

**VISUAL IMPACT ASSESSMENT
Spruce Mountain Wind Project
Woodstock, Maine**

Prepared for

**Patriot Renewables
Spruce Mountain Wind, LLC**

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1.0 EXECUTIVE SUMMARY

1.1 Overview

Spruce Mountain Wind, LLC (SMW), an affiliate of Patriot Renewables, LLC, is proposing the Spruce Mountain Wind Project (Project), an 18 – 20 megawatt (MW) wind generating facility on approximately 2,879 acres of land in Woodstock, Oxford County, Maine. The Project will include up to 11 wind turbines, a 34.5-kilovolt (kV) electrical collector system, an electrical collection substation, a 115-kV generator lead, and an Operations and Maintenance (O&M) building.

The Project will consist of the following components:

- A total of up to 11 turbines, along with associated electrical interconnection infrastructure and a permanent meteorological tower, will be installed along the 1.7-mile-long eastern ridge of Spruce Mountain. Turbines will be located at elevations between 1,550 and 2,670 feet above sea level, on mountains that rise 1,300 to 1,500 feet above the surrounding valleys. All turbine components will be painted white.
- Red warning lights will be installed following Federal Aviation Administration (FAA) guidelines, mounted on the top of some of the nacelles. The final lighting plan is determined by FAA approval but is expected to consist of lights on the two end turbines and on alternating turbines between them.
- Proposed access to the project site will be via a new road off Shagg Pond Road to the Spruce Mountain ridgeline. The new 7,200± foot access road will be 24 feet wide until it reaches the ridgeline, where it will meet the 11,300± foot ridgeline road with an expanded width of 32 feet±, allowing for the crane needed to install the turbines. After construction is finished, some of the road will be re-vegetated and the road will be narrowed to a permanent width of 12 feet±, with the exception of periodic turn-outs to allow for passing vehicles.
- Power from the turbines will be collected in a 34.5 kV underground collector line system under the ridgeline access road, then transferred to an aboveground transmission line for 6,980± feet to Cushman Road. At the intersection with Cushman Road the remainder of the transmission line will be permitted, constructed and operated by Central Maine Power Company (CMP) and will extend along the existing Maine Department of Transportation (DOT) right of way adjacent to Cushman Road, Route 26, and Route 232 for approximately 2.8 miles and interconnect at the existing Woodstock substation.
- The Project will be constructed within a 2,879± acre parcel of land, using approximately 36 acres for the Project. At least 1,000 acres will be protected with a conservation easement that allows for sustainable timber harvest and will be available to the general public for traditional outdoor recreation including hiking, hunting, fishing, and snowmobiling on designated trails.

The Project would be visible within an eight-mile radius from several scenic resources of state or national significance, as defined by LD 2283 *An Act to Implement Recommendations of the Governor's Task Force on Wind Power Development* (Maine Wind Power Law), including:

- Abbots Pond in Sumner, which is noted for its outstanding scenic quality in the *Maine's Finest Lakes* study, plus Little Concord Pond in Woodstock, Shagg Pond in Woodstock, and Labrador Pond in Sumner, which are all noted in the same study for significant scenic quality.

- Dreamhome, a private residence on Bryant Pond in Woodstock that is on the National Register of Historic Places.
- Bald Mountain in Woodstock and a parcel on Speckled Mountain in Peru, which are part of undeveloped park properties held by the Maine Bureau of Parks and Lands.

1.2 Conclusion

There are several scenic resources of state or national significance within the viewshed of the Project. Within the 8-mile study area the most significant scenic resources are the views from several ponds that have been identified as significant or outstanding by the *Maine's Finest Lakes* study, and the views from Bald Mountain and Speckled Mountain, which are on undeveloped park land owned by the Bureau of Parks and Lands.

Throughout the majority of the study area, views of the Project are blocked by topography and roadside vegetation. Within the 8-mile study area, the project will not be visible from any national natural landmarks, federally designated wilderness areas, publicly accessible properties listed on the National Register of Historic Places, national parks, developed state parks, scenic rivers, the Appalachian Trail, Maine DOT scenic turnouts on scenic byways, or scenic viewpoints located in the coastal area.

The assessment examined the following criteria for each scenic resource of state or national significance: context, significance, existing public use, viewer expectations, project impact, and potential effect on public use. This information was used to make a determination of whether the project would significantly compromise views from these resources such that it would have an unreasonable adverse effect on its scenic character or the existing uses related to its scenic character. While the visual impact on several of these resources is anticipated to be moderate to strong, the Project should not have an unreasonable adverse impact on scenic values and existing uses of scenic resources of state or national significance.

2.0 INTRODUCTION

2.1 Background

Terrence J. DeWan and Associates (TJD&A), landscape architects in Yarmouth, Maine, prepared this visual impact assessment (VIA) for the Project being proposed by SMW. The methodology used to assess the potential visual impacts of the Project involves research into potential scenic resources of state or national significance, computer mapping to determine the area that may be affected by the project, field evaluation of existing conditions, development of computer-based photosimulations to illustrate physical changes to the visible landscape, and evaluation of the visual impacts based upon criteria established in the Maine Wind Power Law.

The study area is focused on the Town of Woodstock and includes all abutting towns and townships within eight miles of the project (see Figure 1: Expedited Windpower Permitting Areas in the Vicinity of the Spruce Mountain Wind Project). The limits of the eight-mile study is based upon the Maine Wind Power Law, which instructs the Maine Department of Environmental Protection (Maine DEP) to "consider insignificant the effects of portions of the development's generating facilities located more than 8 miles, measured horizontally, from a scenic resource of state or national significance." (§ 3452.3.)

This report is based upon mapping and design plans provided by Tetra Tech EC, Inc. and SMW. TJD&A created Figure 2: Viewshed Map of the Spruce Mountain Wind Project Study Area with WindPro¹ software to help determine the limits of potential project visibility.

TJD&A used the three-dimensional resources of Google Earth Pro and WindPro to look at the study area from the air and on the ground. These digital tools give reviewers the capability to experience the overall physical characteristics of the landscape and thereby better understand the setting of the wind project relative to the surrounding topographic features.

2.2 Field Investigations

Field data was collected by TJD&A personnel during site visits on August 7, 13, 14, 18, 27, and September 25, 2009. Fieldwork concentrated on evaluating and photographing scenic areas of state or national significance, as noted above, as well as viewpoints from public roads, ponds, and major publicly accessible hiking trails. The fieldwork assessed potential Project visibility, taking into account existing vegetation, buildings, and other physical features that were not incorporated into the WindPro analysis.

Photographs of the project area were taken with Nikon D70 and Nikon D300 digital cameras, recording at the highest resolution. The camera was set to capture images equivalent to those taken by a film camera equipped with a 50 mm (i.e., 'normal') lens, which is comparable to a non-distorted image seen by the human eye.² GPS coordinates were recorded with a JOBO PhotoGPS mounted on the camera's hot-shoe to capture the exact location of each photograph. A selection of annotated representative views within the study area is included in Appendix A: Study Area Photographs. Photographs were also used in the preparation of the photosimulations included in this VIA. A CD containing all of the photographs of the study area is available upon request.

2.3 Photosimulations

A series of photosimulations (computer-altered photographs) have been prepared to illustrate the anticipated change to views from scenic resources of state or national significance, as well as from characteristic viewpoints within the viewshed, resulting from the construction of the Project. The following section describes the methodology used to develop these images:

- TJD&A prepared a viewshed map of the eight-mile study area with WindPro software to determine where any part of any of the turbines, access roads, or transmission line may be visible. The viewshed map is very conservative in that it does not account for the screening effects of existing vegetation, buildings, or other structures that will block views of the Project from most roads and population centers. (See Figure 2: Viewshed Map.)
- Fieldwork by TJD&A verified the relative accuracy of the viewshed map and determined the location of characteristic viewpoints to use for photosimulations. The locations were selected to illustrate visual impacts to scenic resources throughout the eight-mile study area, with an emphasis on those areas of greater visual sensitivity and viewer expectation. The photographs used in Appendix A: Study Area Photographs and Appendix B: Photosimulations were taken from publicly accessible locations to illustrate the wide variety of landscape types within the study area. Where

¹ WindPro software was developed for the wind energy industry and is used world-wide for planning, design, and visual representation.

² The Nikon D300 was set to a focal length of 35 mm, based upon manufacturer's recommendations and field tests conducted by TJD&A.

possible 'worst-case' photographs were taken (i.e., where the most number of turbines would be visible).

- Photosimulations were prepared by TJD&A using the Visual-Photo Montage WindPro module. A digital elevation model (DEM) of the Project area was created in WindPro from on-line data sources. The specifications of the wind turbines (location, manufacturer, model number, base height, rotor diameter, and color) were entered into WindPro, which created three-dimensional images of the turbines and placed them in the proper location on the model. Digital photographs of the selected views were imported into the computer and merged with the DEM, matching the lens focal length, date and time of photograph, digital resolution, and lighting. The DEM was matched with the photograph using the known elevation, latitude, and longitude data from the PhotoGPS log.
- Post-production editing involved eliminating context data and other adjustments (e.g., removing parts of towers that are blocked by terrain, trees, or buildings). Final adjustments were made to account for time of day, weather conditions, haze, and other environmental factors that can change the appearance and visibility of the turbine components.
- The Project model was also inserted into Google Earth to check the registration of the photographs with the computer model, to determine the effectiveness of existing vegetation to block views of the turbines, and to verify the accuracy of the viewshed maps and photosimulations.
- Google Earth was used to determine the relative visibility of access roads, crane pads, and transmission lines. Where these associated facilities were found to be visible, the photosimulations were adjusted in Photoshop to illustrate changes in the texture and color of the surrounding forestland.
- The resultant photosimulations (See Appendix B: Photosimulations) were merged into a panorama using Photoshop to provide a more contextual view of the landscape. Each panoramic view is also accompanied by a 'normal' view to approximate what the human eye would see.

The legend in the panoramic views provides the following information:

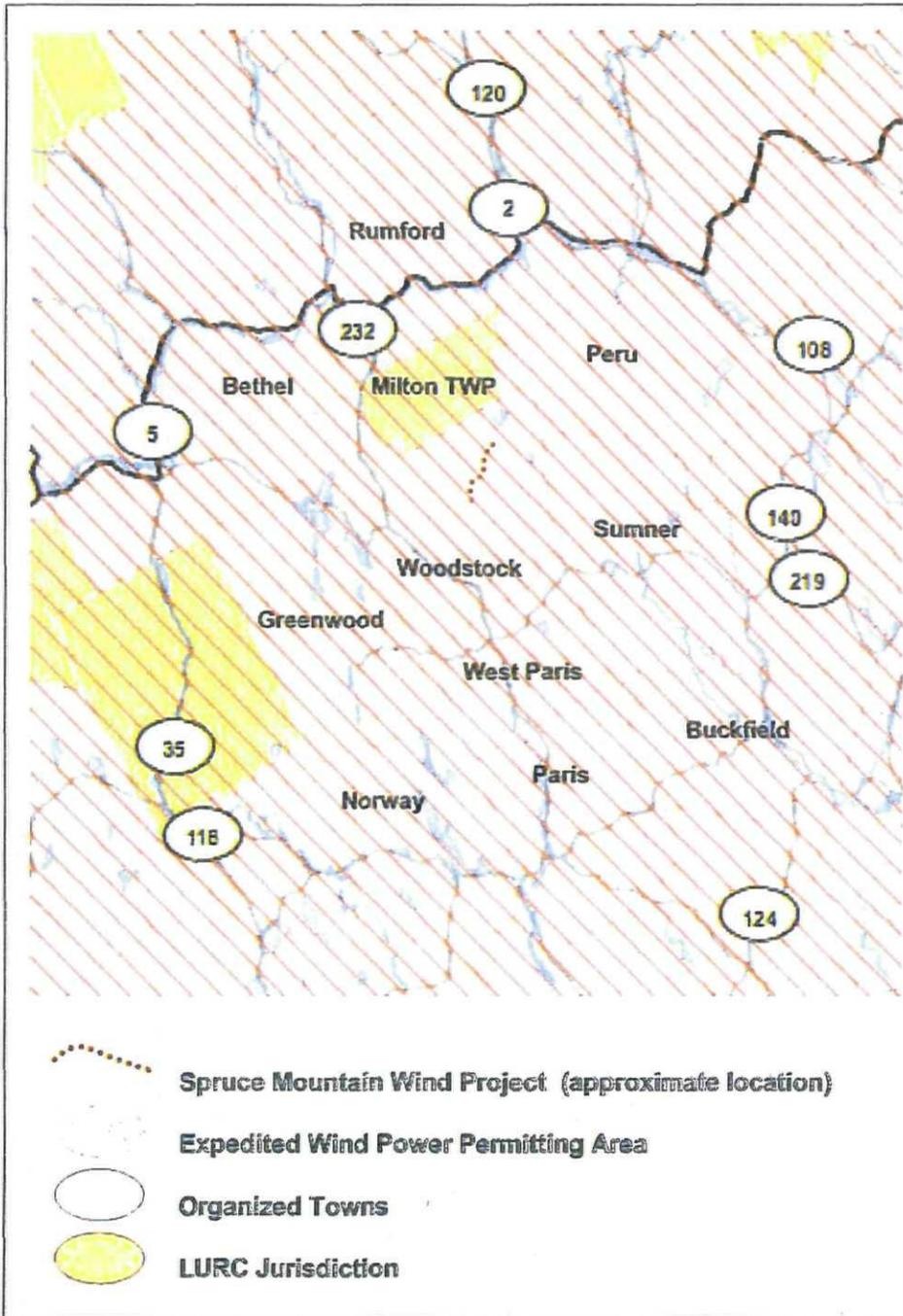
- **Turbine Model:** the manufacturer and model number. The code indicates the rotor diameter in meters (e.g. G90 has a 90m rotor diameter).
- **Hub Height:** The distance from the base to the center of the hub in meters and feet.
- **Rotor Diameter:** The diameter of the turbine blades in meters and feet.
- **View Coordinates:** Latitude and longitude of the photograph and computer model.
- **Viewer Elevation:** Approximate distance above mean sea level, in meters and feet.
- **Direction of View:** The compass direction of the photosimulation (indicated by a red dot and arrows on the Viewpoint Location Map).
- **Closest/Farthest Visible Turbine:** The horizontal distance in miles between the viewpoint and the closest and farthest turbines that may be visible from a particular viewing location.
- **Turbines Visible:** The approximate number of turbines that would likely be seen from the specific viewpoint, considering the effects of vegetation and structures.
- **Date/Time:** When the photograph was taken.

The normal view also provides the distance (in inches) that the reviewer should hold the photosimulation from the eye to accurately replicate real-world conditions.

3.0 REGULATORY REQUIREMENTS

The Maine Wind Power Law created a process to expedite wind power projects in places where they are most compatible with existing patterns of development and resource values. As demonstrated in Figure 1, Woodstock and many of the surrounding towns and townships are considered areas that meet these criteria.

Figure 1: Expedited Wind Power Permitting Areas in the Vicinity of the Spruce Mountain Wind Project



The Maine Wind Power Law requires an applicant attempting to permit an expedited wind energy project to provide Maine DEP with a visual impact assessment. This assessment must address the aforementioned evaluation criteria if Maine DEP determines such an assessment is necessary. There is a rebuttable presumption that a visual impact assessment is not required for those portions of the development's generating facilities that are located more than 3 miles, measured horizontally, from a scenic resource of state or national significance. Maine DEP may require a visual impact assessment for portions of the development's generating facilities located more than 3 miles and up to 8 miles from a scenic resource of state or national significance. This may be required if the Maine DEP finds there is substantial evidence that the pertinent scenic resource of state or national significance is significant and there is the potential for significant adverse effects. In determining whether an applicant for an expedited wind energy project must provide a visual impact assessment, Maine DEP shall consider:

- A. The significance of the potentially affected scenic resource of state or national significance;
- B. The existing character of the surrounding area;
- C. The expectations of the typical viewer;
- D. The project purpose and the context of the proposed activity;
- E. The extent, nature, and duration of potentially affected public uses of the scenic resource of state or national significance and the potential effect of the generating facilities' presence on the public's continued use and enjoyment of the scenic resource of state or national significance; and
- F. The scope and scale of the potential effect of views of the generating facilities on the scenic resource of state or national significance, including but not limited to issues related to the number and extent of turbines visible from the scenic resource of state or national significance, the distance from the scenic resource of state or national significance and the effect of prominent features of the development on the landscape. A finding by Maine DEP that the development's generating facilities are a highly visible feature in the landscape is not a solely sufficient basis for determination that an expedited wind energy project has an unreasonable adverse effect on the scenic values and existing uses related to scenic character of a scenic resource of state or national significance. In making its determination, Maine DEP shall consider insignificant the effects of portions of the development's generating facilities located more than 8 miles, measured horizontally, from a scenic resource of state or national significance.

SMW chose to do a visual impact assessment beyond the 3-mile minimum requirement in recognition of the number and variety of scenic resources of state or national significance within 8 miles of the project.

4.0 PROJECT DESCRIPTION

The following section describes the visible components of the Spruce Mountain Wind Project and its associated facilities.³

4.1 Wind Turbines

The turbines used for the Project will consist of up to 10 Gamesa (G90 or G87) 2.0-MW turbines or 11 General Electric (GE), 1.5-MW turbines. If Gamesa G90 or G87 turbines are used, each tower will be approximately 78 meters tall (256± feet) from the ground to the center of the hub. If a G90 turbine is selected, the total height from the ground to the tip of a fully extended blade will be 123 meters (approximately 403.5 feet). If the G87 turbine is used, the total height will be 121.5 meters (398.6 feet).

³ The Maine Wind Power Law defines 'associated facilities' as those 'elements of a wind energy development other than its generating facilities that are necessary to the proper operation and maintenance of the wind energy development, including but not limited to buildings, access roads, generator lead lines and substations'.

If GE 1.5sle turbines are used, each tower will be approximately 80 meters (262 feet) in height, with a 77 meter (253 feet) rotor, resulting in a total height from the ground to the tip of a fully extended blade of 119 meters (389 feet). Eleven Gamesa G90 turbines, the tallest of the potential models, were used in the assessment of potential visual impacts to allow for the most conservative assessment.

By using a constant base height, each of the nacelles will be roughly parallel to the ridgeline, creating a sense of order throughout the project. The turbines are controlled electronically so they always face into the wind. The blades will spin very slowly in low wind and will begin producing power when the wind velocity reaches approximately 3 m/s (6.7 mph). If the wind maintains a certain high velocity (generally 21 m/s or 47 mph, but will vary with the intensity of turbulence) over a short period of time the machines will cut out.⁴ The turbines may not be operational at other times, such as when the turbines are in-line (wind direction is parallel to the string, which limits the number of turbines that can operate) or when they are taken out of service for repair.

Depending upon the wind velocity, the blades will rotate at 9 to 20 revolutions per minute (RPM), which is equivalent to one revolution every 3 to 6.7 seconds. With unobstructed viewing conditions, individual blades will be clearly visible with virtually no detectable blurring while they rotate.

The turbines will be spaced a minimum of two rotor diameters apart (174 to 180 meters / 570 to 590 feet). Most of the turbines will be spaced 700 to 800 feet apart. Turbine spacing is a function of meteorological considerations related to wind speed and direction, interference from adjacent turbines, and other technical factors. The final siting of individual turbines takes into account the wind resource, site-specific topography, access road locations, wetland proximity, wildlife habitat, and other site conditions.

The turbine components (base, nacelle, and blades) will be white to provide contrast for pilots. White turbines will allow the project to only have red nighttime lighting. Turbine contrast and visibility is a highly variable phenomenon; turbines can appear to change from dark gray to a shade that almost matches the background sky, depending upon the time of day, orientation of the viewer, atmospheric conditions, and weather. In the midground and background viewing distances, where the Project will typically be seen, the turbines will appear as light gray due to the effects of atmospheric perspective, especially on hazy or overcast days.

4.2 Project Lighting

Exterior lighting for the wind turbines will follow the Federal Aviation Administration (FAA) marking and lighting guidelines for aviation safety. SMW plans on installing red LED L-864 flashing hazard beacons, which will be mounted on the top of the wind turbine nacelles at the top of the tower in accordance with an FAA-approved lighting design. The number of turbines with installed lights will be based on FAA Marking and Lighting Guidelines (FAA Advisory Circular 70-7460-1K), which requires lighting turbines at the ends of each string and at half-mile intervals. Under normal operations, the lights will appear between sunset and sunrise as red strobes flashing at the longest interval allowed by the FAA. By using white towers and turbines, which offer a considerable amount of visual contrast for pilots, the FAA will not require lighting during the day. If an alternate color were used, the FAA would likely recommend white strobes for daytime lighting, which would make the Project considerably more noticeable. Turbine warning lights are designed to be brightest when viewed from above or at the same horizontal plane to make them most apparent to pilots. The intensity of the light diminishes below the top of the tower to minimize impacts on surrounding land uses.

⁴ The values presented are based upon the Gamesa G90 turbines. The Gamesa G87 and GE 1.5sle turbines would have very similar characteristics.

The greatest visual impact from lighting on scenic resources of state or national significance will occur on Shagg Pond and Concord Pond, where some camp owners will be able to see the red lights on the ridgeline above the ponds.

4.3 Ridgeline Roads

Access to the turbines along the ridgeline will be over an 11,300± foot road that will connect the turbine foundations. The gravel road will be 32± feet in width and designed to provide safe access for the construction crane to the structures throughout installation process. In some instances the topography will dictate a circuitous route to accommodate the engineering requirements of the installation equipment and minimize site disturbance. In most locations the ridgeline roads will be screened by existing vegetation on either side of the road and would not be highly visible from outside the immediate area. A portion of the clearing required for the ridgeline roads will be visible from Bald Mountain at distances of 1.4 to 2.7± miles. The clearing for a portion of the ridgeline road will also be visible from Speckled Mountain at distances of 1.9 to 3.0± miles. The surface of the ridgeline road should not be visible from outside the immediate project area.

4.4 Access Roads

The Project will include construction of a new 7,200± foot access road extending from Shagg Pond Road to the Spruce Mountain ridgeline, where up to 11 wind turbines and an electrical collection infrastructure will be installed. If existing roads are used, they will be upgraded to 24± feet in width in most locations to accommodate construction vehicles and delivery trucks used for the turbine components construction and delivery, including limited pullouts for the passing of large vehicles. The access road should not be visible to the general public beyond its immediate intersection with Shagg Pond Road.

4.5 Electrical Collection System

Power from the turbines will be collected in a 34.5-kilovolt (kV) underground collector line system buried within the work limit of the ridgeline access road. The underground electric collector line will transition to an aboveground transmission line mounted on single wood poles (35-50 feet tall) in the vicinity of the southernmost turbine for approximately 6,980 feet, traversing the southwest side of the mountain to Cushman Road. CMP will be responsible for the design, permitting, and construction of the transmission line from Cushman Road to the existing Woodstock substation, a distance of 2.8± miles.

4.6 Meteorological Towers

The existing meteorological tower is temporary and will be removed during construction. The Project will not include a permanent meteorological tower.

4.7 Crane Pads and Crane Assembly Area

A cleared and level pad area, less than one acre in size, will be required at the base of each turbine for staging, crane movement, and turbine installation. Additional clearing may be needed in some areas to account for cut/fill slopes. In addition, a crane assembly area will be required for turbine installation. Following construction the crane assembly area will be allowed to naturally revegetate.

4.8 Operations and Maintenance Facility

The Project also includes a 1,750± square foot Operations and Maintenance (O&M) building located north of the ridge at the intersection of Shagg Pond Road and the proposed Project access road. The O&M building is designed to accommodate up to six employees and will include an 8,000± square foot parking lot with seven parking spaces, two of which are handicapped accessible. The building will be served by on-site water and septic.

SMW will leave adequate forest cover to screen the view of this building from Shagg Pond Road. The building will not be visible from any other public access road. This building will be sited harmoniously with the existing natural terrain and will be constructed to minimize removal of existing mature forest on the site. It will have a dark roof and be painted a neutral color to minimize contrast with the surrounding vegetation.

The O&M building is designed with two standard sodium vapor flood lights with cutoff fixtures mounted on the building exterior and oriented to illuminate the adjacent parking area. These lights are not likely to be visible from any adjacent property. The O&M building will not be visible from any scenic resources of state or national significance.

5.0 PROJECT STUDY AREA

5.1 Existing Character of the Surrounding Area

The existing character of the surrounding area is described by its landforms, water resources, vegetative patterns, and cultural character. The potential viewshed within eight miles of the Project is illustrated on Figure 2: Viewshed Map and includes all of Woodstock, plus all or portions of Milton Township, Peru, Sumner, West Paris, Greenwood, Bethel, Rumford, and Hartford.

Several resources within the 8-mile study area are considered scenic resources of state or national significance and are described in greater detail in Section 6. Characteristic photographs of many of these resources are provided in Appendix A: Study Area Photographs.

5.1.1 Landform

The study area is located at the southern end of the Western Maine Foothills biophysical region.⁵ This part of the state is characterized by relatively low, rounded mountains that rise 700 to 1700 feet above the surrounding river valleys and lowlands. Rocky outcrops and bold escarpments are found on several of the mountains, especially on south-facing slopes. Notable examples include Bucks Ledge, Lapham Ledge, and Bald Mountain. Small streams in steeply sloping channels are common.

Spruce Mountain is one of a series of low mountains at the eastern end of the Mahoosuc Range. Other mountains in the eight-mile study area include Mollycokett Mountain to the southeast (with two peaks, elevation 1948 and 2002 feet); Billings Hill (el. 1785 feet), Chamberlain Mountain (el. 2081 feet), and Bryant Mountain (aka Mount Christopher, el. 1758 feet) to the northwest; and Bald Mountain (el. 1692) and Speckled Mountain (el. 2183 feet) to the northeast. The topography in the Project area on Spruce Mountain ranges from relatively flat at the lower elevations and in the vicinity of the O&M building to

⁵ McMahon, J.S. *The Biophysical Regions of Maine: Patterns in the Landscape and Vegetation*. M.S. Thesis. University of Maine, Orono. 1990. Bailey, R.G. *Description of the Ecoregions of the United States*. Miscellaneous Publication No. 1391, U.S. Department of Agriculture, Forest Service, Washington, DC. 1995.

1476 moderate and steep sided slopes that rise 1,600± feet above the surrounding terrain. Bald Mountain and Speckled Mountain are both considered scenic areas of state or national significance and are described in greater detail in Section 6.3 below.

Spruce Mountain has two distinct peaks. The project will be located on a roughly north-south ridgeline that passes through the eastern peak (el. 2224 feet). The western peak (el. 2416 feet) is outside the Project limit. The western summit of Spruce Mountain currently has two 60-meter communication towers on it, which are not related to the Spruce Mountain Wind Project.

5.1.2 Water resources

The land on the north side of the project site drains to the Androscoggin River, which flows through the study area for approximately 1.7 miles between Rumford Point and Rumford. At its closest point, the Androscoggin River would be 4.3 miles from the nearest turbine. The *Maine Rivers Study* identifies this segment of the Androscoggin River (from Rumford to the New Hampshire border) as a "C" River. While it does have river resources of statewide significance (i.e. canoe touring and critical/ecological), the study did not consider the Androscoggin River to have unique or significant scenic resources. The Project may be visible for 1.5 miles in the background to paddlers heading downstream below Rumford Point, at distances of 8.0 to 6.5 miles.

Land on the southwest and south side of the study area drains to the Little Androscoggin River, which the *Maine Rivers Study* classifies as a "C" River. While it also has river resources of statewide significance (i.e., geologic/hydrologic and inland fisheries), the study does not consider the Little Androscoggin to have unique or significant scenic resources. The *Maine Atlas and Gazetteer* (Delorme) describes the Little Androscoggin Canoe Trip, a springtime run between West Paris and South Paris. Most of the trip paddlers would be heading south, away from the Project, which would be approximately six miles away at the nearest point.

Land on the west side of the study area, starting at Shagg Pond, drains to the West Branch of the Nezinscot River, which is classified as a "C" River by the *Maine Rivers Study*. While it does have river resources of statewide significance (i.e., critical/ecological, undeveloped, inland fisheries, and whitewater boating), the study did not consider the West Branch of the Nezinscot River to have unique or significant scenic resources.

There are 18 ponds within the 8-mile study area. These range in size from Worthley Pond (375 acres) east of the Project in Peru, to Washburn Pond (11 acres) in Woodstock (See Table 1: Lakes and Ponds within 8 miles of the Spruce Mountain Wind Project). Six waterbodies are rated for their scenic resources by *Maine's Finest Lakes* study and are considered scenic resources of state or national significance. See Section 6.4 D for a description of these resources and the potential visual effect of the Project.

5.1.3 Vegetative patterns

Current land use in the project area consists of undeveloped forestland and commercial forestry operations. The lower elevations and side slopes of Spruce Mountain support a mixed deciduous-coniferous forest. The ridgeline is dominated by Red and Black Spruce mixed with smaller amounts of Balsam Fir and Gray Birch. Most of the timber on the ridge was harvested in the past, resulting in large stands of often dense, even-aged spruce.

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Table 1. Lakes and Ponds within 8 miles of the Spruce Mountain Wind Project

LAKE/POND	TOWN	SIZE (acres)	DIST (miles)	# OF TURBINES VISIBLE	SCENIC RATING	OVERALL RATING
Bryant Pond	Woodstock	278	4.6	2 – 4		1B
Concord Pond	Woodstock	135	1.1	9		2
Little Concord Pond	Woodstock	30	1.2	3 (portions of blades)	S	1B
North Pond	Woodstock	284	5.2	0		2
Shagg Pond	Woodstock	64	0.9	7	S	1B
Washburn Pond	Woodstock	11	1.5	10(portions of blades)		2
Abbotts Pond	Sumner	32	1.7	7 (portions of blades)	O	1A
Labrador Pond	Sumner	115	6.6	11	S	2
Little Labrador Pond	Sumner	15	7.1	0	S	2
Pleasant Pond	Sumner	118	5.1	4 (portions of blades)		2
Moose Pond	West Paris	97	4.9	0		2
Hicks Pond	Greenwood	93	7.3	0		2
Indian Pond	Greenwood	62	5.2	0		2
Overset Pond	Greenwood	21	7.7	0		2
South and Round Pd.	Greenwood	284	5.4	0		2
Twitchell Pond	Greenwood	179	6.4	0		2
Joes Pond	Rumford	15	7.5	0	S	1B
Worthley Pond	Peru	375	7.3	0		2

Scenic Resource of State or National Significance.

SIZE: Area of waterbody in acres.
DIST: Distance to the nearest turbine.
TURBINES VISIBLE: The approximate number of turbines within eight miles that may be visible from the lake/pond.
SCENIC RATING: S: Significant O: Outstanding.
OVERALL RATING:
 1A: Lakes with multiple outstanding values or 1 outstanding and 4 or more significant values. 1B: Lakes with a single outstanding natural value.
 2: Lakes with no outstanding values but at least one significant resource value.
 3: Lakes with no known outstanding or significant values.

5.1.4 Cultural character

Cultural features within eight miles of the project include:

- **Town centers** of West Paris (4.9± miles south of the nearest turbine), Bryant Pond (4.3 miles southwest), and Locke Mills (6.8± miles west). The Project should be blocked by vegetation and intervening topography and will not be visible from any of these town centers.

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- **Small villages** of South Woodstock (3.5 miles south of the nearest turbine), Greenwood (7.3 miles southwest), North Woodstock (3.5 miles west), Milton (5.1 miles northwest), East Milton (3.0 miles northwest), Abbotts Mill (5.2 miles northwest), Rumford Corner (7.6 miles northwest), Rumford Point (7.8 miles northwest), Rumford Center (7.0 miles north), South Rumford (7.0 miles north), West Peru (7.8 miles northeast), Dickvale (5.5 miles northeast), Redding (2.0 miles east), and West Sumner (6.0 miles southeast). In most of these places the Project should be blocked by vegetation and intervening topography. The exception may be the line of villages to the northwest – East Milton, Abbotts Mills, Rumford Corner, and Rumford Point, where open agricultural land will provide view corridors to Spruce Mountain at distances of 3.0 to 8.0 miles.
- **Waterfront cottages** are found on many of the ponds within eight miles of the Project, including: Concord Pond, Shagg Pond, North Pond, Round Pond, South Pond, Bryant Pond, Labrador Pond, Pleasant Pond, Indian Pond, Hicks Pond, Twitchell Pond, and Worthley Pond. Many of these ponds are surrounded by low wooded hills that will block views of the turbines. Turbines will be visible in the midground (within four miles) from cottages on Concord Pond and Shagg Pond, and in the background (between four and eight miles) on Labrador Pond and portions of Pleasant Pond and Bryant Pond. Shagg Pond and Labrador Pond are the only developed ponds that are scenic areas of state or national significance that would have views of the Project. See Section 6.4 below for a description of these ponds and the potential visual impacts on them.

