


Phase 1B Archaeological Survey

Cassadaga Wind Project

Towns of Charlotte, Cherry Creek, Arkwright, and Stockton, Chautauqua County, New York

Prepared for:

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MANAGEMENT SUMMARY

SHPO Project Review Number:	15PR02730
Involved State and Federal Agencies:	NYSDPS, NYSDEC, NYSOPRHP (Article 10 of the Public Service Law) NYSOPRHP (Section 14.09 of the NYS Parks, Recreation, and Historic Preservation Law) USACE (Section 106 of the National Historic Preservation Act)
Phase of Survey:	Phase 1B Archaeological Survey
Location Information:	Towns of Arkwright, Charlotte, Cherry Creek, and Stockton, Chautauqua County
Survey Area:	
Project Description:	Up to 58 wind turbines and associated infrastructure 5.5-mile long 115Kv generator lead line
Project Area:	Approximately 8,041 acres (Archaeological APE is 471.2 acres)
USGS 7.5-Minute Quadrangle Maps:	*Cassadaga, Hamlet, Cherry Creek and Forestville, NY*
Archaeological Survey Overview:	
Number/interval of shovel tests:	3,853 at 1- to 5-meter (3- to 16-foot) intervals
Number/size of excavation units:	N/A (Phase 1B only)
Pedestrian surface survey:	174.7 acres
Surface survey transect interval:	Approximately 3-5 meters (approximately 10-16 feet)
Results of Archaeological Survey:	
Pre-contact sites identified:	6
Historic sites identified:	10
Report Authors:	Nicholas P. Freeland, RPA Grant Johnson
Date of Report:	April 2016

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1.0 INTRODUCTION

1.1 Purpose of the Investigation

On behalf of Cassadaga Wind, LLC (a subsidiary of EverPower Wind Holdings, Inc. [Everpower]), Environmental Design & Research, Landscape Architecture, Engineering, and Environmental Services, D.P.C. (EDR) conducted a Phase 1B archaeological survey for the proposed Cassadaga Wind Project (the Project), located in the Towns of Arkwright, Charlotte, Cherry Creek, and Stockton in Chautauqua County, New York. The purpose of the Phase 1B survey is to determine whether archaeological sites are located in the areas that may be affected by the proposed Project. The information and recommendations included in this report are intended to assist the New York State Department of Public Service (NYSDPS), the New York State Office of Parks, Recreation and Historic Preservation (NYSOPRHP), the U.S. Army Corps of Engineers (USACE), and other New York state and/or federal agencies in their review of the Project under Article 10 of the New York State Public Service Law, Section 14.09 of the New York State Parks, Recreation, and Historic Preservation Law, and/or Section 106 of the National Historic Preservation Act, as applicable. Please note that this report addresses only archaeological resources; information concerning the Project's potential effect on historic-architectural resources has been (and will continue to be) provided to NYSOPRHP under separate cover. This Phase 1B survey was conducted under the supervision of a Registered Professional Archaeologist (RPA) in a manner consistent with the New York State Historic Preservation Office Guidelines for Wind Farm Development Cultural Resources Survey Work (the SHPO Wind Guidelines) issued by the New York State Office of Parks, Recreation, and Historic Preservation (NYSOPRHP) in 2006 (NYSOPRHP, 2006). In addition, the Phase 1B survey was conducted in accordance with a *Phase 1A Archaeological Survey and Phase 1B Fieldwork Plan* (EDR, 2015), which was reviewed and approved by NYSOPRHP prior to conducting the survey (see Section 2.1 of this report, below). This Phase 1B report was prepared in accordance with NYSOPRHP's Phase 1 Archaeological Report Format Requirements (NYSOPRHP, 2005).

The following terms are used throughout this document to describe the proposed action:

- **The Project**: the Cassadaga Wind Project, which includes up to 58 wind turbines and associated infrastructure in the Towns of Arkwright, Charlotte, Cherry Creek, and Stockton in Chautauqua County, New York (Figures 1 and 2).
- **Project Site:** the Project site is defined as all the property parcels containing proposed Project components of the current Project layout.
- **Archaeological Area of Potential Effect (APE)**: The archaeological Area of Potential Effect (or APE) for the Project is the area containing all proposed soil disturbance associated with the Project. The current Project layout has an archaeological APE of 471.2 acres (see Figure 2).

- **The Archaeological Study Area**: A 35,365-acre box around the archaeological APE which served as the limits for all analysis associated with the archaeological landscape model (see Section 2.0).

1.2 Project Location and Description

Everpower Wind Holdings, Inc. (the Applicant), is proposing to construct a wind energy generation facility (and associated necessary Project infrastructure) in the Towns of Arkwright, Charlotte, Cherry Creek, and Stockton in Chautauqua County, New York (Figure 1). The current Project Site includes approximately 8,041 acres of leased private lands that are roughly bound by State Route 60 to the west, the Gerry and Ellington town lines to the south, the Conewango Creek Valley to the west, and the Arkwright and Villenova town lines to the north (Figures 1 and 2). The Project site consists of open fields, mature forests, areas of successional shrubland and wetlands, with elevations ranging between approximately 1,411 feet (ft) (430 m) above mean sea level (AMSL) along Picket Brook in the northwestern portion of the Archaeological Study Area and approximately 2,083 ft (635 m) AMSL at the summit of Pickett Hill in the southeastern portion of the Archaeological Study Area (Figure 3). Land use within the Project site is dominated by second growth forest as well as active and reverting agricultural land. With the exception of the villages of Cassadaga, Cherry Creek, and Sinclairville, to the west, east, and southwest, respectively of the Project site, the area surrounding the Project site is primarily undeveloped, with farms and rural residences interspersed along area roadways.

The Project will consist of up to 58 wind turbines, with a maximum generating capacity of 126 Megawatts (MW). Wind turbines will only be located in the Towns of Cherry Creek, Charlotte and Arkwright. Other proposed components will include: approximately 18 miles of access roads; approximately 33 miles of above and underground 34.5 kilovolt (kV) collection lines; an approximately 5.5-mile long above ground 115 kV generator lead line; a collection substation; a point of interconnection (POI) substation; two permanent meteorological (met) towers; two temporary staging/laydown yards; and an Operations and Maintenance (O&M) building (see Figure 2). The only proposed Project components in the Town of Stockton are a short section of the generator lead line and the POI substation.

The Project presented herein consists of up to 58 wind turbines, each with a nameplate capacity rating of 2.1 to 3.45 MW (depending on the final turbine model selected), and as previously indicated the total generating capacity of the Facility will not exceed 126 MW. Therefore, up to 58 turbines will be constructed, depending on the model of turbine ultimately selected (i.e., if a 3.45 MW turbine is selected, it is expected that up to 36 turbines will be constructed, while if a 2.3 MW turbine is selected, it is expected that up to 54 turbines will be constructed). However, this analyses in this report are based on a 58 turbine layout in order to present the most conservative assessment of potential impacts.

2.0 BACKGROUND AND RESEARCH DESIGN

2.1 NYSOPRHP Consultation

EDR submitted an initial consultation submission for the Project on June 1, 2015 and NYSOPRHP responded on June 24, 2015 with a request for a map of the area of potential effect (APE) for direct effects for the Project. In response, EDR submitted the *Phase 1A Archaeological Resources Survey and Phase 1B Fieldwork Plan* (EDR, 2015) on August 4, 2015. In this document, EDR (2015) summarized previous archaeological projects and sites within the Project site and described EDR's intended approach for the archaeological survey. In correspondence dated September 17, 2015, NYSOPRHP concurred with EDR's (2015) Phase 1B Fieldwork Plan (Herter, 2015).

In summary, the scope of the Phase 1B archaeological survey described herein was developed in consultation with NYSOPRHP as described above and memorialized in correspondence included in Appendix A. The Phase 1A Archaeological Resources Report and Phase 1B Fieldwork Plan is included in this report as Appendix B. Previously conducted archaeological surveys and previously recorded archaeological sites are summarized in Section 2.2, and the scope (or research design) for the Phase 1B survey is further described in Section 2.4 of this report.

2.2 Summary of Previous Archaeological Studies and Results

As summarized in EDR (2015:19-21), two previous Phase 1A/1B archaeological surveys have been undertaken within the Archaeological Study Area; however, neither of these surveys overlap with the current archaeological APE for the Project. Ten previously recorded archaeological sites occur within 1 mile (1.6 km) of the Project. Two of these sites, one multicomponent historic and prehistoric (A01306.000350), and one prehistoric (A01306.000349), occur within the Archaeological Study Area but well outside the current Project APE (Figure 4). Both sites are currently unevaluated with regard to the State/National Register of Historic Places (S/NRHP). These sites will not be impacted by the proposed development of the Project (as currently conceived), and no further work is recommended for them. Based on the history and prehistory of the area, as well as the presence of previously recorded archaeological sites within and near the Project site, EDR (2015:22-23) determined areas in close proximity to drainages and/or wetlands to be of moderate to high sensitivity for prehistoric archaeological sites, and areas in close proximity to historic map-documented structures (MDS) to be of high sensitivity for historic archaeological sites.

2.3 Project's Area of Potential Effect for Archaeological Resources

A project's archaeological APE is defined as those areas where soil disturbance is proposed to occur during construction. The descriptions below characterize the anticipated limits of soil disturbance for each proposed Project component (see Figure 2), which cumulatively make up the Cassadaga Wind Project's archaeological APE. For purposes of describing the APE, the areas of disturbance listed below represent the temporary extent of soil

disturbance anticipated to occur during Project construction and do not represent permanent soil disturbance associated with the Project. Note that the Phase 1B archaeological survey was conducted concurrently with wetland survey and delineation and that several proposed Project components were moved following the surveys to reduce impacts to wetlands and archaeological sites. Therefore, some areas which were subject to the Phase 1B archaeological survey are no longer included in the Project APE, although they were within the APE at the time of the survey.

