# 2012/2013 Cultural Resources Survey Addendum



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BALL HILL WINDPARK ADDENDUM,
TOWNS OF VILLENOVA AND HANOVER,
CHAUTAUQUA COUNTY, NEW YORK
OPRHP#8PR01814

Prepared for:

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May 2013

# ARCHAEOLOGICAL AND ARCHITECTURAL SURVEY FOR DUKE ENERGY BALL HILL WINDPARK ADDENDUM, TOWNS OF VILLENOVA AND HANOVER, CHAUTAUQUA COUNTY, NEW YORK OPRHP #08PR01814

#### Prepared for:

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#### **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 I archaeological and architectural 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:** 42 total (35 in Villenova; 7 in Hanover)

#### **Architectural Survey Area:**

**Total area surveyed:** The current total area within five miles of the Ball Hill Turbines is 169.4 sq miles, of which turbines are visible from 128.8 sq miles.

**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 Archaeological Survey: (see separate report)

A total of 70 shovel tests were dug at three MDS locations; one historical site (PCI/Ball Hill-3) was identified, located on the north side of Villenova Road west of its intersection with North Hill Road in the Town of Villenova.

#### **Results of Architectural Survey**

Number of previously determined NR-listed or -eligible buildings/structures/cemeteries/ districts in the positive Zone of Visual Influence (ZVI):

- No National Register-listed properties
- 136 individual National Register-eligible (NRE) properties and two NRE historic districts, Ewing Park South Dayton Historic District (13 contributing and 1 non-contributing properties) and Silver Creek Historic District (approximately 35 contributing properties, number of non-contributing is unknown)

Number of recommended NRE buildings/structures/cemeteries/districts in the positive ZVI: Eight individual properties, part of a recommended historic district, Center Street Historic District in Forestville, which consists of 14 primary buildings (13 contributing resources and one non-contributing resource), and four recommended contributing properties to the Silver Creek Historic District.

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

Report Date: May 2013

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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 archaeological and architectural survey addendum for the Duke Energy Ball Hill Windpark, 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 earlier configurations of the project in 2008, including: 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) was 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). The current investigation was conducted to account for more recent changes to the project layout (Figure 1.2).

The project consists of two distinct portions: power generation and transmission. The wind-energy generation component (i.e. wind turbines and their auxiliary facilities) will be in the towns of Villenova and Hanover. The transmission component will be in the Town of Hanover. The generation portion of the project includes:

- Installation and operation of 42 wind turbines with a total capacity of 96.6 megawatts (MW) within an approximately 13,500-acre area in the towns of Villenova and Hanover. Seven turbines will be in Hanover and the remaining 35 will be in Villenova (see Figure 1.1). Eleven of the turbines in Villenova (nos. 8, 9, 10, 11, 20, 21, 22, 24, 28, 29, and 30 see Figure 1.1) will have a total height of 133 m (80 m hub height plus 53 m blade length) and the remainder will be 151 m in total height (98 m hub height plus 53 m blade length). Below ground disturbances for each turbine vary from 1.3 to 3.3 acres and total 87.3 acres.
- Construction and use of approximately 14.3 miles (23 kilometers) of access roads that will connect each wind turbine to a town or county roadway to permit equipment and vehicle access for construction and subsequent maintenance of the facilities. The construction Area of Potential Effect (APE) for the access roads typically varies from 60 to 80 ft (18 to 24 meters) in width and, in places, is up to 100 ft (30 meters) wide. The roads cover a total of 142.1 acres, exclusive of areas where it intersects other project components. After construction, the same access roads will be scaled back to a typical width of 16 ft (4.9 m) to facilitate maintenance and operations;
- Construction and use of an electrical collection system through which electricity will be
  delivered to a new substation (see below) to be constructed in the Town of Hanover
  as part of the transmission portion of the project. The connection system includes
  about 26.7 linear miles of connection lines, roughly one-quarter of which will comprise
  two or more connectors adjacent to one another. The construction corridor for the

<sup>&</sup>lt;sup>1</sup>Two turbines were removed from the planned wind farm late in the design process (nos. 23 and 40) and the remaining turbines were left with their original numerical designations; thus, the numbering sequence for the turbines (see Figure 1.1) extends to 44, but does not include 23 and 40.

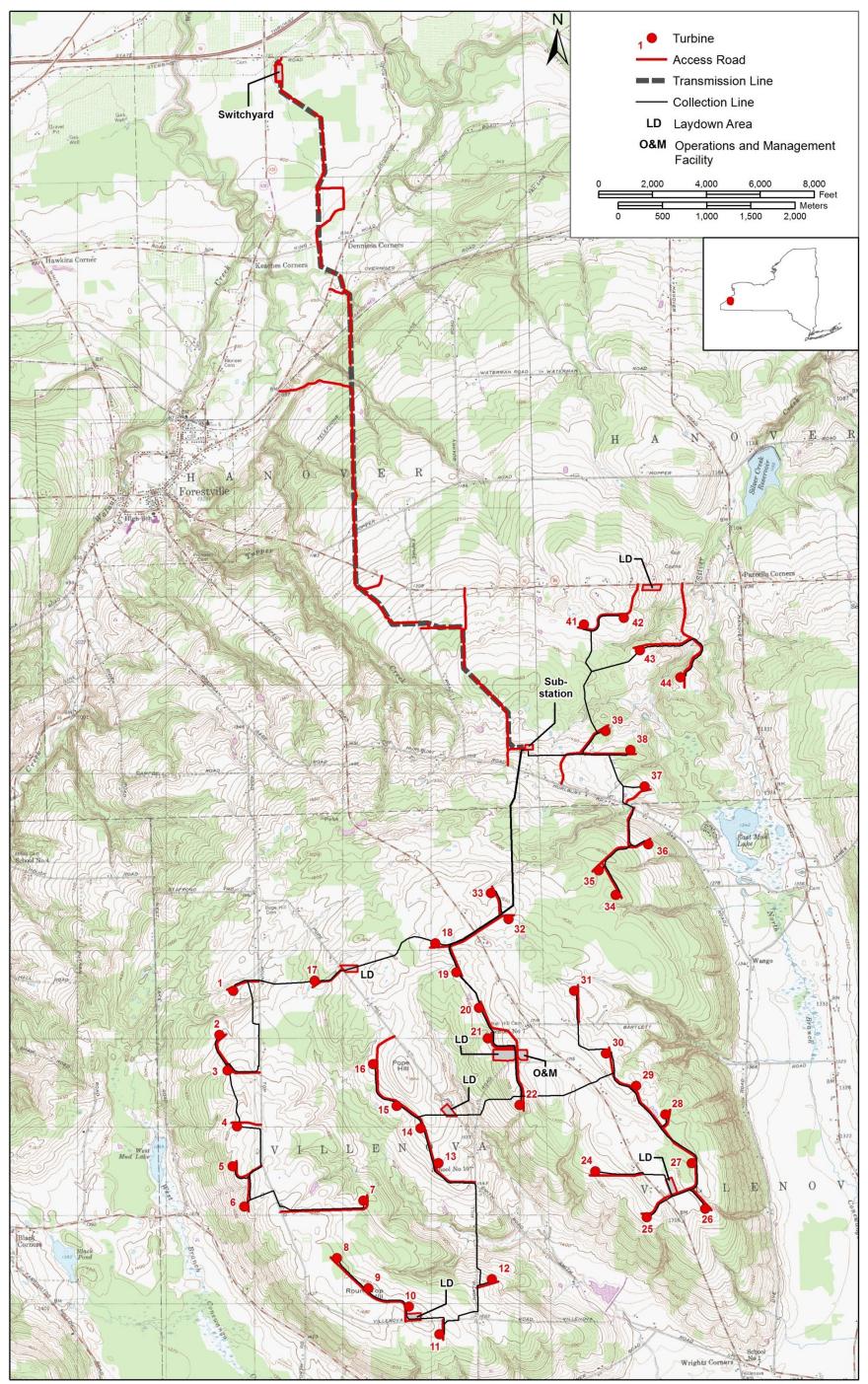


Figure 1.1. The proposed Duke Energy Windpark, Towns of Hanover and Villenova, Chautauqua County, New York (USGS 24k Series Topographic: Silver Creek, NY 1960, Farnham, NY 1960, Perrysburg, NY 1979, Forestville, NY 1979).

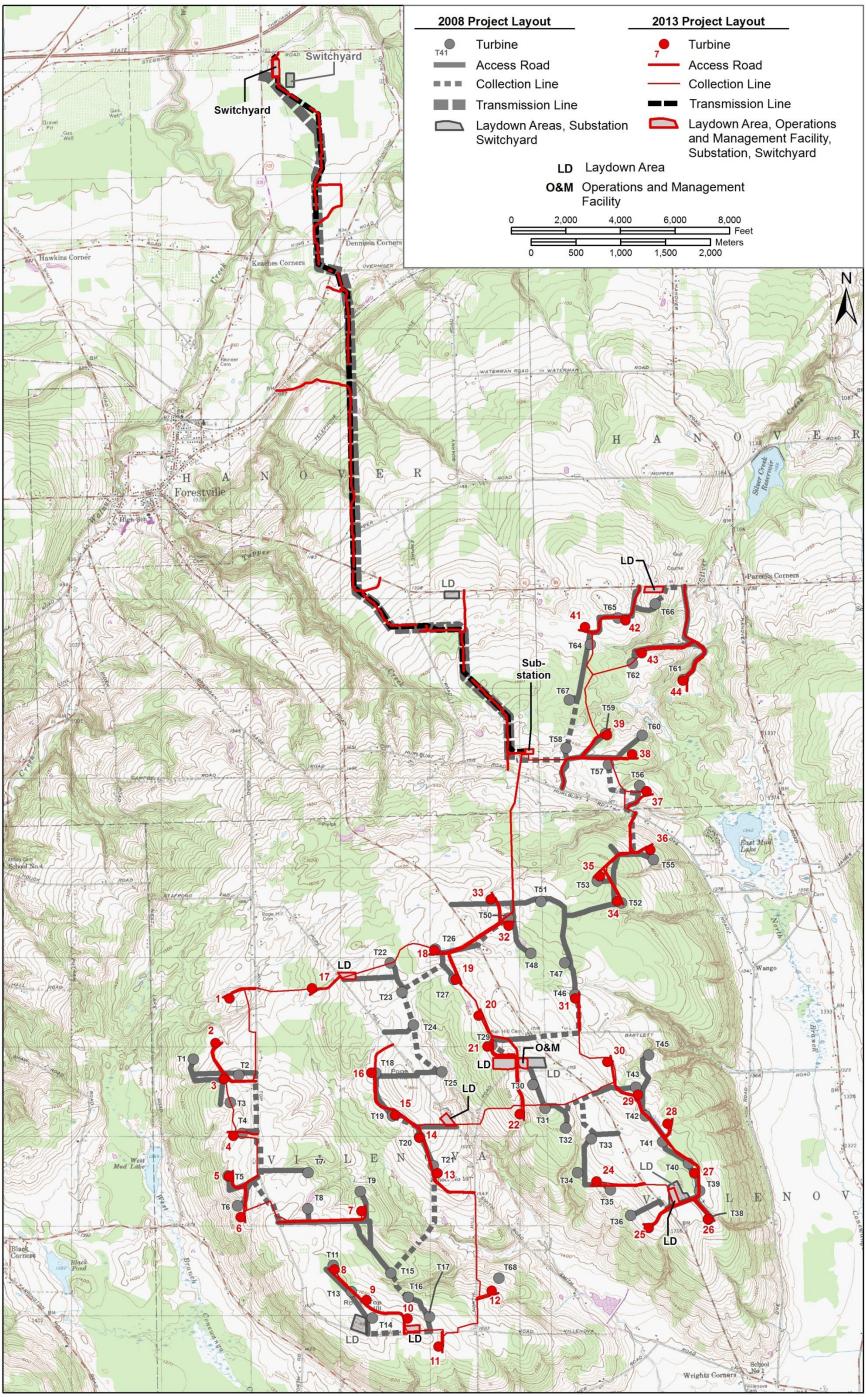


Figure 1.2. The 2013 configuration of the project area relative to its 2008 layout (USGS 24k Series Topographic: Silver Creek, NY 1960, Farnham, NY 1960, Perrysburg, NY 1979, Forestville, NY 1979).

collection lines is a maximum of 25 ft in width. The system covers a total of 66 acres, exclusive of areas where it intersects other project components;

- Six areas totaling 21.8 acres (exclusive of other project components) to be used as laydown facilities for project components during project construction; and
- A 2.6-acre area (exclusive of other project components) to be used as an operations and management facility.

The transmission portion of the Project consists of:

- Installation and use of an approximately 5.9-mile (9.7-km) overhead transmission line, sited in the Town of Hanover. The line will be carried on poles ranging from 55.5 to 75 ft (16.9 to 20.4 m) tall. Its construction corridor will be 120 ft wide and cover a total of 85.77 acres:
- Construction and use of a new substation in the Town of Hanover that will connect the wind energy generating complex with the transmission line. The substation will be east of Empire Road and north of Hurlburt Road and will have a physical APE of 1.9 acres;
- Construction and use of a switchyard in the Town of Hanover to connect the transmission line with National Grid's existing 230-kV Dunkirk-Gardenville transmission line north of the Village of Forestville. The physical APE for the switchyard covers a total of 5.4 acres, of which 3.7 are outside the construction corridor for the transmission line; and
- Construction of approximately 7.7 miles of temporary access roads for use during the
  construction of the transmission line. The roads have a typical width of 12 ft. All but
  5.4 acres of the physical APE for the roads overlap with those of the transmission line,
  substation, and switchyard.

The total physical APE for the project is approximately 416 acres. The project areas for the previous investigations measured 375 acres (initial 2008 Phase I investigations) and 401 acres (2008 archaeological addendum), respectively. These additional 15 acres were not included in this study and will be addressed in future investigation. (A further discussion is presented in Section 2, page 2-24).

The purpose of this addendum is to identify potentially National Register-eligible (NRE) properties in the parts of the current physical and visible APEs for the project that are outside the areas covered by the earlier investigations. The Phase I archaeological background research results (see Hanley et al. 2008b) were used to determine if previously reported archaeological sites were present and to help assess archaeological sensitivity. The archaeological portion of the investigation also included an intensive walkover reconnaissance, photographic documentation of conditions, and shovel testing following New York State Historic Preservation Office (NYSHPO) Guidelines for Wind Farm Development Cultural Resources Survey Work (2006).

The purpose of the architectural portion of the addendum survey was to identify NRE properties in the revised five-mile visual APE of the proposed Duke Energy Windpark. The Duke

Energy Windpark Addendum NRE recommendations in this report are preliminary and **not** considered final determinations of National Register eligibility. Final determinations will be made 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 *Guidelines for Wind Farm Development Cultural Resources Survey Work* (2006).

The cultural resources 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. The investigation was also conducted according to the New York Archaeological Council's (NYAC) Standards for Archaeological Investigations, the New York State Historic Preservation Office *Guidelines for Wind Farm Development Cultural Resources Survey Work*, and New York State Historic Preservation Office Guidelines.

The addendum investigation was conducted by Panamerican in September and October, 2012. Dr. Donald A. Smith, RPA and Ms. Christine M. Longiaru, M.A., served as Co-Principal Investigators. Ms. Longiaru also served as Architectural Historian and Dr. Smith served as Project Archaeologist and Geographic Information Analyst. Archaeological field work was conducted on September 25 and was supervised by Mr. Edwin Button, M.A., assisted by three field technicians. Remaining project personnel included: Senior Historian Mr. Mark A. Steinback, M.A.; Project Director/Senior Archaeologist Dr. Michael A. Cinquino, RPA; and Senior Preservation Planner/Senior Archaeologist Dr. Frank J. Schieppati.

#### 2.0 Archaeological Investigation

#### 2.1 CURRENT PROJECT AREA RELATIVE TO PREVIOUSLY INVESTIGATED AREAS

The purpose of the archaeological portion of the addendum is to identify all archaeological cultural resources within the project area. According to the NYSHPO *Guidelines for Wind Farm Development Cultural Resources Survey Work* (2006), field methods / testing strategies for wind-farm archaeological investigations are largely based on three criteria: the relative distribution of "Environmental Zones" within the project's physical / archaeological APE; the presence of previously identified archaeological sites in or near the APE; and the presence of structures shown on historical maps (i.e., map-documented structures [MDSs]) in or near the APE. Below-ground investigation includes shovel testing at a close (i.e., five-meter) interval in samples of each Environmental Zone present in a project area. The total number of shovel tests for the project is determined by multiplying the project area acreage by 16 and proportionally distributing the total among the Environmental Zones, relative to the percentage of the project area covered by each. Also, all locations of previously identified sites or MDSs are tested; the numbers of shovel tests excavated at each are included in the overall distribution of tests based on the Environmental Zones.

The area investigated during the original 2008 Phase I survey (Hanley et al. 2008b) and the 2008 addendum (which addressed the APEs for laydown areas, a switchyard, and a substation that were not included in the initial survey; Hanley et al. 2008a) totaled 400.61 acres that extended across parts of six Environmental Zones, including: areas near streams and stream headwaters; bogs, swamps, and ponds; lake plain (i.e., Lake Erie lake plain); upland slope / margin (i.e., the slope along the southern boundary of the lake plain); summits, knolls and ridges; and upland areas between summits and knolls (Table 2.1; see Hanley et al. 2008a; 2008b:3-2). The zones were tested with a total of 6,416 shovel tests distributed among 16 turbine locations, 23 portions of 21 project linear components (Hanley et al. 2008b); and one laydown area (Hanley et al. 2008a) (Figure 2.1).

Table 2.1. Environmental Zone distribution for 2008 and current project configurations.

Landform	Project Configuration 2008 Reports	Current Project Configuration
Areas near streams	1.82%	2.55%
Bogs, swamps, or ponds	0.56%	1.75%
Lake Plain	5.53%	6.54%
Upland Margin	13.65%	13.86%
Summits, knolls, and ridges	10.67%	6.94%
Uplands between summits and knolls	67.78%	68.36%

The current project area falls within the same overall project footprint as the 2008 configuration and extends across parts of the same Environmental Zones with a similar distribution (Figure 2.2; see Table 2.1 and Figure 1.2). However, it also covers a slightly larger

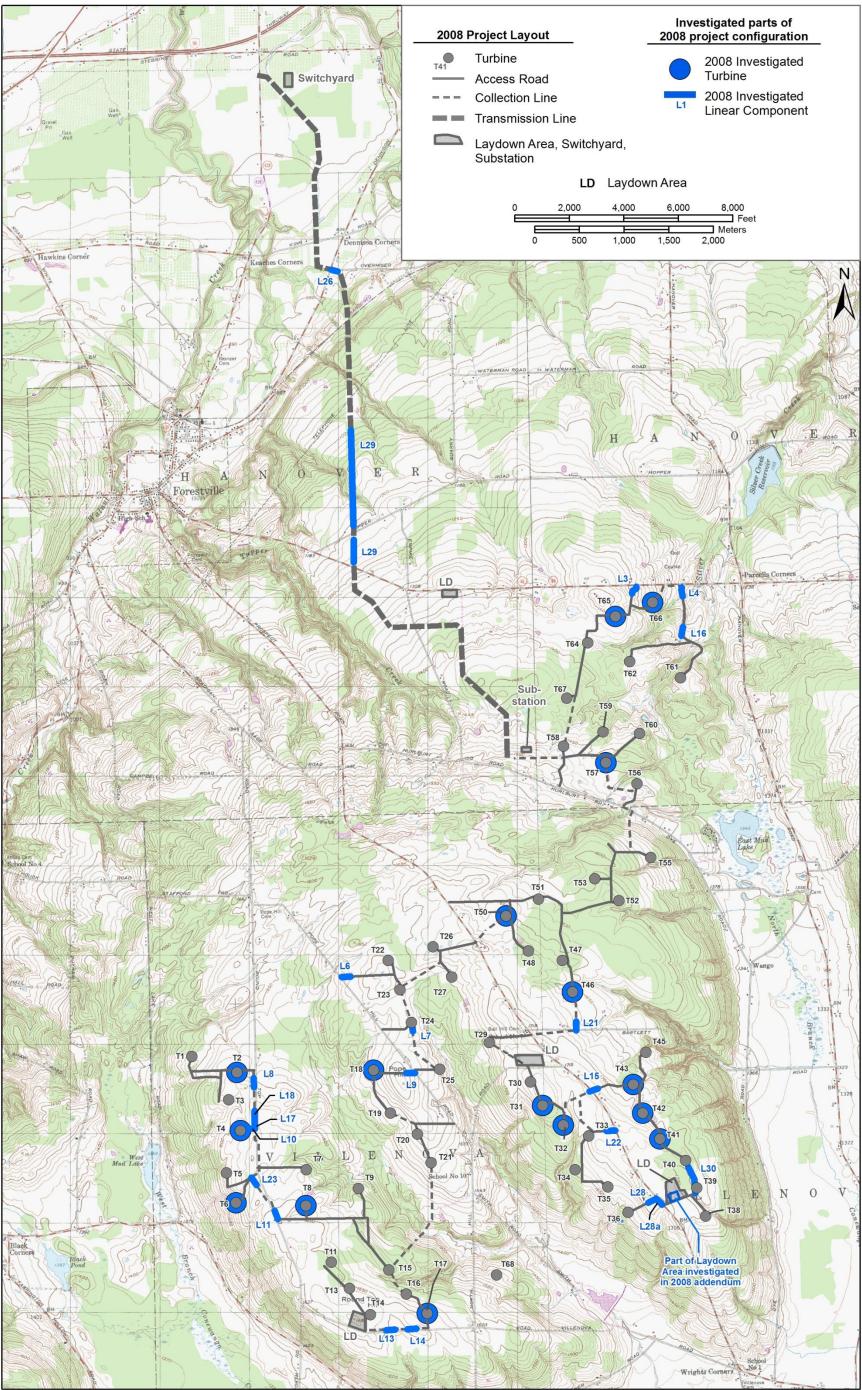


Figure 2.1. Distribution of 2008 tested areas on 2008 project area (USGS 24k Series Topographic: Silver Creek, NY 1960, Farnham, NY 1960, Perrysburg, NY 1979, Forestville, NY 1979).

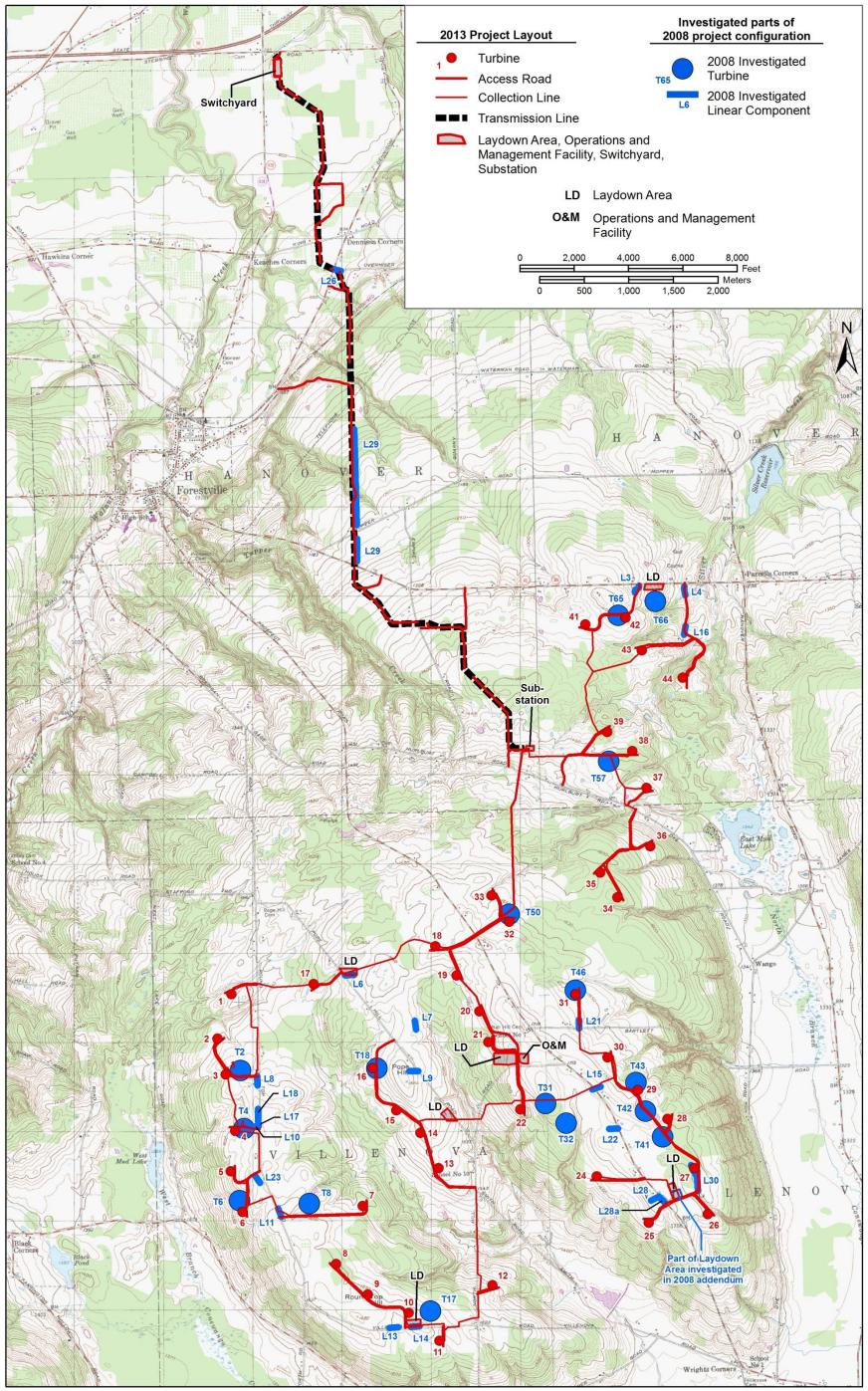


Figure 2.2. 2008 tested areas relative to the current project area (USGS 24k Series Topographic: Silver Creek, NY 1960, Farnham, NY 1960, Perrysburg, NY 1979, Forestville, NY 1979).

total area (416.2 acres) than the 2008 project area (401 acres). While 6,416 shovel tests were dug for the 2008 configuration, 6,656 tests are needed to cover its current layout. Thus, on the basis of the Environmental Zone criterion of the NYSHPO wind farm guidelines, Panamerican recommends the excavation of an additional 240 STPs apportioned among the project area Environmental Zones at a similar ratio as tests dug during the 2008 investigations.

A review of archaeological site files at the New York State Office of Parks, Recreation and Historic Preservation (OPRHP) and the New York State Museum conducted during the previous investigations for the Project indicates there are 18 previously identified archaeological sites within five miles of the project area. None are in or near its current configuration (see Hanley 2008b:2-14).

Inspection of historical maps, including Stewart (1867), Beers (1881), and U.S. Geological Survey (USGS) topographical quadrangles (1900) conducted during the 2008 investigations revealed that Project access roads and connection lines crossed the locations of 20 MDSs. Archaeological survey at these locations identified historical sites at linear testing areas L3 and L13, which were designated PCI/Ball Hill-1 and PCI/Ball Hill-2, respectively. Project components near L3 were redesigned in 2008 to avoid PCI/Ball Hill-1 and PCI/Ball Hill-2 is no longer in the archaeological APE.

The current project configuration includes several areas in the Town of Villenova, Chautauqua County, where linear components extend along roads that were well outside the archaeological APE for the 2008 layout, including: Round Top Road south of Turbine 1; Villenova Road east of Turbine 11; and North Hill Road north of Turbine 12 (see Figure 1.2; turbine references are for the 2013 project layout). Inspection of the historical maps indicates these parts of the project area intersect with the locations of two MDSs, arbitrarily designated A and B, respectively (Figures 2.3 to 2.6; Table 2.2). MDS A appears on maps from 1867, 1881, and 1900, and MDS B is shown on the 1900 map. Archaeological investigation was conducted in the project APE at both MDS locations.

An additional MDS (MDS C) is shown on historical maps on the north side of Villenova Road at a location that was within the APE for in an interim 2012 configuration of the project area. This location was subjected to archaeological investigation for the interim version of the APE, during which an archaeological site associated with the MDS was identified. While the project APE has since been altered to avoid the MDS location, the results of the archaeological investigation there are included in this report, since a site was identified.

Table 2.2. Map-documented structures in the current archaeological APE for the project that were outside its 2008 configuration.

MDS	Historical Map	Associated Individual	Location
Α	1867 Stewart	I. Halstead	West side of Round
	1881 Beers	I. Halstead	Top Road, south-
	1900 USGS	n/a	southeast of Turbine 1
В	1900 USGS	n/a	West side of North Hill
			Road at its intersection
			with Smith Road
C (not in current	1867 Stewart	G. Wagner	North side of Villenova
project area)	1881 Beers	O.W. Hickey	Road west of its
	1900 USGS	n/a	intersection with North
			Hill Road

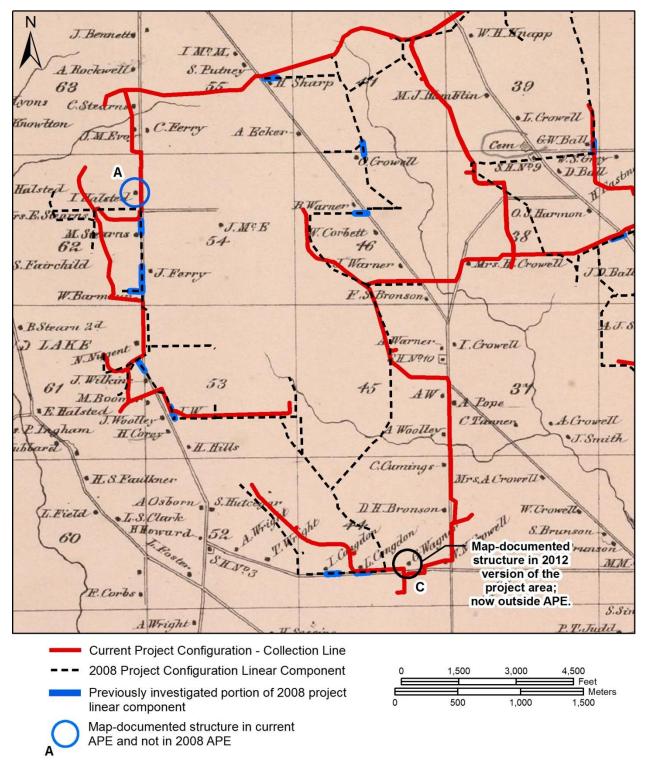


Figure 2.3. The southwest part of the current layout of project collection lines and 2008 linear component configuration on an 1867 historical map (Stewart 1867).

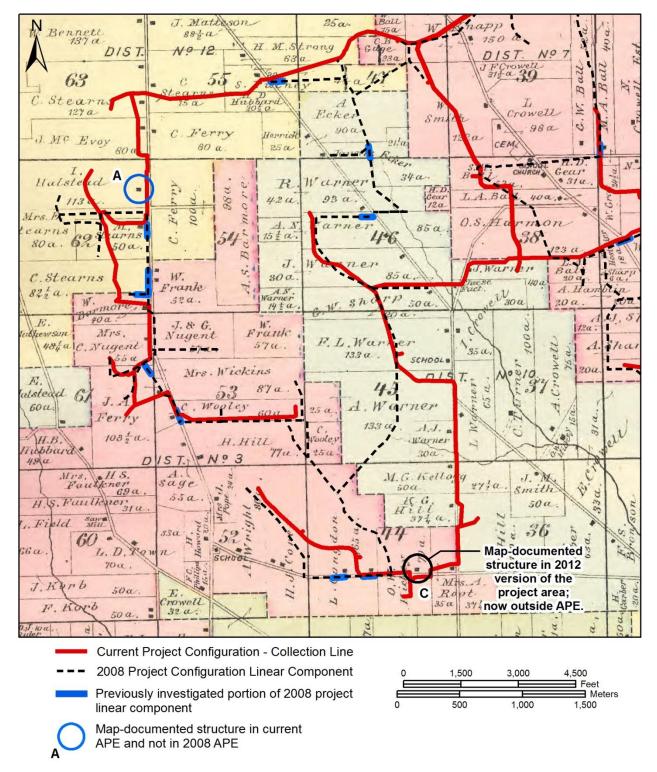


Figure 2.4. The southwest part of the current layout of project collection lines and 2008 linear component configuration on an 1881 historical map (Beers 1881).

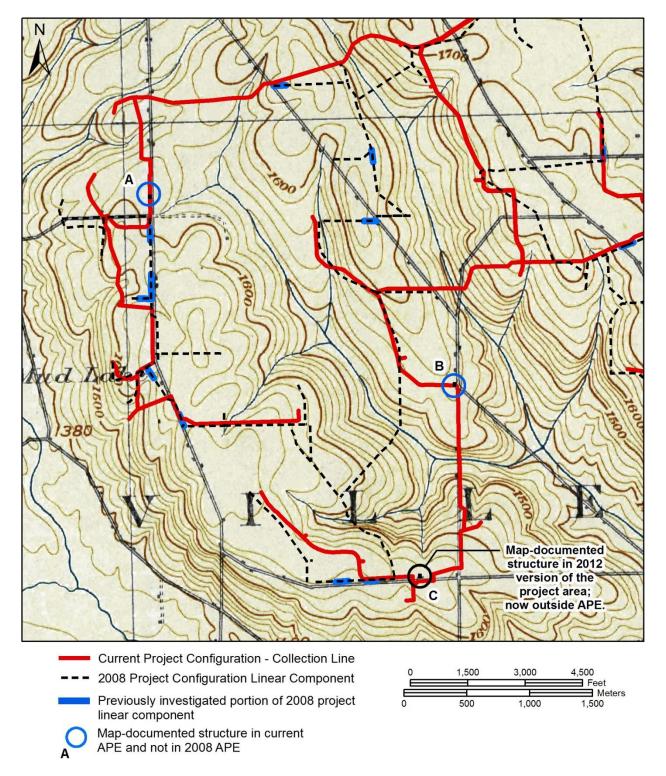


Figure 2.5. The southwest part of the current layout of project collection lines and 2008 linear component configuration on a 1900 USGS map (USGS Cherry Creek quadrangle, 1900).

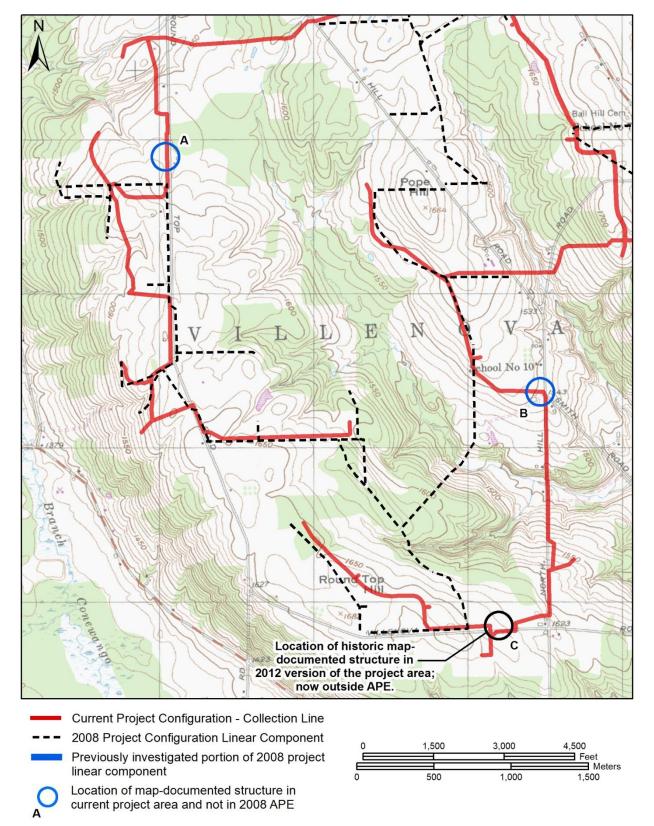


Figure 2.6. MDS locations on a modern USGS quadrangle (USGS 24k Series Topographic: Forestville, NY 1979).

#### 2.2 ENVIRONMENTAL SETTING

This section describes the setting for the three areas investigated for the current addendum; for a description of the remainder of the project area see Hanley et al. 2008b.

**Topography.** The project area is situated within the Cattaraugus Hills subsection of the Appalachian Uplands (or the Allegheny Plateau), one of the two physiographic provinces located within Chautauqua County (the Erie-Ontario Lake Plain is the other). This uplands province in general, has a rugged topography with steep valley walls and wide ridgetops, where elevations and slope increase rapidly, especially near primary waterways. This province also contains several flat-bottomed valleys with meandering streams (Cressey 1966:33-34; Puglia 1994:3). Elevations generally increase from north to south in this area, encompassing a ridge west of the broad floodplain of Conewango Creek and its tributaries.

All three study areas are on moderately-sloping to nearly-level areas near hill summits (in the parlance of the Environmental Zone model used for the 2008 investigation, they are on uplands near summits and knolls). MDS investigation Area A is on a broad ridge about one mile west-northwest of the summit of Pope Hill; Area B is on the gently sloping southeast flank of Pope Hill, about one mile from its highest point; and Area C is on the very gently sloping eastern side of Round Top Hill, roughly 3,400 ft from its summit. Elevation at Area A is roughly 1,575 ft AMSL; Area B is about 1,547 ft AMSL; and Area C is at roughly 1,640 ft AMSL (see Figure 2.6).

*Geology.* Bedrock formations in Chautauqua County occur in bands with a general eastwest orientation and that "also possess very gentle regional dips that have a south-southeast orientation. The oldest rocks in Chautauqua County are largely the black and gray shales that occur along Lake Erie" (Puglia 1994:3). The county's bedrock gets progressively younger toward the southeast. Beneath the project area, it comprises Canadaway Group shale, siltstone, and sandstone, which are oriented northeast-southwest and average about 150 ft (46 m) in thickness (Isachsen et al. 1990; Puglia 1994:3). These rocks are overlain by glacial till of the Olean substage and some glacial outwash deposits (Cressey 1966:23-24, 33). The project area is situated between the Lake Warren and Lake Whittlesey proglacial shore lines, and would have been under water during the Lake Whittlesey lake stage (Van Diver 1985:191-193).

**Soils.** Soils in the project area are classified as part of the Erie-Langford soil association which formed in glacial till and are characterized by very deep soils with a fragipan (Puglia 1994: General Soil Map). Areas A and B each include a single U.S. Department of Agriculture (USDA)-mapped soil unit: Chautauqua silt loam, 3 to 8 percent slopes (CkB) and Langford silt loam, 3 to 8 percent slopes (LnB), respectively (Table 2.3). Two soil units extend across Area C: Chautauqua silt loam, 3 to 8 percent slopes (CkB) and Busti silt loam, 3 to 8 percent slopes (BsB) (Figure 2.7; see Table 2.3).

**Drainage.** Drainage from Area A is via surface runoff towards small streams roughly 1,300 ft to the northwest and 2,000 ft to the east, respectively. Area B drains via surface runoff towards a small stream about 1,500 ft to the east. Drainage from Area C is also by surface runoff towards small streams 2,000 ft to the north and 3,000 ft to the east. (see Figure 2.6).

**Forest Zone and Vegetation.** Chautauqua County contains two primary forest zones: Elm-Red-Maple-Northern Hardwood and Northern Hardwood. The project area is at the boundary between these two zones. The Elm-Red Maple-Northern Hardwood zone is characterized by American elm and red maple, and, to a lesser extent, oak and northern

Table 2.3. Soils in the project area (after Puglia 1994).

	Typical Soil Profile						
Name	Soil Horizon Depth in (cm)	Color	Texture	Slope %	Drainage	Land Form	
	0-8	V DK GR BR	SI LO		0 1 (		
Busti silt loam	8-12	DK GR BR	SI LO		Somewhat   8 poorly drained	Side slopes	
(BsB)	12-19	BR	SI LO	3-8			
(DSD)	19-27	BR	G SI LO				
	27-72	DK GR BR	G SI LO				
	0-7	V DK GR BR	SI LO			convex	
Chautauqua	7-22	DK YL BR	SI LO	2.0	Moderately		
silt loam (CkB)	22-34	BR	G SI LO	3-8	well drained	hilltops and	
, ,	34-72	DK YL BR	V G SI LO			small knolls	
	0-9	DK GR BR	SI LO			convex	
Langford silt	9-15	YL BR	SI LO	2.0	Moderately		
loam (LnB)	15-21	YL BR	SI LO	3-0	3-8 well drained	hilltops and	
(/	21-72	BR	G SI LO			side slopes	

**Color:** BR = brown; DK = dark; GR = gray; YL = yellow

**Texture:** G = gravelly; LO = loam; SI = silt; V = very

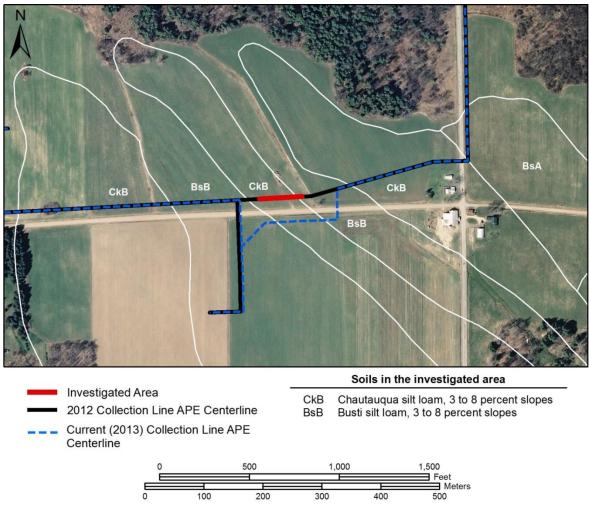


Figure 2.7. USDA-mapped soil units at Study Area C (soils data from NRCS 2012; aerial imagery from NYS GIS Clearinghouse 2008).

hardwoods. This area has been substantially cleared so that oak is greatly reduced. South-facing slopes support more oaks or an oak-hickory mix (due to more sunlight), while north-facing slopes support more northerly-predominant trees, such as elm, red cedar, and hawthorn as well as a variety of evergreens. The Northern Hardwood zone, which occurs in higher elevations away from the Great Lakes, is not uniform, comprising a variety of species, but dominated by beech, sugar maple, and yellow birch. Though not evenly distributed, various types of evergreens are abundant among the hardwoods in these areas, the most popular of which is hemlock (de Laubenfels 1966:92-95).

Vegetation at Study Area A entirely comprises low to medium-height grasses (Figure 2.8; Photograph 2.1). Area B was covered with mowed grass (Figure 2.9; Photograph 2.2). Area C was located in a planted cornfield; vegetation included a mix of high grasses and mature corn plants (Figure 2.10; Photograph 2.3).

**Manmade Features and Alterations.** Study Area A extends along the west side of the asphalt-paved Round Top Road, which is flanked by a drainage ditch that lies along the eastern edge of the area of investigation. A gravel drive extends west from the road through the study area and is possibly associated with the MDS shown on the historical maps (Photograph 2.4). There is a push pile with large cut stones roughly 50 ft west of the study area; the pile may also be related to the MDS (Photograph 2.5). A modern utility shed with nearby pallets of stacked vinyl windows is about 75 feet northwest of the push pile. With the exception of the pile, there were no surface indications of an historic structure in or near the area of investigation.

Study Area B extends along the northern edge of a farm complex west of North Hill Road that likely corresponds with the MDS shown on the 1900 map; the farm's residence and the majority of its outbuildings are greater than 50 years old (Photographs 2.6 and 2.7). A farmer's / access road with intermittent gravel pavement extends west from the asphalt-paved North Hill Road parallel to the study area about 10 ft to its north. With the exception of a drainage ditch on the west side of North Hill Road, there were no obvious indications of below ground disturbance at the time of the field investigation (see Photograph 2.2). The 2008 aerial photography of the project area, however, indicates the terrain now occupied by the farmer's road was significantly disturbed at that time. A brief interview with the landowner conducted during the survey revealed the disturbance was related to the installation of a gas well west of the farm. At the landowner's request, topsoil that would have been under a temporary access road used during the construction of the well was removed and later replaced after the well's completion.

Study Area C was centered along an axis about 50 ft north of the unpaved Villenova Road. A single-lane unpaved access road extends northwest from Villenova Road through the study area to a modern brine talk and well about 50 ft further to the north (Photograph 2.8). There were no indications of the MDS shown on the historical maps.

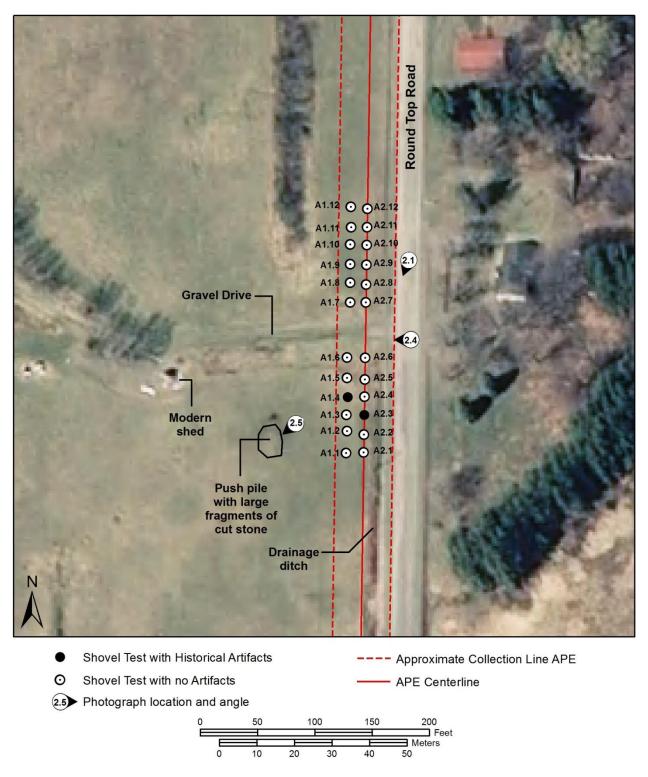


Figure 2.8. Shovel tests, surface features and photograph locations / angles at Study Area A (aerial imagery from NYS GIS Clearinghouse 2008).



Photograph 2.1. Investigation Area A facing southwest from Round Top Road; the presence of a drainage ditch along the west side of the road is indicated by the taller grasses (*Panamerican 2012*).

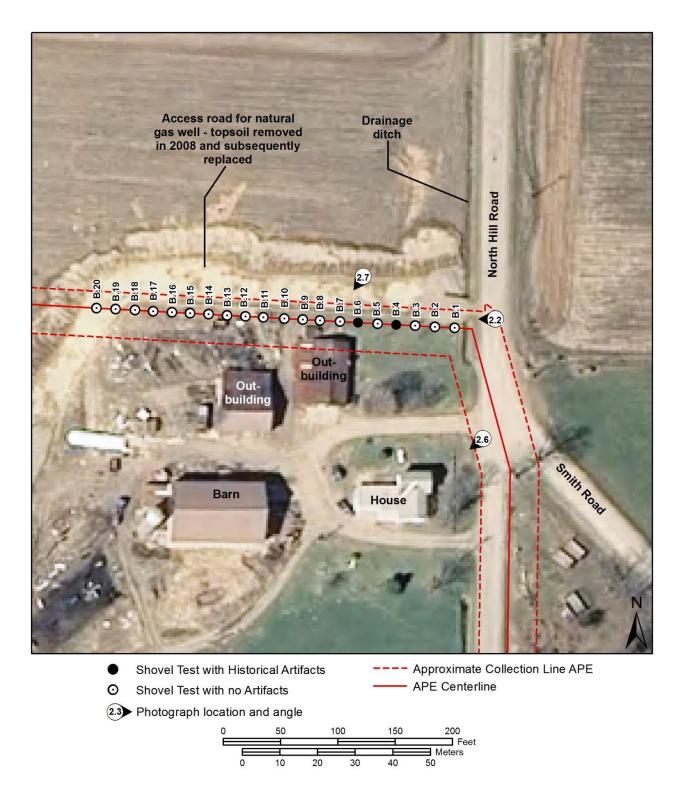


Figure 2.9. Shovel tests, surface features and photograph locations / angles at Study Area B (aerial imagery from NYS GIS Clearinghouse 2008).



Photograph 2.2. Investigation Area B facing west from North Hill Road (Panamerican 2012).

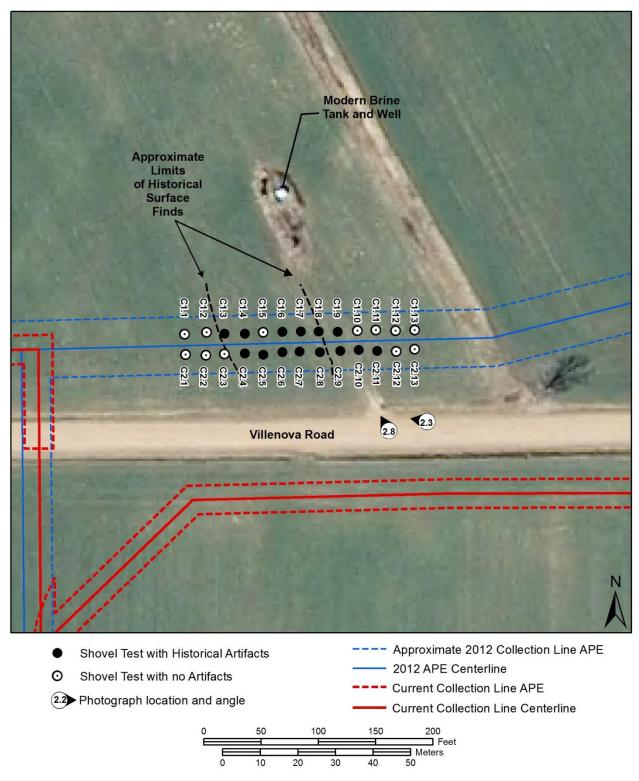


Figure 2.10. Shovel tests, surface features and photograph locations / angles at Study Area C (aerial imagery from NYS GIS Clearinghouse 2008).