Table 2: National Register of Historic Places within 8 Miles of the Spruce Mountain Wind Project

HISTORIC PLACE	TOWN	NPS REF #	DISTANCE (miles)	# OF TURBINES VISIBLE
Whitman Memorial Library	Bryant Pond, Woodstock	94001549	4.2	0
Dreamhome	Bryant Pond, Woodstock	96001037	4.8	4
Greenwood Cattle Pound	Greenwood	07000794	7.1	0
Greenwood Town Hall	Greenwood	00001634	6.9	0
Rumford Point Congregational Church	Rumford Point	85001259	7.8	0
Arthur L. Mann Memorial Library	West Paris	88003016	5.5	0
Stearns Hill Farm	West Paris	09000014	7.4	0
First Universalist Society Church	West Sumner	02000850	5.9	2 leaf off
	National Register of Historic Places where turbines will be visible			
Boldface Type	Places evaluated by Historical Architecture Reconnaissance Survey			

- **Historic Resources.** Eight properties within eight miles of the Project are on the National Register of Historic Places, as noted in Table 2: National Register of Historic Places within 8 Miles of the Spruce Mountain Wind Project⁶. The historic resources include churches, libraries, a town hall, historic farms, a private residence, and a stone cattle pound. Of these, only two – Dreamhome on Bryant Pond (aka Lake Christopher) in Woodstock and the First Universalist Society Church in West Sumner – would have views of the turbines. The other properties are screened by existing vegetation and/or topography and would not be affected by the Project. Dreamhome and the First Universalist Society Church in West Sumner are considered scenic resources of state or national significance. The views of two turbines during leaf-off season in the background from First Universalist Church should have a minimal visual impact on the church and its setting. The impacts on Dreamhome are discussed in Section 6 below.
- **Very low density rural residential developments** were found within the study area. The closest residences that may have open views of the turbines are located on Shagg Pond, approximately 1.0 mile to the east. There are a few new homes on Saunders Road in Woodstock that may have filtered views of turbines at distances of 0.5 to 0.6 miles.
- **Recreational areas** include swimming beaches at south end of South Pond (Greenwood Town Beach), Woodstock Public Swimming Beach and Playground (north side of Bryant Pond on Lakeside Drive); a hand-carry boat launch and picnic area on Washburn Pond (private); trailer accessible boat launches on Shagg Pond, Moose Pond, Bryant Pond, Round Pond, North Pond, and South Pond; commercial campgrounds at the south end of Worthley Pond and South Pond; Maine DOT picnic areas at North Pond (may be closed) and the Androscoggin River in Rumford; and the Mt. Abram Ski Area in Greenwood. The Project would only be visible from the upper trails on Mt. Abram, at a distance of 7.0 miles.
- **Scenic Byways:** There are no state or federally designated scenic byways within eight miles of the Project. The closest ones are Grafton Notch Scenic Byway (Route 26), which starts in Newry (12.2 miles to the northeast), and the Rangeley Lakes Scenic Byway, which starts in Byron (12.7 miles). The Maine DOT rest area at Snow Falls Gorge on Route 26 in West Paris is approximately 7.1 miles south of the Project. There will be no views of the Project from the rest area due to intervening topography and vegetation.
- **Hiking Trails:** The *Maine Atlas and Gazetteer* notes two hiking trails in the study area: the Bald Mountain Trail in Woodstock and the Black Mountain Trail in Sumner. Bald Mountain is part of an extensive tract of undeveloped state park land that includes Little Concord Pond. Speckled Mountain is accessible from the Bald Mountain trail. Bald Mountain is a scenic resource of state or national significance and is described further in Section 6 below.

Mount Zircon, 3.5 miles north of Spruce Mountain in Peru, is the site of the former Zircon Water Bottling Company. The trailhead is unmarked and difficult to find. The view from the 2,240-foot summit is a 360° panorama that includes the Androscoggin River, the Mahoosuc Mountains, the Presidentials in New Hampshire, Speckled Mountain and Bald Mountain. Remnants of the former

⁶ The VIA and Historical Architecture Reconnaissance Survey (HARS) were undertaken using different study parameters. The VIA looked at all historical resources within 8 miles of the Project. With the concurrence of the Maine Historic Preservation Commission (MHPC), the HARS was limited to those areas within eight miles of the nearest turbine that the TJD&A Viewshed Map (Figure 2) indicated would potentially have a view of the Project. Because of these different study parameters, the VIA examined the eight resources listed above while the HARS analyzed the effect of the Project on the five Nation Register-listed resources indicated in **Bold** in Table 2.

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Maine Forest Service fire tower are visible at the summit. All 11 turbines would be visible in the midground.⁷

The study area has an abundance of other opportunities for hiking in the study area on jeep trails and logging roads throughout the mountains. Other notable destinations are Bucks Ledge (no Project views during leaf-on season), Lapham Ledge (no Project views during leaf-on season), Mt. Christopher (on privately-owned land associated with Dreamhome; built and maintained by the University of Maine 4H camp and Learning Center on Bryant Pond; five turbines and the upper portion of the proposed transmission line will be visible at a distance of 5 miles).

The closest point on the Appalachian National Scenic Trail is 21± miles to the northwest on Baldpate Mountain in Grafton Township. There will be no impact on the Appalachian Trail.

- **Snowmobile Trails:** While there are ample opportunities for snowmobiling and ATV riding, there are no designated Interconnected Trail System (ITS) trails in the immediate study area. The closest ITS segment is ITS 89, which runs north-south between Buckfield and Canton, approximately 12 miles east of the Project.
- **Existing Structures:** There are no existing structures on the Project site other than a temporary meteorological tower erected by SMW. There are also two existing communications towers on the western summit of Spruce Mountain, which are not part of the Spruce Mountain Wind Project.

5.2 Distance Zones

The concept of distance zones is based upon the USDA Forest Service visual analysis criteria for forested landscapes and on the amount of detail that an observer can differentiate at varying distances.⁸ The distance zones used for the study of the Project are defined as the following.

- **Foreground: 0 to 1/2 mile in distance.** Within the foreground, the observer would be able to detect surface textures, details, and a full spectrum of color. For example, the details of the turbines (blades, nacelles, support towers) would be readily apparent. There are no scenic resources of state or national significance within one-half mile of the project.
- **Midground: 1/2 mile to 4 miles in distance.** The midground is a critical part of the natural landscape. Within this zone the details found in the landscape become subordinate to the whole: individual trees lose their identities and become forests; buildings are seen as simple geometric forms; roads and rivers become lines. Edges define patterns on the ground and hillsides. Development patterns are readily apparent, especially where there is noticeable contrast in scale, form, texture, or line. Colors of structures become somewhat muted and the details become subordinate to the whole. This effect is intensified in hazy weather conditions, which tend to mute colors and blur outlines even further. In panoramic views, the midground landscape is the most important element in determining visual impact.

Scenic resources of state or national significance within the midground include Little Concord Pond, Shagg Pond, Abbotts Pond, Bald Mountain, and Speckled Mountain. See Section 6 for further discussion of the visual impacts on these scenic resources.

⁷ From Mount Zircon, by Carey Kish, in the Portland Press Herald, June 11, 2006.

⁸ USDA Forest Service, *Landscape Aesthetics: A Handbook for Scenery Management*, Agricultural Handbook Number 701. December 1995.

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- **Background: greater than 4 miles.** Background distances provide the setting for panoramic views that give the observer the greatest sense of the larger landscape. However, the effects of distance and haze will obscure surface textures, detailing, and form of project components. At this distance objects will be highly visible if they present a noticeable contrast in form or line and if the weather conditions are favorable. Due to the thinness of the design, the ends of the turbine blades will be minimally visible at distances greater than eight miles. Scenic resources of state or national significance with background views of the wind project include Dreamhome (a private residence in Greenwood) and Labrador Pond.

6.0 VISUAL IMPACTS ON SCENIC RESOURCES OF STATE OR NATIONAL SIGNIFICANCE

As noted in Section 5, there are several scenic resources of state or national significance within eight miles of the wind project. The following section evaluates each of these resources, using the criteria in the Maine Wind Power Law:

- **Context.** The existing character of the surrounding area and the context of the proposed activity. (§ 3452.3.B and 3452.3.D).
- **Significance.** The significance of the potentially affected scenic resource of state or national significance (§ 3452.3.A).
- **Public Uses.** The extent, nature and duration of potentially affected public uses of the scenic resource of state or national significance. (§ 3452.3.E).
- **Viewer Expectations.** The expectations of the typical viewer who would be using or enjoying the scenic resource of state or national significance. (§ 3452.3.C).
- **Project Impact.** The scope and scale of the potential effect of views of the Project on the scenic resource of state or national significance, including but not limited to issues related to the number and extent of turbines visible from the scenic resource of state or national significance, the distance from the scenic resource of state or national significance, and the effect of prominent features of the development on the landscape. (§ 3452.3.F).
- **Potential Effect on Public Use.** The potential effect of the generating facilities' presence on the public's continued use and enjoyment of the scenic resource of state or national significance. (§ 3452.3.E).
- **Conclusion.** A determination of whether the development significantly compromises views from a scenic resource of state or national significance such that the development has an unreasonable adverse effect on the scenic character or existing uses related to scenic character of the scenic resource of state or national significance. (§ 3452.1).

The assessment of potential visual impact on scenic resources of state or national significance is based upon knowledge of the project site, the viewshed analysis, cross-sectional analysis, and the photosimulations. The review examined the factors of color, form, line, texture, scale, and dominance, following the format established by Richard Smardon and James Palmer in *Foundations for Visual Project Analysis*, the standard reference for visual analysis.⁹ This methodology also follows Maine DEP's Standard Operating Procedures for Chapter 315 Regulations.¹⁰ Table 3: Visual Impact Assessment illustrates the methodology developed for Chapter 315 as it applies to the view from Bald Mountain.

⁹ Smardon, Richard C., James F. Palmer, and John P. Felleman. *Foundations for Visual Project Analysis*. John Wiley & Sons. New York. 1986.

¹⁰ Maine Department of Environmental Protection. *Guidance for Assessing Impacts to Existing Scenic and Aesthetics Uses under the Natural Resources Protection Act*. Augusta. 2003.

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6.1 A. A national natural landmark, federally designated wilderness area or other comparable outstanding natural and cultural feature, such as the Orono Bog or Meddybemps Heath.

There are no designated national natural landmarks, federally designated wilderness areas, or other comparable outstanding natural or cultural features within eight miles of the Project.

6.2 B. A property listed on the National Register of Historic Places pursuant to the National Historic Preservation Act of 1966, as amended, including, but not limited to, the Rockland Breakwater Light and Fort Knox.

Eight properties within eight miles of the Project are on the National Register of Historic Places, including churches, libraries, a town hall, historic farms, a private residence, and a stone cattle pound. Of these, only two – Dreamhome on Bryant Pond (aka Lake Christopher) in Woodstock and the First Universalist Society Church in West Sumner – would have views of the turbines. The views of two turbines during leaf-off season in the background from First Universalist Church should have a minimal visual impact on the church and its setting. The impacts on Dreamhome are discussed below.

Dreamhome

Context. Dreamhome is a private residence designed in the Colonial Revival style on the western shore of Bryant Pond (Lake Christopher) in Greenwood. The property consists of a main house on the water, with a boathouse and guesthouse. The property was built between 1900 and 1924, and added to the National Register in 1996. The existing view from the property over Bryant Pond includes two 60-meter cellular communication towers on the western peak of Spruce Mountain, seen at a distance of approximately 4.7 miles, and a 68-meter communication tower off Dudley Road in Woodstock, seen at a distance of 1.3 miles.

Significance. Dreamhome is on the National Register of Historic Places. However, it is a private residence and is used on a seasonal basis. The public has no access to the property.

Public Uses. The public has no access to the property¹¹.

Viewer Expectations. The current owners of Dreamhome have high expectations of scenic quality. Their current view is oriented to the northeast over Bryant Pond. Spruce Mountain is seen in the background.

Project Impact. The upper portions of four turbines would be visible from the property.

Potential Effect on Public Use. The Project should have no impact on the public's use of the property, since there is no public use. The Project should have a relatively minor impact on the owner's continued use and enjoyment of the property, since the turbines will appear as relatively small elements in a landscape that currently has three highly visible communication towers. Appendix B: Photosimulation 9 illustrates both the existing conditions of the setting and the visual effect that the Project would have on the property. As is shown in the photosimulation, the turbines will appear shorter (or lower in the

¹¹ TJD&A received permission from the current owner of Dreamhome to enter the property and photograph the views from the home.

landscape) than the existing communication towers viewed from Dreamhome.

Conclusion. The Project should not significantly compromise views from Dreamhome or its setting on Bryant Pond. The Project should not have an unreasonable adverse effect on its scenic character or the uses related to the scenic character of the historic property.

6.3 C. National or State Parks

The closest unit of the National Park Service is the Appalachian National Scenic Trail (AT), which is 21 miles away at its closest point on Baldpate Mountain in Newry, Maine. White Mountain National Forest (in Maine) is approximately 13 miles to the west. There are no state parks within eight miles of the Project. The closest state parks are Mount Blue State Park, 17 miles north in Weld, and Grafton Notch State Park, approximately 19 miles to the northwest.

The State of Maine owns undeveloped park land in the vicinity of Little Concord Pond, Bald Mountain, and Speckled Mountain, which is described below.

Little Concord Pond / Bald Mountain Park Land

Context. The Bureau of Parks and Lands holds a large tract of undeveloped park land (in excess of one square mile) around Little Concord Pond and Bald Mountain. The State also holds a separate 64-acre tract on the west slopes of Speckled Mountain that includes part of the Bald-Speckled Mountain Trail. This piece was added as part of an early Land for Maine's Futures project.

The Bald Mountain trail is described as a "pleasant hike in attractive, secluded setting. Trail marked only with cairns and overgrown in spots, ascends (right) by small pristine pond (Little Concord Pond) winds around wooded ledges to open lookout. Access on dirt roads; trailhead not well marked."¹² The trail is 1.5 miles from the trailhead to the ledges south of the summit, with a 700-foot elevation gain. The view from Bald Mountain also includes two existing communication towers on Spruce Mountain, limited residential development on Shagg Pond (0.9 miles to the southwest), as well as local roads.

The trail continues eastward into a wooded valley and then ascends up Speckled Mountain. The 200° view from the first overlook (which appears to be on state-owned land) includes Shagg Pond, Concord Pond, the structures and conductors within the existing transmission line, roads, the New Page Mill in Rumford, and the existing communication towers on the western summit of Spruce Mountain. The second overlook (which appears to be on private property) includes views of Little Concord Pond. The summit clearing is surrounded by evergreen trees that interrupt the 220° panoramic view.

Significance. The *Maine's Finest Lakes* study notes that Little Concord Pond has significant scenic resources. The Little Concord Pond / Bald Mountain / Speckled Mountain land is considered a recreational and scenic resource of regional significance since it has not been designated as a state park and does not have facilities commonly found in state parks.

Public Uses. Little Concord Pond is used for fishing and hiking. The primary use of Bald Mountain and Speckled Mountain is hiking. The Land for Maine's Future website notes: "Please note: Walking/hiking are permitted around Little Concord Pond and on the Speckled Mountain parcel, but traditional access is over private property and is not guaranteed. Respectful use of this access is required, recognizing the

¹² *Maine Atlas and Gazetteer*, 27th edition. DeLorme. Yarmouth, Maine. 2004.

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landowner's generosity."¹³ A sign at the trailhead reiterates the theme of respect for private property. (See Photo 9 in Appendix A.)

Viewer Expectations. People who visit the pond and hike the trails are expected to have high expectations of scenic quality.

Project Impact. All 11 turbines will be visible from the overlook on Bald Mountain at a distance of 1.4 to 2.7 miles. Portions of the ridgeline roads to the closest turbines and clearings around the base of those turbines will also be visible. The transmission line will not be visible. The view from the Bald Mountain overlook is approximately 180° and the project will occupy approximately 15° of that view. Photosimulation 3 from Bald Mountain illustrates the change in visual character resulting from the construction of the Project.

There are two viewpoints before reaching the summit of Speckled Mountain. All 11 turbines, some ridgeline roads, and associated clearings will be visible from each overlook and the summit, at distances that range from 1.9 to 3.3± miles. Photosimulation 2 from Speckled Mountain illustrates the change in visual character from the 64-acre tract of land on Speckled Mountain, owned by the Bureau of Parks and Lands, resulting from the construction of the Project.

Potential Effect on Public Use. As noted in 6.4.1, below, the Project should have a relatively minor impact on the public's use and enjoyment of Little Concord Pond, since the Project views are limited to the tops of several of the turbines from the northern end of the pond.

For hikers, the view of the wind turbines will present a noticeable contrast in form, line, color, scale, and spatial dominance to a largely natural landscape. The turbines will be seen as significant objects that will be highly visible above the treeline. From certain vantage points, the Project may co-dominate the landscape. It is anticipated that the public will continue to use the hiking trails on Bald Mountain and Speckled Mountain once the Project is in place. The presence of the turbines may have a negative effect on some peoples' enjoyment of the views from the overlooks. See Table 3, Visual Impact Assessment: View from Bald Mountain.

Conclusion. The Project will be highly visible from Bald Mountain and Speckled Mountain, and only slightly visible from portions of Little Concord Pond. The Project should not significantly compromise views from the state-owned land that includes Little Concord Pond, Bald Mountain, and Speckled Mountain. The Project should not have an unreasonable adverse effect on its scenic character or the uses related to the scenic character of the historic property.

6.4 D. A great pond that is:

- (1) One of the 66 great ponds located in the State's organized area is identified as having outstanding or significant scenic quality in the "Maine's Finest Lakes" study; or
- (2) One of the 280 great ponds in the State's unorganized or deorganized areas designated as outstanding or significant from a scenic perspective in the "Maine Wildlands Lakes Assessment."

There are six lakes and ponds within the study area that have been identified as having significant or outstanding scenic resources in the *Maine's Finest Lakes* study: Little Concord Pond, Shagg Pond,

¹³ http://www9.informe.org/lmf/projects/project_detail.php?project=1589

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Abbotts Pond, Labrador Pond, Little Labrador Pond, and Joes Pond. Of these, the Project will not be visible from Little Labrador Pond and Joes Pond.

6.4.1 Little Concord Pond

Context. Little Concord Pond (el. 1082 feet) is a 30-acre, undeveloped pond west of Bald Mountain (el. 1692 feet) in Woodstock. The pond is surrounded by over a square mile of land that has been acquired by the Bureau of Parks and Lands but has not been developed for public use. The western side of this fly fishing-only pond is accessible by ATV and hiking trails. There is neither motorized access nor any boat landings on the pond.

Significance. The *Maine's Finest Lakes* study notes that Little Concord Pond has significant scenic resources.

Public Uses. Recreational use of the pond includes fishing and hiking.

Viewer Expectations. People who visit the pond and fish in its waters are expected to have high expectations of scenic quality.

Project Impact. There are small areas of potential visibility on the far northeastern edge of the pond where the tops of up to 3 turbines may be visible above the treeline at a distance of 1.2 miles. Project access roads should be minimally visible from the eastern side of the pond. The transmission line would not be visible.

Potential Effect on Public Use. Where visible, the view of several of the turbine blades will present a contrast in form, line, and color to a landscape that is currently natural. Since the impacts are concentrated in the northern end of this minimally accessible pond, the Project should have a relatively minor impact on the public's continued use and enjoyment. Users will still be able to enjoy the same type of recreational activities they now participate in.

Conclusion. The Project should not significantly compromise views from Little Concord Pond. The Project should not have an unreasonable adverse effect on its scenic character or the uses related to the scenic character of the pond.

6.4.2 Shagg Pond

Context. Shagg Pond is a 64-acre, accessible, developed pond with significant scenic resource in Woodstock. The pond is known for its dramatic views of the rocky face of Bald Mountain to the north and the elongated ridge of Speckled Mountain to the northeast. The pond has 16± cottages around its perimeter, mostly concentrated on the north, south, and west sides. A newly improved boat landing provides public access from the Shagg Pond Road at the south end of the pond.

Significance. The *Maine's Finest Lakes* study notes that Shagg Pond has significant scenic resources.

Public Uses. Recreational use of the pond includes boating, fishing, swimming, and seasonal camps.

Viewer Expectations. People who use Shagg Pond for boating, fishing, swimming, and summer camps are expected to have high expectations of scenic quality.

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Project Impact. At least seven turbines will be visible from the majority of Shagg Pond at distances of 0.9 to 1.1 miles. The access roads and transmission line will not be visible from the pond. The cottages on the northern end of the pond will have views of the turbines; those cottages on the southwestern end of the pond are oriented toward Bald and Speckled Mountains on the east and should not have views of the turbines. The turbines will not be visible from the public boat landing on Shagg Pond. Appendix B: Photosimulation 4 from Shagg Pond illustrates the change in visual character resulting from the construction of the Project.

Potential Effect on Public Use. The view of the wind turbines will present a contrast in form, line, color, scale, and spatial dominance to a natural-based recreational landscape. The turbines will be seen as significant objects that will be highly visible above the treeline. From certain vantage points, the Project will co-dominate the landscape. The views of Bald Mountain and Speckled Mountain, which are 180° from the views of the turbines, will not be affected by the Project. While the turbines will be visible from the majority of the pond, users will still be able to enjoy the same type of recreational activities they now participate in.

Conclusion. Since the turbines will be highly visible over most of the pond, the Project should have a moderate to strong impact on the public's continued use and enjoyment of Shagg Pond. However, users will still be able to enjoy the same type of recreational activities they now participate in.

6.4.3 Abbotts Pond

Context. "Abbotts Pond is a 32-acre undeveloped, largely inaccessible pond southeast of Bald Mountain and southwest of Speckled Mountain in Sumner. The surrounding mountains picturesquely frame the pond. Scenic cliffs, although not on the lake, are within view. The pond shoreline is completely forested with a mixture of white pine and hardwood forests."¹⁴

Significance. The *Maine's Finest Lakes* study notes that Abbotts Pond has outstanding scenic resources for its "high dramatic relief and complex relief."

Public Uses. Recreational use of the pond includes fishing, nature study, and hiking.

Viewer Expectations. People who fish in the pond are expected to have relatively high expectations of scenic quality, due to its dramatic setting underneath Bald Mountain.

Project Impact. The tops of seven of the turbines may be visible from portions of the pond along the northwestern shoreline, at a distance of 1.7 miles.

Potential Effect on Public Use. The introduction of the view of the turbine blades will present a contrast in form, line, and color to a landscape that is currently natural. Since the impacts are concentrated in one portion of this minimally accessible pond, the Project should have a relatively minor impact on the public's continued use and enjoyment. While portions of some of the turbines will be visible from less than half of the pond, users will still be able to enjoy the same type of recreational activities they now participate in.

¹⁴ *Maine's Finest Lakes: The Results of the Maine Lakes Study*. P 33.

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Conclusion. The Project should not significantly compromise views from Abbotts Pond. The Project should not have an unreasonable adverse effect on its scenic character or the uses related to the scenic character of the pond.

6.4.4 Labrador Pond

Context. Labrador Pond is a 115-acre, developed, accessible pond in Sumner with background views of Black Mountain, Spruce Mountain, Mollyocket Mountain, and other nearby mountains. The western shoreline is marshy and largely undeveloped; the eastern shoreline is developed with local roads and 16± residences.

Significance. The *Maine's Finest Lakes* study notes that Labrador Pond has significant scenic resources.

Public Uses. Public access is limited to an informal put-in at the southern end of the pond. Recreational use includes boating, fishing, swimming, snowmobiling, and seasonal camps, primarily for property owners along the shoreline. There are several viewing opportunities from Labrador Pond Road (southern shore) and Valley Road (eastern shore).

Viewer Expectations. People who live on Labrador Pond and use it for boating, swimming, fishing, and summer camps are expected to have high expectations of scenic quality.

Project Impact. All 11 turbines would be visible throughout the pond in the background at distances of 6.6 to 7.1 miles. The Project would be seen over an arc of approximately 12.5°. Appendix B: Photosimulation 5 illustrates the anticipated effect that the Project would have on the view from the pond, based upon a photograph taken near the southern shoreline.

Potential Effect on Public Use. The Project should have a relatively minor impact on the public's continued use and enjoyment of Labrador Pond. While the turbines will be visible from the majority of the pond, users will still be able to enjoy the same type of recreational activities they now participate in.

Conclusion. The Project should not significantly compromise views from Labrador Pond. The Project should not have an unreasonable adverse effect on its scenic character or the uses related to the scenic character of the pond.

6.5 E. A segment of a scenic river or stream identified as having unique or outstanding scenic attributes listed in Appendix G of the "Maine Rivers Study."

There are no designated scenic river segments within eight miles of the Project.

6.6 F. A scenic viewpoint located on state public reserved land or on a trail that is used exclusively for pedestrian use, such as the Appalachian Trail, that the Department of Conservation designates by rule adopted in accordance with section 3457.

See 6.3 for a discussion of the views from Bald Mountain and Speckled Mountain.

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6.7 G. A scenic turnout on a scenic highway constructed by the Department of Transportation.

There are no scenic turnouts on scenic highways constructed by the Maine DOT within eight miles of the Project.

6.8 H. Scenic viewpoints located in the coastal area.

The Project is approximately 66 miles from the coastal area and well outside its zone of visibility. There will be no visual impacts on scenic viewpoints located in the coastal area.

7.0 CONCLUSION

The Spruce Mountain Wind Project has been sited in an area of relatively few scenic resources of state or national significance. Within the 8-mile radius study area the most significant scenic resources are the views from several ponds – Little Concord Pond, Shagg Pond, Abbotts Pond, and Labrador Pond – that have been identified as significant or outstanding by the *Maine's Finest Lakes* study, and the views from Bald Mountain and Speckled Mountain, which are on undeveloped park land owned by the Bureau of Parks and Lands. The visual impact on Little Concord Pond and Abbotts Pond should be insignificant.

Throughout the majority of the study area, views of the wind turbine generators (“generating facilities”) are blocked by topography and roadside vegetation. After analyzing several potential locations for wind turbine placement in the Spruce Mountain vicinity, the applicant has selected sites which meet the primary energy generating objectives while minimizing potential visual impacts to scenic resources and residential areas, particularly at distances less than three miles.

The associated facilities for the Project (i.e., the access road, ridgeline road, underground electrical collection system, aboveground electrical transmission line from the ridgeline to Cushman Road, and the O&M facility) will have limited impact on views from scenic resources of state or national significance. The associated facilities will not be of a location, character, or size to cause an unreasonable adverse visual affect on the scenic character of the study area.

Within the 8-mile study area, the Project will not be visible from any national natural landmarks, federally designated wilderness areas, publicly accessible properties listed on the National Register of Historic Places, national parks, developed state parks, scenic rivers, the Appalachian Trail, Maine DOT scenic turnouts on scenic byways, or scenic viewpoints located in the coastal area.

While the visual impact on several resources is anticipated to be moderate to strong, the Project should not have an unreasonable adverse impact on scenic values and existing uses of scenic resources of state or national significance.

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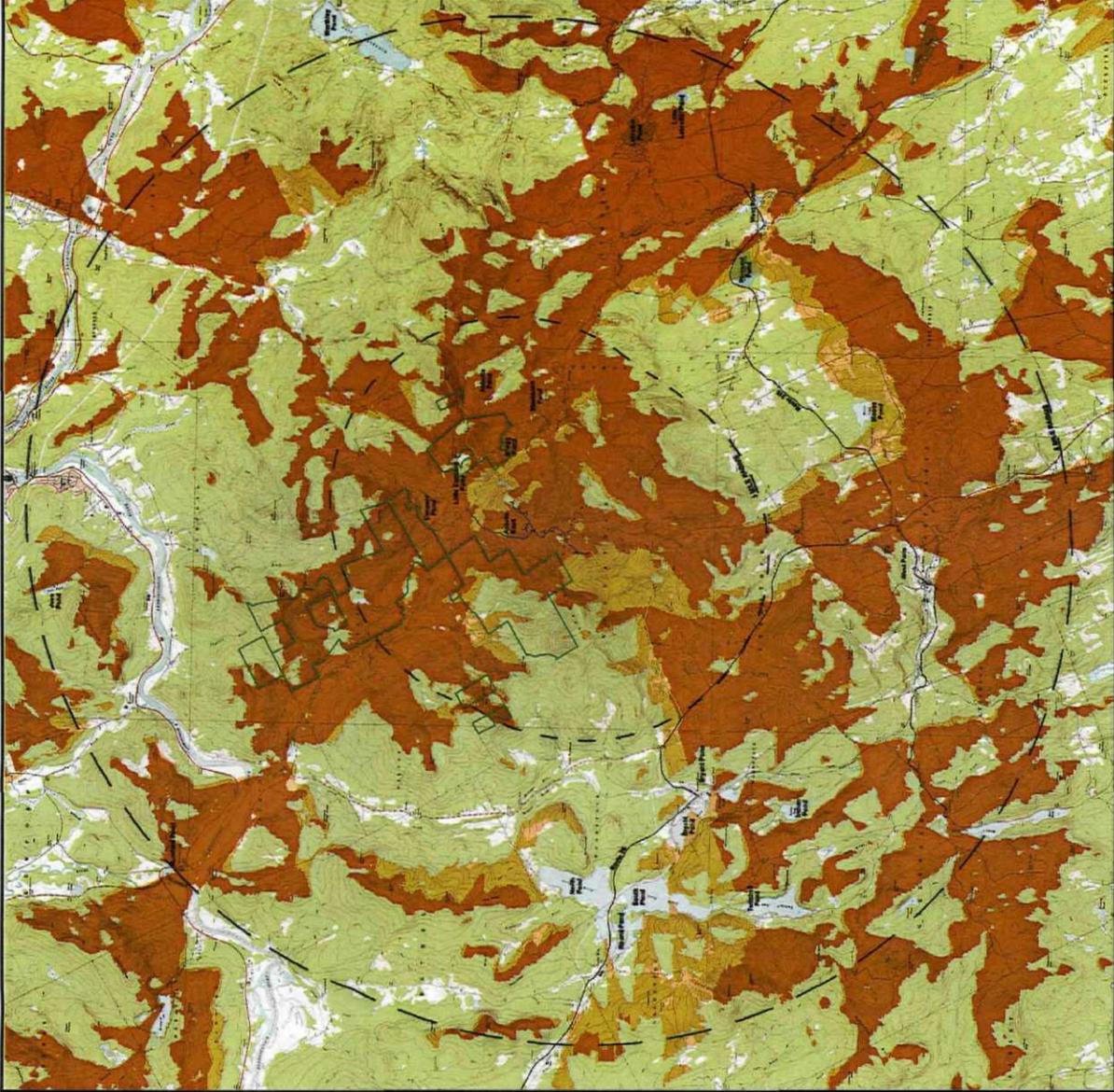
Table 3: Visual Impact Assessment: View from Bald Mountain

VISUAL ELEMENTS	VISUAL SUB ELEMENTS	INDICATORS/CLUES	ELEMENT RATINGS		ELEMENT SCORES
LANDSCAPE COMPATIBILITY ↓	COLOR	Significantly different color, hue, value chroma	Severe	3	3
			Moderate	2	
			Minimal	1	
			None	0	
	FORM	Incompatible 2/3 dimensional shape with landscape surroundings	Severe	3	3
			Moderate	2	
			Minimal	1	
			None	0	
	LINE	Incompatible edges, bands, or silhouette lines introduced	Severe	3	2
			Moderate	2	
			Minimal	1	
			None	0	
	TEXTURE	Incompatible textural grain, density, regularity or pattern	Severe	3	2
			Moderate	2	
			Minimal	1	
			None	0	
SUBTOTAL →					10
SCALE CONTRAST ↓	Major scale introduction/intrusion		Severe	12	6
	One of several major scales or major objects in confined setting		Moderate	8	
	Significant object or scale		Minimal	4	
	Small object or scale		None	0	
SCORE					6
SPATIAL DOMINANCE ↓	LANDSCAPE	Object/activity dominates or is prominent in whole landscape composition; or is prominently situated within the landscape; or dominates landform, water, or sky backdrop	Dominate	12	8
			Co-Dominate	8	
	SITUATION		Sub-ordinate	4	
			BACKDROP	Insignificant	
SCORE					8
TOTAL VISUAL IMPACT SEVERITY →					24
			Severe	27-36	
			Strong	18-26	XXXXX
			Moderate	17-9	
			Weak or Negligible	8-0	

