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**Cultural Resources Surveys**

## **N-1 Archeological Survey**



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**ARCHAEOLOGICAL SURVEY  
FOR THE BALL HILL WIND PROJECT,  
TOWNS OF VILLENOVA AND HANOVER,  
CHAUTAUQUA COUNTY, NEW YORK**

**ADDENDUM 3**

**New York State Historic Preservation Office  
(NYSHPO) #08PR01814**

**Prepared for:**

**ECOLOGY & ENVIRONMENT, INC.  
368 Pleasant View Drive  
Lancaster, New York 14086**

**Prepared by:**

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**October 2016**

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**Prepared by:**

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**October 2016**

# Management Summary

**SHPO Project Review Number:** #08PR01814

**Involved State and Federal Agencies:** U.S. Army Corps of Engineers, New York State Department of Environmental Conservation, Public Service Commission

**Phase of Survey:** Addendum to the Phase 1 archaeological survey

## Project Location Information

**Location:** see minor civil division below

**Minor Civil Division:** Towns of Villenova (MCD 01326) and Hanover (MCD 01314)

**County:** Chautauqua

**Number of Proposed Turbines:** 29

**Area of Potential Effect (APE):** The new total APE of turbines, access roads, collection lines, laydown areas, and support structures (e.g., operations & management, substation) is 318.9 acres.

**USGS 7.5-Minute Quadrangle Maps (all New York): Archaeological Investigation:** Forestville (1979); **Architectural Investigation:** Cassadega (1976), Cherry Creek (1976), Dunkirk (1979), Farnham (1960), Forestville (1979), Hamlet (1976), Perrysburg (1976), and Silver Creek (1960)

**Archaeological Investigation Summary:** The previous project APE revision addressed in Addendum 2 of the Phase 1 Investigation discussed an APE measuring 354.8 acres, which was 46.2 acres smaller than the original 401-acre project APE. The new revisions to the project component totals (e.g., the elimination of seven turbines) and locations presented in this addendum have reduced the APE another 35.9 acres resulting in the current APE covering 318.9 acres.

The APE of the new design crosses similar environmental zones, “Local Habitat Areas,” to those of the previously investigated APE. Therefore, the results generated by the first investigation are applicable in assessing the archaeological sensitivity of the current APE. No potentially National Register of Historic Places-eligible archaeological cultural resources have been identified in the current project area. As revealed by the earlier investigations, the project area has low sensitivity for precontact-period archaeological resources.

The new project design was reviewed over historic maps and only two Map-Documented Structures (MDSs) were in the vicinity of APE that had not been surveyed. In consultation with SHPO it was assessed that there is a low potential for the project to affect archaeological deposits associated with these two MDSs given the inaccuracies of nineteenth-century maps and additional archaeological testing for this project was not necessary (personal communication with Dr. Nancy Herter [SHPO], October 5, 2016).

The present configuration of the Ball Hill Wind Project is not considered sensitive for archaeological cultural resources. Sufficient field investigations have been conducted per the New York State Historic Preservation Office *Guidelines for Wind Farm Development Cultural Resources Survey Work*.

## Results of Architectural Survey

The architectural/viewshed investigation is submitted as a separate report (see Longiaru et al. 2016).

**Report Author(s):** R. Hanley, D. Smith, M. Steinback, and M. Cinquino.

**Date of Report:** October 2016

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# 1.0 Introduction

## 1.1 PROJECT DESCRIPTION

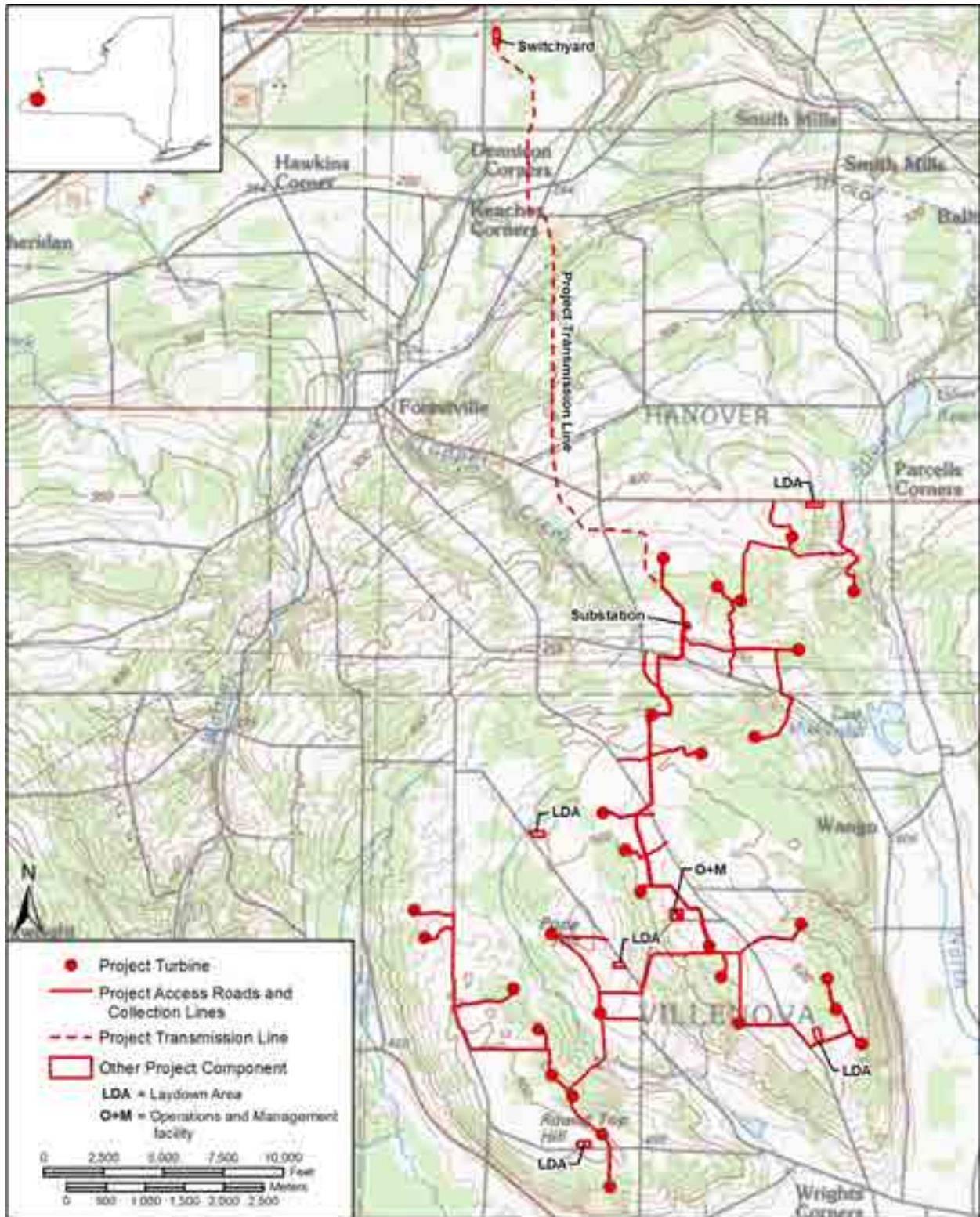
Panamerican Consultants, Inc. (Panamerican), Buffalo, New York, was contracted by Ecology & Environment, Inc. (E&E), Lancaster, New York, to complete archaeological and historic structures survey addenda for the Ball Hill Wind Project, a wind-energy project proposed in the Towns of Hanover and Villenova, Chautauqua County, New York (Figure 1.1). Cultural resources investigations were completed for two earlier configurations of the project in 2008 and 2013, including: in 2008, a Phase I archaeological survey (Hanley et al. 2008b); an addendum archaeological investigation in which the addition of several project components (laydown areas, a switchyard, and a substation) were addressed (Hanley et al. 2008a); and an historical architectural investigation, which assessed the effects of the project on historical cultural resources in the surrounding landscape (Longiaru et al. 2008); and in 2013, an archaeological and architectural assessment addendum that addressed the effects of changes to the project between 2008 and 2013 (Smith et al. 2013). The project design was revised again in December 2015 and addressed in the Phase 1 investigation addendum 2 that discussed an Area of Potential Effect (APE) measuring 354.8 acres which was 46.2 acres smaller than the original 401-acre project APE (Hanley et al. 2015; Longiaru et al. 2015).

New revisions in 2016 to project component locations and totals (e.g., the elimination of seven turbines) have reduced the APE another 35.9 acres resulting in the current APE of 318.9 acres (Figure 1.2). The current investigation was conducted to determine if the revised project component locations outside the previously surveyed APE are archaeologically sensitive. This report only discusses the archaeological component of the investigation; the historic structures survey addendum for the current 2016 layout is submitted as a separate report.

In accordance with the New York State Historic Preservation Office (NYSHPO) *Guidelines for Wind Farm Development Cultural Resources Survey Work* (2006), the purpose of this addendum is to assess the potential for the parts of the current physical project APE that are outside the areas covered by the earlier investigations to contain potentially National Register-eligible (NRE) archaeological resources. The investigation was conducted in compliance with the New York State Historic Preservation Act, the State Environmental Quality Review Act, the National Historic Preservation Act, and the National Environmental Policy Act, as well as all relevant state and federal legislation. It was also conducted according to the New York Archaeological Council's (NYAC) Standards for Archaeological Investigations, and NYSHPO guidelines.

The addendum investigation was conducted by Panamerican in September and October of 2016. Mr. Robert J. Hanley, M.A., RPA Principal Investigator for this Phase 1 archaeology addendum. Dr. Donald A. Smith, RPA, served as Geographic Information Analyst, and Mr. Mark A. Steinback, M.A., was the project historian and technical coordinator. As noted, the historic structures assessment for the project is submitted as a separate report (Longiaru et al. 2016).





**Figure 1.1. Location of the 2016 Ball Hill Wind Project in the Towns of Hanover and Villenova, Chautauqua County, New York** (Base map: United States Geological Survey [USGS] 100k series Jamestown, NY-Penn. [1988] and Silver Creek, NY-Penn.-Ont. [1986] quadrangles).

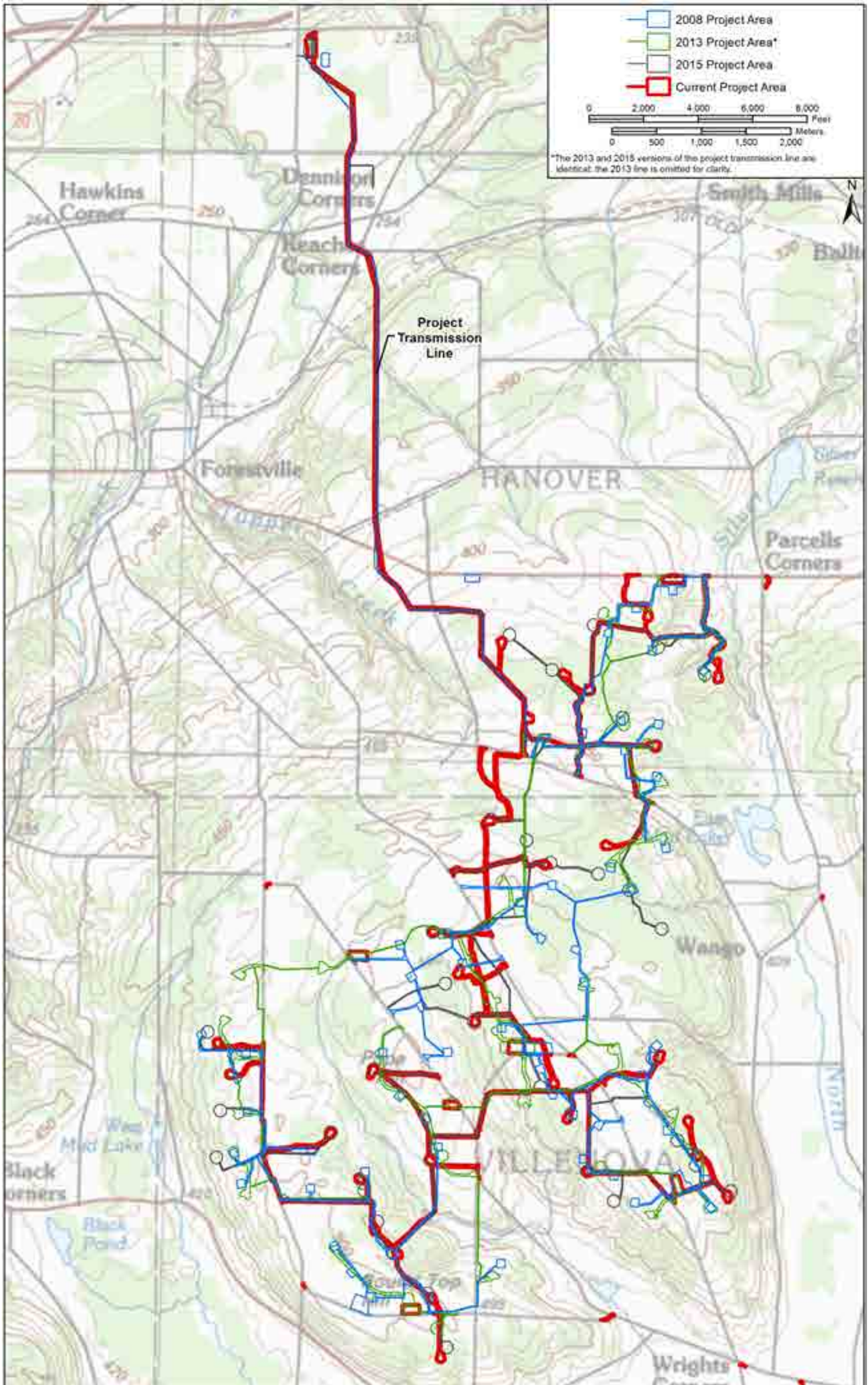


Figure 1.2. The current (2016) project configuration relative to previous layouts (2008, 2013, 2015) (Base map: USGS 100k series Jamestown, NY-Penn. [1988] and Silver Creek, NY-Penn.-Ont. [1986] quadrangles).

## 2.0 Archaeological Investigation

### 2.1 PREVIOUS INVESTIGATIONS

The newly revised layout of the current Ball Hill Wind Project has significant overlap with that of the previously-proposed versions of the project, with the primary revisions associated with the removal of components and consequent reduction in size of the APE (see Figure 1.2). The current project area falls within the same overall footprint as the 2008 configuration and extends across parts of the same environmental zones with a similar spatial distribution. Thus, the areas selected for testing in 2008 were distributed across environmental zones at a similar ratio to those of the current project area. Figure 2.1 depicts the present project design in the same topographic setting as the previous survey areas. Therefore, based on environmental zone criterion of the SHPO *Wind Farm Guidelines*, the results of the archaeological testing completed during the 2008 investigation are approximately also representative of the testing of the current project configuration.

No National Register of Historic Places (NRHP)-eligible archaeological resources were previously reported within the current APE or found during the field investigations for prior project designs. Only two isolated precontact-period artifacts (both lithic debitage) were recovered during the previous field investigations. These investigations resulted in finding three historic sites at Map-Documented Structure (MDS) locations but they were determined not to be eligible for listing in the NRHP (see Hanley et al. 2015).

### 2.2 HISTORICAL MAP RESEARCH

The historical maps reviewed for the 2016 Phase 1 Addendum 3 investigation include: Rea and Trimble (1854), Stewart (1867), Beers (1881), and the USGS Cherry Creek (1900) topographical quadrangle. The present project design places an access road and interconnect in proximity to just two MDSs outside previously surveyed locations. Both are located on the south side of Hurlburt Road in the Town of Hanover. Portions of the APE depicted north of Hurlburt Road were previously surveyed and no evidence of cultural resources was found.