Photograph 2.3. Investigation Area C facing northwest from Villenova Road (Panamerican 2012).



Photograph 2.4. Investigation Area A facing west from Round Top Road along the gravel road that extends through the study area. The building in the background is modern (fiber-board construction); the push pile with cut stones is at left (Panamerican 2012).



Photograph 2.5. Large cut-stone fragments in a push pile near Area A, facing southwest (Panamerican 2012).



Photograph 2.6. Farmhouse at 9133 North Hill Road just south of Study Area B, facing southwest (Panamerican 2012).



Photograph 2.7. Farm outbuildings along the south edge of Study Area B, facing south-southwest (Panamerican 2012).



Photograph 2.8. Study Area C, view northwest from Villenova Road along an unpaved access road that extends to a brine tank and well north of the study area (Panamerican 2012).

#### 2.3 METHODS

**2.3.1 Survey Strategy.** The archaeological field investigation included pedestrian reconnaissance, photographic documentation, shovel testing, and documentation of fieldwork. The pedestrian survey is used to identify cultural features, soil disturbances, and setting. These observations were used in conjunction with background research results to determine the appropriate field investigation strategy (i.e., shovel test configuration). Photographs were taken to document environmental conditions and pertinent site conditions (e.g., cultural features, disturbances).

Since surface visibility was low at all three study areas, the excavation of shovel test pits (STPs) was employed as the primary method for the investigation. STP layout was consistent with the NYSHPO Guidelines for Wind Farm Development Cultural Resources Survey Work (2006), as well as that used during the surveys conducted during the 2008 investigations for the project. STPs were dug at a 5-m (16.4-ft) interval along transects that paralleled the axes of the connection line APEs at each of the three study areas. Two transects of tests were dug at Areas A and C (see Figures 2.8 and 2.10), while a single transect of tests was dug at Area B, due to the presence of the access road disturbance along the north portion of the APE (see Figure 2.9). Shovel tests averaged 40 cm (16 inches) in diameter, were excavated to at least 10 cm (four inches) into culturally sterile soil unless an impasse such as bedrock was encountered or precluded by water seepage. Soil colors were recorded using Munsell® color chart designations and soil descriptions followed pedological clay, silt, and sand categories (i.e., texture). Excavated soils were sieved through 1/4-inch hardware screens. Shovel tests were backfilled to original landscape contour upon completion. All information was recorded on shovel test forms, including provenience, stratigraphic context, natural or manmade disturbances, and the presence or absence of cultural materials. Appendix A contains a log of all shovel tested areas.

2.3.2 Laboratory Methods. Artifacts recovered during fieldwork were analyzed under the supervision of the laboratory director. Recovered cultural materials were placed in plastic bags in the field with all provenience information recorded on the bag with a waterproof marker. Procedures elaborated in 36 CFR Part 79 (Curation of Federally-Owned and Administered Archaeological Collections) and NYAC's Standards and Curation of Archaeological Collections in New York regarding the processing of recovered artifacts was followed. General archaeological procedures of cleaning and storage were followed, with provenience information kept with artifacts at all times. At present, the artifacts are stored in a secure, climate-controlled environment at the Panamerican Consultants, Inc., Buffalo Branch Office.

Non-metal items were washed in tap water, allowed to air dry, and separated by major material class (e.g., ceramics, glass, tools) accompanied by their provenience. Soil or other debris was removed from metal objects with brushes and picks. No particular issues of conservation were observed among the collected items. Once the form and type were identified, artifacts were placed in clean plastic bags with identification and provenience information recorded in waterproof ink. For identification of historical materials, published reference guides, including Noël Hume (1969), South (1977), and Miller (2000) were consulted. The artifacts were subdivided into categories, such as a blue transfer-printed pearlware body fragment, a molded aqua bottle glass fragment, or a wire nail. Attributes coded included count, form type (body, neck, rim), complete form if known (bottle, plate, tea cup), colors, particular identifying marks, and particular dates.

<sup>&</sup>lt;sup>1</sup>Different procedures are employed for analyzing and cataloging prehistoric artifacts. However, no prehistoric items were found at any of the three study areas.

#### 2.4 RESULTS OF THE FIELD INVESTIGATION

**2.4.1 Area A.** The Area A investigation included the excavation of 24 shovel tests along two transects configured to avoid the drainage ditch extending along the eastern edge of the project area (see Figure 2.8). The characteristics of soils in the tests were consistent with those of Chautauqua silt loam, the USDA-mapped soil unit that extends across the study area. Two soil strata were identified in all the STPs. The upper layer was dark grayish brown silt loam that extended to depths between 20 and 38 centimeters (7.9 and 15 inches) and had an average thickness of 29.9 cm (11.8 in). It overlaid a stratum of yellowish brown to dark yellowish brown compacted silt loam, the excavated portion of which varied from 5 to 20 cm (2 to 7.9 in) thick and had a mean vertical extent of 11.6 cm (4.6 in). The Area A STPs were dug to an average total depth of 41.5 cm (16.3 in).

Two of the Area A shovel tests yielded a total of two historical artifacts: a piece of burned whiteware with black transfer print decoration and a fragment of pearlware (the artifact catalog is presented in Appendix B). Both items had maximum dimensions of about 4 cm and were found in the upper soil layer. No historical structures, artifact deposits, or other features were noted anywhere in the project area, nor were any prehistoric remains of any kind found.

2.4.2 Area B. The Study Area B investigation included the excavation of 20 shovel tests dug along the centerline of the project APE (see Figure 2.9). The soils in the tests had characteristics consistent with those of Langford silt loam; two soil strata were identified in all the tests but one (STP B.17–see below). The topsoil was dark grayish brown silt loam that extended to depths between 10 and 40 cm (3.9 and 15.7 in) below the surface and had mean thickness of 24.8 cm (9.8 in). It overlaid a stratum of yellowish brown to dark yellowish brown sandy loam, the excavated portion of which ranged from 10 to 21 cm (3.9 to 8.3 in) in vertical extent and averaged 12.1 cm (4.8 in) in thickness. A disturbance probably associated with the farmer's / access road was noted in STP B.17, which was terminated at a gravel impasse at a depth of 30 cm (12 in); the soil above the impasse was composed of a mix of the two soils identified elsewhere in the study area. The presence of soil from the lower soil stratum within the topsoil was also noted in moderate levels in three other tests (STPs B.5, B.14, and B.16). Gravel was noted in a further two STPs, B.9 and B.18. The Area B tests were dug to an average total depth of 36.5 cm (14.4 in).

A total of two artifacts were found in two of the Area B STPs: a fragment of a clear glass canning jar with an embossed label that partially reads "...A..." from STP B.4 and a piece of flat glass from B.6. Both items were in the topsoil. Exclusive of the in-use farm buildings and equipment along the southern edge of the Area B APE, no historical structures, ruins, artifact deposits, or other features were noted anywhere in the project area, nor were any prehistoric remains of any kind found.

**2.4.3 Area C.** The investigation at Area C included the excavation of 26 shovel tests along two transects extending along either side of the 2012 APE centerline (see Figure 2.10). Soils identified in the tests had characteristics consistent with those of Chautauqua silt loam. Two soil strata were identified in all the STPs. The topsoil was dark grayish brown silt loam that ranged from 17 to 35 cm (6.7 to 13.8 in) in thickness and had a mean vertical extent of 26.7 cm (10.5 in). It overlaid a layer of dark yellowish brown sandy loam, the excavated portion of which ranged from 5 to 16 cm (2 to 6.3 in) thick and had a mean vertical extent of 11.6 cm (4.6 in). Excavation in one of the Area C shovel tests, STP C1.10, was terminated due to the presence

of a rock impasse before being dug 10 cm into the underlying soil. The tests were dug to an average total depth of 38.3 cm (15.1 in).

A total of 59 historical artifacts were found in 14 of the Area C shovel tests and an additional 27 historical items were found on the surface, primarily between the third and eighth shovel test on each transect (Tables 2.4 and 2.5). A somewhat higher density of artifacts was noted within an area of approximately 6 meters of STP C1.6, in which 11 artifacts were found. The 86 total artifacts comprise 21 architectural items, 64 non-architectural items, and one artifact—an iron bolt—that may belong with either artifact class. No prehistoric remains of any kind were found in Study Area C.

The architectural assemblage from Area C is primarily made up of flat glass (n = 12) and brick fragments (n = 7). The remainder includes a cut-nail fragment and a piece of a redware drain tile. Interestingly, nearly all the architectural items were found in shovel tests; just three artifacts were found in the surface scatter.

The non-architectural portion of the Area C artifacts is made up nearly entirely of fragments of ceramic tablewares (n = 27) and glasswares (n = 35). The remaining items are two fragments of coal. Ceramic materials include: ironstone (n = 9); pearlware (n = 4); whiteware (n = 9); stoneware (n = 2); buff-bodied earthenware (n = 1); redware (n = 1); and unidentifiable

Table 2.4. Area C historical artifact distribution.

			STP	Surface	
Class	Material	Туре	Total	Total	Total
Architectural	Brick		6	1	7
	Glass	Flat glass	10	2	12
	Metal	Cut nail	1		1
	Ceramic	Redware drain tile	1		1
Non-architectural	Ceramic	Buff earthenware		1	1
		Ironstone	1	8	9
		Pearlware	4		4
		Redware	1		1
		Stoneware	1	1	2
		Whiteware	6	3	9
		Unidentifiable refined white		1	1
		earthenware			
	Glass	Bottle, aqua	5	1	6
		Bottle, clear	4		4
		Jar, aqua	2	1	3
		Tableware, pressed or		1	1
		molded, clear			
		Tableware, pedestal foot, clear		1	1
		Vessel, cup or preserve jar,		1	1
		clear			
		Vessel, probable bottle, aqua	3		3
		Vessel, probable bottle, blue-	1		1
		green			
		Vessel, probable bottle, clear	10	5	15
	Other	Coal	2		2
Indeterminate	Metal	Bolt	1		1
Total			59	27	86

Table 2.5. Spatial distribution of Area C artifacts.

STP on Transect	Transect B1	Transect B2	Total
1 (west-most)	-	-	-
2	-	-	-
3	10	-	10
4	1	3	4
5	-	4	4
6	10	5	15
7	3	4	7
8	4	5	9
9	1	3	4
10	-	1	1
11	-	4	4
12	-	-	-
13 (east-most)	-	-	-

refined white earthenware (n = 1). The ceramic assemblage includes artifacts with highly variable characteristics. Items with identifiable vessel form, perceivable decoration, or other notable qualities include: a foot from an ironstone vessel, possibly a pitcher or a basin; a piece of a rim from an annular ironstone vessel (likely a cup or a plate) with alternating wide and thin hand-painted blue bands; a low-fired fragment of redware with a clear alkaline glaze; a piece of a stoneware bottle with a reddish body, brown glaze exterior, and alkaline-glazed interior; a piece of thick (ca. 1-cm) red stoneware (perhaps from a jug or tile) with a brown exterior glaze; a fragment of annular whiteware with blue and brown bands; a rim piece from a whiteware vessel with a fine green band (possibly annular); a fragment of buff earthenware with a white slip on the interior and exterior; and a rim fragment from a refined white earthenware vessel (unidentifiable as to fabric) with possible negative blue transfer print decoration. These items have a wide variety of manufacture dates that range from 1780 (pearlware) to ca. 1930 (ironstone) (Miller 2000; NYSM 2004). However, the date range is consistent with what would be expected if the artifacts were associated with the historical inhabitants of the Area C MDS.

The glassware portion of the Area C assemblage primarily comprises bottle fragments (n =10) and pieces that are likely from bottles (n = 19) (although some of these may be from jars). Glass colors for bottle fragments comprise clear (n = 19), aqua (n = 9), and blue-green (n = 1). Pieces with identifiable forms, evidence for manufacture technique, and/or decoration include: a clear medicine bottle fragment with an embossed label that partially reads "...A"; a portion of a neck from a clear glass bottle with a thick mold seam; a circular agua glass bottle base with an embossed label that reads in part "MAR..."; an agua glass base of an oval medicine bottle with an embossed "O"-in-square maker's mark; a clear glass fully molded bottle neck with a cork enclosure; and another clear glass neck probably from a liquor or large medicine bottle that appears to be mold-blown. The remainder of the glassware assemblage includes: four jar fragments (comprising a piece of an agua glass canning jar with an embossed label that partially reads "...BUR..."; an agua glass fragment of a canning jar lid; an agua glass fragment of a canning jar with a lightning-type enclosure; and a clear glass rim piece, probably from a jar); a clear glass piece of a vessel with a pedestal; and a fragment of pressed or molded clear glass from the rim of a cup or small dish. Datable glass artifacts are from around the beginning of the twentieth century, and include the bottle base with the embossed "O"-in-square maker's mark, an Owens' mark from 1919-1929 (glassbottlemarks.com); the fully molded bottle neck, which dates to ca. 1900 to 1930 (sha.org); and the mold-blown neck from the liquor or large medicine

bottle, which was manufactured ca. 1890 to 1920 (sha.org). The date distribution is consistent with that of materials that would have been deposited by the historical inhabitants of the nearby MDS.

The spatial distribution of the artifacts from Area C suggests the presence of features, although this is admittedly speculative pending further investigation (see Table 2.5). Specifically, the relatively large number of items found in STPs C1.3 and C1.6, as well as the higher density of surface finds surrounding the latter test may indicate the presence of artifact deposits.

The historical remains found in Study Area C have been temporarily designated Site PCI/Ball Hill-3, pending the assignment of a Unique Site Number by the NYSHPO. An OPRHP site form has been completed and is included in Appendix C.

## 2.5 CONCLUSIONS AND RECOMMENDATIONS

The current configuration of the Duke Energy Windpark project is approximately 15 acres larger than the APE surveyed during the 2008 investigations. Therefore, per the New York State Historic Preservation Office *Guidelines for Wind Farm Development Cultural Resources Survey Work*, Panamerican recommends the excavation of 240 shovel test pits (or 16 for each acre over 401 acres, if there are further changes to the APE) apportioned among the project area Environmental Zones at a similar ratio as tests dug during the 2008 investigations. Additionally, the project area now extends through the locations of two map-documented structures that were not in the 2008 project configuration: MDS Areas A and B, recommendations for which are summarized below. Results are also summarized for MDS Area C which was investigated for a 2012 interim project area and now lies outside the project APE.

**MDS Area A.** Two historical artifacts were found in Area A. No historical features were identified and no prehistoric remains of any kind were found. The close interval of shovel tests in the study area, coupled with the low number of artifacts and absence of artifact deposits or other features makes it highly unlikely that potentially National Register-eligible (NRE) archaeological resources are present. Thus, the installation of windpark components in this area will not affect archaeological cultural resources and no further investigations are recommended.

**MDS Area B.** A total of two historical artifacts were found in Area B. No historical features were identified and no prehistoric remains of any kind were found. The close interval of shovel tests in the study area, together with the low number of artifacts, the absence of artifact deposits or other cultural features, and the fact that a large portion of the project area was disturbed by an earlier earth-moving operation, makes it highly unlikely that potentially NRE archaeological resources are present. Thus, the installation of windpark components in this area will not affect archaeological cultural resources and no further investigations are recommended.

MDS Area C. A total of 86 historical artifacts were found in Study Area C, including 27 surface finds and 59 items from shovel tests. The artifacts were found across the majority of the study area and have dates indicating they are associated with the historical inhabitants of the MDS shown at this location on the 1867, 1881, and 1900 historical maps. The remains have been designated as the PCI/Ball Hill-3 archaeological site. The project area has been redesigned (i.e., it has been moved to the south side of Villenova Road) since the identification of the site and no longer extends through the location of MDS C. Therefore, no further archaeological investigation is recommended at this location for the MDS criterion of the state windfarm guidelines.

# 3.0 Historic Resources Survey

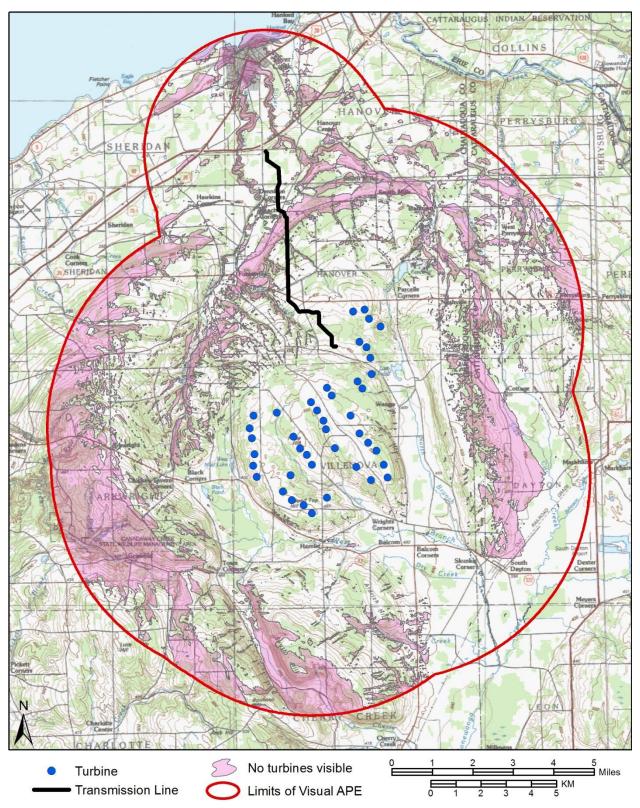
For this investigation, the visual Area of Potential Effect (APE) is defined as the area from which the proposed undertaking may be visible within a five-mile distance around the outer ring of proposed turbine locations and three miles from the proposed transmission line (Figure 3.1; see Figure 1.1). 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, which is based solely on topography (NYSHPO 2006; see the architectural history investigation results map in the pocket at the back of the report / Appendix E). Additional screening may be provided by structures and vegetation. The positive visual APE spans northwestern Cattaraugus County and northeastern Chautauqua County. The municipalities, including non-incorporated villages, located partially or entirely in the five-mile visual APE are listed below.

Cattaraugus	Chautauqua
<ul> <li>Dayton     <i>Village of South Dayton</i></li> <li>Leon</li> <li>Perrysburg</li> </ul>	<ul> <li>Arkwright</li> <li>Hanover Village of Forestville Village of Silver Creek</li> <li>Cherry Creek</li> <li>Sheridan</li> <li>Villenova</li> </ul>

#### 3.1 NATIONAL REGISTER CRITERIA

For a building or structure to be considered eligible for listing in the National Register of Historic Places (NRHP), it must be evaluated within its historic context and shown to be significant for one or more of the four Criteria of Evaluation (36 CFR 60) as outlined in *How to Apply the National Register Criteria for Evaluation* (Bulletin 15, NPS 2002). All structures examined as part of this investigation were identified and evaluated in the field with reference to these criteria:

- Criterion A: (Event) Properties that are associated with events that have made a significant contribution to the broad patterns of our history; or
- Criterion B: (Person) Properties that are associated with the lives of persons significant in our past; or
- Criterion C: (Design/Construction) Properties that embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- Criterion D: (Information Potential) Properties that have yielded, or may be likely to yield, information important in prehistory or history (*NPS Bulletin 15*, referencing 36 CFR Part 60).



**Figure 3.1. Ball Hill 2013 architectural / visual APE** (base map sources: USGS 100k Series Topographic: Buffalo, NY 1984; Jamestown, NY 1988; Olean, NY 1986; Silver Creek, NY 1986).

A property is not eligible if it cannot be related to a particular time period or cultural group and thereby lacks any historic context with which to evaluate the importance of the cultural resource. The cultural property (e.g., historic structure or landscape) must also retain the historic integrity of those features necessary to convey its significance. Seven aspects or qualities of integrity recognized by the National Register are location, design, setting, materials, workmanship, feeling, and association (NPS 2002). Actual determinations of eligibility are made by the Field Services Bureau of the NYSHPO.

## 3.2 ASSESSMENT OF ADVERSE EFFECTS TO HISTORIC PROPERTIES

In general, an undertaking has an effect on an historic property when the undertaking may alter characteristics that may qualify the property for inclusion in the National Register. The assessment of adverse effects to historic properties is spelled out in Section 106 of the National Historic Preservation Act as well as in 36 CFR 800.5.

- (1) Criteria of adverse effect. An adverse effect is found when an undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association. Consideration shall be given to all qualifying characteristics of a historic property, including those that may have been identified subsequent to the original evaluation of the property's eligibility for the National Register. Adverse effects may include reasonably foreseeable effects caused by the undertaking that may occur later in time, be farther removed in distance or be cumulative.
- (2) Examples of adverse effects. Adverse effects on historic properties include, but are not limited to:
  - (i) Physical destruction of or damage to all or part of the property;
  - (ii) Alteration of a property, including restoration, rehabilitation, repair, maintenance, stabilization, hazardous material remediation and provision of handicapped access, that is not consistent with the Secretary's Standards for the Treatment of Historic Properties (36 CFR 68) and applicable guidelines;
  - (iii) Removal of the property from its historic location;
  - (iv) Change of the character of the property's use or of physical features within the property's setting that contribute to its historic significance;
  - (v) Introduction of visual, atmospheric or audible elements that diminish the integrity of the property's significant historic features;
  - (vi) Neglect of a property which causes its deterioration, except where such neglect and deterioration are recognized qualities of a property of religious and cultural significance to an Indian tribe or Native Hawaiian organization; and
  - (vii) Transfer, lease, or sale of property out of Federal ownership or control without adequate and legally enforceable restrictions or conditions to ensure long-term reservation of the property's historic significance [36 CFR 800.5].

**Visual Effects.** By definition, a visual effect occurs whenever a proposed undertaking will be visible from an historic property. The mere existence of a visual effect does not automatically imply that the effect is adverse. An *adverse* visual effect occurs only when the addition of a new

element to a landscape is found to diminish those aspects of a property's significance and integrity, such as its historic setting, which make it eligible for the National Register.

Adverse visual effects are generally of two types, aesthetic and obstructive. An adverse aesthetic effect transpires when an undertaking's visual effect has a negative impact upon the perceived beauty or artistic values of an historic structure or landscape, thereby diminishing the appreciation or understanding of the resource. Common examples of adverse aesthetic impacts include the diminution or elimination of open space, or the introduction of a visual element that is incompatible, in great contrast, or out of character with the historic resource or its associated setting. An adverse obstructive effect occurs when the proposed undertaking blocks any part of an historic property, or eliminates scenic views historically visible from the property.

# 3.3 PREVIOUS INVESTIGATIONS

The current Duke Energy Windpark 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 (OPRHP #08PR01814), which was not constructed. In 2008, Panamerican conducted a reconnaissance-level historic building survey of the five-mile APE for the previously proposed project (Longiaru et al. 2008 [08PR01814]). NYSHPO reviewed the 2008 report recommendations and provided final NRHP evaluations (Bonafide 2008: see Appendix D). A list of all National Register-eligible (NRE) properties in the current Project viewshed previously documented by Panamerican and evaluated by NYSHPO in 2008 is included in this addendum report (see Table 3.1 below). All NRE properties located in the previous 2008 viewshed remain in the 2013 Project viewshed.

In 2009, a historic architectural resources investigation of a five-mile ring study area for the Arkwright Summit Wind Farm in Arkwright, Chautauqua County was submitted to NYSHPO (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 [08PR01814]). Slight differences between the 2008 and 2009 viewsheds in some locations accounted for duplicate documentation of historic resources by these two studies. Though in some locations, the viewsheds did not overlap. For the current survey, the New York State Preservation Historical Information Network Exchange (SPHINX) and the 2009 report were reviewed to identify any additional NRE properties in the 2013 Project viewshed (see Table 3.1). Several properties have duplicate entries in SPHINX, which are noted in Table 3.1.

# 3.4 FIVE-MILE APE ARCHITECTURAL FIELD INVESTIGATION: APRIL 2013

The 2013 Project viewshed was compared with the 2008 viewshed to determine if any locations in the overlap area necessitated additional survey for historic resources. The addendum survey work was initially started in September 2012 and completed in April 2013 based on the 2013 Project design. Differing turbine heights and layouts are accounted for in the current Project viewshed. Changes in the viewshed were minimal; the small areas where turbines will be visible as a result of the current project layout that were outside of the 2008 viewshed were field inspected as part of this addendum study. Panamerican utilized spatial data from the 2008 survey to identify NRE properties in the current project and assess visual impacts of the Project (see Section 4.0). The current total area within five miles of the Project turbines is 169.4 sq miles, of which turbines are visible from 128.8 sq miles.

All properties previously listed in the S/NRHP, properties determined eligible prior to the survey, and those identified during the survey were marked using a single Global Positioning System (GPS) point. The single point was taken at the edge of the property generally at the mid-point of the property's street frontage. The GPS data is linked to the street address and/or NYSHPO Unique Site Number (USN; if one currently exists). This GIS data will be submitted with the final report per NYSHPO guidelines.

Local sources, references, and historical maps were consulted to formulate a historic context of the region in order to supplement NRE evaluations (see Longiaru et al. 2008 [08PR01814]). In some cases, additional information about specific buildings or farm complexes families was supplied by the owner of the property or other interested/informed residents of the community. A valuable online reference is the Chautauqua County Historic Structures database (CCHS), The *Architectural Inventory: Nineteenth Century Structures in Chautauqua County* website (Chautauqua County Historian 2009). The CCHS is a community-sponsored, volunteer-operated collection of information on nineteenth-century home sites or other historic structures in Chautauqua County. Common sources of information include public records of the Chautauqua County Clerk, the 1854 Map of Chautauqua County, the 1867 Atlas of Chautauqua County, the 1881 Atlas of Chautauqua County, and published sources. Note, the 2008 survey pre-dated the CHHS online database.

Historic resource data collected during the architectural field investigation is presented in this report in the Annotated List of Properties (Section 6.0), which catalogs all documented properties. Digital photographs of surveyed properties will be submitted on a compact disk (CD) to NYSHPO to supplement project review. Farm complexes were documented as a group with multiple photographs to convey the setting/relationship of farmhouses, outbuildings and the other farm elements. Clusters of buildings (villages/hamlets) are presented together in the annotated list of properties. The architectural survey also involved the identification of any potential historic districts.

# 3.5 NRE PROPERTIES IN 2008 PROJECT VIEWSHED

A total of 132 individual NRE properties and one NRE historic district, Ewing Park South Dayton Historic District (13 contributing and one non-contributing properties), were identified in the 2008 project viewshed (Longiaru et al. 2008). The majority of which are nineteenth-century residences. The rural agricultural heritage of the region is represented by large farm complexes historically consisting of farm houses, farm buildings, and agricultural fields. Commercial, municipal, religious, and industrial buildings are found in the villages of Forestville, Silver Creek, and South Dayton. Table 3.1 lists NRE resources in the project viewshed. The table includes the original map numbers assigned in the 2008 report to aid in consistency with cross referencing; Map Point Nos. 1 through 132. Note line items in bold and identified by an asterisk indicate properties in the viewshed of the project transmission line. Map Point numbers for properties in the Ewing Park Historic District are identified as SD1 through SD14, as per the 2008 report.

Seven bridges were previously surveyed in the 2008 survey (Map Nos. 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 NYSHPO USNs. Further, the bridges have not been logged into SPHINX.

Table 3.1. NRE resources in the 2008 project viewshed.

Table 3.1. NRE resources in the 2008 project viewshed.									
Map Pt.	Resource Name	Street Address	County	Town/Village/ Hamlet	Survey Date	NRHP Status	Unique Site No.	Comments	
1		12182 Markhams Road	Cattaraugus	Dayton	Pre- 2008	NRE(I)	00906.000086		
2	Erie Railroad Bridge over Cattaraugus Creek	Oaks Road, over Conewango Creek	Cattaraugus	Dayton	2008	Un- evaluat ed	n/a on SPHINX	n/a on SPHINX	
3	Cottage Cemetery	Cottage Road, north side, west of Edwards Corners Road	Cattaraugus	Dayton	2008	NRE	00906.000089		
4		12654 Cottage Road	Cattaraugus	Dayton	2008	NRE	00906.000090		
5		27 Cherry Street	Cattaraugus	Dayton	2008	NRE	00906.000091		
6	Factory Building	East Railroad Avenue, at south end.	Cattaraugus	South Dayton (V)	2008	NRE	00954.000048 / 00954.000013	Prior to 2008 survey- on SPHINX as Not eligible	
7		73 East Railroad Avenue	Cattaraugus	South Dayton (V)	2008	NRE	00954.000049	-	
8		62 Main Street	Cattaraugus	South Dayton (V)	2008	NRE	00954.00005		
9		203 Maple Street	Cattaraugus	South Dayton (V)	2008	NRE	00954.000051		
10		212 /214 Maple Street	Cattaraugus	South Dayton (V)	2008	NRE	00954.000052		
11	Harry Austin Milling Co.	Mill Street, between tracks, east side, north of Pine St	Cattaraugus	South Dayton (V)	2008	NRE	00954.000053		
12		227 Oak Street	Cattaraugus	South Dayton (V)	2008	NRE	00954.000054		
13		8143 Oaks Road	Cattaraugus	South Dayton (V)	2008	NRE	00954.000055		
14		107 Pine Street	Cattaraugus	South Dayton (V)	2008	NRE		NRE per 2008 SHPO letter, but Not eligible on SPHINX	
15		309 Pine Street	Cattaraugus	South Dayton (V)	2008	NRE	00954.000057		
16		312 Pine Street	Cattaraugus	South Dayton (V)	2008	NRE	00954.000058	Note three entries on SPHINX (00954.000 030 - Not eligible; 00954.0000 59 - NRE)	

Map Pt.	Resource Name	Street Address	County	Town/Village/ Hamlet	Survey Date	NRHP Status	Unique Site No.	Comments
17	Wilson House	319 Pine Street	Cattaraugus	South Dayton (V)	2008	NRE	00954.000060	
18		413 Pine Street	Cattaraugus	South Dayton	2008	NRE	00954.000061	
19	Perrysburg Cemetery	NY 39, west of west Perrysburg Road	Cattaraugus	Perrysburg	2008	NRE	00926.000040	
20		12316 NY 39	Cattaraugus	Perrysburg	2008	NRE	00926.000041	
*21	Rugg-town West Perrysburg Cemetery	West Perrysburg Road, west side, north of NY 39	Cattaraugus	Perrysburg (West Perrysburg [H])	2008	NRE	00926.000042	
22		10929 West Perrysburg Road	Cattaraugus	Perrysburg (West Perrysburg [H])	2008	NRE	00926.000043	
23	Weaver Cemetery	Center Road, west side, north of Weaver Road	Chautauqua	Arkwright	2008	NRE	n/a on SPHINX	
24		8129 Griswold Road	Chautauqua	Arkwright	2008	NRE	01301.000022	
25	Rose Farm	1936 Ruttenbur Road	Chautauqua	Arkwright	2008	NRE	01301.000023	
26		2667 NY 83	Chautauqua	Arkwright (Arkwright [H])	2008	NRE	01301.000024	
27	Wooley Farm Complex	8903 Farrington Hollow Road	Chautauqua	Arkwright (Blacks Corners [H])	2008	NRE	01301.000025 / 01301.000033	Two entries on Sphinx
28	Arkwright Summit Cemetery	Farrington Hollow Road, east side, south of NY 83	Chautauqua	Arkwright (Blacks Corners [H])	2008	NRE	01301.000026 / 01301.000034	Two entries on Sphinx
29	Maple-Camp Farm/Black Farm	2083 NY 83	Chautauqua	Arkwright (Blacks Corners [H])	2008	NRE	01301.000027	
30		10917 Alleghany Road	Chautauqua	Hanover	2008	NRE	01314.000060	
*31		12168 Alleghany Road	Chautauqua	Hanover	2008	NRE	01314.000061	

Map Pt.	Resource Name	Street Address	County	Town/Village/ Hamlet	Survey Date	NRHP Status	Unique Site No.	Comments
32	Evergreen Cemetery	Angell Street, south side, east of Denison Road	Chautauqua	Hanover	2008	NRE	01314.000062	
33	Forestville Depot	Center Street, NE corner Erie Street	Chautauqua	Hanover	2008	NRE	01314.000063	
*34	Christy Road Cemetery	Christy Road, north side, east of Allegany Road	Chautauqua	Hanover	2008	NRE	01314.000064	
35		Hanover Road, West side, south of Hopper Road	Chautauqua	Hanover	2008	NRE	01314.000065	
36	Livemore Homestead	10079 Hanover Road	Chautauqua	Hanover	2008	NRE	01314.000066	
37	Hurlburt Road/Swift Cemetery	Hurlburt Road	Chautauqua	Hanover	2008	NRE	01314.000068 / 01314.000092	Two entries on SPHINX
38		Hurlburt Road, south side, east of Prospect Road	Chautauqua	Hanover	2008	NRE	01314.000067	
39		469 NY 39	Chautauqua	Hanover	2008	NRE	01314.000069	
40		503 NY 39	Chautauqua	Hanover	2008	NRE	01314.000070	
41		675 NY 39	Chautauqua	Hanover	2008	NRE	01314.000071	
42		1411 NY 39	Chautauqua	Hanover	2008	NRE	01314.000072	
43		11776 Bennett State Road	Chautauqua	Hanover	Pre- 2008	NRE(I)	01314.000056	previously identified on Old Forestville Road
44	Forestville Pioneer Cemetery	Bennett State Road, south of 11051	Chautauqua	Hanover	2008	NRE	01314.000073 / 01314.000090	previously identified at 11049 Old Forestville Road; two entries on SPHINX
45		11103 Bennett State Road	Chautauqua	Hanover	2008	NRE	01314.000074 / 01314.000091	previously identified at 11103 Old Forestville Road; two entries on SPHINX
*46	Mt. Carmel Cemetery	Old Main Street	Chautauqua	Hanover	2008	NRE	01314.000075	
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Map Pt.	Resource Name	Street Address	County	Town/Village/ Hamlet	Survey Date	NRHP Status	Unique Site No.	Comments
*47	Glenwood Cemetery	Old Main Street	Chautauqua	Hanover	2008	NRE	01314.000076	
*48		11935 Old Main Street	Chautauqua	Hanover	2008	NRE	01314.000077	
49	Prospect Hill Cemetery	Prospect Street, east side, south of Forestville Village	Chautauqua	Hanover	2008	NRE	01314.000078 / 01314.000089	Two entries on SPHINX
50	Doty Cemetery	Stebbins Road, South side, west of Old Forestville Road	Chautauqua	Hanover	2008	NRE	01314.000079	
51	Ball Valley Farms	11037 Allegany Road	Chautauqua	Hanover (Balltown [H])	2008	NRE	01314.000080	
52	Balltown Cemetery	Mackinaw Road, north side at Allegany Road	Chautauqua	Hanover (Balltown [H])	2008	NRE	01314.000081	
53		12010 Angel Road	Chautauqua	Hanover (Hanover Center [H])	2008	NRE	n/a on SPHINX	n/a on SPHINX
54		12021 Angel Road	Chautauqua	Hanover (Hanover Center [H])	2008	NRE	n/a on SPHINX	n/a on SPHINX
55	Golden Harvest	967 Hanover Road	Chautauqua	Hanover (Hanover Center [H])	2008	NRE	01314.000084	
56		11991 Hanover Road	Chautauqua	Hanover (Hanover Center [H])	2008	NRE	01314.000085	
57	Nashville Cemetery	Alleghany Road	Chautauqua	Hanover (Nashville [H])	2008	NRE	01314.000086	
58	Church	NY 39, south side, west of Allegany Road	Chautauqua	Hanover (Nashville [H])	2008	NRE	01314.000087	
59	Smith's Mill Cemetery	Hanover Road, West side at York Road	Chautauqua	Hanover (Smith Mill [H])	2008	NRE	01314.000088	
60	Bridge over Walnut Creek	Bradigan Road, south of Water Street	Chautauqua	Hanover (Forestville [V])	2008	Un- evaluat ed	n/a on SPHINX	n/a on SPHINX
61		13 Cedar Street	Chautauqua	Hanover (Forestville [V])	2008	NRE	01352.000098	
62		18 Center Street	Chautauqua	Hanover (Forestville [V])	2008	NRE	01352.000099	
63		28 Center Street	Chautauqua	Hanover (Forestville [V])	2008	NRE	01352.000100	

Map Pt.	Resource Name	Street Address	County	Town/Village/ Hamlet	Survey Date	NRHP Status	Unique Site No.	Comments
64		11-15 Main Street	Chautauqua	Hanover (Forestville [V])	pre-2008 & 2008	NRE	01352.000047	No NRHP DOE prior to 2008 survey
65	Cyrus D. Angell House	26 Main Street	Chautauqua	Hanover (Forestville [V])	pre-2008 & 2008		01352.000055 / 01352.000103	No NRHP DOE prior to 2008 survey; two entries on SPHINX
66		27 Main Street	Chautauqua	Hanover (Forestville [V])	pre-2008 & 2008		01352.000056 / 01352.000105	No NRHP DOE prior to 2008 survey. Two entries on SPHINX
67	Forestville Free Methodist Church (now residence)	32 Main Street	Chautauqua	Hanover (Forestville [V])	2008	NRE - 2008 SHPO letter	01352.000058	No NRHP DOE prior to 2008 survey.
68		43 Main Street	Chautauqua	Hanover (Forestville [V])	2008	NRE	01352.000064 / 01352.000065 (NRE)/ 01352.000115	DOE prior to 2008 survey. Three entries on SPHINX w/conflictin g DOEs- 1) NRE in 2008 SHPO letter; 2) USN 01352.0001 15 - Not- eligible; 3) USN 01352.0000 64 - No Det.
69		2 Pearl Street	Chautauqua	Hanover (Forestville [V])	2008	NRE	01352.000101 / 01352.000070	In report & SPHINX, but not in 2008 SHPO letter (Map Point #69 in SHPO letter as 8 Prospect St). Two entries on SPHINX
70		9 Water Street	Chautauqua	Hanover (Forestville [V])	2008	NRE	01352.000102	

Map Pt.	Resource Name	Street Address	County	Town/Village/ Hamlet	Survey Date	NRHP Status	Unique Site No.	Comments
*71	Clark Mansion on Lighthouse Point	Beachview Avenue, facing the lake	Chautauqua	Hanover (Silver Creek [V])	2008	NRE	01346.000200	
*72		10 Beachview Avenue	Chautauqua	Hanover (Silver Creek [V])	2008	NRE	01346.000201	
*73		130 Central Avenue	Chautauqua	Hanover (Silver Creek [V])	Pre- 2008	NRE (I)	1346.000008	
*74		147 Central Avenue	Chautauqua	Hanover (Silver Creek [V])	2008	NRE	01346.000202	
*75		151 Central Avenue	Chautauqua	Hanover (Silver Creek [V])	Pre- 2008	NRE (I)	01346.000129	
*76	Our Lady of Carmel	165 Central Avenue	Chautauqua	Hanover (Silver Creek [V])	Pre- 2008	NRE (I)	01346.000006	
*77		338 Central Avenue	Chautauqua	Hanover (Silver Creek [V])	Pre- 2008 & 2008	NRE	01346.000037	Prior to 2008 survey- on SPHINXas Not-eligible
*78		350 Central Avenue	Chautauqua	Hanover (Silver Creek [V])	Pre- 2008 & 2008	NRE	01346.000043	Prior to 2008 survey- on SPHINXas Not-eligible
*79		5 Christy Street	Chautauqua	Hanover (Silver Creek [V])	2008	NRE	01346.000202	
*80		9 Christy Street	Chautauqua	Hanover (Silver Creek [V])	2008	NRE	01346.000204	
*81		4 Dana Drive	Chautauqua	Hanover (Silver Creek [V])	2008	NRE	01346.000205	
*82		12370 Hanover Road	Chautauqua	Hanover (Silver Creek [V])	2008	NRE	01346.000206	
*83		16 Hanover Road	Chautauqua	Hanover (Silver Creek [V])	2008	NRE	01346.000207	
*85	Skew Arch Bridge	Jackson Street, Over Jackson Street	Chautauqua	Hanover (Silver Creek [V])	2008	Un- evaluat ed	n/a on SPHINX	
*86	Nickel Plate Bridge over Jackson Street	Jackson Street, Over Jackson Street	Chautauqua	Hanover (Silver Creek [V])	2008	Un- evaluat ed	n/a on SPHINX	

Map Pt.	Resource Name	Street Address	County	Town/Village/ Hamlet	Survey Date	NRHP Status	Unique Site No.	Comments
*87	Hanover Bridge	Lake Avenue, between Lake at Jackson	Chautauqua	Hanover (Silver Creek [V])	2008	ed		
*88	Stone Bridge	Lake Avenue, over Lake Avenue	Chautauqua	Hanover (Silver Creek [V])	2008	Un- evaluat ed	n/a on SPHINX	
*89	Nickel Plate Bridge over Lake Avenue	Lake Avenue, over Lake Avenue	Chautauqua	Hanover (Silver Creek [V])	2008	Un- evaluat ed	n/a on SPHINX	
*90		6/8 Lake Avenue	Chautauqua	Hanover (Silver Creek [V])	2008	NRE	01346.000208	
*91	St. Albans	38 Lake Avenue	Chautauqua	Hanover (Silver Creek [V])	Pre- 2008	NRE (I)	01346.000158	
*92		18 Oak Street	Chautauqua	Hanover (Silver Creek [V])	2008	NRE	01346.000209	
*93		30 Oak Street	Chautauqua	Hanover (Silver Creek [V])	2008	NRE	01346.000210	
*94		117 Old Main Street	Chautauqua	Hanover (Silver Creek [V])	2008	NRE	01346.000211	
*95		151 Old Main Street	Chautauqua	Hanover (Silver Creek [V])	2008	NRE	01346.000212	
*96		155 Old Main Street	Chautauqua	Hanover (Silver Creek [V])	2008	NRE	01346.000227	
*97		1 Oliver Place	Chautauqua	Hanover (Silver Creek [V])	2008	NRE	01346.000213	
*98		5 Oliver Place	Chautauqua	Hanover (Silver Creek [V])	2008	NRE	01346.000214	
*99	Swift House	Street	Chautauqua	Hanover (Silver Creek [V])	2008	NRE	01346.000215	
*100		9 Parkway Street	Chautauqua	Hanover (Silver Creek [V])	2008	NRE	01346.000216	
*101		17 Parkway Street	Chautauqua	Hanover (Silver Creek [V])	2008	NRE	01346.000217	
*102	Erbin House	27 Parkway Street	Chautauqua	Hanover (Silver Creek [V])	Pre- 2008	NRE (I)	1346.000005	

Map Pt.	Resource Name	Street Address	County	Town/Village/ Hamlet	Survey Date	NRHP Status	Unique Site No.	Comments
*103	Trinity Lutheran Church	Porter Avenue, northeast side at Adams Porter Avenue	Chautauqua	Hanover (Silver Creek [V])	2008	NRE		Identified on SPHINX: Adams Porter Avenue, northeast side
*104		Porter Avenue, south of 21	Chautauqua	Hanover (Silver Creek [V])	2008	NRE	01346.000219	
*105		21 Porter Avenue	Chautauqua	Hanover (Silver Creek [V])	2008	NRE	01346.000220	
*106		45 Robinson Street	Chautauqua	Hanover (Silver Creek [V])	2008	NRE	01346.000221	
*107		16 Rumsey Street	Chautauqua	Hanover (Silver Creek [V])	Pre- 2008 & 2008	NRE		Two entries on SPHINX: USN 1346.00018 1 - No Det.
*108		28 Ward Place	Chautauqua	Hanover (Silver Creek [V])	2008	NRE	01346.000223	
*109		1873 East Middle Road	Chautauqua	Sheridan			01323.000050	
*110		1980 King Road	Chautauqua	Sheridan	2008	NRE	01323.000051 / 01323.000008	No NRHP DOE prior to 2008 survey. Two entries on SPHINX
*111		2023 Stebbins Road	Chautauqua	Sheridan			01323.000052	GET SPHINX info
*112		2248 Stebbins Road	Chautauqua	Sheridan			01323.000053	GET SPHINX info
113	Wheeler Cemetery	Hanover Road, East side	Chautauqua	Villenova	2008	NRE	01326.000065	
115		NY 83, South side, west of Hamlet	Chautauqua	Villenova	2008	NRE	01326.000066	
116		8025 NY 83	Chautauqua	Villenova	2008	NRE	01326.000067	
117		8052 NY 83	Chautauqua	Villenova	2008	NRE	n/a on SPHINX	
118		8562 NY 83	Chautauqua	Villenova	2008	NRE	01326.000068	

Map Pt.	Resource Name	Street Address	County	Town/Village/ Hamlet	Survey Date	NRHP Status	Unique Site No.	Comments
119		307 Philips Road	Chautauqua	Villenova	2008	NRE	01326.000070 / 01326.000054	Two entries on SPHINX with conflicting DOEs: USN 01326.0000 54 - Not - eligible
120	Pope Hill Cemetery	Pope Hill Road, south side, east of Round Top Road	Chautauqua	Villenova	2008	NRE	01326.000071	
121	Forestville Wesleyan Church/ School/Ball Hill Cemetery (church complex)	9495 Prospect Road	Chautauqua	Villenova	2008	NRE	01326.000069 / 01326.000079	Two entries on SPHINX - USN 01326.0000 79 for Ball Hill Cemetery/ Forestville Wesleyan Church Cemetery
122		641 South Dayton Road	Chautauqua	Villenova	2008	NRE	01326.000072	
123		691 South Dayton Road	Chautauqua	Villenova	2008	NRE	01326.000073	
124	Dye Homestead	558 South Dayton- Hamlet Road	Chautauqua	Villenova	Pre- 2008 & 2008	NRE	01326.000016	No NRHP DOE prior to 2008 survey.
125	Hamlet Cemetery	NY 83, south side, west of Hamlet	Chautauqua	Villenova	2008	NRE	01326.000074	Address on SPHINX: 558 NY 83, South side, west of Hamlet
126		1141 NY 83	Chautauqua	Villenova	Pre- 2008 & 2008	NRE	01326.000041	Prior to 2008 survey - on SPHINX as Not eligible
127	Villenova Grange	1150 NY 83, west side	Chautauqua	Villenova	2008	NRE	01326.000075	Also identified on SPHINX as South Dayton Grange - USN 01326.0000 82
128	Hamlet School District No. 2	8520 School Street	Chautauqua	Villenova	2008	NRE	01326.000078 / 01326.000085	Two entries on SPHINX

Map Pt.	Resource Name	Street Address	County	Town/Village/ Hamlet	Survey Date	NRHP Status	Unique Site No.	Comments
129	Hamlet United Methodist Church	1119 South Dayton Road	Chautauqua	Villenova	2008	NRE	01326.000084 / 01326.000038 / 01326.000037	Prior to 2008 survey - on SPHINX as Not eligible. Three entries on SPHINX for this address
130		1129 South Dayton Road	Chautauqua	Villenova	Pre- 2008 & 2008	NRE	01326.000039	Prior to 2008 survey - on SPHINX as Not eligible
131	IOOF	1112 South Dayton Road, NY 83	Chautauqua	Villenova	2008	NRE	/	Prior to 2008 survey - on SPHINX as Not eligible; Two entries on SPHINX
132	Villenova Cemetery	Cemetery Road, east side.	Chautauqua	Villenova	2008	NRE	01326.000076	
SD1	E.B. Crissey & Co.	30 Maple Street	Cattaraugus	Dayton (South Dayton [V])	2008	NRE	00954.000001	Contributing property to Potential Ewing Park South Dayton Historic District (EPSD HD)
SD2	Wilson Hale & Co.	1 Park Street	Cattaraugus	Dayton (South Dayton [V])	2008	NRE	00954.000035	Contributing property to Potential EPSD HD.
SD3	Wilson Hale & Co./ Post Office	5 Park Street	Cattaraugus	Dayton (South Dayton [V])	2008	NRE	00954.000036	Contributing property to Potential EPSD HD. Two entries in SPHINX: previously determined Not eligible - USN 00954.0000 034
SD4	Cattaraugus County Bank	7 Park Street	Cattaraugus	Dayton (South Dayton [V])	2008	NRE	00954.000037	Contributing property to Potential EPSD HD.

Map Pt.	Resource Name	Street Address	County	Town/Village/ Hamlet	Survey Date	NRHP Status	Unique Site No.	Comments
SD5	Gypsy Tea Room	9 Park Street	Ü	Dayton (South Dayton [V])	2008	NRE	00954.000038	Contributing property to Potential EPSD HD. Two entries in SPHINX: previously determined Not eligible - USN 00954.0000 08
SD6		11 Park Street	Cattaraugus	Dayton (South Dayton [V])	2008	NRE	00954.000039	Contributing property to Potential EPSD HD. Two entries in SPHINX: previously determined Not eligible - USN 00954.0000 09
SD7		13 Park Street	Cattaraugus	Dayton (South Dayton [V])	2008	NRE	00954.000040	Contributing property to Potential EPSD HD. Two entries in SPHINX: previously determined Not eligible - USN 00954.0000 11
SD8		15 Park Street	Cattaraugus	Dayton (South Dayton [V])	2008	NRE	00954.000041	Contributing property to Potential EPSD HD.
SD9	Village Hall Library	17 Park Street	Cattaraugus	Dayton (South Dayton [V])	2008	Not- eligible	00954.000042	
SD10	Ewing Park	Park, Maple, Railroad & Pine streets	Cattaraugus	Dayton (South Dayton [V])	2008	NRE	00954.000043	Contributing property to Potential EPSD HD.
SD11	The Valley House/ South Dayton Hotel		Cattaraugus	Dayton (South Dayton [V])	2008	NRE	00954.000044	Contributing property to Potential EPSD HD.
SD12		205 Pine Street	Cattaraugus	Dayton (South Dayton [V])	2008	NRE	00954.000045	Contributing property to Potential EPSD HD.

