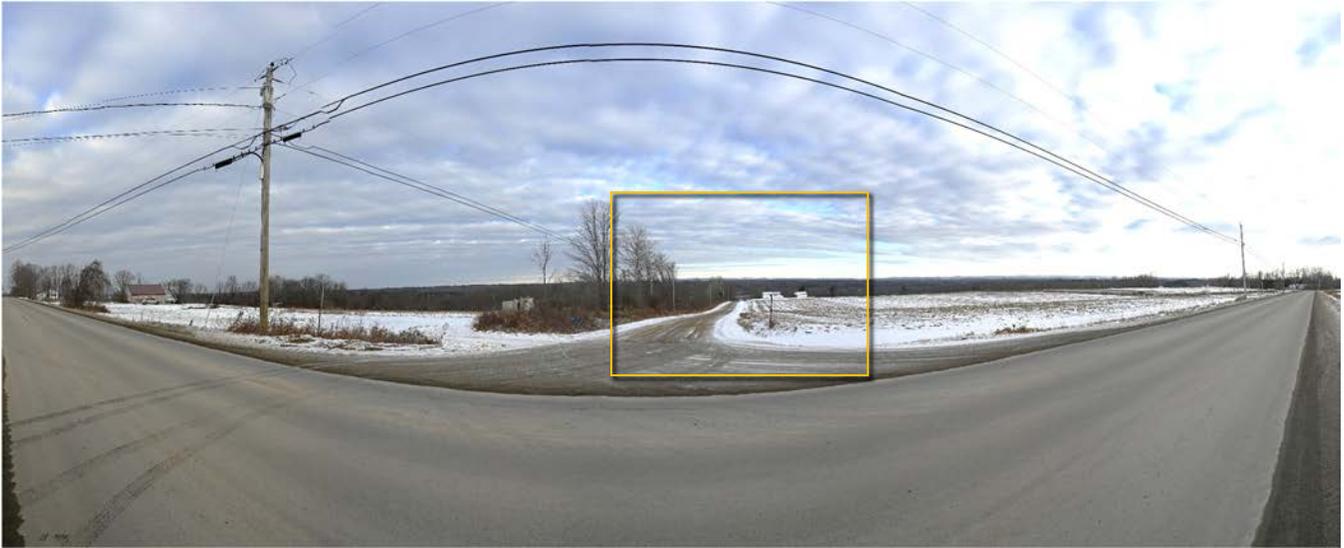


Viewpoint 17: 180° panoramic view from Upper Bellsqueeze Road approximately 4.85 miles northwest of the nearest Project array, panning from northeast (left) to southwest (right). The orange rectangle represents the image below, which is captured with a 50mm equivalent lens.



Project Array in Far Middleground

Viewpoint 17: View looking southeast from Upper Bellsqueeze Road towards the proposed Project. Portions of the proposed array will be visible in the far middleground. (50mm equivalent)



Viewpoint 18: 180° panoramic view from Hill Road at the intersection with Rogers Road approximately 4.6 miles northwest of the nearest Project array, panning from north (left) to south (right). The orange rectangle represents the image below, which is captured with a 50mm equivalent lens.



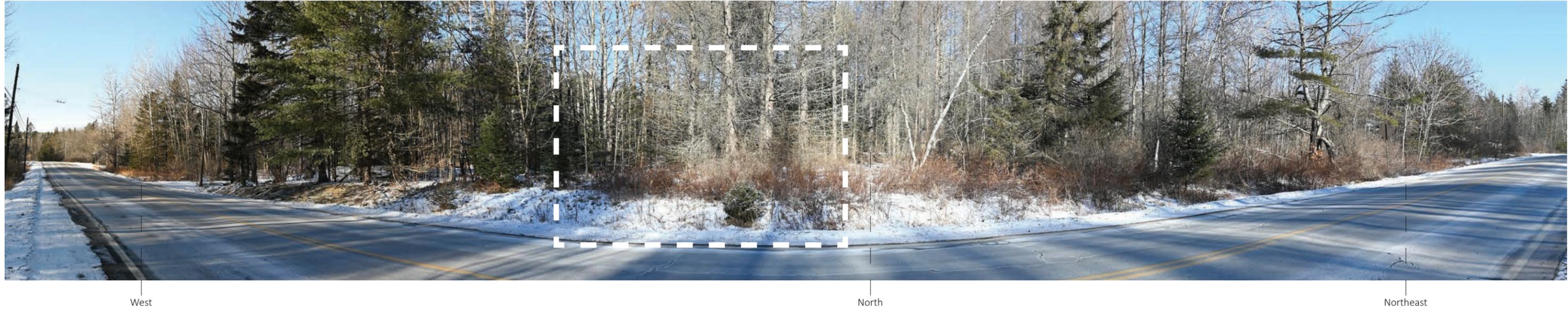
Viewpoint 18: View looking southeast from Hill Road towards the proposed Project. Portions of the proposed array will be visible in the far middleground. (50mm equivalent)



Viewpoint 19: 180° panoramic view from Hill Road approximately 3.7 miles northwest of the nearest Project array, panning from north (left) to south (right). The orange rectangle represents the image below, which is captured with a 50mm equivalent lens.