- **Wind Turbines**. A 200-foot radius around each of the 58 proposed WTG sites will be temporarily stripped of topsoil and graded to create a workspace for WTG assembly and erection. This will result in soil disturbance of approximately 2.9 acres per WTG.
- **Access Roads**. The proposed length of all Facility access roads is approximately 18 miles, some of which will be upgrades to existing farm lanes/logging roads. The maximum width of temporary soil disturbance for access road construction will be 60 ft. Existing farm lanes and woods roads will be used wherever practical to minimize new ground disturbance and vegetation clearing.
- **Collection Lines**. The proposed length of combined overhead and underground collection lines that will collect power from the turbines to deliver to the collection substation is approximately 33 miles. Although underground cabling is the primary option for the electrical collector system, overhead cables will also be used where requested by landowners or where underground installation is prohibitive or infeasible due to constraints such as steep slopes, rivers, streams or creek crossings, bedrock etc. The maximum width of temporary soil disturbance will be 40 ft for buried collection line construction. The maximum width of temporary soil disturbance for overhead collection line construction is 15 ft; however, for the purposes of defining the archaeological APE, EDR used a 100-ft wide corridor which represents the maximum extent of vegetation clearing.
- **115 kV Generator Lead Line:** The 115 kV overhead generator lead line will be approximately 5.5 miles long and will connect the collection substation to the POI substation. Although transmission line design is currently preliminary, it is anticipated that the line will be carried on treated wood pole or steel structures. The maximum width of temporary soil disturbance for generator lead line construction is 15 ft; however, for the purposes of defining the archaeological APE, EDR used a 100-ft wide corridor which represents the maximum extent of vegetation clearing.
- **Meteorological Tower**. Two permanent wind measurement towers (meteorological tower) will be installed to collect wind data and support performance testing of the Facility. A 117-ft radius around both proposed meteorological tower sites will be temporarily stripped of topsoil and graded to create a workspace for tower assembly and erection. This will result in soil disturbance of approximately 1.0-acre per meteorological tower.

- **Temporary Staging/Laydown Areas**. Construction of the Facility will require the development of two temporary construction staging/laydown areas, which will accommodate construction trailers, storage containers, large project components, and parking for construction workers. Together, the two staging/laydown areas are anticipated to disturb a maximum of 7.2 acres.
- **Collector Substation**. This is the terminus of the 34.5 kV collection system, which will be located at the beginning of the 115 kV line. The proposed collection substation will be located in an old field on the west side of Cleland Road in the Town of Charlotte. The maximum extent of soil disturbance associated with the collector substation will be approximately 1.4 acres.
- **POI Substation**. The POI substation will be located immediately adjacent to National Grid's existing Dunkirk-Moon 115 kV transmission line, on the north side of Moon Road in the Town of Stockton. The maximum extent of soil disturbance associated with the collector substation will be approximately 5.0 acres.
- **Operations & Maintenance (O&M) Building**. An O&M building will house the permanent O&M staff offices. The land adjacent to the O&M building will also be used to store equipment as necessary, and the maximum extent of soil disturbance associated with this facility is anticipated to be up to be approximately 2.5 acres.

Based on these impact assumptions, the Project's archaeological APE is 471.2 acres in size. Note that this represents the total areas that will be temporarily disturbed by construction. Following construction, the operating Project is anticipated to have a permanent footprint that is significantly smaller.

2.4 Phase 1B Archaeological Survey Research Design

The archaeological survey work for the Project was conducted in accordance with the *SHPO Wind Guidelines*, which specify an archaeological testing methodology that intensively samples selected areas within the larger Project Area (NYSOPRHP, 2006). The amount of archaeological survey work conducted (i.e., the number of shovel tests pits [STPs] excavated) was determined based on the total area of anticipated ground disturbance (i.e., the archaeological APE). The *SHPO Wind Guidelines* are based on the assumption that additional archaeological survey work is not necessary if Project components move around during the Project development process, as long as the total area of ground disturbance for the Project does not increase.

As described in the Phase 1B Archaeological Work Plan (EDR, 2015; see Appendix B), the *SHPO Wind Guidelines* suggest following the approach detailed in *Archeological Investigations in the Upper Susquehanna Valley, New York State* (Funk, 1993a, 1993b) in the design of archaeological surveys for wind projects. The approach involves identification of broad environmental zones with local habitat (or landscape class) subdivisions and design of the archaeological survey to include intensive sampling of selected areas within each of the identified landscape classes, rather than undertaking an even distribution of sampling throughout the APE. Following this approach, EDR used

Geographic Information System (GIS) software to identify landscape classes within the Cassadaga Wind Project site and used this information to design the proposed archaeological sampling strategy (Figure 5). EDR (2015) performed a GIS-based landscape classification analysis for the Project site in accordance with the *SHPO Wind Guidelines* which is included in its entirety in the Phase 1A Archaeological Resources Survey and Phase 1B Fieldwork Plan (EDR, 2015) which is attached to this report as Appendix B (and see Figure 5). A summary of the landscape classification model is described in full in EDR (2015) (Appendix B) and the current Phase 1B archaeological survey is presented in terms of the model in Table 1.

The locations of areas selected for intensive archaeological sampling within the archaeological APE were made on a judgmental basis in the field under the direction of a Registered Professional Archeologist (RPA). Selection of areas for shovel testing, in accordance with the research design presented in Table 1, prioritized areas of high sensitivity for historic or prehistoric archaeological sites within or adjacent to proposed Project components. In general, high prehistoric archaeological sensitivity was assigned to areas with little to no slope, moderate- to well-drained soils, and close proximity to water sources. High historic archaeological sensitivity was assigned to areas of the APE in close proximity to structures depicted on historic maps (i.e., map-documented structures).

Table 1. Summary of Archaeological Survey Level of Effort by Landscape Class

Landscape Classification	Proposed Number of Shovel Tests	Actual Number of Shovel Tests	Proposed Surface Survey Acreage (Cultivated Areas)	Actual Surface Survey Acreage (Cultivated Areas)	Total Acreage Surveyed (Includes Shovel Tests at 16 Shovel Tests/Acre)	Total % Complete Relative to Research Design
Steep Slopes (>12%)	n/a	0	0	0.1	0.1	N/A
Upland Ridges and Knolls						
No Associated Water	1,620 [1]	1,784	26.3	73.7	296.7	233
Near Wetland/Hydric Soil	825	888	7.4	14.5	70.0	119%
Near Stream	68	82	0	0.5	5.6	132%
Upland Saddles						
No Associated Water	309 [1]	180	23.1	12.2	34.7	82%
Near Wetland/Hydric Soil	358	335	0.8	15.1	36.0	156%
Near Stream	64	45	0	4.4	7.2	180%
Valley Wall						
No Associated Water	221 [1]	115	10.5	45.1	59.5	245%
Near Wetland/Hydric Soil	128	196	0.5	5.2	17.5	205%
Near Stream	27	20	0	3.9	5.2	305%
Valley Floor Ridges and Knolls						
No Associated Water	0	0	0	0	0	--
Near Wetland/Hydric Soil	0	0	0	0	0	--
Near Stream	0	0	0	0	0	--
Valley Floor						
No Associated Water	9 [1]	20	0.2	0	2.5	328%
Near Wetland/Hydric Soil	51	134	0	0	8.4	263%
Near Stream	36	54	0.2	0	3.4	138%

Total	**3,716**	**3,853**	**69**	**174.7**	**546.6**	181%

[1] The proposed number of shovel tests in areas with "No Associated Water" (i.e., those areas located more than 100 meters or 328 ft from a mapped stream, wetland, or areas with greater than 66% hydric soils) was reduced by 50% to reflect that Native American archaeological sites are not typically located in these areas.

3.0 PHASE 1B ARCHAEOLOGICAL SURVEY

3.1 Phase 1B Archaeological Survey Fieldwork Organization and Methods

EDR conducted Phase 1B archaeological survey fieldwork at the Project site between October 6 and November 18, 2015. Nicholas P. Freeland, RPA supervised fieldwork undertaken by Megan Comins, Jessica Devlin, Heather Little, Andrew Nelson, Murat O'Hara, Katrina Ollesch, Emilia Stanfill, and Jonathan Wiener.

EDR conducted Phase 1B archaeological survey fieldwork, within the limits of proposed disturbance for the Project (i.e., the archaeological APE), which included:

- Pedestrian surface survey in actively cultivated areas where ground surface visibility exceeded 70% (per the New York Archaeological Council's *Cultural Resource Standards Handbook* [the *NYAC Standards*] [NYAC, 1994]), and
- The excavation of STPs in areas where ground surface visibility was less than 70% (i.e., forests, idle/successional areas, and hay fields) also in accordance with the NYAC Standards (NYAC, 1994).

The SHPO *Wind Guidelines* (NYSOPRHP, 2006) call for intensive archaeological testing within limited sample areas distributed throughout the Project's APE based on a landscape classification model. The underlying assumption to this approach is that upland areas suitable to wind power development are most likely to include small and ephemeral pre-contact (Native American) archaeological sites (such as lithic scatters and camp sites) that are unlikely to be identified according to the NYSOPRHP standard 15-meter shovel testing interval. In accordance with these guidelines, EDR personnel completed shovel testing of individual archaeological survey areas by close-interval patterns (5-meter spacing) within wooded, idle, and hayfield areas to adequately test landscape types intersected by the Project site.

The locations of areas selected for intensive archaeological sampling within the archaeological APE were made on a judgmental basis in the field under the direction of a RPA, based on the landscape classification model. Selection of locations for shovel testing prioritized areas of high sensitivity for historic or prehistoric archaeological sites within or adjacent to proposed Project components. High prehistoric archaeological sensitivity was assigned to areas with little to no slope, moderate- to well-drained soils, and close proximity to water sources. High historic archaeological sensitivity was assigned to areas of the APE in close proximity (i.e., 200 ft or less) to MDS locations that were digitized by EDR from the 1854 Keeney Map of Chautauqua County (Keeney, 1854), the 1881 Beers Map of Chautauqua County (Beers, 1881), the 1900 *Cherry Creek* and *Dunkirk* United States Geological Survey (USGS) Topographic Maps (USGS, 1900a; 1900b), the 1941 *Cherry Creek* USGS Topographic Map (USGS, 1941), and the 1943 *Dunkirk USGS* Topographic Map (USGS, 1943). These MDS locations are depicted in Figure 4. EDR noted a total of 124 MDS within

or immediately adjacent to the Project site. Of these, 43 occur within or immediately adjacent to (i.e., closer than 200 ft [61 m]) proposed Project components (i.e., the archaeological APE) (see Figure 4).