DEPLW0541-A2002
Used with permission
of R.C. Smardon

1871

 <p>1 MILE NORTH</p>	<p>NOTES</p> <p>The viewshed map does not account for the screening effects of existing vegetation, buildings, or other structures that will block views of the Project from scenic resources of state or national significance.</p>	<p>LEGEND</p> <p>PROPOSED TRANSMISSION LINE</p> <p>CONSERVATION LAND AREAS FROM NE OGIS</p> <p>1-4 Turbines</p> <p>6-11 Turbines</p>	<p>Hydra</p> <p>ENVIRONMENTAL ENGINEERING & CONSULTING</p> <p>10000 10th Avenue, Suite 100 Boulder, Colorado 80501 303.440.1234 www.hydraenv.com</p>	<p>VIEWSHED MAP</p> <p>Spruce Mountain Wind Project</p>
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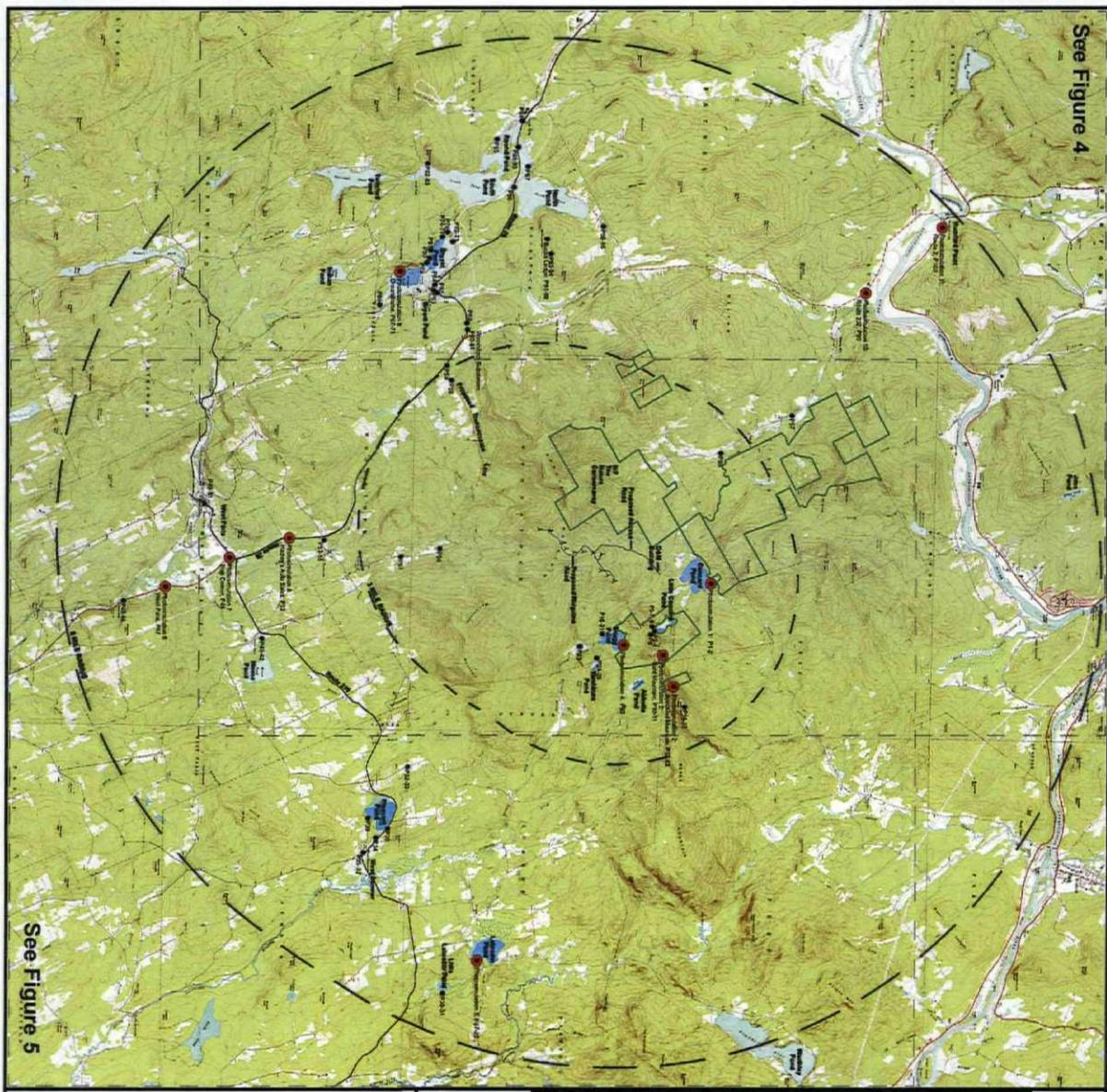


Figure 3
STUDY AREA MAP
 Spruce Mountain Wind Project

tjd&a
 Environmental & Planning
 Landscape Architecture & Planning
 1700 Main Street, Toronto, ON M5S 1A5
 www.tjdand.com

FATHOM RENEWABLES
 Wind Energy Solutions

- LEGEND**
- PROPOSED TURBINES
 - PROPOSED TRANSMISSION LINE
 - CONSERVATION LAND AREAS FROM ME OGIS
 - PHOTOSIMULATION LOCATIONS (SEE APPENDIX B)
 - PHOTO LOCATIONS (SEE APPENDIX A)

VISIBILITY FROM WATERBODIES WITHIN STUDY AREA

Area of Turbine Visibility

NORTH

1 MILE

1486



Figure 4
Enlargement of western portion of the STUDY AREA MAP
Spruce Mountain Wind Project



LEGEND	
	PROPOSED TURBINES
	PROPOSED TRANSMISSION LINE
	CONSERVATION LAND AREAS FROM ME OGIS
	PHOTOSIMULATION LOCATIONS (SEE APPENDIX B)
	PHOTO LOCATIONS (SEE APPENDIX A)

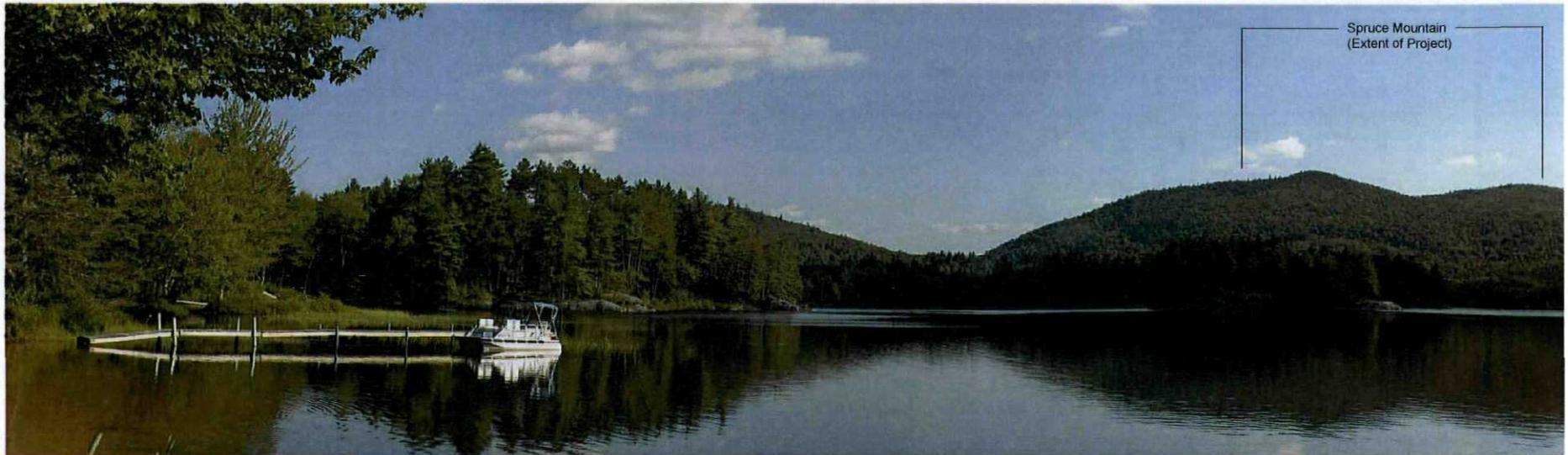
VISIBILITY FROM WATERBODIES WITHIN STUDY AREA	
	Area of Turbine Visibility

NORTH

0.5 MILE



Appendix A: Study Area Photographs
SPRUCE MOUNTAIN WIND PROJECT



P1: Panoramic view looking south toward Spruce Mountain from the northeast corner of Concord Pond in Woodstock. Nine turbines would be visible from this location at distances of 1.6 to 2.4 miles. See Photosimulation 1 in Appendix B.

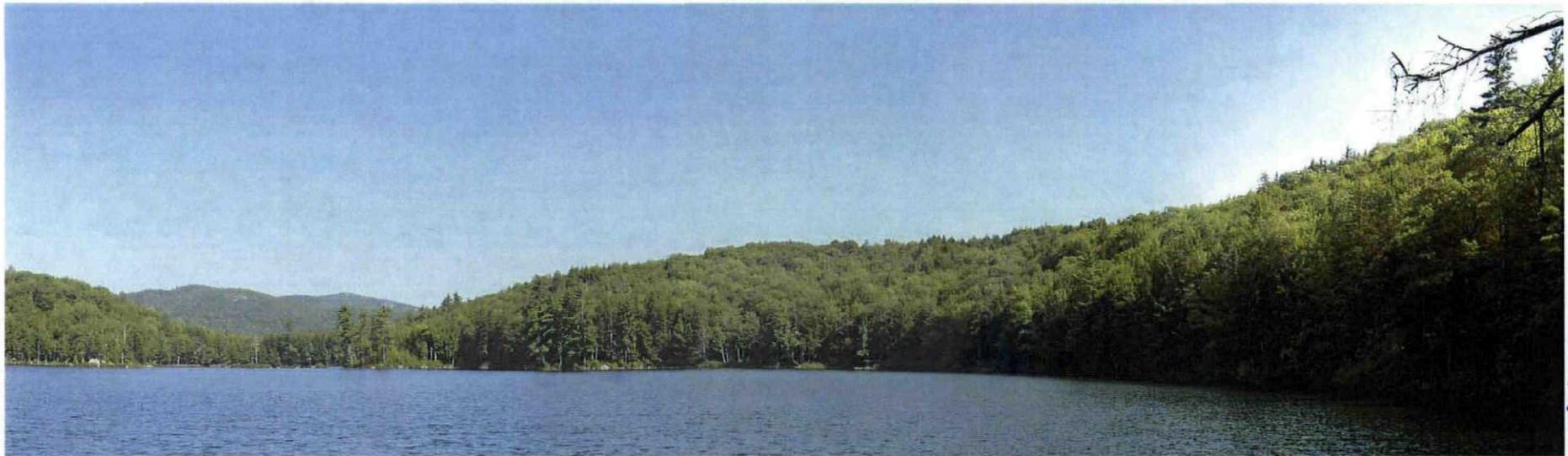


P2: Continued panoramic view looking southwest from Concord Pond in Woodstock.

1488
9841



P3: Panoramic view looking southwest to northwest from the southern corner of Little Concord Pond in Woodstock. The Spruce Mountain Wind Project (Project) will not be visible from this viewpoint. The only place on the pond where turbines would be visible is from the northern end where the tops of two or three turbines would be visible at distances of 1.2 to 1.6 miles.



P4: Continued panoramic view of Little Concord Pond in Woodstock. Davis and Bean Mountains are seen in the midground at the far end of the Pond.

1489



P5: View of the trail to Little Concord Pond.



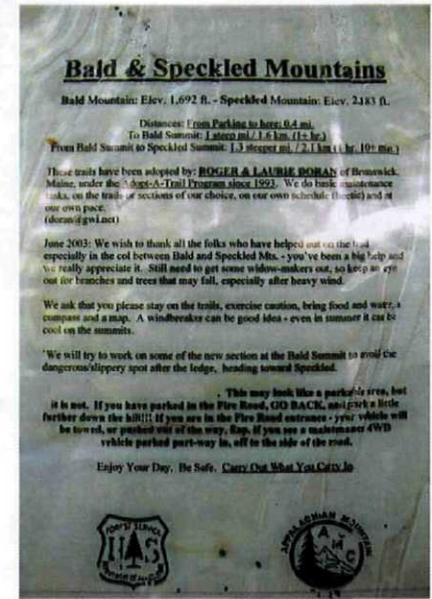
P6: View of the trail approaching Little Concord Pond.



P7: View of the trail on the southern end of Little Concord Pond. The trail extends approximately 300' around the southwestern corner of the Pond, but does not encircle it.



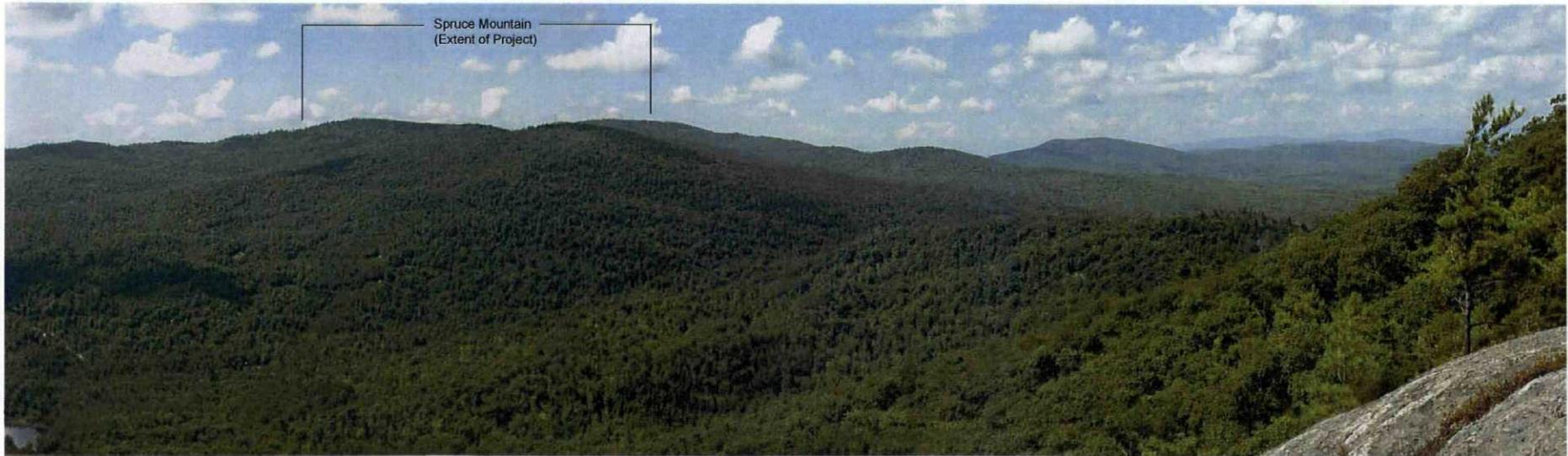
P8: The start of the trail to Bald Mountain and Speckled Mountain.



P9: Trailhead sign to Bald and Speckled Mountains.



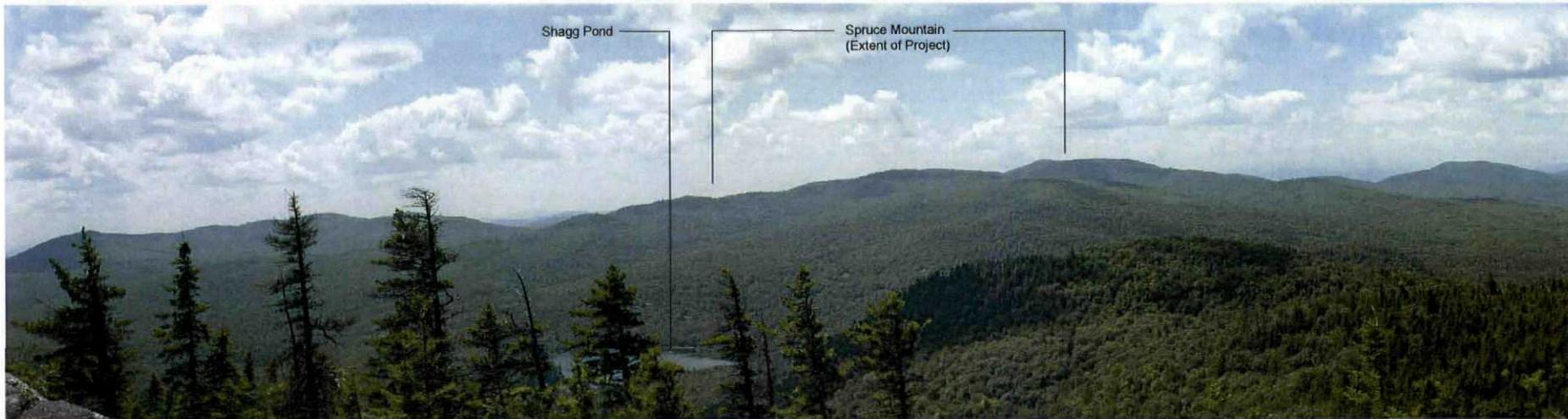
P10: Panoramic view looking southwest toward Spruce Mountain from Bald Mountain in Woodstock. Mollyckett Mountain is seen above Shagg Pond.



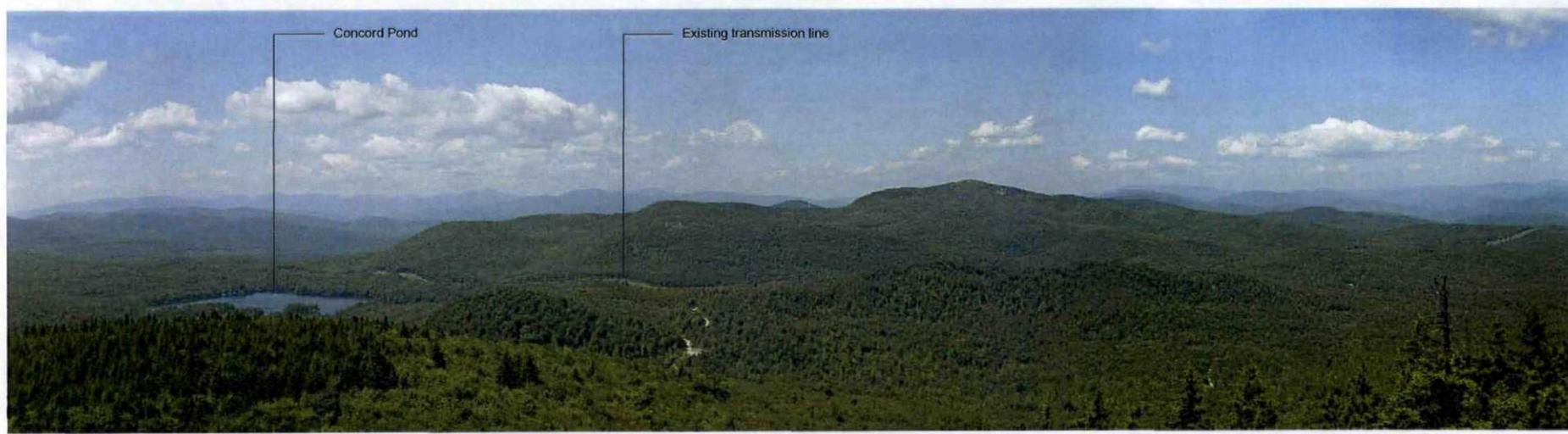
P11: Continued panoramic view from Bald Mountain in Woodstock. Eleven turbines would be visible from this location at distances ranging from 1.4 to 2.8 miles. See Photosimulation 3 in Appendix B.

1492

Appendix A: Study Area Photographs
SPRUCE MOUNTAIN WIND PROJECT



P12: Panoramic view looking southwest toward Spruce Mountain from the 64 acres of state owned property on Speckled Mountain in Peru. Eleven turbines would be visible from this location at distances ranging from 1.9 to 3.3 miles. See Photosimulation 2 in Appendix B.



P13: Continued panoramic view from Speckled Mountain in Peru.

Appendix A: Study Area Photographs
SPRUCE MOUNTAIN WIND PROJECT



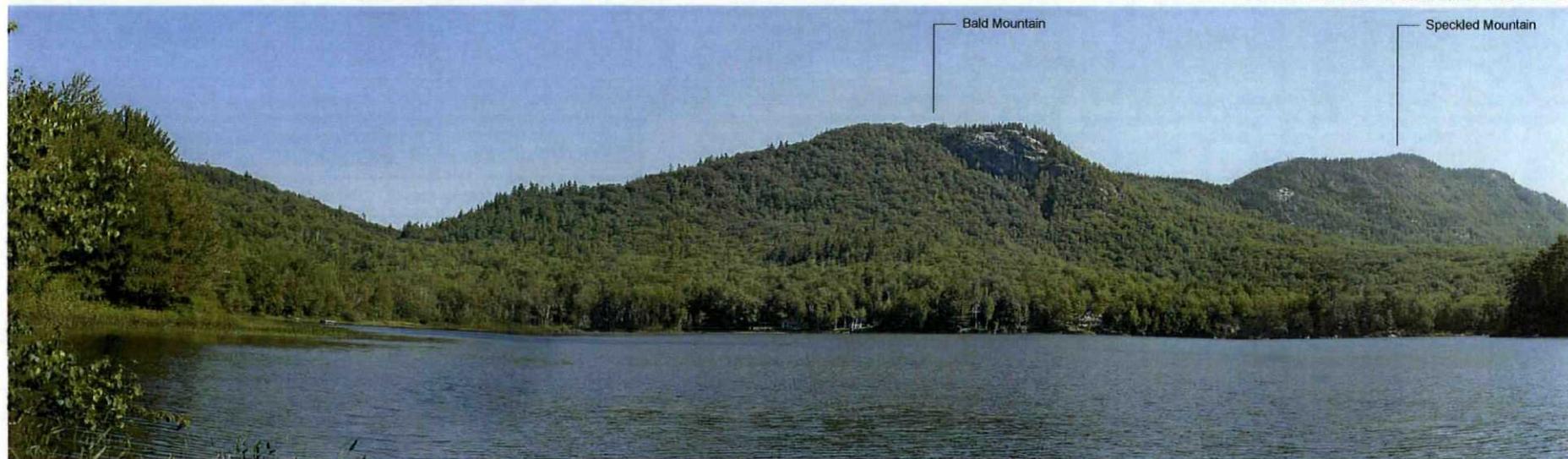
P14: Panoramic view looking southwest toward Spruce Mountain from the summit of Speckled Mountain in Peru (privately owned land). Eleven turbines would be visible from this location at distances ranging from 2.3 to 3.6 miles.



P15: Continued panoramic view from the summit of Speckled Mountain in Peru. Concord Pond is visible on the right in photo.

1494

Appendix A: Study Area Photographs
SPRUCE MOUNTAIN WIND PROJECT



P16: Panoramic view looking northeast toward Bald Mountain and Speckled Mountain from the boat launch on the western shore of Shagg Pond in Woodstock. The Project will not be visible from this location. See Photosimulation 4 for a view from the northeast corner of the pond.



P17: Continued panoramic view from the boat launch on Shagg Pond.



P18: View of Shagg Pond Road looking west near the boat launch on Shagg Pond.



P19: View of cottage near the boat launch on Shagg Pond.



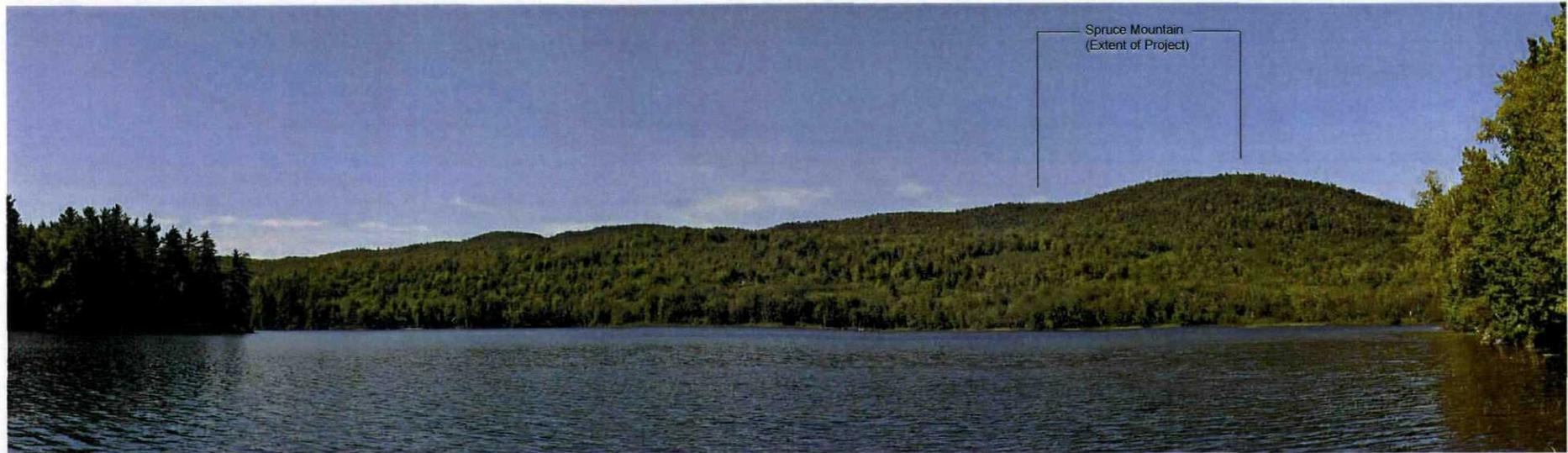
P20: View of the improved boat launch on the western shore of Shagg Pond.



P21: View of Shagg Pond Road looking east near the boat launch.

1495

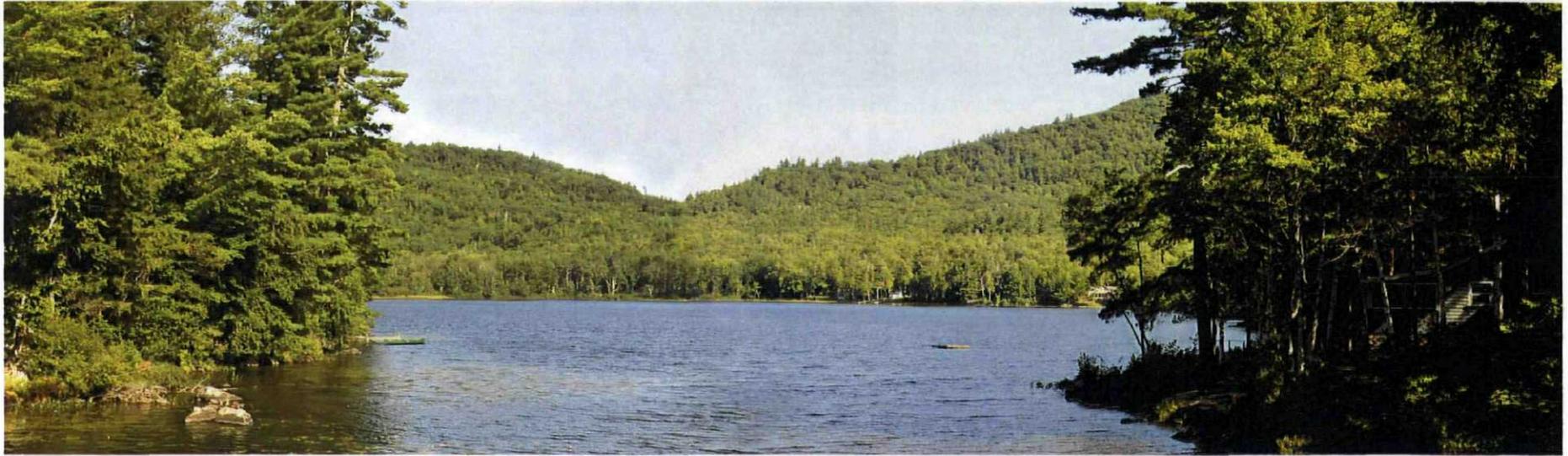
1496



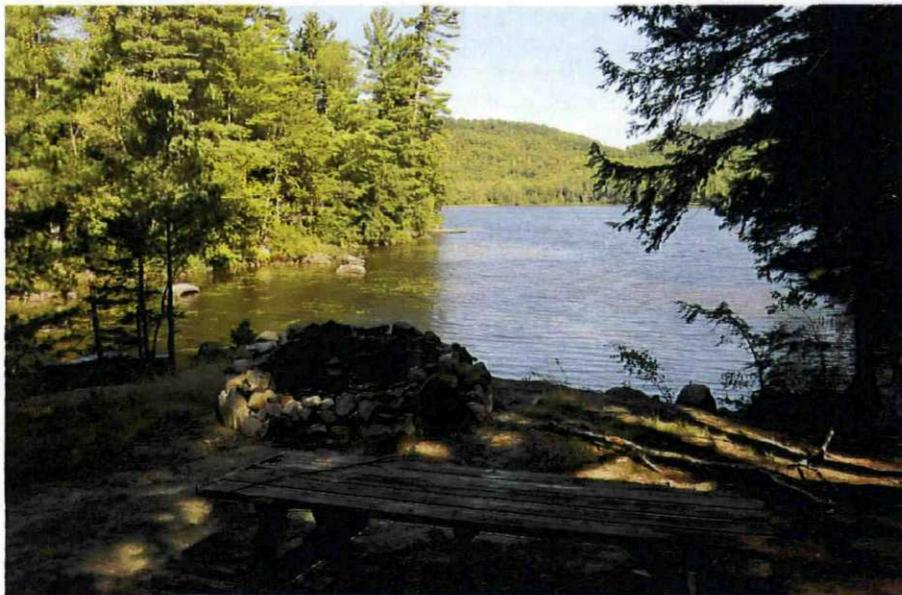
P22: Panoramic view looking southwest toward Spruce Mountain from the northeast corner of Shagg Pond in Woodstock. Seven turbines would be visible from this location at distances ranging from 1.1 to 1.9 miles. See Photosimulation 4 in Appendix B.



P23: Panoramic view looking west toward Spruce Mountain from Shagg Pond Road. The tops of 3+/- turbines would be visible above the treeline behind the home at distances ranging from 1.2 to 1.3 miles.



P24: Panoramic view looking east from the informal boat launch and picnic area on Washburn Pond in Woodstock. The Project would not be visible from this location. Portions of 10 turbines would be visible from the eastern portion of the pond in Summer at distances ranging from 1.5 to 2.3 miles.



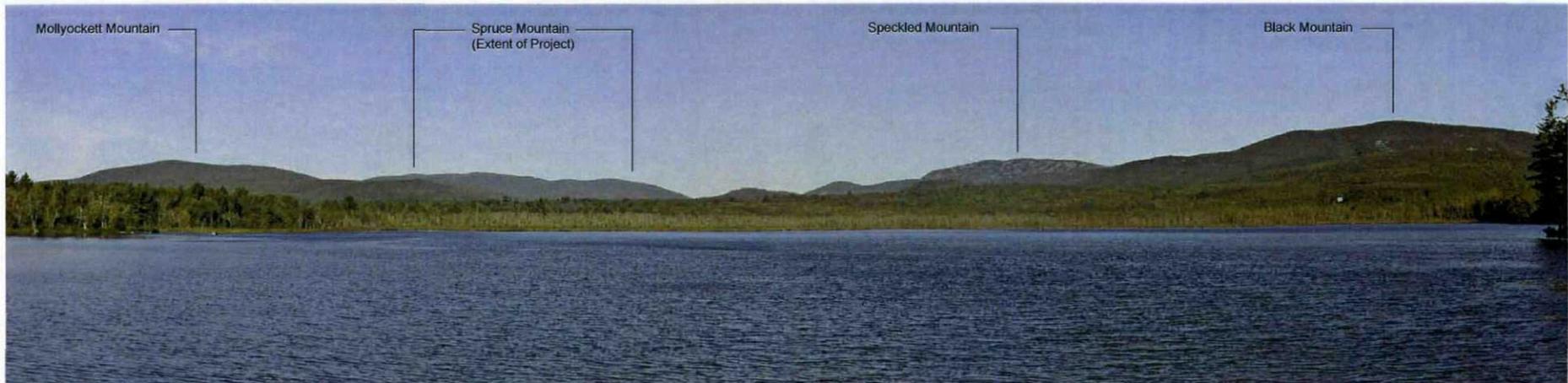
P25: Informal picnic area on Washburn Pond that is on private land but publicly accessible.



P26: Boulder at the picnic area with plaque commemorating William M. Shipps.

1497

1498



P27: Panoramic view looking west toward Spruce Mountain from the informal public access point on the southeast corner on Labrador Pond in Summer. Eleven turbines would be visible from this viewpoint at distances ranging from 6.6 to 7.1 miles.



P28: View looking east from Labrador Pond Road, adjacent to the informal public access point on Labrador Pond in Summer.



P29: View looking west from Labrador Pond Road, adjacent to the informal public access point on Labrador Pond in Summer.



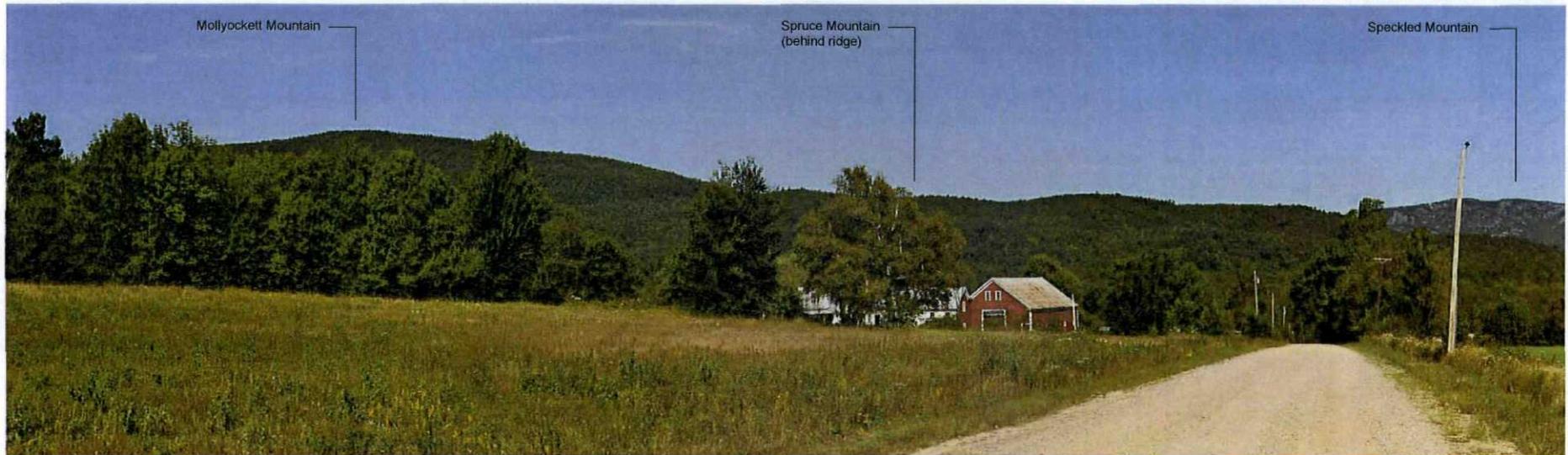
P30: Panoramic view looking west from a point on the southeastern shoreline of Little Labrador Pond in Sumner. The Project will not be visible from this pond.