Viewpoint 19: View looking southeast from Hill Road towards the proposed Project. Portions of the proposed array will be visible in the far middleground. (50mm equivalent)



Panoramic View

The image above is a +/- 180° Panoramic view from Route 139 (Unity Road) just east of the Bessey Lane entrance, panning from southwest (left) to northeast (right). The white rectangle represents the extent of the simulation photo.

General Information

Base Photography

Date: January 4, 2022
Time: 10:12 am
Image Size: 6,048 x 4,024 pixels

Camera Properties

Camera Make/Model: Nikon Z 6II
Sensor Dimensions: 35.9 mm x 23.9 mm
Lens Make/Model: Nikkor Z 24-70 mm
Lens Focal Length: 50 mm
Approximate Angles of View:
39.6° wide and 27° high
Camera Height: 1.5 meters (5 feet)

Viewpoint Information

Location: Route 103 (Unity Road)- Benton, ME
Latitude: 44.582156°
Longitude: -69.36936°
Viewpoint: 2
Viewpoint Elevation: 215.85 feet (Approx.)
Orientation: Looking northwest

Simulation Viewing Notes

The simulation is properly printed on an 11-by-17 inches sheet at actual size. The simulated image is at the proper perspective when viewed at 23.5 inches from the eye or at a distance of approximately twice the image height. If viewed on a computer monitor, use the highest screen resolution.

Project Design

The simulation is based on the best information available in January 2022. Final substation, grading and operations/maintenance building design is not expected to be complete until later stages of the permitting process. Proposed buildings have been depicted with earth tone colors and similar substation designs were utilized in the creation of the simulation.

Sheet Information

Sheet 1
Information Sheet

Sheet 2
Existing Conditions
View looking directly towards the Project, as represented by the white rectangle in the panoramic view above.

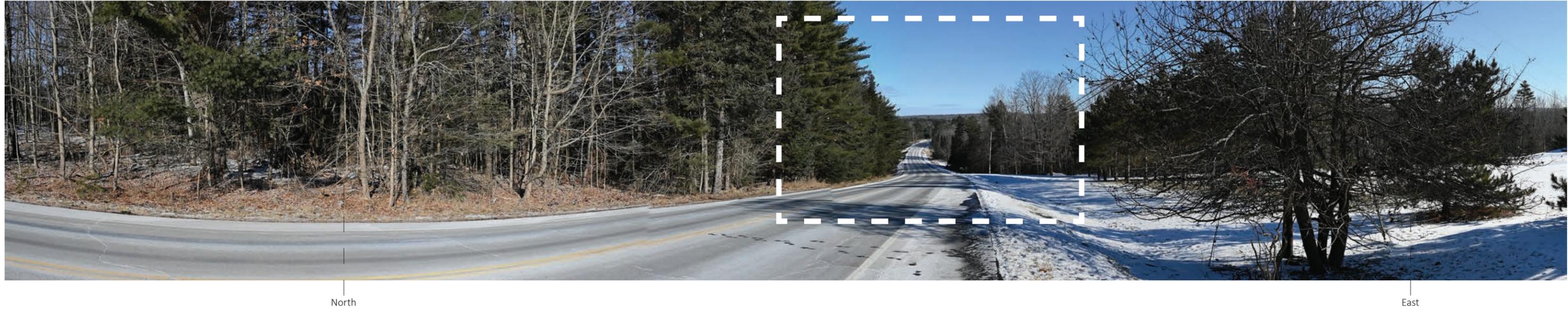
Sheet 3
Simulated Conditions looking at the proposed Project in the center of the photo.

Context Map









Panoramic View

The image above is a +/- 180° Panoramic view from Route 139 (Unity Road) approximately 2,100' east of the Bessey Lane entrance, panning from northwest (left) to southeast (right). The white rectangle represents the extent of the simulation photo.

General Information

Base Photography

Date: January 4, 2022
Time: 11:05 am
Image Size: 6,048 x 4,024 pixels

Camera Properties

Camera Make/Model: Nikon Z 6II
Sensor Dimensions: 35.9 mm x 23.9 mm
Lens Make/Model: Nikkor Z 24-70 mm
Lens Focal Length: 50 mm
Approximate Angles of View:
39.6° wide and 27° high
Camera Height: 1.5 meters (5 feet)

Viewpoint Information

Location: Route 139 (Unity Road) - Benton, ME
Latitude: 44.609027°
Longitude: -69.446386°
Viewpoint: 6
Viewpoint Elevation: 235.82 feet (Approx.)
Orientation: Looking northeast

Simulation Viewing Notes

The simulation is properly printed on an 11-by-17 inches sheet at actual size. The simulated image is at the proper perspective when viewed at 23.5 inches from the eye or at a distance of approximately twice the image height. If viewed on a computer monitor, use the highest screen resolution.

Project Design

The simulation is based on the best information available in January 2022.