The Phase 1B archaeological survey included the following:

- At select WTG locations, EDR personnel established a shovel testing grid of eight to nine transects with eight to nine shovel tests each, with shovel tests and transects spaced at a 5-meter interval, for a total of 64 to 81 shovel tests completed at each selected WTG site. EDR personnel typically aligned the grid according to magnetic north, with the grid centered on the proposed WTG site; however, EDR personnel occasionally offset the center of the grid or its alignment to accommodate local terrain or adjust for the presence of wetlands or other factors (see survey area A3 on Figure 6: Sheet 7 for example). Per project design specifications, EDR assumed a 200 foot radius of potential disturbance for each WTG site tested;
- At select generating site components (i.e., access roads, and collection lines) EDR personnel excavated shovel tests at 5-meter intervals along three to four transects, with transects spaced 5 meters apart for project components or co-located components (i.e., access roads and buried collection lines running parallel to each other). EDR personnel completed between 24 and 148 shovel tests in surveyed areas at locations in accordance with the research design (EDR, 2015). Per project design specifications, EDR assumed temporary soil disturbance from access roads to attain 60 ft in width, temporary disturbance from buried collection lines to attain 30 ft in width, and temporary disturbance from overhead collection lines to attain 100 ft. Additional project components (i.e., the substations, laydown yard) were shovel tested relative to their proposed dimensions.

For the purpose of organizing archaeological fieldwork, EDR divided the Project site into five areas (designated as Areas A though G), with individual archaeological survey areas (including both shovel testing and pedestrian survey) numbered sequentially, beginning with "1" within each given area. These include:

- Area A, which encompasses Project components located in the north-central to northeast portion of the Town of Charlotte (Figure 6, Sheets 1-4, 6-7). This area includes 10 archaeological survey areas (A1-A10).
- Area B, which encompasses Project components located in the northwest portion of the Town of Cherry Creek (Figure 6, Sheets 8-12). This area includes 10 archaeological survey areas (B1-B10).
- Area C, which encompasses Project components located in the east-central portion of the Town of Charlotte (Figure 6, Sheets 5, 13, and 25). This area includes five archaeological survey areas (C1-C5).
- Area D, which encompasses Project components located in the west-central portion of the Town of Cherry Creek (Figure 6, Sheets 14-17). This area includes seven archaeological survey areas (D1-D7).

- Area E, which encompasses Project components located in the southwest portion of the Town of Charlotte as well as the east-central portion of the town of Stockton (Figure 6, Sheets 18-24). This area includes 15 archaeological survey areas (E1-E15).
- Area F, which encompasses Project components located in the southeast portion of the Town of Charlotte (Figure 6, Sheets 26 and 27). This area includes four archaeological survey areas (F1-F4).
- Area G, which encompasses Project components located in the southwest portion of the Town of Cherry Creek (Figure 6, Sheets 28-30). This area includes eight archaeological survey areas (G1-G8).

EDR relied on shovel testing and pedestrian surface survey as the principal archaeological survey methods for its Phase 1B investigation of the Project site. EDR personnel excavated shovel tests to a diameter of 12-20 inches (30-50 cm) and to a depth of at least 4 inches (10 cm) into the "B" horizon subsoil stratum or to the limits of practical hand excavation. EDR personnel recorded the locations of shovel tests with professional-grade GPS equipment (with all field data post-processed), while also noting shovel test locations on field maps. EDR field personnel passed excavated soils through one-quarter inch hardware cloth to ensure uniform recovery of cultural material and recorded shovel test stratigraphic profile data on standardized field record sheets that included strata depth, Munsell soil colors, soil texture and inclusions, and any cultural materials (see Appendices D and E).

All recovered artifacts were placed in temporary field bags marked with standard provenience information and returned to EDR's Syracuse office for processing and placement in archival-grade polyethylene artifact bags. A complete listing of all recovered artifacts is included in Appendix F. In addition to shovel testing data collection, supervising EDR personnel also recorded field notes on the methods and results of testing and photographed field activities, paying close attention to representative views that clearly documented environmental setting, context, and existing conditions of a given archaeological survey area (Appendix C: Photographs 1-59). The locations of all archaeological survey areas subject to shovel testing or pedestrian survey are depicted in Figure 6. In the event that EDR personnel discovered modern cultural material (less than approximately 50 years in age since manufacture) in a shovel test, such as plastic materials, modern bottle glass fragments, or mid- to late twentieth-century architectural materials, personnel noted the material on field forms but did not collect it for subsequent analysis and curation.

The archaeological APE for the Project includes active agricultural lands (including pastures, corn, and hay fields), open meadows, forested/shrubland areas, and steeply sloped areas (i.e., areas in excess of 12% slopes per the NYAC Standards; NYAC, 1994). Following previously used fieldwork methods, EDR's archaeological survey work in these areas consisted of the following:

- **Corn fields**. In existing corn fields and/or previously cultivated areas with greater than 70% ground-surface visibility, EDR personnel conducted a pedestrian surface survey to determine whether archaeological sites are present (in accordance with the NYAC Standards; NYAC, 1994). In these areas, EDR personnel traversed the archaeological APE along transects spaced at 3 to 5-meter intervals while inspecting the ground surface for artifacts and/or archaeological features. If any artifacts or other indication of an archaeological site was observed on the ground surface, then the location of all finds were recorded using professional-grade Global Positioning System (GPS) equipment. After recording the locations of all artifacts and/or features in a given area, EDR personnel collected observed artifacts (or a sample thereof) for subsequent laboratory identification and analysis, in accordance with standard archaeological methods. In most corn fields containing Project components, EDR personnel conducted pedestrian surface survey across the entire field, not just the area containing the Project component. Entire fields were surveyed in this fashion due to the flexible nature of the Project design which is anticipated to change further based on the results of the current Phase 1B archaeological survey as well as other ongoing and recently completed natural resource surveys. The locations of all 11 archaeological survey areas subject to pedestrian survey are depicted in Figure 5.
- **Hay fields, forests, and shrubland**. In selected areas not suitable for pedestrian surface survey, EDR personnel excavated STPs to determine whether archaeological sites were present. STPs were excavated along transects or in grid patterns at five-meter intervals within selected areas. If prehistoric Native American artifacts were recovered from an isolated STP, then up to eight additional STPs were excavated at one-meter and three-meter intervals around the original STP to determine whether the artifacts represented an isolated find or indicated the presence of a more substantial archaeological site. However, no prehistoric Native American artifacts were encountered during the supplemental Phase 1B survey.
- **Steeply sloped areas**. No systematic archaeological survey work was conducted in steeply sloped areas (per the NYAC Standards; NYAC, 1994). In these areas, archaeological survey work was restricted to pedestrian walkover supplemented by judgmental shovel testing if indications of a potential archaeological site were observed (e.g., foundations, structural remains, or rock overhangs suitable for use as shelters).

During the course of a previous large scale Phase 1B fieldwork effort for the Copenhagen Wind Farm Project (EDR, 2014), EDR had consulted with NYSOPRHP regarding the presentation of the stratigraphic profiles within the report. EDR had noted that the majority of shovel tests within the Project site did not include cultural materials and proposed that only a sample of the shovel test stratigraphic profiles be included in tabular format within the report. EDR proposed that a 10% sample of the shovel tests, as well as all the shovel tests located in the vicinity of the MDS sites within the Project site, be included in tabular format in the report, and NYSOPRHP concurred with this proposal. For the current Project, EDR has included all the shovel tests in the vicinity of identified archaeological sites in tabular format in Appendix D of this report. This consists of 648 STPs which constitutes a 17% sample of all the STPs excavated for the

Phase 1B survey. Scanned copies of all STP field records are provided in digital format as a PDF included as Appendix E of this report.

3.2 Phase 1B Archaeological Survey Fieldwork Results

EDR personnel excavated a total of 3,853 STPs and conducted pedestrian survey of approximately 174.7 acres during the Phase 1B fieldwork for the Cassadaga Wind Project. Table 2 (below) summarizes EDR's investigation of the 59 total archaeological survey areas and the results of fieldwork, while the locations of survey areas are depicted in Figure 6. Following completion of the archaeological fieldwork, Project component locations (e.g., turbine locations, portions of interconnection or access road routes) were revised in several instances based on the results of other environmental studies or other practical considerations (e.g., to avoid wetlands or due to property owner concerns). However, these changes were minor and did not increase or significantly change the archaeological APE for the project. Additional Project layout revisions were made to avoid impacts to archaeological sites identified by EDR during the archaeological survey, as discussed in Section 3.3, below.