Map Pt.	Resource Name	Street Address	County	Town/Village/ Hamlet	Survey Date	NRHP Status	Unique Site No.	Comments
SD13		207 Pine Street	Cattaraugus	Dayton (South Dayton [V])	2008	NRE	00954.000046	Contributing property to Potential EPSD HD.
SD14	South Dayton Depot	Railroad Street	Cattaraugus	Dayton (South Dayton [V])	2008	NRE	00954.000047	Contributing property to Potential EPSD HD.
**133		1 Lodi Street NY 39	Chautauqua	Hanover (Forestville [V])	2009	NRE	01352.000112 / 01352.000009	Two entries on SPHINX *Not included in 2008 report
**134		25 Main Street	Chautauqua	Hanover (Forestville [V])	2009	NRE	01352.000106	**Not included in 2008 report
**135	Forestville ME Church	3 Park Street	Chautauqua	Hanover (Forestville [V])	2009	NRE	01352.000104	**Not included in 2008 report
**136		4 Pearl Street	Chautauqua	Hanover (Forestville [V])	2009	NRE	01352.000072	** Not included in 2008 report

3.5.1 Potential NRE Silver Creek Historic District, Village of Silver Creek, Town of Hanover, Chautauqua County. The potential NRE Silver Creek Historic District in the Village of Silver Creek, Town of Hanover, Chautauqua County, is partially in the 2013 Project viewshed. Properties in the Silver Creek Historic District did not fall within the 2008 viewshed, thus the district was not included in the 2008 report (Longiaru et al. 2008 [08PR01814]). NYSHPO has determined Silver Creek Historic District, as identified in SPHINX, as a "potential" NRE historic district. This designation is comparable to that of "NRE" when assessing potential impacts to historic resources under Section 106 compliance review. Only one property in the Silver Creek Historic District, a commercial building at 199-201 Central Avenue (NY Route 5), is in the Project viewshed.

Silver Creek Historic District is centered on Main Street (U.S. Route 20) at the historic crossroads of the village. At present, the boundaries of Silver Creek Historic District are not formally delineated. Properties in the district were initially surveyed in the 1990s as part of a cultural resource reconnaissance survey conducted for a New York State Department of Transportation (DOT) project. Street addresses listed in SPHINX are identified by the street address and location information provided in the earlier DOT report, which also included a structure numbering system where all documented buildings were assigned a unique structure number (i.e., "Structure 1," "Structure 2," etc.). Based on property location information provided in SPHINX, the approximate boundaries of Silver Creek Historic District include: a roughly threeblock section of Main Street (U.S. Route 20) from Central Avenue (NY Route 5) to Robinson Street; the Village Park bound by Park Place, Main Street, and Central Avenue; and an approximately 316-ft section of Central Avenue (NY Route 5) from Main Street to 199-201 Central Avenue. The historic district comprises approximately 39 properties dating from the midnineteenth 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 school.

Formal identification and delineation of Silver Creek Historic District is beyond the scope of the 2013 addendum survey. The current study addresses the portion of Silver Creek Historic District in the 2013 Project viewshed. Contributing and non-contributing properties in Silver Creek Historic District have not been identified. Table 3.2 lists only those properties in the Silver Creek Historic District located within the preliminary historic district boundaries that are identified in SPHINX; it does not include those properties identified as "Not Eligible." The preliminary district boundaries embrace individual National Register Listed (NRL; Post Office at 37 Main Street [USN 1346.000099]) and NRE (commercial building (Fleet Bank) at northeast corner of Central Avenue and Main Street [USN 1346.000016]; Simeon Howes House [USN 01346.000003] at 47 Main Street; and Silver Creek High School at 60 Main Street [USN 1346.000086]) properties that are not identified in SPHINX as in the Silver Creek Historic District. These four properties are also contributing resources to the Silver Creek Historic District and are presented in Table 3.2.

Table 3.2. Properties in the Silver Creek Historic District (SPHINX April 2013).

USN	Street Address/Property Name from SPHINX	In 2013 Project Viewshed	Comments
01346.000096	SILVER CREEK VILLAGE PARK, INTERSECTION OF CENTRAL AVE & MAIN ST	No	The village green occupies the parcel on the southwest corner of Central Ave and Main St. bordered by Park Place.
01346.000016	CENTRAL AVE NY 5 STRUCTURE 1 (FLEET BANK) NORTH SIDE; AT MAIN ST; EAST SIDE	No	Individual NRE property. No street address.
01346.000007	CENTRAL AVE FORMER SCHOOL/APARTMENTS EAST SIDE; AT BABCOCK AVE; NORTH SIDE	No	Incorrect location in SPHINX; former Babcock Avenue School building (now apts) is on Babcock Avenue. No street address.
01346.000120	199/201 CENTRAL AVE STRUCTURE 403 (ELLIE'S DELI/RESIDENCE) WEST SIDE; AT HOWARD ST; SOUTH SIDE	Yes	
01346.000082	MAIN ST NY 5, STRUCTURE 209 (FIRST BAPTIST CHURCH) EAST SIDE; AT BABCOCK AVE; NORTH SIDE	No	Street address is 32 Main Street.
01346.000113	MAIN ST NY 5 STRUCTURE 319 (CHRISTIAN SCIENCE SOCIETY) WEST SIDE; AT MILL ST; SOUTH SIDE	No	No street address.
01346.000097	31 MAIN ST NY 5 STRUCTURE 302 (FIRST UNITED CHURCH) WEST SIDE; AT PARK PLACE; SOUTH SIDE	No	Incorrect address in SPHINX; located at 35 Park Place
01346.000098	33 1/2 MAIN ST, 35 1/2 MAIN ST; NY 5 STRUCTURE 303 (GRANNY'S YARN BARN/RESIDENCE) WEST SIDE; AT PARK PLACE; SOUTH SIDE	No	Note: property is on US Route 20 and not NY Route 5.
1346.000099	37 MAIN ST NY 5 STRUCTURE 304 (U.S. POST OFFICE) WEST SIDE; AT PARK PLACE; SOUTH SIDE	No	NRL property.

USN	Street Address/Property Name from SPHINX	In 2013 Project Viewshed	Comments
01346.000083	38-40 MAIN ST NY 5 STRUCTURE 210 (RESIDENCE) EAST SIDE; AT BABCOCK AVE; NORTH SIDE	No	Property is on US Route 20 and not NY Route 5.
01346.000100	39 MAIN ST NY 5 STRUCTURE 305 (R & R ERECTORS INC.) WEST SIDE; AT PARK PLACE; SOUTH SIDE	No	Property is on US Route 20 and not NY Route 5.
01346.000101	41 MAIN ST NY 5 STRUCTURE 306 (SILVER CREEK OPTICAL) WEST SIDE; AT PARK PLACE; SOUTH SIDE	No	Property is on US Route 20 and not NY Route 5.
01346.000084	42-44 MAIN ST NY 5 STRUCTURE 211 (RESIDENCE) EAST SIDE; AT BABCOCK AVE; NORTH SIDE	No	Property is on US Route 20 and not NY Route 5.
01346.000102	43 MAIN ST NY 5 STRUCTURE 307 (ANDERSON - LEE PUBLIC LIBRARY) WEST SIDE; AT PARK PLACE; SOUTH SIDE	No	Property is on US Route 20 and not NY Route 5.
01346.000103	45 MAIN ST NY 5 STRUCTURE 308 (RESIDENCE) WEST SIDE; AT PARK PLACE; SOUTH SIDE	No	Property is on US Route 20 and not NY Route 5.
01346.000003	MAIN ST SIMEON HOWES HOUSE NORTH SIDE; AT BABCOCK RD.	No	Individual NRE property. Street address is 47 Main Street.
01346.000085	50 MAIN ST NY 5 STRUCTURE 213 (RESIDENCE) EAST SIDE; AT BABCOCK AVE; SOUTH SIDE	No	Property is on US Route 20 and not NY Route 5.
01346.000104	51 MAIN ST NY 5 STRUCTURE 210 (RESIDENCE) WEST SIDE; AT BABCOCK AVE	No	Property is on US Route 20 and not NY Route 5.
01346.000002	52 MAIN ST NY 5 MCKEE HOUSE EAST SIDE; AT BABCOCK AVE; SOUTH SIDE	No	Property is on US Route 20 and not NY Route 5.
01346.000105	55 MAIN ST NY 5 STRUCTURE 311 (RESIDENCE) WEST SIDE; AT BABCOCK AVE; SOUTHWEST	No	Property is on US Route 20 and not NY Route 5.
01346.000106	57 MAIN ST NY 5 STRUCTURE 312 (MIXER-BARRESI HOUSE) WEST SIDE; AT MILL ST; NORTH SIDE	No	Property is on US Route 20 and not NY Route 5.
01346.000086	60 MAIN ST, 60 US 20 SILVER CREEK HIGH SCHOOL, 1922 EAST SIDE; AT BABCOCK AVE; SOUTH SIDE	No	Individual NRE property.
01346.000107	61 MAIN ST NY 5 STRUCTURE 313 (RESIDENCE) WEST SIDE; AT MILL ST; NORTH SIDE	No	Property is on US Route 20 and not NY Route 5.
01346.000108	63 MAIN ST NY 5 STRUCTURE 314 (RESIDENCE) WEST SIDE; AT MILL ST; NORTH SIDE	No	Property is on US Route 20 and not NY Route 5.

USN	Street Address/Property Name from SPHINX	In 2013 Project Viewshed	Comments
01346.000109	63 1/2 MAIN ST NY 5 STRUCTURE 315 (RESIDENCE) WEST SIDE; AT MILL ST; NORTH SIDE	No	Property is on US Route 20 and not NY Route 5.
01346.000087	64 MAIN ST NY 5 STRUCTURE 216 (RESIDENCE) EAST SIDE; AT BURGESS ST; NORTH SIDE	No	Property is on US Route 20 and not NY Route 5.
01346.000110	65 MAIN ST NY 5 STRUCTURE 316 (RESIDENCE) WEST SIDE; AT MILL ST; SOUTH SIDE	No	Property is on US Route 20 and not NY Route 5.
01346.000088	66-68 MAIN ST NY 5 STRUCTURE 217 (RESIDENCE) EAST SIDE; AT BURGESS ST; NORTH SIDE	No	Property is on US Route 20 and not NY Route 5.
01346.000111	67 MAIN ST NY 5 STRUCTURE 317 (RESIDENCE) WEST SIDE; AT MILL ST; SOUTH SIDE	No	Property is on US Route 20 and not NY Route 5.
01346.000112	69 MAIN ST NY 5 STRUCTURE 318 (RESIDENCE) WEST SIDE; AT MILL ST; SOUTH SIDE	No	Property is on US Route 20 and not NY Route 5.
01346.000089	70 MAIN ST NY 5 STRUCTURE 218 (RESIDENCE) EAST SIDE; AT BURGESS ST; SOUTH SIDE	No	Property is on US Route 20 and not NY Route 5.
01346.000090	72 MAIN ST NY 5 STRUCTURE 219 (RESIDENCE) EAST SIDE; AT BURGESS ST; SOUTH SIDE	No	Property is on US Route 20 and not NY Route 5.
01346.000091	74 MAIN ST NY 5 STRUCTURE 220 (RESIDENCE) EAST SIDE; AT BURGESS ST; SOUTH SIDE	No	Property is on US Route 20 and not NY Route 5.
01346.000114	75 MAIN ST NY 5 STRUCTURE 320 (RESIDENCE) WEST SIDE; AT MILL ST; SOUTH SIDE	No	Note: property is on US Route 20 and not NY Route 5.
01346.000092	76-78 MAIN ST NY 5 STRUCTURE 221 (RESIDENCE) EAST SIDE; AT ROBINSON ST; NORTH SIDE	No	Property is on US Route 20 and not NY Route 5.
01346.000115	79 MAIN ST NY 5 STRUCTURE 321 (RESIDENCE) WEST SIDE; AT MILL ST; SOUTH SIDE	No	Property is on US Route 20 and not NY Route 5.
01346.000093	80 MAIN ST NY 5 STRUCTURE 222 (RESIDENCE) EAST SIDE; AT ROBINSON ST; NORTH SIDE	No	Property is on US Route 20 and not NY Route 5.
01346.000094	82 MAIN ST NY 5 STRUCTURE 223 (RESIDENCE) EAST SIDE; AT ROBINSON ST; SOUTH SIDE	No	Property is on US Route 20 and not NY Route 5.
01346.000095	84 MAIN ST NY 5 STRUCTURE 224 (RESIDENCE) EAST SIDE; AT ROBINSON ST; SOUTH SIDE	No	Property is on US Route 20 and not NY Route 5.

## 3.6 RESULTS OF THE 2013 HISTORIC RESOURCES SURVEY ADDENDUM

The 2013 addendum survey recommends eight individual properties and one historic district (Center Street Historic District in Forestville, Chautauqua County) as National Register Eligible. Table 3.3 presents the list of recommended individual NRE properties. Map point numbers assigned to newly surveyed and recommended properties begins with Map Point No. 137, continuing the sequence from the 2008 report. The addendum survey also recommends consideration of additional contributing properties to the Potential NRE Silver Creek Historic District (Map Point SC1 to SC6 [see Table 3.5 and Section 6.3]). 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)—is also recommended as an individual NRE property.

As recommended, the Center Street Historic District consists of 14 primary buildings (13 contributing resources and one non-contributing resource). Ten outbuildings are also recommended as contributing resources to the proposed historic district. 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. Early twentieth-century styles include Craftsman. Map point numbers assigned to properties in the Center Street Historic District are as follows: F1 through F14 (Table 3.4). Section 6.2 includes a map of the historic district, representative streetscapes, and an annotated list of properties.

Forestville is a densely settled village nestled along Walnut Creek. Early industry centered on milling and forestry. Tracks for the Erie Railroad were laid in the extreme northeast corner of the village in 1851 (Forestville New York 2008). The main thoroughfare through the village is NY 39/Main Street. Commercial buildings range in age from mid-nineteenth century to late twentieth century. Many of these structures have been compromised and no longer retain their historic integrity. The area south of Main Street contains many of the village's religious and educational facilities, which are intermixed with residential dwellings. These structures range in age from mid-nineteenth century to early twentieth century. The area north of Main Street consists largely of mid-to-late nineteenth-century residential dwellings sited on narrow parcels with tree-lined streets and pedestrian rights-of-way.

Forestville has a rich architectural heritage, which has been partially documented by various cultural resource surveys. Earlier surveys have recommended several individual resources as NRE. However, no historic districts have been formally identified in the village. Due to the limited scope of area of the village included in the present survey, Panamerican recommends future evaluation of historic resources in Forestville with specific consideration to the identification and delineation of boundaries of additional historic districts and/or future expansion of the recommended Center Street Historic District.

Table 3.3. Individual NRE recommendations for 2013 Survey.

Map Pt.	Resource Name	Street Address	County	Town/Village/ Hamlet	2013 NRHP Recomm.	Comments/Other Info.
137	Grange Hall No. 829	12729 Cottage Road (CR 2)	Cattaraugus	Dayton (Cottage [h])	Rec. NRE	
138	Cottage United Methodist Church	12737 Cottage Road (CR 2)	Cattaraugus	Dayton (Cottage [h])	Rec. NRE	
139	First Hose House	2 Lodi Street / NY 39	Chautauqua	Hanover (Forestville [V])	Rec. NRE	USN 01352.000010 No DOE in SPHINX
140		10 Main Street / NY 39	Chautauqua	Hanover (Forestville [V])	Rec. NRE	Current Name: Collector's Corner. USN 01352.000046 No DOE in SPHINX
141		14 Main Street / NY 39	Chautauqua	Hanover (Forestville [V])	Rec. NRE	Current name: Tavern on the Mall. USN 01352.000048 No DOE in SPHINX
142	St. Peter's Episcopal Church	Park Street	Chautauqua	Hanover (Forestville [V])	Rec. NRE	Current name: St. Peter's Christian Church. USN 01352.000002 No DOE in SPHINX
143		7 Third Street	Chautauqua	Hanover (Forestville [V])	Rec. NRE	
*SC5	The Geitner Theatre (The Blackline)	19 Park Place	Chautauqua	Hanover (Silver Creek [V])	Rec. NRE	*Also recommended as a contributing resource to the Silver Creek H.D.

Table 3.4. Recommended Center Street Historic District, Village of Forestville, Chautauqua County.

Map Pt.	Resource Name	Street Address	Contributing / Non-contributing Resource	Previously Inventoried	In 2013 Project viewshed
F1		1 Center St	Contributing	Individually NRE – USN 01352.000114	Yes
F2		2 Center St	Contributing		Yes
F3		4 Center St	Contributing		Yes
F4		5 Center St	Non-contributing		Yes
F5		6 Center St	Contributing		Yes
F6		7 Center St	Contributing		Yes
F7		8 Center St	Contributing		Yes
F8		9 Center St	Contributing		Yes
F9		10 Center St	Contributing		Yes
F10	St. Rose of Lima Church	11 Center St	Contributing		
F11		12 Center St	Contributing		Yes
F12		16 Center St	Contributing		Yes
F13		18 Center St	Contributing		Yes
F14		18 Pearl St	Contributing	Individually NRE	No

Table 3.5. NRE Silver Creek Historic District, Village of Silver Creek, Chautauqua County.

		•	•	•	
Map Pt.	Resource Name	Street Address	Contributing / Non-contributing Resource	Previously Inventoried	In 2013 Project viewshed
SC 1	Silver Creek Historic District	Main Street/ Center Street	n/a	Original survey date unknown	Yes; northern end partially in the H.D.
SC 2	Commercial Building (Unique Hair & Nails)	7 Park Place	Yes	No	Yes
SC 3	Commercial Building (Stitches)	9 Park Place	Yes	No	Yes
SC 4	Commercial Building (People Inc.)	17 Park Place	Yes	No	Yes
SC 5	The Geitner Theatre (The Blackline)	19 Park Place	Yes. Also recommended as Individual NRE	No	Yes
SC 6	Commercial Building	25 Park Place	Yes	No	Yes

# 4.0 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 3.0). The current total area within five miles of the turbines of the Duke Energy Windpark is 169.4 sq miles, of which turbines are visible from 128.8 sq miles.

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 National Register-listed and -eligible (and potentially eligible) properties within the viewshed (Table 6.1 [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 Zone of Visual Influence (ZVI) 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 identified properties, three are situated such that proposed turbines are in the visual foreground (property nos./map points 41, 114, and 121), 36 are at locations where turbines would be in the visual middle ground, and 125 are situated such that proposed turbines are in the visual background (more than 3.0 miles from the structures) (Table 4.1; see Appendix E, the Historical Architectural Investigation Results pocket map).

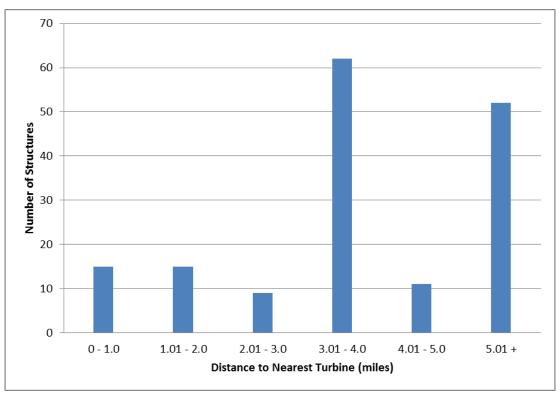


Figure 4.1. Frequency of NRE structures relative to distance to the nearest proposed wind turbine.

Within or immediately adjacent to the proposed windpark 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 133- to 151-meter-tall wind turbines.

The proposed windpark 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.

The 2008 investigation identified 132 individual NRE structures 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). The current 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]), the NRE Silver Creek Historic District within the topographic viewshed or ZVI (see Table 4.1). Note, the NRE Silver Creek historic District was not previously in the ZVI. No NRL properties are in the ZVI. 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 (Table 4.1). The mean number of turbines that are visible from an NRL/NRE property, however, is 20; the average distance from an NRL/NRE property to the nearest turbine is 4 miles (6.4 km).

A review of the SPHINX database indicated that no NRL properties and eight previously-determined NRE properties are in the positive visual five-mile APE. The five-mile visual APE is defined as the area from which the proposed undertaking may be visible (see Section 3.1). Properties within the five-mile APE are ordered according to distance in Appendix A.

Table 4.1. Properties within the visual APE of the Duke Energy Windpark and visual impacts of project turbines.

	Table 4.1. I Toperties within the visual ALE of the Duke Energy Windpark 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		26	4.7	24
2	Erie Railroad Bridge over Cattaragaus Creek	Oaks Road	Cattaraugus	Dayton		26	3.9	34
3	Cottage Cemetery	Cottage Road	Cattaraugus	Dayton	Cottage (h)	36	3.9	23
4		12654 Cottage Road	Cattaraugus	Dayton	Cottage (h)	36	3.5	18
5		27 Cherry Street	Cattaraugus	Dayton	South Dayton (V)	26	3.3	5
6	Factory Building	East Railroad Avenue	Cattaraugus	Dayton	South Dayton (V)	26	3.7	32
7		73 East Railroad Avenue	Cattaraugus	Dayton	South Dayton (V)	26	3.6	24
8		62 Main Street	Cattaraugus	Dayton	South Dayton (V)	26	3.2	31
9		203 Maple Street	Cattaraugus	Dayton	South Dayton (V)	26	3.4	11
10		212 or 214 Maple Street	Cattaraugus	Dayton	South Dayton (V)	26	3.3	6
11	Harry Austin Milling Co.	Mill Street	Cattaraugus	Dayton	South Dayton (V)	26	3.6	20
12		227 Oak Street	Cattaraugus	Dayton	South Dayton (V)	26	3.4	29
13	Sears	8143 Oaks Road	Cattaraugus	Dayton	South Dayton (V)	26	3.6	42
14		107 Pine Street	Cattaraugus	Dayton	South Dayton (V)	26	3.6	25
15		309 Pine Street	Cattaraugus	Dayton	South Dayton (V)	26	3.4	22
16		312 Pine Street	Cattaraugus	Dayton	South Dayton (V)	26	3.4	20
17		319 Pine Street	Cattaraugus	Dayton	South Dayton (V)	26	3.4	23

Table 4.1 (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
18		413 Pine Street	Cattaraugus	Dayton	South Dayton (V)	26	3.3	21
19	Perrysburg Cemetery	NY 39	Cattaraugus	Perrysburg		44	2.7	12
20		12316 NY 39	Cattaraugus	Perrysburg		44	4.5	4
21	Rugg-town West Perrysburg Cemetery	West Perrysburg Road	Cattaraugus	Perrysburg	West Perrysburg (h)	44	3.6	40
22		10929 West Perrysburg Road	Cattaraugus	Perrysburg	West Perrysburg (h)	44	3.5	12
23	Weaver Cemetery	Center Road	Chautauqua	Arkwright		2	3.5	42
24		8129 Griswold Road	Chautauqua	Arkwright		6	4.3	7
25	Rose Farm	1936 Ruttenbur Road	Chautauqua	Arkwright		9	2.8	38
26		2667 NY 83	Chautauqua	Arkwright	Arkwright (h)	2	3.3	19
27	Black Farm Complex	8903 Farrington Hollow Road	Chautauqua	Arkwright	Blacks Corners (h)	6	1.7	40
28	Arkwright Summit Cemetery	Farrington Hollow Road	Chautauqua	Arkwright	Blacks Corners (h)	6	1.6	38
29	Mapl-Camp Farm/Black Farm	2083 NY 83	Chautauqua	Arkwright	Blacks Corners (h)	5	1.6	37
30		10917 Alleghany Road	Chautauqua	Hanover		42	2.6	9
31		12168 Alleghany	Chautauqua	Hanover		42	5.4	7
32	Evergreen Cemetery	Angell Street	Chautauqua	Hanover		41	4.5	37
33	Forestville Depot	Center Street	Chautauqua	Hanover		41	3.1	11
34	Christy Road Cemetery	Christy Road	Chautauqua	Hanover		42	5.2	1
35		Hanover Road	Chautauqua	Hanover		42	1.1	25
36	Livemore Family	10079 Hanover Road	Chautauqua	Hanover		44	0.7	31
37	Hurlburt Road Cemetery	Hurlburt Road	Chautauqua	Hanover		33	1.3	4
38		Hurlburt Road	Chautauqua	Hanover		33	1.3	11

Table 4.1 (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
39		469 NY 39	Chautauqua	Hanover		44	0.8	30
40		503 NY 39	Chautauqua	Hanover		42	0.7	22
41		675 NY 39	Chautauqua	Hanover		41	0.2	26
42		1411 NY 39	Chautauqua	Hanover		41	2.0	26
43		Old Forestville Road	Chautauqua	Hanover		41	4.8	37
44	Pioneer Cemetery	11049? Old Forestville Road	Chautauqua	Hanover		41	3.2	22
45		11103 Old Forestville Road	Chautauqua	Hanover		41	3.3	23
46	Mt. Carmel Cemetery	Old Main Street	Chautauqua	Hanover		41	5.8	1
47	Glenwood Cemetery	Old Main Street	Chautauqua	Hanover		41	5.7	39
48		11935 Old Main Street	Chautauqua	Hanover		41	5.5	39
49	Prospect Hill Cemetery	Prospect Street	Chautauqua	Hanover		41	2.7	19
50	Doty Cemetery	Stebbins Road	Chautauqua	Hanover		41	4.7	38
51	Ball Valley Farms	11037 Allegany Road	Chautauqua	Hanover	Balltown (h)	42	3.1	25
52	Balltown Cemetery	Mackinaw Road	Chautauqua	Hanover	Balltown (h)	42	3.1	9
53		12010 Angel Road	Chautauqua	Hanover	Hanover Center (h)	41	4.8	38
54		12021 Angel Road	Chautauqua	Hanover	Hanover Center (h)	41	4.9	38
55	Golden Harvest	967 Hanover Road	Chautauqua	Hanover	Hanover Center (h)	41	4.6	37
56		11991 Hanover Road	Chautauqua	Hanover	Hanover Center (h)	41	4.7	37
57	Nashville Cemetery	Alleghany Road	Chautauqua	Hanover	Nashville (h)	44	1.5	13
58	Church	NY 39	Chautauqua	Hanover	Nashville (h)	44	1.5	22
59	Smith's Mill Cemetery	Hanover Road	Chautauqua	Hanover	Smith's Mill (h)	42	3.7	14
60	Bridge over Walnut Creek	Bradigan Road	Chautauqua	Hanover	Forestville (V)	1	3.2	12

Table 4.1 (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
61		13 Cedar Street	Chautauqua	Hanover	Forestville (V)	41	3.2	18
62		18 Center Street	Chautauqua	Hanover	Forestville (V)	41	3.1	7
63		28 Center Street	Chautauqua	Hanover	Forestville (V)	41	3.1	12
64		11-15 Main Street	Chautauqua	Hanover	Forestville (V)	41	3.1	6
65		26 Main Street	Chautauqua	Hanover	Forestville (V)	41	3.2	12
66		27 Main Street	Chautauqua	Hanover	Forestville (V)	41	3.2	13
67	Forestville Free Methodist Church	32 Main Street	Chautauqua	Hanover	Forestville (V)	41	3.4	14
68		43 Main Street	Chautauqua	Hanover	Forestville (V)	41	3.3	14
69		2 Pearl Street	Chautauqua	Hanover	Forestville (V)	41	3.1	4
70		9 Water Street	Chautauqua	Hanover	Forestville (V)	41	3.4	13
71	Clark Mansion on Lighthouse Point	Beachview Avenue	Chautauqua	Hanover	Silver Creek (V)	41	7.3	4
72		10 Beachview Avenue	Chautauqua	Hanover	Silver Creek (V)	41	7.2	7
73		130 Central Avenue	Chautauqua	Hanover	Silver Creek (V)	41	7.0	8
74		147 Central Avenue	Chautauqua	Hanover	Silver Creek (V)	41	6.9	25
75		151 Central Avenue	Chautauqua	Hanover	Silver Creek (V)	41	6.9	39
76	Our Lady of Carmel	165 Central Avenue	Chautauqua	Hanover	Silver Creek (V)	41	6.8	32

Table 4.1 (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
77		338 Central Avenue	Chautauqua	Hanover	Silver Creek (V)	41	6.6	40
78		350 Central Avenue	Chautauqua	Hanover	Silver Creek (V)	41	6.6	40
79		5 Christy Street	Chautauqua	Hanover	Silver Creek (V)	41	6.5	40
80		9 Christy Street	Chautauqua	Hanover	Silver Creek (V)	41	6.5	40
81		4 Dana Drive	Chautauqua	Hanover	Silver Creek (V)	41	6.6	17
82		12370 Hanover Road	Chautauqua	Hanover	Silver Creek (V)	41	6.4	40
83		16 Hanover Road	Chautauqua	Hanover	Silver Creek (V)	41	6.8	41
84		Howard Street	Chautauqua	Hanover	Silver Creek (V)	41	7.0	20
85	Skew Arch	Jackson Street	Chautauqua	Hanover	Silver Creek (V)	41	7.0	27
86	Railroad Bridge over Jackson	Jackson Street	Chautauqua	Hanover	Silver Creek (V)	41	7.0	23
87	Bridge over Silver Creek	Lake Avenue	Chautauqua	Hanover	Silver Creek (V)	41	7.0	29
88	Stone Bridge	Lake Avenue	Chautauqua	Hanover	Silver Creek (V)	41	7.0	18
89	Railroad Bridge over Lake Avenue	Lake Avenue	Chautauqua	Hanover	Silver Creek (V)	41	7.0	36
90		6/8 Lake Avenue	Chautauqua	Hanover	Silver Creek (V)	41	6.9	14
91	St. Albans	38 Lake Avenue	Chautauqua	Hanover	Silver Creek (V)	41	6.9	25
92		18 Oak Street	Chautauqua	Hanover	Silver Creek (V)	41	6.7	34

Table 4.1 (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
93		30 Oak Street	Chautauqua	Hanover	Silver Creek (V)	41	6.7	40
94		117 Old Main Street	Chautauqua	Hanover	Silver Creek (V)	41	6.4	3
95		151 Old Main Street	Chautauqua	Hanover	Silver Creek (V)	41	6.3	18
96		155 Old Main Street	Chautauqua	Hanover	Silver Creek (V)	41	6.2	30
97		1 Oliver Place	Chautauqua	Hanover	Silver Creek (V)	41	6.7	18
98		5 Oliver Place	Chautauqua	Hanover	Silver Creek (V)	41	6.7	14
99	Swift House	6 Parkway Street	Chautauqua	Hanover	Silver Creek (V)	41	6.8	32
100		9 Parkway Street	Chautauqua	Hanover	Silver Creek (V)	41	6.8	35
101		17 Parkway Street	Chautauqua	Hanover	Silver Creek (V)	41	6.8	34
102	Erbin House	27 Parkway Street	Chautauqua	Hanover	Silver Creek (V)	41	6.7	30
103	Trinity Lutheran Church	Porter Avenue	Chautauqua	Hanover	Silver Creek (V)	41	6.9	40
104		19? Porter Avenue	Chautauqua	Hanover	Silver Creek (V)	41	6.9	40
105		21 Porter Avenue	Chautauqua	Hanover	Silver Creek (V)	41	6.9	40
106		45 Robinson Street	Chautauqua	Hanover	Silver Creek (V)	41	6.3	1
107		16 Rumsey Street	Chautauqua	Hanover	Silver Creek (V)	41	7.0	15
108		28 Ward Place	Chautauqua	Hanover	Silver Creek (V)	41	6.5	40
109		1873 East Middle Road	Chautauqua	Sheridan		41	6.5	40

Table 4.1 (cont'd)

			7.1 (0011t a)					-
Property Number	Property Name	Street Address	County	Town	Hamlet (h) or Village (V)	Nearest Turbine	Distance to nearest turbine (miles)	Number of turbines visible
110		1980 King Road	Chautauqua	Hanover		41	4.6	36
111		2023 Stebbins Road	Chautauqua	Sheridan		41	5.4	34
112		2248 Stebbins Road	Chautauqua	Sheridan		41	5.7	35
113	Cemetery	Hanover Road	Chautauqua	Villenova		36	1.2	27
114	School No. 10	9129 North Hill Road	Chautauqua	Villenova		13	0.2	28
115		NY 83	Chautauqua	Villenova		11	0.5	3
116		8025 NY 83	Chautauqua	Villenova		26	3.2	36
117		8052 NY 83	Chautauqua	Villenova		26	3.1	37
118		8562 NY 83	Chautauqua	Villenova		26	1.6	35
119		307 Philips Road	Chautauqua	Villenova		26	1.7	32
120	Pope Hill Cemetery	Pope Hill Road	Chautauqua	Villenova		17	0.6	38
121	Forestville Wesleyan Church/School/Ball Hill Cem	9495 Prospect Road	Chautauqua	Villenova		21	0.3	31
122		641 South Dayton Road	Chautauqua	Villenova	Balcom Corners (h)	26	1.7	31
123		691 South Dayton Road	Chautauqua	Villenova		25	1.7	28
124	Dye Homestead	558 South Dayton-Hamlet Road	Chautauqua	Villenova	Balcom Corners (h)	26	1.7	31
125	Hamlet Cemetery	NY 83	Chautauqua	Villenova	Hamlet (h)	11	0.6	5
126		1141 NY 83	Chautauqua	Villenova	Hamlet (h)	11	0.9	14
127	Villenova Grange	NY 83	Chautauqua	Villenova	Hamlet (h)	11	0.8	12
128	Hamlet School District No. 2	School Street	Chautauqua	Villenova	Hamlet (h)	11	0.9	9
129	Hamlet United Methodist Church	1119 South Dayton Road	Chautauqua	Villenova	Hamlet (h)	11	0.9	14
130		1129 South Dayton Road	Chautauqua	Villenova	Hamlet (h)	11	0.9	15
131	IOOF	South Dayton Road	Chautauqua	Villenova	Hamlet (h)	11	0.9	14
132	Villenova Cemetery	Cemetery Road	Chautauqua	Villenova	Wright's Corners (h)	26	1.3	23

Table 4.1 (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
133		1 Lodi Street (NY 39)	Chautauqua	Hanover	Forestville (V)	41	3.1	2
134		25 Main Street	Chautauqua	Hanover	Forestville (V)	41	3.2	10
135	Forestville Methodist Episcopal Church	3 Park Street	Chautauqua	Hanover	Forestville (V)	41	3.2	1
136		4 Pearl Street	Chautauqua	Hanover	Forestville (V)	41	3.1	2
137	Grange Hall No. 829	12729 Cottage Road (CR 2)	Cattaraugus	Dayton	Cottage (h)	36	3.3	1
138	Cottage United Methodist Church	12737 Cottage Road (CR 2)	Cattaraugus	Dayton	Cottage (h)	36	3.3	5
139	First Hose House	2 Lodi Street (NY 39)	Chautauqua	Hanover	Forestville (V)	41	3.1	1
140		10 Main Street (NY 39)	Chautauqua	Hanover	Forestville (V)	41	3.2	5
141		14 Main Street (NY 39)	Chautauqua	Hanover	Forestville (V)	41	3.2	5
142	St. Peter's Episcopal Church	Park Street	Chautauqua	Hanover	Forestville (V)	41	3.2	6
143		7 Third Street	Chautauqua	Hanover	Forestville (V)	41	3.0	1
	Recommended Center Street Historic District	Center Street	Chautauqua	Hanover	Forestville (V)	41	2.9	0-9
F1		1 Center Street	Chautauqua	Hanover	Forestville (V)	41	2.9	3
F2		2 Center Street	Chautauqua	Hanover	Forestville (V)	41	3.1	4
F3		4 Center Street	Chautauqua	Hanover	Forestville (V)	41	3.1	4
F4		5 Center Street	Chautauqua	Hanover	Forestville (V)	41	3.0	3
F5		6 Center Street	Chautauqua	Hanover	Forestville (V)	41	3.1	5

Property Number	Property Name	Street Address	County	Town	Hamlet (h) or Village (V)	Nearest Turbine	Distance to nearest turbine (miles)	Number of turbines visible
F6		7 Center Street	Chautauqua	Hanover	Forestville (V)	41	3.0	4
F7		8 Center Street	Chautauqua	Hanover	Forestville (V)	41	3.1	9
F8		9 Center Street	Chautauqua	Hanover	Forestville (V)	41	3.0	4
F9		10 Center Street	Chautauqua	Hanover	Forestville (V)	41	3.1	9
F10	St. Rose of Lima Church	11 Center Street	Chautauqua	Hanover	Forestville (V)	41	3.1	9
F11		12 Center Street	Chautauqua	Hanover	Forestville (V)	41	3.0	6
F12		16 Center Street	Chautauqua	Hanover	Forestville (V)	41	3.1	8
F13		18 Center Street	Chautauqua	Hanover	Forestville (V)	41	3.1	7
F14		18 Pearl Street	Chautauqua	Hanover	Forestville (V)	41	2.9	1
SC 1	Silver Creek Historic District	Main Street/Center Street	Chautauqua	Hanover	Silver Creek (V)	41	6.5	0-5
SC 2	Commercial Building (Unique Hair & Nails)	7 Park Place	Chautauqua	Hanover	Silver Creek (V)	41	6.7	2
SC 3	Commercial Building (Stitches)	9 Park Place	Chautauqua	Hanover	Silver Creek (V)	41	6.7	2
SC 4	Commercial Building (People Inc.)	17 Park Place	Chautauqua	Hanover	Silver Creek (V)	41	6.7	3
SC 5	The Geitner Theatre (The Blackline)	19 Park Place	Chautauqua	Hanover	Silver Creek (V)	41	6.7	3
SC 6	Commercial Building	25 Park Place	Chautauqua	Hanover	Silver Creek (V)	41	6.7	3

# **5.0 Mitigation of Visual Impacts**

A total of 136 individual NRE properties and two NRE historic districts were previously identified in the current visual APE in Chautauqua and Cattaraugus county (Longiaru et al. 2008; Sexton and Toner 2009). Panamerican recommends eight properties and two historic districts as NRE in 2013 (see Section 6.0). 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 values. The average number of turbines that can be seen is 21 with an average distance of 4 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 6.0, 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 Windpark that will require mitigation.

Duke Energy 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 Windpark, 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

Duke Energy proposes the following working criteria 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 Duke Energy Ball Hill Windpark 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. Federal Aviation Administration (FAA) lighting is not required on every turbine. Permanent access roads are only 16 feet (4.9 meters) wide and temporary access roads are only 35 feet (10.7 meters) wide.

Electrical lines connecting the turbines to each other and the existing substation will be carried on poles ranging from 55.5 to 75 feet (16.9 to 20.4 meters) tall, or placed underground, or installed along existing power line rights-or-way where possible. Since the collection lines are on average approximately 65 feet 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 Duke Energy's plan for the Ball Hill Windpark.

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 a Zone Visual Influence (ZVI) 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 Chautaugua 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 will be contacted by Duke Energy 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.

# **6.0 Annotated List of Properties**

Eight individual primary buildings (i.e., principal structures) and one recommended historic district (containing 14 primary buildings [13 contributing resources and one non-contributing resource]) were documented for the first time during this architectural survey. Recommended individual NRE properties are presented in the Annotated List of Properties that follows (beginning on page 6-2). Subsection 6.2 presents the recommended Center Street Historic District in Forestville, which includes general photographs of Center Street and a separate Annotated List includes the (beginning on page 6-12). Subsection 6.3 presents additional contributing properties to the potential NRE Silver Creek Historic District (Map Point SC1 to SC6 [see Section 6.3]). 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)—is also recommended as an individual NRE property. Outbuildings associated with farms or residential properties are not included in the total number of surveyed properties.

#### 6.1 RECOMMENDED INDIVIDUAL NRE PROPERTIES

For the purpose of clarity and organization of data, the annotated list is arranged in sequential alpha-numerical order by county, town, village or hamlet, and street address. The table includes three columns: 1) a thumbnail-sized photograph of each resource; 2) name, location, date, alterations, map point number, and 3) description. If applicable, the second column also includes S/NRHP eligibility status. The third column lists relevant Unique Site Numbers (USN) on file in the SPHINX database. Dates are presented as *circa*, based on exterior stylistic details and historic materials. A margin of error of approximately ten years should be assumed when "circa" is applied. Providing an accurate and precise time of construction of barns and farm buildings is usually difficult, especially when limited to a reconnaissance survey. Often, in rural settings, many dates are approximations based on physical evidence and the general historic context rather than on documented historical information.

Locations of recommended NRE properties are keyed by map point on the project map located at end of the report (see Map Point Nos. 137 through 143 and SC5). The Project Map consists of a single fold-out topographic map with the viewshed, turbine locations, locations of NRE buildings/structures, recommended NRE properties, and the boundaries of the five-mile APE.

A compact disk (CD) with digital representation of each property photographed in the annotated list accompanies the final five-mile APE survey report to supplement NYSHPO review. Geographic Information System (GIS) project data will be submitted to the NYSHPO for their agency database (to be submitted after NYSHPO review of the five-mile APE survey report).

<sup>&</sup>lt;sup>1</sup> DOE = Determination of Eligibility (NRHP); No Det. = No Determination on file; U = Undetermined status; NRE (I) = Individual NRE property on file; NRL = National Register Listed; NHL = National Historic Landmark; SPHINX = State Preservation Historical Information Network Exchange

Table 6.1. Annotated list for recommended NRE properties.

Cattaraugus County Town: Dayton		
Photograph	Property Information	Description
Photo No. 1	Cottage Grange No. 829 12729 Cottage Road (CR 2)  Town: Dayton Hamlet: Cottage MCD: 00906 Cattaraugus County Date: ca. 1898  Map Point: 137 NRHP Recom.: Eligible	Style: Frame Vernacular Stories: 2 Plan: Rectangular Roof: Front gable Ext. Siding: Clapboard Foundation: Windows: 2/2 DHS  Details: A highly intact example of a Frame Vernacular building originally constructed as a Grange Hall. The building is 2 bays wide by four bays deep with a 1-story rear addition.
Photo No. 2	Cottage Grange No. 829 12729 Cottage Road (CR 2)  Town: Dayton Hamlet: Cottage MCD: 00906 Cattaraugus County Date: ca. 1898  Map Point: 137 NRHP Recom.: Eligible	The main entrance with double-leaf paneled doors and transom is in the right bay of the façade. The second floor has a simple wooden sign. A brick chimney rests on the front center ridge.
Photo No. 3	Cottage Grange No. 829  Grange History: The first dues paying Grange in the world was Fredonia No. 1 in neighboring Chautauqua County, which was established in 1868. The first annual meeting of the NY State Grange was held on March 1874 in Albany, with a membership of 164 Granges (Baugnet 2002).	Historical Info: Cottage Grange organized in 1897. The first meeting was held in the building on October 7, 1908. It is the only Grange building built for this purpose in Cattaraugus County. The Grange once served as the focal point of the community (Cattaraugus County Bicentennial History 2008).

Table 6.1. (cont'd)			
Cattaraugus County Town: Dayton			
Photograph	Property Information	Description	
Photo No. 4	Cottage Methodist Church  12737 Cottage Road (CR 2)  Town: Dayton Hamlet: Cottage MCD: 00906 Cattaraugus County Date: 1846  Map Point: 138 NRHP Recom.: Eligible	Style: Italianate Stories: 1 w/ central tower Plan: rectangular Roof: gabled Ext. Siding: clapboard, vinyl Foundation: stone Windows: 4/4 DHS  Details: A frame example of an early Italianate inspired rural church in what was the original settlement in Dayton, known as West Dayton.	
Photo No. 5	Cottage Methodist Church  12737 Cottage Road (CR 2)  Town: Dayton Hamlet: Cottage MCD: 00906 Cattaraugus County Date: 1846  Map Point: 138 NRHP Recom.: Eligible	The church features an incorporated tall central tower w/entrance, decorative brackets, belfry w/triple arched openings, & Mansard type roof. The entrance has been modified, but still retains its original fanlight and pediment. Windows openings are paired round arched windows with simple wooden surrounds (2 on façade, 3 on sides). A side entrance and gabled shed bay are on the east side. Exterior fabric includes vinyl siding on the façade and clapboard on the sides & rear.	
Photo No. 6	Cottage Methodist Church  12737 Cottage Road (CR 2)  Town: Dayton Hamlet: Cottage MCD: 00906 Cattaraugus County Date: 1846  Map Point: 138 NRHP Recom.: Eligible	Historical Info: The first Methodist Church in Dayton known as Cottage Methodist Church was incorporated on Oct. 32, 1845 with a congregation of approx. 60. Church constructed in 1846 at cost of \$2,500 and capacity for 300 persons. A parsonage and 2 acres of land were secured in ca. 1859 (Ellis 1879).	

Table 6.1. (cont u)			
Cattaraugus County Town: Dayton			
Photograph	Property Information	Description	
	Cottage Methodist Church  12737 Cottage Road (CR 2)  Town: Dayton Hamlet: Cottage MCD: 00906 Cattaraugus County Date: 1846  Map Point: 138 NRHP Recom.: Eligible	South side (rear)	
Photo No. 7			
TO STATE OF THE PARTY OF THE PA	The Geitner Theatre (The Backline)  19 Park Place (The Backline) Town: Hanover Village: Silver Creek MCD: 01346 Chautauqua County Date: 1921  Map Point: NRHP Recom.:  1. Contributing to Silver Creek Historic District	Style: Early 20 <sup>th</sup> -century Commercial -Neoclassical Revival Stories: 2 Plan: Rectangular Roof: Gable with stepped parapet Ext. Siding: Brick Foundation: Concrete Windows: casement  Details: An excellent example of a largely intact (exterior) early 20 <sup>th</sup> -century early "motion picture" theatre inspired by the Neoclassical-	
Photo No. 8	Individual NRE	inspired stylistic elements.	
*See Annotated List in Section 6.3			

Chautauqua County Town: Hanover Village: Forestville

Photograph

Photo No. 9

## **Property Information**

L.J. Pierce House Co. #1
2 Lodi Street
Town:

Town: Hanover Village: Forestville MCD: 01352 Chautauqua County Date: ca. 1896

Map Point: 139

NRHP Recom.: Eligible

## Description

Style: Frame Vernacular Stories: 2 Plan: rectangular Roof: gable

Ext. Siding: clapboard Foundation: stone Windows: 1/1 DHS

**Details:** A two-story Frame Vernacular building distinguished by a gabled parapet w/brackets. The original window openings on the 2<sup>nd</sup> floor façade were enclosed (date unknown), while two original door openings (double and single bay) remain on the first floor façade. No DOE on SPHINX - 01352.000010



Photo No. 10

#### L.J. Pierce House Co. #1 2 Lodi Street

Town:

Town: Hanover Village: Forestville MCD: 01352 Chautauqua County Date: ca. 1896

Map Point: 139

NRHP Recom.: Eligible

Window openings on the side elevations are intact, but most of which are boarded. The original bell cote and wet-fire hose tower are gone. Despite noticeable alterations, the building retains sufficient architectural integrity as well as historical association with rural fire protection to merit consideration for NRHP

eligibility.



Copy of undated historic photograph

#### L.J. Pierce House Co. #1

2 Lodi Street Town: Hanover Village: Forestville MCD: 01352 Chautauqua County Date: ca. 1896

Map Point: 139

NRHP Recom.: Eligible

#### **Historical Info:**

Sign on building: "This building was built in 1896 for the L.J. Pierce Hose Co. # 1, est. 1895." It served as the first hose house in Forestville.

Undated historic photograph

Copy of historic photograph reproduced courtesy of http://www.co.chautauqua.ny.us/ departments/clerk/historian/Pages/ HistoricalCountyStructures.aspx

Table 6.1. (cont'd)			
Chautauqua County Town: Hanover Village: Forestville			
Photograph	Property Information	Description	
	L.J. Pierce House Co. #1  2 Lodi Street  Town: Hanover Village: Forestville MCD: 01352 Chautauqua County Date: ca.  Map Point: 139 NRHP Recom.: Eligible	Northwest side	
Photo No. 11			
Photo No. 12	L.J. Pierce House Co. #1  2 Lodi Street  Town: Hanover Village: Forestville MCD: 01352 Chautauqua County Date: ca.  Map Point: 139 NRHP Recom.: Eligible	Northeast side (rear)	
COLLECTOR'S CORNER  Photo No. 13	10 Main Street/ NY 39 (Collectors Corner)  Town: Hanover Village: Forestville MCD: 01352 Chautauqua County Date: ca.  Map Point: 140 NRHP Recom.: Eligible	Style: Frame Vernacular Stories: 2 Plan: rectangular Roof: shed Ext. Siding: vinyl Foundation: original foundation not visible Windows: replacement 1/1 DHS  Details: No DOE on SPHINX - USN 01352.000046	

	e 6.1. (cont'd)	
Chautauqua County Town: Hanover Village: Forestville		
Photograph	Property Information	Description
	10 Main Street/ NY 39 (Collectors Corner)  Town: Hanover Village: Forestville MCD: 01352 Chautauqua County Date: ca.  Map Point: 140 NRHP Recom.: Eligible	The building is a good representative example of late 19 <sup>th</sup> -century commercial building with intact frame storefront elements which include entry doors, pilasters & bulkheads. Presently, it is the only extant wooden storefront on Main Street. The building also features a wide overhanging wooden cornice with paired decorative brackets.
Photo No. 14		
Photo No. 15	Harrison House 14 Main Street/ NY 39 (Tavern on the Mall)  Town: Hanover Village: Forestville MCD: 01352 Chautauqua County Date: ca. early 1880s  Map Point: 141 NRHP Recom.: Eligible	Style: Italianate Stories:2 Plan: rectangular Roof: gable Ext. Siding: asbestos shingle Foundation: original foundation not visible due to poured concrete porch foundation Windows: segmental arch openings w/ replacement 1/1 DHS  Details:No DOE on SPHINX - USN 01352.000048
Photo No. 16	Harrison House 14 Main Street/ NY 39 (Tavern on the Mall)  Town: Hanover Village: Forestville MCD: 01352 Chautauqua County Date: ca. early 1880s  Map Point: 141 NRHP Recom.: Eligible	A 2-story frame commercial building with tiered wrap-around porches, canted corner entrance, segmental arch window openings, and a pedimented parapet with paired round arched windows & decorative cornice brackets. Two main entrances feature fanlight-type transom and sidelights. Left porch bay on north façade is enclosed.