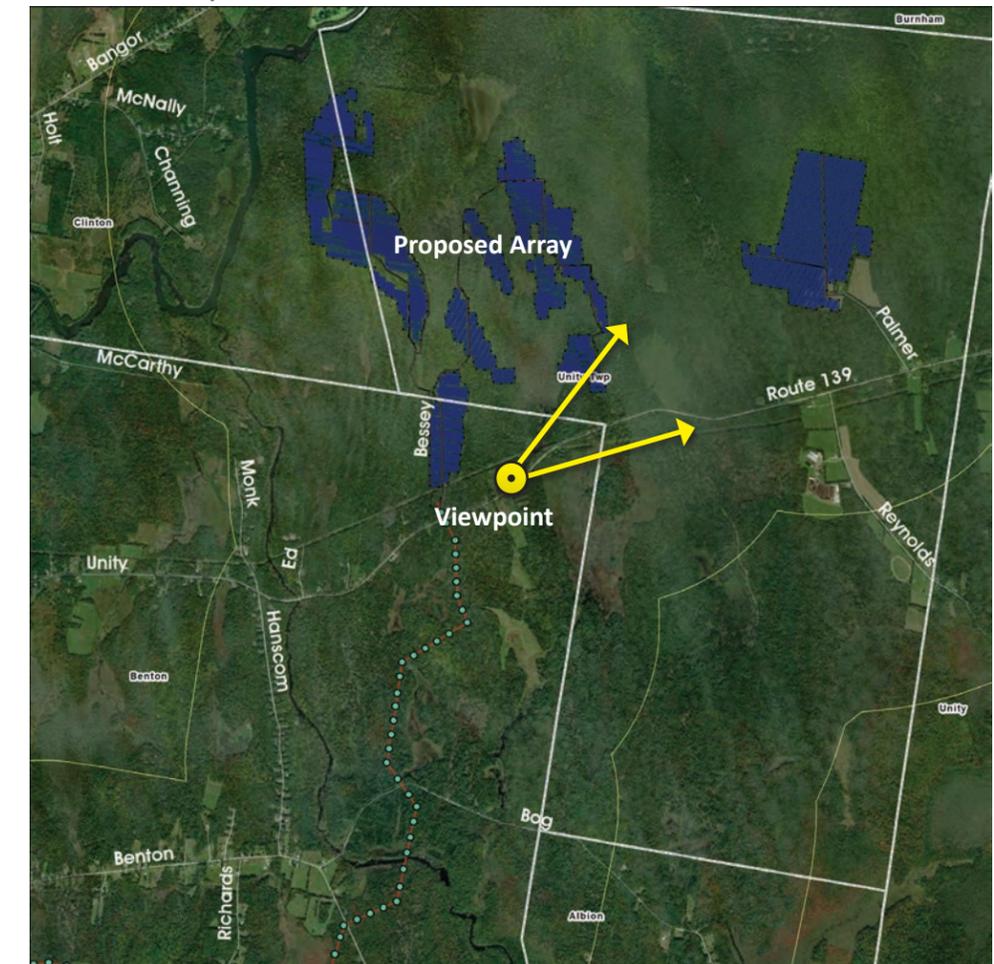
Sheet Information

Sheet 1
Information Sheet

Sheet 2
Existing Conditions
View looking directly towards the Project, as represented by the white rectangle in the panoramic view above.

Sheet 3
Simulated Conditions Looking at the proposed Project in the center of the photo.

Context Map







Simulated Conditions



Panoramic View

The image above is a +/- 180° Panoramic view from US Eoute 202 (Albion Road) approximately 3.4 miles southeast of the nearest Project array, panning from southwest (left) to northeast (right). The white rectangle represents the extent of the simulation photo.

General Information

Base Photography

Date: January 4, 2022
Time: 11:25 am
Image Size: 6,048 x 4,024 pixels

Camera Properties

Camera Make/Model: Nikon Z 6II
Sensor Dimensions: 35.9 mm x 23.9 mm
Lens Make/Model: Nikkor Z 24-70 mm
Lens Focal Length: 50 mm
Approximate Angles of View:
39.6° wide and 27° high
Camera Height: 1.5 meters (5 feet)

Viewpoint Information

Location: Route 202 (Albion Road)- Unity, ME
Latitude: 44.582156°
Longitude: -69.36936°
Viewpoint: 7
Viewpoint Elevation: 395.57 feet (Approx.)
Orientation: Looking northwest

Simulation Viewing Notes

The simulation is properly printed on an 11-by-17 inches sheet at actual size. The simulated image is at the proper perspective when viewed at 23.5 inches from the eye or at a distance of approximately twice the image height. If viewed on a computer monitor, use the highest screen resolution.

Project Design

The simulation is based on the best information available in January 2022.

Sheet Information

Sheet 1
Information Sheet

Sheet 2
Existing Conditions
View looking directly towards the Project, as represented by the white rectangle in the panoramic view above.

Sheet 3
Simulated Conditions Looking at the proposed Project in the center of the photo.

Context Map