In 1854, an MDS attributed to W. McManus was east of a proposed access road (Figure 2.2: MDS 1) and an MDS apparently attributed to O. Meritt was located south of an interconnect (Figure 2.2: MDS 2). By 1867, the MDS attributed to W. McManus near the access road was attributed to S.L. Hulbert (Figure 2.3: MDS 1) and the MDS possibly attributed to O. Meritt south of the interconnect was no longer present (see Figure 2.3). In 1881 MDS 1 was still attributed to S.L. Hulbert (Figure 2.4: MDS 1) and it was still present in 1900 (Figure 2.5). No MDSs were depicted at either location on the 1954 USGS topographic map (map reviewed but not presented).

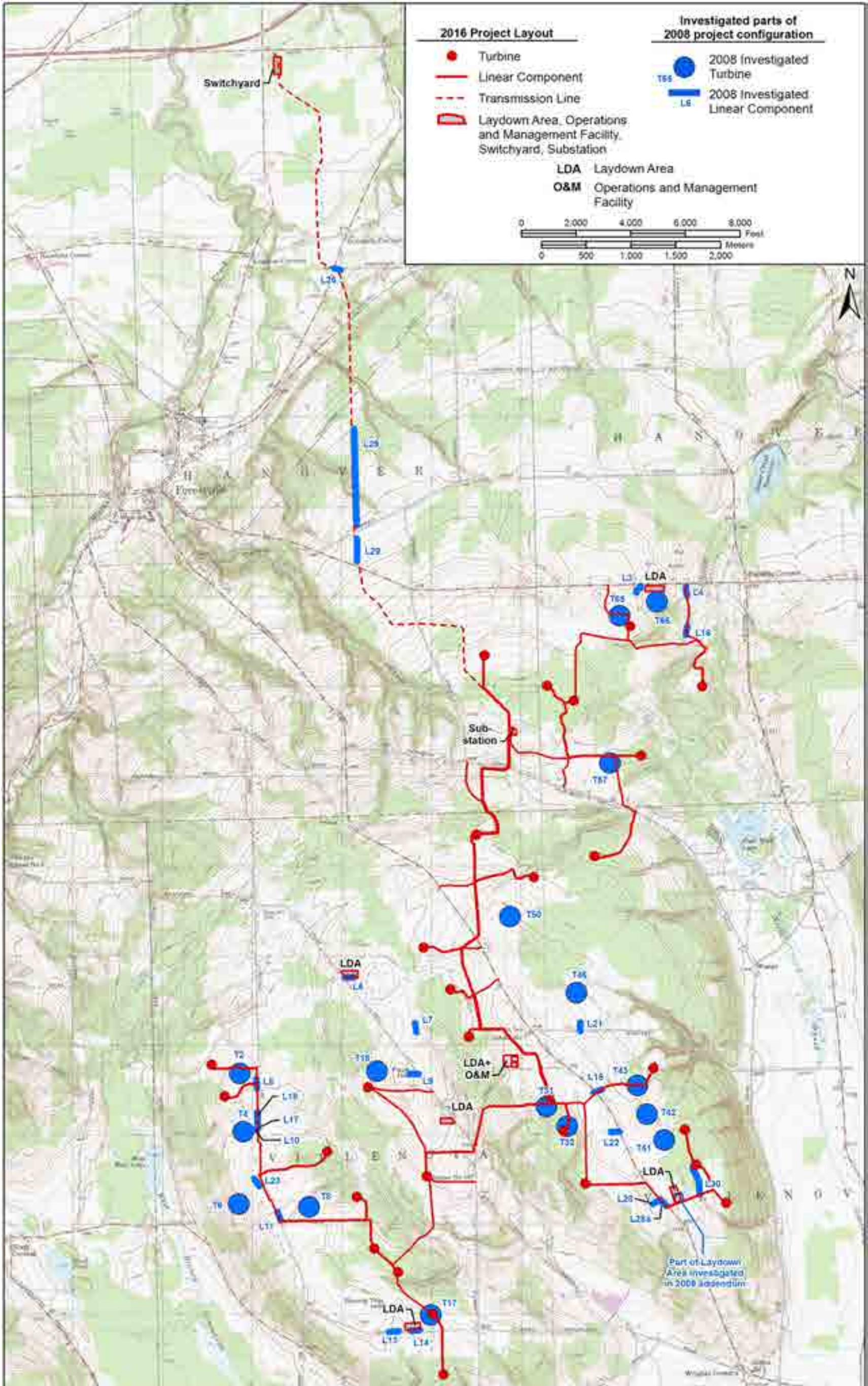


Figure 2.1. Portions of the Ball Hill Wind Project previously subjected to archaeological survey relative to the current project area (Base Maps: USGS 24k Series Topographic: Silver Creek, NY 1960, Farnham, NY 1960, Perrysburg, NY 1979, Forestville, NY 1979).

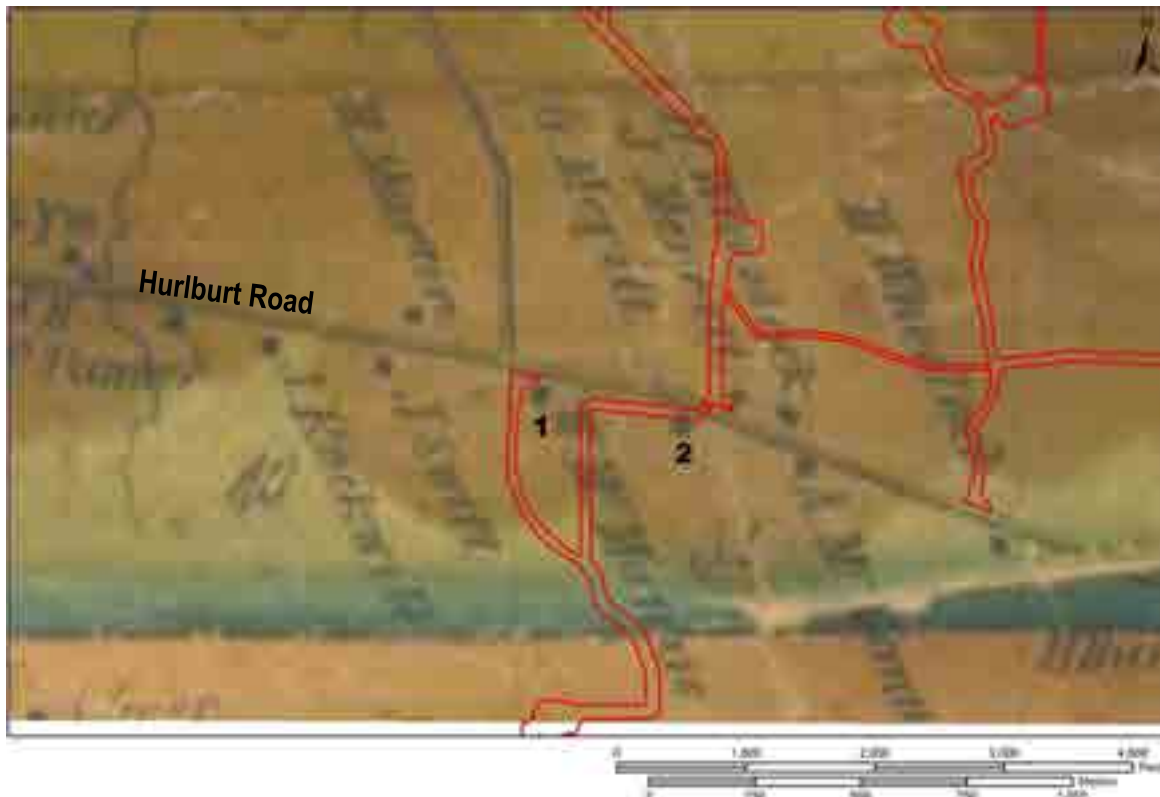


Figure 2.2. MDS locations in the vicinity of the APE in 1854 (Rea and Trimble).

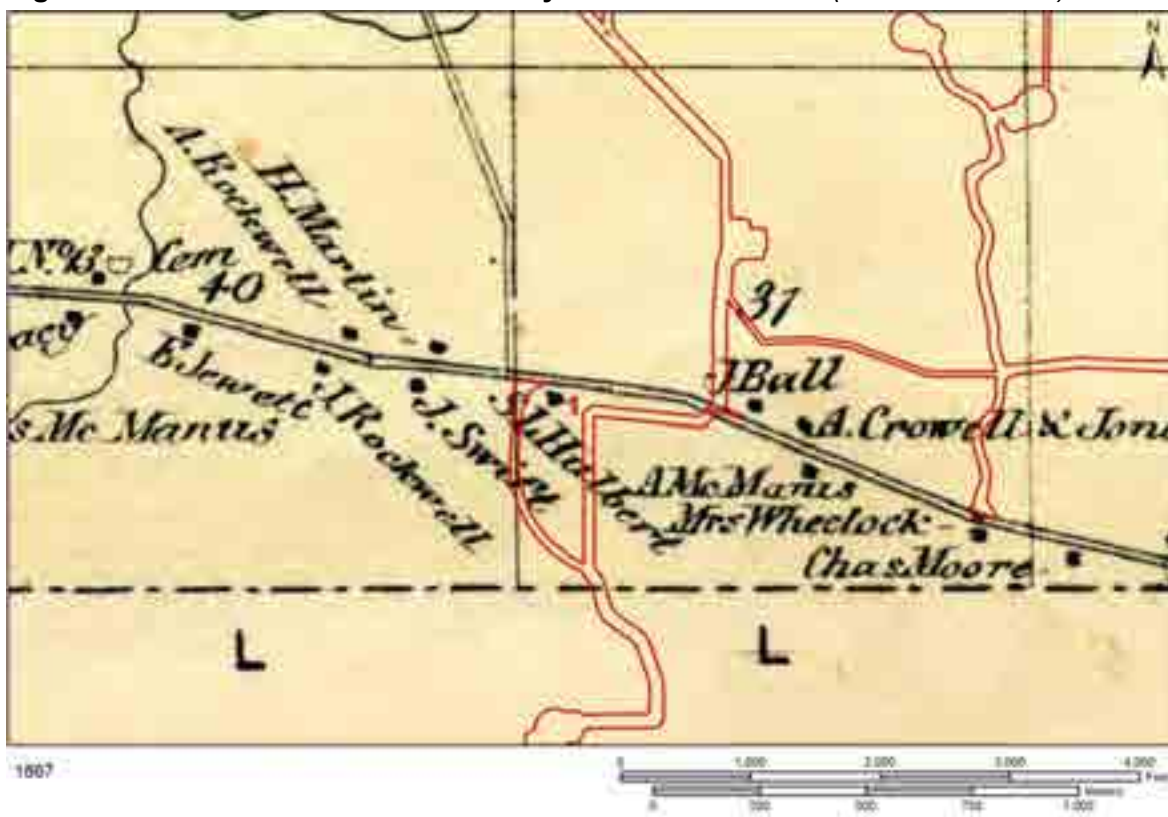


Figure 2.3. MDS locations in the vicinity of the APE in 1867 (Stewart).

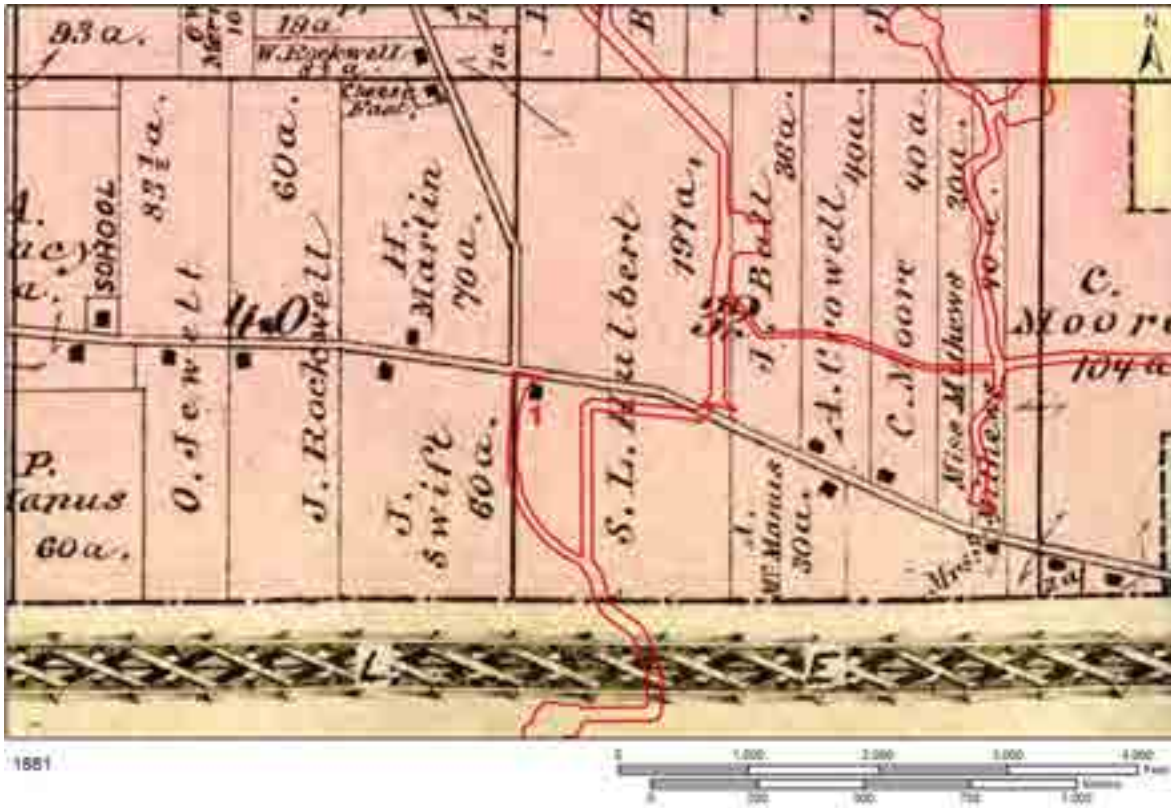


Figure 2.4. MDS locations in the vicinity of the APE in 1881 (Beers).

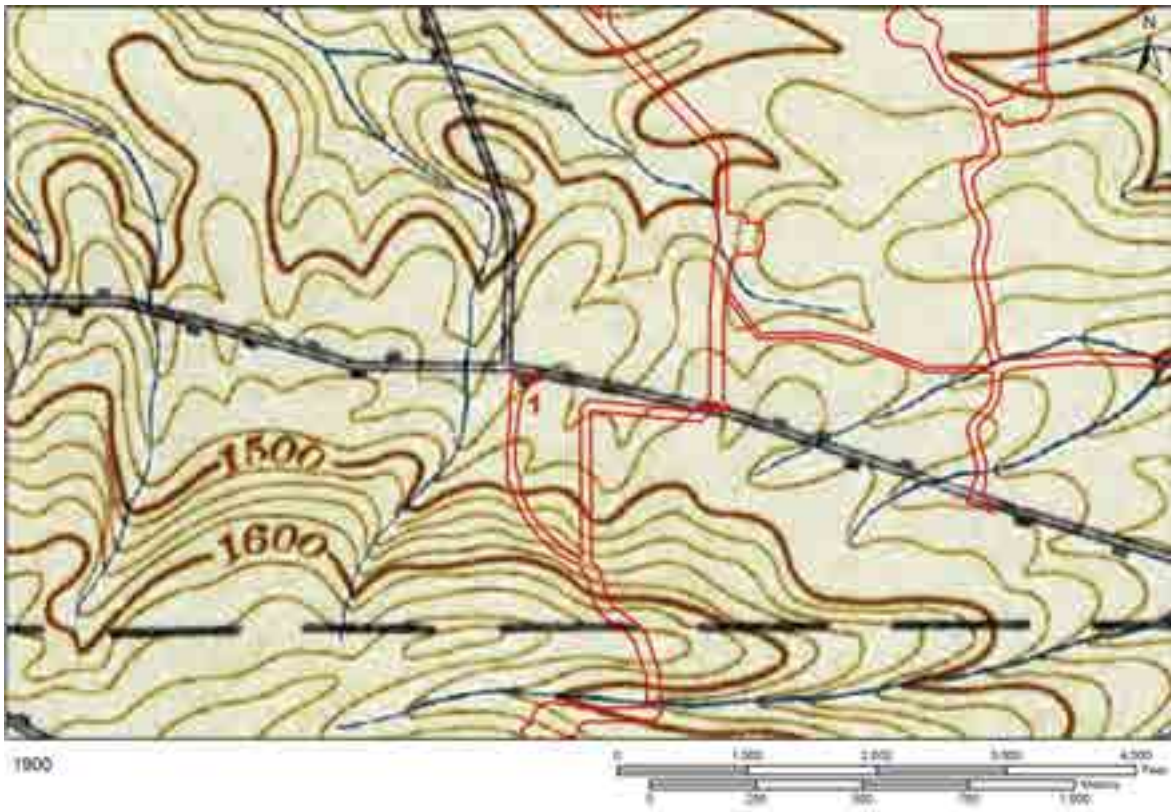


Figure 2.5. MDS locations in the vicinity of the APE in 1900 (USGS Cherry Creek).