Table 6.1. (cont'd)			
Chautauqua County Town: Hanover Village: Forestville			
Photograph	Property Information	Description	
Copy of undated historic photograph	Harrison House 14 Main Street/ NY 39 (Tavern on the Mall)  Town: Hanover Village: Forestville MCD: 01352 Chautauqua County Date: ca. early 1880s  Map Point: 141 NRHP Recom.: Eligible	Historical Info:  1881 map: lot owned by L. Pierce; no building on lot. Built on site of Morrison House, burned in ca. 1874.	
Photo No. 17	Harrison House 14 Main Street/ NY 39 (Tavern on the Mall)  Town: Hanover Village: Forestville MCD: 01352 Chautauqua County Date: ca. early 1880s  Map Point: 141 NRHP Recom.: Eligible	In spite of modifications such as replacement porch elements and window sash, 14 Main Street retains sufficient architectural integrity as a largely intact 19 <sup>th</sup> -century Italianate commercial building. Storefronts of neighboring commercial buildings on Main Street have been largely altered.	
Photo No. 18	St. Peter's Episcopal Church Park Street, west side  Town: Hanover Village: Forestville MCD: 01352 Chautauqua County Date: ca. 1859  Map Point: 142 NRHP Recom.: Eligible  *Current name: St. Peter's Christian Church	Style: Carpenter Gothic Stories:1 Plan: rectangular w/ later wing Roof: gable Ext. Siding: metal-board & batten Foundation: concrete Windows: pointed arch - architectural glass  Details: A largely intact example of a Carpenter Gothic inspired church. Details include an enclosed entry bay with double-leaf wood doors & pointed arched windows, trefoil above entrance, bell tower, pointed arched windows, and architectural glass.  On SHPINX without a NRHP determination: USN 01352.000002	

Table	e 6.1. (cont'd)		
Chautauqua County Town: Hanover Village: Forestville			
Photograph	Property Information	Description	
Photo No. 19	St. Peter's Episcopal Church Park Street, west side  Town: Hanover Village: Forestville MCD: 01352 Chautauqua County Date: ca. 1859  Map Point: 142 NRHP Recom.: Eligible	Historical Info:  The Church was constructed in 1859, mostly by members of the congregation at a cost of \$1,500. The land was purchased from Albert H. and Julia Ann for \$225.00 and at one time was wedge shaped. The land was sold to St. Peter's Church of Forestville, in whose name the title still remains. The church was consecrated on May 30, 1860 (From: http://www.stpetersforestville. org/1473/Our%20History.aspx) As described by a Chautauqua County Historian in 1952:  "That simple, dignified chapel which invites attention for its chaste simplicity and early unpretentious architecture is the original, built and dedicated in 1860, and sponsored by the Fredonia Church. The names of the early families on the memorial windows, include the second settler of the Town of Hanover (Thomas 1952).	
	St. Peter's Episcopal Church Park Street, west side  Town: Hanover Village: Forestville MCD: 01352 Chautauqua County Date: ca. 1859  Map Point: 142 NRHP Recom.: Eligible	South side of church	

Photo No. 20

Table 6.1. (cont'd)			
Chautauqua County Town: Hanover Village: Forestville			
Photograph	Property Information	Description	
Photo No. 21	St. Peter's Episcopal Church Park Street, west side Park Street  Town: Hanover Village: Forestville MCD: 01352 Chautauqua County Date: ca. 1859  Map Point: 142 NRHP Recom.: Eligible	1867 map: Epis. Church 1881 map: Epis. Church  Rear (west) side of chruch	
Photo No. 22	St. Peter's Episcopal Church Park Street, west side  Town: Hanover Village: Forestville MCD: 01352 Chautauqua County Date: ca. 1859  Map Point: 142 NRHP Recom.: Eligible	Detail of window.	
Photo No. 23	7 Third Street Town: Hanover Village: Forestville MCD: 01352 Chautauqua County Date: ca.  Map Point: 143 NRHP Recom.: Eligible	Style: Italianate Stories: 2 Plan: rectangular w/ 1-story rear wing Roof: gable Ext. Siding: clapboard Foundation: stone Windows: replacement DHS  Details: A front-gabled roof subtype of the Italianate style w/ side-hall entrance in right bay.	

Table	e 6.1. (cont'd)				
Chautauqua County Town: Hanover					
Village: Forestville					
Photograph	Property Information	Description			
Photo No. 24	7 Third Street Town: Hanover Village: Forestville MCD: 01352 Chautauqua County Date: ca.  Map Point: 143 NRHP Recom.: Eligible	Details include entrance with segmental arch door enframement, transom, ¾ sidelights, segmental arched windows with hooded window crowns, and polygonal bay. Alterations include replacement sash and new entrance/side porch.  A detached single-bay, frame garage is located at the end of the driveway.			
Photo No. 25	7 Third Street Town: Hanover Village: Forestville MCD: 01352 Chautauqua County Date: ca.  Map Point: 143 NRHP Recom.: Eligible	A largely intact, good representative example of an Italianate residential building in Forestville.			

## 6.2 RECOMMENDED CENTER STREET HISTORIC DISTRICT

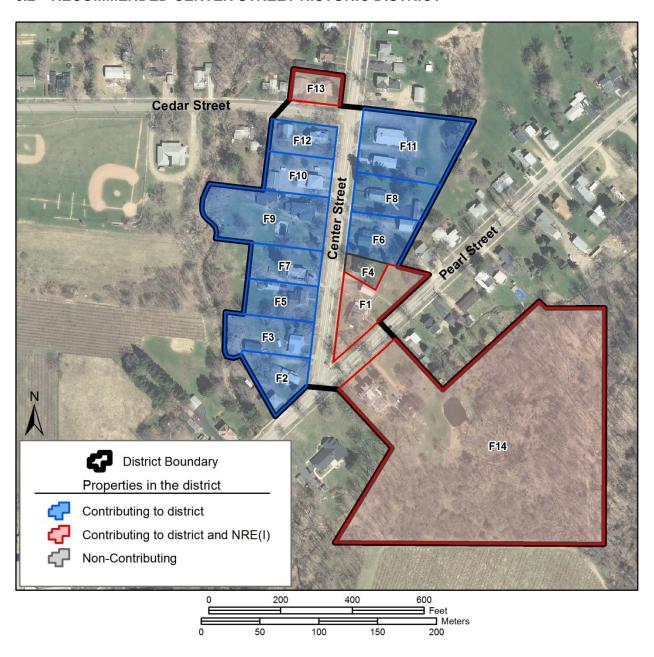


Figure 6.1. Plan of the Recommended NRE Center Street Historic District, Forestville (Panamerican 2013).

# Representative Streetscapes of the Recommended NRE Center Street Historic District, Forestville, Chautauqua County.



Photograph 6.1. Intersection of Center and Pearl streets with 1 Center Street at left and 21 Pearl Street at right, facing northeast (Panamerican 2012).



Photograph 6.2. Center Street from Pearl Street, with 1 Center Street at right and 2 Center Street at left, facing north (Panamerican 2012).



Photograph 6.3. Center Street from 7 Center Street with 8 Center Street and 6 Center Street at right, facing south (*Panamerican 2012*).



Photograph 6.4. Center Street from 7 Center Street with 9 Center Street at right and 10 Center Street at left, facing north (Panamerican 2012).



Photograph 6.5. Center Street from St. Rose of Lima Church with 12 and 10 Center Street at right, facing south (*Panamerican 2012*).



Photograph 6.6. The east side of Center Street from Cedar Street showing St. Rose of Lima Church and 9 Center Street, facing southeast (Panamerican 2012).

Table 6.2. Annotated list of properties in the Recommended NRE Center Street Historic District. Forestville. Chautauga County.

District, Forestville, Chautauqa County.				
Village of Forestville, Town of Hanover, Chautauqua County				
Photograph  Photo No. 26	Property Information  Sherman House 1 Center Street  Town: Hanover Village: Forestville MCD: 01352 Cattaraugus County Date: ca. 1861  Map Point: F1 NRHP Status: NRE (I) NRHP Recom.: Contributing to recommended Center St. Hist. Dist. In Project Viewshed: No	Style: Italianate Stories: 2 Plan: Irregular Roof: Hip w/ cupola Ext. Siding: Clapboard Foundation: stone Windows: 4/4 DHS  Details:		
Photo No. 27	Sherman House 1 Center Street  Town: Hanover Village: Forestville MCD: 01352 Cattaraugus County Date: ca. 1861  Map Point: F1 NRHP Status: NRE (I) NRHP Recom.: Contributing to recommended Center St. Hist. Dist. In Project Viewshed: No	Historical Info:  1867 map: D. Blanding, 1881 map: D. Sherman. Note, present footprint of the house varies significantly from that shown in either atlas. Sign on front of house "ca. 1861."		
Photo No. 28	Sherman House 1 Center Street  Town: Hanover Village: Forestville MCD: 01352 Cattaraugus County Date: ca.  Map Point: F1 NRHP Status: NRE (I) NRHP Recom.: Contributing to recommended Center St. Hist. Dist. In Project Viewshed: No			

Table 6.2. (cont'd) Village of Forestville, Town of Hanover, Chautauqua County				
Photograph	Property Information	Description		
Photo No. 30	Sherman House Outbuilding 1 Center Street  Town: Hanover Village: Forestville MCD: 01352 Cattaraugus County  Map Point: F1 NRHP Recom.: Outbuilding -Contributing to recommended Center St. Hist. Dist. In Project Viewshed: No	Top: View of outbuilding from Pearl Street.  Bottom: View of outbuilding from Center Street		
Photo No.31	2 Center Street  Town: Hanover Village: Forestville MCD: 01352 Cattaraugus County Date: ca.1840  Map Point: F2 NRHP Recom.: Contributing to recommended Center St. Hist. Dist. In Project Viewshed: No	Style: Italianate Stories: 2 Plan: rectangular main block w/ rear wing Roof: hip Ext. Siding: vinyl Foundation: stone Windows: 2/2 DHS  Details: An example of a simple hipped-roof subtype of a transitional Italianate style building with a Greek Revival-type side hall entrance with pedimented enframement, decorative crowns and paired cornice brackets.		

Table 6.2. (cont'd)			
Village of Forestville, Town of Hanover, Chautauqua County			
Photograph  Photo No. 32	Property Information  2 Center Street  Town: Hanover Village: Forestville MCD: 01352 Cattaraugus County Date: ca.  Map Point: F2 NRHP Recom.: Contributing to recommended Center St. Hist. Dist. In Project Viewshed: No	Other features include partial side porch, polygonal bay, rear 1-story gabled wing and attached single bay garage.  Historical Info:  1854 map: Unidentified 1867 map: L. Morrison 1881 map: Baptist Parsonage	
Photo No. 33	4 Center Street  Town: Hanover Village: Forestville MCD: 01352 Cattaraugus County Date: ca.1840  Map Point: F3 NRHP Recom.: Contributing to recommended Center St. Hist. Dist. In Project Viewshed: No	Style: Greek Revival Stories: 1.5 Plan: Gable front & wing Roof: gable Ext. Siding: modern log Foundation: stone Windows: 1/1 DHS  Details: An example of a gable front and wing subtype of the Greek Revival style with original doorway enframement in the left bay of the front gable & cornice returns.	
Photo No. 34	4 Center Street  Town: Hanover Village: Forestville MCD: 01352 Cattaraugus County Date: ca. 1840  Map Point: F3 NRHP Recom.: Contributing to recommended Center St. Hist. Dist. In Project Viewshed: No	Modifications include the addition of an open full-width porch, alterations to the side wing & modern exterior log-type siding.  Historical Info:  1854 map: Unidentified 1867 map: A. Hyde 1881 map: H.W. Eddy	

Table 6.2. (cont'd)			
Village of Forestville, Town of Hanover, Chautauqua County			
Photograph	Property Information	Description	
Photo No. 35	4 Center Street (outbuilding)  Town: Hanover Village: Forestville MCD: 01352 Cattaraugus County Date: ca.  Map Point: F3 NRHP Recom.: Contributing to recommended Center St. Hist. Dist. In Project Viewshed: No	Of note is the associated house barn, which appears to be of contemporaneous construction as the main building. Details of the detached outbuilding include: front gable with wide trim, clapboard siding, hinged double leaf wood doors, hinged hay door & 9-pane light	
Photo No. 36	5 Center Street  Town: Hanover Village: Forestville MCD: 01352 Cattaraugus County Date: ca. early 1900s  Map Point: F4 NRHP Recom.: Non- contributing to recommended Center St. Hist. Dist. In Project Viewshed: No	Style: No style Stories: 2 Plan: L-shaped Roof: hip Ext. Siding: vinyl Foundation: Windows: replacement DHS, sliding  Details: The building no longer retains its original stylistic features. It consists of a rectangular block with rear wing. Original window openings have been altered.	
Photo No. 37	6 Center Street  Town: Hanover Village: Forestville MCD: 01352 Cattaraugus County Date: ca. 1850  Map Point: F5 NRHP Recom.: House and outbuilding - Contributing to recommended Center St. Hist. Dist. In Project Viewshed: Yes	Style: Italianate Stories: 1.5 Plan: irregular Roof: gable Ext. Siding: vinyl Foundation: stone Windows: replacement DHS  Details: A side-gabled building with distinctive central gabled dormer on façade. It has an open full- width porch, paired narrow windows, central entrance, central round arched above entrance, 1-story bay on north side.	

Table 6.2. (cont'd)		
Village of Forestville, Town of Hanover, Ch Photograph	Property Information	Description
Photo No. 38	6 Center Street  Town: Hanover Village: Forestville MCD: 01352 Cattaraugus County Date: ca.1850  Map Point: F5 NRHP Recom.: Contributing to recommended Center St. Hist. Dist. In Project Viewshed: Yes	Historical Info:  1854 map: Unidentified 1867 map: J.H & Mariah Smith; in 1876, conveyed from Adolphus F. Morrison to W. Thomas Wilson 1881 map: O.A. Sacket  An associated carriage barn is located at the rear of the lot. It has a single bay on the front gable and board & batten siding.
Photo No. 39	7 Center Street  Town: Hanover Village: Forestville MCD: 01352 Cattaraugus County Date: ca. 1850  Map Point: 6 NRHP Recom.: Contributing to recommended Center St. Hist. Dist. In Project Viewshed: Yes	Style: transitional Greek/ Italianate Stories: 2 Plan: irregular Roof: gable Ext. Siding: asbestos Foundation: stone Windows: 6/6 DHS  Details: An example of a transitional Greek Revival/Italianate house with full-width Victorian-era porch that extends across side wing & feature turned balusters, spindle frieze and decorative brackets.
Photo No. 40	7 Center Street  Town: Hanover Village: Forestville MCD: 01352 Cattaraugus County Date: ca. 1850  Map Point: F6 NRHP Recom.: Contributing to recommended Center St. Hist. Dist. In Project Viewshed: Yes	It has a side hall entrance in the left bay with pedimented enframement, ¾ sidelights, and 2 narrow full-height openings with double-leaf doors. Window openings have pedimented wood surrounds. Hipped roof side wing has a single entrance on the front, tall narrow windows, 3-sided bay with brackets, & two brick chimneys on north slope

Table 6.2. (cont'd)			
Village of Forestville, Town of Hanover, Chautauqua County			
Photograph  Photo No. 41	Property Information  7 Center Street Outbuilding  Town: Hanover Village: Forestville MCD: 01352 Cattaraugus County Date: ca.  Map Point: F6 NRHP Recom.: Contributing to recommended Center St. Hist. Dist. In Project Viewshed: Yes	Historical Info: 1867 map" J.M. Dix 1881 map: Mrs. Camp  A front gabled house barn is associated with the property. It has a single-bay door with hay hood on the gable end.	
Photo No. 42	8 Center Street  Town: Hanover Village: Forestville MCD: 01352 Cattaraugus County Date: ca. 1840  Map Point: F7 NRHP Recom.: Contributing to recommended Center St. Hist. Dist. In Project Viewshed: Yes	Style: Italianate Stories: 2 Plan: irregular Roof: hip Ext. Siding: clapboard, wood siding Foundation: stone Windows: 4/4 & 1/1 DHS  Details: An example of a hipped roof subtype of the Italianate style with alterations.	
Photo No. 43	8 Center Street  Town: Hanover Village: Forestville MCD: 01352 Cattaraugus County Date: ca. 1840  Map Point: F7 NRHP Recom.: Contributing to recommended Center St. Hist. Dist. In Project Viewshed: Yes	Historical Info:  1854 map: Unidentified 1867 map: Unidentified in 1876, conveyed from Jos. G. Hopkins estate to Minerva Dix 1881 map: Mrs. E.C. Dix	

Table 6.2. (cont'd)		
Village of Forestville, Town of Hanover, Chautauqua County  Photograph Property Information Description		
Photo No. 44	9 Center Street  Town: Hanover Village: Forestville MCD: 01352 Cattaraugus County Date: ca. early 1900s  Map Point: F8 NRHP Recom.: Contributing to recommended Center St. Hist. Dist. In Project Viewshed: Yes	Style: Craftsman Stories: 1.5 Plan: irregular Roof: hip Ext. Siding: vinyl Foundation: stone Windows: replacement DHS  Details: A representative example of a Craftsman influenced residence with enclosed porch, front gabled dormer, and hipped roof.
Photo No. 45	9 Center Street  Town: Hanover Village: Forestville MCD: 01352 Cattaraugus County Date: ca. early 1900s  Map Point: F8 NRHP Recom.: Contributing to recommended Center St. Hist. Dist. In Project Viewshed: Yes	
Photo No. 46	9 Center Street Outbuilding  Town: Hanover Village: Forestville MCD: 01352 Cattaraugus County Date: ca. early 1900s  Map Point: F8 NRHP Recom.: Outbuilding contributing to recommended Center St. Hist. Dist. In Project Viewshed: Yes	Associated with the property at the rear of the lot is a long, side-gabled rectangular house barn with two bays on the barn side.

#### Table 6.2. (cont'd) Village of Forestville, Town of Hanover, Chautauqua County **Photograph Property Information** Description Levi. J. Pierce Homestead Style: Italianate 10 Center Street Stories: 2 Plan: irregular Town: Hanover Roof: hip Village: Forestville Ext. Siding: vinyl MCD: 01352 Foundation: stone Windows: replacement DHS Cattaraugus County Date: ca. 1840 **Details:** An asymmetrical subtype of the Italianate Map Point: F9 NRHP Recom.: style with a low-pitched gabled roof. The façade Contributing to features a Victorian-era fullrecommended Center St. width porch with spindle Hist. Dist. frieze, slender posts, & In Project Viewshed: Yes decorative brackets. The Photo No. 47 main entrance of the 3ranked front has a side hall entrance in the right bay with simple eared enframement and double leaf wood panel & glass doors. Other details include paired decorative cornice brackets, side wing with entrance, full-height 1/1 DHS windows, & full-height polygonal bay 10 Center Street **Historical Info:** 1854 map: Daniel Sherman 1867 map: Joseph G. Town: Hanover Village: Forestville Hopkins. Hopkins died in in 1876, and MCD: 01352 his heirs were listed as his Cattaraugus County son Albert C. Hopkins, Date: ca. 1840 daughter Frances Hopkins Pierce (wife of Levi Map Point: F9 J.Pierce), and grandson NRHP Recom.: Charles Joseph Swift, heirs of a deceased daughter. Contributing to Levi J. Pierce, was executor recommended Center St. of the estate, and the heirs Hist. Dist. In Project Viewshed: Yes conveyed the homestead to him in 1879 (Liber 176 Page Photo No.49 132, and Liber 150 Page 301). His will of 1896 left \$500 to the Prospect Cemetery, and his real estate to his widow Frances Hopkins Pierce. sons Charles H., Joseph G., and Albert L., and daughter

Ophelia F. Taylor

Table 6.2. (cont'd)			
Village of Forestville, Town of Hanover, Chautauqua County			
Photograph  Photo No. 49	Property Information  10 Center Street Outbuilding  Town: Hanover Village: Forestville MCD: 01352 Cattaraugus County Date: ca.  Map Point: F9 NRHP Recom.: Outbuilding contributing to recommended Center St. Hist. Dist. In Project Viewshed: Yes	Levi J. Pierce died in 1916, and by that time, this small farm had become known as the "Levi J. Pierce homestead." After the death of their father, house was conveyed to George S. Boss (Liber 451 Page 340), and the other farm lands associated with this house became the property of the American Legion.	
Photo No. 50	St. Rose of Lima 11 Center Street  Town: Hanover Village: Forestville MCD: 01352 Cattaraugus County Date: ca. 1873  Map Point: F10 NRHP Recom.: Contributing to recommended Center St. Hist. Dist. In Project Viewshed: Yes	Style: Italianate Stories: 1 Plan: rectangular Roof: gable Ext. Siding: vinyl Foundation: concrete block Windows: architectural glass  Details: The façade has an enclosed entry bay with replacement double-leaf wood doors and gabled pediment. Window openings are round arched with architectural glass. A lesser one-story addition is attached to the east side (rear). A modern church hall is located on the north side of the church.	
Photo No. 51	St. Rose of Lima Church 11 Center Street  Town: Hanover Village: Forestville MCD: 01352 Cattaraugus County Date: ca. 1873  Map Point: F10  NRHP Recom.: Contributing to recommended Center St. Hist. Dist. In Project Viewshed: Yes	Historical Info.  St. Rose of Lima built a small church in 1861. At a later date, Mr. & Mrs. Cyrus Angell donated land on the corner of Park & Center streets. The later building – the present ca. 1873 churchwas moved to Center Street in 1931 (Hanover Bicentennial 1976). Note, Harrington reports the building was moved in 1939.	

Table 6.2. (cont'd)			
Village of Forestville, Town of Hanover, Chautauqua County Photograph Property Information Description			
Photo No. 52	12 Center Street  Town: Hanover Village: Forestville MCD: 01352 Cattaraugus County Date: ca. 1840  Map Point: F11 NRHP Recom.: Contributing to recommended Center St. Hist. Dist. In Project Viewshed: Yes	Style: Italianate Stories: 2 Plan: rectangular w/rear wing Roof: hip Ext. Siding: vinyl Foundation: stone Windows: replacement DHS  Details: A simple hipped- roof subtype of the Italianate style. Its three ranked façade openings were altered with entrances in the end bays. Details include open full- width porch, low-pitched hipped roof with wide overhanging eaves supported by decorative brackets.	
Photo No. 53	12 Center Street  Town: Hanover Village: Forestville MCD: 01352 Cattaraugus County Date: ca.  Map Point: F11 NRHP Recom.: Contributing to recommended Center St. Hist. Dist. In Project Viewshed: Yes	Historical Info: 1854 map: doctor's home & office In 1865, conveyed from Stephen Eaton to Mary Brown 1867 map: N. B. Brown 1881 map: N. B. Brown Florence E. Brown Saunders conveyed the lot at 12 Center to Neil Jasper Lewis in 1901 (Liber 283 Page 120).	
Photo No. 54	12 Center Street Outbuilding Town: Hanover Village: Forestville MCD: 01352 Cattaraugus County Date: ca.  Map Point: F11 NRHP Recom.: Outbuilding - contributing to recommended Center St. Hist. Dist. In Project Viewshed: Yes		

Table 6.2. (cont'd)		
Village of Forestville, Town of Hanover, Ch	Property Information	Description
Photograph  Photo No. 55	Town: Hanover Village: Forestville MCD: 01352 Cattaraugus County Date: ca. 1905  Map Point: F12 NRHP Recom.: Contributing to recommended Center St. Hist. Dist. In Project Viewshed: Yes	Style: Queen Anne Stories: 2.5 Plan: irregular Roof: gable Ext. Siding: vinyl, wood shingles Foundation: stone Windows: DHS  Details:
Photo No. 56	16 Center Street  Town: Hanover Village: Forestville MCD: 01352 Cattaraugus County Date: ca. 1905  Map Point: F12 NRHP Recom.: Contributing to recommended Center St. Hist. Dist. In Project Viewshed: Yes	Historical Info:  The lot at 16 Center was conveyed to Asa E. Dye in 1905 ( <i>Liber 322 Page 512</i> ).
Photo No. 57	16 Center Street (Outbuilding)  Town: Hanover Village: Forestville MCD: 01352 Cattaraugus County Date: ca.  Map Point: F12 NRHP Recom.: Outbuilding contributing to recommended Center St. Hist. Dist. In Project Viewshed: Yes	

Village of Forestville, Town of Hanover, Chautauqua County		
	Property Information	Description
Photograph	Property information	Description
Photo No. 58	18 Center Street  Town: Hanover Village: Forestville MCD: 01352 Cattaraugus County Date: ca.  Map Point: F13 NRHP Status: NRE (I) NRHP Recom.: House and outbuilding contributing to recommended Center St. Hist. Dist. In Project Viewshed: Yes	Style: Queen Anne Stories: 2.5 Plan: irregular Roof: hip, gable Ext. Siding: asbestos shingle Foundation: stone Windows: 1/1 DHS <b>Details:</b>
Photo No. 59	21 Pearl Street  Town: Hanover Village: Forestville MCD: 01352 Cattaraugus County Date: ca. 1868-1880  Map Point: F14 NRHP Status: NRE (I) NRHP Recom.: House and carriage house contributing to recommended Center St. Hist. Dist. In Project Viewshed: No	Style: Second Empire Stories: 2.5 w/ 3.5 story central tower Plan: irregular Roof: Mansard Ext. Siding: brick Foundation: stone Windows: 2/2 DHS  Details: An excellent example of a highly intact Second Empire building with carriage house.  Historical Info: 1881 map: W.N. Schoonover

## 6.3 SILVER CREEK HISTORIC DISTRICT: RECOMMENDATIONS

The potential NRE Silver Creek Historic District in the Village of Silver Creek, Town of Hanover, Chautauqua County, is partially in the 2013 Project viewshed (Figure 6.2). NYSHPO has determined Silver Creek Historic District as a "potential" NRE historic district. Only one property in the Silver Creek Historic District, a commercial building at 199-201 Central Avenue (New York 5), is in the Project viewshed. As part of the 2013 addendum survey, the portion of the viewshed in Silver Creek was reviewed to identify whether any new areas necessitated additional architectural survey (see Section 3.5.1. for specific background information).

The addendum survey included an architectural survey of properties on two streets, Park Place and Howard Street. The northern section of the Silver Creek Historic District on Central Avenue and the rear section of the properties on the west side of Park Place are in the Project viewshed. Buildings on the west side of Park Place fronting Silver Creek Village Park have not been previously inventoried by earlier surveys (SPHINX 2013). The section of Howard Street partially in the viewshed is on the east side of Howard Street between Silver Creek and Central Avenue (New York 5). This one-block section of Howard Street includes the industrial complex S. Howes Inc. (25 Howard Street). Presently, the S. Howes Inc. complex has an "Undetermined" NRHP status (SPHINX 2013).

The current study recommends the following:

- The five buildings located on the west side of Park Place as contributing buildings to the Silver Creek Historic District; Nos. 7, 9, 17, 19, and 25 Park Place. Inclusion of these buildings will connect the Village Park with properties on Main Street, Park Place, and Central Avenue.
- The Geitner Theatre at 19 Park Place, based only on the existing condition of the
  exterior, appears to be individually eligible for the NRHP under Criterion C as a
  largely intact example of an early twentieth-century, Neoclassical Revivalinspired "motion picture" theatre. The architectural integrity of the interior of the
  building is unknown as the building was not accessible when the addendum
  survey was conducted.
- Further evaluation and delineation of boundaries of Silver Creek Historic District is recommended for any future historic resource surveys.

A pedestrian survey of Silver Creek Historic District and the area surrounding Silver Creek Village Park on the west side of Park Place was conducted (Photographs 6.7 to 6.10). Five buildings fronting the west side of Park Place are partially in the viewshed. As a result of the setting of the Village Park and the discontinuous boundary of the northern end of Silver Creek Historic District, this row of buildings was considered for potential inclusion in Silver Creek Historic District. Originally constructed as commercial buildings, these properties include: 7 Park Place (Unique Hair & Nails); 9 Park Place (Stitches); 17 Park Place (People Inc.); 19 Park Place (The Geitner Theatre/now "The Blackline"); and 25 Park Place. A vacant lot is located on the northwest corner of Park Place and Central Avenue and the lot between 9 Park Place and 17 Park Place is now part of the expanded People's Inc. facility at 17 Park Place (see Figure 6.2). The southern part of the block represents the rebuilding of the center of the village after one of the most disastrous fires in the community's history occurred in 1921.

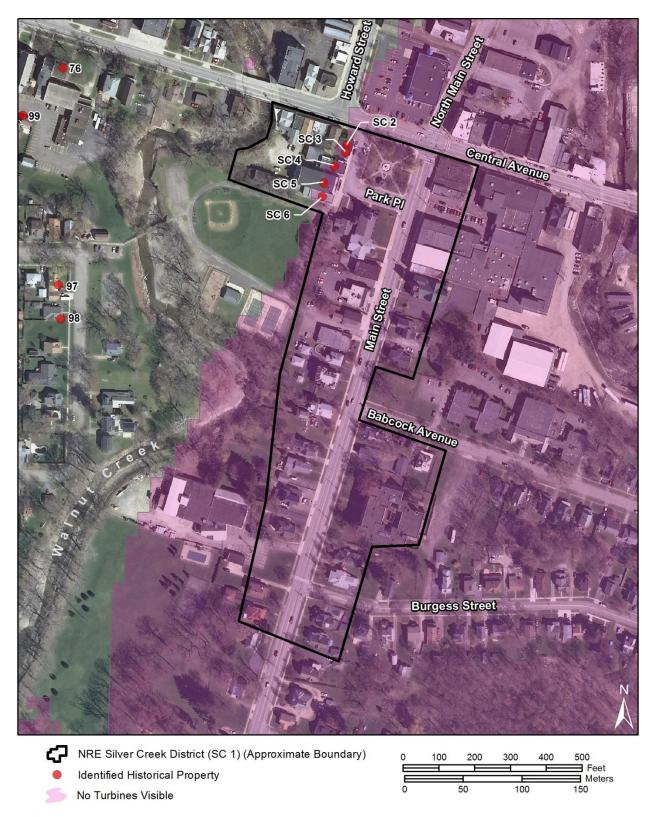


Figure 6.2. Approximate boundaries of the Silver Creek Historic District (NYSG/S Clearinghouse 2012).



Photograph 6.7. Silver Creek Village Park and the northern end of Silver Creek Historic District, facing south (Panamerican 2013).



Photograph 6.8. Silver Creek Village Park with Nos. 7 through 25 Park Place (from left to right) in the background, facing west (Panamerican 2013).



Photograph 6.9. Nos. 7 through 25 Park Place (from right to left), facing southwest (Panamerican 2013).



Photograph 6.10. A circa 1950s view of Silver Creek Village Park with Nos. 7 through 25 Park Place (from right to left) in the background, facing southwest (digital photograph of a historic photograph on display in the Silver Creek Post Office at 37 Main Street).

In 1907, five buildings lined the west side of Park Place; a small ice house, two large dwellings with carriage houses, a boots and shoes shop, a post office, and a barber shop (Figure 6.3). Two dwellings, the Presbyterian Church, and two groceries occupied the south side of the street at that time. The Village Park had a bandstand in center of the park and was noted as "full of shade trees" (Sanborn Map Company 1907). The 1921 fire destroyed the Methodist Church, the Park Avenue Hotel, the trolley station, the grandstand of the ball park, and other buildings on the west side of Main Street. By 1923, the west side of Park Place featured a row of seven commercial buildings including The Geitner Theatre (19 Park Place; built 1921). The other six buildings contained assorted stores (Figure 6.4).

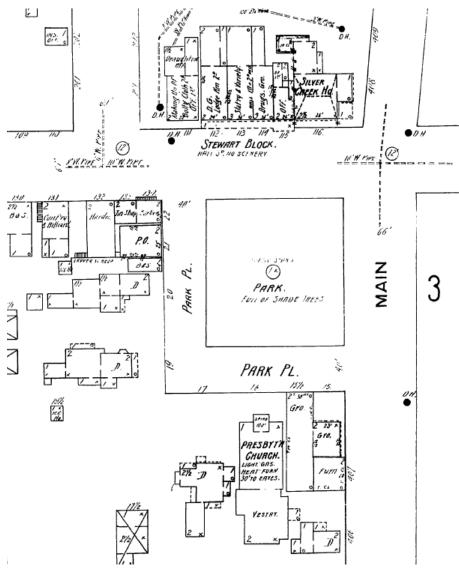


Figure 6.3. A detail of the Village Park and Park Place in 1907 (Sanborn Map Company 1907:Plate 2).

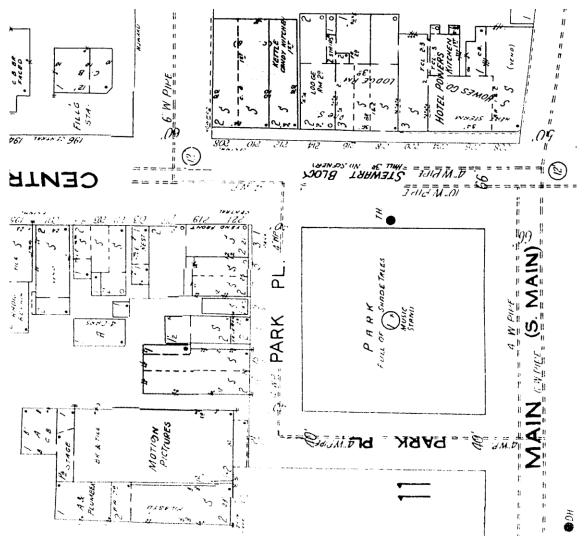


Figure 6.4 A detail of the Village Park and Park Place in 1923 (Sanborn Map Company 1923: Plate 6).

Collectively, the row of commercial buildings on the west side of Park Place contributes to the historic setting of the Silver Creek Village Park. The Presbyterian Church and parsonage on the south side of the street further enhance the park's setting. Most of the extant historic views and postcards of the Village Park capture the park with buildings on Park Place in the background. The Park Place buildings exhibit similar materials, scale, form, and design as other contemporaneous commercial buildings in Silver Creek. As originally laid out in the nineteenth century, Park Place with its narrow street width and sidewalks conveys a more park-like village setting than the much improved and heavily trafficked streets that border the park to the north (Central Avenue/New York 5) and (Main Street/US Route 20). The east side of Main Street opposite the park contains two mid-century commercial buildings, a bank building, parking lot, and a bakery complex. Buildings on the east side of Main Street were previously evaluated and determined Not Eligible for the NRHP. The block on the north side of Central Avenue is now occupied by a modern pharmacy building and its large parking lot.

The commercial block on the south side of Central Avenue west of Park Place has been altered by the recent demolition of a two-story commercial building at 207-209 Central Avenue (USN 01346.00001119). The building was previously determined "Not Eligible" (SPHINX 2013). Similar to other commercial buildings on Central Avenue, the former building at 207-209 Central Avenue was a frame, gabled-roof building with an early twentieth-century storefront with a yellow brick façade and parapet.

The current addendum survey also included visual inspection of the S. Howes Inc. complex at 701 Howard Street (USN 0134.000167; Photographs 6.11-6.14). Partially located in the Project viewshed, the complex presently has an "Undetermined" NRHP status (SPHINX 2013). The S. Howes Company began its first grain-cleaning machinery shop on this site in 1868. By 1885, under the name Howes and Ewell Eurka Wheat Cleaning Machinery, the works had expanded. From 1885 to 1902, the works expanded again and a large four-story brick factory was constructed on the southern part of the parcel. S. Howes also owned the lumber yard on the opposite side of Howard Street at the confluence of Walnut and Silver creeks. At one time the extensive works occupied the large tract of land behind the commercial block (Stewart Block) fronting Central Avenue. The property is bound by Howard Street, North Main Street, and Silver Creek. The main factory building, as documented on Sanborn maps and historic photographs is no longer extant. Remaining buildings in the complex include the frame office building fronting Howard Street, Plant No. 1 (Foundry Building and Warehouse), and Plant No. 2 (a mid-twentieth-century industrial building). The S. Howes Inc. complex is not recommended as an individually NRE property due to the loss of its most significant building, the main factory. However, it should be considered in future evaluation of the Silver Creek Historic District as a potential contributing resource. The S. Howes Company was important in the development of the village. At one time, 80 percent of all the grain-cleaning machinery was manufactured in Silver Creek. Further, the NRE S. Howes Residence at 47 Main Street is located in the Silver Creek Historic District.



Photograph 6.11. S. Howes Inc. complex on Howard Street, facing northeast (Panamerican 2013).



Photograph 6.12. Plant No. 1, S. Howes Inc., facing east (Panamerican 2013).



Photograph 6.13. Plant No. 2, S. Howes Inc., facing northeast (Panamerican 2013).



Photograph 6.14. Plant No. 1 and warehouse on North Main Street, Howes Inc., facing southwest (*Panamerican 2013*).

**Table 6.3 Annotated List of Properties for Silver Creek Historic District** 

Chautauqua County	ties for Sliver Creek Hi	Storic District						
Town: Hanover	Town: Hanover							
Village: Silver Creek Photograph	Property Information	Description						
Photo No. 60	7 Park Place  Town: Hanover Village: Silver Creek MCD: 01346 Chautauqua County Date: ca.1890  Map Point: SC2 NRHP Recom.: Contributing to Silver Creek Historic District	Style: Masonry vernacular Stories: 2 Plan: Rectangular Roof: Shed Ext. Siding: Brick Foundation: Stone Windows: replacement 1/1 double-hung sash (DHS)  Details: A largely intact example of a nineteenth- century brick commercial building with two storefronts.						
Photo No. 61	7 Park Place  Town: Hanover Village: Silver Creek MCD: 01346 Chautauqua County  Map Point: SC2 NRHP Recom.: Contributing to Silver Creek Historic District	Details: The frame storefronts have a central recessed entrance, large single panel display window with two pane transom, and frame bulkhead. A separate entrance to the upper level is set in the right bay. The second floor features stone lintels and sills. The façade has a parapet with sawtooth molding and glazed clay tile coping. Segmental arch window openings are visible on the 2 <sup>nd</sup> floor of the south elevation.						
Photo No. 61	9 Park Place  Town: Hanover Village: Silver Creek MCD: 01346 Chautauqua County Date: Date: ca. 1890, ca. 1920s storefront  Map Point: SC3 NRHP Recom.: Contributing to Silver Creek Historic District	Style: Early 20 <sup>th</sup> Century Commercial Stories: 1 Plan: Rectangular Roof: Shed Ext. Siding: Brick and clapboard Foundation: Windows: Display  Details: A largely intact example of frame commercial building with a early 20 <sup>th</sup> -century brick storefront.						

Chautauqua County Town: Hanover Village: Silver Creek		
Photograph	Property Information	Description
Photo No. 62	9 Park Place  Town: Hanover Village: Silver Creek MCD: 01346 Chautauqua County  Map Point: SC3 NRHP Recom.: Contributing to Silver Creek Historic District	Details: The main block is a frame building. The early 20 <sup>th</sup> -century, yellow brick front features a storefront with wood window and door frames, a recessed entrance with transom, and a decorative brick panel on the front of the parapet. An exterior brick chimney is on the south side and a frame shed is attached to the rear of the building.
Photo No. 63	17 Park Place (People's Inc) Town: Hanover Village: Silver Creek MCD: 01346 Chautauqua County Date: ca.  Map Point: SC4 NRHP Recom.: Contributing to Silver Creek Historic District	Style: Early 20 <sup>th</sup> Commercial Stories: 2 Plan: Rectangular Roof: Front gable Ext. Siding: Clapboard Foundation: Windows: Replacement  Details: A representative example of an early 20 <sup>th</sup> - century commercial building
Photo No. 64	17 Park Place (People's Inc)  Town: Hanover Village: Silver Creek MCD: 01346 Chautauqua County Date: ca. 1921  Map Point: SC4 NRHP Recom.: Contributing to Silver Creek Historic District	The building's storefront has been altered and now features replacement windows and brick bulkheads. The second floor of the façade retains its three-part window openings and features cast stone decorative elements and brick decorative panels. A modern concrete block entrance and an addition were added to the north side of the building

Chautauqua County Town: Hanover Village: Silver Creek		
Photograph	Property Information	Description
Photo No. 65	17 Park Place (People's Inc)	View: West elevation showing modern 1- story concrete block addition.
Photo No. 66	The Geitner Theatre (The Backline)  19 Park Place (The Backline) Town: Hanover Village: Silver Creek MCD: 01346 Chautauqua County Date: 1921  Map Point: SC5 NRHP Recom.:  1. Contributing to Silver Creek Historic District 2. Individual NRE	Style: Early 20 <sup>th</sup> Commercial -Neoclassical Revival Stories: 2 Plan: Rectangular Roof: Gable with stepped parapet Ext. Siding: Brick Foundation: Concrete Windows: casement  Details: An excellent example of a largely intact (exterior) early 20 <sup>th</sup> -century early "motion picture" theatre inspired by the Neoclassical- inspired stylistic elements
Photo No. 67	The Geitner Theatre (The Backline)  19 Park Place (The Backline) Town: Hanover Village: Silver Creek MCD: 01346 Chautauqua County  Map Point: SC5	Details: The yellow brick façade features a brick marquee supported by square brick columns with cast stone capitals and foundations, a wide brick marquee with a cast stone cornice, brick parapet containing the cast stone panel with the original theatre name. It has five pairs of original double-leaf wood and glass doors.

Chautauqua County Town: Hanover Village: Silver Creek		
Photograph	Property Information	Description
Photo No. 68	The Geitner Theatre (The Backline)  19 Park Place (The Backline) Town: Hanover Village: Silver Creek MCD: 01346 Chautauqua County  Map Point: SC5	View: Alley between 19 Park Place (left) and 17 Park Place (right)  Details (cont'd): The upper level of the façade is a wide band of casement windows set in a cast stone surround, two decorative cast stone cartouches, a date stone (1921), a cast stone cornice, and a stepped parapet with a cast stone wreath.
Photo No. 69	The Geitner Theatre (The Backline)  19 Park Place (The Backline) Town: Hanover Village: Silver Creek MCD: 01346 Chautauqua County	View: Front side entrance on north elevation.  Window openings on the north elevation have been filled in with brick.
Photo No. 70	The Geitner Theatre (The Backline)  19 Park Place (The Backline) Town: Hanover Village: Silver Creek MCD: 01346 Chautauqua County	View: Original double-leaf wood exit doors on north elevation.

Chautauqua County Town: Hanover		
Village: Silver Creek  Photograph	Property Information	Description
Photo No. 71	The Geitner Theatre (The Backline)  19 Park Place (The Backline) Town: Hanover Village: Silver Creek MCD: 01346 Chautauqua County	View: West elevation.  A one-story frame addition with shed roof is attached to the west elevation. It appears that the addition might be brick with vinyl siding.
Photo No. 72	The Geitner Theatre (The Backline)  19 Park Place (The Backline) Town: Hanover Village: Silver Creek MCD: 01346 Chautauqua County	View: Detail of north and east elevations.
Photo No. 73	The Geitner Theatre (The Backline)  19 Park Place (The Backline) Town: Hanover Village: Silver Creek MCD: 01346 Chautauqua County	Postcard of The Geitner Theatre postmarked 27 February 1924.  It appears the original cast stone building name sign is intact, but presently obscured by a modern sign.

Chautauqua County Town: Hanover Village: Silver Creek		
Photograph	Property Information	Description
Photo No. 74	25 Park Place  Town: Hanover Village: Silver Creek MCD: 01346 Chautauqua County Date: ca. late 1910s  Map Point: SC6 NRHP Recom.: Contributing to Silver Creek Historic District	Style: Early 20 <sup>th</sup> Century Commercial Stories: 2 Plan: Rectangular Roof: Shed Ext. Siding: Brick Foundation: Concrete Windows: Display and replacement windows on the south elevation.  Details: A representative example of an early 20 <sup>th</sup> century commercial building
Photo No. 75	25 Park Place  Town: Hanover Village: Silver Creek MCD: 01346 Chautauqua County  Map Point: SC6	Details: The original main block of the building is the brick two-story section fronting Park Place. The building has multiple rear additions. The east façade has a single storefront with a recessed central entrance, wood door and window frames, large display windows, wood bulkheads and a pent canopy. The 2 <sup>nd</sup> floor has two oriels.
Photo No. 76	25 Park Place  Town: Hanover Village: Silver Creek MCD: 01346 Chautauqua County  Map Point: SC6	View: East elevation and one-story ornamental concrete block rear addition.

Chautauqua County Town: Hanover		
Village: Silver Creek Photograph	Property Information	Description
Photo No. 77	25 Park Place  Town: Hanover Village: Silver Creek MCD: 01346 Chautauqua County  Map Point: SC6	View: Rear frame additions.

## 7.0 References

#### Adams, William

1893 Historical Gazetteer and Biographical Memorial of Cattaraugus County, New York. Lyman, Horton & Company, Ltd, Syracuse.

#### Beers, D.G., J.H. Goodhue, and E.F. Sanford

1869 Atlas of Cattaraugus County, New York. D.G. Beers & Co., New York.

#### Beers. Frederick W.

1881 Illustrated Historical Atlas of the County of Chautaugua, New York. F.W. Beers, New York.

#### Baugnet, Andrew

2002 "Picturing the Grange: 130 Years." *Voices* (Volume 28 Spring-Summer), New York Folklore Society, Schenectady, NY.

#### Bonafide, John A.

2008 Letter to Andrew C. Davis, State of New York Department of Public Service, Albany, New York. Re: PSC/SEQR Noble Ball Hill Windpark (08PR01814), dated 24 September 2008. New York State Office of Parks Recreation and Historic Preservation.

### Cattaraugus County

2008 Cattaraugus County Bicentennial History. Maggie Frederickson, ed. Cattaraugus County, New York.

#### Chautaugua County Historian

2009 Architectural Inventory: Nineteenth Century Structures in Chautauqua County, New York. Electronic database,

http://www.co.chautauqua.ny.us/departments/clerk/historian/Pages/HistoricalCountyStructures.aspx, accessed October 1, 2012.

#### Cressey, George B.

1966 Land Forms. In *Geography of New York State*, edited by John H. Thompson, pp. 19-53. Syracuse University Press, Syracuse.

#### de Laubenfels, David J.

1966 Vegetation. In *Geography of New York State*, edited by John H. Thompson, pp. 90-103. Syracuse University Press, Syracuse.

#### Edson, Obed

1894 History of Chautauqua County, New York. Edited by Georgia Drew Merrill. W.A. Ferguson & Co., Boston.

#### Ellis, Franklin

1879 History of Cattaraugus County, New York. L.H. Everts, Philadelphia.

#### glassbottlemarks.com

nd "Glass Bottle Marks." Electronic document, http://www.glassbottlemarks.com/, accessed October 1, 2012.

- Hanley, Robert J., Michael A. Cinquino, Rebecca J. Emans, and Joseph Kline
  - 2008a Addendum to the Phase I Cultural Resources Investigation for the Proposed Noble Ball Hill Windpark, Towns of Villenova and Hanover, Chautauqua County, New York (OPRHP #08PR01814). Panamerican Consultants, Inc., Buffalo Branch, Buffalo. Prepared for Noble Ball Hill Windpark, LLC, Essex, CT.
- Hanley, Robert J., Mark A. Steinback, Michael A. Cinquino, Rebecca J. Emans, Edwin Button, Sharon Jenkins, and Donald Smith
  - 2008b Phase I Cultural Resources Investigation for the Proposed Noble Ball Hill Windpark, Towns of Villenova and Hanover, Chautauqua County, New York (OPRHP #08PR01814). Panamerican Consultants, Inc., Buffalo Branch, Buffalo. Prepared for Noble Ball Hill Windpark, LLC., Essex, CT.

#### Harrington, Mrs. Leroy H.

1949 Forestville, Its Environs, Past and Present. Paper prepared and read at a meeting of the Chautauqua County Historical Society, Forestville N.Y. on June 4, 1949.

Isachsen, Y.W., T.D. Mock, R.E. Nyahay, and W.B. Rogers

1990 New York State Geological Highway Map. New York State Museum Educational Leaflet No. 33. New York State Department of Education, Albany.

#### Keeney, C.G.

1854 Map of Chautauqua County, New York. Philadelphia, Collins G. Keeney.

Longiaru, Christine M., Kelly M. Mahar, Frank J. Schieppati, Donald Smith, Mark A. Steinback, Michael A. Cinquino, and Martin Wachadlo

2008 Architectural Survey (Five-mile APE) for the Proposed Noble Ball Hill Windpark, Towns of Villenova and Hanover, Chautauqua County, New York (OPRHP #08PR01814). Panamerican Consultants, Inc., Buffalo Branch, Buffalo. Prepared for Noble Ball Hill Windpark, LLC, Essex, CT.

#### Miller, G.L.

2000 Telling Time for Archaeologists. Northeast Historical Archaeology 29:1-22.

#### National Resource Conservation Service (NRCS)

2012 Soil Survey Geographic (SSURGO) Database for Chautauqua County, New York. Soil Survey Staff, Natural Resources Conservation Service, U.S. Department of Agriculture, Washington, D.C. Electronic database, http://soildatamart.nrcs.usda.gov, accessed September 20, 2012.

#### New York Archaeological Council (NYAC)

1994 Standards for Cultural Resource Investigations and the Curation of Archaeological Collections. On file at Panamerican Consultants, Inc., Buffalo Branch, Buffalo.

#### New York State Museum (NYSM)

2004 Artifact Cataloging Catalog, Cultural Resource Survey Program. Policies and Procedures for the Archaeological Collections of the New York State Museum. Anthropological Survey, Albany, New York. Developed by M. Pickands and A. Lain. Expanded by J. Pasquini and T. Thomas.