Table 2. Summary of Archaeological Survey Results by EDR Survey Areas

EDR Survey Area	Associated Project Component(s)	Pedestrian Survey (acres)	Shovel Tests Completed	Sites Adjacent or Investigated	Figure 6: Map Sheet(s)	Photographs (Appendix C)
A1	WTG 4	--	81	N/A	1	Photograph 1
A2	Collocated Access Road and Collection Line to WTG 4	--	120	N/A	1	Photograph 2
A3	WTG 5	--	81	N/A	7	Photograph 3
A4	WTG 55	--	82	N/A	6	Photograph 4
A5	Access Road to WTG 55	--	68	Chase Site 1	6	Photograph 5
A6	WTG 17	--	81	N/A	3	Photograph 6
A7	Access Road to WTG 17	--	135	N/A	3	Photograph 7
A8	WTG 15	16.2	--	N/A	3	Photograph 8
A9	WTG 36	20.3	--	Wagner Site 1	4	Photograph 9
A10	Collection Line between WTG 4 and WTG 15	9.4	--	N/A	2	Photograph 10
B1	Collocated Access Road and Collection Line between WTG 22 and WTG 23	6.4	--		12	Photograph 11
B2	WTG 23	--	81	N/A	12	Photograph 12
B3	WTG 22	--	80	N/A	12	Photograph 13
B4	WTG 13	--	81	N/A	8	Photograph 14
B5	WTG 16	--	81	N/A	9	Photograph 15
B6	Collocated Access Road and Collection Line Between WTG 49 and WTG 16	--	148	N/A	9	Photograph 16
B7	WTG 8	--	81	N/A	11	Photograph 17
B8	WTG 34	--	81	N/A	11	Photograph 18
B9	WTG 52	--	73	N/A	10	Photograph 19
B10	Access Road and Collection Line to WTG 46	--	92	N/A	8	Photograph 20
C1	Collector Substation	--	135	N/A	25	Photograph 21
C2	O&M Area	--	117	N/A	25	Photograph 22
C3	WTG53	--	81	N/A	13	Photograph 23

EDR Survey Area	Associated Project Component(s)	Pedestrian Survey (acres)	Shovel Tests Completed	Sites Adjacent or Investigated	Figure 6: Map Sheet(s)	Photographs (Appendix C)
C4	Collection Line between WTG 48 and Mill Creek Road	20.7	--	N/A	5	Photograph 24
C5	Collection Line south of WTG 48	--	45	N/A	5	Photograph 25
D1	WTG 14	--	80	N/A	16	Photograph 26
D2	WTG 33	--	81	N/A	16	Photograph 27
D3	WTG 29	--	81	N/A	17	Photograph 28
D4	Collection Line along northwest side of Boutwell Hill Rd.	--	60	State Site 1	15	Photograph 29
D5	Collection Line along north side of Mill Creek Rd.	--	30	State Site 2	14	Photograph 30
D6	Collection Line along north side of Mill Creek Rd.	--	24	State Site 3	14	Photograph 31
D7	Collection Line along north side of Mill Creek Rd.	--	24	State Site 4	14	Photograph 32
E1	Collocated Collection Line and Overhead Transmission Line east of Hall Rd.	28.8	25	Williams Site 1 and Williams Site 2	23	Photograph 33
E2	Access Road to WTG 32, 40, and 43	7.4	--	N/A	19	Photograph 34
E3	Overhead Transmission Line west of Andrews Road	--	125	Allenbrand Site 3	22	Photograph 35
E4	Overhead Transmission Line west of Andrews Road	--	108	N/A	22	Photograph 36
E5	Collocated Collection Line and Overhead Transmission Line west of Andrews Road	--	49	Allenbrand Site 2	22	Photograph 37
E6	WTG 44, associated Access Road and Collection Line	28.3	4	N/A	22	Photograph 38
E7	Collocated Overhead Transmission Line and Collection Line east of Hall Rd.	--	48	N/A	20	Photograph 39
E8	Collocated Overhead Transmission Line and Collection Line east of Hall Rd.	--	148	N/A	20, 23	Photograph 40
E9	Collocated Overhead Transmission Line and Collection Line east of Hall Rd., between forks of Mill Creek	--	45	N/A	21	Photograph 41
E10	Collocated Overhead Transmission Line and Collection Line east of Hall Rd., between forks of Mill Creek	--	56	N/A	21	Photograph 42

EDR Survey Area	Associated Project Component(s)	Pedestrian Survey (acres)	Shovel Tests Completed	Sites Adjacent or Investigated	Figure 6: Map Sheet(s)	Photographs (Appendix C)
E11	POI Substation	--	134	N/A	18	Photograph 43
E12	Overhead Transmission Line West of State Route 60	--	20	N/A	18	Photograph 44
E13	Overhead Transmission Line west of County Route 77	5.2	--	N/A	21	Photograph 45
E14	Near Transmission Line west of Hall Road, targeting Valley Wall Near Stream landscape class, overlooking Mill Creek	16.4	--	N/A	21, 24	Photograph 46
E15	Overhead Transmission Line east of State Route 60	--	60	N/A	18	Photograph 47
F1	Former WTG 62, associated Access Road and Collection Line	15.6	--	N/A	27	Photograph 48
F2	WTG 61	--	81	N/A	26	Photograph 49
F3	Collection Line north of WTG 61	--	30	N/A	26	Photograph 50
F4	Collection Line along south side of Cleland Rd.	--	24	Tenpas Site 1	25	Photograph 51
G1	WTG 50	--	81	N/A	28	Photograph 52
G2	WTG 9	--	81	N/A	29	Photograph 53
G3	WTG 26	--	81	N/A	29	Photograph 54
G4	Collocated Access Road and Collection Line between WTG 26 and WTG 9	--	127	Charrington Creek Site 1	29	Photograph 55
G5	WTG 2	--	81	N/A	30	Photograph 56
G6	WTG 10	--	81	N/A	30	Photograph 57
G7	WTG 42	--	81	N/A	28	Photograph 58
G8	WTG 21	--	64	N/A	28	Photograph 59
	Total	**174.7 Total Acres Pedestrian Survey**	**3,853 Shovel Tests**			

EDR collected a total 325 historic-period artifacts during the Phase 1B archaeological survey. Two-hundred and forty-two historic artifacts were collected from shovel tests and 83 were collected from the ground surface. In some cases, isolated non-diagnostic artifacts in shovel tests or on the surface were observed and noted but not collected. At sites with a surface component, all clearly diagnostic artifacts, and a representative sample of other artifacts were collected but the entire surface assemblage was not collected. One-hundred and fifty-four of the historic artifacts collected from STPs occurred at or near MDS locations and 59 of the artifacts collected via surface collection were at or near MDS locations.

Additionally, EDR collected a total of 9 prehistoric (Native American) artifacts during the Phase 1B archaeological survey. Five of the prehistoric artifacts were collected from shovel tests and four were collected from the ground surface. All prehistoric artifacts encountered during the Phase 1B survey were collected.

All the artifacts collected by EDR over the course of the supplemental Phase 1B archaeological survey are listed in Appendix F.

3.3 Identified Archaeological Sites

EDR identified 10 historic-period archaeological sites and six prehistoric (Native American) archaeological sites within the Project site during the Phase 1B archaeological survey (Table 3). Each site is discussed in further detail below in Subsections 3.3.1 through 3.3.16. In addition to the descriptions of these sites provided herein, the information for each site will be entered into NYSOPRHP's online Cultural Resource Information System (CRIS) databased upon final submission of this report through CRIS.

In addition to the archaeological sites recorded during the Phase 1B survey, EDR archaeologists identified two field scatters of historic and modern debris: one located in EDR Survey Area E1 (Figure 6, Sheet 23) and one in EDR Archaeological Survey Area E6 (Figure 6, Sheet 22). Both scatters consisted of highly fragmented historic and modern debris located in active agricultural fields with no significant buried component. The field scatter in E1 consisted of approximately highly fragmented historic and modern artifacts on the surface, of which a representative sample was collected for further analysis (Table 4). The field scatter in E6 consisted of approximately 100 highly fragmented historic and modern artifacts on the surface, of which a representative sample was collected for further analysis (Table 5).

Table 3. Summary of Archaeological Sites Identified During the Phase 1 Survey

Site Name	Description	Location	Map Sheet (Figure 7)	Potential Impacts	Avoidance Measures
Allenbrand Site 1	Historic Farmstead	Adjacent to west side of Andrews Road; approximately 3,700 ft northwest of Mill Creek.	8	Intersected by Project APE (collocated Overhead Collection Line and Overhead Transmission Line west of Andrews Road and south of WTG 44).	No poles placed within features. No adverse impacts.
Allenbrand Site 2	Prehistoric Lithic Scatter	Approximately 600 ft west of Andrews Road; approximately 4,200 ft northwest of Mill Creek.	8	Intersected by Project APE (collocated Overhead Collection Line and Overhead Transmission Line west of Andrews Road and south of WTG 44).	No poles placed within site boundary. No impacts.
Allenbrand Site 3	Prehistoric Flake	Approximately 900 ft west of Andrews Road; approximately 4,500 ft northwest of Mill Creek.	8	Intersected by Project APE (Overhead Transmission Line west of Andrews Road and north of WTG 39).	No poles placed within site boundary. No impacts.
Charrington Creek Site 1	Prehistoric Lithic Scatter	Near summit of Pickup Hill, approximately 4,000 ft east of Chautauqua County Route 85, approximately 4,300 ft north of Risley Rd.	11	Not impacted by current layout.	Avoided by Project design.
Chase Site 1	Historic Farmstead	Approximately 1,300 ft south of intersection of Cook and Lewis Roads; approximately 67 ft north of uppermost section of Canadaway Creek drainage.	2	Not impacted by current layout.	Avoided by Project design.
Green Highlands Site 1	Prehistoric bifacial tool	Approximately 765 ft north of Engdahl Road; approximately 7,800 ft east of C. Johnson Road.	12	Not impacted by current layout.	Avoided by Project design.
Higgs Site 1	Historic Farmstead	Adjacent to northeast side of Mill Creek Rd., approximately 175 northeast of Mill Creek.	4	Not impacted by current layout.	Avoided by Project design.
Reynolds Site 1	Historic Farmstead	Approximately 3,500 ft south of Dybkas Rd., approximately 3,900 ft west of Plank Rd; approximately 5,200 ft northeast of Chautauqua County Route 85.	3	Not impacted by current layout.	Avoided by Project design.
State Site 1	Depression/Possible Historic Foundation	Approximately 55 ft northwest of Boutwell Hill Rd., approximately 150 ft northeast of an unnamed southeast-trending drainage.	7	Intersected by Project APE (overhead Collection Line along north side of Boutwell Hill Rd.).	No poles placed within site boundary. No impacts.
State Site 2	Historic Debris Scatter	Approximately 10 ft north of Mill Creek Rd., approximately 1,900 northeast of upper Mill Creek drainage.	6	Intersected by Project APE (overhead Collection Line along north side of Mill Creek Rd.)	No poles placed within site boundary. No impacts.
State Site 3	Historic Farmstead	Approximately 10 ft north of Mill Creek Rd., Approximately 230 ft west of Overland Trail Rd., approximately 1,000 ft northeast of upper Mill Creek drainage.	5	Intersected by Project APE (overhead Collection Line along north side of Mill Creek Rd.).	No poles placed within site boundary. No impacts.
State Site 4	Historic Farmstead	Approximately 10 ft north of Mill Creek Rd., Approximately 1,350 ft west-northwest of Overland Trail Road, approximately 800 ft east-northeast of Mill Creek Rd.	5	Intersected by Project APE (overhead Collection Line along north side of Mill Creek Rd.).	No poles placed within site boundary. No impacts.