## 2.3 CONCLUSIONS AND RECOMMENDATIONS

Archaeological field investigations were previously conducted to account for the original APE of 401 acres. The current project APE is now 82.1 acres smaller with the total presently measuring 318.9 acres. The APE of the new design crosses similar environmental zones “Local Habitat Areas” to those of the previously investigated APE. Therefore, the results generated by the first investigation are applicable in assessing the archaeological sensitivity of the current APE. No potentially NRHP-eligible archaeological resources have been previously identified in the current project area. As determined by the earlier investigations, the project area has low sensitivity for precontact-period archaeological resources and no NRHP-eligible historic sites were found after investigating numerous MDS loci.

The new project design was overlain on historical maps and only two MDSs were identified in the vicinity of the APE that had not been previously surveyed. In consultation with SHPO it was assessed that there is a low potential for the project to affect archaeological deposits associated with these two MDSs given the inaccuracies of nineteenth-century maps, and, as a result, additional archaeological testing for this project was not necessary (email: Dr. Nancy Herter, NYSHPO, October 5, 2016).

In summary, the present 2016 configuration of the Ball Hill Wind Project is not considered sensitive for archaeological cultural resources. Sufficient field investigations have been conducted per the NYSHPO *Guidelines for Wind Farm Development Cultural Resources Survey Work*. Panamerican does not recommend any further cultural resources investigations for the current design of the Ball Hill Wind Project.

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## **N-2 Architectural Survey**





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**ADDENDUM #3**

**OPRHP#08PR01814**

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**October 2016**

# Management Summary

**SHPO Project Review Number:** #08PR01814

**Involved State and Federal Agencies:** U.S. Army Corps of Engineers, New York State Department of Environmental Conservation, Public Service Commission

**Phase of Survey:** Addendum Phase 1 historic architectural resources survey

## Project Location Information

**Location:** see minor civil division below

**Minor Civil Division:** Towns of Villenova (MCD 01326) and Hanover (MCD 01314)

**County:** Chautauqua

## Five-mile Ring Information

**Minor Civil Division:** Towns of Arkwright (MCD 01301), Charlotte (MCD 01304), Cherry Creek (MCD 01306), Hanover (MCD 01314), Sheridan (MCD 01323), and Villenova (MCD 01326), and the villages of Forestville (MCD 01352), Silver Creek (MCD 01346), Chautauqua County; and Towns of Dayton (MCD 00906), Leon (MCD 00917), and Perrysburg (MCD 00926), and the villages of Perrysburg (MCD 00951) and South Dayton (MCD 00954), Cattaraugus County

**Counties:** Chautauqua and Cattaraugus

**Number of Proposed Turbines:** 29

## Architectural Survey Area:

**Total area surveyed:** The current total within the five-mile buffer of the Ball Hill turbines and the and three-mile buffer of the Project's transmission line is 170.1 square miles; 76.2 percent of which, or 129.7 square miles, makes up the Visual APE.

**USGS 7.5-Minute Quadrangle Maps (all New York): Archaeological Investigation:** Forestville (1979); **Architectural Investigation:** Cassadega (1976), Cherry Creek (1976), Dunkirk (1979), Farnham (1960), Forestville (1979), Hamlet (1976), Perrysburg (1976), and Silver Creek (1960)

## Results of Architectural Survey

**Number of previously determined NR-listed or –eligible buildings/structures/cemeteries/districts in the 5-mile Visual Area of Potential Effect (APE):**

- National Register-listed properties: None
- Individual National Register-eligible (NRE) properties: 159

**Number of Historic Districts with “Undetermined” NRHP Status: 2**

- 1) Silver Creek Historic District (approximately 35 contributing properties, number of non-contributing is unknown) four were recommended contributing properties to the Silver Creek Historic District.
- 2) Center Street Historic District in Forestville, which consists of 14 primary buildings (13 contributing resources and one non-contributing resource).

**Number of recommended NRE buildings/structures/cemeteries/districts in the 5-mile Visual APE 2016 Addendum:** None

**Report Author(s):** D. Smith, M. Steinback, C. Longiaru, and M. Cinquino.

**Date of Report:** October 2016

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# 1.0 Introduction

## 1.1 PROJECT DESCRIPTION

Panamerican Consultants, Inc. (Panamerican) was contracted by Ecology & Environment, Inc. (E&E), Lancaster, New York, to complete an historic architectural resources survey addendum for the proposed Ball Hill Wind Project, a wind-energy project proposed in the Towns of Hanover and Villenova, Chautauqua County, New York (Figure 1.1). The Project's most visible components are 29 492-ft-(150-meter)-tall wind-power generating turbines.<sup>1</sup> Its visual Area of Potential Effect (APE) is defined as the area within five miles of the turbines and three miles of its transmission line and from which its turbines will be visible. The area within five miles of turbines and three miles of the transmission line totals 170.1 square miles, of which turbines will be visible in 129.7 square miles (Figure 1.2). Three previous historic architectural resources studies were completed for earlier configurations of the Ball Hill Wind Project. In 2008 Panamerican completed the initial historic buildings survey of the five-mile visual APE (Longiaru et al. 2008) and in 2013 and 2015 archaeological and architectural assessment addenda were submitted to the New York State Historic Preservation Office (NYSHPO) (Smith et al. 2013; Longiaru et al. 2015 [Figure 1.3]). The configuration of the Project addressed in the 2015 addendum was considerably larger than its current layout and included 36 turbines. This 2016 addendum addresses the current Project layout and includes an updated five-mile visual APE study area that accounts for changes to the 2015 study area (i.e., new areas in the current Project's five-mile visual APE).

The project includes wind-energy generation and transmission components. The generation component (i.e., wind turbines and their auxiliary facilities [access roads, an electrical collection network, construction laydown areas, and an operations and management [O&M] facility]) will be constructed in the towns of Villenova and Hanover and the transmission component (i.e., an electrical transmission line with its ancillary facilities [access roads, a switchyard, and a substation]) will be in the Town of Hanover. The total physical APE for the current project is approximately 329 acres. It includes 29 wind turbines with a capacity to produce approximately 100MW of electricity; the APE for each turbine covers 3.65 acres. The generation project's linear components (access roads and electrical collection lines) total 215,376 feet (65,646 meters / 40.8 miles) in length and have APEs that range from 25 to 40 ft (7.6 to 12.2 m) wide; the construction laydown areas total 15 acres and the O&M facility is 5 acres. The project's transmission line is 29,945 ft (9,127 m / 5.7 miles) in length and has a 120-ft (3.6-m)-wide APE / right-of-way (ROW). Its switchyard covers 4 acres and the substation covers 1.3 acres. Finally, the transmission portion of the project also includes a series of access roads, all but 1.5 acres of which are located within the transmission line's ROW.

The purpose of the 2016 architectural survey addendum is to identify National Register Listed/Eligible (NRL/NRE) properties in the current Project's five-mile visual APE study area.<sup>2</sup> This addendum addresses newly identified areas in the current visual APE that were previously not covered by earlier investigations (i.e., new locations containing historic architectural resources now in the visual APE). It includes an up-to-date analysis of the potential visual effect of the Project on historic architectural resources in the study area. Panamerican also completed a separate archaeological investigation for the current Project layout (Hanley et al. 2016).

Any National Register eligibility recommendations presented in the 2016 addendum report are preliminary and **not** considered final determinations of National Register eligibility. Final determinations will be made

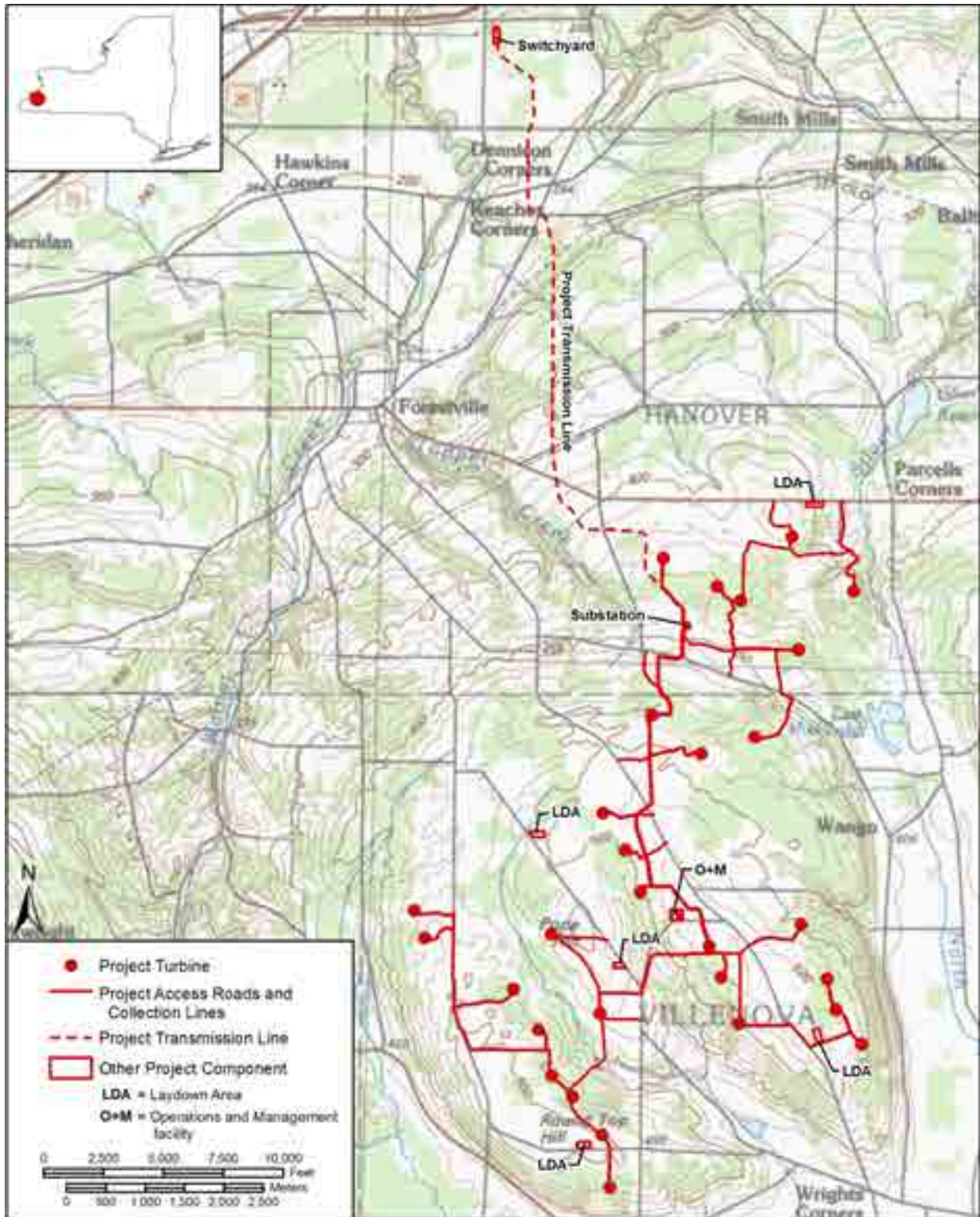
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<sup>1</sup> Previous versions of the project included up to 39 turbines, which were assigned the designations T1 to T39. In the current layout, the earlier numerical designations for turbines have been retained. Thus, turbine designations used throughout this report range from T1 to T39, from which 10 designations have been omitted (T1, T10, T12, T22, T24, T25, T26, T29, T32, and T38). The current configuration calls for only 29 turbines.

<sup>2</sup> Previously documented resources as identified in the original five-mile visual APE for the *Architectural Survey (Five-mile APE) for the Proposed Noble Ball Hill Windpark* (2008) and the 2013 addendum were not re-surveyed for the 2015 addendum.

by NYSHPO. The historic building survey of the five-mile APE study area and the three-mile APE study area was conducted in compliance with NYSHPO *Wind Farm Guidelines* (2006).

Each of the historic architectural resources surveys completed by Panamerican in 2008, 2013, 2015, and 2016 were conducted in accordance with NYSHPO's *Guidelines for Wind Farm Development Cultural Resources Survey Work* (2006), and based on previous experience with conducting historic resources surveys for wind-energy projects. These investigations were completed in compliance with the New York State Historic Preservation Act, the State Environmental Quality Review Act, the National Historic Preservation Act, and the National Environmental Policy Act, as well as all relevant state and federal legislation. Panamerican completed the historic architectural resources field survey in November 2015. Ms. Christine M. Longiaru, M.A., served as Principal Investigator for the architectural evaluation. The project team included Senior Historian Mr. Mark A. Steinback, M.A.; Geographic Information Analyst Dr. Donald A. Smith, RPA, Project Director/Senior Archaeologist Dr. Michael A. Cinquino, RPA, and Senior Preservation Planner/Senior Archaeologist Dr. Frank J. Schiepati, RPA.



**Figure 1.1.** The approximate location of the Ball Hill Wind Project in the Towns of Hanover and Villenova, Chautauqua County, New York (USGS 100k Series Topographic: Jamestown, NY-Pennsylvania (1988 [1986]); Silver Creek, NY-Pennsylvania-Ontario (1986)).