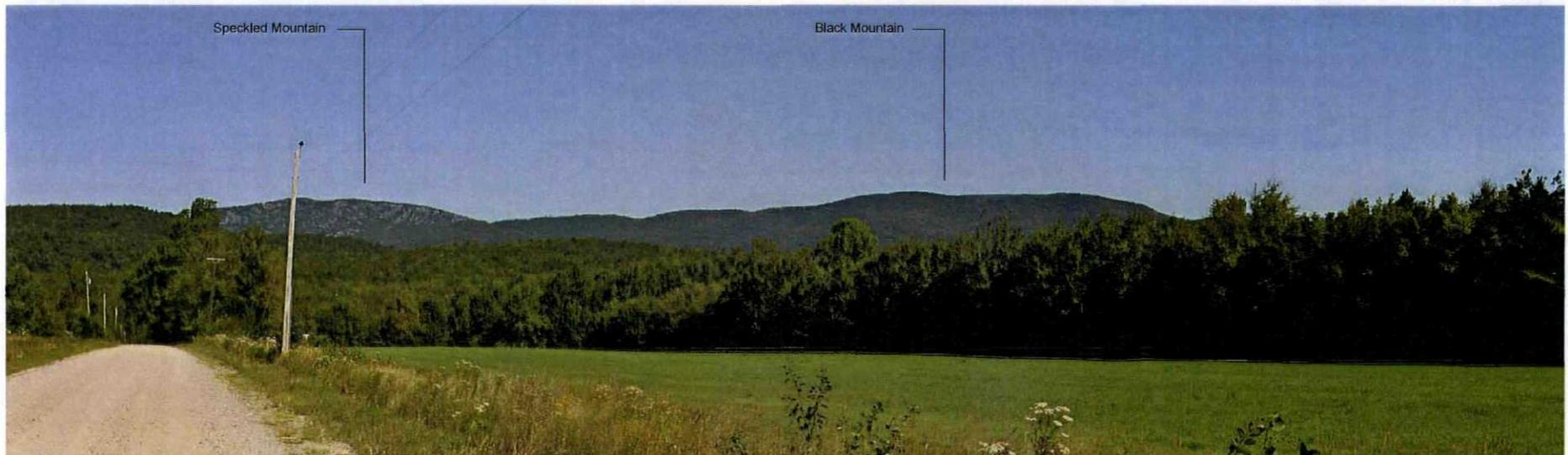
P31: Continued panoramic view looking northwest from Little Labrador Pond. Black Mountain is visible to right of center in photo.

149

1500



P32: Panoramic view looking northwest from Tuell Hill Road in Sumner. The top of one turbine may be visible from this viewpoint at a distance of 4.5 miles. The rest of the Project will be screened by Mollyockett Mountain.



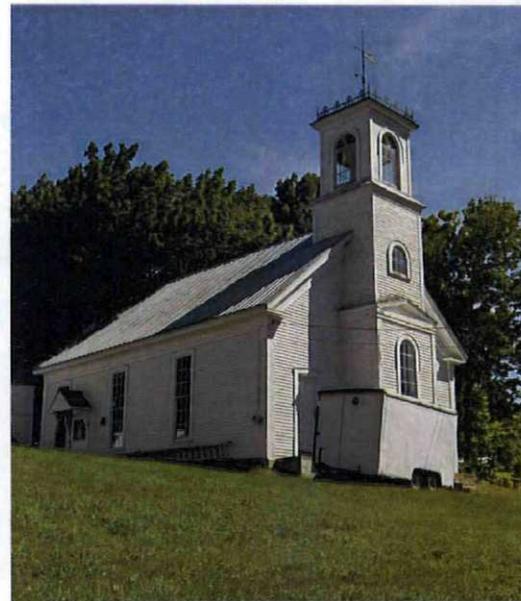
P33: Continued panoramic view from Tuell Hill Road looking north.



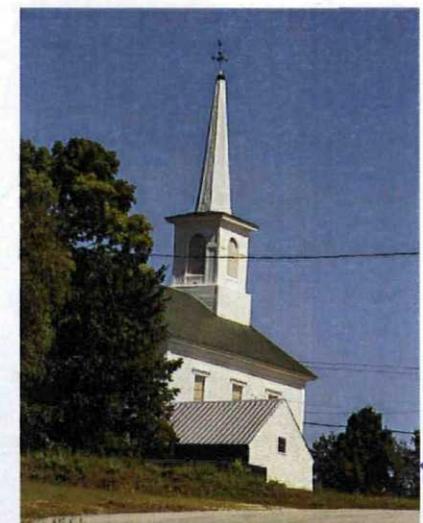
P34: Panoramic view looking northwest from the cemetery off Route 219 (Main Street) in West Sumner, west of the village. The tops of approximately 5 turbines may be visible during the leaf off season.



P35: View of Front Street in West Sumner. The Project will not be visible from the village.

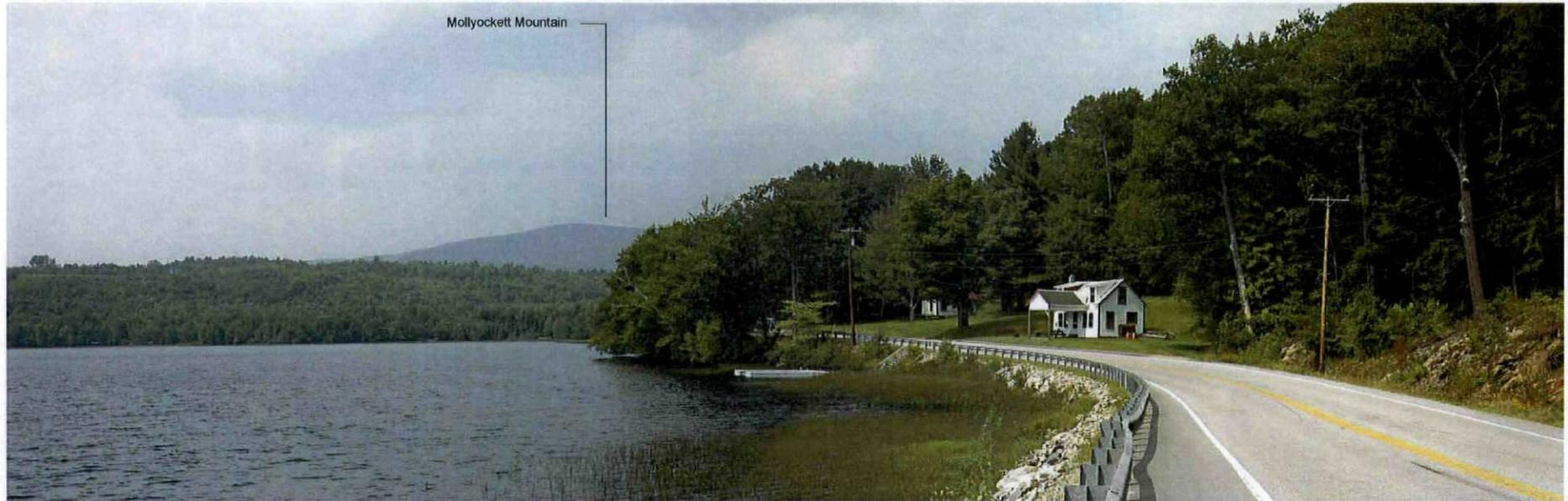


P36: A church being used as a residence on Front Street in West Sumner.

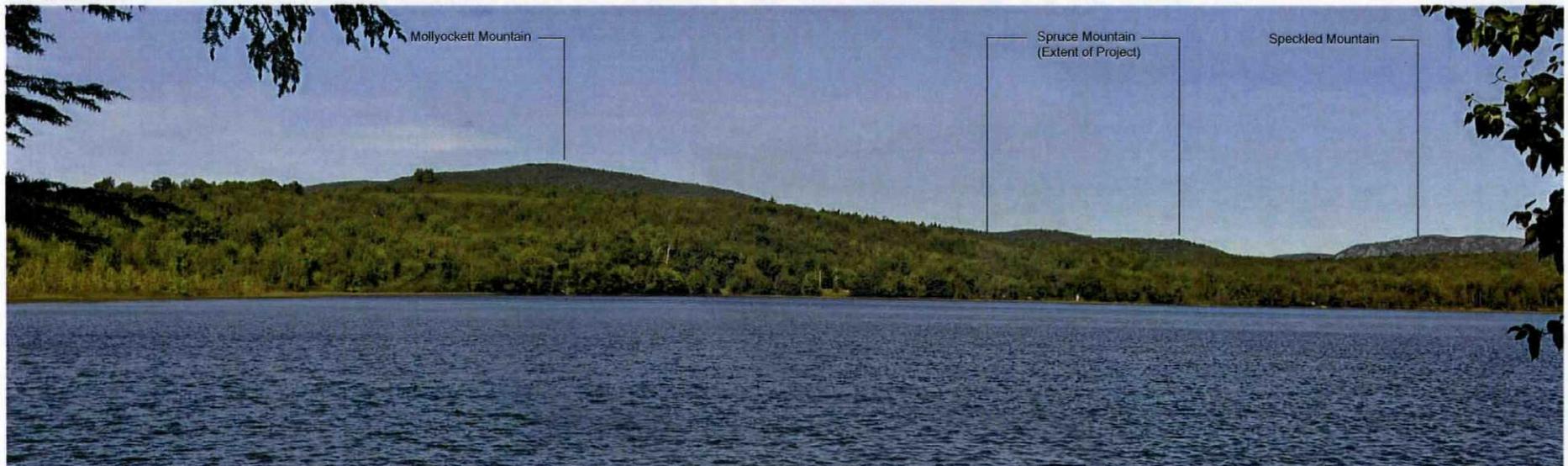


P37: View of the First Universalist Society Church in West Sumner. One or two turbines may be visible over the road in front of the church during leaf off season.

1509



P38: Panoramic view looking northwest at Pleasant Pond from Route 219 in Summer. The Project will not be visible from this viewpoint due to intervening foreground vegetation and topography.



P39: Panoramic view looking northwest from the southeastern corner of Pleasant Pond. Approximately 9 turbines would be visible on Spruce Mountain from this viewpoint at distances ranging from 6.6 to 7.0 miles.



P40: View of the public access area on Moose Pond in North Paris. The Project will not be visible from the pond.



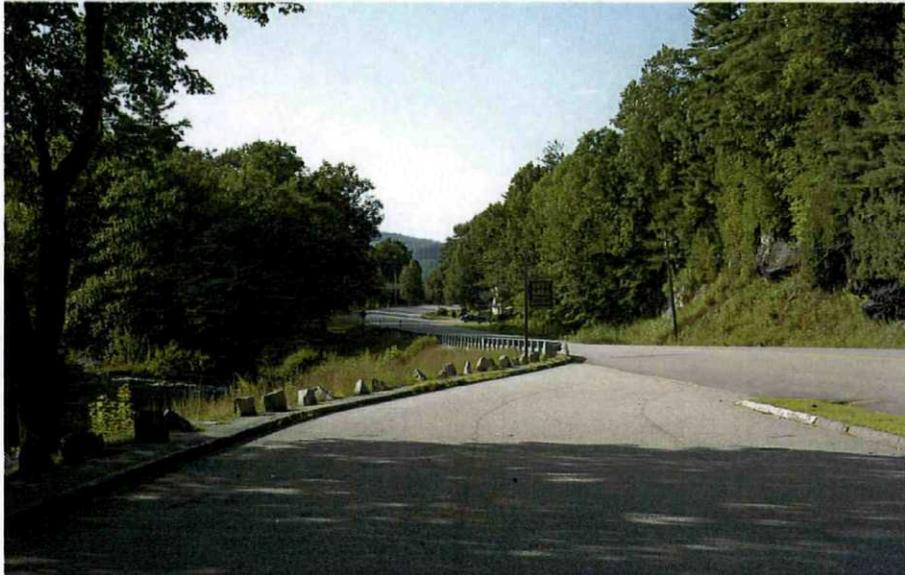
P41: View of the boat launch on Moose Pond in North Paris.



P42: Panoramic view looking southeast from the boat launch on Moose Pond. The Project will not be visible from this pond due to intervening vegetation and topography.

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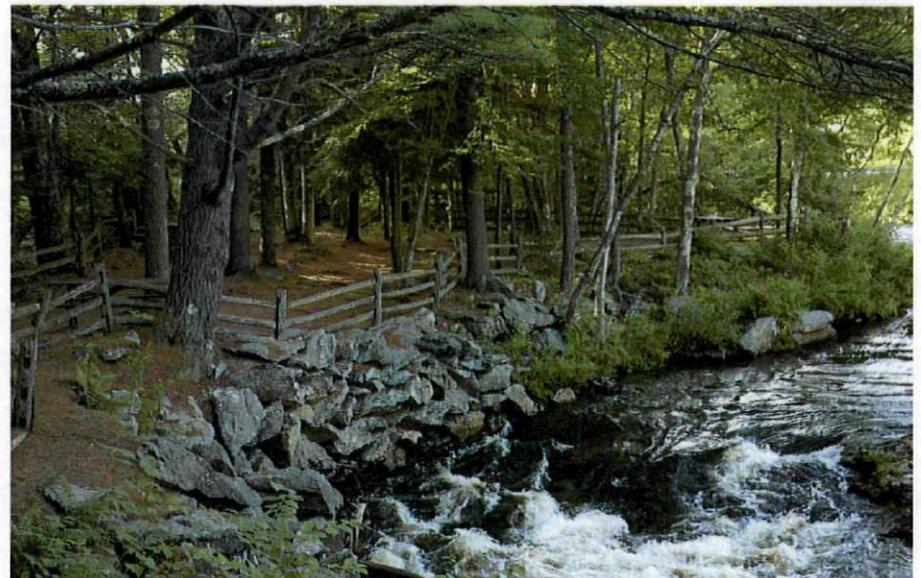
P43: View looking north at the Maine DOT parking area for the Snow Falls Gorge Rest Area on Route 26 in West Paris. No turbines would be visible from the rest area.



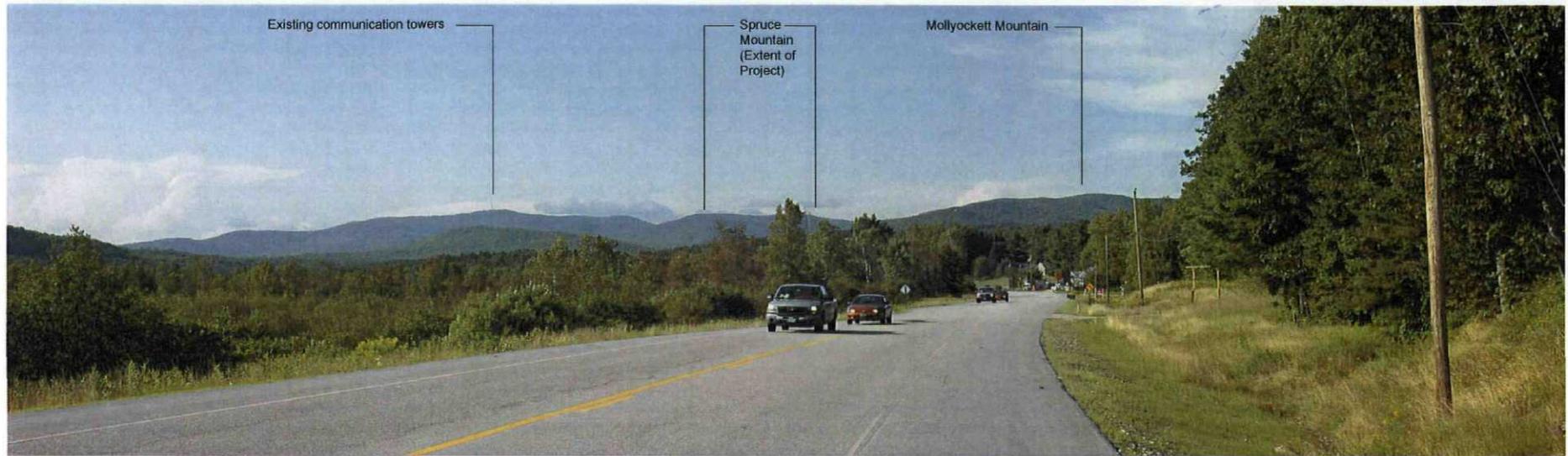
P44: View of Snow Falls Gorge from the parking area.



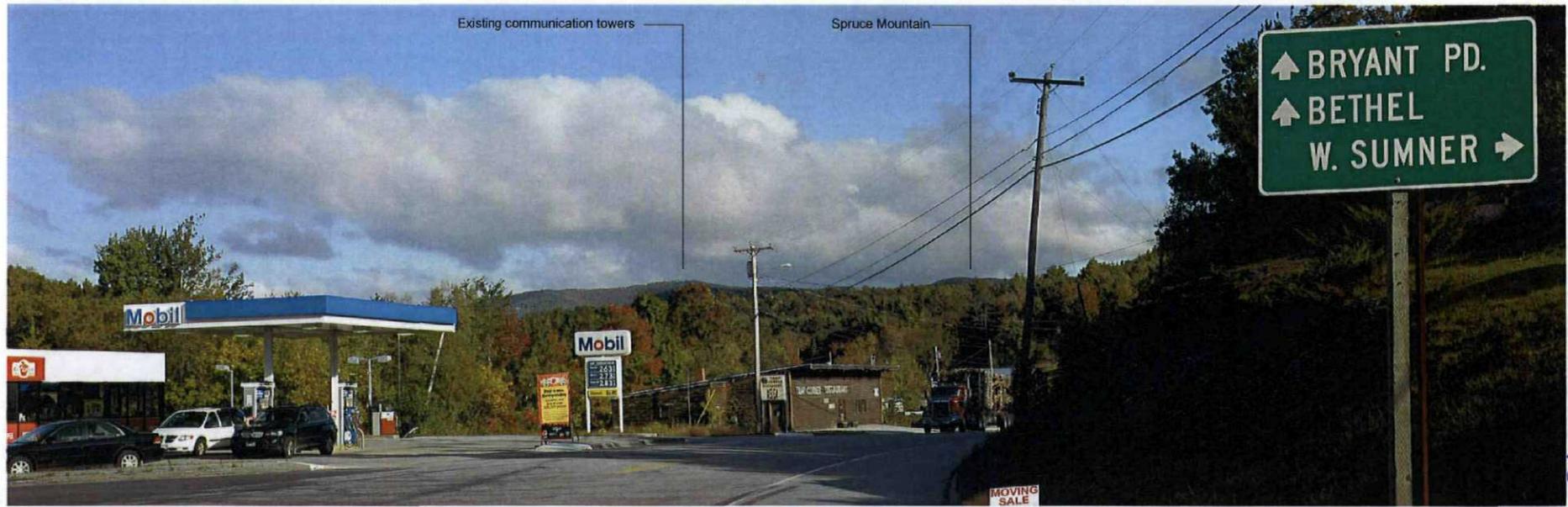
P45: View of Snow Falls Gorge.



P46: View of Snow Falls Gorge.

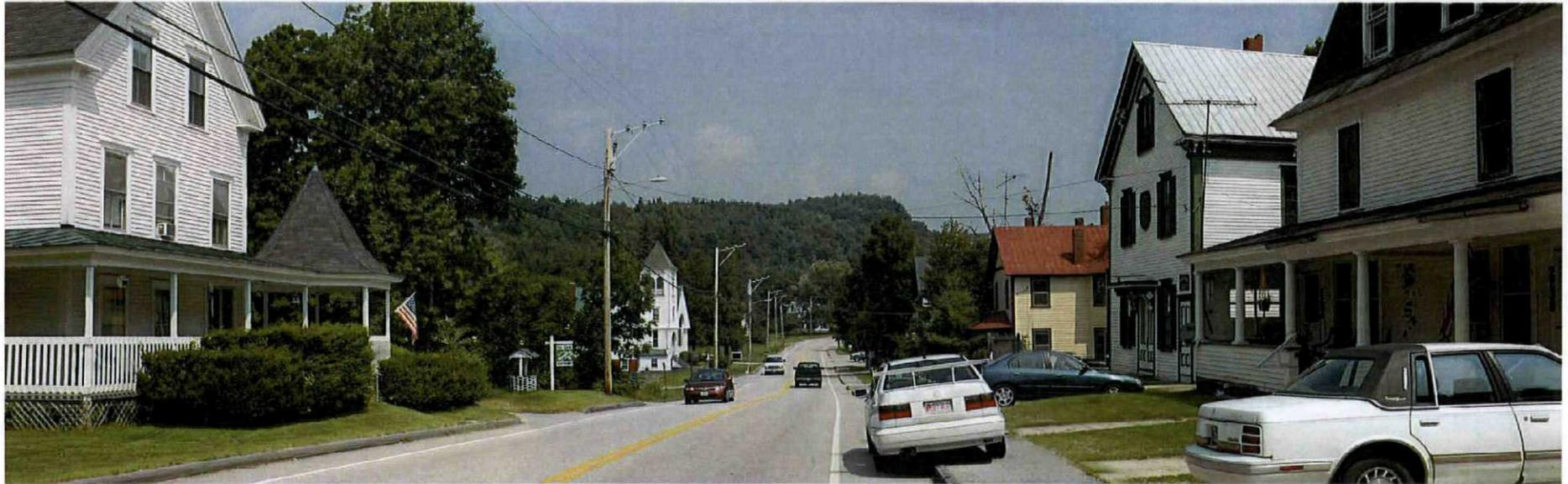


P47: Panoramic view looking north from Route 26 in West Paris, south of Trap Corner. Approximately 4 turbines would be visible from this location at distances ranging from 6.1 to 6.6 miles. See Photosimulation 6 in Appendix B.

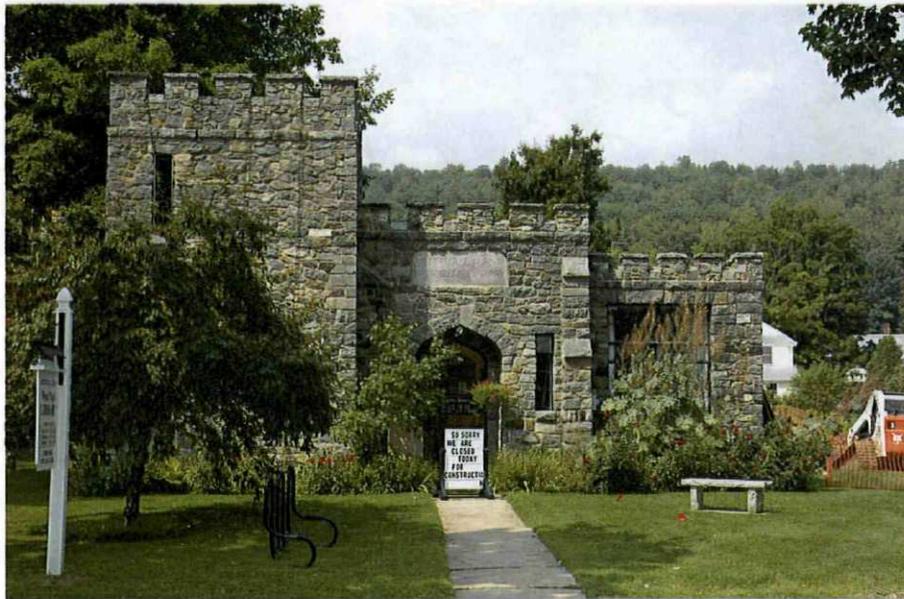


P48: Panoramic view looking north from Route 26 at Trap Corner in West Paris. Approximately 3 turbines would be visible from this location at distances ranging from 5.1 to 5.5 miles. See Photosimulation 7 in Appendix B.

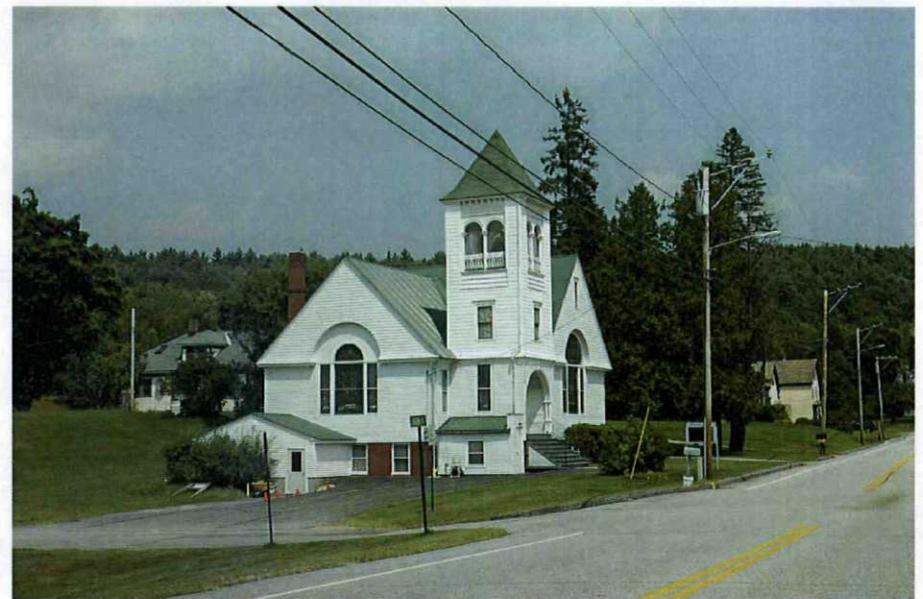
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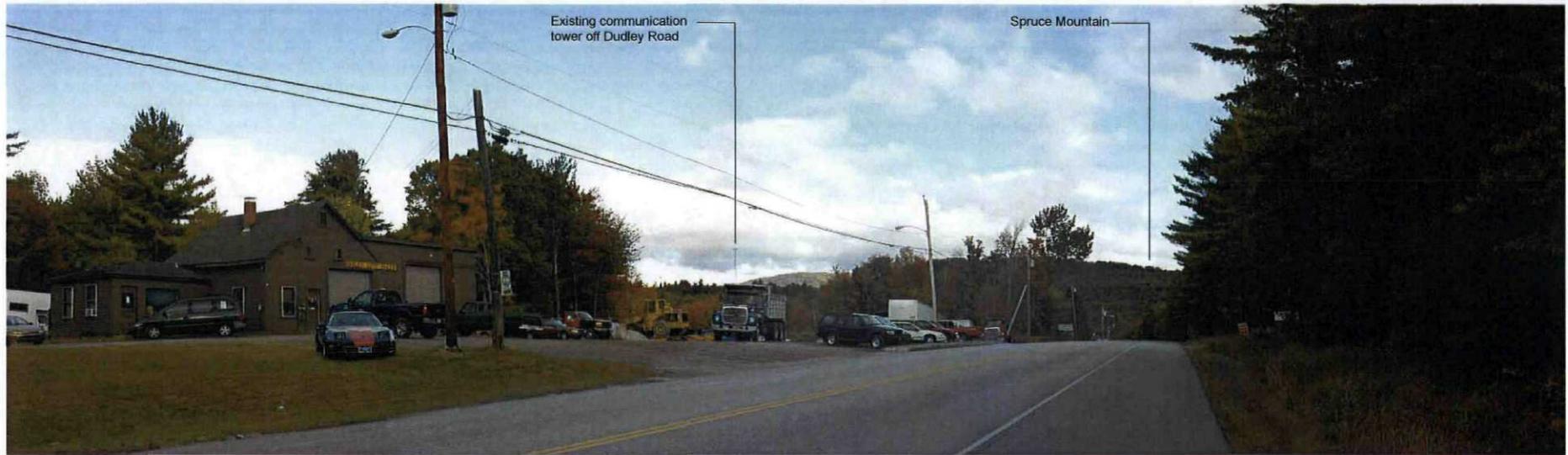
P49: Panoramic view looking north from Route 219 (Main Street) in the village of West Paris. The Project will not be visible from the village.



P50: View of the Arthur L. Mann Library, a building on the National Register of Historic Places, in West Paris. The Project will not be visible from the Library.



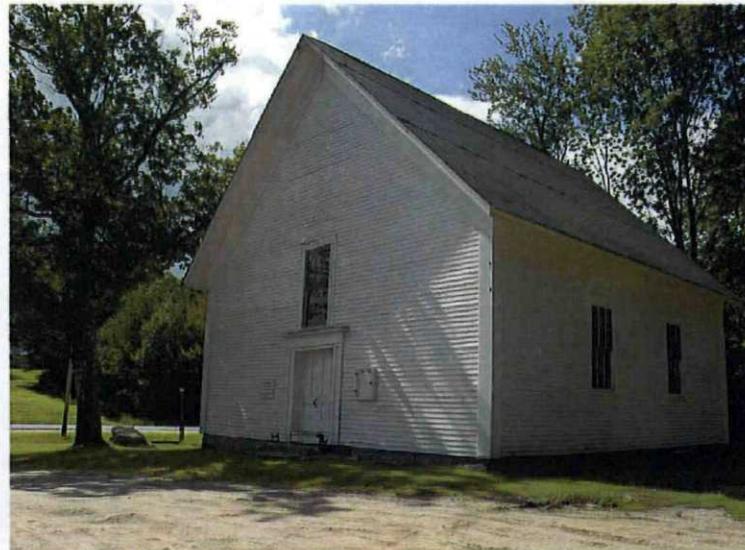
P51: View of the West Paris Universalist Church on Main Street. The Project will not be visible from the Church.



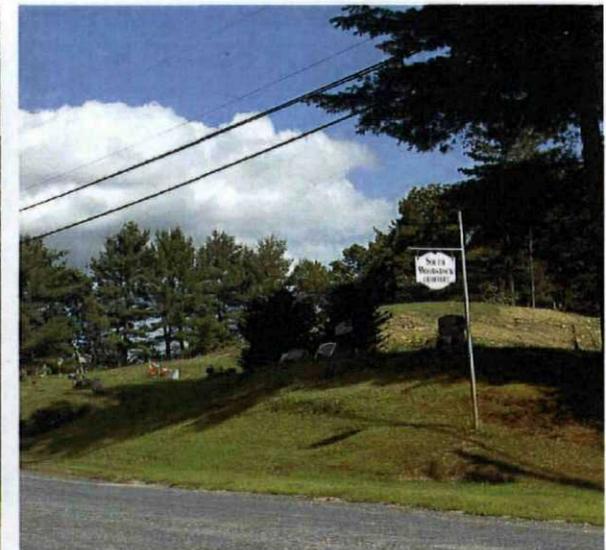
P52: Panoramic view looking north from Route 26 adjacent to Hadley's Auto Sales in South Woodstock, north of Trap Corner. Approximately 2 turbines would be visible from this location at distances ranging from 4.1 to 4.3 miles. See Photosimulation 8 in Appendix B.



P53: The intersection of Route 26 and Andrews Road in South Woodstock. The Project will not be visible from this location.



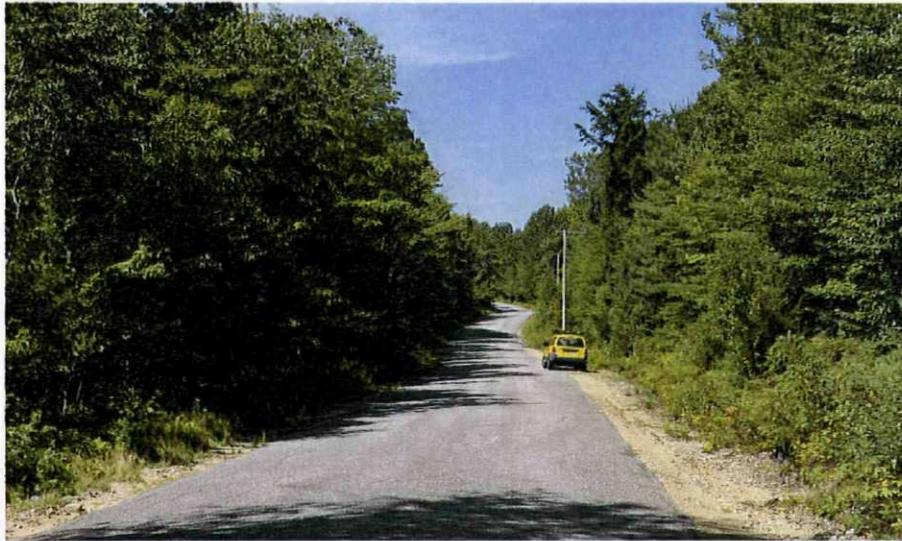
P54: View of the South Woodstock Church on Andrews Road. The Project will not be visible from this location.



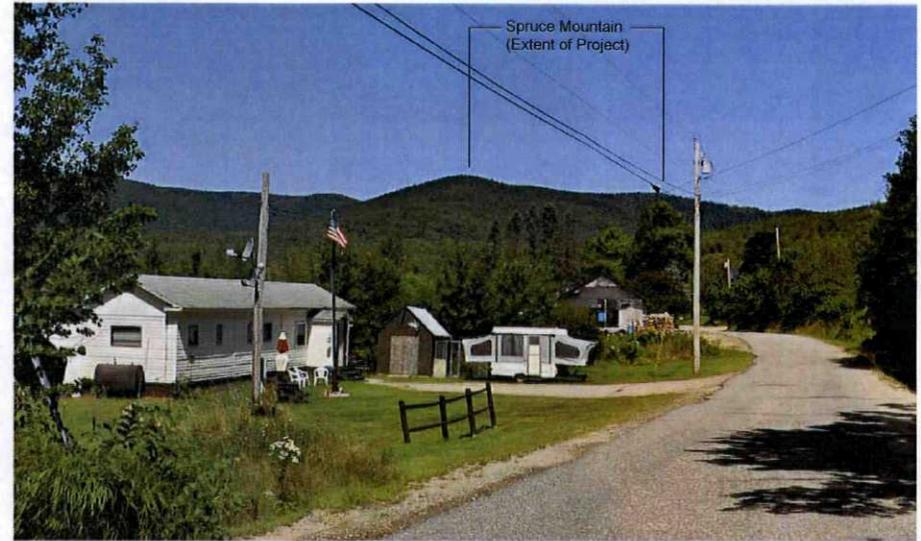
P55: View of the South Woodstock Cemetery across from the Church near the intersection of Route 26 and Andrews Road. The Project will not be visible from this location.