#### New York State Historic Preservation Office (NYSHPO)

2006 Guidelines for Wind Farm Development Cultural Resources Survey Work. New York State Historic Preservation Office, Office of Parks, Recreation and Historic Preservation, Peebles Island, Waterford.

#### Noël Hume, Ivor

1969 A Guide to Artifacts of Colonial America. Alfred A. Knopf, New York.

#### NYS GIS Clearinghouse

2008 *Digital Orthoimagery of Chautauqua County*, 2ft resolution, 4-band. Electronic database, http://gis.ny.gov/gateway/mg/2008/chautauqua/, accessed September 3, 2012.

2012 *Digital Orthoimagery of Chautauqua County*, 12ft resolution, 4-band. Electronic database, http://gis.ny.gov/gateway/mg/2012/chautauqua/, accessed April 30, 2013.

#### Pentingill & Company

1903 Penttingil's Newspaper Directory and Gazetteer. Pentingill & Company, Boston.

#### Puglia, Paul S.

1994 Soil Survey of Chautauqua County, New York. U.S. Department of Agriculture, Soil Conservation Service in cooperation with the Cornell University Agricultural Experiment Station. U.S. Government Printing Office, Washington, D.C.

#### Sexton, James, and Jim Toner

2009 Historic Architectural Resource Investigation, 5-mile Ring Study, Arkwright Summit Wind Farm, Towns of Arkwright, Charlotte, Cherry Creek, Dunkirk, Hanover, Pomfret, Sheridan, Stockton, and Villenova, The Villages of Cassadaga, Fredonia, and Forestville, and the City of Dunkirk, Chautauqua County, New York. Tetratech, Inc. Prepared for Arkwright Summit Wind Farm, LLC, Albany, NY.

#### sha.org

nd Bottle Finishes & Closures, Part II: Types or Styles of Finishes – Page 2. Society for Historical Archaeology. Electronic document, http://www.sha.org/bottle/finishstyles2.htm#Collared Ring, accessed October 1, 2012.

#### South, Stanley A.

1977 Method and Theory in Historical Archaeology. Academic Press, New York.

#### Stewart, William

1867 New Topographical Atlas of Chautauqua County, New York. William Stewart Publisher, Philadelphia.

#### Thomas. Marion

1952 "Chautauqua County Churches A History," Once Upon a Time. Electronic document, http://www.rootsweb.ancestry.com/~nychauta/HISTORY/Once/Once8.htm, accessed September 25, 2012.

#### Town of Hanover

1976 Town of Hanover Bicentennial Commemorative Program. Town of Hanover, NY.

- United States Geological Survey (USGS)
  - 1900 Cherry Creek, NY Quadrangle. 15-Minute Series, US Government Printing Office, Washington, D.C. Electronic document, http://store.usgs.gov, accessed August 31, 2012.
  - 1900 Silver Creek, NY Quadrangle. 15-Minute Series, US Government Printing Office, Washington, D.C. Electronic document, http://store.usgs.gov, accessed August 31, 2012.
  - 1960 Farnham, New York Quadrangle, 7.5 Minute Series (Topographic). U.S. Geological Survey, Department of the Interior, Washington, D.C.
  - 1960 North Collins, New York Quadrangle, 7.5 Minute Series (Topographic). U.S. Geological Survey, Department of the Interior, Washington, D.C.
  - 1960 Silver Creek, New York Quadrangle, 7.5 Minute Series (Topographic). U.S. Geological Survey, Department of the Interior, Washington, D.C.
  - 1976 [1954] Cassadega, New York Quadrangle, 7.5 Minute Series (Topographic). U.S. Geological Survey, Department of the Interior, Washington, D.C. Photo-inspected but not revised.
  - 1976 [1954] Cherry Creek, New York Quadrangle, 7.5 Minute Series (Topographic). U.S. Geological Survey, Department of the Interior, Washington, D.C. Photo-inspected but not revised.
  - 1976 [1963] Gowanda, New York Quadrangle, 7.5 Minute Series (Topographic). U.S. Geological Survey, Department of the Interior, Washington, D.C. Photo-inspected but not revised.
  - 1976 [1954] Hamlet, New York Quadrangle, 7.5 Minute Series (Topographic). U.S. Geological Survey, Department of the Interior, Washington, D.C. Photo-inspected but not revised.
  - 1976 [1963] New Albion, New York Quadrangle, 7.5 Minute Series (Topographic). U.S. Geological Survey, Department of the Interior, Washington, D.C. Photo-inspected but not revised.
  - 1976 [1955] North of Dunkirk, New York Quadrangle, 7.5 Minute Series (Topographic). U.S. Geological Survey, Department of the Interior, Washington, D.C. Photo-inspected but not revised.
  - 1979 [1954] *Dunkirk, New York Quadrangle, 7.5 Minute Series (Topographic).* U.S. Geological Survey, Department of the Interior, Washington, D.C. Photo-revised.
  - 1979 [1954] Forestville, New York Quadrangle, 7.5 Minute Series (Topographic). U.S. Geological Survey, Department of the Interior, Washington, D.C. Photo-revised.
  - 1979 [1954] Perrysburg, New York Quadrangle, 7.5 Minute Series (Topographic). U.S. Geological Survey, Department of the Interior, Washington, D.C. Photo-revised.

- 1984 Buffalo, New York, 1:100k Series (Topographic). U.S. Geological Survey, Department of the Interior, Washington, D.C.
- 1986 Olean, New York-Pennsylvania, 1:100k Series (Topographic). U.S. Geological Survey, Department of the Interior, Washington, D.C.
- 1986 Silver Creek, New York-Pennsylvania-Ontario, 1:100k Series (Topographic). U.S. Geological Survey, Department of the Interior, Washington, D.C.
- 1988 [1986] *Jamestown, New York-Pennsylvania*, 1:100k Series (Topographic). U.S. Geological Survey, Department of the Interior, Washington, D.C. Photo-inspected.
- Van Diver, Bradford B.
  - 1985 Roadside Geology of New York. Mountain Press Publishing Company, Missoula, MT.
- Young, Andrew W.
  - 1875 History of Chautauqua County, New York. Printing House of Mathews & Warren, Buffalo.

# Appendix A. Archaeological Investigation Shovel Test Log

# Shovel Test Log for Ball Hill Addendum MDS Testing, Phase I

Shovel Test	Stratum	Depth (cm)	Munsell	Soil Color	Soil Description	Comments	
A1.1	1	0-33	10YR 4/2	DK GR BR	SI LO	NCM	
A1.1	2	33-43	10YR 6/3	PALE BR	SA LO	NCM	
A1.2	1	0-28	10YR 4/2	DK GR BR	SILO	NCM	
A1.2	2	28-41	10YR 4/4	DK YL BR	SILO	NCM	
A1.3	1	0-32	10YR 4/2	DK GR BR	SI LO	NCM	
A1.3	2	32-44	10YR 5/4	YL BR	SA LO	NCM	
A1.4	1	0-33	10YR 4/2	DK GR BR	SI LO	1 whiteware	
A1.4	2	33-43	10YR 5/4	YL BR	SA LO	NCM	
A1.5	1	0-29	10YR 4/2	DK GR BR	SI LO	NCM	
A1.5	2	29-41	10YR 5/4	YL BR	SA LO	NCM	
A1.6	1	0-20	10YR 4/2	DK GR BR	SI LO	NCM	
A1.6	2	20-40	10YR 6/3 10YR 5/4	PALE BR YL BR	SA LO	NCM	
A1.7	1	0-32	10YR 4/2	DK GR BR	SILO	NCM	
A1.7	2	32-42	10YR 6/3 10YR 5/4	PALE BR YL BR	SA LO	NCM	
A1.8	1	0-30	10YR 4/2	DK GR BR	SI LO	NCM	
A1.8	2	30-43	101R 4/2	PALE BR	SA LO	NCM	
,	_	30 <del>1</del> 0	101R 5/6	YL BR	5,120	140111	
A1.9	1	0-32	101R 3/0	DK GR BR	SI LO	NCM	
A1.9	2	32-45	10YR 6/3	PALE BR	SA LO	NCM	
711.0	_	02 10	10YR 5/6	YL BR	0,120		
A1.10	1	0-31	10YR 4/2	DK GR BR	SILO	NCM	
A1.10	2	31-41	10YR 6/3	PALE BR	SA LO	NCM	
A1.11	1	0-35	10YR 4/2	DK GR BR	SILO	NCM	
A1.11	2	35-46	10YR 6/3	PALE BR	SA LO	NCM	
A1.12	1	0-37	10YR 4/2	DK GR BR	SILO	NCM	
A1.12	2	37-50	10YR 6/3	PALE BR	SA LO	NCM	
A2.1	1	0-30	10YR 4/2	DK GR BR	SILO	NCM	
A2.1	2	30-40	10YR 4/4	DK YL BR	CL LO	NCM	
A2.2	1	0-30	10YR 4/2	DK GR BR	SILO	NCM	
A2.2	2	30-42	10YR 5/4	YL BR	SI CL	NCM	
A2.3	1	0-31	10YR 4/2	DK GR BR	SILO	1 pearlware	
A2.3	2	31-41	10YR 5/4	YL BR	SI CL	NCM	
A2.4	1	0-30	10YR 4/2	DK GR BR	SILO	NCM	
A2.4	2	30-41	10YR 4/4	DK YL BR	CL LO	NCM	
A2.5	1	0-27	10YR 4/2	DK GR BR	SILO	NCM	
A2.5	2	27-42	10YR 4/4	DK YL BR	CL LO	NCM	
A2.6	1	0-22	10YR 4/2	DK GR BR	SI LO	cut stone fragment; slag (not collected)	
A2.6	2	22-29	10YR 4/4	DK YL BR	CL LO	NCM; rock impasse at 29cm	
A2.7	1	0-38	101R 4/4 10YR 4/2	DK GR BR	SILO	NCM	
A2.7	2	38-48	10YR 4/4	DK YL BR	CL LO	NCM	
A2.8	1	0-28	10YR 4/2	DK GR BR	SILO	NCM	
A2.8	2	28-45	10YR 4/4	DK YL BR	LO	NCM	
A2.9	1	0-28	10YR 4/2	DK GR BR	SILO	NCM	
A2.9	2	28-40	10YR 4/4	DK YL BR	LO	NCM	
A2.10	1	0-28	10YR 4/2	DK GR BR	SILO	NCM	
A2.10	2	28-33	10YR 4/4	DK YL BR	LO	NCM; rock impasse at 33cm	
A2.11	1	0-24	10YR 4/2	DK GR BR	SILO	NCM	
A2.11	2	24-36	101R 4/2	DK YL BR	CL LO	NCM	
A2.12	1	0-30	101R 4/4 10YR 4/2	DK GR BR	SILO	NCM	
A2.12	2	30-40	101R 4/2 10YR 4/4	DK YL BR	CL LO	NCM	
B.1	1	0-32	101R 4/4 10YR 4/2	DK TE BR	SILO	NCM	
Key							
Key Soil Color: BL = black, BR = brown, DK = dark, GR = gray, LT = light, V = very, YL = yellow  Soil Description: CL = clay, LO = loam, SA = sand, SI = silt							
Comments: NCM = no cultural material							

# Shovel Test Log for Ball Hill Addendum MDS Testing, Phase I

Total	Shovel		Depth			Soil	
B-1		Stratum		Munsell	Soil Color		Comments
B.2		2		10YR 4/4	DK YL BR		NCM
B.3	B.2	1	0-20		DK GR BR	SI LO	NCM
B.3	B.2	2	20-32	10YR 4/4		SA LO	
B.4	B.3	1	0-25	10YR 4/2		SI LO	
B.4	B.3	2	25-35	10YR 6/3	PALE BR		NCM
B.5	B.4	1	0-29	10YR 4/2	DK GR BR	SI LO	1 canning jar glass
B.5	B.4	2	29-40				
B.6		1	0-31				
B.6		2					
B.7							
B.7		2					
B.8							
B.8   2   27-37   10YR 6/3   PALE BR   SA LO   NCM							
B.9							
B.9							
B.10							
B.10							
B.11			-				
B.11							
B.12							
B.12							
B.13							
B.13							
B.14							
B.14	B.13	2	30-40			SA LO	NCM
B.14						0110	11011
B.15							
B.15	B.14	2	27-37			SALO	NCM
B.15	D 45	4	0.00	10YR 6/3	PALE BR	0110	NOM
B.16							
B.16   2   20-32   10YR 5/4   YL BR   SA LO   NCM							
B.17							
B.18							
B.18	D.17	'	0-30			SILO	NCW, graver impasse at 50cm
B.18   2   40-50   10YR 6/3   PALE BR   SA LO   NCM	R 18	1	0-40			SLLO	NCM
B.19							
B.19	D. 10		40-30			SA LO	INCIVI
B.19         2         25-35         10YR 6/3 PALE BR DK YL BR         SA LO         NCM           B.20         1         0-22         10YR 4/2 DK GR BR SI LO         NCM           B.20         2         22-32         10YR 6/3 PALE BR SA LO NCM           C1.1         1         0-28         10YR 4/2 DK GR BR SI LO NCM           C1.1         2         28-38         10YR 4/4 DK YL BR SA LO NCM           C1.2         1         0-33         10YR 4/2 DK GR BR SI LO NCM           C1.2         2         33-43         10YR 4/4 DK YL BR SA LO NCM           C1.3         1         0-35         10YR 4/2 DK GR BR SI LO Sbottle glass; 2 coal; 2 flat glass; 1 brick fragment           C1.3         2         35-45         10YR 4/4 DK YL BR SA LO NCM           C1.4         1         0-30         10YR 4/2 DK GR BR SI LO SI LO NCM           C1.4         2         30-42         10YR 5/6 YL BR SA LO NCM           C1.5         1         0-29         10YR 4/2 DK GR BR SI LO NCM           C1.5         2         29-40         10YR 5/6 YL BR SA LO NCM	B 19	1	0-25			SLLO	NCM
B.20							
B.20         1         0-22         10YR 4/2         DK GR BR         SI LO         NCM           B.20         2         22-32         10YR 6/3         PALE BR         SA LO         NCM           C1.1         1         0-28         10YR 4/2         DK GR BR         SI LO         NCM           C1.1         2         28-38         10YR 4/2         DK GR BR         SI LO         NCM           C1.2         1         0-33         10YR 4/2         DK GR BR         SI LO         NCM           C1.2         2         33-43         10YR 4/2         DK GR BR         SI LO         NCM           C1.3         1         0-35         10YR 4/2         DK GR BR         SI LO         5 bottle glass; 2 coal; 2 flat glass; 1 brick fragment           C1.3         2         35-45         10YR 4/4         DK YL BR         SA LO         NCM           C1.4         1         0-30         10YR 4/2         DK GR BR         SI LO         flat glass (not collected)           C1.4         2         30-42         10YR 5/6         YL BR         SA LO         NCM           C1.5         1         0-29         10YR 4/2         DK GR BR         SI LO         NCM	2.10	_	20 00			0,120	110
B.20         2         22-32         10YR 6/3 PALE BR 10YR 5/4 YL BR         SA LO         NCM           C1.1         1         0-28         10YR 4/2 DK GR BR SI LO         NCM           C1.1         2         28-38         10YR 4/4 DK YL BR SA LO NCM           C1.2         1         0-33         10YR 4/2 DK GR BR SI LO NCM           C1.2         2         33-43         10YR 4/4 DK YL BR SA LO NCM           C1.3         1         0-35         10YR 4/2 DK GR BR SI LO 5 bottle glass; 2 coal; 2 flat glass; 1 brick fragment           C1.3         2         35-45         10YR 4/4 DK YL BR SA LO NCM           C1.4         1         0-30         10YR 4/2 DK GR BR SI LO flat glass (not collected)           C1.4         2         30-42         10YR 5/6 YL BR SA LO NCM           C1.5         1         0-29         10YR 4/2 DK GR BR SI LO NCM           C1.5         2         29-40         10YR 5/6 YL BR SA LO NCM	B.20	1	0-22			SI LO	NCM
10YR 5/4							
C1.1         1         0-28         10YR 4/2         DK GR BR         SI LO         NCM           C1.1         2         28-38         10YR 4/4         DK YL BR         SA LO         NCM           C1.2         1         0-33         10YR 4/2         DK GR BR         SI LO         NCM           C1.2         2         33-43         10YR 4/4         DK YL BR         SA LO         NCM           C1.3         1         0-35         10YR 4/2         DK GR BR         SI LO         5 bottle glass; 2 coal; 2 flat glass; 1 brick fragment           C1.3         2         35-45         10YR 4/4         DK YL BR         SA LO         NCM           C1.4         1         0-30         10YR 4/2         DK GR BR         SI LO         flat glass (not collected)           C1.4         2         30-42         10YR 5/6         YL BR         SA LO         NCM           C1.5         1         0-29         10YR 4/2         DK GR BR         SI LO         NCM           C1.5         2         29-40         10YR 5/6         YL BR         SA LO         NCM		_	<b>~_</b>				
C1.1         2         28-38         10YR 4/4         DK YL BR         SA LO         NCM           C1.2         1         0-33         10YR 4/2         DK GR BR         SI LO         NCM           C1.2         2         33-43         10YR 4/4         DK YL BR         SA LO         NCM           C1.3         1         0-35         10YR 4/2         DK GR BR         SI LO         5 bottle glass; 2 coal; 2 flat glass; 1 brick fragment           C1.3         2         35-45         10YR 4/4         DK YL BR         SA LO         NCM           C1.4         1         0-30         10YR 4/2         DK GR BR         SI LO         flat glass (not collected)           C1.4         2         30-42         10YR 5/6         YL BR         SA LO         NCM           C1.5         1         0-29         10YR 4/2         DK GR BR         SI LO         NCM           C1.5         2         29-40         10YR 5/6         YL BR         SA LO         NCM	C1.1	1	0-28			SI LO	NCM
C1.2         1         0-33         10YR 4/2         DK GR BR         SI LO         NCM           C1.2         2         33-43         10YR 4/4         DK YL BR         SA LO         NCM           C1.3         1         0-35         10YR 4/2         DK GR BR         SI LO         5 bottle glass; 2 coal; 2 flat glass; 1 brick fragment           C1.3         2         35-45         10YR 4/4         DK YL BR         SA LO         NCM           C1.4         1         0-30         10YR 4/2         DK GR BR         SI LO         flat glass (not collected)           C1.4         2         30-42         10YR 5/6         YL BR         SA LO         NCM           C1.5         1         0-29         10YR 4/2         DK GR BR         SI LO         NCM           C1.5         2         29-40         10YR 5/6         YL BR         SA LO         NCM		2					
C1.2         2         33-43         10YR 4/4         DK YL BR         SA LO         NCM           C1.3         1         0-35         10YR 4/2         DK GR BR         SI LO         5 bottle glass; 2 coal; 2 flat glass; 1 brick fragment           C1.3         2         35-45         10YR 4/4         DK YL BR         SA LO         NCM           C1.4         1         0-30         10YR 4/2         DK GR BR         SI LO         flat glass (not collected)           C1.4         2         30-42         10YR 5/6         YL BR         SA LO         NCM           C1.5         1         0-29         10YR 4/2         DK GR BR         SI LO         NCM           C1.5         2         29-40         10YR 5/6         YL BR         SA LO         NCM							
C1.3         1         0-35         10YR 4/2         DK GR BR         SI LO         5 bottle glass; 2 coal; 2 flat glass; 1 brick fragment           C1.3         2         35-45         10YR 4/4         DK YL BR         SA LO         NCM           C1.4         1         0-30         10YR 4/2         DK GR BR         SI LO         flat glass (not collected)           C1.4         2         30-42         10YR 5/6         YL BR         SA LO         NCM           C1.5         1         0-29         10YR 4/2         DK GR BR         SI LO         NCM           C1.5         2         29-40         10YR 5/6         YL BR         SA LO         NCM			33-43				
C1.3         2         35-45         10YR 4/4         DK YL BR         SA LO         NCM           C1.4         1         0-30         10YR 4/2         DK GR BR         SI LO         flat glass (not collected)           C1.4         2         30-42         10YR 5/6         YL BR         SA LO         NCM           C1.5         1         0-29         10YR 4/2         DK GR BR         SI LO         NCM           C1.5         2         29-40         10YR 5/6         YL BR         SA LO         NCM			0-35				5 bottle glass; 2 coal; 2 flat glass; 1
C1.3         2         35-45         10YR 4/4         DK YL BR         SA LO         NCM           C1.4         1         0-30         10YR 4/2         DK GR BR         SI LO         flat glass (not collected)           C1.4         2         30-42         10YR 5/6         YL BR         SA LO         NCM           C1.5         1         0-29         10YR 4/2         DK GR BR         SI LO         NCM           C1.5         2         29-40         10YR 5/6         YL BR         SA LO         NCM							
C1.4         2         30-42         10YR 5/6 10YR 5/6 10YR 5/6 10YR 6/3         YL BR PALE BR         SA LO         NCM           C1.5         1         0-29         10YR 4/2 DK GR BR SI LO         NCM           C1.5         2         29-40         10YR 5/6 YL BR SA LO         NCM	C1.3	2		10YR 4/4	DK YL BR	SA LO	NCM
C1.5         1         0-29         10YR 4/2         DK GR BR         SI LO         NCM           C1.5         2         29-40         10YR 5/6         YL BR         SA LO         NCM	C1.4	1	0-30	10YR 4/2	DK GR BR	SI LO	flat glass (not collected)
C1.5         1         0-29         10YR 4/2         DK GR BR         SI LO         NCM           C1.5         2         29-40         10YR 5/6         YL BR         SA LO         NCM	C1.4	2	30-42	10YR 5/6	YL BR	SA LO	NCM
C1.5         1         0-29         10YR 4/2         DK GR BR         SI LO         NCM           C1.5         2         29-40         10YR 5/6         YL BR         SA LO         NCM					PALE BR		
C1.5 2 29-40 10YR 5/6 YL BR SA LO NCM	C1.5	1	0-29			SI LO	NCM
	C1.5	2	29-40	10YR 5/6	YL BR	SA LO	NCM
				10YR 6/3	PALE BR		

# Shovel Test Log for Ball Hill Addendum MDS Testing, Phase I

Shovel		Depth			Soil	
Test	Stratum	(cm)	Munsell	Soil Color	Description	Comments
1631		(CIII)			Description	1 square glass bottle base 1 circular
		Í				glass bottle base; 8 container glass; 1
C1.6	1	0-25	10YR 4/2	DK GR BR	SI LO	redware
C1.6	2	25-36	10YR 5/4	YL BR	SA LO	NCM
C1.7	1	0-29	10YR 4/2	DK GR BR	SI LO	1 glass bottle neck; 1 stoneware; 1
01.7	i i	0 20	1011( 4/2	BIC OIC BIC	0.20	whiteware
C1.7	2	29-39	10YR 4/4	DK YL BR	SA LO	NCM
01	_		10111111	DICTE DIC	0,120	2 whiteware; 1 vessel glass; 1 flat
C1.8	1	0-24	10YR 4/2	DK GR BR	SI LO	glass
C1.8	2	24-35	10YR 4/4	DK YL BR	SA LO	NCM
C1.9	1	0-31	10YR 4/2	DK GR BR	SILO	1 glass bottle neck
C1.9	2	31-41	10YR 4/4	DK YL BR	SA LO	NCM
C1.10	1	0-27	10YR 4/2	DK GR BR	SI LO	NCM
C1.10	2	27-32	10YR 4/4	DK YL BR	SA LO	NCM; rock impasse at 32 cm
C1.11	1	0-28	10YR 4/2	DK GR BR	SI LO	NCM
C1.11	2	28-38	101R 4/2	DK YL BR	SA LO	NCM
C1.12	1	0-18	101R 4/4 10YR 4/2	DK GR BR	SILO	NCM
C1.12	2	18-30	101R 4/2 10YR 4/4	DK YL BR	SA LO	NCM
C1.12	1	0-26	101R 4/4 10YR 4/2	DK TE BR	SILO	NCM
C1.13	2	26-36	101R 4/2 10YR 4/4	DK YL BR	SA LO	NCM
C2.1	1	0-30	101R 4/4 10YR 4/2	DK TE BR	SI LO	NCM
C2.1	2	30-40	101R 4/2 10YR 4/4	DK YL BR	SA LO	NCM
						NCM
C2.2 C2.2	2	0-30	10YR 4/2 10YR 4/4	DK GR BR	SILO	NCM NCM
	1	30-40		DK YL BR	SA LO	NCM NCM
C2.3	2	0-28	10YR 4/2 10YR 4/4	DK GR BR	SILO	NCM NCM
C2.3		28-40	101R 4/4	DK YL BR	SA LO	
CO 4	4	0.07	40VD 4/0		CLLO	1 brick fragment; 1 redware; 1 flat
C2.4 C2.4	2	0-27 27-42	10YR 4/2	DK GR BR DK YL BR	SILO	glass NCM
C2.4 C2.5			10YR 4/4		SA LO	
	1	0-23	10YR 4/2	DK GR BR	SILO	3 flat glass; 1 whiteware
C2.5	2	23-38	10YR 6/3	PALE BR	SA LO	NCM
			10YR 4/4	DK YL BR		4 whiteware, 4 flet gless, 2 brief
60.6	4	0.04	40VD 4/0		CLLO	1 whiteware; 1 flat glass; 2 brick
C2.6	1	0-24	10YR 4/2	DK GR BR	SILO	fragments; 1 cut nail
C2.6	2	24-40	10YR 6/3	PALE BR	SA LO	NCM
00.7	4	0.00	10YR 4/4	DK YL BR	0110	4t-in
C2.7	1	0-30	10YR 4/2	DK GR BR	SILO	4 container glass
C2.7	2	30-45	10YR 4/4	DK YL BR	SA LO	NCM
C2.0		0.00	10VD 4/0		SI O	2 pearlware; 2 brick fragments; 1 flat
C2.8	1	0-29	10YR 4/2	DK GR BR	SILO	glass
C2.8	2	29-40	10YR 4/4	DK YL BR	SA LO	NCM
C2.9	1	0-17	10YR 4/2	DK GR BR	SILO	1 whiteware; 2 pearlware
C2.9	2	17-32	10YR 4/4	DK YL BR	SA LO	NCM 1 ironotono
C2.10	1	0-24	10YR 4/2	DK GR BR	SILO	1 ironstone
C2.10	2	24-38	10YR 4/4	DK YL BR	SA LO	NCM
C2.11	1	0-21	10YR 4/2	DK GR BR	SILO	1 iron bolt; 3 container glass
C2.11	2	21-33	10YR 4/4	DK YL BR	SA LO	NCM
C2.12	1	0-19	10YR 4/2	DK GR BR	SILO	NCM
C2.12	2	19-32	10YR 4/4	DK YL BR	SA LO	NCM
C2.13	1	0-29	10YR 4/2	DK GR BR	SILO	NCM
C2.13	2	29-40	10YR 4/4	DK YL BR	SA LO	NCM

# Appendix B. Archaeological Investigation Artifact Catalog

## Artifact Catalog for Ball Hill Addendum MDS Testing

Provenience				atalog for Ball filli Adden			
A1.4	_					Secondary	_
A1.4	Provenience	Stratum	Material	Artifact Type	Count	Туре	Comments
A2.3							burned, probable
A2.3	A1.4	1	ceramic	whiteware, transfer print	1	black	tableware, 4 cm
B.4							4 cm, probable
B.4	A2.3	1	ceramic	pearlware	1		tableware
B.6	B.4	1	glass	canning jar		clear	
C1.3	B.6		_	• • • • • • • • • • • • • • • • • • • •			,
C1.3				brick fragment			2.2 cm
C1.3 1 glass bottle 1 clear 2.5 cm  C1.3 1 glass bottle 1 clear 7 mm thick, canning iar?, partially embossed ".B.W.". Possible side of prescription type bottle, 2.5 cm  C1.3 1 glass bottle 1 aqua 7 mm thick, canning iar?, partially embossed ".B.W.". Post post ble, 4 cm fragments appear related to item listed above, under 3 cm probable bottle glass, under 3 cm probable bottle glass, under 4 cm probable bottle glass, under 5 cm, under 4 cm probable bottle glass, under 5 cm, under 4 cm probable bottle glass, under 5 cm, under 5 cm, tablewares will blue and painted bands, 3.5 cm under 5 cm, tablewares buff, white slip interior and exterior, 3.5 cm brown exterior glaze, jug or tile fragment, 5 x 7.5 cm, 1 cm thick probable bottle glass under 5 cm.							
C1.3 1 glass bottle 1 clear							
C1.3 1 glass bottle 1 clear 7 mm thick, canning jar?, partially embossed ".B.UR" [only top of tetters visible], 4 cm fragments appear related to item listed above, under 3 cm fragments appear related to item listed above, under 3 cm fragments appear related to item listed above, under 3 cm fragments appear related to item listed above, under 3 cm fragments appear related to item listed above, under 3 cm fragments appear related to item listed above, under 3 cm fragments appear related to item listed above, under 3 cm fragments appear related to item listed above, under 3 cm fragments appear related to item listed above, under 3 cm probable bottle glass, under 3 cm probable bottle glass, under 3 cm probable bottle glass, 4 cm probable bottle glass, 2 cm probable bottle glass	0.1.0		g.acc		_		
C1.3 1 glass bottle 1 clear Prescription type bottle, 2.5 cm  C1.3 1 glass bottle 1 aqua fragments appear related to item listed above, under 3 cm probable bottle glass, under 4 cm probable bottle glass, under 4 cm probable bottle glass, 2 cm advance around C1.6 surface ceramic red stoneware 1 glass vessel 4 clear probable bottle glass, under 5 cm, tablewares 1 surface glass vessel 4 clear under 5 cm under 5 cm and extensive probable to the spread of the blue and thin blue hand painted thin blue hand painted C1.6 surface ceramic red stoneware 1 surface around C1.6 surface ceramic red stoneware 1 surface glass under 6 cm and extensive proposable bottle glass, under 5 cm, tablewares 5 under 6 cm and extensive proposable to the surface around C1.6 surface ceramic red stoneware 1 surface around C1.6 surface ceramic red stoneware 1 surface around C1.6 surface ceramic red stoneware 1 surface probable bottle glass, under 6 cm and extensive probable bottle surface around C1.6 surface ceramic red stoneware 1 surface probable bottle glass, under 6 cm and extensive glass, under 6 cm							
C1.3							
C1.3 1 glass bottle 1 aqua letters visible), 4 cm  C1.3 1 glass bottle 3 aqua aqua letters visible), 4 cm  C1.4 1 glass bottle 3 aqua aqua aqua letters visible), 4 cm  C1.4 1 glass flat 1 clear  C1.6 1 ceramic redware 1 clear  C1.6 1 glass vessel 6 clear probable bottle glass, 2 cm  C1.6 1 glass vessel 1 blue-green cm  C1.6 1 glass vessel 1 aqua probable bottle glass, 4 cm  C1.6 1 glass vessel 1 aqua probable bottle glass, 2 cm  C1.6 1 glass vessel 1 aqua probable bottle glass, 2 cm  C1.6 1 glass vessel 1 aqua probable bottle glass, 2 cm  C1.6 1 glass bottle base, rectangular 1 aqua green probable bottle glass, 2 cm  C1.6 1 glass bottle base, circular 1 aqua possible canning jar, embossed 'MAR'  C1.6 1 glass bottle base, circular 1 aqua green probable bottle glass, 2 cm  C1.6 1 glass bottle base, circular 1 aqua green probable bottle glass, 2 cm  C1.6 1 glass bottle base, circular 1 aqua green probable bottle glass, 2 cm  C1.6 1 glass bottle base, circular 1 aqua green possible canning jar, embossed 'MAR'  C1.6 surface around C1.6 surface ceramic ironstone 1 blue budy and painted bands, 3.5 cm  Surface around C1.6 surface ceramic ironstone 3 under 5 cm, tablewares buff, white slip interior and exterior, 3.5 cm  Drown exterior glaze, jug or tile fragment, 5 x probable bottle glass, under 5 cm  C1.6 surface around C1.6 surface ceramic red stoneware 1 7.5 cm, 1 cm thick probable bottle glass, under 5 cm	C1 3	1	alace	bottlo	1	cloar	
C1.3 1 glass bottle 1 aqua fragments appear related to item listed above, under 3 cm  C1.4 1 glass flat 1 clear  C1.6 1 ceramic redware 1 probable bottle glass, under 3 cm  C1.6 1 glass vessel 6 clear probable bottle glass, under 4 cm  C1.6 1 glass vessel 1 blue-green probable bottle glass, 2 cm  C1.6 1 glass vessel 1 aqua prescription type, oval suction scar, embossed O in a Square [Owen s Bottle Company. Toledo OH (1903-1929, likely)  C1.6 1 glass bottle base, rectangular 1 aqua possible canning jar, embossed MAR'  C1.6 1 glass bottle base, circular 1 aqua possible canning jar, embossed MAR'  C1.6 1 glass bottle base, circular 1 aqua possible canning jar, embossed MAR'  C1.6 1 glass bottle base, circular 1 aqua possible canning jar, embossed MAR'  C1.6 surface around C1.6 surface ceramic ironstone 3 under 5 cm, tablewares  Surface around C1.6 surface ceramic ironstone 3 under 5 cm, tablewares  Surface around C1.6 surface ceramic red stoneware 1 probable bottle glass, 2 in this bottle surface, in the surface ceramic ironstone 3 probable bottle glass, 2 cm  Surface around C1.6 surface ceramic ironstone 3 under 5 cm, tablewares  Surface around C1.6 surface ceramic red stoneware 1 probable bottle glass, 2 in thick probable bottle glass, 2 cm thick glass vessel 4 clear under 5 cm thick probable bottle glass, 2 in thick probable bottle glass, 2 cm thick glass under 5 cm thick probable bottle glass, 2 in the fragment, 5 x in thick probable bottle glass, 2 in thick glass under 5 cm thick probable bottle glass, 2 in thick probable bottle glass, 2 in thick glass and 2 in thick probable bottle glass, 2 in thick glass around cn.6 surface ceramic red stoneware 1 probable bottle glass, and a charlenge around cn.6 surface around cn.6 surface around cn.6 surface around cn.6 surface around cn.6 sur	01.3		giass	bottle	<u>'</u>	Cleai	2.5 (11)
C1.3 1 glass bottle 1 aqua fragments appear related to item listed above, under 3 cm  C1.4 1 glass flat 1 clear  C1.6 1 ceramic redware 1 probable bottle glass, under 3 cm  C1.6 1 glass vessel 6 clear probable bottle glass, under 4 cm  C1.6 1 glass vessel 1 blue-green probable bottle glass, 2 cm  C1.6 1 glass vessel 1 aqua prescription type, oval suction scar, embossed O in a Square [Owen s Bottle Company. Toledo OH (1903-1929, likely)  C1.6 1 glass bottle base, rectangular 1 aqua possible canning jar, embossed MAR'  C1.6 1 glass bottle base, circular 1 aqua possible canning jar, embossed MAR'  C1.6 1 glass bottle base, circular 1 aqua possible canning jar, embossed MAR'  C1.6 1 glass bottle base, circular 1 aqua possible canning jar, embossed MAR'  C1.6 surface around C1.6 surface ceramic ironstone 3 under 5 cm, tablewares  Surface around C1.6 surface ceramic ironstone 3 under 5 cm, tablewares  Surface around C1.6 surface ceramic red stoneware 1 probable bottle glass, 2 in this bottle surface, in the surface ceramic ironstone 3 probable bottle glass, 2 cm  Surface around C1.6 surface ceramic ironstone 3 under 5 cm, tablewares  Surface around C1.6 surface ceramic red stoneware 1 probable bottle glass, 2 in thick probable bottle glass, 2 cm thick glass vessel 4 clear under 5 cm thick probable bottle glass, 2 in thick probable bottle glass, 2 cm thick glass under 5 cm thick probable bottle glass, 2 in the fragment, 5 x in thick probable bottle glass, 2 in thick glass under 5 cm thick probable bottle glass, 2 in thick probable bottle glass, 2 in thick glass and 2 in thick probable bottle glass, 2 in thick glass around cn.6 surface ceramic red stoneware 1 probable bottle glass, and a charlenge around cn.6 surface around cn.6 surface around cn.6 surface around cn.6 surface around cn.6 sur							7 mm think comming
C1.3 1 glass bottle 1 aqua letters visible], 4 cm  C1.3 1 glass bottle 3 aqua letters visible], 4 cm  C1.4 1 glass bottle 3 aqua letters visible], 4 cm  C1.4 1 glass bottle 3 aqua letters visible], 4 cm  C1.4 1 glass litat 1 clear  C1.6 1 ceramic redware 1 letters visible], 4 cm  C1.6 1 glass vessel 6 clear  C1.6 1 glass vessel 6 clear  C1.6 1 glass vessel 1 blue-green probable bottle glass, 4 cm  C1.6 1 glass vessel 1 aqua prescription type, oval suction scar, embossed O in a Square [Owen s Bottle Company, Toledo OH (1903-1929, likely used after 1919  C1.6 1 glass bottle base, circular 1 aqua possible canning jar, embossed TMAR"  Surface around C1.6 surface ceramic ironstone 1 blue bands, 3.5 cm  Surface around C1.6 surface ceramic ironstone 3 under 5 cm, tablewares Surface around C1.6 surface ceramic red stoneware 1 probable bottle glass, under 5 cm  Surface around C1.6 surface ceramic red stoneware 1 probable bottle glass, under 5 cm  ".BUR" [only top of letters visible], 4 cm  fragments appear related to item listed above, under 3 cm  14 mm thick, curved, possible drain tile, under 3 cm  probable bottle glass, under 4 cm  probable bottle glass, 2  cm  prescription type, oval suction scar, embossed O in a Square [Owen s Bottle Company, Toledo OH (1903-1929, likely used after 1919  possible canning jar, embossed "MAR"  cup plate rim, wide and thin blue hand painted bands, 3.5 cm  Surface around C1.6 surface ceramic ironstone 3 under 5 cm, tablewares buff, white slip interior and exterior, 3.5 cm  Forwing transparted to item listed above, under 5 cm  ".BUR." [only to the fragment, 5 x 7.5 cm, 1 cm thick curved, probable bottle glass, under 5 cm  ".BUR." [only the sabove, under 3 cm  14 mm thick, curved, possible canning jar, embossed with the probable bottle glass, under 5 cm  ".BUR." [only the sabove, under 3 cm  14 maqua under 3 cm  15 probable bottle glass, 2 cm  16 clear  17 probable bottle glass, 2 cm  18 probable bottle glass, 2 cm  18 probable bottle glass, 2 cm  19 probable bottle glass, 2 cm							
C1.3 1 glass bottle 1 aqua letters visible], 4 cm fragments appear related to item listed content of the probable bottle glass, 4 cm fragments appear related to item listed above, under 3 cm content of the probable bottle glass, 4 cm probable bottle glass, 2 cm probable bottle glass, 3 cm probable bottle glass, 3 cm blue bards, 3 cm probable bottle glass, 3 cm blue bards, 3 cm probable bottle glass, 4 clear probable bottle g							
C1.3 1 glass bottle 3 aqua related to item listed above, under 3 cm C1.4 1 glass flat 1 clear  C1.6 1 ceramic redware 1 probable bottle glass, under 4 cm probable bottle glass, 2 cm  C1.6 1 glass vessel 1 blue-green probable bottle glass, 2 cm  C1.6 1 glass vessel 1 aqua prescription type, oval suction scar, embossed O in a Square [Owen s Bottle Company, Toledo OH (1903-1929, likely) C1.6 1 glass bottle base, rectangular 1 aqua used after 1919 C1.6 1 glass bottle base, circular 1 aqua cup possible canning jar, embossed "MAR"  Surface around C1.6 surface ceramic ironstone 1 blue buff earthenware 1 cup plate rim, wide and thin blue hand painted bands, 3.5 cm  Surface around C1.6 surface ceramic ironstone 3 under 5 cm, tablewares Surface around C1.6 surface ceramic red stoneware 1 probable bottle glass, under 5 cm  Surface around C1.6 surface ceramic red stoneware 1 probable bottle glass, under 5 cm  Surface around C1.6 surface glass vessel 4 clear probable bottle glass, under 5 cm							
C1.3 1 glass bottle 3 aqua related to item listed above, under 3 cm C1.4 1 glass flat 1 clear  C1.6 1 ceramic redware 1 1 14 mm thick, curved, possible drain tile, under 3 cm C1.6 1 glass vessel 6 clear probable bottle glass, under 4 cm C1.6 1 glass vessel 1 blue-green probable bottle glass, 2 cm C1.6 1 glass vessel 1 aqua probable bottle glass, 2 cm C1.6 1 glass vessel 1 aqua probable bottle glass, 2 cm C1.6 1 glass vessel 1 aqua probable bottle glass, 2 cm C1.6 1 glass vessel 1 aqua probable bottle glass, 2 cm C1.6 1 glass bottle base, rectangular 1 aqua used after 1919 possible canning jar, embossed "MAR"  C1.6 1 glass bottle base, circular 1 aqua embossed "MAR"  C1.6 surface around C1.6 surface ceramic ironstone 3 under 5 cm, tablewares Surface around C1.6 surface ceramic red stoneware 1 buff earthenware 1 buff red and exterior, 3.5 cm Surface around C1.6 surface ceramic red stoneware 1 clear probable bottle glass, 2 cm  C1.6 surface ground C1.6 surface ceramic red stoneware 1 probable bottle glass, 2 cm  C1.6 surface around C1.6 surface glass vessel 4 clear probable bottle glass, 2 cm  C1.6 surface around C1.6 surface glass vessel 4 clear probable bottle glass, under 5 cm	C1.3	1	glass	bottle	1	aqua	
C1.3 1 glass bottle 3 aqua above, under 3 cm C1.4 1 glass flat 1 clear  C1.6 1 ceramic redware 1 under 3 cm C1.6 1 glass vessel 6 clear probable bottle glass, under 4 cm C1.6 1 glass vessel 1 blue-green C1.6 1 glass vessel 1 aqua probable bottle glass, 4 cm C1.6 1 glass vessel 1 aqua probable bottle glass, 2 cm  C1.6 1 glass vessel 1 aqua probable bottle glass, 2 cm  C1.6 1 glass vessel 1 aqua probable bottle glass, 2 cm  C1.6 1 glass vessel 1 aqua probable bottle glass, 2 cm  C1.6 1 glass bottle base, rectangular 1 aqua prossible canning jar, embossed "MAR"  C1.6 1 glass bottle base, circular 1 aqua cup possible canning jar, embossed "MAR"  C1.6 surface around C1.6 surface ceramic ironstone 1 blue bands, 3.5 cm  Surface around C1.6 surface ceramic buff earthenware 1 buff, white slip interior and exterior, 3.5 cm  Surface around C1.6 surface ceramic red stoneware 1 probable bottle glass, 2 cm  C1.6 surface glass vessel 1 aqua probable bottle bands, 3.5 cm  Surface around C1.6 surface ceramic red stoneware 1 probable bottle glass, 2 cm  C1.6 surface glass vessel 4 clear probable bottle glass, 2 cm  C1.6 surface around C1.6 surface glass vessel 4 clear probable bottle glass, under 5 cm							
C1.4 1 glass flat 1 clear 14 mm thick, curved, possible drain tile, under 3 cm probable bottle glass, 4 cm probable bottle glass, 2 cm probabl							related to item listed
C1.6 1 ceramic redware 1 under 3 cm  C1.6 1 glass vessel 6 clear probable bottle glass, under 4 cm  C1.6 1 glass vessel 1 blue-green probable bottle glass, 4 cm  C1.6 1 glass vessel 1 plue-green probable bottle glass, 4 cm  C1.6 1 glass vessel 1 aqua probable bottle glass, 2 cm  C1.6 1 glass vessel 1 aqua probable bottle glass, 2 cm  C1.6 1 glass bottle base, rectangular 1 aqua suction scar, embossed O in a Square [Owen s Bottle Company. Toledo OH (1903-1929, likely used after 1919 possible canning jar, embossed "MAR"  C1.6 1 glass bottle base, circular 1 aqua cup probable bottle glass, 2 cm  Surface around C1.6 surface ceramic ironstone 1 blue blue bands, 3.5 cm  Surface around C1.6 surface ceramic buff, white slip interior and exterior, 3.5 cm brown exterior glaze, jug or tile fragment, 5 x 7.5 cm, 1 cm thick C1.6 surface glass vessel 4 clear under 5 cm thick probable bottle glass, under 5 cm			glass	bottle		aqua	above, under 3 cm
C1.6 1 ceramic redware 1 possible drain tile, under 3 cm  C1.6 1 glass vessel 6 clear probable bottle glass, under 4 cm  C1.6 1 glass vessel 1 blue-green probable bottle glass, 4 cm  C1.6 1 glass vessel 1 aqua probable bottle glass, 2 cm  C1.6 1 glass vessel 1 aqua probable bottle glass, 2 cm  C1.6 1 glass bottle base, rectangular 1 aqua glase bottle company. Toledo OH (1903-1929, likely used after 1919 possible canning jar, embossed "MAR"  C1.6 1 glass bottle base, circular 1 aqua embossed "MAR"  C1.6 surface around C1.6 surface ceramic ironstone 1 blue blue bands, 3.5 cm  Surface around C1.6 surface ceramic ironstone 3 under 5 cm, tablewares brown exterior, 3.5 cm  Surface around C1.6 surface ceramic red stoneware 1 probable bottle glass, 2 cm  Surface around C1.6 surface glass vessel 4 clear probable bottle glass, 2 cm  C1.6 surface around C1.6 surface glass vessel 4 clear under 5 cm	C1.4	1	glass	flat	1	clear	
C1.6 1 glass vessel 6 clear probable bottle glass, under 4 cm  C1.6 1 glass vessel 1 blue-green probable bottle glass, under 4 cm  C1.6 1 glass vessel 1 blue-green probable bottle glass, 4 cm  C1.6 1 glass vessel 1 aqua probable bottle glass, 2 cm  C1.6 1 glass vessel 1 aqua probable bottle glass, 2 cm  C1.6 1 glass bottle base, rectangular 1 aqua used after 1919  C1.6 1 glass bottle base, circular 1 aqua embossed "MAR"  C1.6 1 glass bottle base, circular 1 aqua embossed "MAR"  C1.6 1 glass bottle base, circular 1 aqua embossed "MAR"  C1.6 surface around C1.6 surface ceramic ironstone 1 blue band, 3.5 cm  Surface around C1.6 surface ceramic ironstone 3 under 5 cm, tablewares  Surface around C1.6 surface ceramic pluff earthenware 1 brown exterior, 3.5 cm  brown exterior glaze, jug or tile fragment, 5 x 7.5 cm, 1 cm thick Surface around C1.6 surface glass vessel 4 clear under 5 cm							14 mm thick, curved,
C1.6 1 glass vessel 6 clear under 4 cm probable bottle glass, under 4 cm probable bottle glass, 2 cm probable bottle glass, 4 clear probable bottle glass, 4 cm probable bottle glass, 4 cm probable bottle glass, 4 clear probable bottle glass, 4 clear probable bottle glass, 4 clear probable bottle glass, under 5 cm probable bottle glass, unde							possible drain tile,
C1.6 1 glass vessel 6 clear under 4 cm probable bottle glass, under 4 cm probable bottle glass, 2 cm probable bottle glass, 4 clear probable bottle glass, 4 cm probable bottle glass, 4 cm probable bottle glass, 4 clear probable bottle glass, 4 clear probable bottle glass, 4 clear probable bottle glass, under 5 cm probable bottle glass, unde	C1.6	1	ceramic	redware	1		under 3 cm
C1.6 1 glass vessel 6 clear under 4 cm  C1.6 1 glass vessel 1 blue-green  C1.6 1 glass vessel 1 aqua probable bottle glass, 4 cm  C1.6 1 glass vessel 1 aqua probable bottle glass, 2 cm  C1.6 1 glass vessel 1 aqua probable bottle glass, 2 cm  C1.6 1 glass bottle base, rectangular 1 aqua used after 1919  C1.6 1 glass bottle base, circular 1 aqua possible canning jar, embossed "MAR"  C1.6 1 glass bottle base, circular 1 aqua cup possible canning jar, embossed "MAR"  C1.6 Surface around C1.6 surface ceramic ironstone 1 blue blue bands, 3.5 cm  C1.6 surface around C1.6 surface ceramic ironstone 3 under 5 cm, tablewares brown exterior glaze, jug or tile fragment, 5 x 7.5 cm, 1 cm thick Surface around C1.6 surface glass vessel 4 clear under 5 cm under 5 cm.  C1.6 surface glass vessel 4 clear under 5 cm under 5 cm.							
C1.6 1 glass vessel 1 blue-green probable bottle glass, 4 cm  C1.6 1 glass vessel 1 aqua probable bottle glass, 2 cm  C1.6 1 glass vessel 1 aqua probable bottle glass, 2 cm  probable bottle glass, 4 cm  probable bottle glass, 2 cm  probable bottle glass, 4 cm  probable bottle glass, 4 cm  probable bottle glass, 2 cm  probable pottle mm  probable glass place and 2 cm  probable glass place an	C1.6	1	alass	vessel	6	clear	
C1.6 1 glass vessel 1 blue-green cm  C1.6 1 glass vessel 1 aqua probable bottle glass, 2 cm  C1.6 1 glass vessel 1 aqua probable bottle glass, 2 cm			9				
C1.6 1 glass vessel 1 aqua probable bottle glass, 2 cm  prescription type, oval suction scar, embossed O in a Square [Owen s Bottle Company. Toledo OH (1903-1929, likely used after 1919 possible canning jar, embossed "MAR"  C1.6 1 glass bottle base, circular 1 aqua used after 1919 possible canning jar, embossed "MAR"  C1.6 surface around C1.6 surface ceramic ironstone 1 blue bands, 3.5 cm  Surface around C1.6 surface ceramic ironstone 3 under 5 cm, tablewares buff, white slip interior and exterior, 3.5 cm  Surface around C1.6 surface ceramic buff earthenware 1 and exterior, 3.5 cm  Surface around C1.6 surface glass vessel 4 clear under 5 cm  Surface around C1.6 surface glass vessel 4 clear under 5 cm	C1.6	1	glass	vessel	1	blue-green	-
C1.6 1 glass vessel 1 aqua cm  prescription type, oval suction scar, embossed O in a Square [Owen s Bottle Company. Toledo OH (1903-1929, likely used after 1919  C1.6 1 glass bottle base, rectangular 1 aqua used after 1919  C1.6 1 glass bottle base, circular 1 aqua embossed "MAR"  C1.6 1 glass bottle base, circular 1 aqua embossed "MAR"  C1.6 surface around C1.6 surface ceramic ironstone 1 blue bands, 3.5 cm  Surface around C1.6 surface ceramic ironstone 3 under 5 cm, tablewares buff, white slip interior and exterior, 3.5 cm  Surface around C1.6 surface ceramic red stoneware 1 buff earthenware 1 provable bottle glass, jug or tile fragment, 5 x 7.5 cm, 1 cm thick probable bottle glass, under 5 cm  Surface around C1.6 surface glass vessel 4 clear under 5 cm	0.110		g.acc			2.00 9.00	
prescription type, oval suction scar, embossed O in a Square [Owen s Bottle Company. Toledo OH (1903-1929, likely C1.6 1 glass bottle base, rectangular 1 aqua used after 1919 possible canning jar, embossed "MAR"  C1.6 1 glass bottle base, circular 1 aqua used after 1919 possible canning jar, embossed "MAR"  Cup plate rim, wide and thin blue hand painted bands, 3.5 cm  C1.6 surface around C1.6 surface ceramic ironstone 3 under 5 cm, tablewares  Surface around C1.6 surface ceramic buff earthenware 1 under 5 cm, tablewares  Surface around C1.6 surface ceramic red stoneware 1 5 cm brown exterior glaze, jug or tile fragment, 5 x 7.5 cm, 1 cm thick probable bottle glass, under 5 cm  Surface around C1.6 surface glass vessel 4 clear under 5 cm	C1 6	1	glass	vessel	1	agua	-
Surface around C1.6 surface ceramic C1.6 surface around C1.6 surface ceramic Surface around C1.6 surface around C1.6 surface ceramic Surface around C1.6 surface around C1.6 surface ceramic Surface around C1.6 surface glass Surface around C1.6 surface ceramic Surface around C1.6 surface ceramic Surface around C1.6 surface glass Surface around C1.6 surface ceramic Surface around C1.6 surface glass Surface around C1.6 surface glass Vessel 4 clear Surface around C1.6 surface glass Under 5 cm Surface around C1.6 surface glass Under 5 cm	01.0		giaco	10000.	1 .	ичии	5.11
Surface around C1.6 surface ceramic C1.6 surface around C1.6 surface ceramic Surface around C1.6 surface around C1.6 surface ceramic Surface around C1.6 surface around C1.6 surface ceramic Surface around C1.6 surface glass Surface around C1.6 surface ceramic Surface around C1.6 surface ceramic Surface around C1.6 surface glass Surface around C1.6 surface ceramic Surface around C1.6 surface glass Surface around C1.6 surface glass Vessel 4 clear Surface around C1.6 surface glass Under 5 cm Surface around C1.6 surface glass Under 5 cm							
Surface around C1.6 surface ceramic C1.6 surface around C1.6 surface ceramic Surface around C1.6 surface around C1.6 surface ceramic Surface around C1.6 surface around C1.6 surface ceramic Surface around C1.6 surface glass Surface around C1.6 surface ceramic Surface around C1.6 surface ceramic Surface around C1.6 surface glass Surface around C1.6 surface ceramic Surface around C1.6 surface glass Surface around C1.6 surface glass Vessel 4 clear Surface around C1.6 surface glass Under 5 cm Surface around C1.6 surface glass Under 5 cm							
C1.6 1 glass bottle base, rectangular 1 aqua used after 1919  C1.6 1 glass bottle base, rectangular 1 aqua used after 1919  C1.6 1 glass bottle base, circular 1 aqua embossed "MAR"  C1.6 1 glass bottle base, circular 1 aqua embossed "MAR"  C1.6 surface around C1.6 surface ceramic ironstone 1 blue bands, 3.5 cm  Surface around C1.6 surface ceramic ironstone 3 under 5 cm, tablewares  Surface around C1.6 surface ceramic buff earthenware 1 and exterior, 3.5 cm  Surface around C1.6 surface ceramic buff earthenware 1 provide and exterior, 3.5 cm  Surface around C1.6 surface glass vessel 4 clear under 5 cm  Surface around C1.6 surface glass vessel 4 clear under 5 cm							
C1.6 1 glass bottle base, rectangular 1 aqua used after 1919  C1.6 1 glass bottle base, circular 1 aqua possible canning jar, embossed "MAR"  C1.6 1 glass bottle base, circular 1 aqua cup plate rim, wide and thin blue hand painted bands, 3.5 cm  C1.6 surface around C1.6 surface ceramic ironstone 1 blue bands, 3.5 cm  Surface around C1.6 surface ceramic ironstone 3 under 5 cm, tablewares  C1.6 surface around C1.6 surface ceramic buff earthenware 1 and exterior, 3.5 cm  Surface around C1.6 surface ceramic red stoneware 1 probable bottle glass, under 5 cm  Surface around C1.6 surface glass vessel 4 clear under 5 cm							-
C1.6 1 glass bottle base, rectangular 1 aqua used after 1919  C1.6 1 glass bottle base, circular 1 aqua possible canning jar, embossed "MAR"  C1.6 1 glass bottle base, circular 1 aqua cup plate rim, wide and thin blue hand painted bands, 3.5 cm  C1.6 surface around C1.6 surface ceramic ironstone 3 under 5 cm, tablewares  Surface around C1.6 surface ceramic buff earthenware 1 and exterior, 3.5 cm  Surface around C1.6 surface ceramic red stoneware 1 7.5 cm, 1 cm thick  Surface around C1.6 surface glass vessel 4 clear under 5 cm  Surface around C1.6 surface glass, under 5 cm							
C1.6 1 glass bottle base, rectangular 1 aqua used after 1919  C1.6 1 glass bottle base, circular 1 aqua possible canning jar, embossed "MAR"  Cup plate rim, wide and thin blue hand painted bands, 3.5 cm  Surface around C1.6 surface ceramic ironstone 1 blue bands, 3.5 cm  Surface around C1.6 surface ceramic ironstone 3 under 5 cm, tablewares  Surface around C1.6 surface ceramic buff earthenware 1 and exterior, 3.5 cm  Surface around C1.6 surface ceramic red stoneware 1 7.5 cm, 1 cm thick  Surface around C1.6 surface glass vessel 4 clear under 5 cm							
C1.6 1 glass bottle base, circular 1 aqua possible canning jar, embossed "MAR"  Surface around C1.6 surface ceramic ironstone 1 blue bands, 3.5 cm  Surface around C1.6 surface ceramic ironstone 3 under 5 cm, tablewares  Surface around C1.6 surface ceramic buff earthenware 1 and exterior, 3.5 cm  Surface around C1.6 surface ceramic buff earthenware 1 probable bottle glass, conduct of the conduction of t							
C1.6 1 glass bottle base, circular 1 aqua embossed "MAR"  Surface around C1.6 surface ceramic ironstone 1 blue bands, 3.5 cm  Surface around C1.6 surface ceramic ironstone 3 under 5 cm, tablewares  Surface around C1.6 surface ceramic buff earthenware 1 and exterior, 3.5 cm  Surface around C1.6 surface ceramic red stoneware 1 7.5 cm, 1 cm thick  Surface around C1.6 surface glass vessel 4 clear under 5 cm  Surface around C1.6 surface glass under 5 cm	C1.6	1	glass	bottle base, rectangular	1	aqua	used after 1919
Surface around C1.6 surface ceramic ironstone 1 blue bands, 3.5 cm  Surface around C1.6 surface ceramic ironstone 3 under 5 cm, tablewares  Surface around C1.6 surface ceramic buff earthenware 1 and exterior, 3.5 cm  Surface around C1.6 surface ceramic red stoneware 1 7.5 cm, 1 cm thick  Surface around C1.6 surface glass vessel 4 clear under 5 cm  Surface around C1.6 surface around							possible canning jar,
Surface around C1.6 surface ceramic ironstone 1 blue bands, 3.5 cm  Surface around C1.6 surface ceramic ironstone 3 under 5 cm, tablewares  Surface around C1.6 surface ceramic buff earthenware 1 and exterior, 3.5 cm  Surface around C1.6 surface ceramic red stoneware 1 7.5 cm, 1 cm thick  Surface around C1.6 surface glass vessel 4 clear under 5 cm  Surface around C1.6 surface around	C1.6	1	glass	bottle base, circular	1	aqua	
Surface around C1.6 surface ceramic ironstone  Surface around C1.6 surface ceramic ironstone  Surface around C1.6 surface ceramic ironstone  Surface around C1.6 surface ceramic buff earthenware  Surface around C1.6 surface ceramic buff earthenware  Surface around C1.6 surface red stoneware  Surface around C1.6 surface glass  Surface around C1.6 surface ceramic red stoneware  Surface around C1.6 surface glass  Vessel  4 clear under 5 cm			Ŭ			·	
Surface around C1.6 surface ceramic ironstone  Surface around C1.6 surface ceramic ironstone  Surface around C1.6 surface ceramic ironstone  Surface around C1.6 surface ceramic buff earthenware  Surface around C1.6 surface ceramic buff earthenware  Surface around C1.6 surface red stoneware  Surface around C1.6 surface glass  Surface around C1.6 surface ceramic red stoneware  Surface around C1.6 surface glass  Vessel  4 clear under 5 cm							cup plate rim, wide and
C1.6 surface ceramic ironstone 1 blue bands, 3.5 cm  Surface around C1.6 surface ceramic ironstone 3 under 5 cm, tablewares  Surface around C1.6 surface ceramic buff earthenware 1 and exterior, 3.5 cm  Surface around C1.6 surface ceramic red stoneware 1 7.5 cm, 1 cm thick  Surface around C1.6 surface glass vessel 4 clear under 5 cm  Surface around C1.6 surface glass	Surface around						
Surface around C1.6 surface ceramic ironstone 3 under 5 cm, tablewares  Surface around C1.6 surface ceramic buff earthenware 1 and exterior, 3.5 cm  Surface around C1.6 surface ceramic red stoneware 1 7.5 cm, 1 cm thick  Surface around C1.6 surface glass vessel 4 clear under 5 cm, tablewares  buff, white slip interior and exterior, 3.5 cm  brown exterior glaze, jug or tile fragment, 5 x  7.5 cm, 1 cm thick probable bottle glass, under 5 cm		surface	ceramic	ironstone	1	blue	•
C1.6 surface ceramic ironstone 3 under 5 cm, tablewares  Surface around C1.6 surface ceramic buff earthenware 1 and exterior, 3.5 cm  Surface around C1.6 surface ceramic red stoneware 1 7.5 cm, 1 cm thick  Surface around C1.6 surface glass vessel 4 clear under 5 cm  Surface around			22.2				
Surface around C1.6 surface ceramic buff earthenware 1 buff, white slip interior and exterior, 3.5 cm  Surface around C1.6 surface ceramic red stoneware 1 brown exterior glaze, jug or tile fragment, 5 x  C1.6 surface around C1.6 surface glass vessel 4 clear under 5 cm		surface	ceramic	ironstone	3		under 5 cm_tablewares
C1.6 surface ceramic buff earthenware 1 and exterior, 3.5 cm  Surface around C1.6 surface ceramic red stoneware 1 probable bottle glass, C1.6 surface glass vessel 4 clear under 5 cm		3411400	COLCULIO		+ -		
Surface around C1.6 surface ceramic red stoneware C1.6 surface around C1.6 surface glass C1.6 surface glass C1.6 surface around C1.6 surface glass C1.6 surface around C1.6 surface glass		surface	ceramic	huff earthenware	1		•
Surface around C1.6 surface ceramic red stoneware  Surface around C1.6 surface glass C1.6 surface glass  Surface around C1.6 surface surface C1.6 surface glass	01.0	Juliace	CCIAIIIIC	bui carrieriware	+ ' +		
C1.6 surface ceramic red stoneware 1 7.5 cm, 1 cm thick Surface around C1.6 surface glass vessel 4 clear under 5 cm Surface around	Curtoco oround						
Surface around C1.6 surface glass vessel 4 clear under 5 cm		ourfood	ooramia	rod otor swers	4		
C1.6 surface glass vessel 4 clear under 5 cm Surface around		suriace	ceramic	rea sioneware	1		
Surface around				1			
		surface	glass	vessel	4	clear	under 5 cm
C1.6   surface   glass   bottle   1   aqua   body fragment,5 cm			. I				_
	C1.6	surface	glass	bottle	1	aqua	body fragment,5 cm