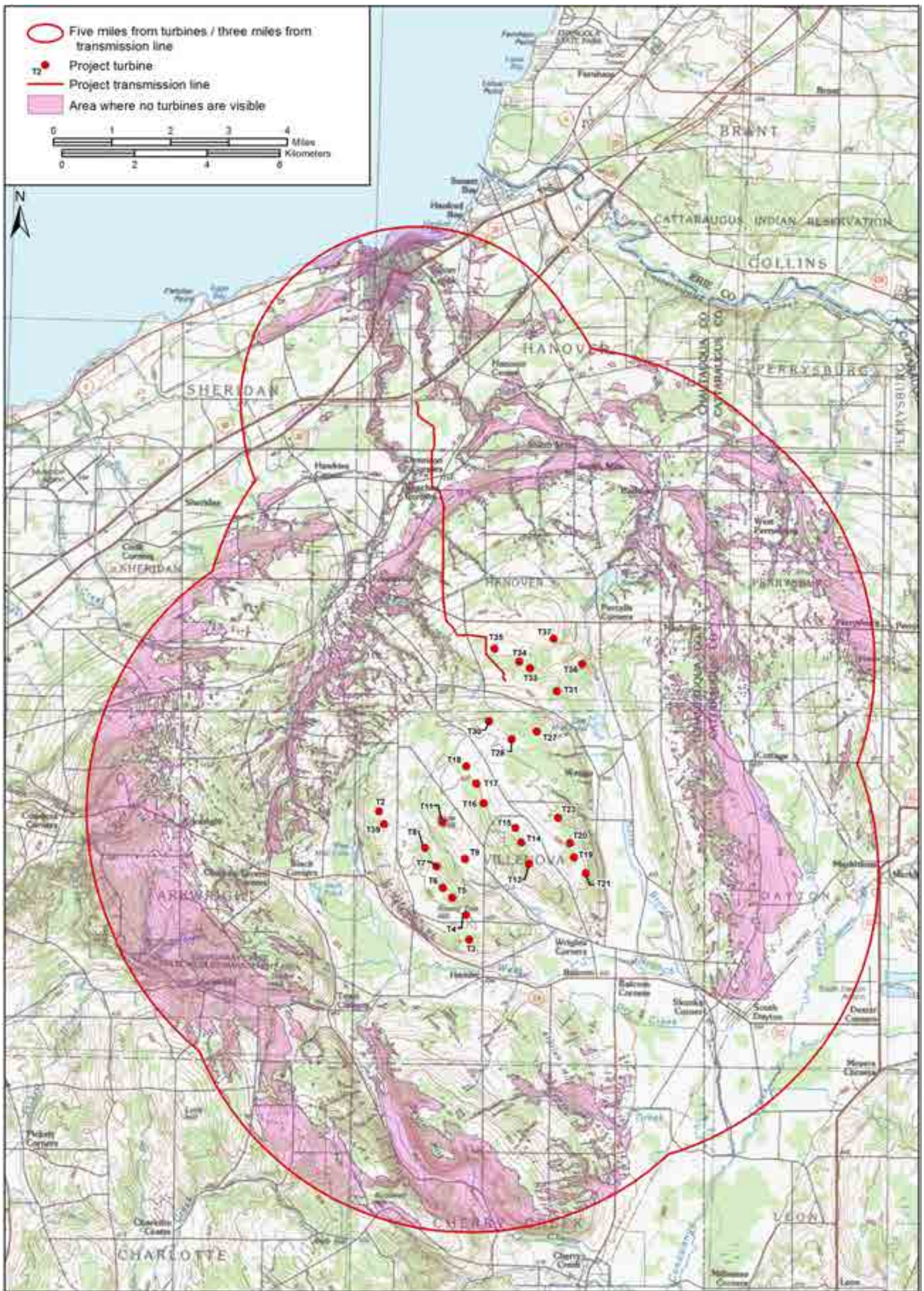
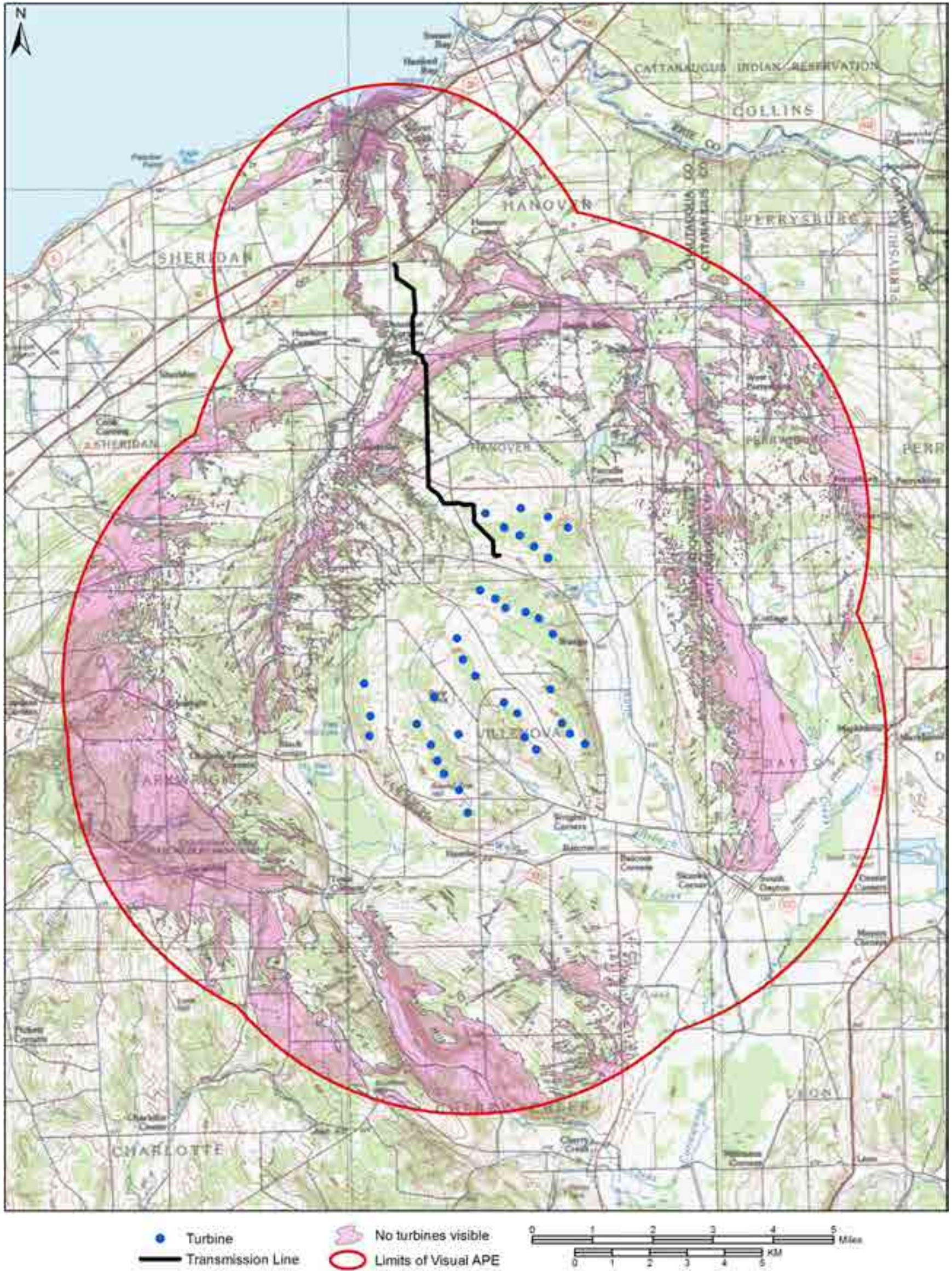


Figure 1.2. Ball Hill 2016 Addendum historic architectural resources visual APE (base map sources: USGS 100k Series Topographic: Buffalo, NY 1984; Jamestown, NY 1988 [1986]; Olean, NY 1986; Silver Creek, NY 1986).



**Figure 1.3. Ball Hill 2015 architectural / visual APE** (base map sources: USGS 100k Series Topographic: Buffalo, NY 1984; Jamestown, NY 1988 [1986]; Olean, NY 1986; Silver Creek, NY 1986).

## 2.0 Historic Architectural Resources Summary

For this investigation, the visual APE is defined as the area within five miles of the Project turbines and three miles of its transmission line and from which its turbines will be visible (see Figure 1.2). Within this area both direct and indirect visual effects are assessed that may cause changes in the character or use of cultural properties. Panamerican generated the viewshed analysis map of the five-mile visual APE based solely on topography (NYSHPO 2006; see Appendix A). Additional screening may be provided by existing buildings and vegetation. The visual APE spans parts of northwestern Cattaraugus County and northeastern Chautauqua County.

The current Project's five-mile visual APE has significant overlap in area with that of a previously proposed project, Noble Ball Hill Windpark and Transmission Line (NYS Office of Parks, Recreation, and Historic Preservation [OPRHP] #08PR01814), which was not constructed. In 2008, Panamerican conducted a reconnaissance-level historic buildings survey of the five-mile APE for the originally proposed project (Longiaru et al. 2008 [#08PR01814]). NYSHPO reviewed the 2008 report recommendations and provided final National Register of Historic Places (NRHP) evaluations (Bonafide 2008). A list of all NRE properties in the current Project viewshed previously documented by Panamerican and evaluated by NYSHPO in 2008 is included in this addendum report (Table 2.1, below).

### 2.1 PREVIOUS INVESTIGATIONS

Five historic architectural resources studies for wind-energy projects were previously conducted in and partially within the Project's five-mile visual APE study area (Longiaru et al. 2008 [Ball Hill]; Smith et al. 2013 [Ball Hill]; Longiaru et al. 2015 [Ball Hill]; Sexton and Toner 2009 [Arkwright Summit wind project]; and EDR 2015 [Cassadaga wind project]). Four of the previous historic architectural resources surveys identified NRE resources within the current Project's visual APE. These surveys included identification of all historical architectural resources previously determined listed or eligible the S/NRHPs, as well as newly documented resources.

The original 2008 survey for Ball Hill Wind Project identified 132 individual NRE properties and one NRE historic district—Ewing Park South Dayton Historic District (USN 0095.000062; 13 contributing and one non-contributing properties [Longiaru et al. 2008]). The majority of properties identified in the original 2008 survey were nineteenth-century residences. These NRE properties reflect the rural agricultural heritage of the region as represented by large farm complexes historically consisting of farm houses, farm buildings, and agricultural fields. Commercial, municipal, religious, and industrial buildings were found in the villages of Forestville, Silver Creek, and South Dayton. In addition, seven bridges were documented in the 2008 survey (Map Points 2 [in Dayton], 60 [in Forestville], and 85-89 [in Silver Creek]). NYSHPO assigned an "Undetermined" NRHP status for each of these structures (Bonafide 2008). The seven bridges have not been assigned OPRHP unique site numbers (USNs).

An historic architectural resources investigation of a five-mile ring study area for the Arkwright Summit Wind Farm in Arkwright, Chautauqua County, was completed in 2009 (Sexton and Toner 2009). The Arkwright Summit Wind Farm study area partially overlapped the five-mile visual APE for the Noble Ball Hill Windpark and Transmission project (Longiaru et al. 2008). Slight differences between the 2008 and 2009 viewsheds in some locations accounted for duplicate documentation of historic properties by these two studies.

In 2013 Panamerican submitted an addendum cultural resources investigation for a second proposed project, the Duke Energy Ball Hill Windpark (OPRHP #08PR01814). The 2013 five-mile visual APE had significant overlap with the 2008 visual APE. The total area within five miles of the Project turbines in 2013 was 169.4 sq miles, of which turbines were visible from 128.8 sq miles. Several new locations in the 2013 addendum study area required further investigation for historic architectural resources.

The 2013 addendum survey recommended eight individual properties and one historic district (Center Street Historic District in Forestville, Chautauqua County [USN 01352.000127] Map Points F1 to F14) as

NRE. The 2013 addendum survey also recommended consideration of additional contributing properties to the Silver Creek Historic District (USN 01346.000242; Map Points SC2 to SC6). One of the individual properties recommended as a contributing resource to the Silver Creek Historic District—The Geitner Theatre (The Blackline) at 19 Park Place (Map Point SC5)—was also recommended as an individual NRE property. For continuity in project review and reference, the 2013 addendum survey report retained Map Points assigned to historic architectural resources in the 2008 report (Smith et al. 2015).

The 2015 visual APE for the Project covered 129.9 sq miles. The addendum investigation identified a total of 163 identified historic architectural properties in the five-mile visual APE for the Project. No new resources were identified as NRE. No NRL properties were identified within the visual APE. The types of NRE historic properties included farm complexes, individual residences, commercial buildings, and cemeteries. Two historic districts with “Undetermined” NRHP Status were partially within the visual APE: the Center Street Historic District, Forestville and the Silver Creek Historic District (Longiaru et al. 2015). Since the 2015 report both historic districts have been determined NRE.

## 2.2 Previously Identified Historic Architectural Resources

Panamerican utilized OPRHP’s CRIS to identify previously inventoried historic properties and historic districts located within a five-mile buffer around the Project. Any new information obtained from CRIS for previously documented resources in 2008, 2013, and 2015 (i.e., USNs, street addresses, resource names, etc.) were amended for this addendum. (The 2008 and 2013 reports were completed prior to the development of the CRIS website.)

The following is a summary of findings for previously identified historic architectural resources in the Project’s visual APE.

- No State/National Register Listed properties
- 163 individual State/National Register Eligible properties
- Two historic districts with “Undetermined” NRHP status

The results of the CRIS search for NRE properties are enumerated in Table 2.1. The table includes the original map numbers assigned in the 2008 report for consistency and cross referencing with the earlier reports. Map Points 1 through 132 reference those properties previously documented in 2008. Map Points SD1 through SD14 were originally assigned to properties that were recommended NRE in Ewing Park Historic District (USN 0095.000062; Longiaru et al. 2008). Map Points 137 through 143 and SC 2 through 6 were identified in the 2013 addendum study (Smith et al. 2013). Locations of identified properties are indicated on the project study area map (see Appendix A). Note, line items in Table 2.1 identified in bold and by an asterisk indicate properties in the viewshed of the project transmission line. Missing map points in Tables 2.1 and 3.1 (Visual Impacts section) indicate those resources that are no longer included in the visual APE as a result of either their absence in CRIS or their change in NRHP status.

A small portion of the NRE Silver Creek Historic District (USN 01346.000242) in the Village of Silver Creek, Town of Hanover, Chautauqua County, is in the 2016 visual APE. Properties in the Silver Creek Historic District were not located in the 2008 visual APE. The Silver Creek Historic District is centered on Main Street (U.S. Route 20 [US 20]) at the historic crossroads of the village. Properties in the district were initially surveyed in the 1990s as part of a cultural resources reconnaissance survey conducted for a New York State Department of Transportation (NYSDOT) project. The approximate boundaries of Silver Creek Historic District include a three-block section of Main Street (US 20) from Central Avenue (NY 5) to Robinson Street; the Village Park bound by Park Place, Main Street, and Central Avenue; and a section of Central Avenue (NY 5) from Main Street to 199-201 Central Avenue. The historic district comprises 41 properties dating from the mid-nineteenth century through the early twentieth century, the majority of which are residential. Other property types include a village park, commercial buildings, religious

buildings, a post office, and a school. Formal identification and delineation of the Silver Creek Historic District was beyond the scope of the 2013 addendum survey. The current study addresses the portion of Silver Creek Historic District in the Project's visual APE. Map Points assigned to properties in the Silver Creek Historic District are SC2 through SC6 (see Table 2.1).

The NRE Center Street Historic District (USN 01352.000127) in the Village of Forestville, Town of Hanover, Chautauqua County, consists of 14 NRE buildings and ten outbuildings. All of the buildings in the proposed district are residential with the exception of St. Rose of Lima Church. The boundaries of the Center Street Historic District include a roughly one-block stretch of Center Street, from the intersection with Pearl Street to Cedar Street. Residential buildings on this section of Center Street represent a cohesive, largely intact example of Forestville's nineteenth-century architectural heritage, which includes examples of Greek Revival, transitional Greek/Italianate, Italianate, Gothic/Italianate, and Queen Anne styles, as well as early twentieth-century styles (e.g., Craftsman). Map Points assigned to properties in the Center Street Historic District are F1 through F14 (see Table 2.1).

The NRE Ewing Park South Dayton Historic District (USN 0095.000062); South Dayton, Cattaraugus County, has 16 contributing and one non-contributing properties. Ewing Park Historic District is an approximately 3.7-acre (161,203-sq ft) area bound by Park Street on the west, the Erie Railroad tracks on the east, Maple Street on the north, and Pine Street on the south. Map Points for properties in the Ewing Park Historic District are SD1 through SD14, as per the 2008 report.

Changes in CRIS were noted for a few properties since the 2013 addendum was submitted. Seven bridges were previously documented in 2008, and included in the 2008 and 2013 survey reports (see Table 2.2), but have not been assigned USNs or entered into CRIS.