1507

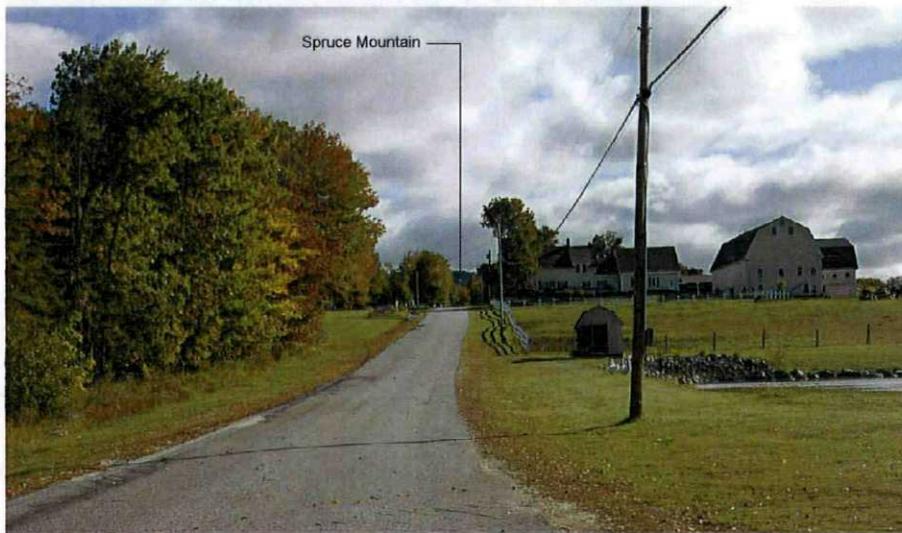
1508



P56: View looking northwest from Perkins Valley Road, approximately 2.2 miles from the Project. There will be no views of the Project from the northern portions of Perkins Valley Road due to intervening vegetation.



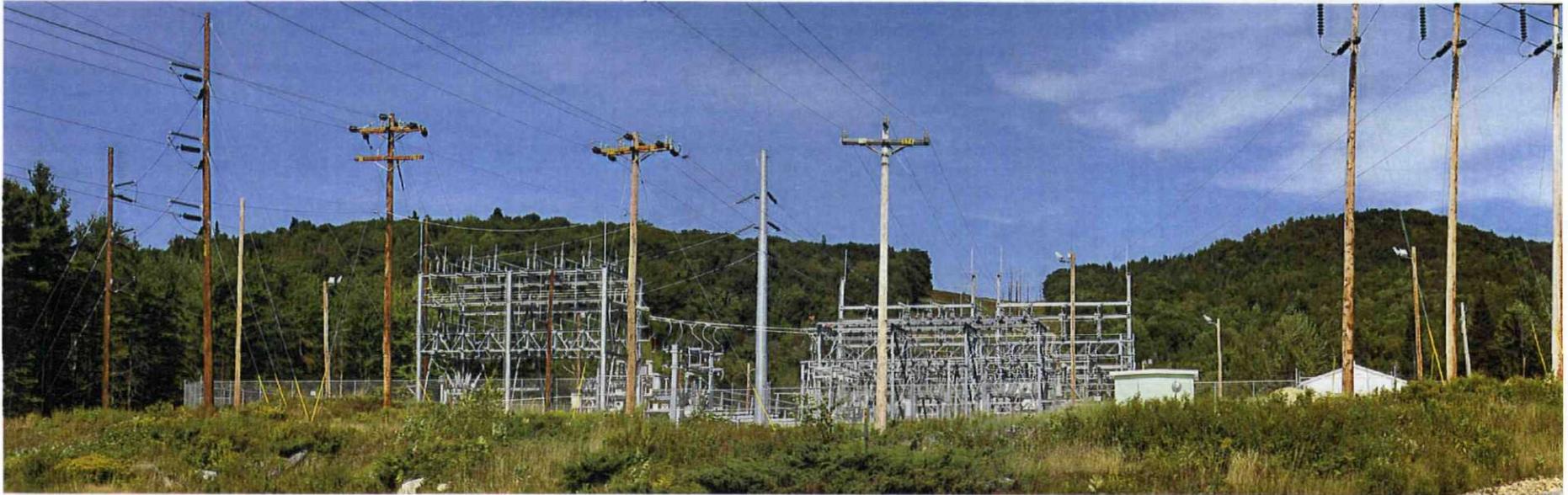
P57: View looking north from Perkins Valley Road, 0.9 of a mile, north of the intersection with Andrews Road/Koskela Road. Approximately 6 turbines would be visible at distances ranging from 2.3 to 3.0 miles.



P58: View looking northeast from Cushman Road, 0.1 miles east of the intersection with Route 26. One turbine would be visible from this location at a distance of 3.0 miles. The transmission line (to be permitted and constructed by CMP) would be located along this section of Cushman Road.



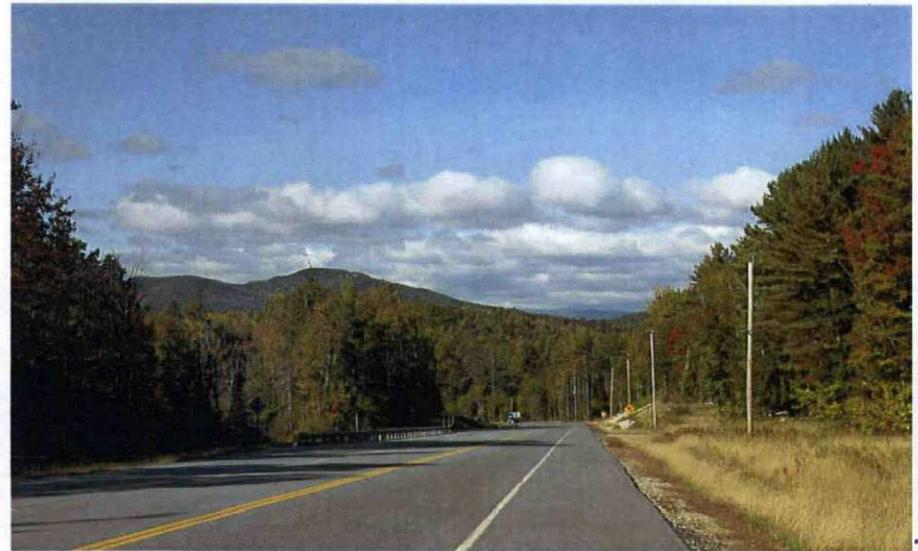
P59: View looking northeast from the intersection of Route 26 and Cushman Road. The Project will not be visible from this location.



P60: View of the existing Woodstock Substation on Route 232 in Woodstock. The Project's transmission line will connect to this substation. The transmission line will be permitted, constructed, and maintained by Central Maine Power.



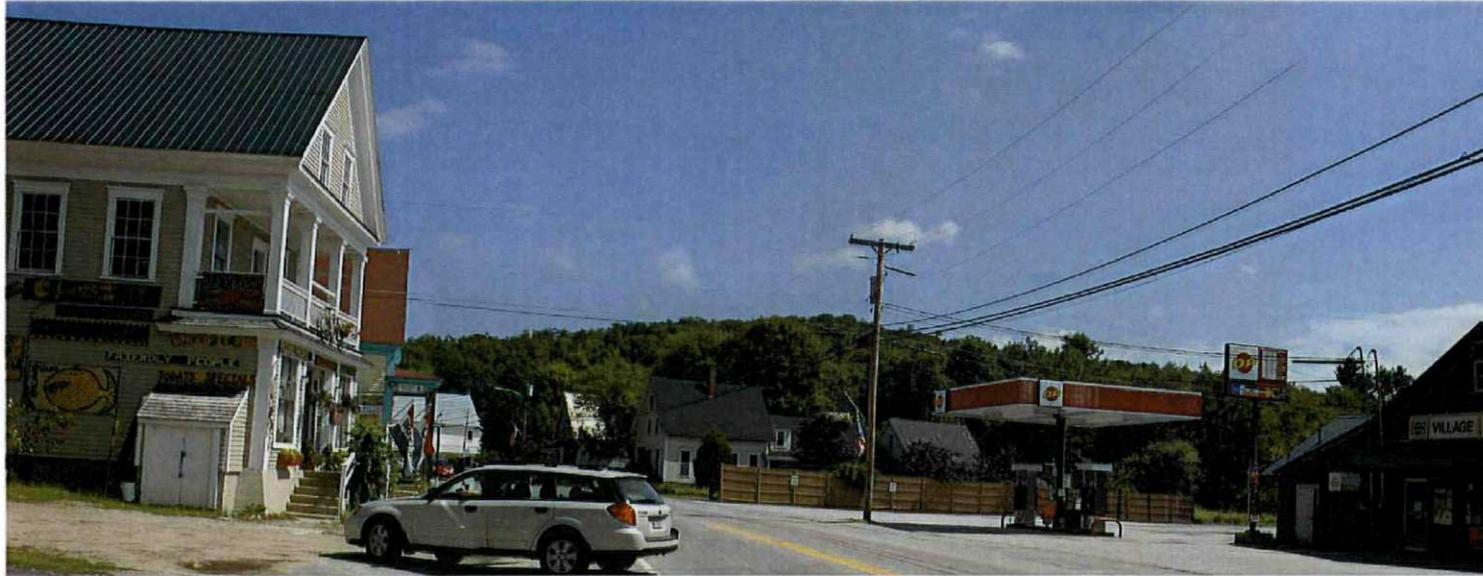
P61: View looking southwest from the existing transmission line crossing of Route 232. The Project will not affect this section of the transmission line.



P62: View looking west from Route 26 on Merrifield Hill, west of the intersection with Route 232 in Woodstock. The Project will not be visible from Merrifield Hill.

1509

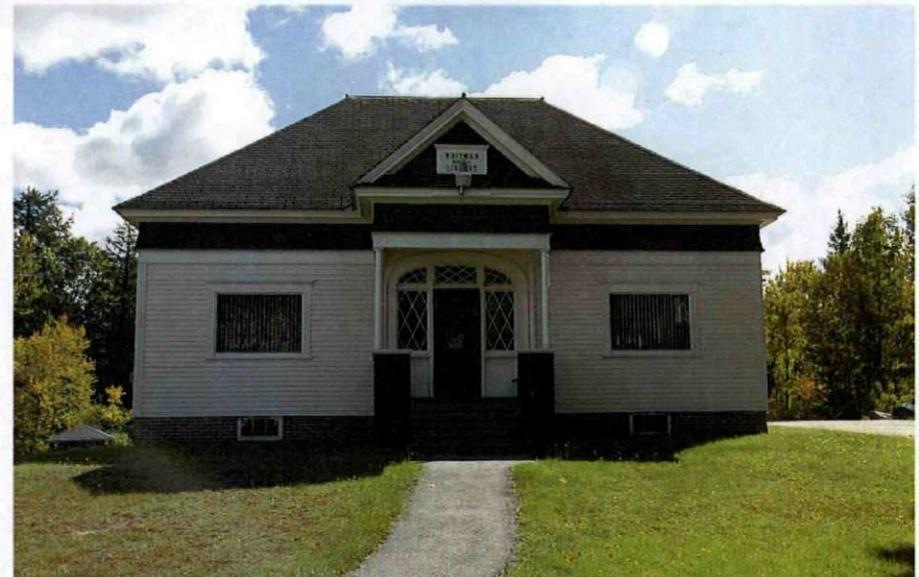
1510



P63: View of Route 26 in Bryant Pond in Woodstock. The Project will not be visible from the village.



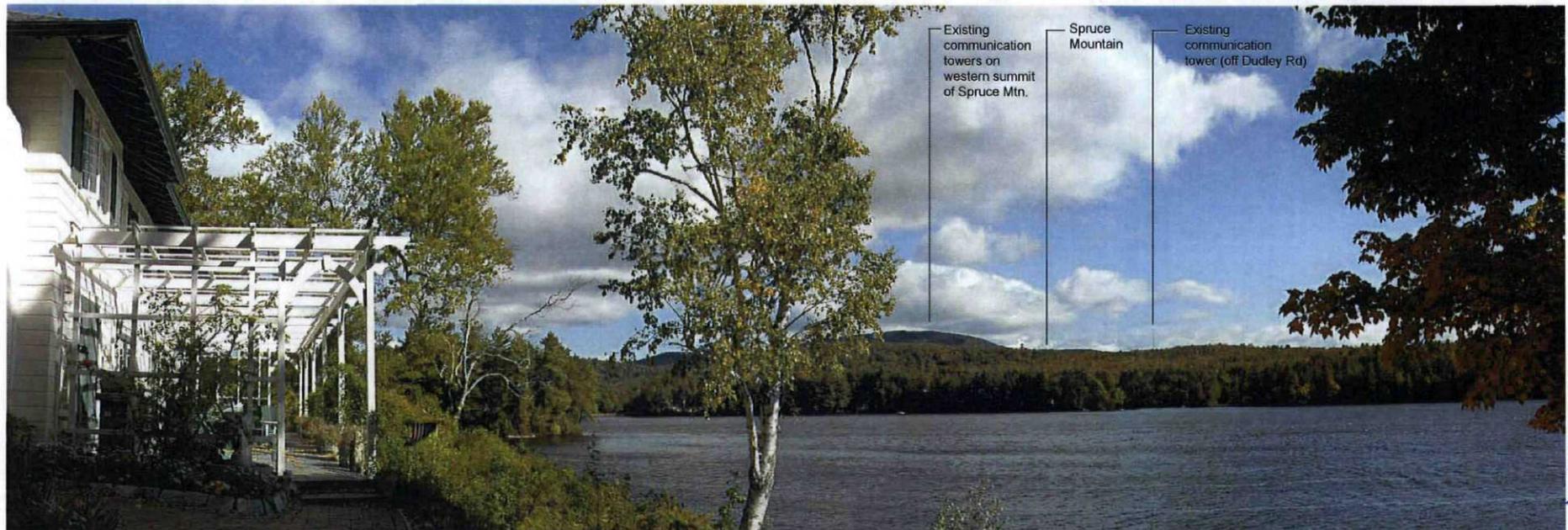
P64: Sculpture in Bryant Pond dedicated to Barbara and Elden Hathaway, owners of the Bryant Pond Telephone Company, the last hand crank telephone company in the United States. The Project will not be visible from near the sculpture.



P65: View of the Whitman Library, a building on the National Register of Historic Places, on Route 26 in Bryant Pond. The Project will not be visible from the Library.



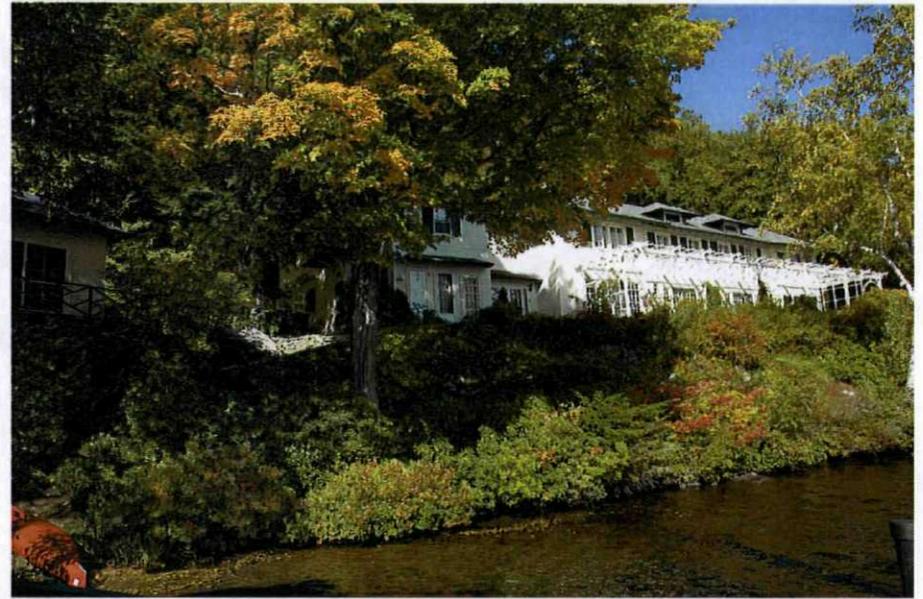
P66: Panoramic view from the boat launch on the southern end of Bryant Pond (Christopher Lake) off Rowe Hill Road. The Project will not be visible from this location.



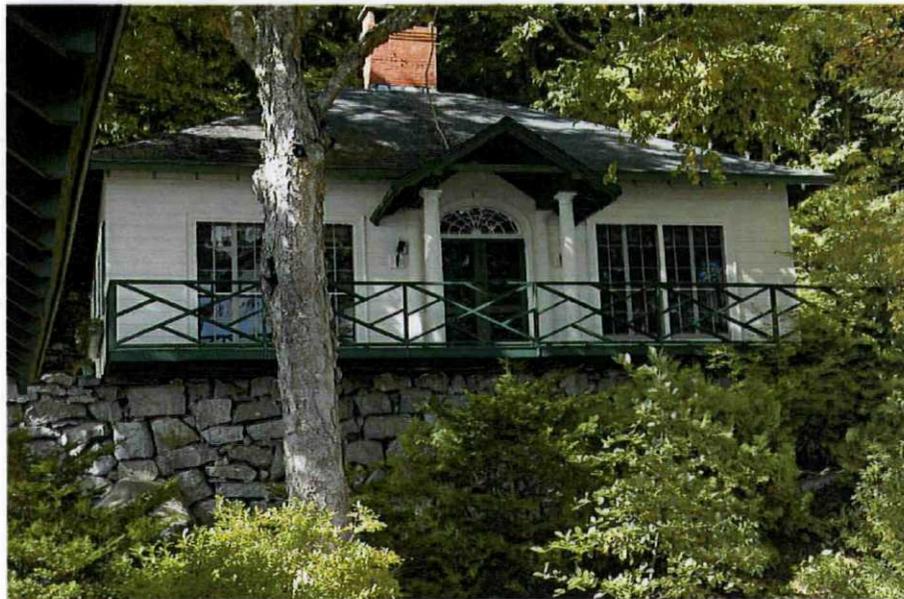
P67: Panoramic view looking northeast over Bryant Pond (Christopher Lake) from Dreamhome, a private residence on the National Register of Historic Places in Woodstock. Portions of 4 turbines would be visible from this location at distances ranging from 4.8 to 5.3 miles. See Photosimulation 9 in Appendix B.



P68: View of the Dreamhome guest cottage and pathways.



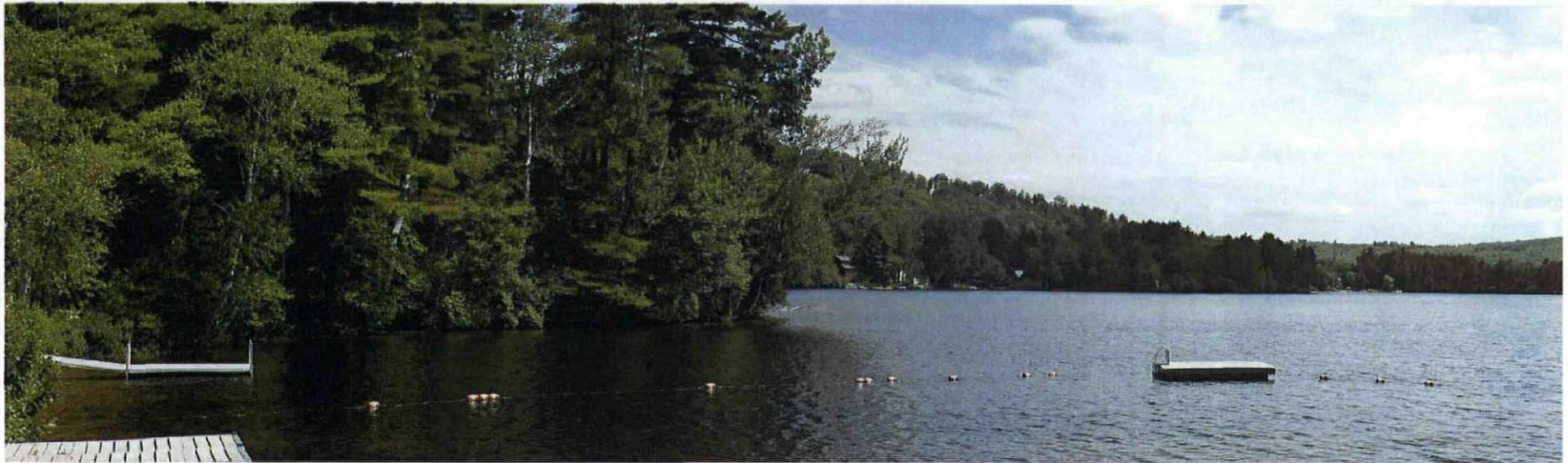
P69: View of Dreamhome from the boat house.



P70: View of the guest cottage at Dreamhome.



P71: View of the boat house at Dreamhome.

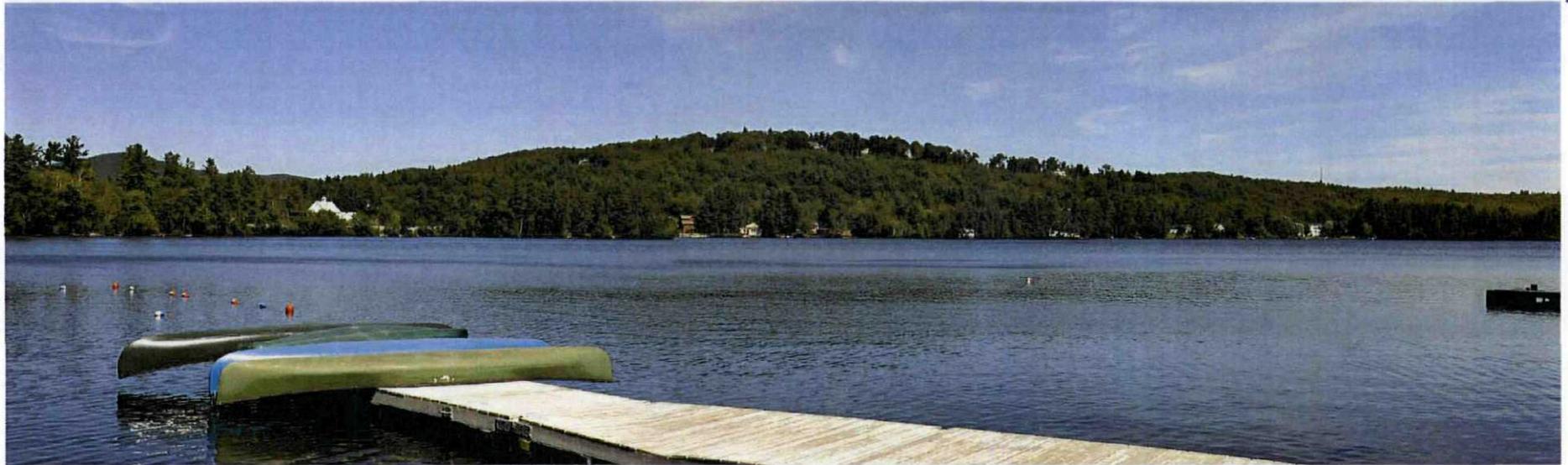


P72: Panoramic view looking east from the Woodstock Public Swimming Beach off Lakeside Drive on the north end of Bryant Pond (Christopher Lake). The Project will not be visible from this location.

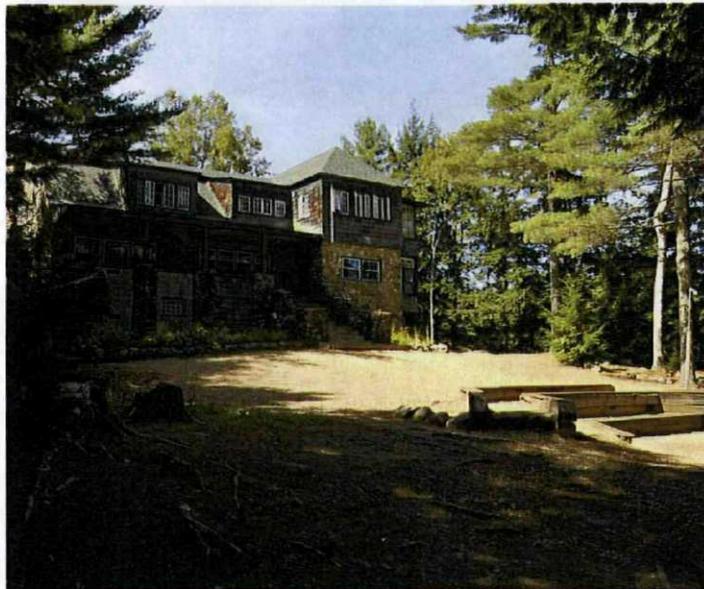


P73: Continued panoramic view looking southeast from the Woodstock Public Swimming Beach on Bryant Pond. The Project will not be visible from this location.

1514



P74: Panoramic view looking northeast from the University of Maine 4-H Camp & Learning Center on the northwest corner of Bryant Pond (Christopher Lake). The Project will not be visible from this location.



P75: The Cranestone Cottage Office Building at the UMaine 4-H Camp. The Project will not be visible from the campgrounds.



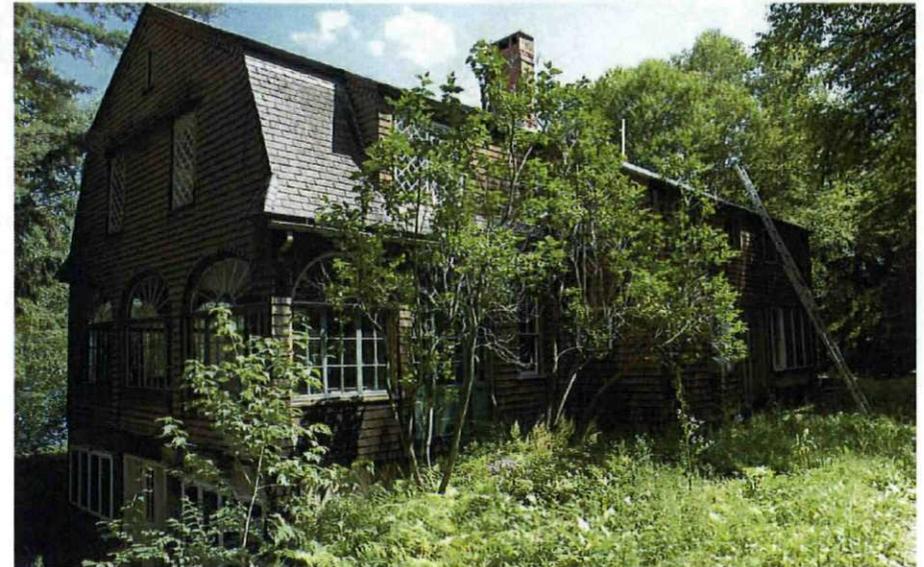
P76: View of other structures at the UMaine 4-H Camp.



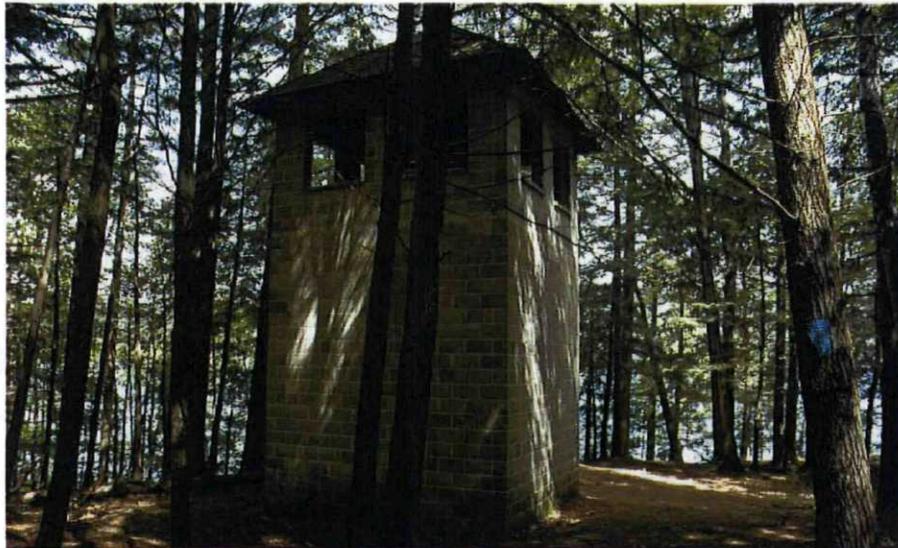
P77: Sign at the UMaine 4-H Camp.



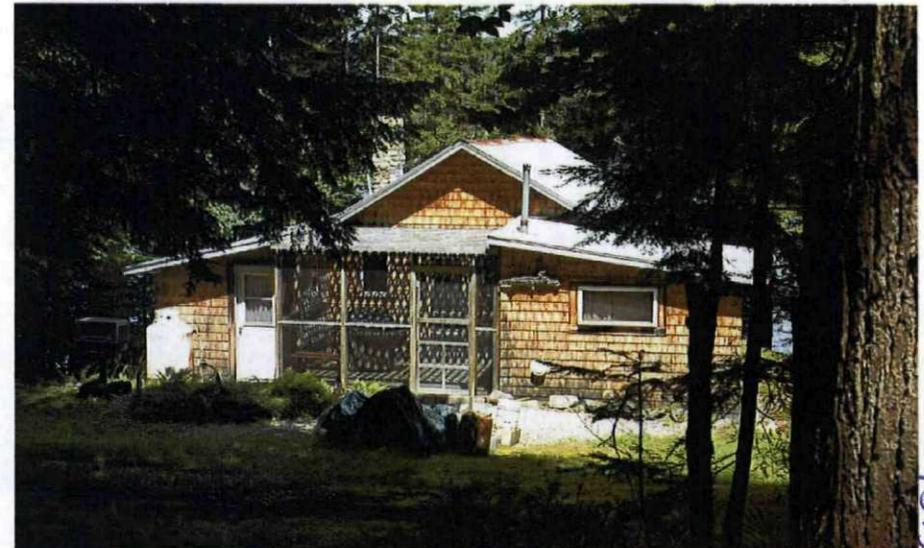
P78: View of Conservation Lane, the access road to the UMaine 4-H Camp & Learning Center and three cottages.



P79: View of the Birchmere Cottage on Bryant Pond at the end of Conservation Lane. There may be filtered views of the Project from the waterside of this private cottage.



P80: View of the Kinsman Family mausoleum structure adjacent to the Birchmere Cottage. There may be filtered views of the Project from benches located on the waterside of this structure.



P81: View of another private cottage on the end of Conservation Lane. There may be filtered views of the Project from the waterside of this cottage.

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1516



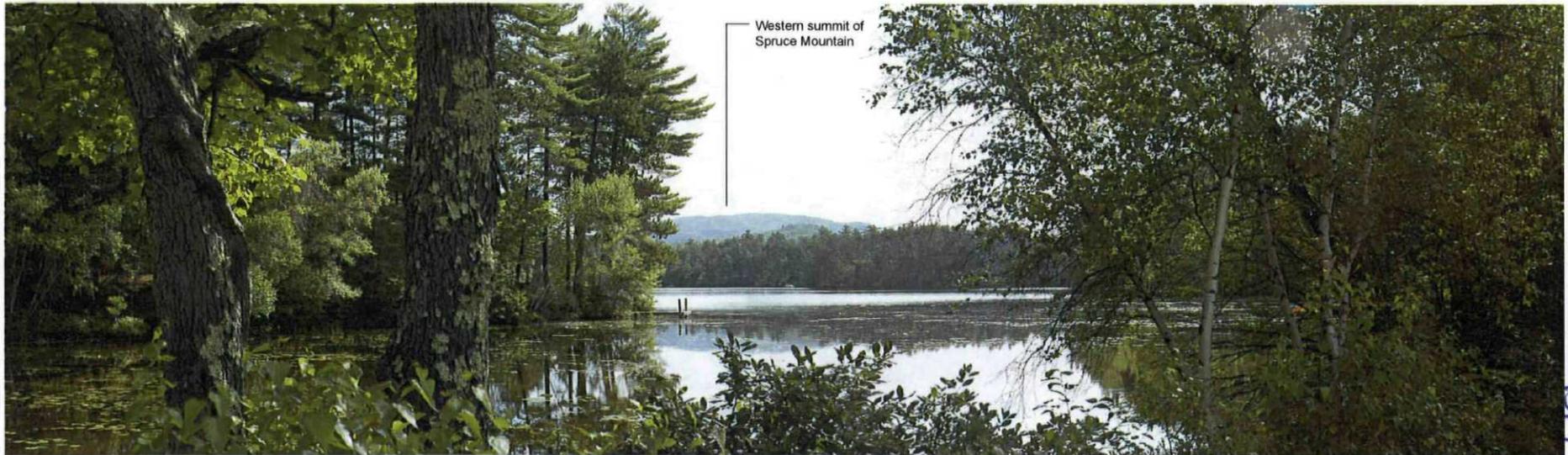
P82: Panoramic view looking north from the Town Beach and boat launch on South Pond in Greenwood. The Project will not be visible from this location.



P83: Continued panoramic view looking east from the Greenwood Town Beach and boat launch on South Pond. The Project will not be visible from this location.