## Artifact Catalog for Ball Hill Addendum MDS Testing

				T T	0	
					Secondary	
Provenience	Stratum	Material	Artifact Type	Count	Type	Comments
Surface around						
C1.6	surface	glass	cup or preserve jar rim	1	clear	rim fragment, 4.5 cm
01.0	Surface	giass	cup or preserve jair filli	'	Clear	min magment, 4.5 cm
						cork enclosure, appears
						fully molded, est. 1900-
C1.7	1	glass	bottle finish, collared ring	1	clear	1930, under 3 cm
		9	<u> </u>			2.5 cm, probable
C1.7	1	ceramic	whiteware	1		tableware
01.7		Ceramic	Willewale	'		tableware
						1 - 1 - 6 1 - 1
						body fragment, reddish
						body, brown glaze
						exterior, alkaline glazed
C1.7	1	ceramic	stoneware bottle	1		interior, 5 cm
C1.8	1	ceramic	whiteware	1		1.5 cm
01.0	•	ocianio	Willoware		blue and brown	1.0 0111
04.0	4	:-		1		4.5
C1.8	1	ceramic	whiteware, annular	1	bands	1.5 cm
						probable bottle glass,
C1.8	1	glass	vessel	1	clear	4.5 cm
C1.8	1	glass	flat	1		3 cm
		9				
						cork enclosure, appears
						mold bown, commonly
						used for liquors and
			bottle finish, straight brandy			large medicinal bottles,
C1.9	1	glass	or wine type	1	clear	5 cm
		9.400	e:e type	•	0.00.	low fired (soft), clear
C2.4	4	ooromio	roduces	1		
	1	ceramic	redware	1		alkaline glaze. 2.5 cm
C2.4	1	other	brick fragment	1		under 2 cm
C2.4	1	glass	flat	1		under 2.5 cm
C2.5	1	glass	flat	3		under 3 cm
C2.5	1	ceramic	whiteware	1		1 cm, very thin fragment
C2.6	1	metal	nail, cut, fragment	1		3 cm
C2.6	1	other	brick fragment	2		under 2 cm
C2.6	1	glass	flat	1		3.5 cm
						rim, probable cup or
						small plate, fine band,
C2.6	1	ceramic	whiteware, annular	1	green band	under 1.5 cm
					<b>J</b>	possible canning jar lid
C2.7	1	glass	bottle	1	20112	fragment, 4 cm
02.1	1	yıass	DOLLIE		aqua	
				_		probable bottle glass,
C2.7	1	glass	vessel	2	aqua	under 4 cm
						probable bottle glass, 1
C2.7	1	glass	vessel	1	clear	cm
						1.5 cm, probable plate
C2.8	1	ceramic	pearlware	1		base
02.0		Jordinio	podriware	<del>  '</del>		2.5 cm, probable plate
						base, partial impressed
						makers mark
C2.8	1	ceramic	pearlware	1		(intelligible)
C2.8	1	glass	flat	1		1 cm
C2.8	1	other	brick fragment	2		2 cm
	•	201	2.131.1129.110111	<u> </u>		under 3.5 cm, probable
C2 C	4	oorom:	poorhuore	2		
C2.9	1	ceramic	pearlware	2		tableware
						3 cm, probable
C2.9	1	ceramic	whiteware	1		tableware

## Artifact Catalog for Ball Hill Addendum MDS Testing

			atalog for Ball Tilli Adder	1 1	Secondary	
Provenience	Stratum	Material	Artifact Type	Count	Type	Comments
TTOVCINCIOC	Otratam	Material	Artifact Type	Journ	Турс	foot, possible
C2.10	1	ceramic	ironstone	1		basin/pitcher, 5 cm
						portion of neck, 4 cm,
C2.11	1	glass	bottle	1	clear	thick mold seam
						probable bottle glass, 3
C2.11	1	glass	vessel	2	clear	cm
C2.11	1	metal	bolt	1		very corroded, 8 cm
Area C between tests 3 & 7	surface	other	brick fragment	1		4 cm
Area C between tests 3 & 7	surface	glass	pressed/molded glass	1	clear	probable small dish or cup rim, pressed or molded decorative rim, under 4 cm
Area C between						pedestal / foot fragment,
tests 3 & 7	surface	glass	vessel	1	clear	6 cm
Area C between tests 3 & 7	surface	glass	canning jar	1	aqua	rim shard, similar to lightning type enclosure, 5 cm, popular 1st-half 20th century
Area C between tests 3 & 7	surface	glass	vessel	1	clear	probable bottle glass, 4 cm
Area C between tests 3 & 7	surface	glass	flat	2		under 3 cm
Area C between tests 3 & 7	surface	ceramic	pearlware/whiteware	1	blue	rim fragment, possible negative blue transfer, under 2 cm
Area C between tests 3 & 7	surface	ceramic	whiteware	2		probable tableware, under 3 cm
Area C between tests 3 & 7	surface	ceramic	whiteware	1		small cup handle
Area C between tests 3 & 7	surface	ceramic	ironstone	4		probable tableware, under 4 cm

# **Appendix C. OPRHP Site form for PCI Ball Hill-3**

### NEW YORK STATE HISTORIC ARCHAEOLOGICAL SITE INVENTORY FORM

For Office Use OnlySite Identifier	
Project Identifier Your Name Donald A. Smith Address 2390 Clinton Street Buffalo, NY 14227	<b>Date</b> <u>October 1, 2012</u> <b>Phone</b> (716) <u>821-1650</u>
Organization (if any) Panamerican Consultants, Inc.	
Site Identifier(s) Site PCI/Ball Hill-3     County Chautauqua One of following: City Township Villenova Incorporated Village Unincorporated Village or Ha	<u> </u>
3. Present Owner Address	
4. Site Description (check all appropriate categories) Structure/site Superstructure: complete partial_ collar Foundation: above X below_(ground leve Structural subdivisions apparent Only surface traces visible _X Buried traces detected	psed_ not evident <u>X</u>
List construction materials (be as specific as pos No indications of a structure were present; flat gla drain tile fragment were found in shovel tests and of	ass, brick fragments, a cut nail, and a redware
GroundsUplandFloodplainX_Under cultivationNever cultivatedPWoodlandPasturelandMowed laws Soil Drainage: excellent good X fair poo Slope: flat gentle_X_ moderate steep Distance to nearest water from site (approx.) 335r	n r
5. Site Investigation (append additional sheets, if new Surface X date(s) 9/2012  X Site Map (Submit with form*) see attachme Collection	•
Subsurfacedate(s) 9/2012 Testing: shovel X coring other unit size no	o. of units 26 (Submit plan of units*)
Excavation: unit size no. of units (Submit * Submission should be 8½"x11", if feasible.	plan of units with form*)
Investigator Donald A. Smith	

#### Manuscript or published report(s) (reference fully):

Smith, Donald A., Christine M. Longiaru, Frank J. Schieppati, Mark A. Steinback, and Michael A. Cinquino

2013 Archaeological and Architectural History Phase I Addendum for the Duke Energy Ball Hill Wind Farm, Towns of Villenova and Hanover, Chautauqua County, New York, (OPRHP #08PR01814). Panamerican Consultants, Inc., Buffalo Branch. Prepared for Ecology & Environment, Lancaster, New York.

Present repository of materials Panamerican Consultants, Inc.

- 6. Site inventory:
  - a. date constructed or occupation period mid- 19<sup>th</sup> century to early 20<sup>th</sup> century
  - b. previous owners, if known

The site is likely related to an MDS shown as associated with G. Wagner in the Stewart 1867 Chautauqua County Atlas (see below), and with O.W. Hickey in the 1881 Chautauqua County Atlas.

c. modifications, if known

Recent additions to the exterior and modifications to the interior (append additional sheets, if necessary)

- 7. Site documentation (append additional sheets, if necessary):
  - a. Historic map references
  - 1) Name Stewart, William

Date 1867 Source New Topographical Atlas of Chautauqua County, New York. William Stewart, Publisher, Philadelphia.

Present location of original, if known Buffalo and Erie County Library.

Available URL: http://nyheritage.nnyln.net

2) Name Beers, Frederick W.

Date 1881 Source Illustrated Historical Atlas of the County of Chautaugua, New York. F.W. Beers, New York.

Present location of original, if known Buffalo and Erie County Library.

Available URL: http://nyheritage.nnyln.net

3) Name U.S. Geological Survey

Date 1900 Source Cherry Creek, NY. 15 Minute Series Quadrangle, U.S. Government Printing Office, Washington, D.C.

Present location of original, if known

Available URL: http://store.usgs.gov/b2c usgs/usgs/maplocator/

- b. Representation in existing photography
  - 1) Photo date \_\_\_\_ Where located 2) Photo date \_\_\_ Where located
- c. Primary and secondary source documentation (reference fully)
- d. Persons with memory of site:
  - 1) Name Address

8. List of material remains other than those used in construction (be as specific as possible in identifying object and material): See Attachment  $\underline{x}$ 

A total of 86 historical artifacts were found at the site, of which 27 were surface finds and 59 were from shovel tests.

If prehistoric materials are evident, check here and fill out prehistoric site form.\_\_\_\_

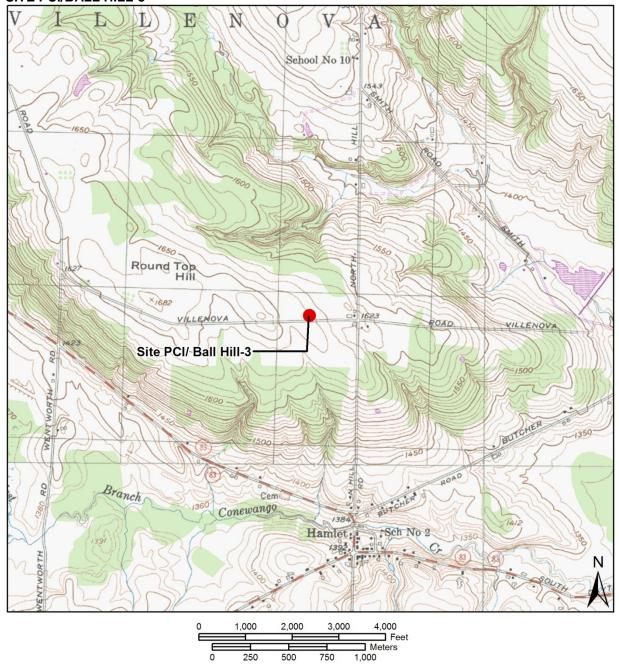
9. Map References: Map or maps showing exact location and extent of identified site must accompany this form and must be identified by source and date. Keep this submission to 8½"x11", if possible.

USGS 7½ Minute Series Quad. Name Forestville, NY 1979 [1954] For or Office Use Only—UTM Coordinates \_\_\_\_\_

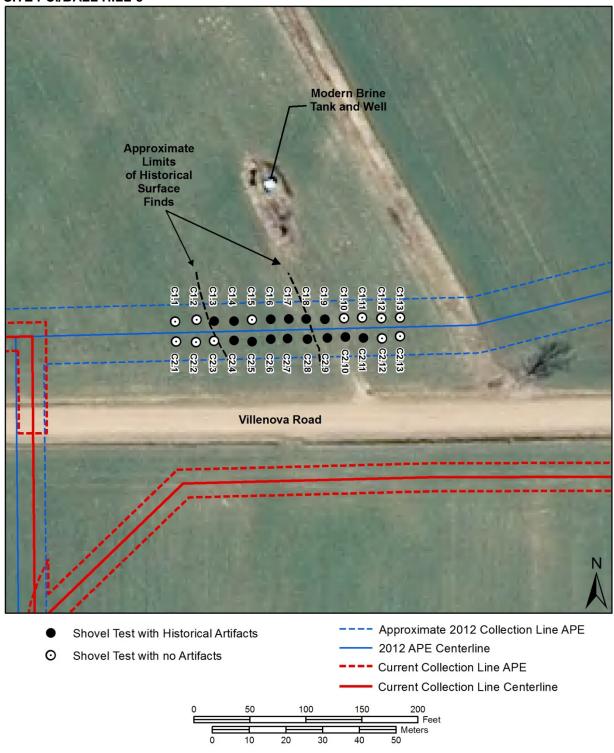
10. Photography (optional for environmental impact survey):

Please submit a 5"x 7" black and white print(s) showing the current state of the site. Provide a label for the print(s) on a separate sheet.

See attached.



**Location of PCI/Ball Hill-3.** (USGS Cherry Creek, NY 1976 [1954]; Forestville, NY 1979 [1954]; Hamlet 1976 [1954]; Perrysburg, NY 1979 [1954]).



Shovel testing at PCI/Ball Hill-3.



Setting of PCI/Ball Hill-3 in September 2012. The road on the left is Villenova Road

Artifact Catalog for PCI/Ball Hill-3

Artifact Catal Provenience	Stratum	Material	Artifact Type	Qty	Secondary Type	Comments
C1.3	1	other	brick fragment	1	- 7	2.2 cm
C1.3	1	other	coal	2		under 4 cm
C1.3	1	glass	flat	2		under 4 cm
C1.3	1	glass	bottle	1	clear	embossed "A", possible side of prescription type bottle, 2.5 cm
C1.3	1	glass	bottle	1	aqua	7 mm thick, canning jar?, partially embossed "BUR" [only top of letters visible], 4 cm
C1.3	1	glass	bottle	3	aqua	fragments appear related to item listed above, under 3 cm
C1.4	1	glass	flat	1	clear	
C1.6	1	ceramic	redware	1		14 mm thick, curved, possible drain tile, under 3 cm
C1.6	1	glass	vessel	6	clear	probable bottle glass, under 4 cm
C1.6	1	glass	vessel	1	blue-green	probable bottle glass, 4 cm
C1.6	1	glass	vessel	1	aqua	probable bottle glass, 2 cm
C1.6	1	glass	bottle base, rectangular	1	aqua	prescription type, oval suction scar, embossed O in a Square [Owen s Bottle Company. Toledo OH (1903- 1929, likely used after 1919
C1.6	1	glass	bottle base, circular	1	aqua	possible canning jar, embossed "MAR"
Surface around C1.6	surface	ceramic	ironstone	1	blue	cup plate rim, wide and thin blue hand painted bands, 3.5 cm
Surface around C1.6	surface	ceramic	ironstone	3		under 5 cm, tablewares
Surface around C1.6	surface	ceramic	buff earthenware	1		buff, white slip interior and exterior, 3.5 cm

Provenience	Stratum	Material	Artifact Type	Qty	Secondary Type	Comments
Surface around C1.6	surface	ceramic	red stoneware	1		brown exterior glaze, jug or tile fragment, 5 x 7.5 cm, 1 cm thick
Surface around C1.6	surface	glass	vessel	4	clear	probable bottle glass, under 5 cm
Surface around C1.6	surface	glass	bottle	1	aqua	body fragment,5 cm
Surface around C1.6	surface	glass	cup or preserve jar rim	1	clear	rim fragment, 4.5 cm
C1.7	1	glass	bottle finish, collared ring	1	clear	cork enclosure, appears fully molded, est. 1900- 1930, under 3 cm
C1.7	1	ceramic	whiteware	1		2.5 cm, probable tableware
C1.7	1	ceramic	stoneware bottle	1		body fragment, reddish body, brown glaze exterior, alkaline glazed interior, 5 cm
C1.8	1	ceramic	whiteware	1		1.5 cm
C1.8	1	ceramic	whiteware, annular	1	blue and brown bands	1.5 cm
C1.8	1	glass	vessel	1	clear	probable bottle glass, 4.5 cm
C1.8	1	glass	flat	1		3 cm
C1.9	1	glass	bottle finish, straight brandy or wine type	1	clear	cork enclosure, appears mold bown, commonly used for liquors and large medicinal bottles, 5 cm
C2.4	1	ceramic	redware	1		low fired (soft), clear alkaline glaze. 2.5 cm
C2.4	1	other	brick fragment	1		under 2 cm
C2.4	1	glass	flat	1		under 2.5 cm
C2.5	1	glass	flat	3		under 3 cm
C2.5	1	ceramic	whiteware	1		1 cm, very thin fragment
C2.6	1	metal	nail, cut, fragment	1		3 cm
C2.6	1	other	brick fragment	2		under 2 cm
C2.6	1	glass	flat	1		3.5 cm
C2.6	1	ceramic	whiteware, annular	1	green band	rim, probable cup or small plate, fine band, under 1.5 cm
C2.7	1	glass	bottle	1	aqua	possible canning jar lid fragment, 4 cm

Provenience	Stratum	Material	Artifact Type	Qty	Secondary Type	Comments
C2.7	1	glass	vessel	2	aqua	probable bottle glass, under 4 cm
C2.7	1	glass	vessel	1	clear	probable bottle glass, 1 cm
C2.8	1	ceramic	pearlware	1		1.5 cm, probable plate base
C2.8	1	ceramic	pearlware	1		2.5 cm, probable plate base, partial impressed makers mark (intelligible)
C2.8	1	glass	flat	1		1 cm
C2.8	1	other	brick fragment	2		2 cm
C2.9	1	ceramic	pearlware	2		under 3.5 cm, probable tableware
C2.9	1	ceramic	whiteware	1		3 cm, probable tableware
C2.10	1	ceramic	ironstone	1		foot, possible basin/pitcher, 5 cm
C2.11	1	glass	bottle	1	clear	portion of neck, 4 cm, thick mold seam
C2.11	1	glass	vessel	2	clear	probable bottle glass, 3 cm
C2.11	1	metal	bolt	1		very corroded, 8 cm
Area C between tests 3 & 7	surface	other	brick fragment	1		4 cm
Area C between tests 3 & 7	surface	glass	pressed/molded glass	1	clear	probable small dish or cup rim, pressed or molded decorative rim, under 4 cm
Area C between tests 3 & 7	surface	glass	vessel	1	clear	pedestal / foot fragment, 6 cm
Area C between tests 3 & 7	surface	glass	canning jar	1	aqua	rim shard, similar to lightning type enclosure, 5 cm, popular 1st-half 20th century
Area C between tests 3 & 7	surface	glass	vessel	1	clear	probable bottle glass, 4 cm
Area C between tests 3 & 7	surface	glass	flat	2		under 3 cm
Area C between tests 3 & 7	surface	ceramic	pearlware/whiteware	1	blue	rim fragment, possible negative blue transfer, under 2 cm

Provenience	Stratum	Material	Artifact Type	Qty	Secondary Type	Comments
Area C between tests 3 & 7	surface	ceramic	whiteware	2		probable tableware, under 3 cm
Area C between tests 3 & 7	surface	ceramic	whiteware	1		small cup handle
Area C between tests 3 & 7	surface	ceramic	ironstone	4		probable tableware, under 4 cm

# **Appendix D. NYSHPO Correspondence**



David A. Paterson Governor

> Carol Ash Commissioner

#### New York State Office of Parks, Recreation and Historic Preservation

Historic Preservation Field Services Bureau • Peebles Island, PO Box 189, Waterford, New York 12188-0189 518-237-8643

www.nysparks.com

September 24, 2008

Andrew C. Davis State of New York Department of Public Service 3 Empire State Plaza Albany, NY 12223-1350

Re: PSC/SEQRA

Noble Ball Hill Windpark 60 Turbines/90 MW

Villenova/Hanover, Chautauqua County

08PR01814

Dear Mr. Davis:

The Office of Parks, Recreation and Historic Preservation (OPRHP) has been asked for comments on this undertaking by the project sponsor. We are providing these comments as part of what we anticipate will by a coordinated Section 14.09 (NYPRHPL) review as a result of the applicant's need to have the project certified by you agency. These comments are provided by the Field Services Bureau and relate only to Historic/Cultural resources. They do not include potential environmental impacts to New York State Parkland that may be involved in or near the project. Such impacts must be considered as part of the environmental review of the project pursuant to the State Environmental Quality Review Act (New York Environmental Conservation Law Article 8) and its implementing regulations (6 NYCRR Part 617).

This letter is to inform your agency that we have received a request to evaluate properties for potential historic/cultural significance. The material submitted was based on our agency's generic wind farm survey guidance (2006). The evaluated survey area, as defined by our guidance, was a five-mile radius drawn around each of the individual turbine sites. The outer edges of these circles are connected by tangent lines thus producing a five-mile survey area around the entire project. It was also recommended that for an analysis of potential visual impacts to historic resources that the next step was to determine sight lines based on topographic features and the locations and maximum heights of each turbine.

The request for resource evaluation was received on August 15, 2008. It consisted of a single-volume report titled: Architectural Survey (Five-Mile APE) for the Proposed Noble Ball Hill Windpark (July 2008, Panamerican Consultants, Inc.). This document identified a total of 146 individual properties within the survey area. The survey identified 132 individual buildings and one historic district (the Ewing Park Historic District). Based on our review of the materials the NYSHPO has determined that 121 of the individual resources are eligible for inclusion in the New York State and National Registers of Historic places (SR/NRE). An additional 13 out of 14 identified properties are included as contributing features in the Eligible Ewing Historic District. Eight identified bridges remain unevaluated at this time. Lastly, three buildings were determined not to meet the eligibility criteria. A full list of our assessment is attached to this letter as Appendix A.

The eligible resources identified in the survey report are diverse in both nature and their physical settings. Properties that will be in the view shed of the project include those in established village/hamlet settings as well as resources that occupy open rural agricultural settings. With few exceptions the scale of the building stock is limited to the height of single and two-story residential, commercial and agricultural buildings with few non agricultural elements breaking the treetops in this sparsely populated area.

Within the survey area, this agency has identified several key loci where visual impacts should be carefully assessed. These areas encompass the villages of South Dayton, Silver Creek, Hamlet and Forestville as well as several highly intact farmsteads. Many of these resources will be in the viewshed of a significant number of the proposed towers. Given the undulating and sharply elevated topography of this area the potential viewshed/setting impacts associated with these resources should be carefully assessed. All resources where this office believes additional visual assessments should be undertaken have been identified in *Appendix A* with an asterisk (\*). We would recommend that your agency seek to have appropriate visual simulations generated to better understand the full extent of the potential visual impacts associated with this project.

Although the full extent of potential impacts from the proposed undertaking cannot be assessed absent simulations as part of a comprehensive visual analysis, OPRHP believes that sufficient information does exist to determine that under Section 14.09, 1(c) of New York State Parks and Recreation Law, the undertaking will have an *Adverse Impact* on cultural resources. The introduction of the sleek, ultramodern, approximately 389 foot tall kinetic wind turbines (up to 60 proposed) throughout this scenic landscape forever alters and changes the rural setting, which itself is a significant element in much of the survey area and serves as the backdrop for the architectural, cultural and scenic tourism heritage of these communities.

We would recommend that the applicant utilize the visual analysis as a tool to aid in the exploration of feasible and prudent alternatives that avoid the adverse impact(s). The assessment of potential impact avoidance options may include a reduction in turbine numbers and/or height, relocation of turbine units, and various screening options. We would recommend that only after an assessment of avoidance options has been established should potential mitigation options be discussed. All consultation regarding avoidance options and potential later mitigation options should involve those state/federal agencies directly associated with the permitting/approval process for this project.

At this point in time we have concluded our evaluation of eligible resources and the potential impacts to those resources associated with this project. Please be aware that we will be asking the project sponsor for GPS data gathered as part of the survey. If you should have questions regarding our evaluation process or the basis for our effect recommendation, please do not hesitate to contact me at 518-237-8643, ext.3263.

Sincerely,

John A. Bonafide

Historic Preservation Services

Coordinator

Michael Cinquino, Panamerican (via-e-mail)
Kristin Hawley, Noble (via-e-mail)

cc:

A (1)	ppendix A = Previously determ	ined NRE by		e de la companya de l		,			* * * *
Map Point	JName -	Street Number	Street Name	Gounty	Tiown	Hamlet	Village	NRE Status	Visual Analysi
1		12182	Markhams Road	Cattaraugus	Dayton		BEE IN CHARLES	NRE(I)	
2	Erie RR Bridge over Conewango Creek		Oaks Road	Cattaraugus	Dayton			Unevalu ated	
3	Cottage Cemetery		Cottage Road	Cattaraugus	Dayton	Cottage	e transc i forma la Sala de La calenda e Por	NRE	
4		12654	Cottage Road	Cattaraugus		Cottage	of the same	NRE	
	Simulation	ns should l	be produced	from several	locations in th	e Village of S	outh Dayton		*
5		27	Cherry Street	Cattaraugus	Dayton		South Dayton	NRE	
6 .	Factory Building		East Railroad Avenue	Cattaraugus	Dayton		South Dayton	NRE	
7		73	East Railroad Avenue	Cattaraugus	Dayton		South Dayton	NRE	٠.
8		62	Main Street	Cattaraugus	Dayton	٠	South Dayton	NRE	
9		203	Maple Street	Cattaraugus	Dayton	,	South Dayton	NRE	
10		212 or 214	Maple Street	Cattaraugus	Dayton		South Dayton	NRE,	
11	Harry Austin Milling Co.		Mill Street	Cattaraugus	Dayton		South Dayton	NRE	-
12		227	Oak Street	Cattaraugus	Dayton		South Dayton	NRE	
13		8143	Oaks Road	Cattaraugus	Dayton	od man de son e l'annu a vice de l'annu e l'annu	South Dayton	NRE	
14	Wilder and American	107	Pine Street	Cattaraugus	Dayton		South Dayton	NRE	
15	,	309	Pine Street	Cattaraugus	Dayton		South Dayton	NRE '	• .
16		312	Pine Street	Cattaraugus	Dayton		South Dayton	NRE	
17	Wilson House	319	Pine Street	Cattaraugus	Dayton		South Dayton	NRE	
18		413	Pine Street	Cattaraugus	Dayton		South Dayton	NRE	,
19	Perrysburg Cemetery		NY 39	Cattaraugus	Perrysburg			NRE	
20		12316	NY 39	Cattaraugus	Perrysburg			NRE	

Map Point	Name	Street Number	Street Name	County	Town	Hamlet	Village	∖NRE Status∌	Visual Analysis
21	Rugg-town West Perrysburg Cemetery		West Perrysburg Road	Cattaraugus	Perrysburg	West 🤼 Perrysburg		NRE	
22		10929	West Perrysburg Road	Cattaraugus	Perrysburg	West ·· Perrysburg		NRE	
23	Weaver Cemetery		Center Road	Chautauqua	Arkwright			NRE	
24		8129	Griswold Road	Chautauqua	Arkwright			NRE	
25	Rose Farm	1936	Ruttenbur Road	Chautauqua	Arkwright	,		NRE	
26	,	2667	NY 83	Chautauqua	Arkwright	Arkwright		NRE	
27	Wooley Farm Complex	8903- 8911	Farrington Hollow	Chautauqua	Arkwright	Blacks Corners		NRE	
28	Arkwright Summit Cemetery		Farrington Hollow Road	Chautauqua	Arkwright	Blacks Corners		NRE	To the state of th
29	Maple-Camp Farm/Black Farm	2083	NY 83	Chautauqua	Arkwright	Blacks Corners		NRE	
30		10917	Alleghany Road	Chautauqua	Hanover			NRE	
31		12168	Alleghany Road	Chautauqua	Hanover			NRE	
32	Evergreen Cemetery		Angell Road	Chautauqua	Hanover			NRE	
33	Forestville Depot		Center Street	Chautauqua	Hanover			NRE	
34	Christy Road Cemetery		Christy Road	Chautauqua	Hanover		100 to 10	NRE	
35			Hanover Road	Chautauqua	Hanover			NRE	
. 36	Livemore Homestead	10079	Hanover Road	Chautauqua	Hanover	, ,		NRE	
37	Hurlburt Road/Swift Cemetery		Hurlburt Road	Chautauqua	Hanover			NRE	
38			Hurlburt Road	Chautauqua	Hanover	THE PROPERTY OF THE PROPERTY O		NRE	
39		469	NY 39	Chautauqua	Hanover			NRE	
40		503	NY 39	Chautauqua	Hanover			NRE	
41		675	NY 39	Chautauqua	Hanover			NRE	
42		1411	NY 39	Chautauqua	Hanover			NRE	
43		11776	Old Forestville Road	Chautauqua	Hanover			NRE(I)	10 10 10 10 10 10 10 10 10 10 10 10 10 1

***************************************	18/18						70X'15		Vi. 18
Мар		:Street Number	Street Name	County	Town	Hamlet	Willage	⊣NRE ⊮Status	Wisuai Analysis
Point		Number	Name					30,000	Allalysis (* )
44	Pioneer	11049?	Old	Chautauqua	Hanover	age et a de en ac		NRE .	
	Cemetery	· · ·	Forestville Road						1
45	,	11103	Old	Chautauqua	Hanover	1		NRE	,
			Forestville						47, 1
46	Mt. Carmel		Road Old Main	Chautauqua	Hanover			NRE	
40	Cemetery		Street	Oridatadqua	Tidillovoi				
47	Glenwood Cemetery		Old Main Street	Chautauqua	Hanover			NRE	
48		11935	Old Main Street	Chautauqua	Hanover			NRE	
49	Prospect Hill Cemetery		Prospect Street	Chautauqua	Hanover			NRE	
50	Doty Cemetery		.Stebbins Road	Chautauqua	Hanover			NRE	
51	Ball Valley Farms	11037	Alleghany Road	Chautauqua	Hanover	Balltown	,	NRE .	
52	Balltown Cemetery		Mackinaw Road	Chautauqua	Hanover	Balltown		NRE	
53		12010	Angell Road	Chautauqua	Hanover	Hanover Center		NRE	V 10-20
54		12021	Angell Road	Chautauqua	Hanover	Hanover Center		NRE	
55	Golden Harvest	967	Hanover Road	Chautauqua	Hanover	Hanover Center		NRE	
56		11991	Hanover Road	Chautauqua	Hanover	Hanover . Center		NRE	
57	Nashville Cemetery		Alleghany Road	Chautauqua	Hanover	Nashville		NRE	
58	Church		NY 39	Chautauqua	Hanover	Nashville		NRE	
59	Smlth's Mill Cemetery		Hanover Road	Chautauqua	Hanover	Smith's Mill		NRE	
	Simulation	ons should	l be produce	d from severa	l locations in t	the Hamlet of	Forestville		* *
-60	Bridge over Walnut Creek	•	Bradigan Road	Chautauqua	Hanover		Forestville	Unevalu ated	
61		. 13	Cedar Street	Chautauqua	Hanover		Forestville	NRE	
62		18	Center Street	Chautauqua	Hanover		Forestville	NRE	
63		28	Center Street	Chautauqua	Hanover	11/2-141	Forestville	NRE	
64		11-15	Main Street	Chautauqua	Hanover		Forestville	NRE	
65		26	1	Chautauqua	Hanover		Forestville	NRE	
66		27	Main Street	Chautauqua	Hanover		Forestville	NRE	
			<u> </u>	<u> </u>				1	

Map Point	Name	Street Number	Street Name	County	Тown	Hamlet	Village	NRE Status	Visual Analysis
67	Forestville Free	32	Main Street	Chautauqua	Hanover		Forestville	NRE >	242
	Methodist Church		•						
68		43	Main Street	Chautauqua	Hanover		Forestville	NRE	
69		. 8	· Prospect Street	Chautauqua	Hanover		Forestville	NRE	
70		9	Water Street	Chautauqua	Hanover		Forestville	NRE	
	Simulatio	ns should	be produced	from several	locations in th	ne Hamlet of S	Silver Creek	•	*
71	Clark Mansion on		Beachview Avenue	Chautauqua	Hanover		Silver Creek	NRE	
;	Lighthouse Point					:			
72		10	Beachview Avenue	Chautauqua	Hanover		Silver Creek	NRE	
73		130	Central Avenue	Chautauqua	Hanover		Silver Creek	NRE(I)	
74		147	Central Avenue	Chautauqua	Hanover		Silver Creek	NRE	
75		151	Central Avenue	Chautauqua	Hanover	71112	Silver Creek	NRE(I)	
76	Our Lady of Carmel	165	Central Avenue	Chautauqua	Hanover		Silver Creek	NRE(I)	
77		338	Central Avenue	Chautauqua	Hanover	7 - Walter St. 1 - Wa	Silver Creek	NRE	
78		350	Central Avenue	Chautauqua	Hanover		Silver Creek	NRE	
79		5	Christy Street	Chautauqua	Hanover		Silver Creek	NRE	, , , , , , , , , , , , , , , , , , , ,
80		9	Christy Street	Chautauqua	Hanover		Silver Creek	NRE	<u></u>
81		4	Dana Drive	Chautauqua	Hanover	,	Silver Creek	NRE	**************************************
82		12370	Hanover Road	Chautauqua	Hanover		Silver Creek	NRE	
83		16	Hanover Street	Chautauqua	Hanover		Silver Creek	NRE	
84			Howard Street	Chautauqua	Hanover		Silver Creek	Not NRE	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
85	Skew Arch Bridge		Jackson Street	Chautauqua	Hanover		Silver Creek	Unevalu ated	
86	Skew Arch Bridge and Nickel Plate Bridge over Jackson Street	THE PRINT CHAPTER AND ADDRESS OF	Jackson Street	Chautauqua	Hanover		Silver Creek	Unevalu ated	, , , , , ,

Map		Street	Street					NRE	-Visual
Point	Name	Number	Name	(County	Tiown	/Hamlet	Village	Status	Analysis
.87	Hanover∴	Aganta Agan	″ ⊹Lake	Chautauqua	Hanover		Silver-Creek	Unevalu	• • •
	Bridge		Avenue					ated	
88	Stone Bridge		Lake	Chautauqua	Hanover		Silver Creek	Unevalu	
		:	Avenue		,			ated	
89	Nickel Plate		Lake	Chautauqua	Hanover		Silver Creek	1	
	Bridge over Lake Avenue		Avenue	:				ated	1.4 1.
90		6/8	Lake Avenue	Chautauqua	Hanover		Silver Creek	NRE	
91	St. Albans	38	Lake Avenue	Chautauqua	Hanover		Silver Creek	NRE(I)	
92		18	Oak Street	Chautauqua	Hanover ,		Silver Creek	NRE	
93		30	Oak Street	Chautauqua	Hanover	,	Silver Creek	NRE	
94		117:	Old Main Street	Chautauqua	Hanover		Silver Creek	NRE	
95		151	Old Main · Street	Chautauqua	Hanover		Silver Creek	NRE	
96		155	Old Main Street	Chautauqua	Hanover		Silver Creek	NRE	
97		1	Oliver Place	Chautauqua	. Hanover		Silver Creek	NRE	
98		5	Oliver Place	Chautauqua	Hanover		Silver Creek	NRE	
99	Swift House	6	Parkway Avenue	Chautauqua	Hanover		Silver Creek	NRE	
100		9 .	Parkway Avenue	Chautauqua	Hanover		Silver Creek	NRE	
101		17	Parkway Avenue	Chautauqua	Hanover		Silver Creek	NRE	
102	Erbin House	27	Parkway Avenue	Chautauqua	Hanover	CASION CONTROL OF THE PROPERTY	Silver Creek		
103	Trinity Lutheran Church		Porter Avenue	Chautauqua	Hanover		Silver Creek	NRE	
104		19?	Porter Avenue	Chautauqua	Hanover		Silver Creek	NRE	
105		21	Porter Avenue	Chautauqua	Hanover		Silver Creek	NRE	
106		45	Robinson Street	Chautauqua	Hanover		Silver Creek	NRE	<u>.</u>
107	And the Control of th	16	Rumsey Street	Chautauqua	Hanover <sup>-</sup>		Silver Creek	NRE	
108		28	Ward Place	Chautauqua	Hanover		Silver Creek	NRE	
109		1873	East Middle Road	Chautauqua	Sheridan			NRE	
110		1980	King Road	Chautauqua	Sheridan	.,		NRE	