**Table 2.1. National Register-Eligible Properties in Visual APE (CRIS 2016).<sup>3</sup>**

Map Pt.	Resource Name	Street Address	County	Town/ Village/ Hamlet	S/NRHP Status 2016	Unique Site No.	2016 Comment
1		12182 Markhams Road	Cattaraugus	Dayton	NRE	00906.000086	
3 <sup>4</sup>	Cottage Cemetery	Cottage Road, north side, west of Edwards Corners Road	Cattaraugus	Dayton	NRE	00906.000089	
4	Residential, c.1860	12654 Cottage Road	Cattaraugus	Dayton	NRE	00906.000090	
5	Residential, c.1930	27 Cherry Street	Cattaraugus	Dayton	NRE	00906.000091	
6	Factory Building	East Railroad Avenue, at south end	Cattaraugus	South Dayton (V)	NRE	00954.000048	
7	Residential, c.1870	73 East Railroad Avenue	Cattaraugus	South Dayton (V)	NRE	00954.000049	
8	Residential, c.1860	62 Main Street	Cattaraugus	South Dayton (V)	NRE	00954.000050	
9	Residential, c.1890	203 Maple Street	Cattaraugus	South Dayton (V)	NRE	00954.000051	
10	Residential, c.1910	212 /214 Maple Street	Cattaraugus	South Dayton (V)	NRE	00954.000052	
11	Harry Austin Milling Co., 1883	Mill Street, between tracks, east side, north of Pine Street	Cattaraugus	South Dayton (V)	NRE	00954.000053	
12	Residential, c.1860	227 Oak Street	Cattaraugus	South Dayton (V)	NRE	00954.000054	
13	Sears Farmhouse & Complex, c.1920	8143 Oaks Road	Cattaraugus	South Dayton (V)	NRE	00954.000055	

<sup>3</sup> **Key for Table 2.1.** USN=NYSOPRHP Unique Site Number; S/NRHP= State/National Registers of Historic Places; and Address: n/a = No locational information available for property in CRIS. Note, line items in bold and identified by an asterisk indicate properties in the viewshed of the project transmission line.

<sup>4</sup> Note, missing map points indicate those resources that are no longer included in the visual APE as a result of either their absence in CRIS or their change in NRHP status.

**Table 2.1. National Register-Eligible Properties in Visual APE (CRIS 2016).<sup>3</sup>**

Map Pt.	Resource Name	Street Address	County	Town/ Village/ Hamlet	S/NRHP Status 2016	Unique Site No.	2016 Comment
14	Corkwell's Garage	107 Pine Street	Cattaraugus	South Dayton (V)	NRE	00954.000007	
15	Residential, c.1910	309 Pine Street	Cattaraugus	South Dayton (V)	NRE	00954.000057	
16	Residential, c.1900	312 Pine Street	Cattaraugus	South Dayton (V)	NRE	00954.000058	
17	Residential, c.1890 (Wilson House)	319 Pine Street	Cattaraugus	South Dayton (V)	NRE	00954.000060	
18	Commercial, c.1920	413 Pine Street	Cattaraugus	South Dayton	NRE	00954.000061	
19	Perrysburg Cemetery	NY 39, west of West Perrysburg Road	Cattaraugus	Perrysburg	NRE	00926.000040	
20	Residential, c.1860	12316 NY 39	Cattaraugus	Perrysburg	NRE	00926.000041	
21	Rugg-town West Perrysburg Cemetery	West Perrysburg Road, west side, north of NY 39	Cattaraugus	Perrysburg (West Perrysburg [H])	NRE	00926.000042	
22	Farm Complex, 1939	10929 West Perrysburg Road	Cattaraugus	Perrysburg (West Perrysburg [H])	NRE	00926.000043	
23	Weaver Cemetery	Center Road, west side, north of Weaver Road	Chautauqua	Arkwright	NRE	00926.000044	
24	Residential, 1847	8129 Griswold Road	Chautauqua	Arkwright	NRE	01301.000022	
25	Rose Farm, c.1870	1936 Ruttenbur Road	Chautauqua	Arkwright	NRE	01301.000023	
26	Residential, c.1915	2667 NY 83	Chautauqua	Arkwright (Arkwright [H])	NRE	01301.000024	
27	Farmstead, c.1850 (Wooley Farm Complex)	8903 Farrington Hollow Road	Chautauqua	Arkwright (Blacks Corners [H])	NRE	01301.000033	Resource type is "Building"; in CRIS as "Archaeology" resource
28	Arkwright Summit Cemetery	Farrington Hollow Road, east side, south of NY 83	Chautauqua	Arkwright (Blacks Corners [H])	NRE	01301.000034	Resource type is "Building"; in CRIS as "Archaeology" resource

**Table 2.1. National Register-Eligible Properties in Visual APE (CRIS 2016).<sup>3</sup>**

Map Pt.	Resource Name	Street Address	County	Town/ Village/ Hamlet	S/NRHP Status 2016	Unique Site No.	2016 Comment
29	Farm Complex, c.1870 Barns / Pre-Civil War House (Maple-Camp Farm / Black Farm)	2083 NY 83	Chautauqua	Arkwright (Blacks Corners [H])	NRE	01301.000027	
30	Residential, c.1850	10917 Alleghany Road	Chautauqua	Hanover	NRE	01314.000060	
<b>*31</b>	<b>Residential, c.1895</b>	<b>12168 Alleghany Road</b>	<b>Chautauqua</b>	<b>Hanover</b>	NRE	01314.000061	
32	Evergreen Cemetery	Angell Street, south side, east of Denison Road	Chautauqua	Hanover	NRE	01314.000062	
33	Forestville Depot	Center Street, NE corner Erie Street	Chautauqua	Hanover	NRE	01314.000063	
<b>*34</b>	<b>Christy Road Cemetery</b>	<b>Christy Road, north side, east of Alleghany Road</b>	<b>Chautauqua</b>	<b>Hanover</b>	NRE	01314.000064	
35	Residential, c.1860	Hanover Road, West side, south of Hopper Road	Chautauqua	Hanover	NRE	01314.000065	
36	Livermore Homestead- Farm Complex, c.1840	10079 Hanover Road	Chautauqua	Hanover	NRE	01314.000066	
37	Swift Cemetery	Hurlburt Road	Chautauqua	Hanover	NRE	01314.000092	
38	Residential, c.1850	Hurlburt Road, south side, east of Prospect Road	Chautauqua	Hanover	NRE	01314.000067	
39	Residential, c.1870	469 NY 39	Chautauqua	Hanover	NRE	01314.000069	
40	Residential, c.1890	503 NY 39	Chautauqua	Hanover	NRE	01314.000070	
41	Residential, c.1860	675 NY 39	Chautauqua	Hanover	NRE	01314.000071	
42	Residential, c.1840	1411 NY 39	Chautauqua	Hanover	NRE	01314.000072	
43		11776 Bennett State Road	Chautauqua	Hanover	NRE	01314.000056	

**Table 2.1. National Register-Eligible Properties in Visual APE (CRIS 2016).<sup>3</sup>**

<b>Map Pt.</b>	<b>Resource Name</b>	<b>Street Address</b>	<b>County</b>	<b>Town/ Village/ Hamlet</b>	<b>S/NRHP Status 2016</b>	<b>Unique Site No.</b>	<b>2016 Comment</b>
44	Forestville Pioneer Cemetery	Bennett State Road, south of 11051	Chautauqua	Hanover	NRE	01314.000090	
45	Residential, c.1870	11103 Bennett State Road	Chautauqua	Hanover	NRE	01314.000074	
<b>*46</b>	<b>Mt. Carmel Cemetery, 1926</b>	<b>Old Main Street</b>	<b>Chautauqua</b>	<b>Hanover</b>	NRE	01314.000075	
<b>*47</b>	<b>Glenwood Cemetery, c.1810</b>	<b>Old Main Street</b>	<b>Chautauqua</b>	<b>Hanover</b>	NRE	01314.000076	
<b>*48</b>	<b>Residential, c.1910</b>	<b>11935 Old Main Street</b>	<b>Chautauqua</b>	<b>Hanover</b>	NRE	01314.000077	
49	Forestville Cemetery (Prospect Cemetery)	Prospect Street, east side, south of Forestville Village	Chautauqua	Hanover	NRE	01314.000089	
50	Doty Cemetery	Stebbins Road, South side, west of Old Forestville Road	Chautauqua	Hanover	NRE	01314.000079	
51	Residential, c.1810	11037 Alleghany Road	Chautauqua	Hanover (Balltown [H])	NRE	01314.000080	
52	Balltown Cemetery	Mackinaw Road, north side at Alleghany Road	Chautauqua	Hanover (Balltown [H])	NRE	01314.000081	
53	Residential, c.1915	12010 Angell Road	Chautauqua	Hanover (Hanover Center [H])	NRE	01314.000082	
54	Residential, c.1905	12021 Angell Road	Chautauqua	Hanover (Hanover Center [H])	NRE	01314.000083	
55	Farmstead, c.1890	967 Hanover Road	Chautauqua	Hanover (Hanover Center [H])	NRE	01314.000084	
56	Residential, c.1920	11991 Hanover Road	Chautauqua	Hanover (Hanover Center [H])	NRE	01314.000085	
57	Nashville Cemetery	Alleghany Road	Chautauqua	Hanover (Nashville [H])	NRE	01314.000086	
58	Church, c.1850	NY 39, south side, west of Alleghany Road	Chautauqua	Hanover (Nashville [H])	NRE	01314.000087	

**Table 2.1. National Register-Eligible Properties in Visual APE (CRIS 2016).<sup>3</sup>**

Map Pt.	Resource Name	Street Address	County	Town/ Village/ Hamlet	S/NRHP Status 2016	Unique Site No.	2016 Comment
59	Smith's Mill Cemetery	Hanover Road, West side at York Road	Chautauqua	Hanover (Smith Mill [H])	NRE	01314.000088	
61	Residential, c.1860	13 Cedar Street	Chautauqua	Hanover (Forestville [V])	NRE	01352.000098	
63	Residential, c.1870	28 Center Street	Chautauqua	Hanover (Forestville [V])	NRE	01352.000100	
64	Commercial, c.1870	11-15 Main Street	Chautauqua	Hanover (Forestville [V])	NRE	01352.000047	
65	Residential, c.1830 (Cyrus D. Angell House)	26 Main Street	Chautauqua	Hanover (Forestville [V])	NRE	01352.000103	
66	Commercial, c.1870	27 Main Street	Chautauqua	Hanover (Forestville [V])	NRE	01352.000105	
67	Residential, c.1860 (former church)	32 Main Street	Chautauqua	Hanover (Forestville [V])	NRE	01352.000058	
68	Residential, c.1812	43 Main Street	Chautauqua	Hanover (Forestville [V])	NRE	01352.000065	
69	Commercial, c.1860	2 Pearl Street	Chautauqua	Hanover (Forestville [V])	NRE	01352.000101	
70	Residential, c.1830	9 Water Street	Chautauqua	Hanover (Forestville [V])	NRE	01352.000102	
71	Clark Mansion on Lighthouse Point, c.1900	Beachview Avenue, facing the lake	Chautauqua	Hanover (Silver Creek [V])	NRE	01346.000200	
72	Residential, c.1930	10 Beachview Avenue	Chautauqua	Hanover (Silver Creek [V])	NRE	01346.000201	
73	Residential, c.1830	130 Central Avenue	Chautauqua	Hanover (Silver Creek [V])	NRE	01346.000008	
74	Residential, c.1870	147 Central Avenue	Chautauqua	Hanover (Silver Creek [V])	NRE	01346.000202	
75	Structure 414 (Residence Tew- Babcock-Livermore House	151 Central Avenue	Chautauqua	Hanover (Silver Creek [V])	NRE	01346.000129	

**Table 2.1. National Register-Eligible Properties in Visual APE (CRIS 2016).<sup>3</sup>**

<b>Map Pt.</b>	<b>Resource Name</b>	<b>Street Address</b>	<b>County</b>	<b>Town/ Village/ Hamlet</b>	<b>S/NRHP Status 2016</b>	<b>Unique Site No.</b>	<b>2016 Comment</b>
76	Our Lady of Mt. Carmel	165 Central Avenue	Chautauqua	Hanover (Silver Creek [V])	NRE	01346.000006	
77	Residential, c.1915	338 Central Avenue	Chautauqua	Hanover (Silver Creek [V])	NRE	01346.000037	
78	Residential, c.1915	350 Central Avenue	Chautauqua	Hanover (Silver Creek [V])	NRE	01346.000043	
79	Residential, c.1870	5 Christy Street	Chautauqua	Hanover (Silver Creek [V])	NRE	01346.000202	
80	Residential, c.1910	9 Christy Street	Chautauqua	Hanover (Silver Creek [V])	NRE	01346.000204	
81	Residential, c.1915	4 Dana Drive	Chautauqua	Hanover (Silver Creek [V])	NRE	01346.000205	
82	Farmstead	12370 Hanover Road	Chautauqua	Hanover (Silver Creek [V])	NRE	01346.000206	
83	Residential, c.1915	16 Hanover Road	Chautauqua	Hanover (Silver Creek [V])	NRE	01346.000207	
90	Residential, c.1890	6/8 Lake Avenue	Chautauqua	Hanover (Silver Creek [V])	NRE	01346.000208	
91	St. Alban's Church	38 Lake Avenue	Chautauqua	Hanover (Silver Creek [V])	NRE	01346.000158	
92	Residential, c.1870	18 Oak St	Chautauqua	Hanover (Silver Creek [V])	NRE	01346.000209	
93	Residential, c.1860	30 Oak St	Chautauqua	Hanover (Silver Creek [V])	NRE	01346.000210	
94	Residential, c.1915	117 Old Main St	Chautauqua	Hanover (Silver Creek [V])	NRE	01346.000211	
95	Residential, c.1915	151 Old Main Street	Chautauqua	Hanover (Silver Creek [V])	NRE	01346.000212	
96	Residential, 1850	155 Old Main Street	Chautauqua	Hanover (Silver Creek [V])	NRE	01346.000227	
97	Residential, c.1910	1 Oliver Place	Chautauqua	Hanover (Silver Creek [V])	NRE	01346.000213	

**Table 2.1. National Register-Eligible Properties in Visual APE (CRIS 2016).<sup>3</sup>**

<b>Map Pt.</b>	<b>Resource Name</b>	<b>Street Address</b>	<b>County</b>	<b>Town/ Village/ Hamlet</b>	<b>S/NRHP Status 2016</b>	<b>Unique Site No.</b>	<b>2016 Comment</b>
98	Residential, c.1915	5 Oliver Place	Chautauqua	Hanover (Silver Creek [V])	NRE	01346.000214	
99	Residential, 1914 (Swift House)	6 Parkway Street	Chautauqua	Hanover (Silver Creek [V])	NRE	01346.000215	
100	Residential, c.1930	9 Parkway Street	Chautauqua	Hanover (Silver Creek [V])	NRE	01346.000216	
101	Residential, c.1900	17 Parkway Street	Chautauqua	Hanover (Silver Creek [V])	NRE	01346.000217	
102	Erbin House, c.1905 – 27	27 Parkway Street	Chautauqua	Hanover (Silver Creek [V])	NRE	01346.000005	
103	Trinity Lutheran Church, c.1880	Porter Avenue, northeast side at Adams Porter Avenue	Chautauqua	Hanover (Silver Creek [V])	NRE	01346.000218	
104	Church, c.1860	Porter Avenue, south of 21	Chautauqua	Hanover (Silver Creek [V])	NRE	01346.000219	
105	Residential, c.1920	21 Porter Avenue	Chautauqua	Hanover (Silver Creek [V])	NRE	01346.000220	
106	Residential, c.1915	45 Robinson Street	Chautauqua	Hanover (Silver Creek [V])	NRE	01346.000221	
107	Residential, c.1860	16 Rumsey Street	Chautauqua	Hanover (Silver Creek [V])	NRE	01346.000222	
108	Residential, c.1920	28 Ward Place	Chautauqua	Hanover (Silver Creek [V])	NRE	01346.000223	
109	Residential, c.1860	1873 East Middle Road	Chautauqua	Sheridan	NRE	01323.000050	
110	Residential, c.1830	1980 King Road	Chautauqua	Sheridan	NRE	01323.000051	
111	Residential, c.1915	2023 Stebbins Road	Chautauqua	Sheridan	NRE	01323.000052	
112	Residential, c.1860	2248 Stebbins Road	Chautauqua	Sheridan	NRE	01323.000053	