Tenpas Site 1	Historic Farmstead	Approximately 10 ft southwest of Cleland Rd., approximately 1,150 ft southeast of intersection of Cleland Rd. and Boutwell Hill Rd., approximately 10 ft north of an unnamed east-southeast-trending tributary of Clear Creek.	10	Not impacted by current layout.	Avoided by Project design.
Wagner Site 1	Historic/Modern Rubble Mound	Approximately 10 ft west of Chautauqua County Route 77, approximately 2,900 ft north of Mill Creek, approximately 3,450 ft south-southwest of intersection of Route 77 and Cook Rd.	1	Not impacted by current layout.	Avoided by Project design.
Williams Site 1	Prehistoric Lithic Scatter	Approximately 275 ft east of Hall Road, approximately 1,550 ft northeast of Mill Creek, approximately 2,400 ft north of intersection of Hall Rd. and Route 77.	9	Not impacted by current layout.	Avoided by Project design.
Williams Site 2	Prehistoric Flake	Approximately 150 ft east of Hall Road, approximately 1,900 ft northeast of Mill Creek, approximately 3,200 ft north of intersection of Hall Rd. and Route 77.	9	Not impacted by current layout.	Avoided by Project design.

The scatters were not recorded as archaeological sites because they appear to be the result of informal dumping and manure seeding activities, they do not directly correspond to MDS locations, and shovel testing at each scatter failed to identify a significant buried archaeological component. Furthermore, as surface scatters in actively worked agricultural fields (both had been planted in corn in 2015), the locational integrity of the individual artifacts within the scatters is suspect because materials have likely been moved around (as well as damaged) by plowing and disking. EDR excavated seven shovel tests within the field scatter in survey area E1 and four shovel tests within the field scatter in survey area E6. The locations of these shovel tests are depicted in Figure 6 (Sheets 22 and 23) and stratigraphic profiles are included in Appendix E.

Table 4. Artifacts collected from Field Scatter in EDR Survey Area E1.

Shovel Test	Stratum	Depth	Count	Description	Comments	Date Range	Sources
SURFACE (AREA E1)	SURFACE	SURFACE	1	IRONSTONE CHINA	UNDECORATED, BASAL FRAGMENT	1830- 20TH C	MACL, 2016
SURFACE (AREA E1)	SURFACE	SURFACE	1	SOLARIZED VESSEL GLASS	SOLARIZED, BASAL FRAGMENT		
SURFACE (AREA E1)	SURFACE	SURFACE	1	AQUA BOTTLE FINISH	MOLD BLOWN, TOOLED FINISH	1820-1925	BLM/SHA, 2016
SURFACE (AREA E1)	SURFACE	SURFACE	2	COLBALT VESSEL GLASS			

SURFACE (AREA E1)	SURFACE	SURFACE	1	AQUA FLAT GLASS			
SURFACE (AREA E1)	SURFACE	SURFACE	2	PRINTED WHITE REFINED EARTHENWARE	SPRIGGED SHEET PRINT, LIGHT BLUE	1826-1867	MACL, 2016
SURFACE (AREA E1)	SURFACE	SURFACE	1	WHITE BUTTON	MATERIAL UNKNOWN		
SURFACE (AREA E1)	SURFACE	SURFACE	2	AQUA BOTTLE GLASS	BASAL FRAGMENT, EMBOSSED "B" SANS SERIF		
SURFACE (AREA E1)	SURFACE	SURFACE	1	WHITE REFINED EARTHENWARE	UNDECORATED	1830-PRESENT	FMNH, 2016
SURFACE (AREA E1)	SURFACE	SURFACE	1	AQUA VESSEL GLASS	RIM FRAGMENT		
SURFACE (AREA E1)	SURFACE	SURFACE	3	WHITE REFINED EARTHENWARE TRASFERPRINT	LIGHT BLUE TRANSFER, 1 RIM FRAGMENT	1830-1867	MACL, 2016
SURFACE (AREA E1)	SURFACE	SURFACE	1	SOLARIZED PRESSED GLASS	SOLARIZED, POSSIBLE BOWL, SCALLOPED EDGE	1850-1910	Collectors Weekly, 2016
SURFACE (AREA E1)	SURFACE	SURFACE	2	BROWN BOTTLE GLASS	APPLIED FINISH	1830-1885	BLM/SHA, 2016
SURFACE (AREA E1)	SURFACE	SURFACE	1	CLEAR PRESSED VESSEL GLASS	POSSIBLE KITCHENWARE?		
SURFACE (AREA E1)	SURFACE	SURFACE	1	CLEAR PRESSED VESSEL GLASS		1850-1910	Collectors Weekly, 2016
SURFACE (AREA E1)	SURFACE	SURFACE	1	CLEAR BOTTLE FINISH	TOOLED FINISH	1820-1925	BLM/SHA, 2016
SURFACE (AREA E1)	SURFACE	SURFACE	1	MISC METAL	ALUMINIUM		
SURFACE (AREA E1)	SURFACE	SURFACE	1	BONE			
SURFACE (AREA E1)	SURFACE	SURFACE	1	BROWN VESSEL GLASS	MOLDED		
SURFACE (AREA E1)	SURFACE	SURFACE	1	CLEAR BOTTLE	COMPLETE, "1/2", TOOLED AND GROUND FINISH, MOLD AND VENT MARKS	1877-1920	BLM/SHA, 2016
SURFACE (AREA E1)	SURFACE	SURFACE	1	PORCELAIN	MOLDED		
SURFACE (AREA E1)	SURFACE	SURFACE	2	PORCELAIN	DECAL DECORATION, ROSE AND LEAF	LATE 19TH C - PRESENT	MACL, 2016
SURFACE (AREA E1)	SURFACE	SURFACE	1	OPAQUE BLUE GLASS	BLUE, MOLDED, VINE PATTERN?	1870-1920	BLM/SHA, 2016

SURFACE (AREA E1)	SURFACE	SURFACE	5	WHITE REFINED EARTHENWARE TRASFERPRINT	LIGHT BLUE, 1 FRAGMENT WITH PARTIAL MAKERS MARK	1830-PRESENT	FMNH, 2016
SURFACE (AREA E1)	SURFACE	SURFACE	1	SHELL EDGED WHITE REFINED EARTHENWARE	UNSCALLOPED IMPRESSED EDGE		
SURFACE (AREA E1)	SURFACE	SURFACE	1	SHELL EDGED WHITE REFINED EARTHENWARE	UNSCALLOPED IMPRESSED EDGE		
SURFACE (AREA E1)	SURFACE	SURFACE	1	SHELL EDGED WHITE REFINED EARTHENWARE	EVEN SCALLOP IMPRESSED BUD EDGE		
SURFACE (AREA E1)	SURFACE	SURFACE	1	MOLDED IRONSTONE CHINA	MOLDED RIM FRAGMENT, FOLIAGE MOTIF	1850s-1860s	MACL, 2016
SURFACE (AREA E1)	SURFACE	SURFACE	1	GLAZED REDWARE	BROWN/BLACK GLAZE	LATE 18TH - MID 19TH CENTURY	Fairfax County (FC), 2016
SURFACE (AREA E1)	SURFACE	SURFACE	1	WHITE REFINED EARTHENWARE TRASFERPRINT	RED TRANSFER	1830-1880	MACL, 2016
SURFACE (AREA E1)	SURFACE	SURFACE	1	WHITE REFINED EARTHENWARE TRASFERPRINT	BROWN/BLACK TRANSFER	1830- 1869	MACL, 2016
SURFACE (AREA E1)	SURFACE	SURFACE	2	GLAZED REFINED EARTHENWARE	BLUE GLAZE ON EXTERIOR, POSSIBLE ANNULAR WARE		
SURFACE (AREA E1)	SURFACE	SURFACE	1	CERAMIC TUBE	POSSIBLE INSULATOR, COROSION ON ONE END		
SURFACE (AREA E1)	SURFACE	SURFACE	1	STONEWARE	SALT GLAZED INTERIOR & EXTERIOR	19th C	NYSM, 2016
SURFACE (AREA E1)	SURFACE	SURFACE	1	STONEWARE	SALT GLAZE, ALBANY SLIP	19TH C	NYSM, 2016
SURFACE (AREA E1)	SURFACE	SURFACE	1	STONEWARE	SLIP ON INTERIOR AND EXTERIOR	19TH C	NYSM, 2016
SURFACE (AREA E1)	SURFACE	SURFACE	1	WHITE REFINED EARTHENWARE	RIM FRAGMENT, BROWN GLAZE LINEAR DESIGN ON RIM BOTH ON EXTERIOR AND INTERIOR, POSSIBLY ANNULAR EARTHENWARE		
SURFACE (AREA E1)	SURFACE	SURFACE	1	WHITE REFINED EARTHENWARE TRANSFERPRINT	BLACK TRANSFER, BASAL FRAGMENT	1830-1864	MACL, 2016
SURFACE (AREA E1)	SURFACE	SURFACE	1	ROCKINGHAM WARE	MOTTLED BROWN / YELLOW GLAZE, SOLID BROWN GLAZE.	1848-1936	MACL, 2016