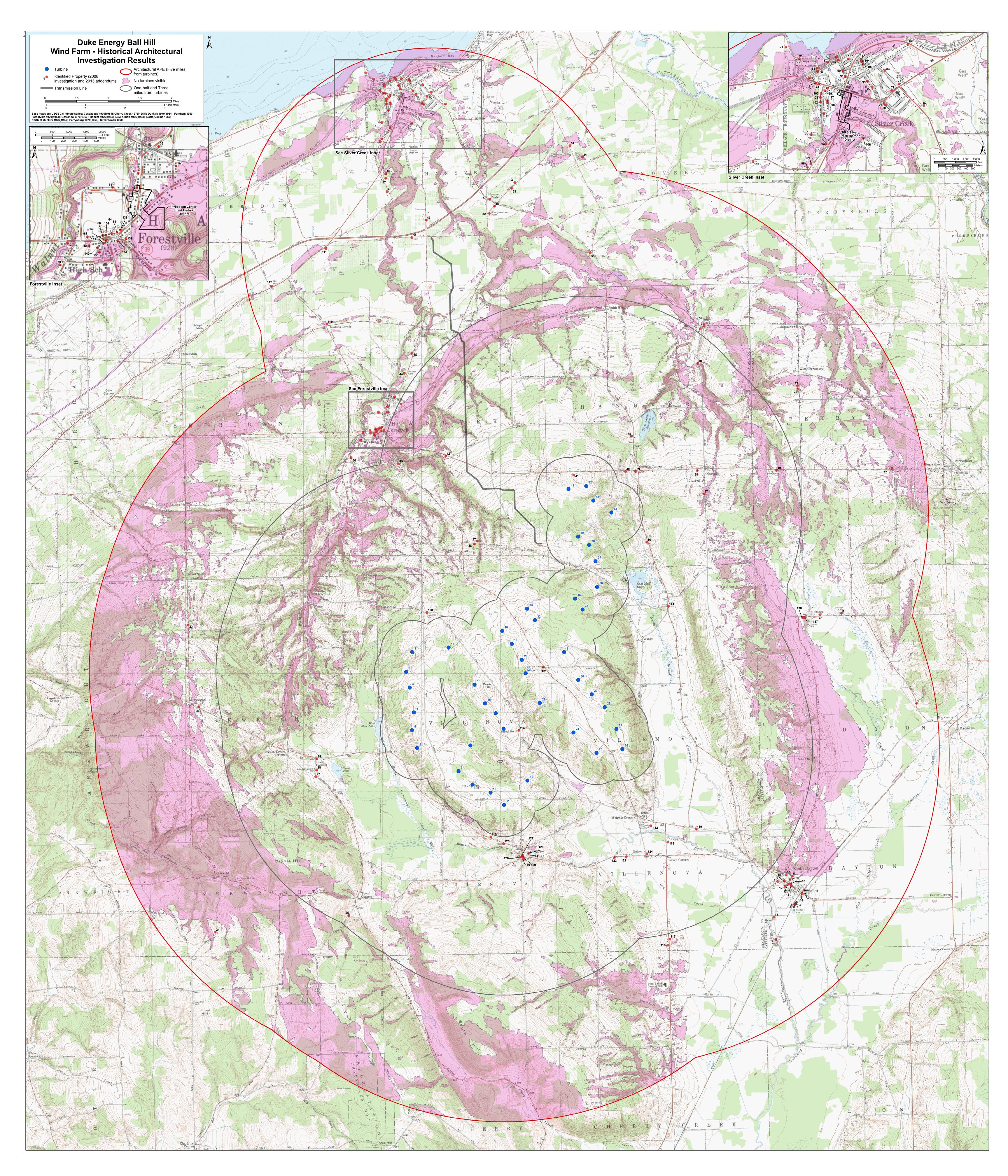
Map Point	Name	Street Number	Street Name	County	Town	Hamlet	Village	NRE Status	Visual Analysis
111	.,,	2023	Stebbins Road	Chautauqua	Shëridan		••	NRE	1
112		2248	Stebbins Road	Chautauqua	Sheridan			NRE	
113	Wheeler Cemetery		Hanover . Road	Chautauqua	Villenova	,		NRE	
114	School No. 10	9129	North Hill Road	Chautauqua	Villenova		-	Not-NRE	
115			NY 83	Chautauqua	Villenova			NRE	
116		8025	NY 83	Chautauqua	Villenova		The second secon	NRE	*
117		8052	NY 83	Chautauqua	Villenova			NRE	
118		8562	NY 83	Chautauqua	Villenova			NRE	
119		307	Philips Road	Chautauqua	Villenova			NRE	
120	Pope Hill Cemetery		Pope Hill Road	Chautauqua	Villenova			NRE	
121	Forestville Wesleyan Church/Scho ol/Ball Hill Cemetery	9495	Prospect Road	Chautauqua	Villenova			NRE	*
122		641	South Dayton Road	Chautauqua	Villenova	Balcom		NRE	
123		691	South Dayton Road	Chautauqua	Villenova	Balcom		NRE	
124	Dye Homestead	558	South Dayton- Hamlet Road	Chautauqua	Villenova	Balcom Corners	Total Control	NRE	
		Simulation	s should be	produced fron	n several loca	itions in Hamle	et		*
125	Hamlet Cemetery		NY 83	Chautauqua	Villenova	Hamlet	The sale was an experience of the sale and a	NRE	
126		1141	NY 83	Chautauqua	Villenova	Hamlet		NRE	
127	Villenova Grange Hall	1150	NY 83	Chautauqua	Villenova	Hamlet		NRE	
128	Hamlet School District No. 2		School Street	Chautauqua	Villenova	Hamlet		NRE	
129	Hamlet United Methodist Church	1119	South Dayton Road (NY 83)	Chautauqua	Villenova	Hamlet		NRE	
130	THE PROPERTY OF THE PROPERTY O	1129	South Dayton Road (NY 83)	Chautauqua	Villenova	Hamlet		NRE	777

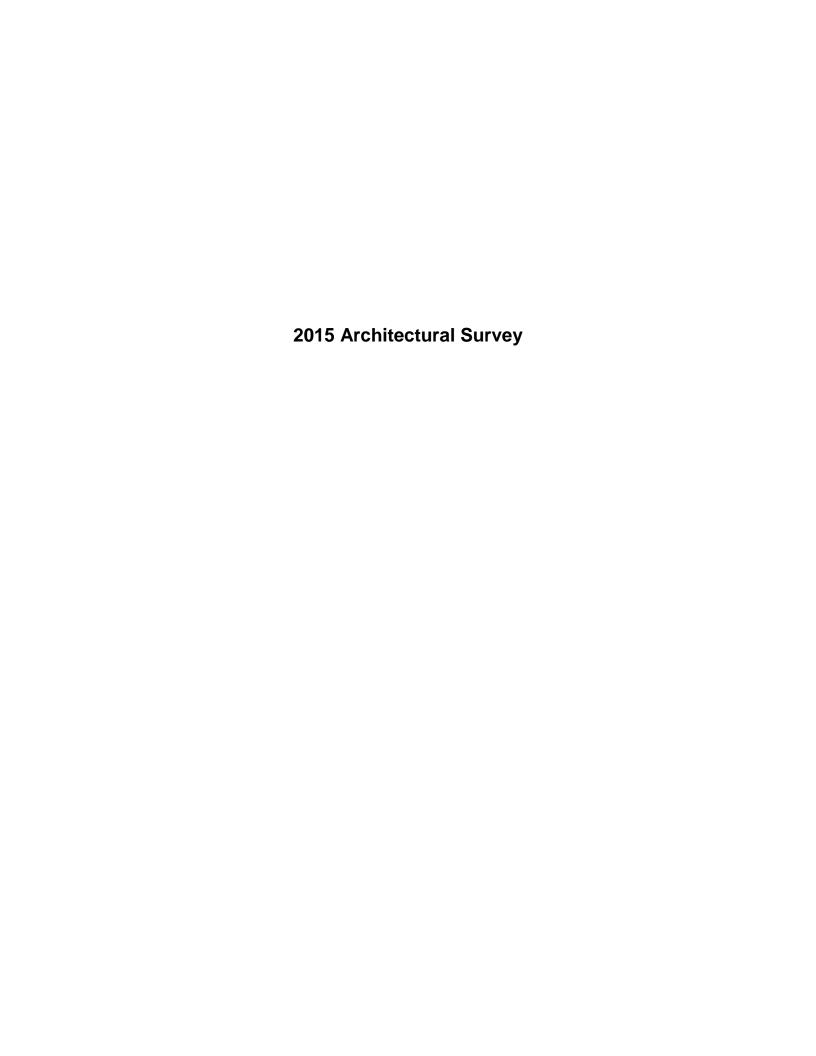
Map Roint	Name	Street Number	Street Name	County	Tiown	Hamlet	Willage	NRE Status	Visual Analysis
131"	IOOF		South Dayton Road (NY 83)	Chautauqua	Villenova	Hamlet		: NRE	
132	Villenova Cemetery		Cemetery Road	Chautauqua	Villenova	Wright's Corners		NRE	

Map Point	IName.	Street Numb er	StreetiName	Gounty	iliown	Village	NR Status	Visual Analysis
		E	wing Park So	outh Dayton	Historic Distri	ct		*
SD1	E.B. Crissey & Co.	30	Maple Street	Cattaraugus	Dayton	South Dayton	Contribut ing to historic district	
SD2	Wilson Hale & Co.	The supplemental party Party.	Park Street	Cattaraugus	Dayton	South Dayton	Contribut ing to historic district	
SD3	Wilson Hale & Co./Post Office	5	Park Street	Cattaraugus	Dayton	South Dayton	Contribut ing to historic district	
SD4	Cattaraugus County Bank	7	Park Street	Cattaraugus	Dayton	South Dayton	Contribut ing to historic district	
SD5	Gypsy Tea Room	9	Park Street	Cattaraugus	Dayton	South Dayton	Contribut ing to historic district	
SD6		11	Park Street	Cattaraugus	Dayton	South Dayton	Contribut ing to historic district	
SD7		13	Park Street	Cattaraugus	Dayton	South Dayton	Contribut ing to historic district	
SD8			Park Street	Cattaraugus	Dayton	South Dayton	Contribut ing to historic district	
	Village Hall/Library	17	Park Street	Cattaraugus	Dayton	South Dayton	Non- Contribu ting to	

Map Point	HEAD AND SHOUSHIELDS AND AND	Street Numb er	Street/Name	County	Лоwn	Village	NR Status	Visual Analysis
		/· .; /					historic district	о,
SD10	Ewing Park		Park, Maple, Raifroad and Pine Street	Cattaraugus	Dayton	South Dayton	Contribut ing to historic district	
SD11	The Valley House/South Dayton Hotel	203	Pine Street	Cattaraugus	Dayton	South Dayton	Contribut ing to historic district	
SD12		205	Pine Street	Cattaraugus	Dayton	South Dayton	Contribut ing to historic district	**************************************
SD13		207	Pine Street	Cattaraugus	Dayton	South Dayton	Contribut ing to historic district	• • • • • • • • • • • • • • • • • • •
SD14	South Dayton Depot	1	Railroad Street	Cattaraugus	Dayton	South Dayton	Contribut ing to historic district	

# Appendix E. Historical Architectural Investigation Results Map







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Corporate Headquarters P.O. Box 20884 Tuscaloosa, AL 35402 Tel: (205) 248-8767 Fax: (205) 248-8739 ARCHITECTURAL SURVEY

FOR THE BALL HILL WIND PROJECT

TOWNS OF VILLENOVA AND HANOVER,

CHAUTAUQUA COUNTY, NEW YORK

ADDENDUM #2

OPRHP#08PR01814

**Prepared for:** 

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

Prepared by:

PANAMERICAN CONSULTANTS, INC. 2390 Clinton Street Buffalo, New York 14227-1735 (716) 821-1650

December 2015

# ARCHITECTURAL SURVEY FOR THE BALL HILL WIND PROJECT TOWNS OF VILLENOVA AND HANOVER, CHAUTAUQUA COUNTY, NEW YORK ADDENDUM #2

OPRHP #08PR01814

**Prepared for:** 

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

#### Prepared by:

Christine M. Longiaru, M.A., Principal Investigator/Senior Architectural Historian Mark A. Steinback, M.A., Senior Historian Donald Smith, Ph.D., Senior Archaeologist/GIS Supervisor Michael A. Cinquino, Ph.D., RPA, Project Director

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December 2015

#### **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: 36** 

#### **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 170.7 square miles; 76.1 percent of which, or 129.9 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: 163

#### Number of Historic Districts with "Undetermined" NRHP Status: 2

- Silver Creek Historic District (approximately 35 contributing properties, number of noncontributing 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 2015 Addendum: None

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

Date of Report: December 2015

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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 Energy, LLC project (Ball Hill Wind Project), a wind-energy project proposed in the Towns of Hanover and Villenova, Chautauqua County, New York (Figure 1.1). The entire 2015 five-mile buffer (turbines) and three-mile buffer (transmission line) encompasses 171 square miles; 76 percent of which, or 130 square miles, comprise the visual Area of Potential Effect (APE; Figure 1.2). Two previous historic architectural resources studies were completed for earlier configurations of the Project. In 2008 Panamerican completed the initial historic buildings survey of the five-mile visual APE (Longiaru et al. 2008), and in 2013 an archaeological and architectural assessment addendum was submitted to the New York State Historic Preservation Office (NYSHPO) (Smith et al. 2013 [Figure 1.3]). The 2015 Ball Hill Wind Project Addendum addresses the current Project layout and includes an updated five-mile visual APE study area that accounts for changes to the 2013 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 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 355 acres. It includes 36 wind turbines with a capacity to produce approximately 80-90MW of electricity; the APE for each turbine covers 3.65 acres. The generation project's linear components (access roads and electrical collection lines) total 123,437 feet (37,648 meters / 23.4 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 26 acres (the operations and management [O&M] facility lies entirely inside the APE for one of the laydown areas). The Project's transmission line is 31,154 ft (9,502 m / 5.9 miles) in length and has a 120-ft (3.6-m)-wide APE / right-of-way (ROW). Its switchyard covers 5.4 acres and the substation covers 1.9 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 2015 architectural survey addendum is to identify National Register Listed/Eligible (NRL/NRE) properties in the current Project's five-mile visual APE study area. 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). The addendum 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 (Hanley et al. 2015).

Any National Register eligibility recommendations presented in the 2015 addendum report are preliminary and **not** considered final determinations of National Register eligibility. Final determinations will be made 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, and 2015 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

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.

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.; Dr. Donald A. Smith, RPA, as Geographic Information Analyst. Project Director/Senior Archaeologist Dr. Michael A. Cinquino, RPA; and Senior Preservation Planner/Senior Archaeologist Dr. Frank J. Schieppati, RPA.

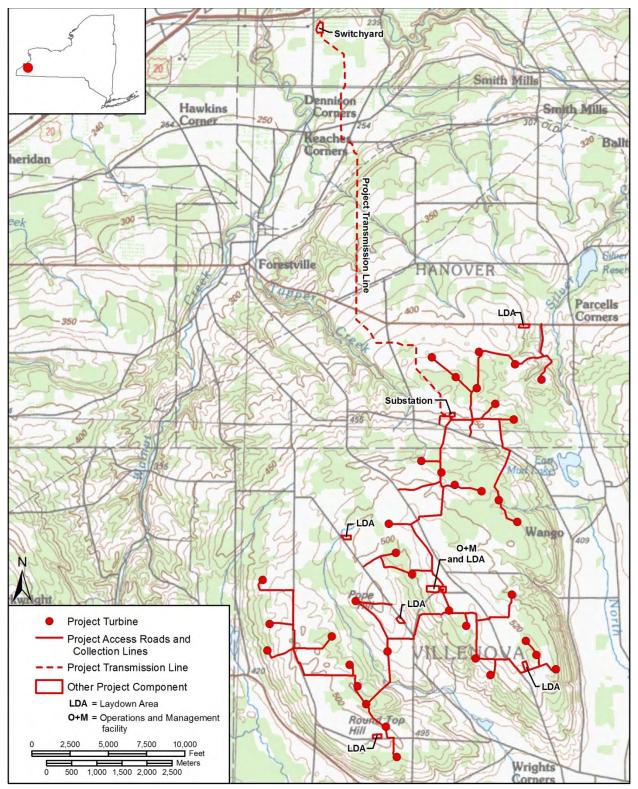
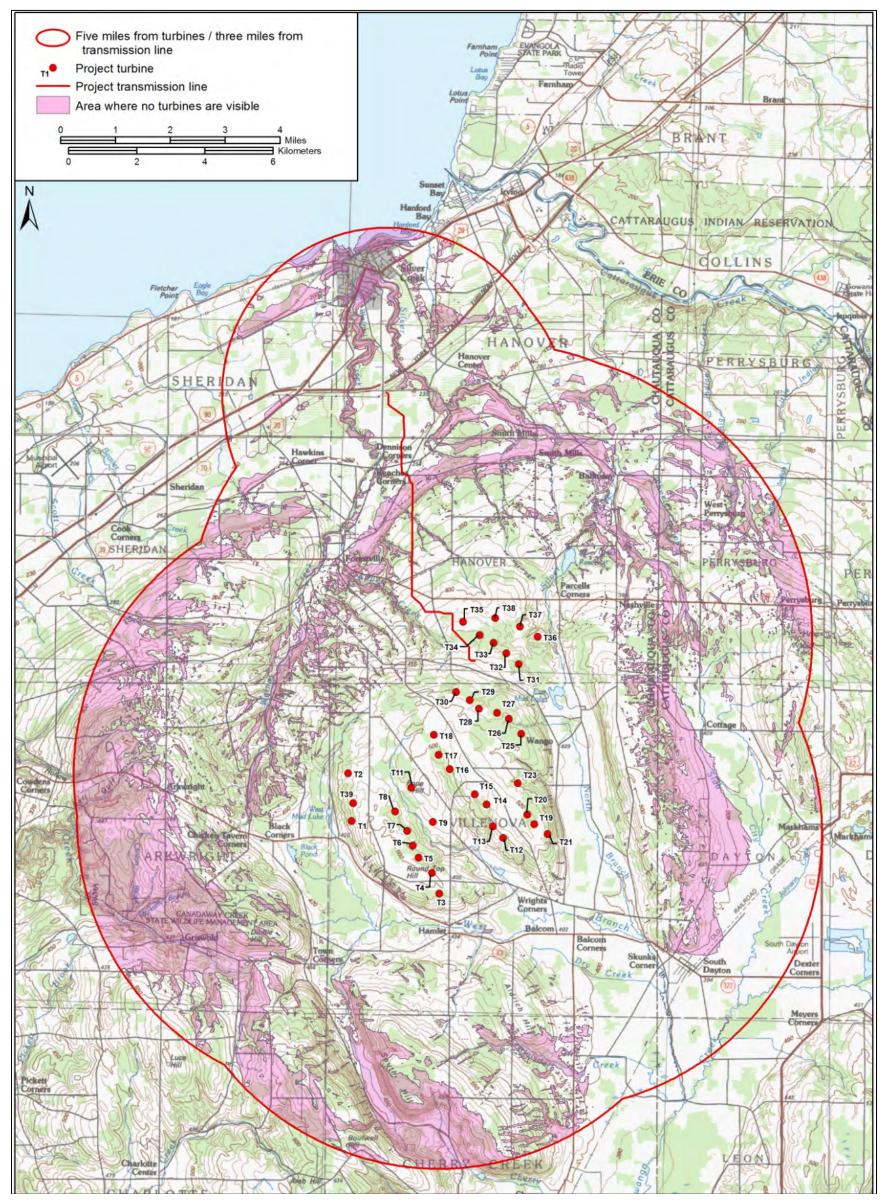


Figure 1.1. The approximate location of the Ball Hill Wind Project in the Towns of Hanover and Villenova, Chautauqua County, New York (USGS 100k Series Topographic: Jamestown, NY-Pennsylvania (1988 [1986]); Silver Creek, NY-Pennsylvania-Ontario (1986).



**Figure 1.2. Ball Hill 2015 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).

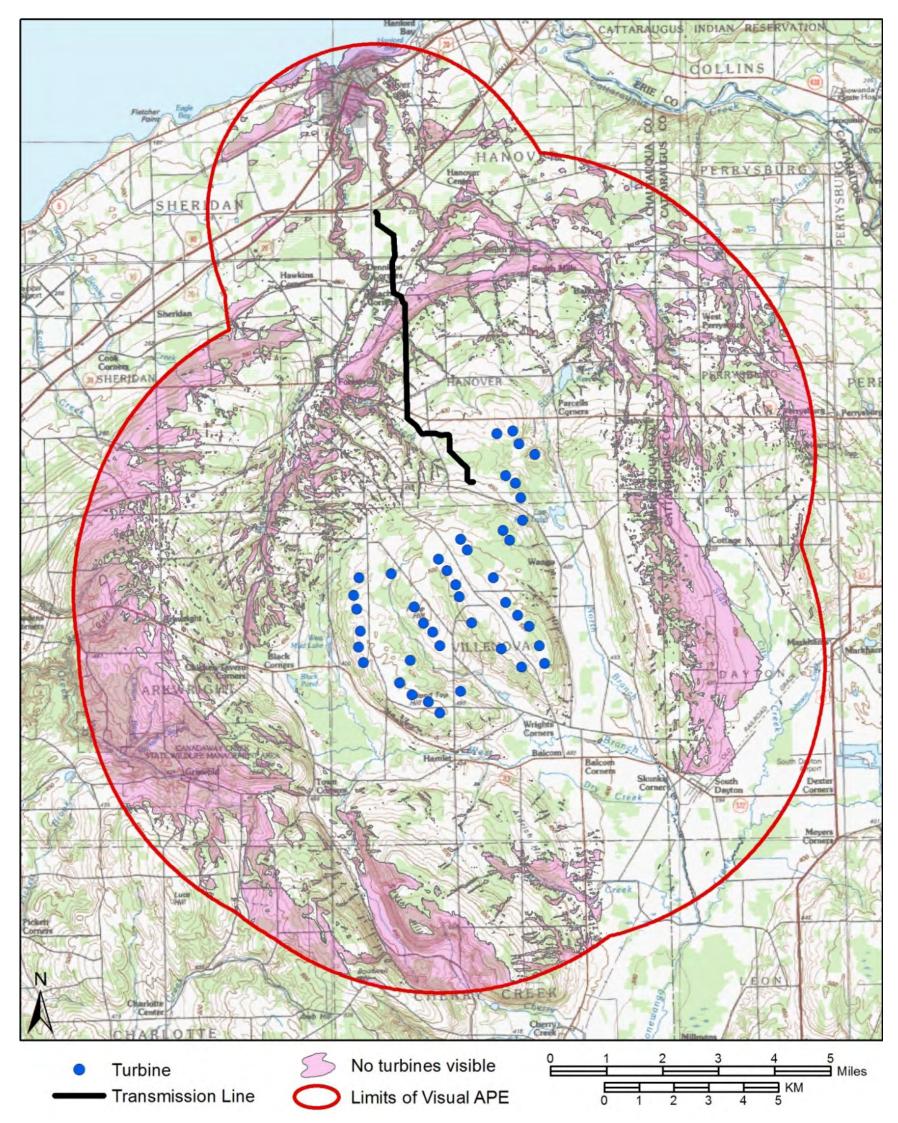


Figure 1.3. Ball Hill 2013 architectural / visual APE (base map sources: USGS 100k Series Topographic: Buffalo, NY 1984; Jamestown, NY 1988 [1986]; Olean, NY 1986; Silver Creek, NY 1986).

#### 2.0 Historic Architectural Resources Summary

For this investigation, the visual APE is defined as the area from which the proposed undertaking may be visible within a five-mile distance around the outer ring of proposed turbine locations and three miles from the proposed transmission line (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 positive visual APE spans 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 layout for the Project, Noble Ball Hill Windpark and Transmission Line (NYS Office of Parks, Recreation, and Historic Preservation [OPRHP] #08PR01814). 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

Four 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]; Sexton and Toner 2009 [Arkwright Summit]; and EDR 2015 [Cassadaga]. Three 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 (13 contributing and one non-contributing properties [Longiaru et al. 2008]). Note, CRIS does not list the Ewing Park South Dayton Historic District; resources in this previously recommended district are recognized as individual resources in CRIS and not as a district. The majority of resources identified in the original 2008 survey were nineteenth-century residences. These NRE resources 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 2008 proposed project layout (Longiaru et al. 2008). Slight differences between the 2008 and 2009 viewsheds in some locations accounted for duplicate documentation of historic resources by these two studies.

In 2013 Panamerican submitted an addendum cultural resources investigation for a second proposed project layout (Smith et al. 2013; 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.

#### 2.2 Previously Identified Historic Architectural Resources

Panamerican utilized NYSOPRHP's Cultural Resources Information System (CRIS) to identify previously inventoried historic resources and historic districts located within a five-mile buffer around the Project. Any new information obtained from CRIS for previously documented resources in 2008 and 2013 (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 OPRHP's 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 resources.
- Two historic districts with "Undetermined" NRHP status.

The results of the CRIS search for NRE resources 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 resources previously documented in 2008. Map Points SD1 through SD14 were originally assigned to properties that were recommended in Ewing Park Historic District (Longiaru et al. 2008). Map Points 137 through 143 and SC 2 through 6 were identified in the 2013 addendum study. Locations of identified resources 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.

The Silver Creek Historic District in the Village of Silver Creek, Town of Hanover, Chautauqua County, presently has an "Undetermined" NRHP status (USN 01346.000242). A small portion of the district lies within the 2015 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) at the historic crossroads of the village. At present, the boundaries of Silver Creek Historic District are not formally delineated. 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. Based on property location information provided in CRIS, the approximate boundaries of Silver Creek Historic District include a roughly three-block section of Main Street (U.S. Route 20) from Central Avenue (NY Route 5) to Robinson Street; the Village Park bound by Park Place, Main Street, and Central Avenue; and an approximately 316-ft section of Central Avenue (NY Route 5) from Main Street to 199-201 Central Avenue. The historic district comprises approximately 39 properties dating from the midnineteenth 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 2015 Project's visual APE. Map Points assigned to properties in the Silver Creek Historic District are SC2 through SC6 (see Table 2.1).

The Center Street Historic District in the Village of Forestville, Town of Hanover, Chautauqua County, presently has an "Undetermined" NRHP status (USN 01352.000127; CRIS 2015). The district consists of 14 primary buildings (13 contributing resources and one non-contributing resource) 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).

Ewing Park South Dayton Historic District, South Dayton, Cattaraugus County, is not identified as a district (CRIS 2015). As recommended in 2008, the district had 13 contributing and one non-contributing properties (Longiaru et al. 2008). 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. Weaver Cemetery on Center Road in Arkwright (Map Point 23) was previously determined NRE; the cemetery is presently not listed in CRIS (Bonafide 2008). Ewing Park in South Dayton (USN 00954.000043/ Map Point SD10) was previously recommended as a contributing resource to the South Dayton Historic District; it presently has an undetermined NRHP status in CRIS (Longiaru et al. 2008; Smith et al. 2013). St. Peter's Episcopal Church on Park Street in Forestville was previously recommended as NRE and is not presently in CRIS (2013 addendum Map Point 142). In 2013 the church had an undetermined status (USN 01352.000002). Seven bridges were previously documented in 2008, and included in the 2008 and 2013 survey reports (see Table 2.2). However, these structures have not been assigned USNs or entered into CRIS.

	Table 2.1. National Register Eligible Resources in Visual APE (CRIS 2015). <sup>2</sup>										
Map Pt.	Resource Name	Street Address	County	Town/ Village/ Hamlet	S/NRHP Status 2015	Unique Site No.	2015 Comment				
1		12182 Markhams Road	Cattaraugus	Dayton	NRE	00906.000086	No GIS location in CRIS				
3 <sup>3</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					

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.
 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 Resources in Visual APE (CRIS 2015). <sup>2</sup>									
Map Pt.	Resource Name	Street Address	County	Town/ Village/ Hamlet	S/NRHP Status 2015	Unique Site No.	2015 Comment			
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				
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				
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				

	Table 2.1. National Register Eligible Resources in Visual APE (CRIS 2015). <sup>2</sup>									
Map Pt.	Resource Name	Street Address	County	Town/ Village/ Hamlet	S/NRHP Status 2015	Unique Site No.	2015 Comment			
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			
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				
*31	Residential, c.1895	12168 Alleghany Road	Chautauqua	Hanover	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				
*34	Christy Road Cemetery	Christy Road, north side, east of Allegany Road	Chautauqua	Hanover	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				

	Table 2.1. National Register Eligible Resources in Visual APE (CRIS 2015). <sup>2</sup>									
Map Pt.	Resource Name	Street Address	County	Town/ Village/ Hamlet	S/NRHP Status 2015	Unique Site No.	2015 Comment			
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				
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				
*46	Mt. Carmel Cemetery, 1926	Old Main Street	Chautauqua	Hanover	NRE	01314.000075				
*47	Glenwood Cemetery, c.1810	Old Main Street	Chautauqua	Hanover	NRE	01314.000076				
*48	Residential, c.1910	11935 Old Main Street	Chautauqua	Hanover	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 —- Check SHPO's date	11037 Alleghany Road	Chautauqua	Hanover (Balltown [H])	NRE	01314.000080	CRIS locates proper at 1037 Alleghany Road			

	Table 2.1. National Register Eligible Resources in Visual APE (CRIS 2015). <sup>2</sup>									
Map Pt.	Resource Name	Street Address	County	Town/ Village/ Hamlet	S/NRHP Status 2015	Unique Site No.	2015 Comment			
52	Balltown Cemetery	Mackinaw Road, north side at Allegany Road	Chautauqua	Hanover (Balltown [H])	NRE	01314.000081				
53	Residential, c.1915	12010 Angell Road	Chautauqua	Hanover (Hanover Center [H])	NRE	n/a on SPHINX	CRIS locates property on Abgell Road			
54	Residential, c.1905	12021 Angell Road	Chautauqua	Hanover (Hanover Center [H])	NRE	n/a on SPHINX	CRIS locates property on Abgell Road			
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 Allegany Road	Chautauqua	Hanover (Nashville [H])	NRE	01314.000087				
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				

		Table 2.1. National Re	gister Eligible	Resources in V	isual APE (CR	IS 2015). <sup>2</sup>	
Map Pt.	Resource Name	Street Address	County	Town/ Village/ Hamlet	S/NRHP Status 2015	Unique Site No.	2015 Comment
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	
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	

	Table 2.1. National Register Eligible Resources in Visual APE (CRIS 2015). <sup>2</sup>									
Map Pt.	Resource Name	Street Address	County	Town/ Village/ Hamlet	S/NRHP Status 2015	Unique Site No.	2015 Comment			
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	3			

	Table 2.1. National Register Eligible Resources in Visual APE (CRIS 2015). <sup>2</sup>										
Map Pt.	Resource Name	Street Address	County	Town/ Village/ Hamlet	S/NRHP Status 2015	Unique Site No.	2015 Comment				
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					
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					

	Table 2.1. National Register Eligible Resources in Visual APE (CRIS 2015). <sup>2</sup>									
Map Pt.	Resource Name	Street Address	County	Town/ Village/ Hamlet	S/NRHP Status 2015	Unique Site No.	2015 Comment			
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				
113	Wheeler Cemetery, c.1848	Hanover Road, East side	Chautauqua	Villenova	NRE	01326.000065				
115	Farm Complex, c.1870	NY 83, South side, west of Hamlet	Chautauqua	Villenova	NRE	01326.000066				
116	Farm Complex, c.1920	8025 NY 83	Chautauqua	Villenova	NRE	01326.000067				
118	Farm Complex, c.1860	8562 NY 83	Chautauqua	Villenova	NRE	01326.000068				
119	Farm Complex, c.1830	307 Philips Road	Chautauqua	Villenova	NRE	01326.000070				
120	Pope Hill Cemetery	Pope Hill Road, south side, east of Round Top Road	Chautauqua	Villenova	NRE	01326.000071				

		Table 2.1. National Re	gister Eligible	Resources in V	/isual APE (CR	IS 2015). <sup>2</sup>	
Map Pt.	Resource Name	Street Address	County	Town/ Village/ Hamlet	S/NRHP Status 2015	Unique Site No.	2015 Comment
121	Forestville Wesleyan Church Complex, c.1858, includes Cemetery & School	9495 Prospect Road	Chautauqua	Villenova	NRE	01326.000069	
122	Farm Complex	641 South Dayton Road	Chautauqua	Villenova	NRE	01326.000072	
123	Residential, c.1845	691 South Dayton Road	Chautauqua	Villenova	NRE	01326.000073	
124	Farm Complex, c.1890 (Dye Homestead)	558 South Dayton- Hamlet Road	Chautauqua	Villenova	NRE	01326.000016	
125	Hamlet Cemetery	NY 83, south side, west of Hamlet	Chautauqua	Villenova		01326.000074	
126	Residential, c.1840	1141 NY 83	Chautauqua	Villenova	NRE	01326.000041	
127	Villenova Grange Hall	1150 NY 83, west side	Chautauqua	Villenova	NRE	01326.000075	
128	Hamlet School District No. 2	8520 School Street	Chautauqua	Villenova	NRE	01326.000078	
129	Hamlet United Methodist Church, 1812	1119 South Dayton Road	Chautauqua	Villenova	NRE	01326.000038	
130	Residential, c.1870	1129 South Dayton Road	Chautauqua	Villenova	NRE	01326.000039	
131	Commercial, c.1905 (I.O.O.F.)	1112 South Dayton Road, NY 83	Chautauqua	Villenova	NRE	01326.000040	
132	Villenova Cemetery	Cemetery Road, east side.	Chautauqua	Villenova	NRE	01326.000076	

		Table 2.1. National Re	egister Eligible	Resources in V	isual APE (CR	IS 2015). <sup>2</sup>	
Map Pt.	Resource Name	Street Address	County	Town/ Village/ Hamlet	S/NRHP Status 2015	Unique Site No.	2015 Comment
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	
SD11	The Valley House/ South Dayton Hotel 1877	203 Pine Street	Cattaraugus	Dayton (South Dayton [V])	NRE	00954.000044	
SD12	Commercial, c.1930	205 Pine Street	Cattaraugus	Dayton (South Dayton [V])	NRE	00954.000045	
SD13	Commercial, c.1900	207 Pine Street	Cattaraugus	Dayton (South Dayton [V])	NRE	00954.000046	
SD14	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	
134	Commercial, c.1870	25 Main Street	Chautauqua	Hanover (Forestville [V])	NRE	01352.000106	

		Table 2.1. National Re	gister Eligible	Resources in V	isual APE (CR	IS 2015). <sup>2</sup>	
Map Pt.	Resource Name	Street Address	County	Town/ Village/ Hamlet	S/NRHP Status 2015	Unique Site No.	2015 Comment
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	
143	Residence, Italianate	7 Third Street	Chautauqua	Hanover (Forestville [V])	NRE	01352.000116	
*SC 2	Commercial Building, c.1890	7 Park Place	Chautauqua	Silver Creek (V)	NRE	01346.000238	
*SC 3	Commercial Building, c.1890	9 Park Place	Chautauqua	Silver Creek (V)	NRE	01346.000239	
*SC 4	Commercial Building, c.1920	17 Park Place	Chautauqua	Silver Creek (V)	NRE	01346.000240	
*SC 5	The Geitner Theatre, 1921	19 Park Place	Chautauqua	Silver Creek (V)	NRE	01346.000237	
*SC 6	Commercial Building, c.1910	25 Park Place	Chautauqua	Silver Creek (V)	NRE	01346.000241	
F1	Sherman House, c.1860	1 Center St	Chautauqua	Hanover (Forestville [V])	NRE	01352.000114	

	Table 2.1. National Register Eligible Resources in Visual APE (CRIS 2015). <sup>2</sup>									
Map Pt.	Resource Name	Street Address	County	Town/ Village/ Hamlet	S/NRHP Status 2015	Unique Site No.	2015 Comment			
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	1352.000123	In CRIS also as USN 01352.000003 "Undet." NR Status			
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				

Та	ble 2.2 Seven bridges p	reviously documented CRIS.	in 2008 without	NRHP determinations in
Map Pt.	Resource Name	Street Address	County	Town/ Village/ Hamlet
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 2015 ADDENDUM FIELD INVESTIGATION

The 2015 Project's visual APE was compared with the 2008 and 2013 visual APEs to determine if any locations in the overlap area 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 that were outside of the 2008 and 2013 visual APEs were field inspected as part of this addendum study. 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 2015 ADDENDUM ARCHITECTURAL RESOURCES SURVEY RESULTS

A total of 163 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 2015 addendum as National Register Eligible. There are no National Register Listed properties in the visual APE. The types of NRE historic resources include farm complexes, individual residences, commercial buildings, and cemeteries. Two historic districts with "Undetermined" NRHP Status are partially within the visual APE: the Center Street Historic District, Forestville; and the Silver Creek Historic District.

# 3.0 Visual Impacts to Architectural Resources

The study area is a five-mile radius around the proposed Project's 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 170.7 sq miles, of which turbines are visible from 129.9 sq miles (76.1 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 National Register-listed and -eligible (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, man-made 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 identified properties, five are situated such that proposed turbines are in the visual foreground (property nos./map points 41, 114, 115, 121 and 125), 65 are at locations where turbines would be in the visual middle ground, and 93 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 133- to 151-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.

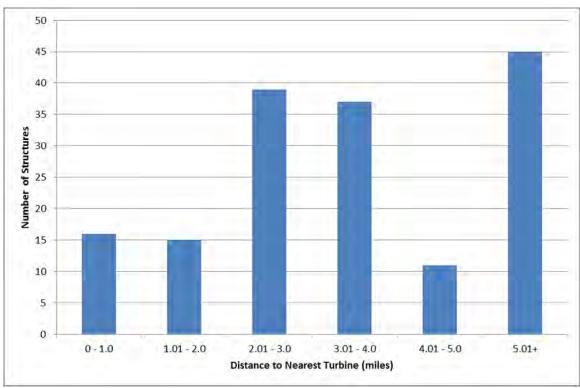


Figure 3.1. Frequency of NRE structures relative to distance to the nearest proposed wind turbine.

Below is a summary of visual impact findings for two 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's 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]), the NRE Silver Creek Historic District within the topographic visual APE /or viewshed (see Smith et al. 2013).

# 2015 ADDENDUM: VISUAL IMPACTS SUMMARY

No NRL properties are located in the visual APE. There are 163 individual NRE architectural resources and two historic districts with "Undetermined" NRHP status 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 (Table 3.1).

The mean number of turbines that are visible from an NRE property, however, is 19; the average distance from an NRE property to the nearest turbine is 3.7 miles (6.0 km).

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	4.5	25
3 <sup>1</sup>	Cottage Cemetery	Cottage Road	Cattaraugus	Dayton	Cottage (h)	25	3.9	24
4		12654 Cottage Road	Cattaraugus	Dayton	Cottage (h)	25	3.5	19
5		27 Cherry Street	Cattaraugus	Dayton	South Dayton (V)	21	3.3	3
6	Factory Building	East Railroad Avenue	Cattaraugus	Dayton	South Dayton (V)	21	3.6	25
7		73 East Railroad Avenue	Cattaraugus	Dayton	South Dayton (V)	21	3.6	19
8		62 Main Street	Cattaraugus	Dayton	South Dayton (V)	21	3.2	22
9		203 Maple Street	Cattaraugus	Dayton	South Dayton (V)	21	3.3	10
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	18
12		227 Oak Street	Cattaraugus	Dayton	South Dayton (V)	21	3.3	21
13	Sears	8143 Oaks Road	Cattaraugus	Dayton	South Dayton (V)	21	3.6	36
14		107 Pine Street	Cattaraugus	Dayton	South Dayton (V)	21	3.6	20
15		309 Pine Street	Cattaraugus	Dayton	South Dayton (V)	21	3.4	19
16		312 Pine Street	Cattaraugus	Dayton	South Dayton (V)	21	3.4	16
17		319 Pine Street	Cattaraugus	Dayton	South Dayton (V)	21	3.4	19
18		413 Pine Street	Cattaraugus	Dayton	South Dayton (V)	21	3.3	16
19	Perrysburg Cemetery	NY 39	Cattaraugus	Perrysburg		36	2.7	13
20		12316 NY 39	Cattaraugus	Perrysburg		36	4.5	6
21	Rugg-town West Perrysburg Cemetery	West Perrysburg Road	Cattaraugus	Perrysburg	West Perrysburg (h)	36	3.5	35

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
22		10929 West Perrysburg Road	Cattaraugus	Perrysburg	West Perrysburg (h)	36	3.5	35
24		8129 Griswold Road	Chautauqua	Arkwright		1	4.3	7
25	Rose Farm	1936 Ruttenbur Road	Chautauqua	Arkwright		3	3.0	33
26		2667 NY 83	Chautauqua	Arkwright	Arkwright (h)	2	3.2	19
27	Black Farm Complex	8903 Farrington Hollow Road	Chautauqua	Arkwright	Blacks Corners (h)	1	1.6	33
28	Arkwright Summit Cemetery	Farrington Hollow Road	Chautauqua	Arkwright	Blacks Corners (h)	1	1.5	32
29	Mapl-Camp Farm/Black Farm	2083 NY 83	Chautauqua	Arkwright	Blacks Corners (h)	1	1.4	32
30		10917 Alleghany Road	Chautauqua	Hanover		36	2.7	12
31		12168 Alleghany	Chautauqua	Hanover		38	5.5	27
32	Evergreen Cemetery	Angell Street	Chautauqua	Hanover		35	4.6	33
33	Forestville Depot	Center Street	Chautauqua	Hanover		35	2.6	11
34	Christy Road Cemetery	Christy Road	Chautauqua	Hanover		38	5.3	0-36
35		Hanover Road	Chautauqua	Hanover		37	1.2	23
36	Livemore Family	10079 Hanover Road	Chautauqua	Hanover		36	0.7	28
37	Hurlburt Road Cemetery	Hurlburt Road	Chautauqua	Hanover		30	0.9	8
38		Hurlburt Road	Chautauqua	Hanover		30	0.9	12
39		469 NY 39	Chautauqua	Hanover		36	0.8	27
40		503 NY 39	Chautauqua	Hanover		36	0.7	23
41		675 NY 39	Chautauqua	Hanover		38	0.3	25
42		1411 NY 39	Chautauqua	Hanover		35	1.5	23
43		Old Forestville Road	Chautauqua	Hanover		35	4.7	34
44	Pioneer Cemetery	11049? Old Forestville Road	Chautauqua	Hanover		35	2.8	19
45		11103 Old Forestville Road	Chautauqua	Hanover		35	2.9	19

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
46	Mt. Carmel Cemetery	Old Main Street	Chautauqua	Hanover		35	5.6	0-35
47	Glenwood Cemetery	Old Main Street	Chautauqua	Hanover		35	5.5	35
48		11935 Old Main Street	Chautauqua	Hanover		35	5.3	35
49	Prospect Hill Cemetery	Prospect Street	Chautauqua	Hanover		35	2.1	16
50	Doty Cemetery	Stebbins Road	Chautauqua	Hanover		35	4.5	34
51	Ball Valley Farms	11037 Allegany Road	Chautauqua	Hanover	Balltown (h)	36	3.2	22
52	Balltown Cemetery	Mackinaw Road	Chautauqua	Hanover	Balltown (h)	36	3.3	10
53		12010 Angel Road	Chautauqua	Hanover	Hanover Center (h)	38	4.9	35
54		12021 Angel Road	Chautauqua	Hanover	Hanover Center (h)	38	5.0	35
55	Golden Harvest	967 Hanover Road	Chautauqua	Hanover	Hanover Center (h)	35	4.7	34
56		11991 Hanover Road	Chautauqua	Hanover	Hanover Center (h)	35	4.8	34
57	Nashville Cemetery	Alleghany Road	Chautauqua	Hanover	Nashville (h)	36	1.5	14
58	Church	NY 39	Chautauqua	Hanover	Nashville (h)	36	1.5	20
59	Smith's Mill Cemetery	Hanover Road	Chautauqua	Hanover	Smith's Mill (h)	38	3.8	16
61		13 Cedar Street	Chautauqua	Hanover	Forestville (V)	35	2.7	17
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	2.7	10
66		27 Main Street	Chautauqua	Hanover	Forestville (V)	35	2.6	11
67	Forestville Free Methodist Church	32 Main Street	Chautauqua	Hanover	Forestville (V)	35	2.8	14
68		43 Main Street	Chautauqua	Hanover	Forestville (V)	35	2.7	13
69		2 Pearl Street	Chautauqua	Hanover	Forestville (V)	35	2.6	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
70		9 Water Street	Chautauqua	Hanover	Forestville (V)	35	2.8	9
71	Clark Mansion on Lighthouse Point	Beachview Avenue	Chautauqua	Hanover	Silver Creek (V)	35	7.2	6
72		10 Beachview Avenue	Chautauqua	Hanover	Silver Creek (V)	35	7.1	5
73		130 Central Avenue	Chautauqua	Hanover	Silver Creek (V)	35	6.9	8
74		147 Central Avenue	Chautauqua	Hanover	Silver Creek (V)	35	6.8	25
75		151 Central Avenue	Chautauqua	Hanover	Silver Creek (V)	35	6.8	35
76	Our Lady of Carmel	165 Central Avenue	Chautauqua	Hanover	Silver Creek (V)	35	6.7	28
77		338 Central Avenue	Chautauqua	Hanover	Silver Creek (V)	35	6.6	35
78		350 Central Avenue	Chautauqua	Hanover	Silver Creek (V)	35	6.6	35
79		5 Christy Street	Chautauqua	Hanover	Silver Creek (V)	35	6.5	35
80		9 Christy Street	Chautauqua	Hanover	Silver Creek (V)	35	6.4	35
81		4 Dana Drive	Chautauqua	Hanover	Silver Creek (V)	35	6.5	14
82		12370 Hanover Road	Chautauqua	Hanover	Silver Creek (V)	35	6.4	35
83		16 Hanover Road	Chautauqua	Hanover	Silver Creek (V)	35	6.7	35
90		6/8 Lake Avenue	Chautauqua	Hanover	Silver Creek (V)	35	6.8	10
91	St. Albans	38 Lake Avenue	Chautauqua	Hanover	Silver Creek (V)	35	6.8	23
92		18 Oak Street	Chautauqua	Hanover	Silver Creek (V)	35	6.6	31
93		30 Oak Street	Chautauqua	Hanover	Silver Creek (V)	35	6.7	35
94		117 Old Main Street	Chautauqua	Hanover	Silver Creek (V)	35	6.3	2
95		151 Old Main Street	Chautauqua	Hanover	Silver Creek (V)	35	6.1	17
96		155 Old Main Street	Chautauqua	Hanover	Silver Creek (V)	35	6.1	35
97		1 Oliver Place	Chautauqua	Hanover	Silver Creek (V)	35	6.6	16
98		5 Oliver Place	Chautauqua	Hanover	Silver Creek (V)	35	6.6	15
99	Swift House	6 Parkway Street	Chautauqua	Hanover	Silver Creek (V)	35	6.7	29
100		9 Parkway Street	Chautauqua	Hanover	Silver Creek (V)	35	6.7	33

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
101		17 Parkway Street	Chautauqua	Hanover	Silver Creek (V)	35	6.7	32
102	Erbin House	27 Parkway Street	Chautauqua	Hanover	Silver Creek (V)	35	6.6	27
103	Trinity Lutheran Church	Porter Avenue	Chautauqua	Hanover	Silver Creek (V)	35	6.9	35
104		19? Porter Avenue	Chautauqua	Hanover	Silver Creek (V)	35	6.9	35
105		21 Porter Avenue	Chautauqua	Hanover	Silver Creek (V)	35	6.9	35
106		45 Robinson Street	Chautauqua	Hanover	Silver Creek (V)	35	6.2	34
107		16 Rumsey Street	Chautauqua	Hanover	Silver Creek (V)	35	6.9	16
108		28 Ward Place	Chautauqua	Hanover	Silver Creek (V)	35	6.4	35
109		1873 East Middle Road	Chautauqua	Sheridan		35	6.3	35
110		1980 King Road	Chautauqua	Hanover		35	4.2	32
111		2023 Stebbins Road	Chautauqua	Sheridan		35	5.1	30
112		2248 Stebbins Road	Chautauqua	Sheridan		35	5.3	34
113	Cemetery	Hanover Road	Chautauqua	Villenova		25	1.2	25
114	School No. 10	9129 North Hill Road	Chautauqua	Villenova		9	0.3	25
115		NY 83	Chautauqua	Villenova		3	0.5	2
116		8025 NY 83	Chautauqua	Villenova		3	3.3	29
117		8052 NY 83	Chautauqua	Villenova		21	3.2	29
118		8562 NY 83	Chautauqua	Villenova		21	1.7	25
119		307 Philips Road	Chautauqua	Villenova		21	1.7	28
120	Pope Hill Cemetery	Pope Hill Road	Chautauqua	Villenova		2	1.1	33
121	Forestville Wesleyan Church/School/Ball Hill Cem	9495 Prospect Road	Chautauqua	Villenova		16	0.4	29
122		641 South Dayton Road	Chautauqua	Villenova	Balcom Corners (h)	21	1.8	19
123		691 South Dayton Road	Chautauqua	Villenova		3	1.8	21
124	Dye Homestead	558 South Dayton-Hamlet Road	Chautauqua	Villenova	Balcom Corners (h)	21	1.8	22

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
125	Hamlet Cemetery	NY 83	Chautauqua	Villenova	Hamlet (h)	3	0.5	3
126		1141 NY 83	Chautauqua	Villenova	Hamlet (h)	3	0.7	13
127	Villenova Grange	NY 83	Chautauqua	Villenova	Hamlet (h)	3	0.7	11
128	Hamlet School District No. 2	School Street	Chautauqua	Villenova	Hamlet (h)	3	0.7	8
129	Hamlet United Methodist Church	1119 South Dayton Road	Chautauqua	Villenova	Hamlet (h)	3	0.8	14
130		1129 South Dayton Road	Chautauqua	Villenova	Hamlet (h)	3	0.8	14
131	IOOF	South Dayton Road	Chautauqua	Villenova	Hamlet (h)	3	0.7	11
132	Villenova Cemetery	Cemetery Road	Chautauqua	Villenova	Wright's Corners (h)	21	1.4	20
SD2	Wilson Hale & Co.	1 Park Street	Cattaraugus	Dayton	South Dayton (V)	21	3.5	18
SD3	Wilson Hale & Co./ Post Office	5 Park Street	Cattaraugus	Dayton	South Dayton (V)	21	3.5	18
SD4	Cattaraugus County Bank	7 Park Street	Cattaraugus	Dayton	South Dayton (V)	21	3.5	18
SD5	Gypsy Tea Room	9 Park Street	Cattaraugus	Dayton	South Dayton (V)	21	3.5	18
SD6	Commercial c.1890	11 Park Street	Cattaraugus	Dayton	South Dayton (V)	21	3.5	18
SD7	Commercial c.1910	13 Park Street	Cattaraugus	Dayton	South Dayton (V)	21	3.5	17
SD8	Commercial c.1900	15 Park Street	Cattaraugus	Dayton	South Dayton (V)	21	3.5	17
SD11	The Valley House/ South Dayton Hotel 1877	203 Pine Street	Cattaraugus	Dayton	South Dayton (V)	21	3.6	19
SD12	Commercial c.1930	205 Pine Street	Cattaraugus	Dayton	South Dayton (V)	21	3.6	19
SD13	Commercial c.1900	207 Pine Street	Cattaraugus	Dayton	South Dayton (V)	21	3.5	19
SD14	South Dayton Depot	Railroad Street	Cattaraugus	Dayton	South Dayton (V)	21	3.6	18
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	11
135	Forestville Methodist Episcopal Church	3 Park Street	Chautauqua	Hanover	Forestville (V)	35	2.6	2

Table 3.1 (cont'd)

			i (cont a)		•			
Property Number	Property Name	Street Address	County	Town	Hamlet (h) or Village (V)	Nearest Turbine	Distance to nearest turbine (miles)	Number of turbines visible
136		4 Pearl Street	Chautauqua	Hanover	Forestville (V)	35	2.6	5
137	Grange Hall No. 829	12729 Cottage Road (CR 2)	Cattaraugus	Dayton	Cottage (h)	25	3.3	6
138	Cottage United Methodist Church	12737 Cottage Road (CR 2)	Cattaraugus	Dayton	Cottage (h)	25	3.2	5
139	First Hose House	2 Lodi Street (NY 39)	Chautauqua	Hanover	Forestville (V)	35	2.5	4
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	5
142	St. Peter's Episcopal Church	Park Street	Chautauqua	Hanover	Forestville (V)	35	2.6	4
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	5
F2		2 Center Street	Chautauqua	Hanover	Forestville (V)	35	2.5	7
F3		4 Center Street	Chautauqua	Hanover	Forestville (V)	35	2.5	7
F4		5 Center Street	Chautauqua	Hanover	Forestville (V)	35	2.5	3
F5		6 Center Street	Chautauqua	Hanover	Forestville (V)	35	2.6	7
F6		7 Center Street	Chautauqua	Hanover	Forestville (V)	35	2.5	5
F7		8 Center Street	Chautauqua	Hanover	Forestville (V)	35	2.6	7
F8		9 Center Street	Chautauqua	Hanover	Forestville (V)	35	2.5	6
F9		10 Center Street	Chautauqua	Hanover	Forestville (V)	35	2.6	8
F10	St. Rose of Lima Church	11 Center Street	Chautauqua	Hanover	Forestville (V)	35	2.6	10
F11		12 Center Street	Chautauqua	Hanover	Forestville (V)	35	2.5	9
F12		16 Center Street	Chautauqua	Hanover	Forestville (V)	35	2.6	10
F13		18 Center Street	Chautauqua	Hanover	Forestville (V)	35	2.6	10
F14		18 Pearl Street	Chautauqua	Hanover	Forestville (V)	35	2.5	4
SC 2	Commercial Building (Unique Hair & Nails)	7 Park Place	Chautauqua	Hanover	Silver Creek (V)	35	6.6	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
SC 3	Commercial Building (Stitches)	9 Park Place	Chautauqua	Hanover	Silver Creek (V)	35	6.6	2
SC 4	Commercial Building (People Inc.)	17 Park Place	Chautauqua	Hanover	Silver Creek (V)	35	6.6	2
SC 5	The Geitner Theatre (The Blackline)	19 Park Place	Chautauqua	Hanover	Silver Creek (V)	35	6.6	2
SC 6	Commercial Building	25 Park Place	Chautauqua	Hanover	Silver Creek (V)	35	6.6	1

# 4.0 Mitigation of Visual Impacts

A total of 163 individual NRE properties and two historic districts with "Undetermined" NRHP status were previously identified in the current visual APE in Chautauqua and Cattaraugus counties (Longiaru et al. 2008; Smith et al. 2013). 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 values. The average number of turbines that can be seen is 19 with an average distance of 3.7 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.