**Table 2.1. National Register-Eligible Properties in Visual APE (CRIS 2016).<sup>3</sup>**

Map Pt.	Resource Name	Street Address	County	Town/ Village/ Hamlet	S/NRHP Status 2016	Unique Site No.	2016 Comment
113	Wheeler Cemetery, c.1848	Hanover Road, East side	Chautauqua	Villanova	NRE	01326.000065	
115	Farm Complex, c.1870	NY 83, South side, west of Hamlet	Chautauqua	Villanova	NRE	01326.000066	
116	Farm Complex, c.1920	8025 NY 83	Chautauqua	Villanova	NRE	01326.000067	
118	Farm Complex, c.1860	8562 NY 83	Chautauqua	Villanova	NRE	01326.000068	
119	Farm Complex, c.1830	307 Philips Road	Chautauqua	Villanova	NRE	01326.000070	
120	Pope Hill Cemetery	Pope Hill Road, south side, east of Round Top Road	Chautauqua	Villanova	NRE	01326.000071	
121	Forestville Wesleyan Church Complex, c.1858, includes Cemetery & School	9495 Prospect Road	Chautauqua	Villanova	NRE	01326.000069	
122	Farm Complex	641 South Dayton Road	Chautauqua	Villanova	NRE	01326.000072	
123	Residential, c.1845	691 South Dayton Road	Chautauqua	Villanova	NRE	01326.000073	
124	Farm Complex, c.1890 (Dye Homestead)	558 South Dayton-Hamlet Road	Chautauqua	Villanova	NRE	01326.000016	
125	Hamlet Cemetery	NY 83, south side, west of Hamlet	Chautauqua	Villanova		01326.000074	
126	Residential, c.1840	1141 NY 83	Chautauqua	Villanova	NRE	01326.000041	
127	Villanova Grange Hall	1150 NY 83, west side	Chautauqua	Villanova	NRE	01326.000075	
128	Hamlet School District No. 2	8520 School Street	Chautauqua	Villanova	NRE	01326.000078	
129	Hamlet United Methodist Church, 1812	1119 South Dayton Road	Chautauqua	Villanova	NRE	01326.000038	



**Table 2.1. National Register-Eligible Properties in Visual APE (CRIS 2016).<sup>3</sup>**

Map Pt.	Resource Name	Street Address	County	Town/ Village/ Hamlet	S/NRHP Status 2016	Unique Site No.	2016 Comment
130	Residential, c.1870	1129 South Dayton Road	Chautauqua	Villanova	NRE	01326.000039	
131	Commercial, c.1905 (I.O.O.F.)	1112 South Dayton Road, NY 83	Chautauqua	Villanova	NRE	01326.000040	
132	Villanova Cemetery	Cemetery Road, east side.	Chautauqua	Villanova	NRE	01326.000076	
SD2	Wilson Hale & Co.	1 Park Street	Cattaraugus	Dayton (South Dayton [V])	NRE	00954.000035	
SD3	Wilson Hale & Co./ Post Office	5 Park Street	Cattaraugus	Dayton (South Dayton [V])	NRE	00954.000036	
SD4	Cattaraugus County Bank	7 Park Street	Cattaraugus	Dayton (South Dayton [V])	NRE	00954.000037	
SD5	Gypsy Tea Room	9 Park Street	Cattaraugus	Dayton (South Dayton [V])	NRE	00954.000038	
SD6	Commercial, c.1890	11 Park Street	Cattaraugus	Dayton (South Dayton [V])	NRE	00954.000039	
SD7	Commercial, c.1910	13 Park Street	Cattaraugus	Dayton (South Dayton [V])	NRE	00954.000040	
SD8	Commercial, c.1900	15 Park Street	Cattaraugus	Dayton (South Dayton [V])	NRE	00954.000041	
SD1 1	The Valley House/ South Dayton Hotel 1877	203 Pine Street	Cattaraugus	Dayton (South Dayton [V])	NRE	00954.000044	
SD1 2	Commercial, c.1930	205 Pine Street	Cattaraugus	Dayton (South Dayton [V])	NRE	00954.000045	
SD1 3	Commercial, c.1900	207 Pine Street	Cattaraugus	Dayton (South Dayton [V])	NRE	00954.000046	
SD1 4	South Dayton Depot	Railroad Street	Cattaraugus	Dayton (South Dayton [V])	NRE	00954.000047	
133	Residential, c.1865-90	1 Lodi Street NY 39	Chautauqua	Hanover (Forestville [V])	NRE	01352.000112	

**Table 2.1. National Register-Eligible Properties in Visual APE (CRIS 2016).<sup>3</sup>**

<b>Map Pt.</b>	<b>Resource Name</b>	<b>Street Address</b>	<b>County</b>	<b>Town/ Village/ Hamlet</b>	<b>S/NRHP Status 2016</b>	<b>Unique Site No.</b>	<b>2016 Comment</b>
134	Commercial, c.1870	25 Main Street	Chautauqua	Hanover (Forestville [V])	NRE	01352.000106	
135	Forestville ME Church, 1861	3 Park Street	Chautauqua	Hanover (Forestville [V])	NRE	01352.000104	
136	Residential, c.1890	4 Pearl Street	Chautauqua	Hanover (Forestville [V])	NRE	01352.000072	
137	Grange Hall No. 829	12729 Cottage Road (CR 2)	Cattaraugus	Dayton (Cottage [h])	NRE	00906.000093	
138	Cottage United Methodist Church	12737 Cottage Road (CR 2)	Cattaraugus	Dayton (Cottage [h])	NRE	00906.000094	
139	First Hose House	2 Lodi Street / NY 39	Chautauqua	Hanover (Forestville [V])	NRE	01352.000010	
140	Commercial	10 Main Street / NY 39	Chautauqua	Hanover (Forestville [V])	NRE	01352.000046	
141	Commercial	14 Main Street / NY 39	Chautauqua	Hanover (Forestville [V])	NRE	01352.000048	
142	St. Peter's Episcopal Church	Park Street	Chautauqua	Hanover (Forestville [V])	NRE	01352.000002	
143	Residence, Italianate	7 Third Street	Chautauqua	Hanover (Forestville [V])	NRE	01352.000116	
<b>*SC 2</b>	<b>Commercial Building, c.1890</b>	<b>7 Park Place</b>	<b>Chautauqua</b>	<b>Silver Creek (V)</b>	NRE	01346.000238	
<b>*SC 3</b>	<b>Commercial Building, c.1890</b>	<b>9 Park Place</b>	<b>Chautauqua</b>	<b>Silver Creek (V)</b>	NRE	01346.000239	
<b>*SC 4</b>	<b>Commercial Building, c.1920</b>	<b>17 Park Place</b>	<b>Chautauqua</b>	<b>Silver Creek (V)</b>	NRE	01346.000240	
<b>*SC 5</b>	<b>The Geitner Theatre, 1921</b>	<b>19 Park Place</b>	<b>Chautauqua</b>	<b>Silver Creek (V)</b>	NRE	01346.000237	
<b>*SC 6</b>	<b>Commercial Building, c.1910</b>	<b>25 Park Place</b>	<b>Chautauqua</b>	<b>Silver Creek (V)</b>	NRE	01346.000241	
F1	Sherman House, c.1860	1 Center St	Chautauqua	Hanover (Forestville [V])	NRE	01352.000114	

**Table 2.1. National Register-Eligible Properties in Visual APE (CRIS 2016).<sup>3</sup>**

<b>Map Pt.</b>	<b>Resource Name</b>	<b>Street Address</b>	<b>County</b>	<b>Town/ Village/ Hamlet</b>	<b>S/NRHP Status 2016</b>	<b>Unique Site No.</b>	<b>2016 Comment</b>
F2	Residence, c.1840	2 Center St	Chautauqua	Hanover (Forestville [V])	NRE	01352.000117	
F3	Residence, c.1840	4 Center St	Chautauqua	Hanover (Forestville [V])	NRE	01352.000118	
F4	Residence, c.1900	5 Center St	Chautauqua	Hanover (Forestville [V])	NRE	01352.000119	
F5	Residence, c.1850	6 Center St	Chautauqua	Hanover (Forestville [V])	NRE	01352.000094	
F6	Residence, c.1850	7 Center St	Chautauqua	Hanover (Forestville [V])	NRE	01352.000120	
F7	Residence, c.1840	8 Center St	Chautauqua	Hanover (Forestville [V])	NRE	01352.000121	
F8	Residence, c.1900	9 Center St	Chautauqua	Hanover (Forestville [V])	NRE	01352.000122	
F9	Levi J. Pierce Homestead, c.1840	10 Center St	Chautauqua	Hanover (Forestville [V])	NRE	01352.000123	In CRIS also as USN 01352.000003
F10	St. Rose of Lima Church	11 Center St	Chautauqua	Hanover (Forestville [V])	NRE	01352.000124	
F11	Residence, c.1840	12 Center St	Chautauqua	Hanover (Forestville [V])	NRE	01352.000125	
F12	Residence, c.1905	16 Center St	Chautauqua	Hanover (Forestville [V])	NRE	01352.000126	
F13	Residence, c.1890	18 Center St	Chautauqua	Hanover (Forestville [V])	NRE	01352.000099	
F14	Residence, c.1868- 1890	21 Pearl St	Chautauqua	Hanover (Forestville [V])	NRE	01352.000113	

**Table 2.2. Bridges previously documented in 2008 without NRHP determinations in CRIS.**

<b>Map Pt.</b>	<b>Resource Name</b>	<b>Street Address</b>	<b>County</b>	<b>Town/ Village/ Hamlet</b>
2	Erie Railroad Bridge over Cattaraugus Creek	Oaks Road, over Conewango Creek	Cattaraugus	Dayton
60	Bridge over Walnut Creek	Bradigan Road, south of Water Street	Chautauqua	Hanover (Forestville [V])
85	Skew Arch Bridge	Jackson Street, over Jackson Street	Chautauqua	Hanover (Silver Creek [V])
86	Nickel Plate Bridge over Jackson Street	Jackson Street, over Jackson Street	Chautauqua	Hanover (Silver Creek [V])
*87	Hanover Bridge	Jackson Street, between Lake at Jackson Street	Chautauqua	Hanover (Silver Creek [V])
88	Stone Bridge	Lake Avenue, over Lake Avenue	Chautauqua	Hanover (Silver Creek [V])
89	Nickel Plate Bridge over Lake Avenue	Lake Avenue, over Lake Avenue	Chautauqua	Hanover (Silver Creek [V])

### **2.3 2016 ADDENDUM INVESTIGATION**

The 2016 Project visual APE was compared with the 2008, 2013, and 2015 visual APEs to determine if any locations necessitated additional survey for historic architectural resources. Differing turbine heights and layouts are accounted for in the current visual APE. Changes in the viewshed were minimal; the small areas where turbines will be visible as a result of the current project layout and that were outside of the 2008, 2013, and 2015 visual APEs were addressed during previous Project revisions and no additional field survey was conducted. Panamerican utilized spatial data from the previous surveys to identify NRE properties in the current project and assess visual impacts of the Project (see Section 3.0).

### **2.4 2016 ADDENDUM ARCHITECTURAL RESOURCES SURVEY RESULTS**

A total of 159 of the previously-identified historic architectural resources are located within the five-mile visual APE for the Ball Hill Wind Project. No new resources were identified in the 2016 addendum as National Register Eligible. Five properties visible in the 2015 configuration of the Project are not visible in its current layout. There are no National Register-Listed properties in the visual APE. As in the earlier versions of the Project, the types of NRE historic resources include farm complexes, individual residences, commercial buildings, and cemeteries. Two NRE historic districts are partially within the visual APE: the Center Street Historic District, Forestville (USN 01352.000127); and the Silver Creek Historic District (USN 01346.000242).

### 3.0 Visual Impacts to Architectural Resources

The study area is a five-mile radius around the proposed project turbines and a three-mile area around its transmission line. The project is located in Chautauqua County. The towns included within the Project's five-mile visual APE primarily include portions of Dayton, Perrysburg, and a small section of Leon in Cattaraugus County, and Arkwright, Charlotte, Cherry Creek, Hanover, Villenova, and Sheridan in Chautauqua County (see Section 2.0). The total study area for the current project layout is 170.1 sq miles, of which turbines are visible from 129.7 sq miles (76.2 percent of the study area).

No structures or buildings will be demolished or physically altered in connection with the construction of the project. Access to the surrounding historical, recreational, and commercial land uses will not be impeded by the project.

The definition of visual impacts has historically been conceptually problematic. The New York State Department of Environmental Conservation (NYSDEC) defines *Visual Impact* as:

when the mitigating effects of perspective do not reduce the visibility of an object to insignificant levels. Beauty plays no role in this concept. A visual impact may also be considered in the context of contrast. For instance, all other things being equal, a blue object seen against an orange background has greater visual impact than a blue object seen against the same colored blue background. Again, beauty plays no role in this concept [NYSDEC 2000:10-11].

However, the difficulty lies in defining insignificant levels or in determining the levels of contrast that have an effect. Further, at what level of contrast does the effect become adverse? In the overall assessment, the multivariate natures of the NRL and NRE properties in the viewshed can be considered to a limited degree. In many instances, the setting of the property contributes to its eligibility while in other cases, it is less so or not at all important. In this analysis, the level of effect (visibility and contrast) is measured on the dataset as a whole—the NRL and NRE (and potentially eligible) properties within the viewshed (Table 3.1 [end]).

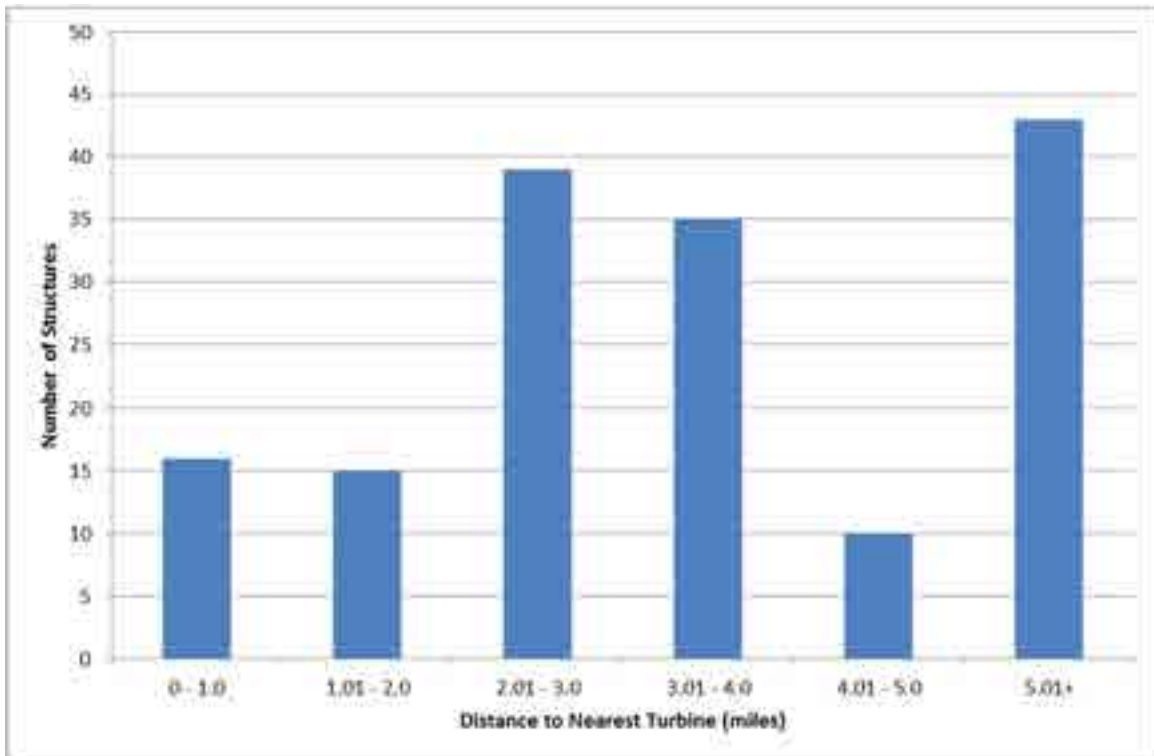
Based on the provided information, it is apparent that the project will change the visible landscape of the region and create a distinct visual setting. The turbines will be unique and prominent visible features on the landscape in many locations where there are not or ever have been other types of vertical, manmade features. The Federal Aviation Administration (FAA)-required lighting on some of the turbines will also be visible from many locations. While there may be some screening afforded by mature trees, shrubbery and other plantings during the growing season, the prominent features of the turbines will be visible during periods of dormancy.