SURFACE (AREA E1)	SURFACE	SURFACE	1	WHITE REFINED EARTHENWARE TRASFERPRINT	DARK BLUE TRANSFER	1830- 1859	MACL, 2016
SURFACE (AREA E1)	SURFACE	SURFACE	1	PRINTED WHITE REFINED EARTHENWARE	SHEET PRINT	1826-1842	MACL, 2016
SURFACE (AREA E1)	SURFACE	SURFACE	1	IRONSTONE CHINA	ANCHOR POTTERY MAKERS MARK, "ANCHOR P…" // "J.E.M," // "TRENTON. N.J."	POST 1898	Atlee, 2016
SURFACE (AREA E1)	SURFACE	SURFACE	1	STONEWARE	SLIP ON ONE SIDE, UNGLAZED ON OTHER. RIDGES ON UNGLAZED SIDE	19th C	NYSM, 2016
SURFACE (AREA E1)	SURFACE	SURFACE	1	REFINED EARTHENWARE	BROWN GLAZE ON ONE SIDE, UNGLAZED WITH RIDGES ON OPPOSITE		
SURFACE (AREA E1)	SURFACE	SURFACE	1	ANNULAR WHITE REFINED EARTHENWARE	PARALELL TAN GLAZE LINES	LATE 18TH - MID 19TH CENTURY	FMNH, 2016
SURFACE (AREA E1)	SURFACE	SURFACE	1	CARRIAGE BOLT WITH SQUARE NUT			-
E1.06	1	0-17 CM	2	CUT NAIL	2 FRAGMENTS	1810S - EARLY 20TH CENTURY	UVM, 2016
E1.06	1	0-17 CM	2	CLEAR VESSEL GLASS			-
E1.06	1	0-17 CM	3	IRONSTONE CHINA	2 MOLDED RIM FRAGMENTS, HARVEST MOTIF	1860- EARLY 20TH C	MACL, 2016
E1.07	SURFACE	SURFACE	1	SPONGE PAINTED WHITE REFINED EARTHENWARE	BLUE SPONGE, RIM FRAGMENT	1830-1860s	MACL, 2016
E1.07	1	0-17 CM	1	AQUA FLAT GLASS			
E1.07	1	0-17 CM	1	1907 INDIAN HEAD PENNY		1907	

Table 5. Artifacts collected from Field Scatter in EDR Survey Area E6.

Shovel Test	Stratum	Depth	Count	Description	Comments	Date Range	Sources
SURFACE (AREA E6)	SURFACE	SURFACE	3	AQUA FLAT GLASS			
SURFACE (AREA E6)	SURFACE	SURFACE	1	AQUA VESSEL GLASS			
SURFACE (AREA E6)	SURFACE	SURFACE	4	FLOW BLUE WHITE REFINED EARTHENWARE	DARK BLUE FLOW FLORAL PATTERN	MID 19TH - EARLY 20TH CENTURY	MACL, 2016
SURFACE (AREA E6)	SURFACE	SURFACE	4	REFINED EARTHENWARE	UNDECORATED		
SURFACE (AREA E6)	SURFACE	SURFACE	1	TRANSFERPRINT PEARLWARE	RED TRANSFER, SCALLOPED EDGE	1818-1880	MACL, 2016
SURFACE (AREA E6)	SURFACE	SURFACE	1	REFINED EARTHENWARE	GREY GLAZE		
SURFACE (AREA E6)	SURFACE	SURFACE	2	WHITE REFINED EATHENWARE TRANSFERPRINT	COBALT TRANSFER, FLORAL PATTERN	1830-1859	MACL, 2016
SURFACE (AREA E6)	SURFACE	SURFACE	1	WHITE REFINED EARTHENWARE TRASFERPRINT	RED TRANSFER	1830-1880	MACL, 2016
SURFACE (ARAE E6)	SURFACE	SURFACE	1	REFINED EARTHENWARE	GREEN GLAZE		
SURFACE (AREA E6)	SURFACE	SURFACE	1	SHELL EDGED WHITE REFINED EARTHENWARE	EVEN SCALLOP STRAIGHT LINES EDGE		
SURFACE (AREA E6)	SURFACE	SURFACE	1	WHITE REFINED EARTHENWARE	RIM FRAGMENT, RED LINEAR PAINTED DECORATION	1830- PRESENT	
SURFACE (AREA E6)	SURFACE	SURFACE	2	SHEET PRINTED WHITE REFINED EARTHENWARE	LIGHT BLUE SHEET PRINT, 1 RIM FRAGMENT	1830-1867	MACL, 2016
SURFACE (AREA E6)	SURFACE	SURFACE	1	WHITE REFINED EARTHENWARE TRANSFER PRINT	LIGHT BLUE TRANSFER ON BOTH SIDES OF FRAGMENT	1830-1867	MACL, 2016
SURFACE (AREA E6)	SURFACE	SURFACE	1	HAND PAINTED PEARLWARE	RIM FRAGMENT, DARK BLUE DESIGN	1775-1840	FMNH, 2016
SURFACE (AREA E6)	SURFACE	SURFACE	1	MISC METAL			
E6.03	1	0-27 CM	2	AQUA FLAT GLASS			
E6.03	1	0-27 CM	1	GLAZED REFINED EARTHENWARE	UNDECORATED		
E6.04	1	0-19 CM	1	WIRE NAIL		1890S-PRESENT	UVM, 2016
E6.04	1	0-19 CM	1	SHEET PRINTED WHITE REFINED EARTHENWARE	SPRIGGED SHEET PRINT	1830- 1867	MACL, 2016

3.3.1 Allenbrand Site 1

Site Type: Historic Farmstead
Archaeology Survey Area: N/A
Associated Project Component: Collocated Collection Line and Overhead Transmission Line west of Andrews Road and south of WTG 44.

Site Description: Allenbrand Site 1 is a historic farmstead located Adjacent to the west side of Andrews Road, approximately 3,700 ft northwest of Mill Creek (Figure 7, Sheet 8). The site is located within a tree/shrub-covered area within an open pasture near the top of a prominent north/south-trending ridge forming the drainage divide between Mill Creek to the east and the outlet of Cassadaga Lakes to the west. Sediment is Busti silt loam which consists of somewhat poorly drained coarse loamy material (Esri and Natural Resources Conservation Service [NRCS], 2016a). Vegetation in the vicinity consists of mixed weedy grasses and forbs, sumac and other successional vegetation (in patches), and mature shade trees dominated by maples in a cluster at the west end of the site and scattered unevenly throughout the remainder of the site. Modern impacts to the area include cattle grazing, erosion, and the natural decay of the former structures and foundations. Overall, the area is moderately disturbed.

Allenbrand Site 1 consists of three foundations (Foundation 1 – Foundation 3), three concrete pads (Pad 1 – Pad 3), one rubble mound, and two pieces of agricultural equipment (see Figure 7, Sheet 8). Foundation 1 consists of a dry-laid fieldstone foundation capped with concrete on its above ground portion (Appendix C, Photograph 60). It is set approximately 4 ft into the ground and the foundation walls extent approximately 1.5 ft above the ground. There is a 2-ft high concrete pier, probably to support a porch, adjacent to the east side of the foundation. Foundation 1 measures approximately 45 ft north/south and approximately 28 ft east/west. It appears to represent the remains of the farmhouse.

Foundation 2 consists of a dry laid fieldstone foundation set into a west-facing slope at the west end of the site (Appendix C, Photograph 61). The foundation is approximately 6 ft deep on the east (upslope) side and level with the ground on the west (downslope) side. The feature is heavily overgrown with sumac and other successional deciduous shubs. Foundation 2 measures approximately 30 ft north/south and approximately 46 ft east/west. It appears to represent the remains of a barn.

Foundation 3 consists of a circular concrete silo foundation set into a west-facing slope to the south of Foundation 2 (Appendix C, Photograph 62). It is set approximately 4 ft below the ground, the concrete foundation extends approximately 1 foot, 6 inches above the ground surface, and it has a diameter of approximately 14 ft. Some wrought

iron hardware remains attached to the foundation. Foundation 3 has a diameter of approximately 14 ft. It represents the remains of a silo.

Pad 1 consists of a concrete pad poured over a dry laid fieldstone base situated between Foundation 1 to the east and Pad 2 to the west (Appendix C, Photograph 63). The pad contains a raised concrete rectangle approximately 1.5 ft square and 6 inches tall. Pad 1 measures approximately 14 ft square. There appears to be a cavity underneath the pad which may represent a cistern, or possibly, the natural subsidence of the soil on which the pad was constructed. This feature appears to represent the remains of an outbuilding.

Pad 2 consists of a concrete pad poured over dry laid fieldstone located west of Pad 1 and immediately east of Pad 3 (Appendix C, Photograph 64). The Pad measures approximately 23 ft square and it may be connected to Pad 3. It appears to represent the remains of an outbuilding.

Pad 3 consists of a concrete pad located between Pad 2 to the east and Foundation 3 to the west (Appendix C, Photograph 65). The pad may have been poured over a dry laid fieldstone base; however, it is so heavily overgrown with moss, sumac, briars, and other successional vegetation, that it is difficult to determine the construction of the base. Pad 2 measures approximately 50 ft north/south and approximately 27 ft east/west. This feature appears to represent the remains of an outbuilding.

The rubble mound consists of a built up circular area of piled soil and debris that is heavily overgrown with sumac and other successional vegetation (Appendix C, Photograph 66). It is approximately 4 ft high with a diameter of approximately 20 ft. This feature may be piled up debris from the destruction of one or more structures on the site, but it is difficult to firmly identify its contents because it is so heavily overgrown.