The selection of mitigation/offset projects is typically accomplished through discussions among the various local stakeholders, the wind-project developer, NYSHPO, the Lead Federal agency, and the Advisory Council on Historic Preservation, where specific community historic preservation needs are ascertained and funding levels are negotiated. A final set of appropriate mitigation measures will be identified to reflect local concerns and address individual properties, and a Memorandum of Agreement will be developed and signed.

# **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 to be 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 feet (4.9 meters) 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 approximately 90 ft (27.5 m) tall, or placed underground, or installed along existing power line rights-orway where possible. Since the collection lines are on average approximately 90 ft (27.5 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.

#### **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, and 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
- Completing a detailed architectural survey of Chautauqua County
- Conducting 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
- Cataloging 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 funding of specific historic preservation projects overseen by a third party is also an effective way of offsetting project impacts.

• Establishing 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 notfor-profit organizations to increase awareness of historic landscapes in New York State.
- Establishing a cemetery maintenance program that can disburse funds to maintain the many small historic cemeteries in the area.
- Providing 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.
- Making donations to libraries in the affected area for purchase of local and Chautauqua County material.
- Creating 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 municipal, regional, and state 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 offsets.

- 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.
- PowerPoint 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 variation 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. These include:

- 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.

# 5.0 References

# Bonafide, John A.

2008 Letter to Andrew C. Davis, State of New York Department of Public Service, Albany, New York. Re: PSC/SEQR Noble Ball Hill Windpark (08PR01814), dated 24 September 2008. New York State Office of Parks Recreation and Historic Preservation.

#### **EDR**

- 2015 Phase IA Historic Architectural Resources Survey & Work Plan Cassadaga Wind Project.; Towns of Charlotte, Cherry Creek, And Stockton, Chautauqua County, New York. Prepared for Everpower Wind Holdings, Inc., Pittsburgh, PA. \ Prepared by EDR, Syracuse, NY.
- Hanley, Robert J., Donald Smith, Mark A. Steinback, and Michael A. Cinquino
  - 2015 Archaeological Survey for the Ball Hill Wind Project, Towns of Villenova and Hanover, Chautauqua County, New York. Addendum #2. Panamerican Consultants, Inc., Buffalo Branch, Buffalo. Prepared for Ecology & Environment, Inc., Lancaster, NY.
- Longiaru, Christine M., Kelly M. Mahar, Frank J. Schieppati, Donald Smith, Mark A. Steinback, Michael A. Cinquino, and Martin Wachadlo
  - 2008 Architectural Survey (Five-mile APE) for the Proposed Noble Ball Hill Windpark, Towns of Villenova and Hanover, Chautauqua County, New York (OPRHP #08PR01814). Panamerican Consultants, Inc., Buffalo Branch, Buffalo. Prepared for Noble Ball Hill Windpark, LLC, Essex, CT.
- New York State Department of Environmental Conservation (NYSDEC)
  - 2000 Assessing and Mitigating Visual Impacts, DEP-00-02. (Jul 31). New York State Department of Environmental Conservation, Albany.
- New York State Office of Parks, Recreation and Historic Preservation Office (NYSOPRHP)
  - 2006 Guidelines for Wind Farm Development Cultural Resources Survey Work. New York State Historic Preservation Office, Office of Parks, Recreation and Historic Preservation, Peebles Island, Waterford.
  - 2015 Cultural Resources Information System (CRIS). New York State Historic Preservation Office, Office of Parks, Recreation and Historic Preservation, Peebles Island, Waterford. Electronic database, https://cris.parks.ny.gov/Login.aspx?ReturnUrl=%2f, accessed November 2015.

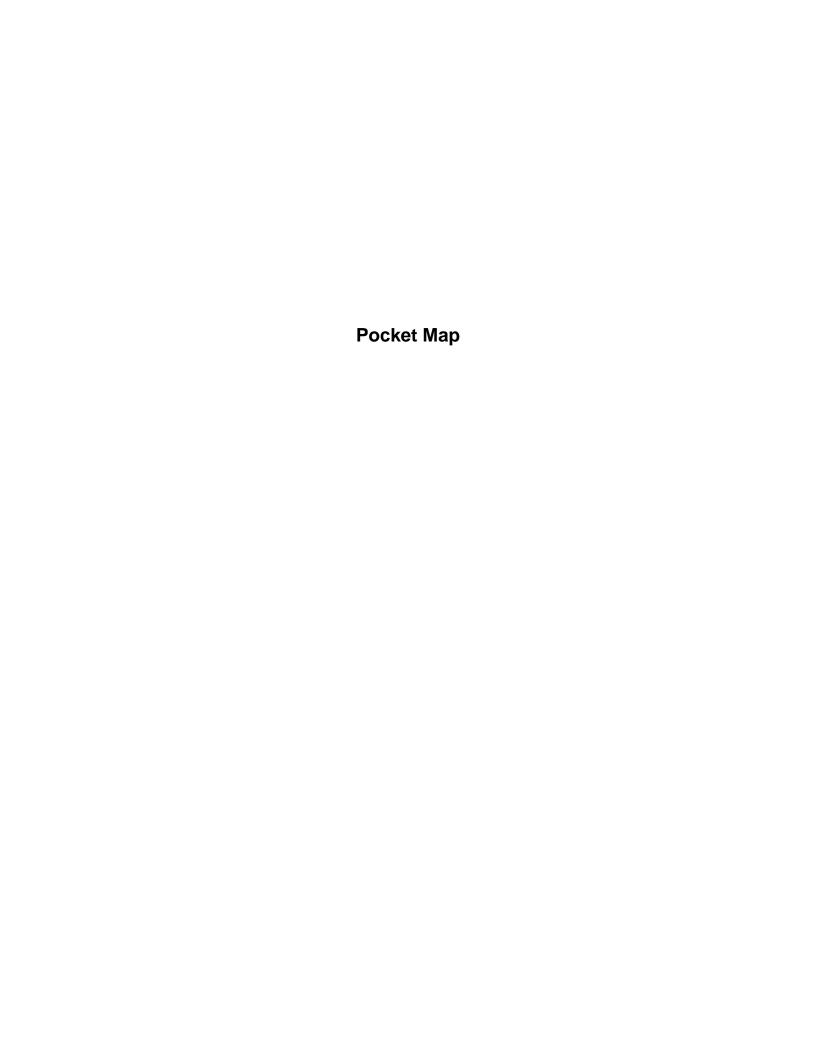
# Sexton, James, and Jim Toner

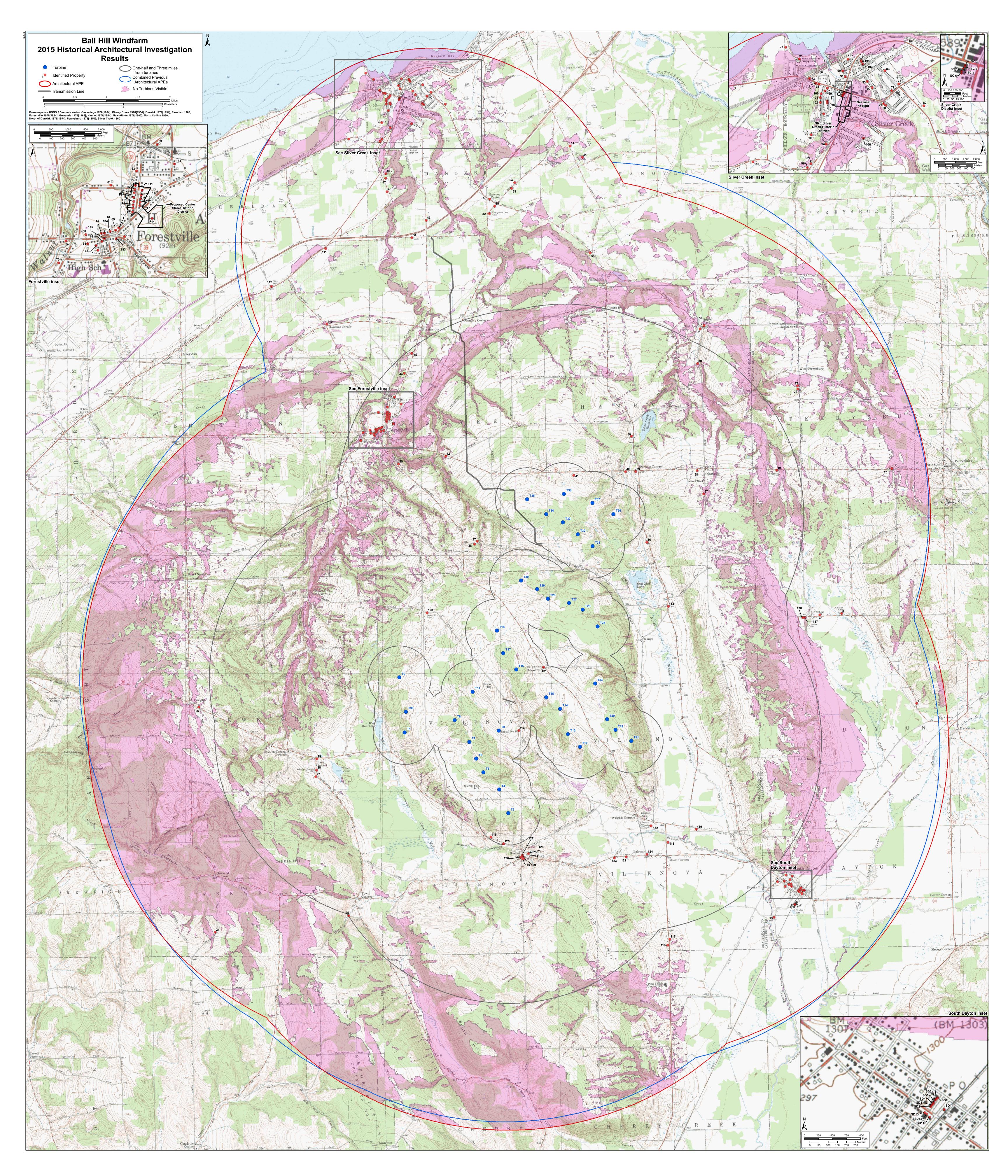
- 2009 Historic Architectural Resource Investigation, 5-mile Ring Study, Arkwright Summit Wind Farm, Towns of Arkwright, Charlotte, Cherry Creek, Dunkirk, Hanover, Pomfret, Sheridan, Stockton, and Villenova, The Villages of Cassadaga, Fredonia, and Forestville, and the City of Dunkirk, Chautauqua County, New York. Tetratech, Inc. Prepared for Arkwright Summit Wind Farm, LLC, Albany, NY.
- Smith, Donald, Christine M. Longiaru, Frank J. Schieppati, Mark A. Steinback, and Michael A. Cinquino 2013 Archaeological and Architectural Survey for the Duke Energy Ball Hill Windpark Addendum, Town of Villenova and Hanover, Chautauqua County, New York. #08PR01814. Panamerican Consultants, Inc., Buffalo Branch, Buffalo. Prepared for Ecology & Environment, Inc., Lancaster, NY

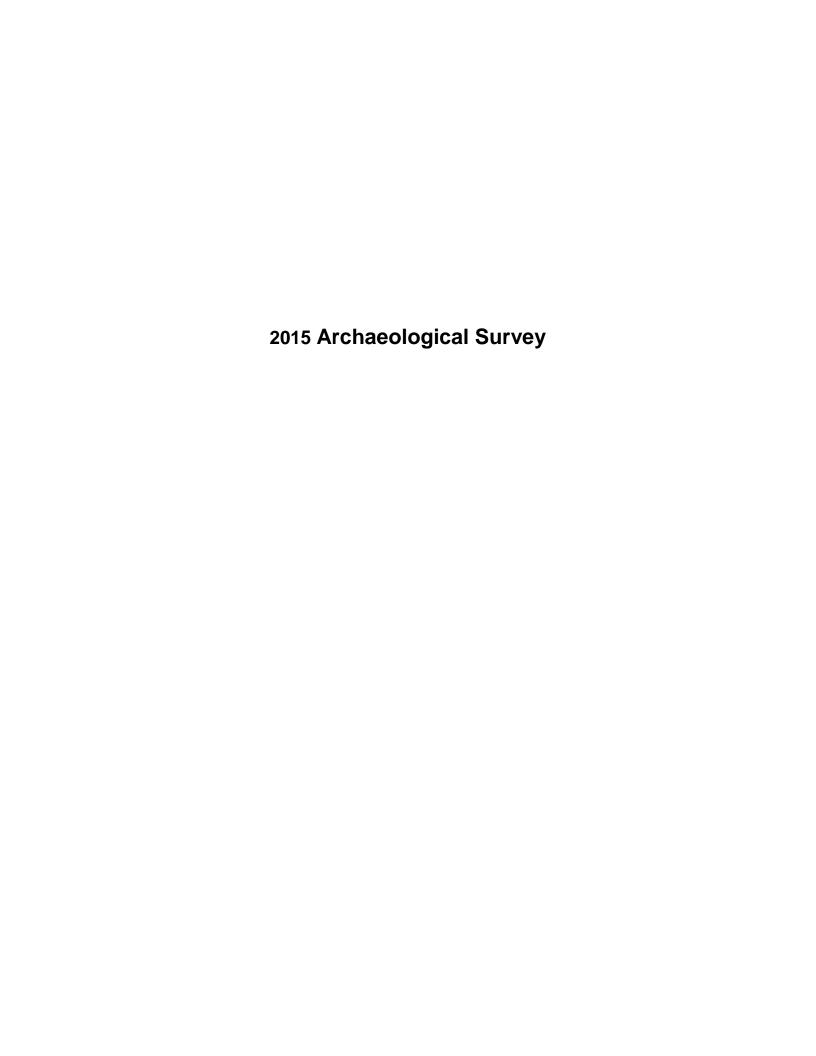
# U.S. Geological Survey

- 1984 Buffalo, New York, 1:100k Series (Topographic). U.S. Geological Survey, Department of the Interior, Washington, D.C.
- 1986 Olean, New York-Pennsylvania, 1:100k Series (Topographic). U.S. Geological Survey, Department of the Interior, Washington, D.C.

- 1986 Silver Creek, New York-Pennsylvania-Ontario, 1:100k Series (Topographic). U.S. Geological Survey, Department of the Interior, Washington, D.C.
- 1988 [1986] *Jamestown, New York-Pennsylvania*, 1:100k Series (Topographic). U.S. Geological Survey, Department of the Interior, Washington, D.C. Photo-inspected.









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Corporate Headquarters P.O. Box 20884 Tuscaloosa, AL 35402 Tel: (205) 248-8767 Fax: (205) 248-8739 ARCHAEOLOGICAL SURVEY

FOR THE BALL HILL WIND PROJECT,

TOWNS OF VILLENOVA AND HANOVER,

CHAUTAUQUA COUNTY, NEW YORK

ADDENDUM #2

OPRHP#08PR01814

**Prepared for:** 

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

**Prepared by:** 

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December 2015

# ARCHAEOLOGICAL SURVEY FOR THE BALL HILL WIND PROJECT TOWNS OF VILLENOVA AND HANOVER, CHAUTAUQUA COUNTY, NEW YORK ADDENDUM #2

OPRHP#08PR01814

# **Prepared for:**

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December 2015

# **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 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: 36** 

**Area of Potential Effect (APE):** The total APE of turbines, access roads, collection lines, laydown areas, and support structures (e.g., operations & management, substation) is 354.8 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)

Results of Archaeological Survey: The redesigned configuration of the Ball Hill Wind Project has an area of potential effect that measures 354.8 acres. This APE has 46.2 fewer acres than the area previously surveyed for the Phase 1 investigation of the original 401-acre project design. The APE of the new design crosses similar environmental zone "Local Habitat Areas" as 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 cultural resources have been identified in the current project area. As revealed by the 2008 investigations, the terrain around the project area is typically not sensitive for precontact-period archaeological resources. Although historical-period sites are present, they cluster at the locations of MDSs. Since there are no MDSs in the portions of the current project area outside its previous configurations, it is highly unlikely that historical sites are located there.

Thus, the 2015 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.* Panamerican does not recommend any further cultural resources investigations for the current design of the Ball Hill Wind Project.

# **Results of Architectural Survey**

The architectural/viewshed investigation is submitted as a separate report (see Longiaru et al. 2015).

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

Date of Report: December 2015

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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 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 current investigation was conducted to account for more changes to the project layout relative to its previous two configurations (Figure 1.2). This report only discusses the archaeological component of the investigation; the historic structures survey addendum for the current layout is submitted as a separate report.

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 (LDA), and an operations and management (O&M) facility]) will be 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 area of potential effect (APE) for the current project is approximately 354.8 acres. It includes 36 wind turbines with a capacity to produce approximately 80-90MW of electricity. The APE for each turbine covers 3.65 acres; the generation project's linear components (access roads and electrical collection lines) total 123,437 ft (37,623 meters / 23.4 miles) in length and have APEs that range from 25 to 40 ft wide; the construction LDAs total 26 acres (the O&M facility lies entirely inside the APE for one of the LDAs). The project's transmission line is 31,154 ft (9,496 meters / 5.9 miles) in length and has a 120-ft-wide APE / right-of-way (ROW). Its switchyard covers 5.4 acres and the substation covers 1.9 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 project areas for the previous investigations measured 375 acres (initial 2008 Phase I investigations). 401 acres (2008 archaeological addendum), and 416 acres (2013 architectural and archaeological addendum).

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 quidelines.

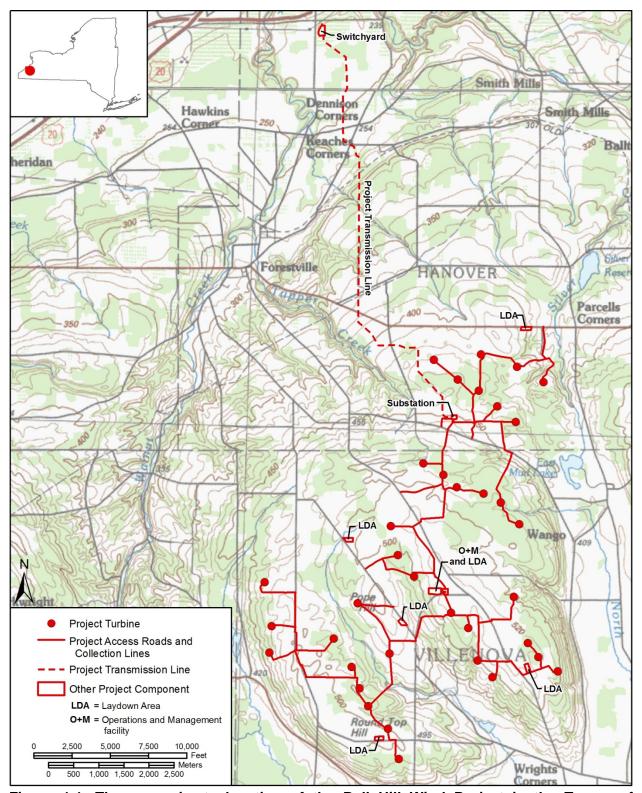


Figure 1.1. The approximate location of the Ball Hill Wind Project in the Towns of Hanover and Villenova, Chautauqua County, New York (Base map: USGS 100k series Jamestown, NY-Penn. [1988] and Silver Creek, NY-Penn.-Ont. [1986] quadrangles).

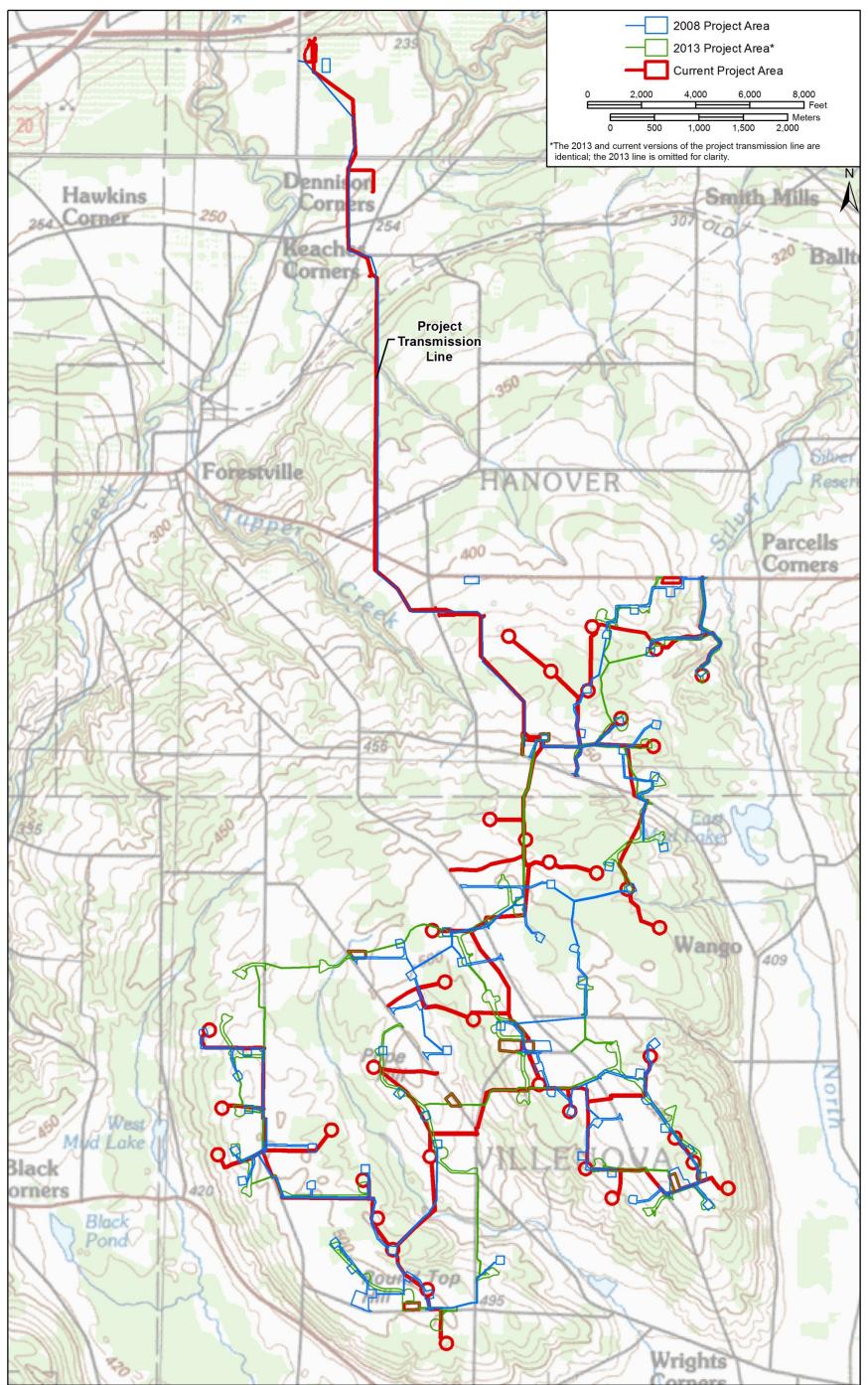


Figure 1.2. The current (2015) project configuration relative to previous layouts (2008 and 2013) (Base map: USGS 100k series Jamestown, NY-Penn. [1988] and Silver Creek, NY-Penn.-Ont. [1986] quadrangles).

The addendum investigation was conducted by Panamerican in November 2015. Mr. Robert J. Hanley, M.A., RPA and Ms. Christine M. Longiaru, M.A., served as Co-Principal Investigators. Ms. Longiaru also served as Architectural Historian and Mr. Hanley served as Project Archaeologists. Dr. Donald A. Smith, RPA, served as Geographic Information Analyst and Mr. Mark Steinback 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. 2015).

# 2.0 Archaeological Investigation

# 2.1 PREVIOUS INVESTIGATIONS

The layout of the current Ball Hill Wind Project has significant overlap with that of the previously-proposed versions of the project, none of which were constructed (see Figure 1.2). Three cultural resources investigations were completed for the 2008 configuration of the project: a Phase I archaeological survey (Hanley et al. 2008a); an addendum archaeological investigation in which additional project components (e.g., LDAs, a switchyard, and a substation) were addressed (Hanley et al. 2008b); and an historical architectural investigation, which assessed the effects of the project on historical cultural resources in the surrounding landscape (Longiaru et al. 2008). In 2013, the project was redesigned and an archaeological and architectural assessment addendum (Smith et al. 2013) was prepared. The discussion of the results of the previous historic structures investigations is presented in a separate report (Longiaru et al. 2015).

# 2.2 CURRENT PROJECT AREA RELATIVE TO PREVIOUSLY INVESTIGATED AREAS AND RESULTS

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. NYSHPO Guidelines for Wind Farm Development Cultural Resources Survey Work (2006) outlines a sampling methodology for wind-power project archaeological investigations that is largely based on three criteria: the relative distribution of "environmental zones" within the project's physical / archaeological APE; the presence of previously identified archaeological sites in or near the APE; and the locations of structures shown on historical maps and that are not now extant (i.e., map-documented structures [MDSs]) in or near the APE. Below-ground investigation includes the excavation of shovel test pits (STPs) at a five-meter interval in representative portions of each environmental zone present in a project area. The number of STPs for a project survey is determined by multiplying the project area acreage by 16 and the resulting total STPs are proportionally distributing among the environmental zones, relative to the percentage of the project area covered by each. Also, all locations of previously identified sites or MDSs are tested; the numbers of shovel tests excavated at each are included in the overall distribution of tests based on the environmental zones.

**2.2.1 Environmental Zones.** The area for the original project design was surveyed during the 2008 Phase 1 cultural resources investigations (Hanley et al. 2008a, 2008b). The area investigated totaled 400.61 acres that extended across parts of six environmental zones, including: areas near streams and stream headwaters; bogs, swamps, and ponds; lake plain (i.e., Lake Erie lake plain); upland slope / margin (i.e., the slope along the southern boundary of the lake plain); summits, knolls and ridges; and upland areas between summits and knolls (Table 2.1; see Hanley et al. 2008a:3-2, 2008b). The zones were tested with a total of 6,416 shovel tests distributed among 16 turbine locations, 23 portions of 21 project linear components (Hanley et al. 2008a); and one laydown area (Hanley et al. 2008b; Figure 2.1).

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 (Figure 2.2 and Table 2.1; see Figure 1.2). Thus, the areas selected for testing in 2008 were distributed

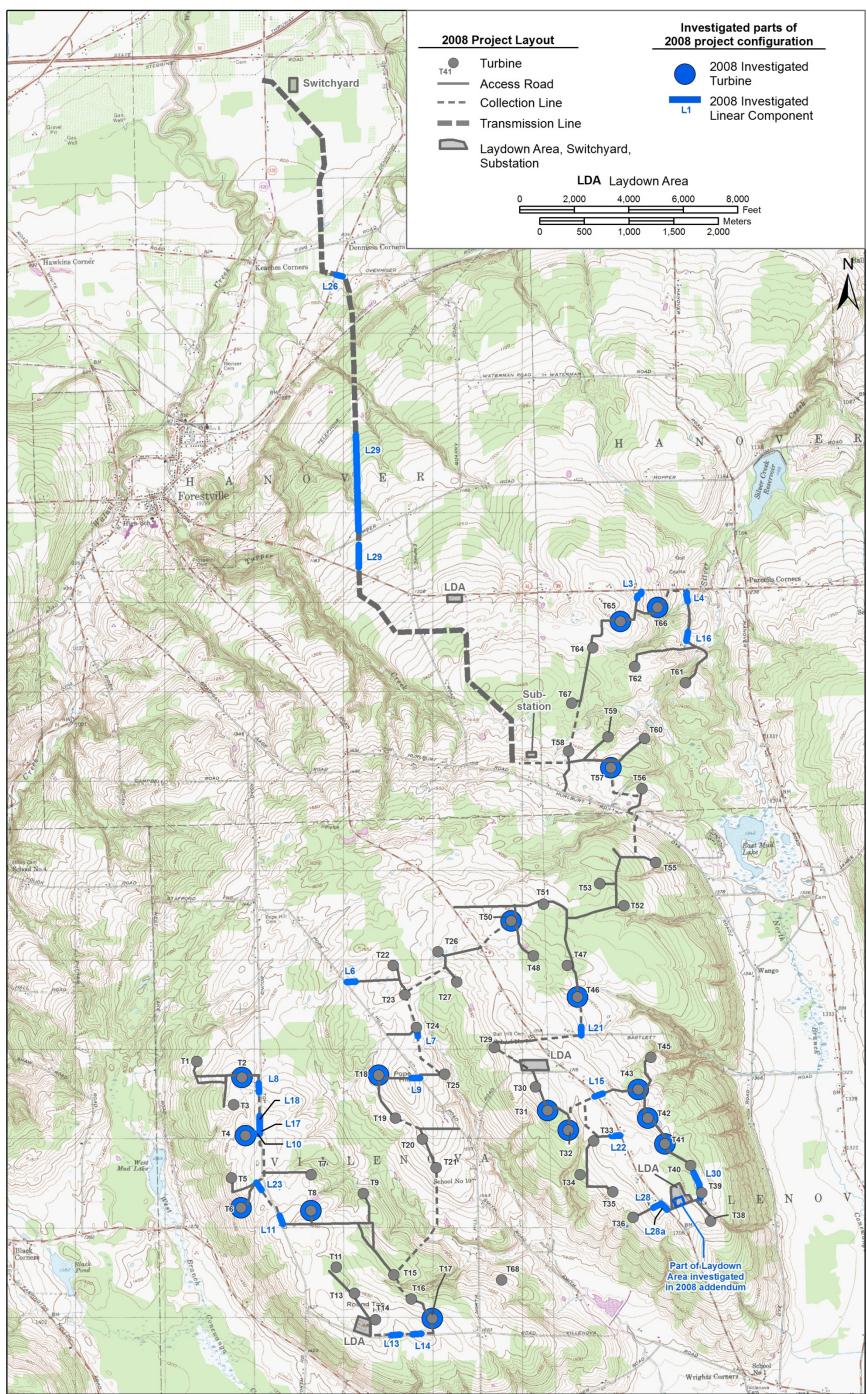


Figure 2.1. Portions of the 2008 Ball Hill Wind Project selected for archaeological survey (Base Maps: USGS 24k Series Topographic: Silver Creek, NY 1960, Farnham, NY 1960, Perrysburg, NY 1979, Forestville, NY 1979).

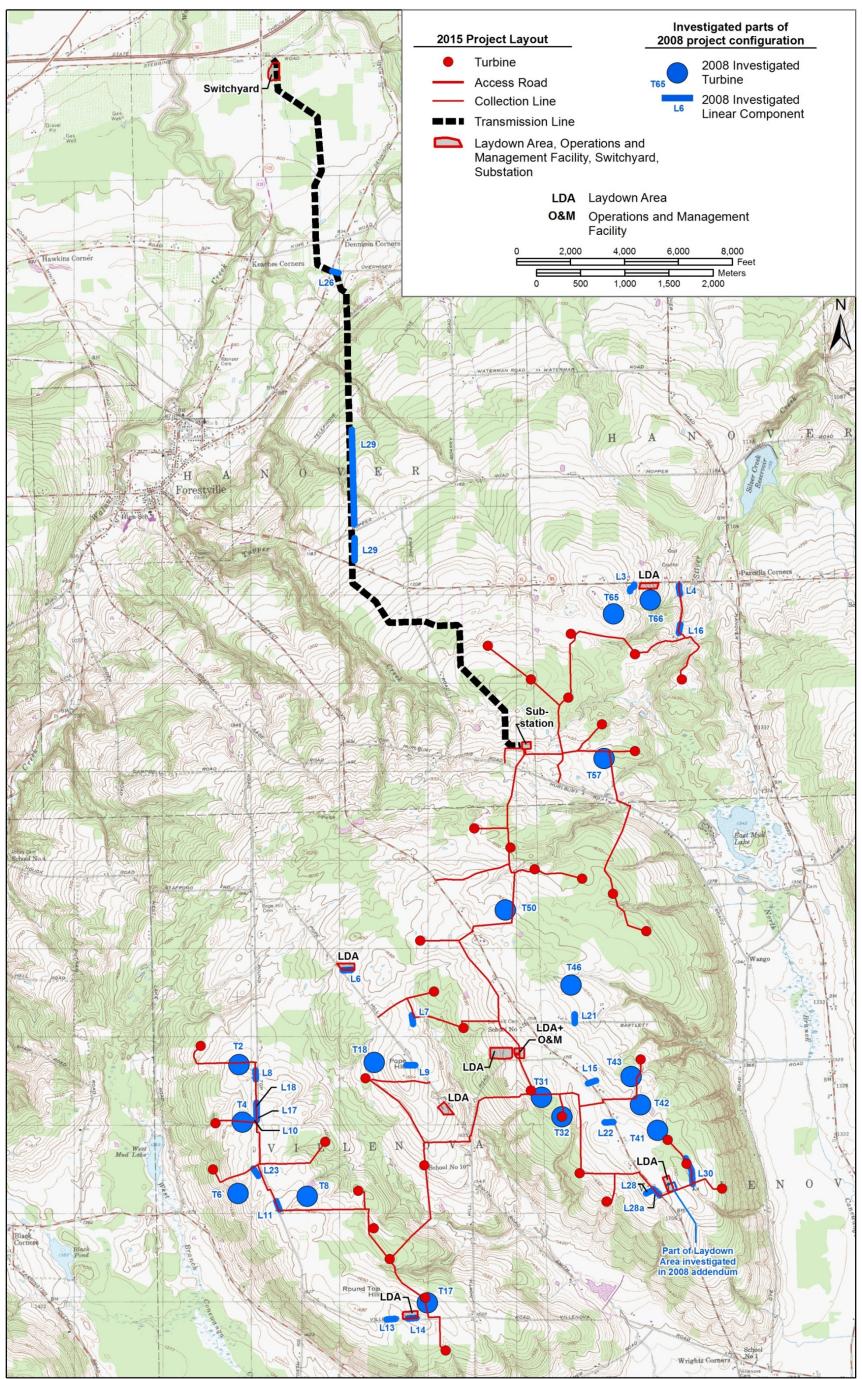


Figure 2.2. Portions of the 2008 Ball Hill Wind Project selected for archaeological survey relative to the current project area (Base Maps: USGS 24k Series Topographic: Silver Creek, NY 1960, Farnham, NY 1960, Perrysburg, NY 1979, Forestville, NY 1979).

across environmental zones at a similar ratio to how areas would be tested in the current project area (see Figure 2.2). Also, many of the areas investigated in 2008 are within the current APE. Therefore, on the basis of the SHPO Wind Farm Guidelines' environmental zone criterion, the results of the archaeological testing completed during the 2008 investigation are approximately also representative of the project's 2015 configuration.

Table 2.1. Environmental Zone Distribution for 2008, 2013, and Current Project Configurations.

Landform	Project Configuration 2008 Reports	Project Configuration 2013 Report	Current Project Configuration
Areas near streams	1.82%	2.55%	12.09%
Bogs, swamps, or ponds	0.56%	1.75%	1.75%
Lake Plain	5.53%	6.54%	3.07%
Upland Margin	13.65%	13.86%	14.97%
Summits, knolls, and ridges	10.67%	6.94%	9.10%
Uplands between summits and knolls	67.78%	68.36%	59.02%

**2.2.2 Project Size.** The current project area totals approximately 354.8 acres, an area for which the Wind Farm Guidelines recommend below-ground survey with 5,677 STPs (354.8 acres x 16 STPs per acre). A total of 6,416 shovel tests were dug for the 2008 configuration, which covered 401 acres (6,416 tests = 401 acres x 16 tests per acre). Thus, on the basis of the guidelines' recommendations concerning intensity of below-ground investigation, the number of shovel tests dug for the project's 2008 layout exceeds what would be needed for the 2015 configuration (by 739 shovel test pits).

**2.2.3** *Previous Investigation Results.* Despite the large number of shovel tests dug during the previous investigations for the project, a relatively small number of archaeological resources were identified. Just two precontact-period artifacts were found during the studies – both of which were isolated reduction flake finds – and three historic sites were located at MDS locations (see below). The sparseness of precontact finds is consistent with the hypothesis that the project area in general is not sensitive for precontact-period archaeological resources. The identified historical sites cluster at MDS locations.

# 2.3 SITE FILE REVIEW AND HISTORICAL MAP RESEARCH

A review of archaeological site files at the New York State Office of Parks, Recreation and Historic Preservation (OPRHP) and the New York State Museum (NYSM) was conducted during the previous investigations for the project and revealed that there were 18 previously identified archaeological sites within five miles of the project area. None were in or near the 2008 or 2013 configurations (see Hanley 2008a:2-14). A review of the OPRHP archaeological site-file database accessed through the New York State Cultural Resource Information System (CRIS) for the current project configuration identified nine archeological sites within one mile of its proposed turbine locations (Table 2.2). Two of these sites are unidentified precontact sites, five are historic Euro-American, and two have no information but are likely precontact. In addition, one historic site was identified during a previous design phase of the project that was not listed in CRIS. None of the sites are in the current physical project area.

Table 2.2. Archaeological sites within approximately one mile of the project area.

OPRHP Site #	Additional Site #	Distance to APE ft (m)	Time Period	Site Type
01314.000059	PCI/Ball Hill 1	200 (60)	1867-1900	Foundation with historic artifacts
01326.000001	UB 2217; Villenova 3	250	Unidentified precontact	Camp
01326.000004	UB 2231, Villenova 5	5,200	Unidentified precontact	Camp
01326.000064	PCI/Ball Hill 2	500	1867-1900	Foundation with historic artifacts
01326.000045	Hamlet Site; UB 2999; NYSM 10774	2,850	1825-1900	Foundry debris
01326.000046	Hotel Site; UB 3026; NYSM 10775	2.750	1867-1900	Domestic debris
01326.000047	Bolt Site; UB 3025; NYSM 10776	2.750	1867-1900	Domestic debris
	NYSM 1903; Hubbard #1 (CCR 1-1)	1,975	No information	Cemetery
	NYSM 1904; Hubbard #2 (CCR 2-1)	2,200	No information	Mound
	PCI/Ball Hill 3	300	Mid-nineteenth century-mid- twentieth century	Domestic debris

Inspection of historical maps, including Stewart (1867), Beers (1881), and the USGS Cherry Creek (1900) and Silver Creek (1899) topographical quadrangles, conducted during the 2008 investigations revealed that project access roads and collection lines crossed the locations of 20 MDSs. Archaeological survey at these locations identified two historical sites, which were designated PCI/Ball Hill-1 (01314.000059) and PCI/Ball Hill-2 (01326.000064). Project components were redesigned in 2008 to avoid those sites (Hanley et al. 2008a, 2008b). PCI/Ball Hill-1 is roughly 60 meters (200 ft) from one of the current project laydown areas, but close interval shovel testing conducted near the site in 2008 indicates it will not be affected by the project.

The 2013 configuration included several areas in the Town of Villenova that were well outside the archaeological APE of the 2008 layout. Inspection of the historical maps indicated these parts of the project area intersected with two MDS locations. The 2013 report included the investigation of a third MDS (PCI/Ball Hill 3) that was investigated as part of 2012 interim configuration that was later dropped from the 2013 "final" configuration.

Three MDS areas (identified as areas A, B, and C) were investigated as a result of design changes for the 2012/2013 configuration. Area A's investigation included the excavation of 24 shovel tests, which recovered two historical artifacts. No historical structures, artifact deposits, or other features were noted anywhere in Area A, nor were any prehistoric remains of any kind found. Area B's investigation included the excavation of 20 shovel tests, which recovered two artifacts. No historical structures, ruins, artifact deposits, or other features were noted anywhere in the project area, nor were any prehistoric remains of any kind found (Smith et al. 20013).

Area C's investigation included the excavation of 26 shovel tests. A total of 59 historical artifacts were found in 14 shovel tests in this area and an additional 27 historical items were found on the surface. The 86 total artifacts comprise 21 architectural items, 64 non-architectural items, and one artifact—an iron bolt—that may belong with either artifact class. No prehistoric remains of any kind were found in Area C. The historical remains found in Area C were designated Site PCI/Ball Hill-3. An OPRHP site form was submitted, but the site is not listed within CRIS. This area was outside the 2013 configuration (Smith et al. 2013) and is also outside the current layout.

The historical maps reviewed for the 2015 project included Keeney (1854), Stewart (1867), Beers (1881), and the USGS Cherry Creek (1900) and Silver Creek (1899) topographical quadrangles. The parts of the project area outside its previous configurations do not cross the locations of any MDSs shown on the maps.

# 2.4 CONCLUSIONS AND RECOMMENDATIONS

The redesigned configuration of the Ball Hill Wind Project has an area of potential effect that measures 354.8 acres. This APE has 46.2 fewer acres than the area previously surveyed for the Phase 1 investigation of the original 401-acre project design. The APE of the new design crosses similar environmental zone "Local Habitat Areas" as 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 cultural resources have been identified in the current project area. As revealed by the 2008 investigations, the terrain around the project area is typically not sensitive for precontact-period archaeological resources. Although historical-period sites are present, they cluster at the locations of MDSs. Since there are no MDSs in the portions of the current project area outside its previous configurations, it is highly unlikely that historical sites are located there.

Thus, the 2015 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.* Panamerican does not recommend any further cultural resources investigations for the current design of the Ball Hill Wind Project.

# 3.0 References

Beauchamp, William M.

1900 Aboriginal Occupation of New York. New York State Museum Bulletin 7(32). Albany.

Beers. Frederick W.

1881 Illustrated Historical Atlas of the County of Chautaugua, New York. F.W. Beers, New York.

Funk, Robert E.

1993 Archaeological Investigations in the Upper Susquehanna Valley, New York State, Volume 1. Persimmon Press, Buffalo.

Hanley, Robert J., Michael A. Cinquino, Rebecca J. Emans, and Joseph Kline

2008b Addendum to the Phase I Cultural Resources Investigation for the Proposed Noble Ball Hill Windpark, Towns of Villenova and Hanover, Chautauqua County, New York (OPRHP #08PR01814). Panamerican Consultants, Inc., Buffalo Branch, Buffalo. Prepared for Noble Ball Hill Windpark, LLC, Essex, CT.

Hanley, Robert J., Mark A. Steinback, Michael A. Cinquino, Rebecca J. Emans, Edwin Button, Sharon Jenkins, and Donald Smith

2008a Phase I Cultural Resources Investigation for the Proposed Noble Ball Hill Windpark, Towns of Villenova and Hanover, Chautauqua County, New York (OPRHP #08PR01814). Panamerican Consultants, Inc., Buffalo Branch, Buffalo. Prepared for Noble Ball Hill Windpark, LLC., Essex, CT.

Keeney, Collins G.

1854 Map of Chautauque County. Collins G. Keeney, Philadelphia. Electronic Document, http://www.rootsweb.ancestry.com/~nychauta/HISTORY/1854Atlas/WallMapOfChautauquaCount y1854.html, accessed December 1, 2015.

Longiaru, Christine M., Kelly M. Mahar, Frank J. Schieppati, Donald Smith, Mark A. Steinback, Michael A. Cinquino, and Martin Wachadlo

2008 Architectural Survey (Five-mile APE) for the Proposed Noble Ball Hill Windpark, Towns of Villenova and Hanover, Chautauqua County, New York (OPRHP #08PR01814). Panamerican Consultants, Inc., Buffalo Branch, Buffalo. Prepared for Noble Ball Hill Windpark, LLC, Essex, CT.

Longiaru, Christine M., Mark A. Steinback, Donald Smith, and Michael A. Cinquino

2015 Architectural Survey for the Ball Hill Wind Project, Towns of Villenova and Hanover, Chautauqua County, New York. Addendum #2. Panamerican Consultants, Inc., Buffalo Branch, Buffalo. Prepared for Ecology & Environment, Inc., Lancaster, NY.

New York Archaeological Council (NYAC)

1994 Standards for Cultural Resources Investigations and the Curation of Archaeological Collections in New York State. New York Archaeological Council, Albany, NY.

New York State Historic Preservation Office (NYSHPO)

2006 Guidelines for Wind Farm Development Cultural Resources Survey Work. New York State Historic Preservation Office, Office of Parks, Recreation and Historic Preservation, Peebles Island, Waterford.

Parker, Arthur C.

1922 The Archaeological History of New York. New York State Museum Bulletin Nos. 235-238. Albany.

# Puglia, Paul S.

1994 Soil Survey of Chautauqua County, New York. United States Department of Agriculture, Soil Conservation Service in cooperation with the Cornell University Agricultural Experiment Station. U.S. Government Printing Office, Washington, D.C.

#### Ritchie, William A.

1980 The Archaeology of New York State. Revised. Harbor Hill Books, Harrison, NY.

Smith, Donald, Christine M. Longiaru, Frank J. Schieppati, Mark A. Steinback, and Michael A. Cinquino 2013 Archaeological and Architectural Survey for the Duke Energy Ball Hill Windpark Addendum, Town of Villenova and Hanover, Chautauqua County, New York. #08PR01814. Panamerican Consultants, Inc., Buffalo Branch, Buffalo. Prepared for Ecology & Environment, Inc., Lancaster, NY.

# Stewart, William

1867 New Topographical Atlas of Chautauqua County, New York. William Stewart, Publisher, Philadelphia.

#### U.S. Geological Survey (USGS)

- 1899 Silver Creek, NY. 15 Minute Series Quadrangle Maps, U.S. Government Printing Office, Washington, D.C. Historic USGS Maps of New England & New York, Documents Department & Data Center, Dimond Library, University of New Hampshire, Durham. Electronic document, http://docs.unh.edu/nhtopos/CherryCreek.htm, accessed December 1, 2015.
- 1900 Cherry Creek, NY. 15 Minute Series Quadrangle Maps, U.S. Government Printing Office, Washington, D.C. Historic USGS Maps of New England & New York, Documents Department & Data Center, Dimond Library, University of New Hampshire, Durham. Electronic document, http://docs.unh.edu/nhtopos/CherryCreek.htm, accessed December 1, 2015.
- 1960 Farnham, New York Quadrangle, 7.5 Minute Series (Topographic). U.S. Geological Survey, Department of the Interior, Washington, D.C.
- 1960 Silver Creek, New York Quadrangle, 7.5 Minute Series (Topographic). U.S. Geological Survey, Department of the Interior, Washington, D.C.
- 1979 [1954] Forestville, New York Quadrangle, 7.5 Minute Series (Topographic). Photorevised. U.S. Geological Survey, Department of the Interior, Washington, D.C.
- 1979 [1954] *Perrysburg, New York Quadrangle, 7.5 Minute Series (Topographic).* Photorevised. U.S. Geological Survey, Department of the Interior, Washington, D.C.