Another method for illustrating the degree of visual impact is based on categories suggested by the U.S. Forest Service. In this framework, the project viewshed or visual APE is divided into zones of relative visibility based on geographical distance to the nearest turbine: Foreground (0-0.5 mile); Middle ground (0.5-3.0 miles); and Background (3.0 miles to horizon). Of the 161 historic properties identified in the visual APE, five are situated such that proposed turbines are in the visual foreground (property nos./map points 41, 114, 115, 121 and 125), 66 are at locations where turbines would be in the visual middle ground, and 90 are situated such that proposed turbines are in the visual background (more than 3.0 miles from the structures) (Table 3.1; see Appendix A, the Historical Architectural Investigation Results map).

Within or immediately adjacent to the proposed wind-project study area there are electrical distribution lines, telephone poles, water towers, and other vertical, modern visual intrusions. Most of these modern intrusions, to a certain extent, may have compromised some historical settings. Existing modern visual intrusions are relatively small compared to the 150-meter-tall wind turbines.

The proposed wind-energy project will be prominently sited in the southern portion of Hanover and the northern half of Villenova. The most significant visual impacts will be on open farming land (rural

agricultural landscapes), and any of the following that have open/clear views of the wind farm: historic properties on ridges, cemeteries, historic properties within Hanover and Villenova, historic properties along major thoroughfares in the area, and at historic crossroads communities. The impacts to these resources vary with the surrounding topography, distance from the turbines, existing landscaping and vegetation, and surrounding land uses.



**Figure 3.1. Frequency of NRE structures relative to distance to the nearest proposed wind turbine.**

Below is a summary of visual impact findings for the previous historic architectural surveys completed for the proposed Project:

- 1) The 2008 investigation identified 132 individual NRE resources and one NRE historic district (Ewing Park South Dayton Historic District [13 contributing and 1 non-contributing properties]) in the project visual APE (see Longiaru et al. 2008).
- 2) The 2013 addendum survey identified an additional eight recommended individual NRE properties, one recommended NRE historic district (Center Street Historic District [13 contributing resources and one non-contributing resource]), and the NRE Silver Creek Historic District within the topographic visual APE (see Smith et al. 2013).
- 3) The 2015 addendum survey identified a total of 163 individual NRE architectural resources and the two historic districts—the Center Street and Silver Creek Historic Districts—in the visual APE. The number of turbines that can be seen from properties documented within the five-mile APE (e.g., NRL, NRE, and recommended NRE properties) spanned the full range of values possible values. The mean number of turbines visible from NRE properties, however, was 19; the average distance from an NRE property to the nearest turbine was 3.7 miles (Longiaru et al. 2015).

## **2016 ADDENDUM: VISUAL IMPACTS SUMMARY**

No NRL properties are located in the visual APE. Five properties that were in the 2015 visual APE are in areas from which no turbines are visible in the current Project layout (property nos. 22, 106, 137, SC5, and SC6) (Table 3.1<sup>1</sup>). There are 159 individual NRE architectural resources and two NRE historic districts in the visual APE. The number of turbines that can be seen from all properties documented within the five-mile APE (e.g., NRL, NRE and recommended NRE properties) spans the full range of values (see Table 3.1).

The mean number of turbines that are visible from an NRE property, however, is 15; the average distance from an NRE property to the nearest turbine is 3.6 miles (5.8 km). Due to the smaller number of turbines in the current Project layout relative to its 2015 configuration (29 vs. 39 turbines), its visual impact on the landscape is somewhat less than the version addressed in the 2015 addendum.

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<sup>1</sup> To facilitate comparison with the 2015 addendum, the five previously-identified properties not in the viewshed for the project's current layout have been included in Table 3.1, which also retains the numbering system employed for the previous project architectural investigations.

**Table 3.1. Properties within the visual APE of the Ball Hill Wind Farm and visual impacts of project turbines.**

Property Number	Property Name	Street Address	County	Town	Hamlet (h) or Village (V)	Nearest Turbine	Distance to nearest turbine (miles)	Number of turbines visible
1		12182 Markhams Road	Cattaraugus	Dayton		21	4.6	19
3 <sup>2</sup>	Cottage Cemetery	Cottage Road	Cattaraugus	Dayton	Cottage (h)	36	3.8	19
4		12654 Cottage Road	Cattaraugus	Dayton	Cottage (h)	36	3.5	13
5		27 Cherry Street	Cattaraugus	Dayton	South Dayton (V)	21	3.3	4
6	Factory Building	East Railroad Avenue	Cattaraugus	Dayton	South Dayton (V)	21	3.6	22
7		73 East Railroad Avenue	Cattaraugus	Dayton	South Dayton (V)	21	3.6	17
8		62 Main Street	Cattaraugus	Dayton	South Dayton (V)	21	3.2	20
9		203 Maple Street	Cattaraugus	Dayton	South Dayton (V)	21	3.3	9
10		212 or 214 Maple Street	Cattaraugus	Dayton	South Dayton (V)	21	3.2	4
11	Harry Austin Milling Co.	Mill Street	Cattaraugus	Dayton	South Dayton (V)	21	3.6	16
12		227 Oak Street	Cattaraugus	Dayton	South Dayton (V)	21	3.3	19
13	Sears	8143 Oaks Road	Cattaraugus	Dayton	South Dayton (V)	21	3.6	29
14		107 Pine Street	Cattaraugus	Dayton	South Dayton (V)	21	3.6	17
15		309 Pine Street	Cattaraugus	Dayton	South Dayton (V)	21	3.4	17
16		312 Pine Street	Cattaraugus	Dayton	South Dayton (V)	21	3.4	14
17		319 Pine Street	Cattaraugus	Dayton	South Dayton (V)	21	3.4	16
18		413 Pine Street	Cattaraugus	Dayton	South Dayton (V)	21	3.3	14
19	Perrysburg Cemetery	NY 39	Cattaraugus	Perrysburg		36	2.6	9
20		12316 NY 39	Cattaraugus	Perrysburg		36	4.4	5
21	Rugg-town West Perrysburg Cemetery	West Perrysburg Road	Cattaraugus	Perrysburg	West Perrysburg (h)	36	3.5	28
22		10929 West Perrysburg Road	Cattaraugus	Perrysburg	West Perrysburg (h)	36	3.5	0

<sup>2</sup> Note, missing map points indicate those resources are no longer included in the Visual APE as a result of either their absence in CRIS or their NRHP status has changed.



Table 3.1 (cont'd)

Property Number	Property Name	Street Address	County	Town	Hamlet (h) or Village (V)	Nearest Turbine	Distance to nearest turbine (miles)	Number of turbines visible
23	Weaver Cemetery	Center Road	Chautauqua	Arkwright		2	3.5	29
24		8129 Griswold Road	Chautauqua	Arkwright		39	4.8	5
25	Rose Farm	1936 Rutenbur Road	Chautauqua	Arkwright		3	2.9	27
26		2667 NY 83	Chautauqua	Arkwright	Arkwright (h)	2	3.3	13
27	Black Farm Complex	8903 Farrington Hollow Road	Chautauqua	Arkwright	Blacks Corners (h)	39	2.0	28
28	Arkwright Summit Cemetery	Farrington Hollow Road	Chautauqua	Arkwright	Blacks Corners (h)	39	1.9	27
29	Mapl-Camp Farm/Black Farm	2083 NY 83	Chautauqua	Arkwright	Blacks Corners (h)	39	1.8	27
30		10917 Alleghany Road	Chautauqua	Hanover		37	2.6	8
31		12168 Alleghany	Chautauqua	Hanover		37	5.4	20
32	Evergreen Cemetery	Angell Street	Chautauqua	Hanover		35	4.6	26
33	Forestville Depot	Center Street	Chautauqua	Hanover		35	2.6	9
34	Christy Road Cemetery	Christy Road	Chautauqua	Hanover		37	5.2	0-29
35		Hanover Road	Chautauqua	Hanover		37	1.1	18
36	Livemore Family	10079 Hanover Road	Chautauqua	Hanover		36	.6	22
37	Hurlburt Road Cemetery	Hurlburt Road	Chautauqua	Hanover		30	0.9	6
38		Hurlburt Road	Chautauqua	Hanover		30	0.9	9
39		469 NY 39	Chautauqua	Hanover		36	0.8	22
40		503 NY 39	Chautauqua	Hanover		37	0.7	17
41		675 NY 39	Chautauqua	Hanover		37	0.3	19
42		1411 NY 39	Chautauqua	Hanover		35	1.4	18
43		Old Forestville Road	Chautauqua	Hanover		35	4.7	27
44	Pioneer Cemetery	11049? Old Forestville Road	Chautauqua	Hanover		35	2.8	14
45		11103 Old Forestville Road	Chautauqua	Hanover		35	2.9	15
46	Mt. Carmel Cemetery	Old Main Street	Chautauqua	Hanover		35	5.6	0-29

Table 3.1 (cont'd)

Property Number	Property Name	Street Address	County	Town	Hamlet (h) or Village (V)	Nearest Turbine	Distance to nearest turbine (miles)	Number of turbines visible
47	Glenwood Cemetery	Old Main Street	Chautauqua	Hanover		35	5.6	28
48		11935 Old Main Street	Chautauqua	Hanover		35	5.4	28
49	Prospect Hill Cemetery	Prospect Street	Chautauqua	Hanover		35	2.1	12
50	Doty Cemetery	Stebbins Road	Chautauqua	Hanover		35	4.5	26
51	Ball Valley Farms	11037 Allegany Road	Chautauqua	Hanover	Balltown (h)	37	3.1	17
52	Balltown Cemetery	Mackinaw Road	Chautauqua	Hanover	Balltown (h)	37	3.2	9
53		12010 Angell Road	Chautauqua	Hanover	Hanover Center (h)	37	4.9	28
54		12021 Angell Road	Chautauqua	Hanover	Hanover Center (h)	37	5.0	28
55	Golden Harvest	967 Hanover Road	Chautauqua	Hanover	Hanover Center (h)	35	4.7	26
56		11991 Hanover Road	Chautauqua	Hanover	Hanover Center (h)	35	4.8	26
57	Nashville Cemetery	Alleghany Road	Chautauqua	Hanover	Nashville (h)	36	1.4	9
58	Church	NY 39	Chautauqua	Hanover	Nashville (h)	36	1.4	15
59	Smith's Mill Cemetery	Hanover Road	Chautauqua	Hanover	Smith's Mill (h)	37	3.7	11
61		13 Cedar Street	Chautauqua	Hanover	Forestville (V)	35	2.7	11
63		28 Center Street	Chautauqua	Hanover	Forestville (V)	35	2.6	9
64		11-15 Main Street	Chautauqua	Hanover	Forestville (V)	35	2.6	7
65		26 Main Street	Chautauqua	Hanover	Forestville (V)	35	2.6	8
66		27 Main Street	Chautauqua	Hanover	Forestville (V)	35	2.6	9
67	Forestville Free Methodist Church	32 Main Street	Chautauqua	Hanover	Forestville (V)	35	2.8	11
68		43 Main Street	Chautauqua	Hanover	Forestville (V)	35	2.7	11
69		2 Pearl Street	Chautauqua	Hanover	Forestville (V)	35	2.5	5
70		9 Water Street	Chautauqua	Hanover	Forestville (V)	35	2.8	8

**Table 3.1 (cont'd)**

<b>Property Number</b>	<b>Property Name</b>	<b>Street Address</b>	<b>County</b>	<b>Town</b>	<b>Hamlet (h) or Village (V)</b>	<b>Nearest Turbine</b>	<b>Distance to nearest turbine (miles)</b>	<b>Number of turbines visible</b>
71	Clark Mansion on Lighthouse Point	Beachview Avenue	Chautauqua	Hanover	Silver Creek (V)	35	7.2	5
72		10 Beachview Avenue	Chautauqua	Hanover	Silver Creek (V)	35	7.1	3
73		130 Central Avenue	Chautauqua	Hanover	Silver Creek (V)	35	6.9	5
74		147 Central Avenue	Chautauqua	Hanover	Silver Creek (V)	35	6.8	19
75		151 Central Avenue	Chautauqua	Hanover	Silver Creek (V)	35	6.8	28
76	Our Lady of Carmel	165 Central Avenue	Chautauqua	Hanover	Silver Creek (V)	35	6.8	23
77		338 Central Avenue	Chautauqua	Hanover	Silver Creek (V)	35	6.6	28
78		350 Central Avenue	Chautauqua	Hanover	Silver Creek (V)	35	6.6	28
79		5 Christy Street	Chautauqua	Hanover	Silver Creek (V)	35	6.5	28
80		9 Christy Street	Chautauqua	Hanover	Silver Creek (V)	35	6.5	28
81		4 Dana Drive	Chautauqua	Hanover	Silver Creek (V)	35	6.5	13
82		12370 Hanover Road	Chautauqua	Hanover	Silver Creek (V)	35	6.4	28
83		16 Hanover Road	Chautauqua	Hanover	Silver Creek (V)	35	6.8	28
90		6/8 Lake Avenue	Chautauqua	Hanover	Silver Creek (V)	35	6.9	8
91	St. Albans	38 Lake Avenue	Chautauqua	Hanover	Silver Creek (V)	35	6.8	16
92		18 Oak Street	Chautauqua	Hanover	Silver Creek (V)	35	6.7	24
93		30 Oak Street	Chautauqua	Hanover	Silver Creek (V)	35	6.7	28
94		117 Old Main Street	Chautauqua	Hanover	Silver Creek (V)	35	6.3	3
95		151 Old Main Street	Chautauqua	Hanover	Silver Creek (V)	35	6.2	12
96		155 Old Main Street	Chautauqua	Hanover	Silver Creek (V)	35	6.1	28
97		1 Oliver Place	Chautauqua	Hanover	Silver Creek (V)	35	6.6	14
98		5 Oliver Place	Chautauqua	Hanover	Silver Creek (V)	35	6.6	13
99	Swift House	6 Parkway Street	Chautauqua	Hanover	Silver Creek (V)	35	6.7	23
100		9 Parkway Street	Chautauqua	Hanover	Silver Creek (V)	35	6.7	26
101		17 Parkway Street	Chautauqua	Hanover	Silver Creek (V)	35	6.7	25

Table 3.1 (cont'd)