In addition to the features noted at the site, Allenbrand Site 1 contains a light scatter of historic debris, consisting of various metal hardware fragments, iron barrel hoops, and tin stove pipe fragments, and totaling approximatey 30 pieces. Additionally, there are three unidentified agricultural implements clustered in the area north of Pad 2 (Appendix C, Photograph 67). EDR archaeologists also noted several thin tabular stones located south of foundation 3 (Appendix C, Photograph 68). These were at first interpreted as deteriorated gravestones, however, the lack of inscriptions and their location within or adjacent to the historic barnyard suggests some other use. It is possible they were used as paving stones or as the foundation to some ephemeral outbuilding such as a chicken coop.

EDR personnel excavated shovel tests east of Allenbrand Site 1 (designated EDR Survey Area E5) which did not recover an historic artifacts. EDR did not excavate any shovel tests within the site and based the site boundary on the surface feature and artifact distribution.

The site area contains a single structures on the 1900 USGS *Dunkirk Quardrangle* (USGS, 1900) and 1943 USGS *Dunkirk Quadrangle* (USGS, 1943). On both maps the structure is in the approximately location of Foundation 1, adjacent to the west side of Andrews Road. No structures are depicted in the vicinity of the site on the 1854 Keeney map or the 1881 Beers map (Beers, 1881; Keeney, 1854).

NRHP Eligibility Recommendation and Project Effect: Allenbrand Site 1 is currently unevaluated with regard to the S/NRHP. It represents the remains of a historic farmstead whose construction dates to between 1881 and 1900; however, additional subsurface testing would be necessary to determine the full extent and nature of archaeological materials at the site. Therefore, the site is currently unevaluated under criteria A, C, and D. Furthermore, additional research into local or regional history would be necessary to determine if the owner or owners of the farmstead played a significant role in local or regional history and, if so, if this site is associated with the activities and/or events that made them significant. Therefore, the site is also recommended as unevaluated under Criterion B.

Allenbrand Site 1 is located within the Project APE along the proposed collection line and overhead transmission line west of Andrews Road and may be impacted by the Project. However, no poles will be placed within site features so there will be no physical impacts to the features at the site (see Figure 7, Sheet 8). Pole placement may impact a buried artifact scatter; however, this is not considered a significant portion of the site. Therefore, there will be no adverse effect to significant resources. No further work is recommended.

3.3.2 Allenbrand Site 2

Site Type: Prehistoric Lithic Scatter
Archaeology Survey Area: E5
Associated Project Component: Overhead Transmission Line west of Andrews Road and north of WTG 39

Site Description: Allenbrand Site 2 consists of a small prehistoric lithic scatter located in a pasture approximately 600 ft west of Andrews Road and approximately 4,200 ft northwest of Mill Creek (Figure 7, Sheet 8). The site is located in a flat to gently east-sloping pasture on top of a prominent north/south-trending ridge forming the drainage divide between Mill Creek to the east and the outlet of Cassadaga Lakes to the west (Appendix C, Photograph 69). The site overlooks a small north/south-trending ephemeral drainage to the west that may be man-made. Sediment is Busti silt

loam which consists of somewhat poorly drained coarse loamy material (Esri and NRCS, 2016a). Vegetation in the vicinity consists of various grasses and forbs within the pasture and scattered shrubby willows along the drainage. Modern impacts to the area include extensive cattle grazing, and resultant bioturbation/trampling, as well as erosion. Overall, the area is lightly disturbed.

The site consists of 2 unmodified chert flakes: one made of tan chert and one made of dark gray chert (Appendix C, Photograph 70). Both flakes contain a secondary weathered cortex on their dorsal surfaces. This gives them the appearance of having been removed from relatively small cobbles which are common in glacial gravels present throughout much of the Project site. The tan chert flake is 2.1 cm long and the gray chert flake is 1.5 cm long. The tan chert flake was recovered from shovel test E5.03 between 0 and 10 cm below ground surface (bgs). Five radial shovel tests were excavated around shovel test E5.03, one of which (E5.03S-1m) contained the gray flake between 0 and 20 cmbgs. The remainder of the radial shovel tests and the additional 43 shovel tests excavated within EDR Survey Area E5 did not contain cultural material.

It should be noted that the chert from which these two flakes were made is at least superficially similar to Onondaga Chert known from the Onondaga Escarpment in Central and Western New York and southern Ontario, Canada. However, these two artifacts appear to come from glacial pebbles and/or cobbles local to the area. It is possible that the glacial gravels in this area contain Onondaga Chert pebbles that were pushed south and west from the Onondaga Escarpment by glacial movement.

NRHP Eligibility Recommendation and Project Effect: Allenbrand Site 2 is currently recommended as not eligible for listing on the S/NRHP under any criteria. It consists of a small prehistoric lithic scatter of two flakes that lacks a significant density or diversity of artifacts. Additional shovel testing at the site did not reveal additional artifacts, and it is believed that the two flakes recovered represent an isolated component not indicative of a significant archaeological site. The site's integrity of setting and feeling have been moderately compromised by modern agricultural and residential development in the area. It lacks integrity of design and workmanship as the site consists of two casually discarded pieces of chipped stone debitage. The site's integrity of association is severely compromised because it cannot be dated or specifically associated with a period of significance. The integrity of materials and location remain strong; however, these do not make up for the overall lack of integrity and significance. The site cannot be associated with significant prehistoric trends or individuals, and it does not embody significant engineering or design attributes, therefore, it is not eligible for listing on the S/NRHP under criteria A, B, or C. Small isolated lithic scatters of this sort are relatively common in the Allegheny Plateau and Escarpment, and further research at the site is unlikely to obtain significant data pertinent to understanding local or regional prehistory. Therefore, the site is not eligible under Criterion D.

Allenbrand Site 2 is located within the APE for the proposed collection line and overhead transmission line west of Andrews Road. However, the site will be avoided by pole placements for the overhead lines so there will be no physical impacts to the site area (see Figure 7, Sheet 8). Regardless of potential impacts, the site is recommended as not eligible for listing on the S/NRHP so there will be no effect to significant resources. No further work is recommended.

3.3.3 Allenbrand Site 3

Site Type: Prehistoric Flake
Archaeology Survey Area: E3
Associated Project Component: Overhead Transmission Line west of Andrews Road and north of WTG 39

Site Description: Allenbrand Site 3 consists of a single prehistoric flake located approximately 900 ft west of Andrews Road and approximately 4,500 ft northwest of Mill Creek (Figure 7, Sheet 8). The site is located in a flat to gently west-sloping pasture on top of a prominent north/south-trending ridge forming the drainage divide between Mill Creek to the east and the outlet of Cassadaga Lakes to the west (Appendix C, Photograph 71). The site overlooks a small north/south-trending ephemeral drainage to the east that may be man-made. Sediment is Busti Silt Loam which consists of somewhat poorly drained coarse loamy material (Esri and NRCS, 2016a). Vegetation in the vicinity consists of various grasses and forbs within the pasture and scattered shrubby willows along the drainage. Modern impacts to the area include extensive cattle grazing, and resultant bioturbation/trampling, as well as erosion. Overall, the area is lightly disturbed.

The site consists of a single unmodified flake of mottled gray chert that measures 1.8 cm cm long. Its dorsal side contains two flake scars and no cortex (Appendix C, Photograph 72). The artifact was identified at a depth of between 0 and 27 cmbgs in shovel test E3.02 and five radial shovel tests were excavated around the find, all of which were negative. Additionally, the other 119 shovel tests excavated within EDR Survey Area E3 did not contain cultural material.

As with the prehistoric artifacts from Allenbrand Site 2, it should be noted that the gray chert from which this flake was made is at least superficially similar to Onondaga Chert known from the Onondaga Escarpment in Central and Western New York and southern Ontario, Canada. However, EDR archaeologists noted widespread gray, black, and tan chert pebbles contained within glacial gravels throughout the Project site, and it seems likely that the artifact originates from this local source. It is possible that the glacial gravels in this area contain Onondaga Chert pebbles that were pushed south and west from the Onondaga Escarpment by glacial movement.

NRHP Eligibility Recommendation and Project Effect: Allenbrand Site 3 is currently recommended as not eligible for listing on S/NRHP under any criteria. It consists of a single isolated prehistoric flake. The site lacks a density and diversity of artifacts, and additional shovel testing at the site did not identify additional artifacts. It is believed that the single flake recovered represents an isolated component not indicative of a significant archaeological site. The site's integrity of setting and feeling have been moderately compromised by modern agricultural and residential development in the area. It lacks integrity of design and workmanship as is consists of a single casually discarded piece of chipped stone debitage. The site's integrity of association is severely compromised because it cannot be dated or specifically associated with a period of significance. The integrity of materials and location remain strong; however, these do not make up for the overall lack of integrity and significance. The site cannot be associated with significant prehistoric trends or individuals, and it does not embody significant engineering or design attributes, therefore, it is not eligible for listing on the S/NRHP under criteria A, B, or C. Small isolated lithic scatters of this sort are relatively common in the Allegheny Plateau and Escarpment, and further research at the site is unlikely to obtain significant data pertinent to understanding local or regional prehistory. Therefore, the site is not eligible under Criterion D.

Allenbrand Site 3 is located within the APE for the proposed overhead transmission line west of Andrews Road. However, the site will be avoided by pole placements for the overhead line so there will be no physical impacts to the site area (see Figure 7, Sheet 8). Regardless of potential impacts, the site is recommended as not eligible for listing on the S/NRHP so there will be no effect to significant resources. No further work is recommended.

3.3.4 Charrington Creek Site 1

Site Type: Prehistoric lithic scatter
Archaeology Survey Area: G4
Associated Project Component: Not impacted by current layout

Site Description: Charrington Creek Site 1 consists of two prehistoric flakes located near the summit of Pickup Hill, approximately 4,000 ft east of Chautauqua County Route 85, approximately 4,300 ft north of Risley Rd. (Figure 7, Sheet 11; Appendix C, Photograph 73). It is located on flat ground overlooking a small northeast-trending stream to the southwest. Sediment is Chautauqua Silt Loam which consists of moderately well drained coarse loamy mixed material (Esri and NRCS, 2016a). Vegetation in the vicinity consists of mature second growth forest dominated by beech and various other deciduous trees. The understory contains various ferns, beech saplings, and various forbs. Modern impacts to the area consist of historic and/or modern logging which has resulted in a small amount of pushed soil and tree-throws. Overall, the area is lightly disturbed.