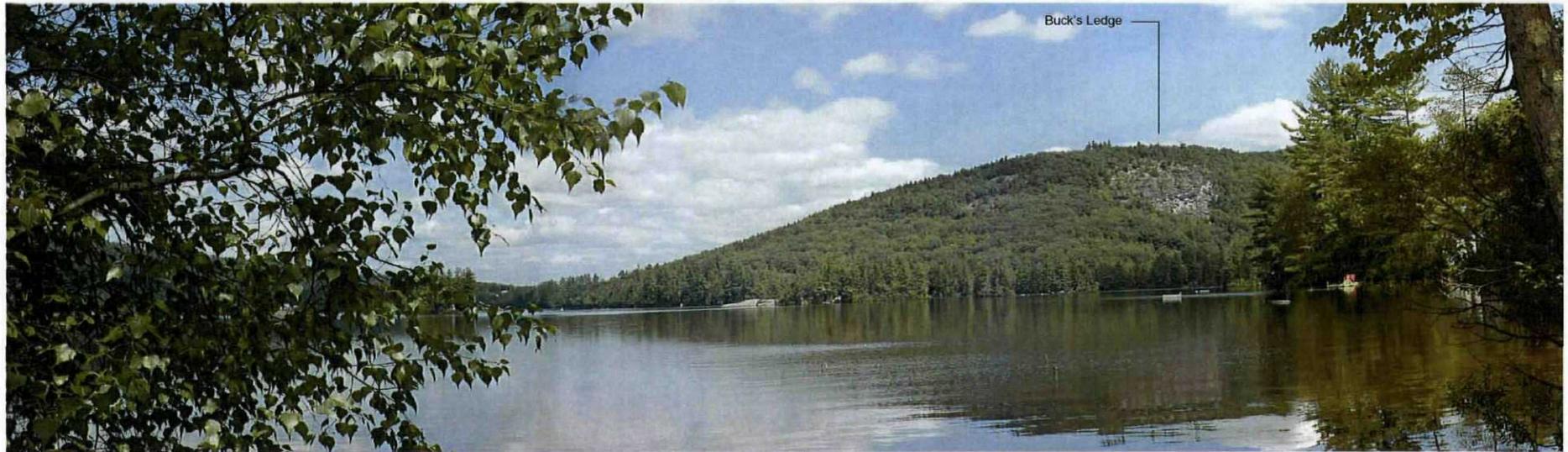


P84: Panoramic view looking northeast from the boat launch on Round Pond in Greenwood. The Project will not be visible from this location.

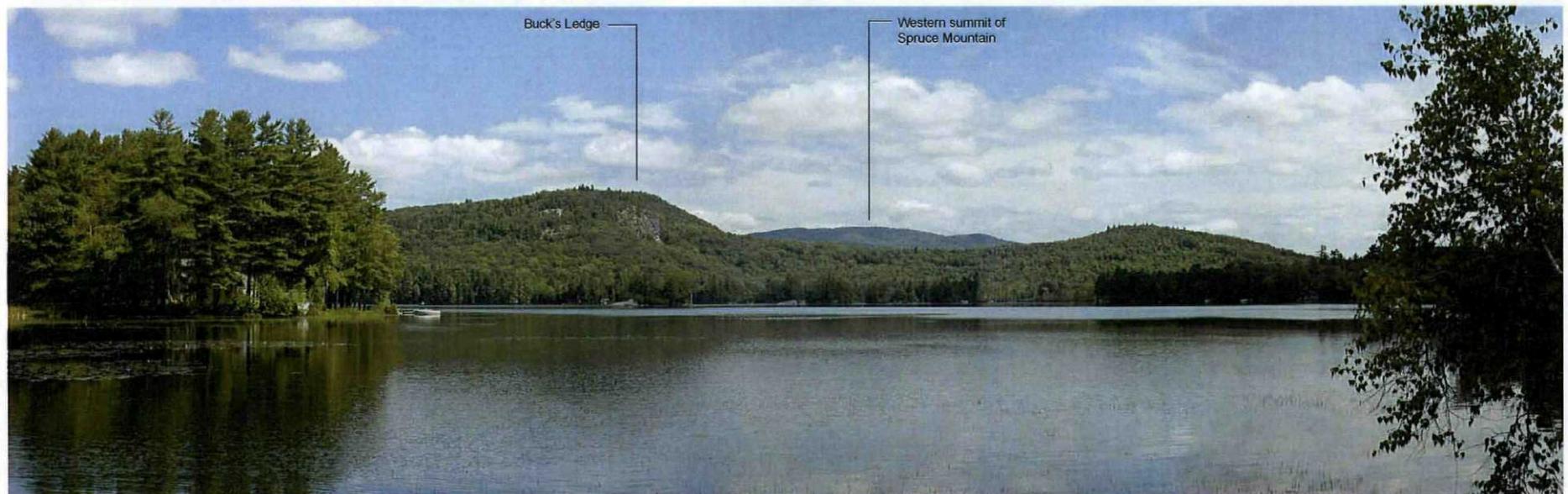


P85: Panoramic view looking east from Greenwood Road across Round Pond in Greenwood. The Project will not be visible from this location.

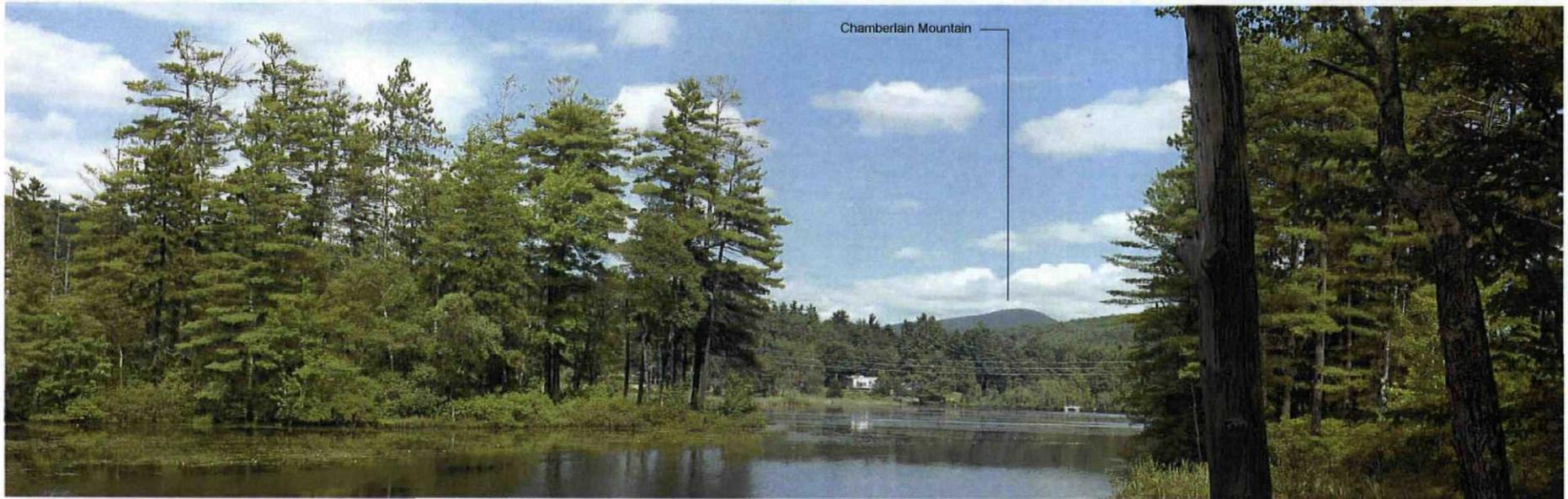
1518



P86: Panoramic view looking northeast from a boat launch off Route 26 on North Pond. The Project will not be visible from this location.



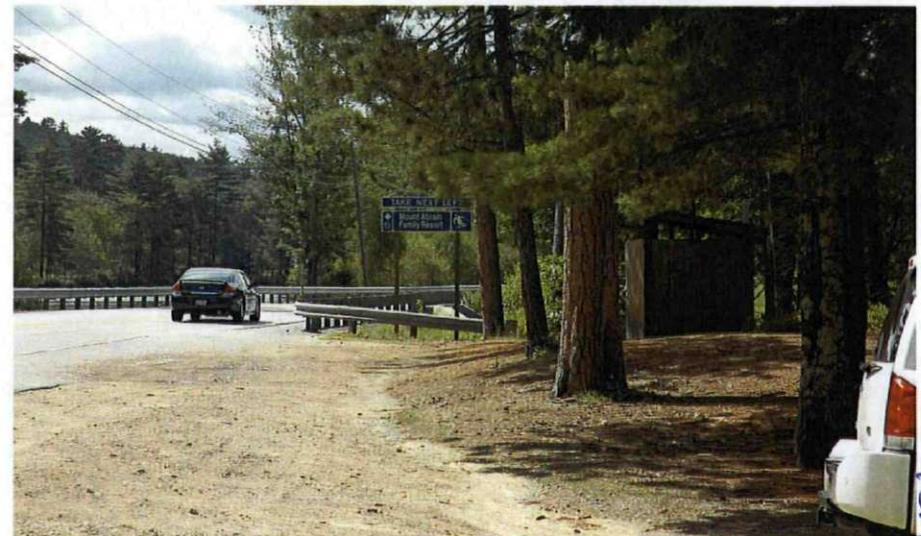
P87: Panoramic view looking northeast from Johnny's Bridge Road over North Pond. The Project will be screened by the western summit of Spruce Mountain.



P88: Panoramic view looking northeast across North Pond from the Maine DOT Greenwood Shores Rest Area off Route 26 in Greenwood. The Project will not be visible from this location.

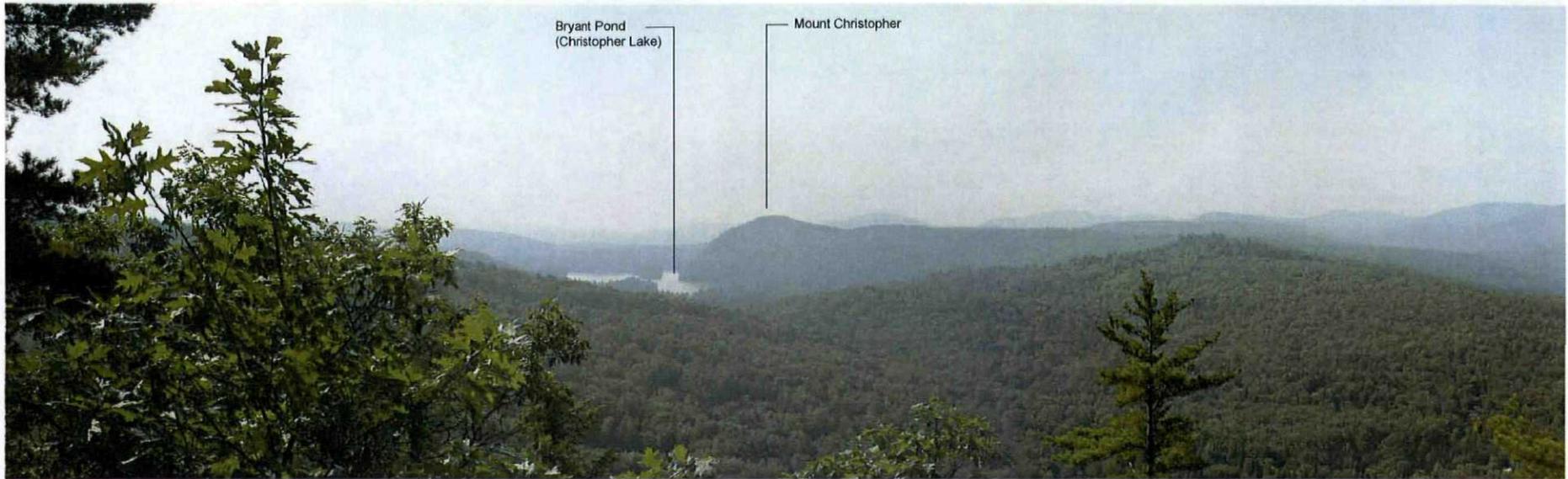


P89: View of the parking and picnic facilities at the Maine DOT rest area off Route 26 on North Pond in Greenwood.

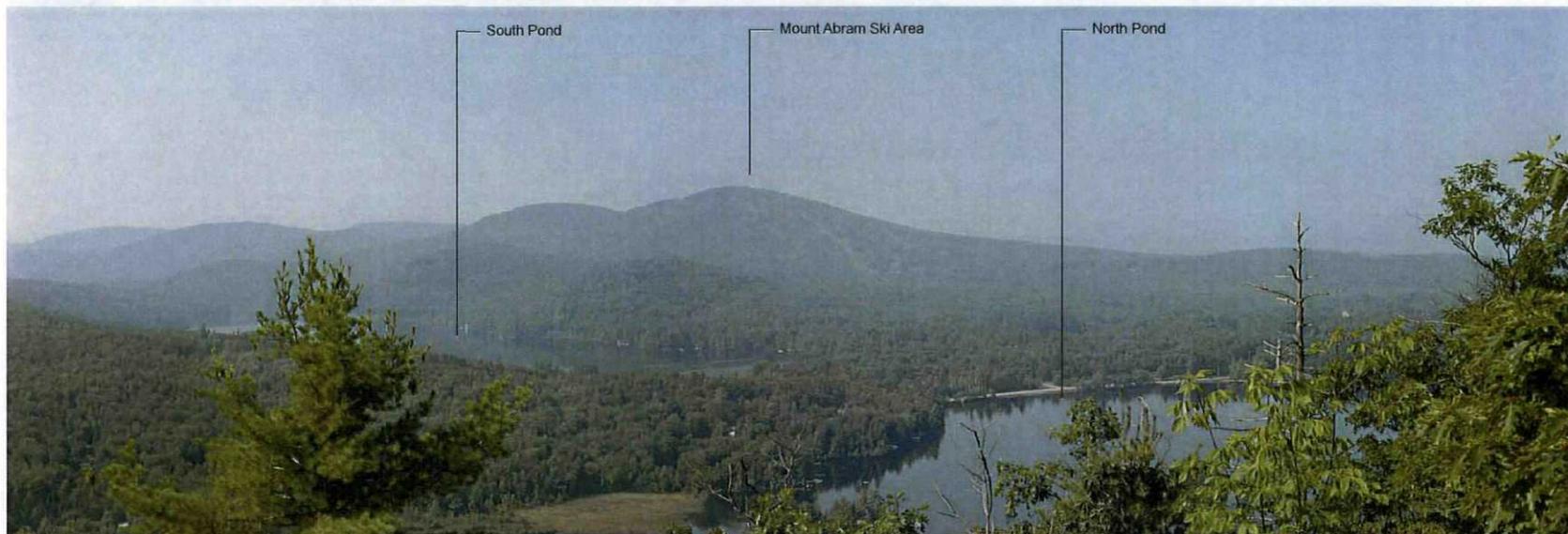


P90: View of the Maine DOT rest area off Route 26.

152D



P91: Panoramic view looking south from Bucks Ledge on the southern end of Moody Mountain in Woodstock. The Project will not be visible during leaf-on season. One or two turbines may be visible in the winter months filtered through vegetation on the left in photo.

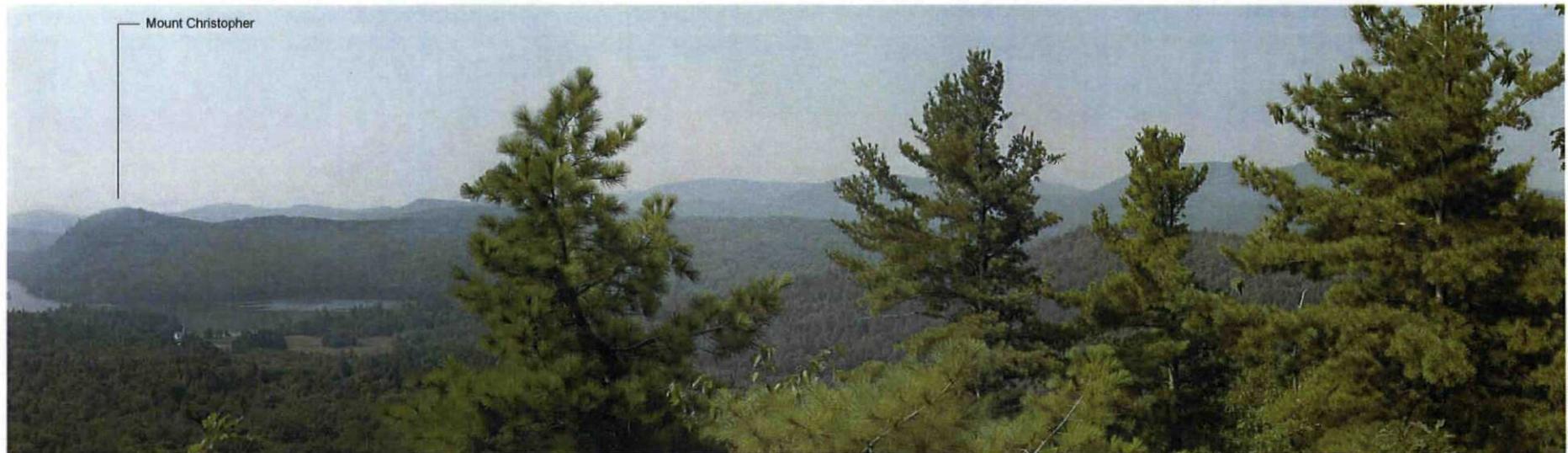


P92: Continued panoramic view looking west from Bucks Ledge in Woodstock.



Bryant Pond
(Christopher Lake)

P93: Panoramic view looking south from Lapham Ledge, to the east of Bucks Ledge on the southern end of Moody Mountain in Woodstock. The Project will not be visible from this location during leaf-on season. One of two turbines may be visible in the winter months filtered through vegetation on the left in photo.

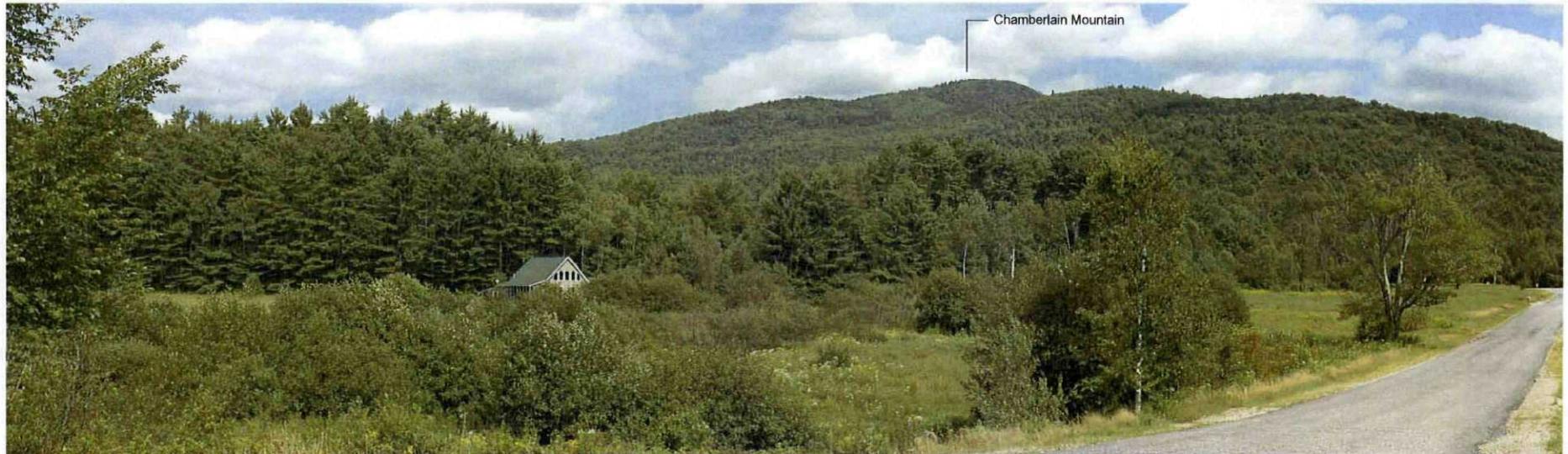


Mount Christopher

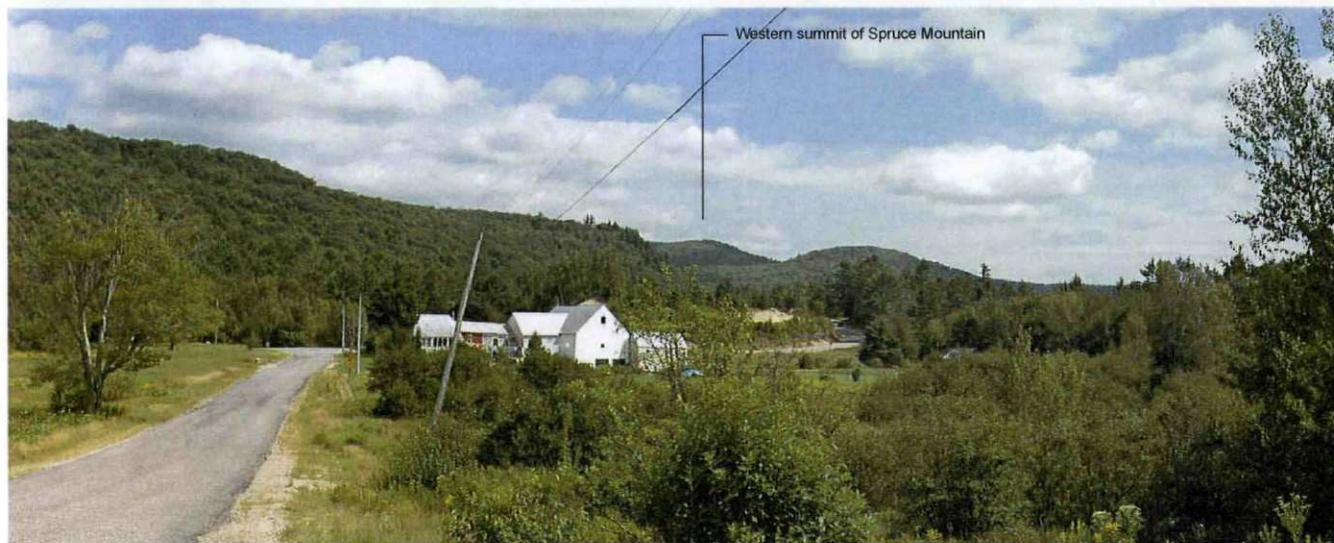
P94: Continued panoramic view looking southwest from Lapham Ledge.

1521

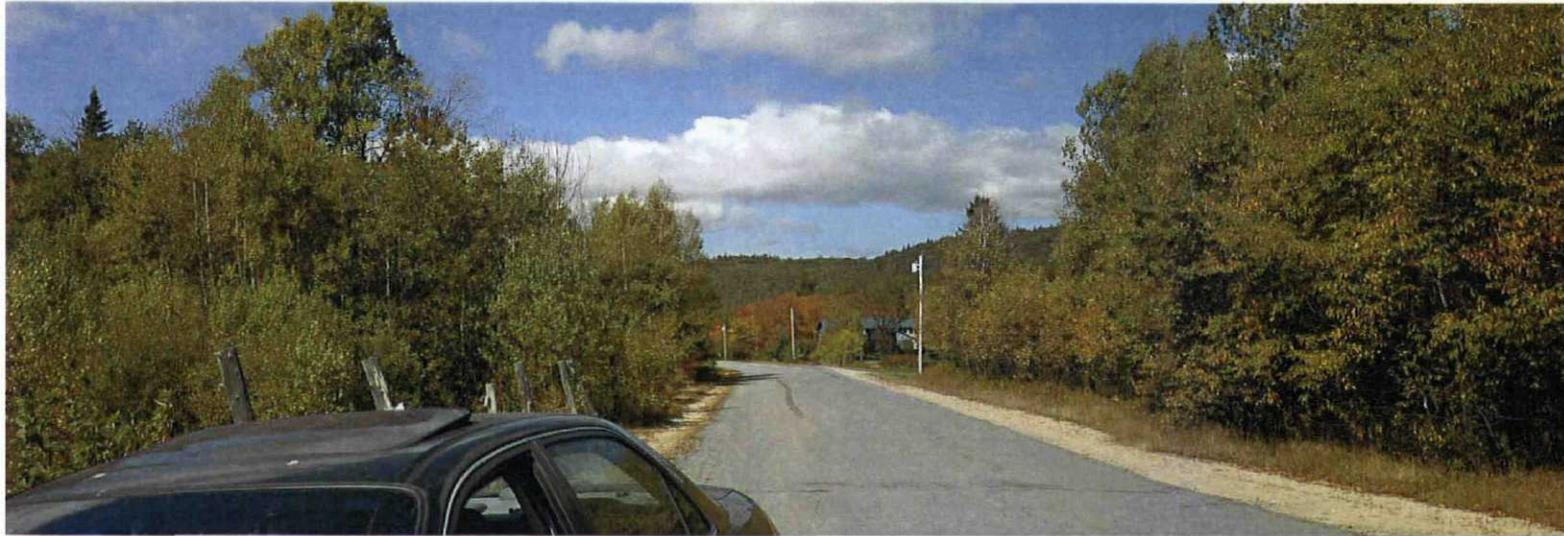
1522



P95: Panoramic view looking northeast from Gore Road in Woodstock. The Project will not be visible from this location.



P96: Continued panoramic view looking east from Gore Road in Woodstock. The Project will not be visible from this location.



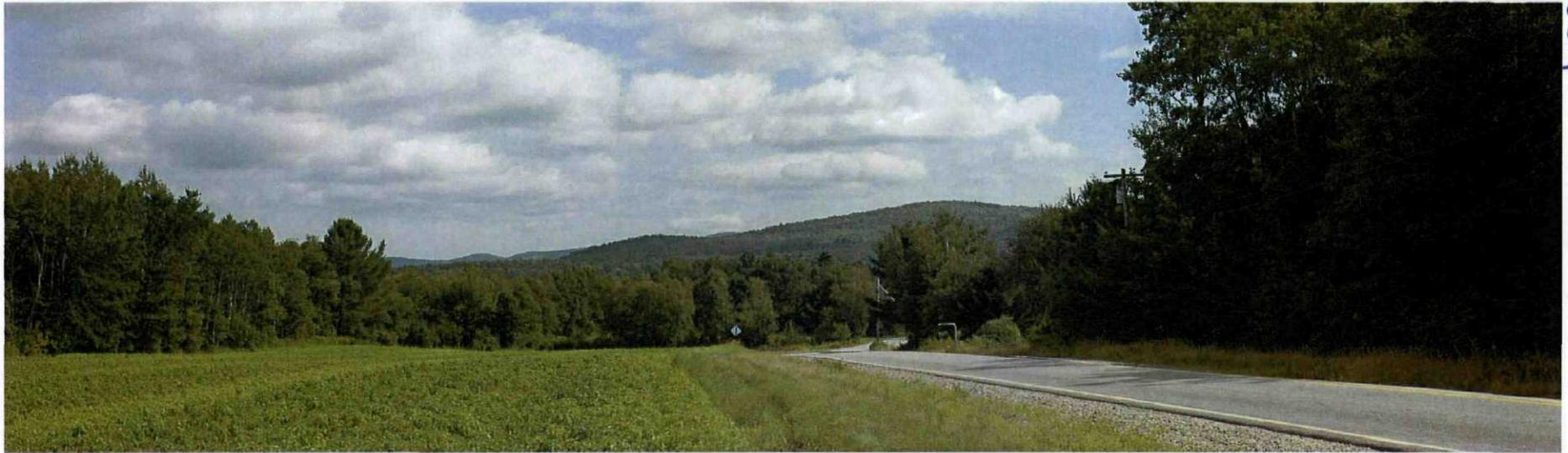
P97: Panoramic view looking southeast from Milton Road in Milton. Portions of approximately four turbines would be visible from this location, beyond the ridge in the foreground, at distances ranging from 4.4 to 4.7 miles.



P98: Panoramic view looking southeast from Milton Road in Milton. The tops of approximately 3 turbines would be visible from this location at distances ranging from 2.9 to 3.1 miles.

1523

1524



P99: Panoramic view looking southeast from Route 232 in Abbots Mill in Rumford. Approximately 8 turbines would be visible from this location at distances ranging from 6.1 to 6.5 miles. See Photosimulation 10 in Appendix B.



P100: Panoramic view looking southeast from Route 2 in Rumford Point in Rumford. Approximately 11 turbines would be visible at distances ranging from 7.7 to 8.3 miles. See Photosimulation 11 in Appendix B.



Photosimulation 1: A portion of the panoramic view looking south toward the proposed Spruce Mountain Wind Project from the northeast corner of Concord Pond in Woodstock. Turbines visible from this location would be 1.6 to 2.4 miles away.



Continued panoramic view from Concord Pond in Woodstock.

LEGEND	VIEWPOINT LOCATION MAP	PHOTOSIMULATION INFORMATION																																		
<ul style="list-style-type: none"> ● Spruce Mountain Wind Project Turbines ↗ Viewpoint Location and direction of view Town of Woodstock Boundary 		<table border="0"> <tr> <td>Turbine Model:</td> <td>Gamesa G90</td> </tr> <tr> <td>Hub Height:</td> <td>78m (256 ft)</td> </tr> <tr> <td>Rotor Diameter:</td> <td>90m (295 ft)</td> </tr> <tr> <td>View Coordinates:</td> <td>Latitude: 44.446803°, Longitude: -70.549918°</td> </tr> <tr> <td>Viewer Elevation:</td> <td>305m (1000 ft)</td> </tr> <tr> <td>Direction of View:</td> <td>South-Southwest</td> </tr> <tr> <td>Focal Length:</td> <td>Digital equivalent to 50mm normal lens</td> </tr> <tr> <td>Closest Visible Turbine:</td> <td>1.6 miles</td> </tr> <tr> <td>Furthest Visible Turbine:</td> <td>2.4 miles</td> </tr> <tr> <td>Turbines Visible:</td> <td>9±</td> </tr> <tr> <td>Date of Photo:</td> <td>08.14.09</td> </tr> <tr> <td>Time of Photo:</td> <td>4:30 pm</td> </tr> </table>	Turbine Model:	Gamesa G90	Hub Height:	78m (256 ft)	Rotor Diameter:	90m (295 ft)	View Coordinates:	Latitude: 44.446803°, Longitude: -70.549918°	Viewer Elevation:	305m (1000 ft)	Direction of View:	South-Southwest	Focal Length:	Digital equivalent to 50mm normal lens	Closest Visible Turbine:	1.6 miles	Furthest Visible Turbine:	2.4 miles	Turbines Visible:	9±	Date of Photo:	08.14.09	Time of Photo:	4:30 pm	<h2 style="margin: 0;">Concord Pond Photosimulation 1</h2> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td data-bbox="1640 1230 1889 1320" style="text-align: center;"> Spruce Mountain Wind Project </td> <td data-bbox="1889 1230 2049 1320" style="text-align: center;"> </td> </tr> <tr> <td colspan="2" data-bbox="1640 1320 2049 1377" style="font-size: small;"> Terrence J. DeWan & Associates Landscape Architects & Planners 121 West Main Street, Yarmouth, ME 04096 telephone: 207.848.0727 web: www.tjd.net </td> </tr> <tr> <td colspan="2" data-bbox="1640 1377 2049 1414" style="text-align: center;"> PATRIOT RENEWABLES Spruce Mountain Wind, LLC </td> </tr> <tr> <td colspan="2" data-bbox="1640 1414 2049 1442" style="text-align: right;"> Page 1 </td> </tr> </table>		Spruce Mountain Wind Project		Terrence J. DeWan & Associates Landscape Architects & Planners 121 West Main Street, Yarmouth, ME 04096 telephone: 207.848.0727 web: www.tjd.net		PATRIOT RENEWABLES Spruce Mountain Wind, LLC		Page 1	
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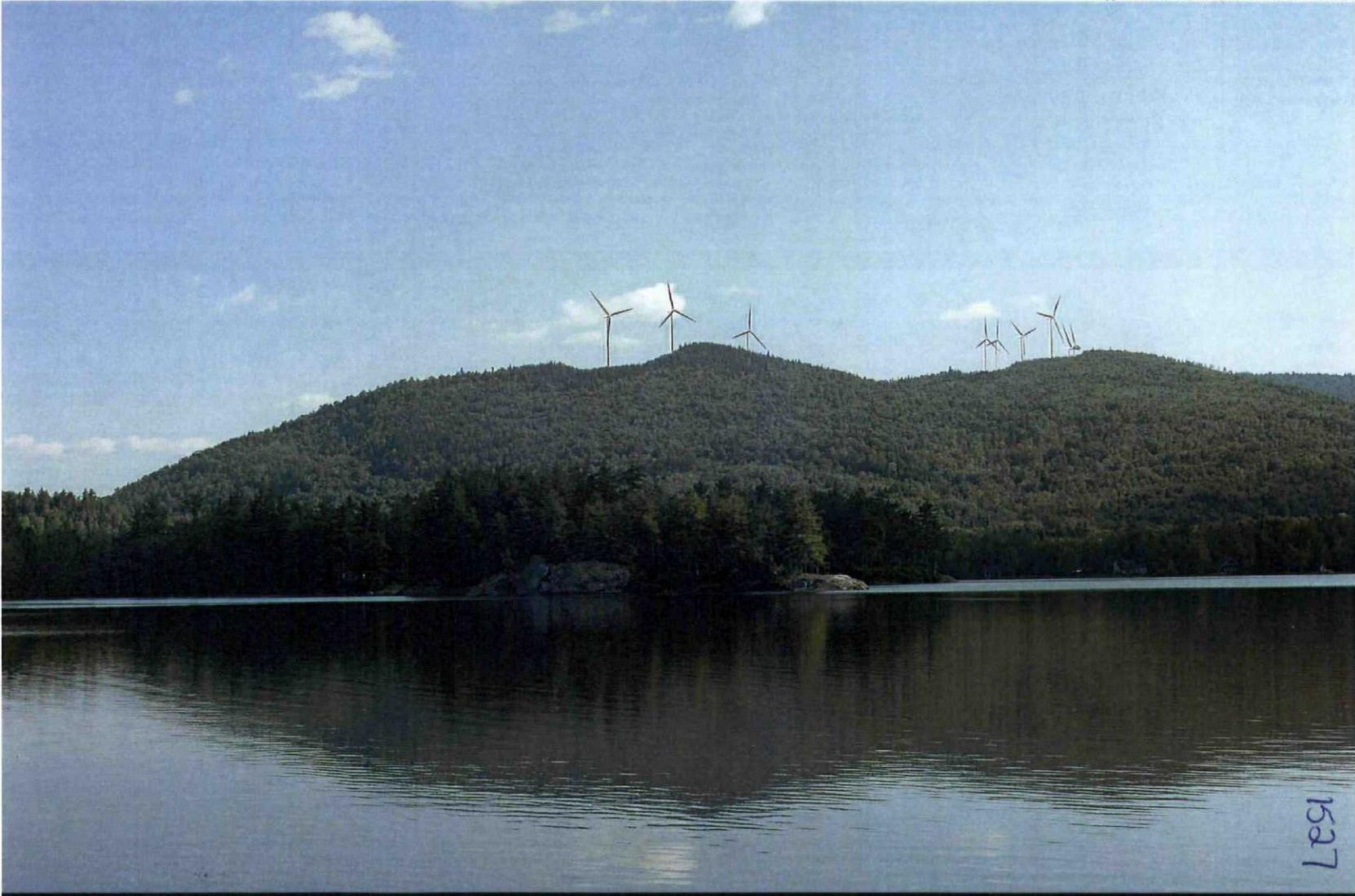
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152a6



Normal view of existing conditions looking southwest from the northeast corner of Concord Pond in Woodstock. Viewer should hold this image, when printed at 11" x 17", approximately 17" from eye to replicate actual view.