Property Number	Property Name	Street Address	County	Town	Hamlet (h) or Village (V)	Nearest Turbine	Distance to nearest turbine (miles)	Number of turbines visible
102	Erbin House	27 Parkway Street	Chautauqua	Hanover	Silver Creek (V)	35	6.7	23
103	Trinity Lutheran Church	Porter Avenue	Chautauqua	Hanover	Silver Creek (V)	35	6.9	28
104		19? Porter Avenue	Chautauqua	Hanover	Silver Creek (V)	35	6.9	28
105		21 Porter Avenue	Chautauqua	Hanover	Silver Creek (V)	35	6.9	28
106		45 Robinson Street	Chautauqua	Hanover	Silver Creek (V)	35	6.2	0
107		16 Rumsey Street	Chautauqua	Hanover	Silver Creek (V)	35	7.0	14
108		28 Ward Place	Chautauqua	Hanover	Silver Creek (V)	35	6.4	28
109		1873 East Middle Road	Chautauqua	Sheridan		35	6.4	28
110		1980 King Road	Chautauqua	Hanover		35	4.2	25
111		2023 Stebbins Road	Chautauqua	Sheridan		35	5.1	23
112		2248 Stebbins Road	Chautauqua	Sheridan		35	5.2	27
113	Cemetery	Hanover Road	Chautauqua	Villanova		31	1.5	20
114	School No. 10	9129 North Hill Road	Chautauqua	Villanova		9	0.3	21
115		NY 83	Chautauqua	Villanova		3	0.4	2
116		8025 NY 83	Chautauqua	Villanova		3	3.2	24
117		8052 NY 83	Chautauqua	Villanova		21	3.2	24
118		8562 NY 83	Chautauqua	Villanova		21	1.7	22
119		307 Philips Road	Chautauqua	Villanova		21	1.7	22
120	Pope Hill Cemetery	Pope Hill Road	Chautauqua	Villanova		18	1.1	27
121	Forestville Wesleyan Church /School/Ball Hill Cemetery	9495 Prospect Road	Chautauqua	Villanova		16	0.4	24
122		641 South Dayton Road	Chautauqua	Villanova	Balcom Corners (h)	21	1.8	19
123		691 South Dayton Road	Chautauqua	Villanova		3	1.8	20
124	Dye Homestead	558 South Dayton-Hamlet Road	Chautauqua	Villanova	Balcom Corners (h)	21	1.8	20
125	Hamlet Cemetery	NY 83	Chautauqua	Villanova	Hamlet (h)	3	0.4	2

Table 3.1 (cont'd)

Property Number	Property Name	Street Address	County	Town	Hamlet (h) or Village (V)	Nearest Turbine	Distance to nearest turbine (miles)	Number of turbines visible
126		1141 NY 83	Chautauqua	Villanova	Hamlet (h)	3	0.7	13
127	Villanova Grange	NY 83	Chautauqua	Villanova	Hamlet (h)	3	0.6	9
128	Hamlet School District No. 2	School Street	Chautauqua	Villanova	Hamlet (h)	3	0.7	5
129	Hamlet United Methodist Church	1119 South Dayton Road	Chautauqua	Villanova	Hamlet (h)	3	0.7	13
130		1129 South Dayton Road	Chautauqua	Villanova	Hamlet (h)	3	0.7	13
131	IOOF	South Dayton Road	Chautauqua	Villanova	Hamlet (h)	3	0.7	10
132	Villanova Cemetery	Cemetery Road	Chautauqua	Villanova	Wright's Corners (h)	21	1.4	18
SD2	Wilson Hale & Co.	1 Park Street	Cattaraugus	Dayton	South Dayton (V)	21	3.5	16
SD3	Wilson Hale & Co./ Post Office	5 Park Street	Cattaraugus	Dayton	South Dayton (V)	21	3.5	16
SD4	Cattaraugus County Bank	7 Park Street	Cattaraugus	Dayton	South Dayton (V)	21	3.5	16
SD5	Gypsy Tea Room	9 Park Street	Cattaraugus	Dayton	South Dayton (V)	21	3.5	15
SD6	Commercial c.1890	11 Park Street	Cattaraugus	Dayton	South Dayton (V)	21	3.5	15
SD7	Commercial c.1910	13 Park Street	Cattaraugus	Dayton	South Dayton (V)	21	3.5	14
SD8	Commercial c.1900	15 Park Street	Cattaraugus	Dayton	South Dayton (V)	21	3.5	14
SD11	The Valley House/ South Dayton Hotel 1877	203 Pine Street	Cattaraugus	Dayton	South Dayton (V)	21	3.6	17
SD12	Commercial c.1930	205 Pine Street	Cattaraugus	Dayton	South Dayton (V)	21	3.6	17
SD13	Commercial c.1900	207 Pine Street	Cattaraugus	Dayton	South Dayton (V)	21	3.5	17
SD14	South Dayton Depot	Railroad Street	Cattaraugus	Dayton	South Dayton (V)	21	3.6	16
133		1 Lodi Street (NY 39)	Chautauqua	Hanover	Forestville (V)	35	2.5	3
134		25 Main Street	Chautauqua	Hanover	Forestville (V)	35	2.6	9
135	Forestville Methodist Episcopal Church	3 Park Street	Chautauqua	Hanover	Forestville (V)	35	2.6	1
136		4 Pearl Street	Chautauqua	Hanover	Forestville (V)	35	2.5	5

Table 3.1 (cont'd)

Property Number	Property Name	Street Address	County	Town	Hamlet (h) or Village (V)	Nearest Turbine	Distance to nearest turbine (miles)	Number of turbines visible
137	Grange Hall No. 829	12729 Cottage Road (CR 2)	Cattaraugus	Dayton	Cottage (h)	36	3.3	0
138	Cottage United Methodist Church	12737 Cottage Road (CR 2)	Cattaraugus	Dayton	Cottage (h)	36	3.3	4
139	First Hose House	2 Lodi Street (NY 39)	Chautauqua	Hanover	Forestville (V)	35	2.5	3
140		10 Main Street (NY 39)	Chautauqua	Hanover	Forestville (V)	35	2.6	6
141		14 Main Street (NY 39)	Chautauqua	Hanover	Forestville (V)	35	2.6	4
142	St. Peter's Episcopal Church	Park Street	Chautauqua	Hanover	Forestville (V)	35	2.6	3
143		7 Third Street	Chautauqua	Hanover	Forestville (V)	35	2.5	2
	Recommended Center Street Historic District	Center Street	Chautauqua	Hanover	Forestville (V)	35	2.3	0-10
F1		1 Center Street	Chautauqua	Hanover	Forestville (V)	35	2.5	3
F2		2 Center Street	Chautauqua	Hanover	Forestville (V)	35	2.5	4
F3		4 Center Street	Chautauqua	Hanover	Forestville (V)	35	2.5	5
F4		5 Center Street	Chautauqua	Hanover	Forestville (V)	35	2.5	2
F5		6 Center Street	Chautauqua	Hanover	Forestville (V)	35	2.5	6
F6		7 Center Street	Chautauqua	Hanover	Forestville (V)	35	2.5	2
F7		8 Center Street	Chautauqua	Hanover	Forestville (V)	35	2.5	4
F8		9 Center Street	Chautauqua	Hanover	Forestville (V)	35	2.5	2
F9		10 Center Street	Chautauqua	Hanover	Forestville (V)	35	2.6	6
F10	St. Rose of Lima Church	11 Center Street	Chautauqua	Hanover	Forestville (V)	35	2.6	6
F11		12 Center Street	Chautauqua	Hanover	Forestville (V)	35	2.5	5
F12		16 Center Street	Chautauqua	Hanover	Forestville (V)	35	2.6	8
F13		18 Center Street	Chautauqua	Hanover	Forestville (V)	35	2.6	7
F14		18 Pearl Street	Chautauqua	Hanover	Forestville (V)	35	2.4	1
SC 2	Commercial Building (Unique Hair & Nails)	7 Park Place	Chautauqua	Hanover	Silver Creek (V)	35	6.8	1

Table 3.1 (cont'd)

Property Number	Property Name	Street Address	County	Town	Hamlet (h) or Village (V)	Nearest Turbine	Distance to nearest turbine (miles)	Number of turbines visible
SC 3	Commercial Building (Stitches)	9 Park Place	Chautauqua	Hanover	Silver Creek (V)	35	6.7	1
SC 4	Commercial Building (People Inc.)	17 Park Place	Chautauqua	Hanover	Silver Creek (V)	35	6.7	1
<b>SC 5</b>	<b>The Geitner Theatre (The Blackline)</b>	<b>19 Park Place</b>	Chautauqua	Hanover	Silver Creek (V)	35	6.7	0
SC 6	Commercial Building	25 Park Place	Chautauqua	Hanover	Silver Creek (V)	35	6.7	0

## 4.0 Mitigation of Visual Impacts

A total of 159 individual NRE properties and two NRE historic districts are in the current visual APE for the Ball Hill Wind Project. None of these properties are listed on the National Register. The number of turbines that can be seen from NRE properties spans the full range of possible values. The average number of turbines that can be seen is 15 with an average distance of 3.6 miles. While some of these properties are grouped together within villages or hamlets, along roads or in associated complexes such as farmsteads, on the whole, the properties are widely dispersed across the area. As noted in Section 3.0, the impacts to these resources vary with the surrounding topography, distance from the turbines and electrical lines, existing landscaping and vegetation, and surrounding land uses.

Some screening will be afforded by mature trees, shrubs, and plantings for at least part of the year. This observation is especially true for buildings/structures in the areas surrounding streams and steep embankments. The topography of some portions of the five-mile visual APE will provide additional screening. Nevertheless, there are visual impacts to the area associated with the construction of the Ball Hill Wind Project that will require mitigation.

Ball Hill Wind Energy, LLC is obligated to mitigate adverse visual effects to NRE and NRL properties under Section 106 of the National Historic Preservation Act as well as to mitigate significant visual impacts under Article 8 of the New York State Environmental Conservation Law (ECL) and 6NYCRR Part 617 as delineated in the New York State Department of Environmental Conservation's (NYSDEC) *Assessing and Mitigating Visual Impacts* (2000). In the case of the Ball Hill Wind Project, both Section 106 and NYSDEC mitigation were triggered by the same occurrence: the inclusion of NRE or potentially NRE properties within the project visual APE. NYSDEC lists specific mitigation strategies, while Section 106 does not; the two are not mutually exclusive, however, and strategies for each can have common characteristics.

The mitigation of visual effects to these properties presents an opportunity for a number of alternative mitigative strategies. The usual mitigative approaches can be applied; however, broader alternative strategies can encourage local community input and assist those communities through the undertaking of "hometown" cultural resource projects that are commonly in need of financial and professional assistance. The mitigative strategies below are grouped into several categories. These categories overlap; and some of the categories include the more traditional mitigative alternatives.

### PROJECT CRITERIA

Typically, the following working criteria are considered for any proposed "historical mitigation" project or activity. These criteria provide that the subject of any such project should:

1. Be consistent with the guidance of NYSHPO
2. Have historical significance
3. Serve a public historic purpose
4. Be a good investment
5. Be appropriate to the state of preservation of local historical resources

### PROFESSIONAL DESIGN AND SITING

NYSDEC considers a properly designed and sited project the best way to mitigate potential impacts. The Ball Hill Wind Project is designed to mitigate the visual impact of the turbines where practical. The color of the towers is a non-specular neutral white or off-white so the towers will blend into a white sky. The turbines are laid out in a random, natural pattern so that the flow of the landscape is not interrupted. FAA



lighting is not required on every turbine. Permanent access roads are generally only 16 ft (4.9 m) wide and temporary access roads are only 35 ft (10.7 m) wide.

Electrical lines connecting the turbines to each other and the existing substation will be carried on poles ranging from 55.5 to 75 ft (16.9 to 22.9 m) tall, or placed underground, or installed along existing power line rights-of-way where possible. Since the collection lines are on average approximately 65 ft (19.8 m) tall, some screening will be afforded by mature trees, shrubs and plantings for at least part of the year. The overhead line runs through a heavily forested area and over open fields in Hanover. In part, the utility poles will not extend above the natural canopy.

## **MAINTENANCE**

NYSDEC considers the maintenance of buildings/structures and landscapes and the decommissioning of objects or buildings/structures as part of a mitigation strategy. Proper maintenance prevents “eyesores” and is an integral part of the plan for the Ball Hill Wind Project.

Local laws require a decommissioning plan to be put into place to remove obsolete and unused turbines. The plan will include cost estimates for the removal of towers and the reclamation of the areas including concrete foundations, access roads, seeding and re-vegetation and salvage of various materials.

## **SURVEYS**

The completion of various types of surveys is a more traditional form of Section 106 mitigation; nevertheless it can also be used as a type of “offset” as described by NYSDEC. An “offset” is the correction of an existing aesthetic problem identified within the visual APE as compensation for project impacts. Elements of these surveys can include:

- GIS mapping of the county’s cultural resources within the affected area
- Complete a detailed architectural survey of Chautauqua County
- Conduct surveys identifying specific architectural styles and types of buildings, structures and landscapes within the counties, towns, villages and hamlets affected by the project
- Listing NRE resources
- Sites/buildings/structures/objects/districts/landscapes that have been identified as NRE, but never listed within the area affected by the project
- Completing formal recordation documents (e.g., Historic American Buildings Survey [HABS], Historic American Engineering Record [HAER], Historic American Landscape Survey [HALS]) for the power houses/dams as well as sites, buildings, structures, landscapes that have been identified but never completed within the APE.

## **MONETARY CONTRIBUTIONS**

The creation of a pool of funds overseen by a third party is a less traditional, but effective way of offsetting project impacts.

- Establish a monetary fund, with NYSHPO oversight, to initiate an historic landscape preservation program to support the preservation of historic landscapes in New York State. The introduction of such a program would offer technical assistance to municipalities and not-for-profit organizations to increase awareness of historic landscapes in New York State.
- Establish a cemetery maintenance program that can disburse funds to maintain the many small historic cemeteries in the area.

- Provide funds towards the construction of a “Historic Center” for storage and display of historic material. The location can be determined upon consultation with the county and affected towns.
- Donations to libraries in the affected area for purchase of local and Chautauqua County material.
- Create a Historic Property Visual Mitigation Grant Fund for use by the owners of historic structures affected by the project. Funds from grants would be used to purchase onsite screening or make repairs to affected historic structures. The details of oversight, submission protocols, and eligibility will be negotiated with the NYSHPO.

## **HERITAGE TOURISM**

The creation of Heritage Tourism materials has become an important part of municipalities, regions, and states promotional activities. These materials can be easily used by many individuals and widely distributed. Most of the activities listed below fall within the traditional Section 106 mitigation sphere, and all can be used as offset.

- 10-Minute Video Presentation. A video presentation can be used in schools, for presentations to civic groups, and on public access television.
- Brochure. A brochure highlighting historic architecture can be distributed at public libraries, visitor’s centers, etc., within the affected area.
- Posters. Posters can be produced highlighting the area and its history.
- Driving/Walking tours. Tours can be conducted out of the public library, visitor’s centers, etc., within the affected area.
- Exhibit. Exhibits focusing on history and architecture can be set up in libraries, visitor’s centers, town halls, etc., within the affected area.
- Power-Point Presentation. This can be used in schools, for presentations to civic groups within the affected area

## **EDUCATIONAL ACTIVITIES**

Educational activities have a broad appeal and can target a wide age group. Activities for school-age groups can help raise awareness of cultural resources within the community at an early age and engender excitement within the school system. Educational activities of various types are traditional Section 106 mitigation options; however, the creation of a graphic novel is a twist on this traditional use. The items below are also excellent offset activities.

- Grade Appropriate Lesson Plans. Packages can include teacher information, student activities, and possible field trips, long- and short-term class projects centered on the affected area and distributed via Internet.
- Graphic Novel (comic book) about the history of the area.
- Host Public History Day. A special event can be staged in conjunction with schools and chambers of commerce within the affected area

## **HISTORY ACTIVITIES**

Activities related to historic resources are the most traditional of Section 106 mitigation strategies. Nevertheless, they can be useful and an important offset activity.

- Popular Written History of the County. Produce a history highlighting specific county contributions to state and country, addressing the towns, villages and hamlets within the affected area.
- Historic Brochure and/or series of brochures addressing various aspects of the county's, town's, village's and hamlet's history within the affected area.
- Oral History Project.
- Placing Historic Markers.
- Creation of Context/s. Produce historical/architectural histories and contexts specific to the area, particularly a regional farming context.

Local community input is vital to the success of any mitigation strategy. Local historians, town officials, and agencies should be contacted to begin the process of determining community needs. NYSHPO staff will also play a major role in this process. This investigation of probable community needs is preliminary at best and in no way represents a final accounting of those needs.

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