Concord Pond	Page
Existing Conditions	2



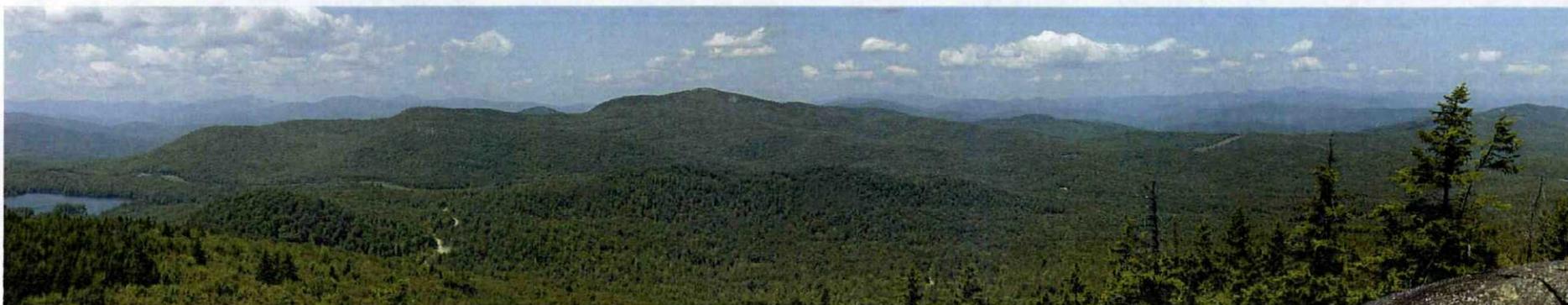
Photosimulation 1A: Normal view looking south toward the proposed Spruce Mountain Wind Project from the northeast corner of Concord Pond in Woodstock. Approximately 9 turbines would be visible from this viewpoint and the majority of Concord Pond. Portions of the access road may be slightly visible from portions of the pond. Viewer should hold this image, when printed at 11" x 17", approximately 17" from eye to replicate actual view.

Concord Pond	Page
Photosimulation 1A	3

1527

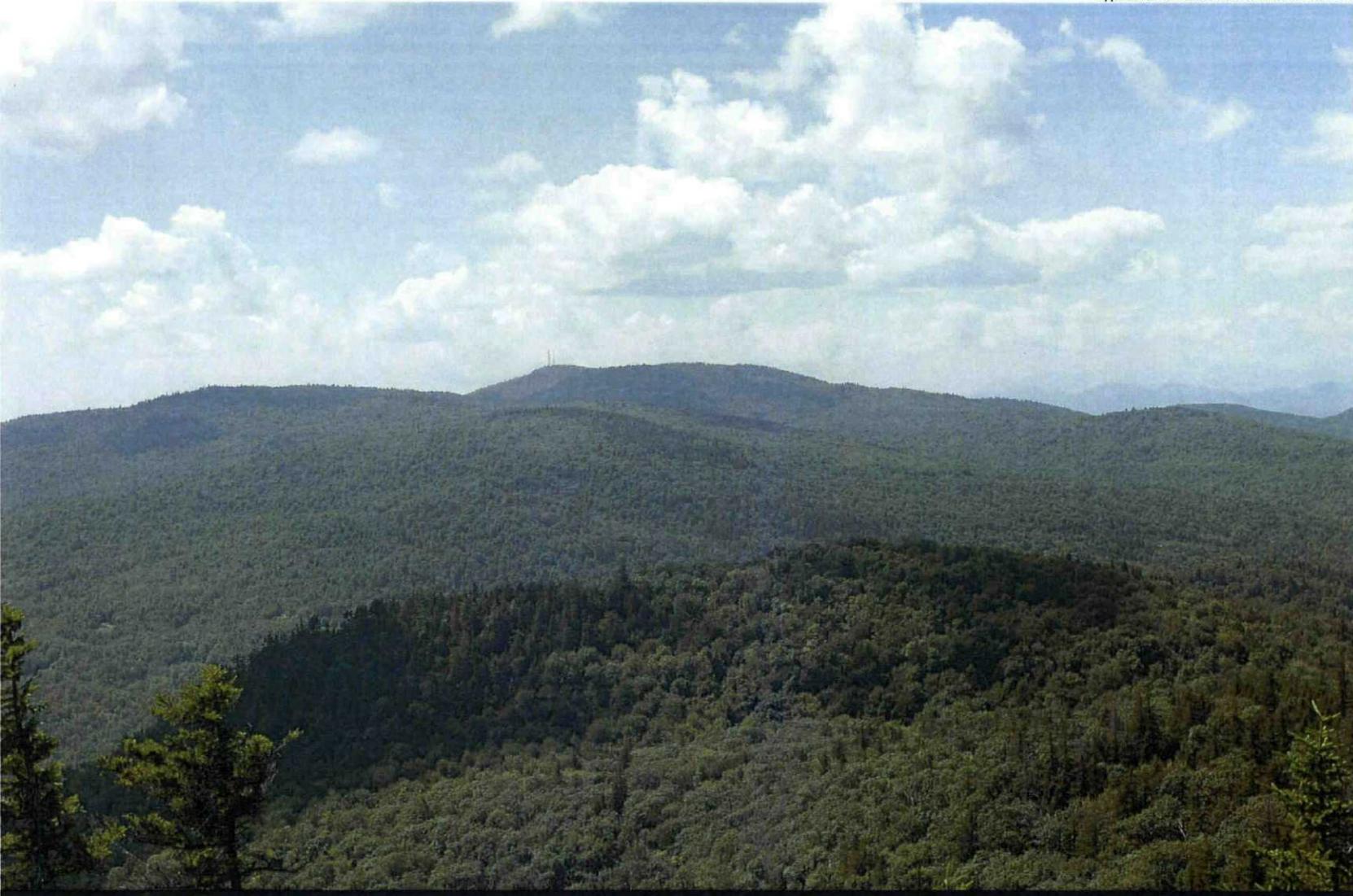


Photosimulation 2: A portion of the panoramic view looking southwest toward the proposed Spruce Mountain Wind Project from state-owned land on Speckled Mountain in Peru. Turbines visible from this location would be 1.9 to 3.3 miles away.



Continued panoramic view looking west from Speckled Mountain in Peru. Concord Pond is visible in the midground.

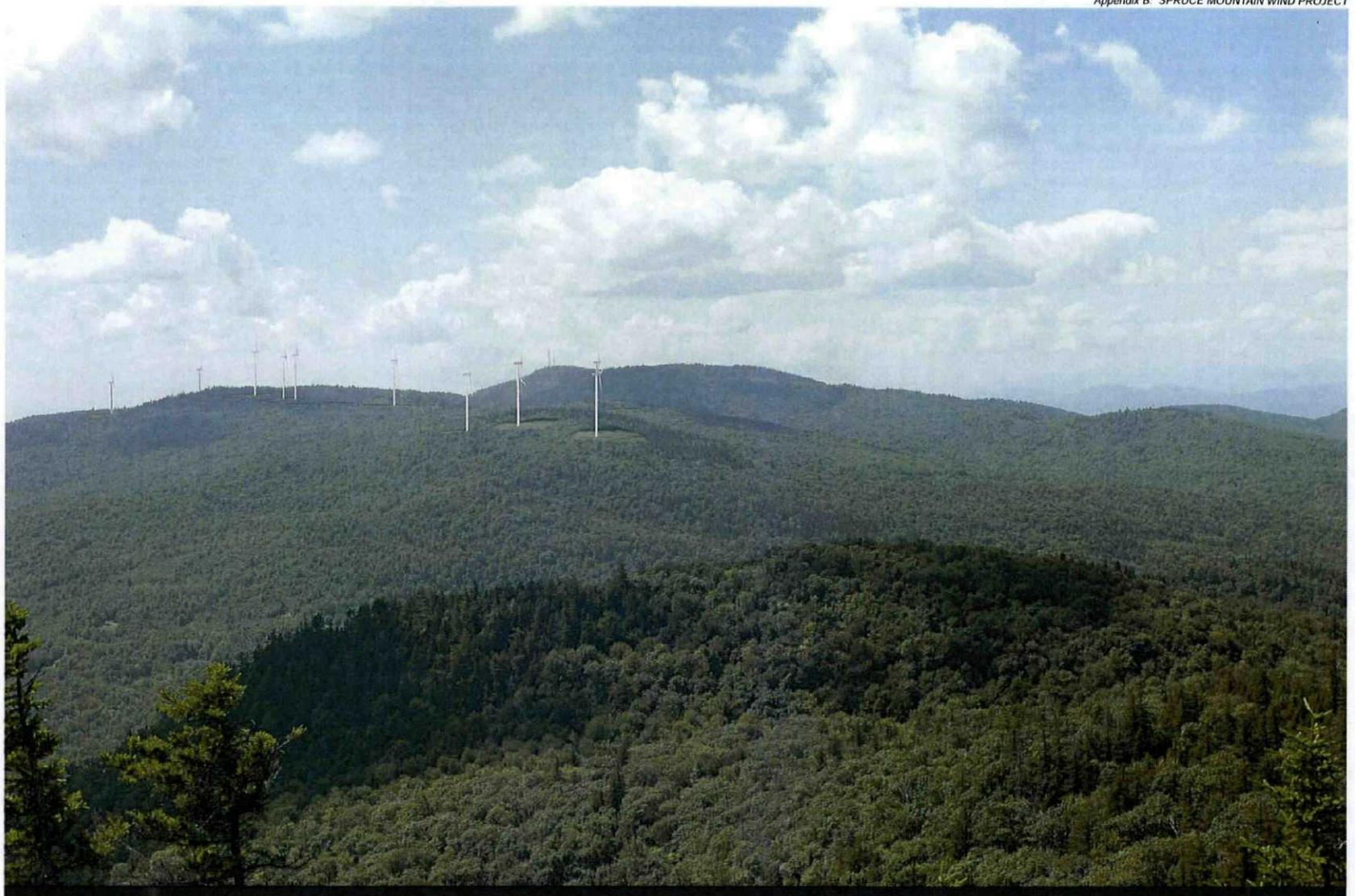
LEGEND	VIEWPOINT LOCATION MAP	PHOTOSIMULATION INFORMATION																										
<ul style="list-style-type: none"> ● Spruce Mountain Wind Project Turbines → Viewpoint Location and direction of view Town of Woodstock Boundary 		<table border="0"> <tr> <td>Turbine Model:</td> <td>Gamesa G90</td> </tr> <tr> <td>Hub Height:</td> <td>78m (256 ft)</td> </tr> <tr> <td>Rotor Diameter:</td> <td>90m (295 ft)</td> </tr> <tr> <td>View Coordinates:</td> <td>Latitude: 44.438321°, Longitude: -70.517353°</td> </tr> <tr> <td>Viewer Elevation:</td> <td>582m (1911ft)</td> </tr> <tr> <td>Direction of View:</td> <td>Southwest</td> </tr> <tr> <td>Focal Length:</td> <td>Digital equivalent to 50mm normal lens</td> </tr> <tr> <td>Closest Visible Turbine:</td> <td>1.9 miles</td> </tr> <tr> <td>Furthest Visible Turbine:</td> <td>3.3 miles</td> </tr> <tr> <td>Turbines Visible:</td> <td>11±</td> </tr> <tr> <td>Date of Photo:</td> <td>08.14.09</td> </tr> <tr> <td>Time of Photo:</td> <td>1:04 pm</td> </tr> </table>	Turbine Model:	Gamesa G90	Hub Height:	78m (256 ft)	Rotor Diameter:	90m (295 ft)	View Coordinates:	Latitude: 44.438321°, Longitude: -70.517353°	Viewer Elevation:	582m (1911ft)	Direction of View:	Southwest	Focal Length:	Digital equivalent to 50mm normal lens	Closest Visible Turbine:	1.9 miles	Furthest Visible Turbine:	3.3 miles	Turbines Visible:	11±	Date of Photo:	08.14.09	Time of Photo:	1:04 pm	<h2>Speckled Mountain Photosimulation 2</h2>	
Turbine Model:	Gamesa G90																											
Hub Height:	78m (256 ft)																											
Rotor Diameter:	90m (295 ft)																											
View Coordinates:	Latitude: 44.438321°, Longitude: -70.517353°																											
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Date of Photo:	08.14.09																											
Time of Photo:	1:04 pm																											
		<table border="0"> <tr> <td style="vertical-align: top;"> <p>Spruce Mountain Wind Project</p> </td> <td style="vertical-align: top;"> <p>tjd&a Terrence J. DeWan & Associates Landscape Architects & Planners</p> </td> </tr> </table>		<p>Spruce Mountain Wind Project</p>	<p>tjd&a Terrence J. DeWan & Associates Landscape Architects & Planners</p>																							
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		<p>Page 4</p>																										



Normal view of existing conditions looking southwest from Speckled Mountain in Peru. The existing communication towers visible on Spruce Mountain are not part of the Project. Viewer should hold this image, when printed at 11" x 17", approximately 17" from eye to replicate actual view.

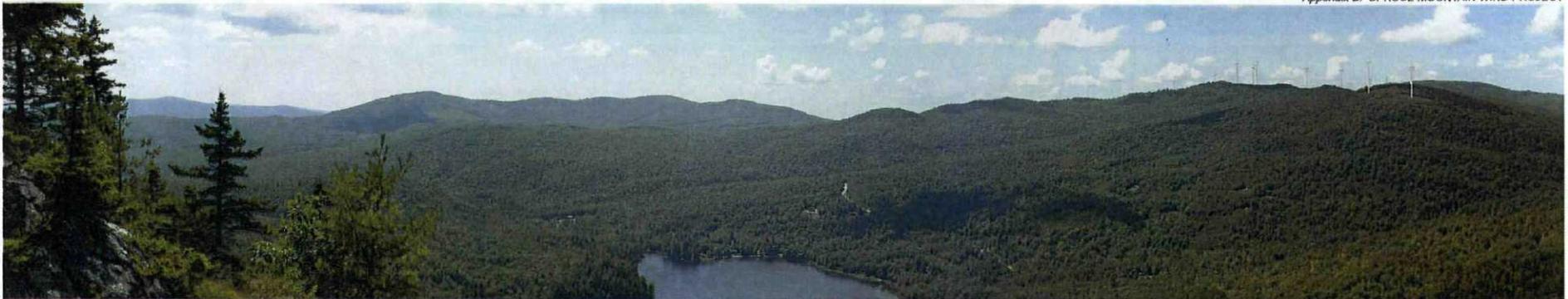
Speckled Mountain	Page
Existing Conditions	5

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Photosimulation 2A: Normal view looking southwest toward the proposed Spruce Mountain Wind Project from Speckled Mountain in Peru. All 11 turbines would be visible from this viewpoint. The closest turbine would be approximately 2.3 miles away. Viewer should hold this image, when printed at 11" x 17", approximately 17" from eye to replicate actual view.

Speckled Mountain	Page
Photosimulation 2A	6



Photosimulation 3: A portion of the panoramic view looking southwest toward the proposed Spruce Mountain Wind Project from Bald Mountain in Woodstock. Turbines visible from this location would be 1.4 to 2.8 miles away. Shagg Pond is visible in the center of the photograph.



Continued panoramic view looking west from Bald Mountain.

LEGEND	VIEWPOINT LOCATION MAP	PHOTOSIMULATION INFORMATION		Bald Mountain Photosimulation 3	
<ul style="list-style-type: none"> ● Spruce Mountain Wind Project Turbines ↗ Viewpoint Location and direction of view Town of Woodstock Boundary 		<p>Turbine Model: Gamesa G90 Hub Height: 78m (256 ft) Rotor Diameter: 90m (295 ft) View Coordinates: Latitude: 44.433408°, Longitude: -70.526344° Viewer Elevation: 501m (1645ft) Direction of View: Southwest Focal Length: Digital equivalent to 50mm normal lens Closest Visible Turbine: 1.4 miles Furthest Visible Turbine: 2.8 miles Turbines Visible: 11± Date of Photo: 08.14.09 Time of Photo: 1:51 pm</p>	<p>Closest Visible Turbine: 1.4 miles Furthest Visible Turbine: 2.8 miles Turbines Visible: 11± Date of Photo: 08.14.09 Time of Photo: 1:51 pm</p>	<p>Spruce Mountain Wind Project</p>	<p>tjd&a <small>Terrence J. DeWan & Associates Landscape Architects & Planners</small></p>
		<p> PATRIOT RENEWABLES Spruce Mountain Wind, LLC</p>	<p><small>121 West Main Street, Yarmouth, ME 04096 telephone: 207.848.0757 web: www.pjta.net</small></p> <p>Page 7</p>		

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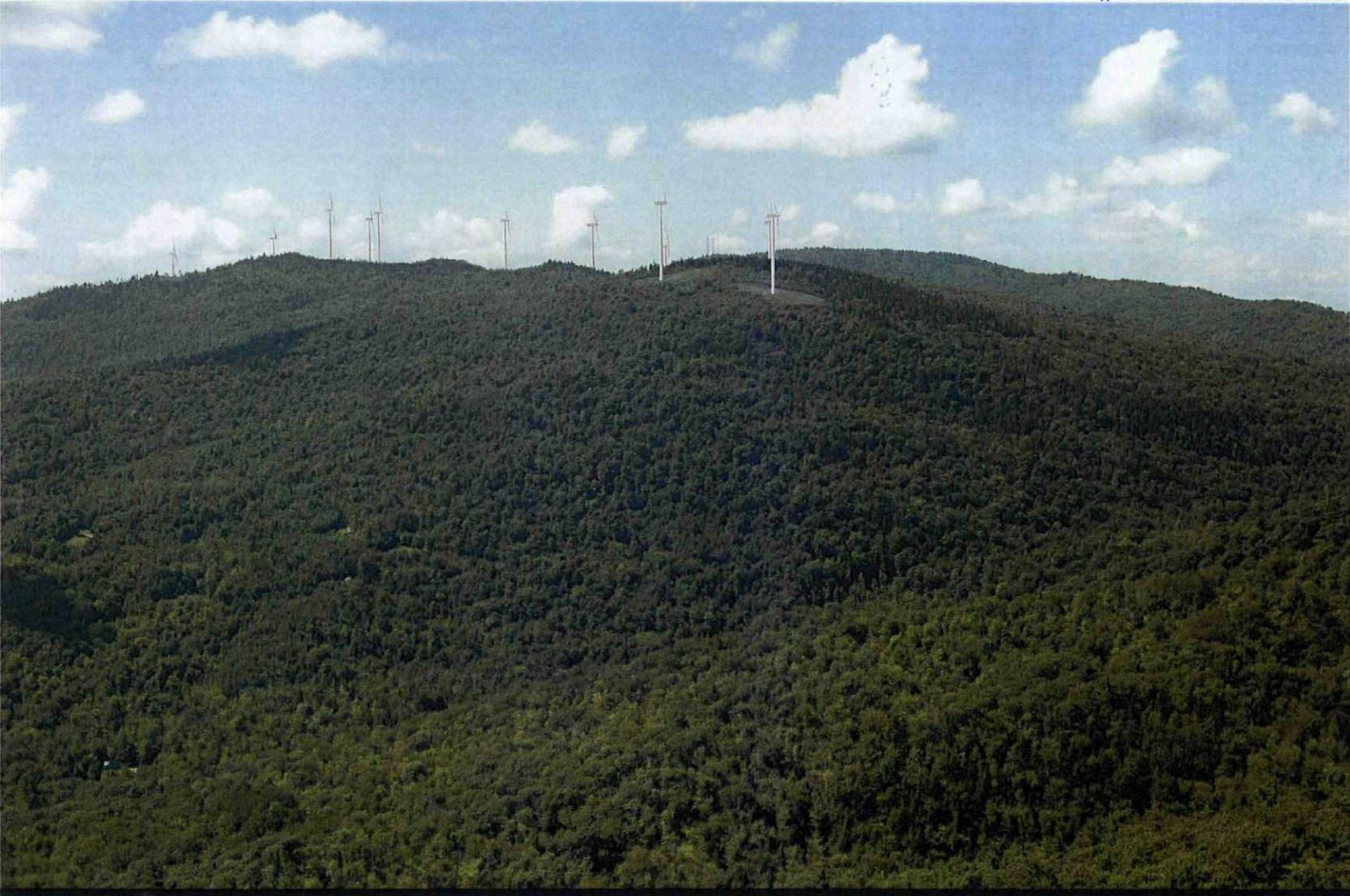
Normal view of existing conditions looking southwest from Bald Mountain in Woodstock. The existing communication towers visible on Spruce Mountain are not part of the Project. Viewer should hold this image, when printed at 11" x 17", approximately 17" from eye to replicate actual view.

Bald Mountain

Page

Existing Conditions

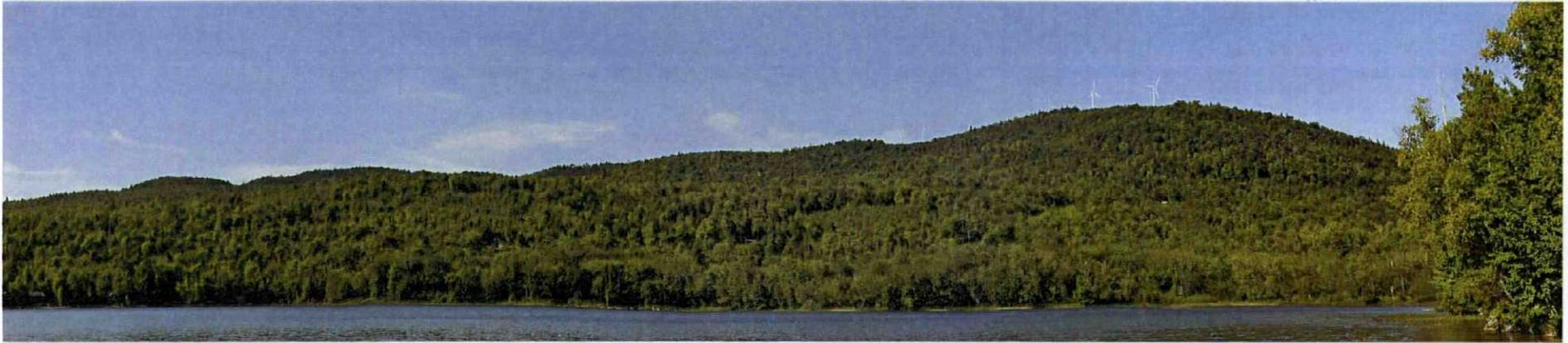
8



Photosimulation 3A: Normal view looking southwest toward the proposed Spruce Mountain Wind Project from Bald Mountain in Woodstock. All 11 turbines would be visible from this viewpoint. The closest turbine would be approximately 1.4 miles away. Viewer should hold this image, when printed at 11" x 17", approximately 17" from eye to replicate actual view.

Bald Mountain	Page
Photosimulation 3A	9

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Photosimulation 4: Panoramic view looking west to southwest toward the proposed Spruce Mountain Wind Project from Shagg Pond in Woodstock. Turbines visible from this location would be 1.1 to 1.9 miles away.

LEGEND	VIEWPOINT LOCATION MAP	PHOTOSIMULATION INFORMATION	Shagg Pond Photosimulation 4																									
<ul style="list-style-type: none"> ● Spruce Mountain Wind Project Turbines Viewpoint Location and direction of view Town of Woodstock Boundary 		<table border="0"> <tr> <td>Turbine Model:</td> <td>Gamesa G90</td> </tr> <tr> <td>Hub Height:</td> <td>78m (256 ft)</td> </tr> <tr> <td>Rotor Diameter:</td> <td>90m (295 ft)</td> </tr> <tr> <td>View Coordinates:</td> <td>Latitude: 44.425760°, Longitude: -70.528224°</td> </tr> <tr> <td>Viewer Elevation:</td> <td>260m (854 ft)</td> </tr> <tr> <td>Direction of View:</td> <td>West-Southwest</td> </tr> <tr> <td>Focal Length:</td> <td>Digital equivalent to 50mm normal lens</td> </tr> <tr> <td>Closest Visible Turbine:</td> <td>1.1 miles</td> </tr> <tr> <td>Furthest Visible Turbine:</td> <td>1.9 miles</td> </tr> <tr> <td>Turbines Visible:</td> <td>7±</td> </tr> <tr> <td>Date of Photo:</td> <td>08.27.09</td> </tr> <tr> <td>Time of Photo:</td> <td>10:30 am</td> </tr> </table>	Turbine Model:	Gamesa G90	Hub Height:	78m (256 ft)	Rotor Diameter:	90m (295 ft)	View Coordinates:	Latitude: 44.425760°, Longitude: -70.528224°	Viewer Elevation:	260m (854 ft)	Direction of View:	West-Southwest	Focal Length:	Digital equivalent to 50mm normal lens	Closest Visible Turbine:	1.1 miles	Furthest Visible Turbine:	1.9 miles	Turbines Visible:	7±	Date of Photo:	08.27.09	Time of Photo:	10:30 am	<p>Spruce Mountain Wind Project</p>	<p>tjd&a Terrence J. DeWan & Associates Landscape Architects & Planners</p>
Turbine Model:	Gamesa G90																											
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		<p>PATRIOT RENEWABLES Spruce Mountain Wind, LLC</p>	<p>121 West Main Street, Yarmouth, ME 04096 Telephone: 207.848.0737 web: www.tjd.com</p> <p style="text-align: right;">Page 10</p>																									



Normal view of existing conditions looking west from Shagg Pond in Woodstock. Viewer should hold this image, when printed at 11" x 17", approximately 17" from eye to replicate actual view.

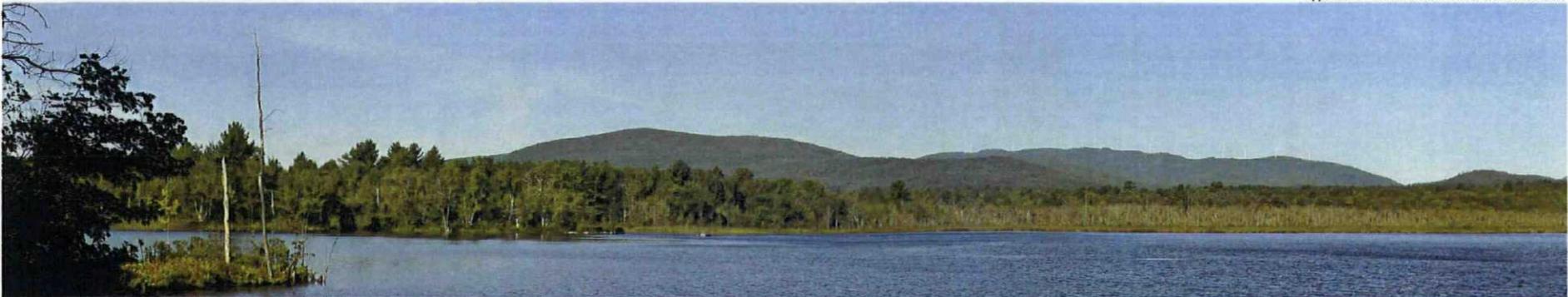
Shagg Pond	Page
Existing Conditions	11

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Photosimulation 4A. Normal view looking west toward the proposed Spruce Mountain Wind Project from Shagg Pond in Woodstock. Approximately 7 turbines would be visible from this location. Viewer should hold this image, when printed at 11" x 17", approximately 17" from eye to replicate actual view.

Shagg Pond	Page
Photosimulation 4A	12



Photostimulation 5: A portion of the panoramic view looking west toward the proposed Spruce Mountain Wind Project from Labrador Pond in Summer. Turbines visible from this location would be 6.6 to 7.1 miles away.



Continued panoramic view looking northwest from Labrador Pond in Summer.

LEGEND	VIEWPOINT LOCATION MAP	PHOTOSIMULATION INFORMATION																																
<ul style="list-style-type: none"> ● Spruce Mountain Wind Project Turbines ↗ Viewpoint Location and direction of view Town of Woodstock Boundary 		<table border="0"> <tr> <td>Turbine Model:</td> <td>Gamesa G90</td> </tr> <tr> <td>Hub Height:</td> <td>78m (256 ft)</td> </tr> <tr> <td>Rotor Diameter:</td> <td>90m (295 ft)</td> </tr> <tr> <td>View Coordinates:</td> <td>Latitude: 44.392566°, Longitude: -70.424085°</td> </tr> <tr> <td>Viewer Elevation:</td> <td>143m (468 ft)</td> </tr> <tr> <td>Direction of View:</td> <td>West</td> </tr> <tr> <td>Focal Length:</td> <td>Digital equivalent to 50mm normal lens</td> </tr> <tr> <td>Closest Visible Turbine:</td> <td>6.6 miles</td> </tr> <tr> <td>Furthest Visible Turbine:</td> <td>7.1 miles</td> </tr> <tr> <td>Turbines Visible:</td> <td>11±</td> </tr> <tr> <td>Date of Photo:</td> <td>08.27.09</td> </tr> <tr> <td>Time of Photo:</td> <td>9:08 am</td> </tr> </table>	Turbine Model:	Gamesa G90	Hub Height:	78m (256 ft)	Rotor Diameter:	90m (295 ft)	View Coordinates:	Latitude: 44.392566°, Longitude: -70.424085°	Viewer Elevation:	143m (468 ft)	Direction of View:	West	Focal Length:	Digital equivalent to 50mm normal lens	Closest Visible Turbine:	6.6 miles	Furthest Visible Turbine:	7.1 miles	Turbines Visible:	11±	Date of Photo:	08.27.09	Time of Photo:	9:08 am	<h2 style="margin: 0;">Labrador Pond Photostimulation 5</h2> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td data-bbox="1640 1224 1889 1317" style="text-align: center;"> Spruce Mountain Wind Project </td> <td data-bbox="1889 1224 2051 1317" style="text-align: center;"> <small>Terrence J. DeWan & Associates Landscape Architects & Planners 121 West Main Street, Yarmouth, ME 04096 Telephone: 207-848-0757 web: www.tjd.net</small> </td> </tr> <tr> <td colspan="2" data-bbox="1640 1317 2051 1411" style="text-align: center;"> PATRIOT RENEWABLES Spruce Mountain Wind, LLC </td> </tr> <tr> <td colspan="2" data-bbox="1640 1411 2051 1442" style="text-align: right;"> Page 13 </td> </tr> </table>		Spruce Mountain Wind Project	 <small>Terrence J. DeWan & Associates Landscape Architects & Planners 121 West Main Street, Yarmouth, ME 04096 Telephone: 207-848-0757 web: www.tjd.net</small>	PATRIOT RENEWABLES Spruce Mountain Wind, LLC		Page 13	
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PATRIOT RENEWABLES Spruce Mountain Wind, LLC																																		
Page 13																																		

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Normal view of existing conditions looking west from Labrador Pond in Summer. Viewer should hold this image, when printed at 11" x 17", approximately 17" from eye to replicate actual view.

Labrador Pond	Page
Existing Conditions	14

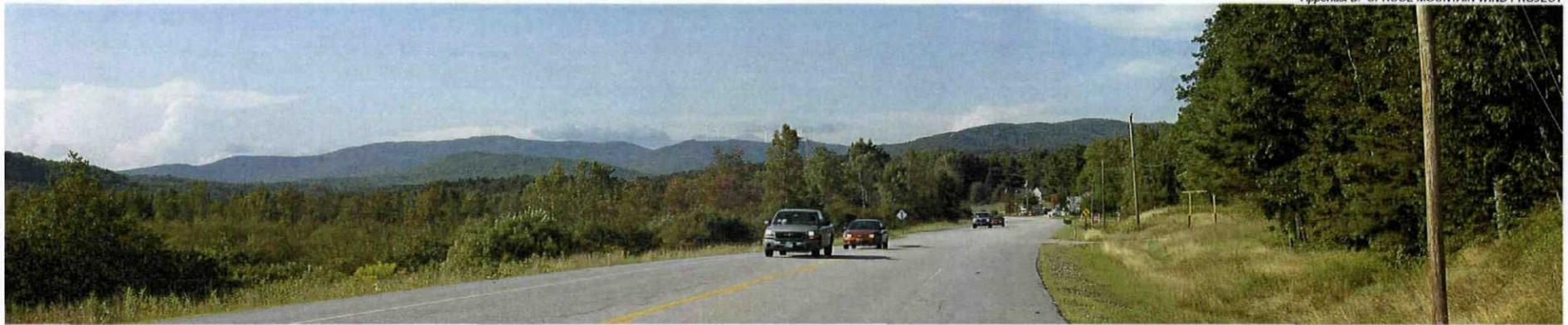


Photosimulation 5A. Normal view looking west toward the proposed Spruce Mountain Wind Project from Labrador Pond in Sumner. All 11 turbines will be visible from this viewpoint. Viewer should hold this image, when printed at 11" x 17", approximately 17" from eye to replicate actual view.

Labrador Pond	Page
Photosimulation 5A	15

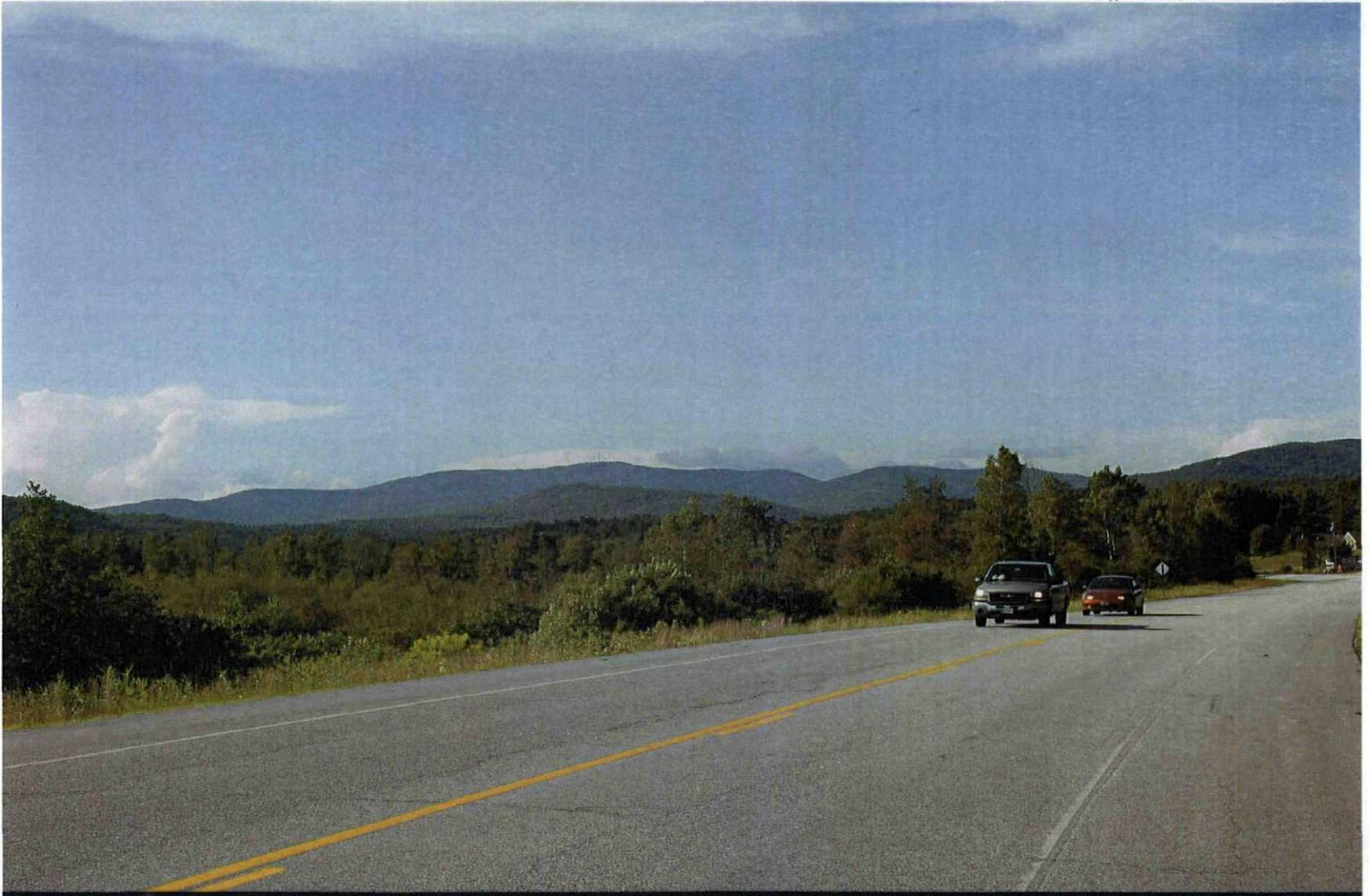
1539

154D



Photosimulation 6: Panoramic view looking north toward the proposed Spruce Mountain Wind Project from Route 26, south of Trap Corner in West Paris. Turbines visible from this location would be 6.1 to 6.6 miles away.

LEGEND	VIEWPOINT LOCATION MAP	PHOTOSIMULATION INFORMATION	Route 26, West Paris Photosimulation 6																									
<ul style="list-style-type: none"> ● Spruce Mountain Wind Project Turbines ↗ Viewpoint Location and direction of view Town of Woodstock Boundary 		<table border="0"> <tr> <td>Turbine Model:</td> <td>Gamesa G90</td> </tr> <tr> <td>Hub Height:</td> <td>78m (256 ft)</td> </tr> <tr> <td>Rotor Diameter:</td> <td>90m (295 ft)</td> </tr> <tr> <td>View Coordinates:</td> <td>Latitude: 44.317286°, Longitude: -70.546075°</td> </tr> <tr> <td>Viewer Elevation:</td> <td>142m (466 ft)</td> </tr> <tr> <td>Direction of View:</td> <td>North</td> </tr> <tr> <td>Focal Length:</td> <td>Digital equivalent to 50mm normal lens</td> </tr> <tr> <td>Closest Visible Turbine:</td> <td>6.1 miles</td> </tr> <tr> <td>Furthest Visible Turbine:</td> <td>6.6 miles</td> </tr> <tr> <td>Turbines Visible:</td> <td>4±</td> </tr> <tr> <td>Date of Photo:</td> <td>08.13.09</td> </tr> <tr> <td>Time of Photo:</td> <td>5:09 pm</td> </tr> </table>	Turbine Model:	Gamesa G90	Hub Height:	78m (256 ft)	Rotor Diameter:	90m (295 ft)	View Coordinates:	Latitude: 44.317286°, Longitude: -70.546075°	Viewer Elevation:	142m (466 ft)	Direction of View:	North	Focal Length:	Digital equivalent to 50mm normal lens	Closest Visible Turbine:	6.1 miles	Furthest Visible Turbine:	6.6 miles	Turbines Visible:	4±	Date of Photo:	08.13.09	Time of Photo:	5:09 pm	<p>Spruce Mountain Wind Project</p>	<p>tjd&a Terrence J. DeWan & Associates Landscape Architects & Planners</p>
Turbine Model:	Gamesa G90																											
Hub Height:	78m (256 ft)																											
Rotor Diameter:	90m (295 ft)																											
View Coordinates:	Latitude: 44.317286°, Longitude: -70.546075°																											
Viewer Elevation:	142m (466 ft)																											
Direction of View:	North																											
Focal Length:	Digital equivalent to 50mm normal lens																											
Closest Visible Turbine:	6.1 miles																											
Furthest Visible Turbine:	6.6 miles																											
Turbines Visible:	4±																											
Date of Photo:	08.13.09																											
Time of Photo:	5:09 pm																											
<p>PATRIOT RENEWABLES Spruce Mountain Wind, LLC</p>		<p>121 West Main Street, Yarmouth, ME 04096 Telephone: 207.848.0757 web: www.tjd.net</p> <p>Page 16</p>																										

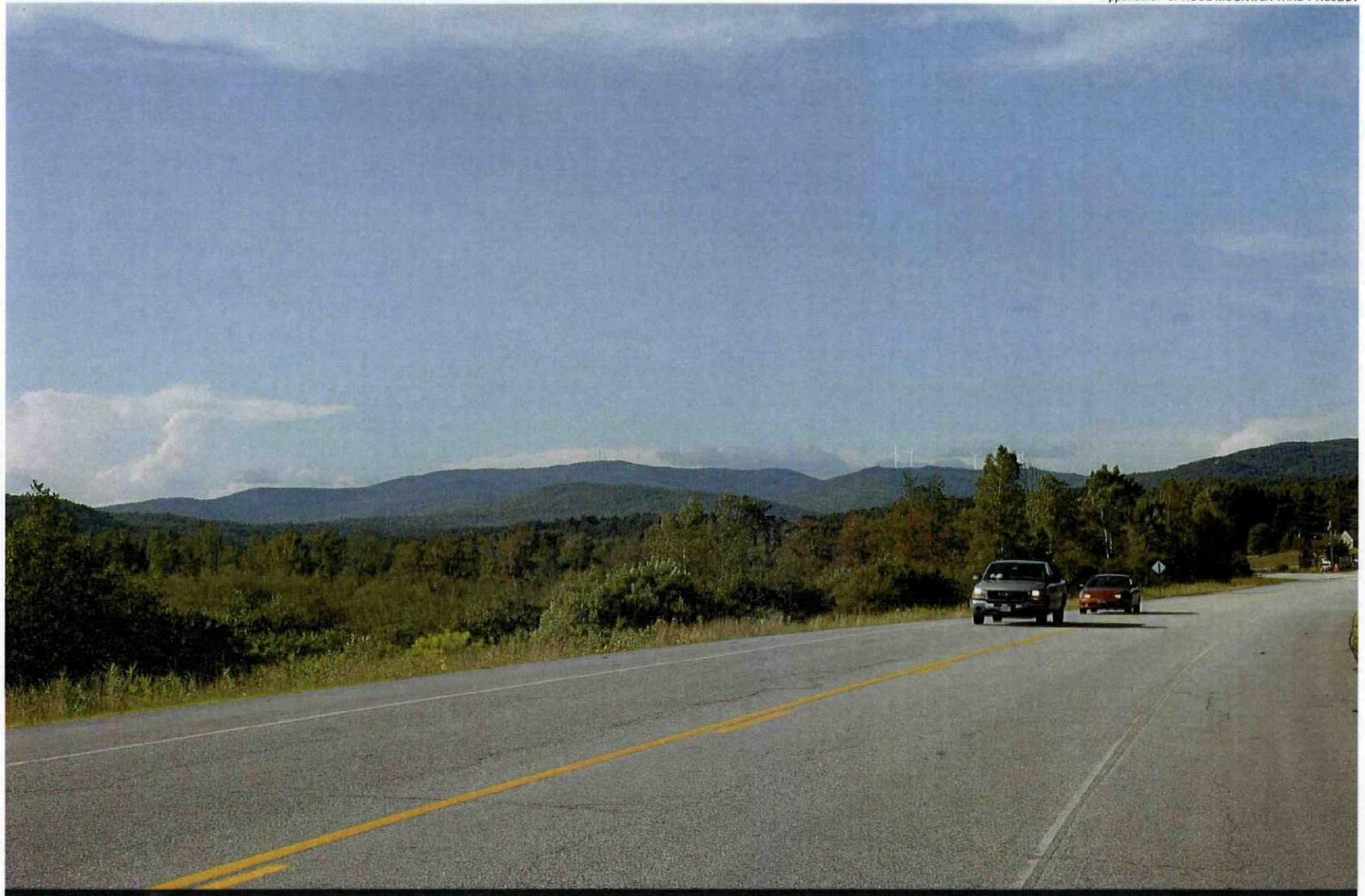


Normal view of existing conditions looking north from Route 26 in West Paris. Viewer should hold this image, when printed at 11" x 17", approximately 17" from eye to replicate actual view.

Route 26, West Paris	Page
Existing Conditions	17

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Photosimulation 6A. Normal view looking north toward the proposed Spruce Mountain Wind Project on Spruce Mountain from Route 26 in West Paris. Approximately 4 turbines will be visible from this viewpoint. Viewer should hold this image, when printed at 11" x 17", approximately 17" from eye to replicate actual view.

Route 26, West Paris	Page
Photosimulation 6A	18



Photosimulation 7: Panoramic view looking north toward the proposed Spruce Mountain Wind Project from Route 26 at Trap Corner in West Paris. Turbines visible from this location would be 5.1 to 5.5 miles away.

LEGEND	VIEWPOINT LOCATION MAP	PHOTOSIMULATION INFORMATION			
<ul style="list-style-type: none"> ● Spruce Mountain Wind Project Turbines ↗ Viewpoint Location and direction of view Town of Woodstock Boundary 		<p>Turbine Model: Gamesa G90 Hub Height: 78m (256 ft) Rotor Diameter: 90m (295 ft) View Coordinates: Latitude: 44.331441°, Longitude: -70.555350° Viewer Elevation: 146m (479 ft) Direction of View: North Focal Length: Digital equivalent to 50mm normal lens Closest Visible Turbine: 5.1 miles Furthest Visible Turbine: 5.5 miles Turbines Visible: 3± Date of Photo: 09.25.09 Time of Photo: 8:59 am</p>		<h3>Route 26, Trap Corner Photosimulation 7</h3>	
				<p>Spruce Mountain Wind Project</p>	<p>tjd&a <small>Terrence J. DeWan & Associates Landscape Architects & Planners</small></p>
				<p> PATRIOT RENEWABLES <small>Spruce Mountain Wind, LLC</small></p>	<p>121 West Main Street, Yarmouth, ME 04096 telephone: 207 846 0767 web: www.pjta.net</p> <p>Page 19</p>

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Normal view of existing conditions looking north from Route 26 at Trap Corner in West Paris. Viewer should hold this image, when printed at 11" x 17", approximately 17" from eye to replicate actual view.

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Existing Conditions	20

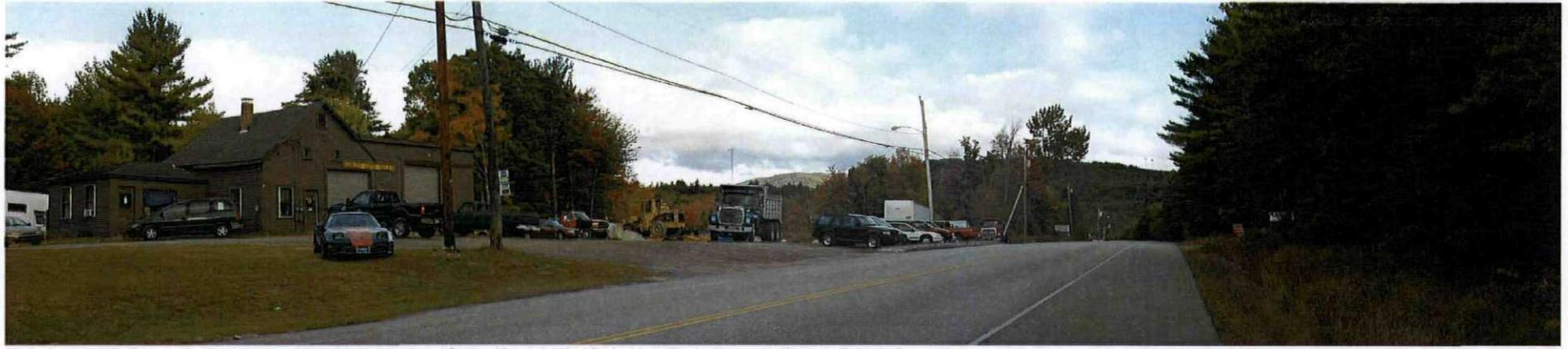
MOV
SA
126 High St.
←



Photosimulation 7A. Normal view looking north toward the proposed Spruce Mountain Wind Project from Route 26 at Trap Corner in West Paris. Approximately 3 turbines would be visible from this viewpoint. Viewer should hold this image, when printed at 11" x 17", approximately 17" from eye to replicate actual view.

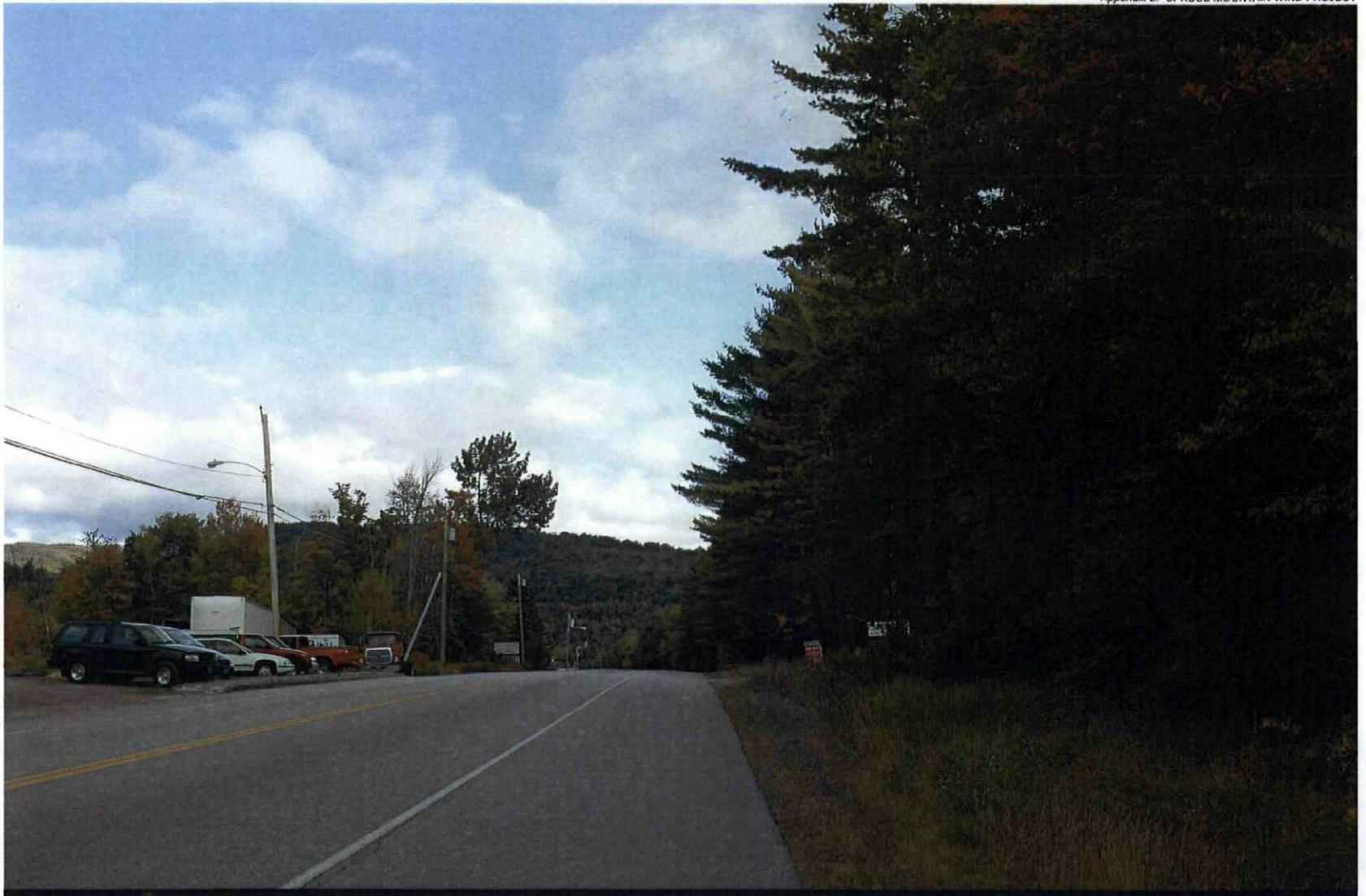
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Photosimulation 8: Panoramic view looking north toward the proposed Spruce Mountain Wind Project from Route 26 near Hadley Auto Sales in South Woodstock. The existing communication tower off Dudley Road is visible in the center of the photo. Turbines visible from this location would be 4.1 to 4.3 miles away.

LEGEND	VIEWPOINT LOCATION MAP	PHOTOSIMULATION INFORMATION																										
<ul style="list-style-type: none"> ● Spruce Mountain Wind Project Turbines ↗ Viewpoint Location and direction of view Town of Woodstock Boundary 		<table border="0"> <tr> <td>Turbine Model:</td> <td>Gamesa G90</td> </tr> <tr> <td>Hub Height:</td> <td>78m (256 ft)</td> </tr> <tr> <td>Rotor Diameter:</td> <td>90m, (295 ft)</td> </tr> <tr> <td>View Coordinates:</td> <td>Latitude: 44.345758°, Longitude: -70.562315°</td> </tr> <tr> <td>Viewer Elevation:</td> <td>190m (623 ft)</td> </tr> <tr> <td>Direction of View:</td> <td>North</td> </tr> <tr> <td>Focal Length:</td> <td>Digital equivalent to 50mm normal lens</td> </tr> <tr> <td>Closest Visible Turbine:</td> <td>4.1 miles</td> </tr> <tr> <td>Furthest Visible Turbine:</td> <td>4.3 miles</td> </tr> <tr> <td>Turbines Visible:</td> <td>2±</td> </tr> <tr> <td>Date of Photo:</td> <td>09.25.09</td> </tr> <tr> <td>Time of Photo:</td> <td>9:17 am</td> </tr> </table>	Turbine Model:	Gamesa G90	Hub Height:	78m (256 ft)	Rotor Diameter:	90m, (295 ft)	View Coordinates:	Latitude: 44.345758°, Longitude: -70.562315°	Viewer Elevation:	190m (623 ft)	Direction of View:	North	Focal Length:	Digital equivalent to 50mm normal lens	Closest Visible Turbine:	4.1 miles	Furthest Visible Turbine:	4.3 miles	Turbines Visible:	2±	Date of Photo:	09.25.09	Time of Photo:	9:17 am	<h2>Route 26, Hadley Auto Sales Photosimulation 8</h2>	
Turbine Model:	Gamesa G90																											
Hub Height:	78m (256 ft)																											
Rotor Diameter:	90m, (295 ft)																											
View Coordinates:	Latitude: 44.345758°, Longitude: -70.562315°																											
Viewer Elevation:	190m (623 ft)																											
Direction of View:	North																											
Focal Length:	Digital equivalent to 50mm normal lens																											
Closest Visible Turbine:	4.1 miles																											
Furthest Visible Turbine:	4.3 miles																											
Turbines Visible:	2±																											
Date of Photo:	09.25.09																											
Time of Photo:	9:17 am																											
		Spruce Mountain Wind Project	 <small>Terrence J. DeWan & Associates Landscape Architects & Planners</small>																									
		 PATRIOT RENEWABLES <small>Spruce Mountain Wind, LLC</small>	<small>121 West Main Street, Yarmouth, ME 04096 Telephone: 207.848.0757 web: www.tjd.net</small> <div style="text-align: right;">Page 22</div>																									



Normal view of existing conditions looking north from Route 26 near Hadley Auto Sales in South Woodstock. Viewer should hold this image, when printed at 11" x 17", approximately 17" from eye to replicate actual view.

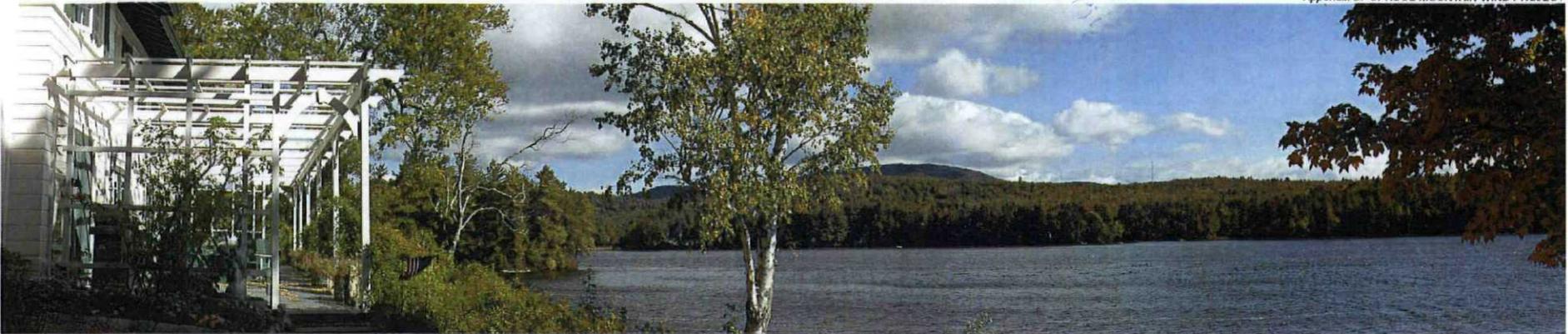
Route 26, Hadley Auto Sales	Page
Existing Conditions	23

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Photosimulation 8A. Normal view looking north toward the proposed Spruce Mountain Wind Project from Route 26 near Hadley Auto Sales in South Woodstock. Approximately 2 turbines would be visible from this viewpoint. The vegetation along the road would screen views of the rest of the turbines. Viewer should hold this image, when printed at 11" x 17", approximately 17" from eye to replicate actual view.

Route 26, Hadley Auto Sales	Page
Photosimulation 8A	24



Photosimulation 9: Panoramic view looking northeast over Bryant Pond (aka Lake Christopher) toward the proposed Spruce Mountain Wind Project from Dreamhome, a private residence on the National Register of Historic Places, off Mountain Lodge Road (private road) in Woodstock. The two existing communication towers on Spruce Mountain (to left of turbines in photo) and the existing communication tower off Dudley Road (to right of turbines in photo), are not associated with the Project. Turbines visible from this location would be 4.8 to 5.3 miles away.

LEGEND	VIEWPOINT LOCATION MAP	PHOTOSIMULATION INFORMATION			
<ul style="list-style-type: none"> ● Spruce Mountain Wind Project Turbines ↗ Viewpoint Location and direction of view Town of Woodstock Boundary 		<p>Turbine Model: Gamesa G90 Hub Height: 78m (256 ft) Rotor Diameter: 90m (295 ft) View Coordinates: Latitude: 44.446803°, Longitude: -70.549918° Viewer Elevation: 216m (708 ft) Direction of View: Northeast Focal Length: Digital equivalent to 50mm normal lens Closest Visible Turbine: 4.8 miles Furthest Visible Turbine: 5.3 miles Turbines Visible: 4± Date of Photo: 09.25.09 Time of Photo: 11:05 am</p>		<h2>Dreamhome Photosimulation 9</h2>	<p><small>Terrence J. DeVan & Associates Landscape Architects & Planners</small></p>
				<p>Spruce Mountain Wind Project</p>	<p><small>121 West Main Street, Yarmouth, ME 04096 Telephone: 207.846.0731 web: www.pjr.net</small></p>
				<p>PATRIOT RENEWABLES Spruce Mountain Wind, LLC</p>	<p>Page 25</p>

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Normal view of existing conditions looking north from Dreamhome, a private residence on the National Register of Historic Places, off Mountain Lodge Road (private road) in Woodstock. The existing communication towers visible on Spruce Mountain are not part of the Project. Viewer should hold this image, when printed at 11" x 17", approximately 17" from eye to replicate actual view.

Dreamhome	Page
Existing Conditions	26



Photosimulation 9A. Normal view looking northeast toward the proposed Spruce Mountain Wind Project from Dreamhome off Mountain Lodge Road (private road) in Woodstock. A portion of 4 turbines would be visible from this location and this general area of Bryant Pond. Viewer should hold this image, when printed at 11" x 17", approximately 17" from eye to replicate actual view.

Dreamhome	Page
Photosimulation 9A	27

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Photosimulation 10: Panoramic view looking southeast toward the proposed Spruce Mountain Wind Project from Route 232 in Abbotts Mill, Rumford. Turbines visible from this location would be 6.1 to 6.5 miles away.

LEGEND	VIEWPOINT LOCATION MAP	PHOTOSIMULATION INFORMATION																																				
<ul style="list-style-type: none"> ● Spruce Mountain Wind Project Turbines ↗ Viewpoint Location and direction of view Town of Woodstock Boundary 		<table border="0"> <tr> <td>Turbine Model:</td> <td>Gamesa G90</td> </tr> <tr> <td>Hub Height:</td> <td>78m (256 ft)</td> </tr> <tr> <td>Rotor Diameter:</td> <td>90m (295 ft)</td> </tr> <tr> <td>View Coordinates:</td> <td>Latitude: 44.482463°, Longitude: -70.647173°</td> </tr> <tr> <td>Viewer Elevation:</td> <td>189m (620 ft)</td> </tr> <tr> <td>Direction of View:</td> <td>Southeast</td> </tr> <tr> <td>Focal Length:</td> <td>Digital equivalent to 50mm normal lens</td> </tr> <tr> <td>Closest Visible Turbine:</td> <td>6.1 miles</td> </tr> <tr> <td>Furthest Visible Turbine:</td> <td>6.5 miles</td> </tr> <tr> <td>Turbines Visible:</td> <td>8±</td> </tr> <tr> <td>Date of Photo:</td> <td>08.13.09</td> </tr> <tr> <td>Time of Photo:</td> <td>3:07 pm</td> </tr> </table>	Turbine Model:	Gamesa G90	Hub Height:	78m (256 ft)	Rotor Diameter:	90m (295 ft)	View Coordinates:	Latitude: 44.482463°, Longitude: -70.647173°	Viewer Elevation:	189m (620 ft)	Direction of View:	Southeast	Focal Length:	Digital equivalent to 50mm normal lens	Closest Visible Turbine:	6.1 miles	Furthest Visible Turbine:	6.5 miles	Turbines Visible:	8±	Date of Photo:	08.13.09	Time of Photo:	3:07 pm	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td colspan="2" style="text-align: center;">Route 232, Abbotts Mill Photosimulation 10</td> </tr> <tr> <td style="width: 50%; text-align: center;">Spruce Mountain Wind Project</td> <td style="width: 50%; text-align: center;">tjd&a <small>Terrence J. DeWan & Associates Landscape Architects & Planners</small></td> </tr> <tr> <td colspan="2" style="text-align: center;"> PATRIOT RENEWABLES <small>Spruce Mountain Wind, LLC</small></td> </tr> <tr> <td colspan="2" style="text-align: right;"><small>121 West Main Street, Yarmouth, ME 04096 Telephone: 207.846.0757 web: www.tjd.com</small></td> </tr> <tr> <td colspan="2" style="text-align: right;">Page 28</td> </tr> </table>		Route 232, Abbotts Mill Photosimulation 10		Spruce Mountain Wind Project	tjd&a <small>Terrence J. DeWan & Associates Landscape Architects & Planners</small>	PATRIOT RENEWABLES <small>Spruce Mountain Wind, LLC</small>		<small>121 West Main Street, Yarmouth, ME 04096 Telephone: 207.846.0757 web: www.tjd.com</small>		Page 28	
Turbine Model:	Gamesa G90																																					
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Route 232, Abbotts Mill Photosimulation 10																																						
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<small>121 West Main Street, Yarmouth, ME 04096 Telephone: 207.846.0757 web: www.tjd.com</small>																																						
Page 28																																						



Normal view of existing conditions looking southeast from Route 232 in Abbotts Mill, Rumford. Viewer should hold this image, when printed at 11" x 17", approximately 17" from eye to replicate actual view.

Route 232, Abbotts Mill	Page
Existing Conditions	29

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Photosimulation 10A. Normal view looking northeast toward the proposed Spruce Mountain Wind Project from Route 232 in Abbotts Mill, Rumford. Approximately 8 turbines would be visible from this viewpoint. Viewer should hold this image, when printed at 11" x 17", approximately 17" from eye to replicate actual view.

Route 232, Abbotts Mill	Page
Photosimulation 10A	30



Photosimulation 11: Panoramic view looking southeast toward the proposed Spruce Mountain Wind Project from Route 2 in Rumford Point. Turbines visible from this location would be 7.7 to 8.3 miles away.

LEGEND	VIEWPOINT LOCATION MAP	PHOTOSIMULATION INFORMATION		Route 2, Rumford Point Photosimulation 11	
<ul style="list-style-type: none"> ● Spruce Mountain Wind Project Turbines Viewpoint Location and direction of view Town of Woodstock Boundary 		<p>Turbine Model: Gamesa G90 Hub Height: 78m (256 ft) Rotor Diameter: 90m (295 ft) View Coordinates: Latitude: 44.500153°, Longitude: -70.668197° Viewer Elevation: 194m (635 ft) Direction of View: Southeast Focal Length: Digital equivalent to 50mm normal lens Closest Visible Turbine: 7.7 miles Furthest Visible Turbine: 8.3 miles Turbines Visible: 11± Date of Photo: 08.13.09 Time of Photo: 3:18 pm</p>	<p>Gamesa G90 78m (256 ft) 90m (295 ft) Latitude: 44.500153°, Longitude: -70.668197° Southeast Digital equivalent to 50mm normal lens 7.7 miles 8.3 miles 11± 08.13.09 3:18 pm</p>	<p>Spruce Mountain Wind Project</p>	<p>tjd&a Terrence J. DeWan & Associates Landscape Architects & Planners 121 West Main Street, Yarmouth, ME 04096 Telephone: 207.848.0737 web: www.tjd.net</p>
				<p> PATRIOT RENEWABLES Spruce Mountain Wind, LLC</p>	<p>Page 31</p>

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Normal view of existing conditions looking southeast from Route 2 in Rumford Point. Viewer should hold this image, when printed at 11" x 17", approximately 17" from eye to replicate actual view.

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Photosimulation 11A. Normal view looking southeast toward the proposed Spruce Mountain Wind Project from Route 2 in Rumford Point. All 11 turbines would be visible from this viewpoint. Viewer should hold this image, when printed at 11" x 17", approximately 17" from eye to replicate actual view.

Route 2, Rumford Point	Page
Photosimulation 11A	33

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