The site consists of two unmodified gray chert flakes, neither of which contain dorsal cortex (Appendix C, Photograph 74). One flake is 1.1 cm long and the other is 1.6 cm long. The smaller flake was encountered between 0 and 25 cmbgs in shovel test G4.48. Five radial shovel tests were excavated around G4.48, one of which (G4.48N-1m) contained the larger flake between 0 and 30 cmbgs. The other four radial shovel tests around G4.48, and the additional 123 shovel tests excavated within EDR Survey Area G4 did not contain any cultural material.

As with the prehistoric artifacts from Allenbrand Sites 2 and 3, it should be noted that the gray chert from which these flakes were made is at least superficially similar to Onondaga Chert known from the Onondaga Escarpment in Central and Western New York and southern Ontario, Canada. However, EDR archaeologists noted widespread gray, black, and tan chert pebbles contained within glacial gravels throughout the Project site, and it seems likely that the artifacts originate from this local source. It is possible that the glacial gravels in this area contain Onondaga Chert pebbles that were pushed south and west from the Onondaga Escarpment by glacial movement.

NRHP Eligibility Recommendation and Project Effect: Charrington Creek Site 1 is currently recommended as not eligible for listing on the S/NRHP under any criteria. It consists of two prehistoric flakes. It lacks a density and diversity of artifacts, and additional shovel testing at the site did not identify additional artifacts. It is believed that the single flake recovered represents an isolated component not indicative of a significant archaeological site. The site's integrity of location, setting, feeling, and materials all remain intact. However, it lacks integrity of design and workmanship because it consists of only two casually discarded pieces of chipped stone debitage. The site's integrity of association is severely compromised because it cannot be dated or specifically associated with a period of significance. The site cannot be associated with significant prehistoric trends or individuals, and it does not embody significant engineering or design attributes; therefore, it is not eligible for listing on the S/NRHP under criteria A, B, or C. Small isolated lithic scatters of this sort are relatively common in the Allegheny Plateau and Escarpment, and further research at the site is unlikely to obtain significant data pertinent to understanding local or regional prehistory. Therefore, the site is not eligible under Criterion D.

Charrington Creek Site 1 has been avoided by Project design so there will be no Project related impacts to the site. Regardless of potential impacts, the site is recommended as not eligible for listing on the S/NRHP so there will be no effect to significant resources. No further work is recommended.

3.3.5 Chase Site 1

Site Type: Historic Farmstead

Archaeology Survey Area: A5

Associated Project Component: Not impacted by current layout

Site Description: Chase Site 1 is a historic farmstead located approximately 1,300 ft south of intersection of Cook and Lewis Roads and approximately 67 ft north of uppermost section of Canadaway Creek drainage (Figure 7, Sheet 2). The site is located on the upper west slope of a roughly north/south-trending ridge, overlooking the uppermost portion of the Canadaway Creek drainage to the west. Sediment is Schuyler Silt Loam which consists of moderately well drained fine loamy mixed material (Esri and NRCS, 2016b). Vegetation in the vicinity consists of weedy grasses and forbs including goldenrod, as well as successional shrubs such as raspberry. Mature apple and maple trees are scattered throughout the site and were probably planted during the period of use. Modern impacts to the area include maintenance activities associated with the nearby Lewis Road as well as cattle grazing. Overall, the site is moderately to severely disturbed.

Chase Site 1 consists of one rubble mound, one Foundation, and a historic debris scatter. The rubble mound is located adjacent to Lewis Road and stands on the former location of a farmhouse (Morris Chase personal communication, October 8, 2015). In an informal interview, landowner Mr. Morris Chase noted that he recalled the house at the location of the rubble mound had fallen down or been knocked down by 1948 and the foundation was filled in during by the town maintenance crew during improvements to Lewis Road ca. 1960. The resulting rubble mound is an irregular four-sided polygon: the north side is approximately 90 ft long, the east side is approximately 89 ft long, the south side is approximately 70 ft long, and the west side is approximately 72 ft long (see Figure 7, Sheet 2; Appendix C, Photograph 75). The mound is approximately 6 ft tall at its highest point and it is heavily grown over with various grasses, forbs, and raspberry bushes. Mr. Chase also noted the presence of a hand-dug well near the southwest corner of the Rubble Mound. He estimated it had measured approximately 10 ft square and approximately 30 ft deep, and was lined with local fieldstone (Morris Chase personal communication, October 8, 2015). EDR archaeologists were unable to relocate the well during the current survey.

The foundation is a collapsed heavily degraded fieldstone foundation that rises approximately 8 inches above the current ground surface (see Figure 7, Sheet 2; Appendix C, Photograph 76). The feature does not appear to have been excavated into the ground and there is no concrete slab present. The foundation measures approximately 22 ft north/south and approximately 28 ft east/west. There is an approximately 10 x 10 ft area of very flat stones adjacent to the Foundation that may represent an extension of the former structure. The feature is surrounded by apple trees and another type of unidentified deciduous tree. Mr. Chase noted that in 1948, a barn was standing at this location (Mason Chase personal communication, October 8, 2016).

EDR collected a total of 123 artifacts from Chase Site 1 consisting of 21 pieces of ceramic, 61 pieces of glass, and 34 pieces of metal, 5 pieces of leather, and 2 pieces of plastic. The artifacts are summarized in Table 6 and depicted in Appendix C, Photographs 77-79.

Table 6. Artifacts Collected at Chase Site 1.

Shovel Test	Stratum	Depth	Count	Description	Comments	Date Range	Source(s)
A5.08	1		1	AQUA FLAT GLASS			
A5.15	1	0-28 CM	1	WHITE REFINED EARTHENWARE	GREEN LEAF DECAL DECORATION	LATE 19TH C - PRESENT	Maryland Archaeological Conservation Laboratory (MACL), 2016
A5.16	1		1	WIRE NAIL		1890s-PRESENT	University of Vermont (UVM), 2016
A5.16	1		2	AQUA FLAT GLASS			
A5.16	1		1	CLEAR VESSEL GLASS			
A5.18	1,2	0-36CM	18	WIRE NAIL	2 COMPLETE NAILS, 16 NAIL FRAGMENTS	1890s-PRESENT	UVM, 2016
A5.19	1	0-26 CM	1	METAL HANDLE			
A5.19	1	0-26 CM	2	WIRE NAIL		1890s-PRESENT	UVM, 2016
A5.19	1	0-26 CM	2	PLASTIC	POSSIBLE KNOB OR HANDLE PIECES?		
A5.21	1,2	0-46 CM	3	WIRE NAIL	3 COMPLETE NAILS	1890s-PRESENT	UVM, 2016
A5.22	1,2	0-44 CM	1	WIRE NAIL	1 NAIL FRAGMENT	1890s-PRESENT	UVM, 2016
A5.22	1,2	0-44 CM	1	CLEAR FLAT GLASS			
A5.25	1	0-30 CM	2	WIRE NAIL	2 NAIL FRAGMENTS	1890s-PRESENT	UVM, 2016
A5.26	1,2	0-40 CM	1	WIRE NAIL	1 NAIL FRAGMENT	1890s-PRESENT	UVM, 2016
A5.30	1,2	0-45 CM	6	CLEAR VESSEL GLASS			
A5.30	1,2	0-45 CM	1	CLEAR BOTTLE BASE	CUP MOLD, "1679" EMBOSSED ON BASE	POST 1900	Bureau of Land Management/Society for Historical Archaeology (BLM/SHA), 2016
A5.30	1,2	0-45 CM	9	CLEAR VESSEL GLASS	2 FRAGS WITH SIDE MOLD SEAM		

A5.30	1,2	0-45 CM	5	EMOSSED AQUA GLASS MASON'S LID LINER	"MAS...N'S IMPROVED", "...ERO GLASSWORKS PHILA. PA."	1883- 1920S	Lockhart et al., 2016
A5.30	1,2	0-45 CM	25	EMBOSSED AQUA GLASS MASON JAR	"IMPROVE...", MOLD SEAM, 2 MOUTH FRAGS	LATE 19TH C-LATE 20TH C	Lockhart et al., 2016
A5.30	1,2	0-45 CM	3	LEATHER WITH PUNCHED HOLES	POSSIBLE SHOE LEATHER?		
A5.30	1,2	0-45 CM	6	WHITE REFINED EARTHENWARE	UNDECORATED	1830-PRESENT	FMNH, 2016
A5.30	1,2	0-45 CM	1	UNGLAZED YELLOW WARE	RIM FRAGMENT	MID 19TH - 20TH C	FMNH, 2016
A5.30	1,2	0-45 CM	3	WIRE NAIL	1 COMPLETE, 2 FRAGMENTS	1890s-PRESENT	UVM, 2016
A5.32	1	0-25 CM	1	WIRE NAIL	1 FRAGMENT	1890s-PRESENT	UVM, 2016
A5.32	1	0-25 CM	1	MISC METAL			
A5.32	1	0-25 CM	2	LEATHER	1 PIECE WITH PUNCHED HOLE		
A5.32	1	0-25 CM	5	AQUA FLAT GLASS			
A5.32	1	0-25 CM	11	IRONSTONE CHINA	UNDECORATED, 1 FRAGMENT WITH HANDLE	1830- 20TH C	MACL, 2016
A5.32	1	0-25 CM	4	CLEAR VESSEL GLASS			
A5.32	1	0-25 CM	1	OPAQUE WHITE GLASS	FRAGMENT, "…D'S", POSSIBLE COSMETIC JAR?	1870s-1920	BLM/SHA, 2016
A5.57	1	0-30 CM	1	PORCELAIN	BASAL FRAGMENT		
A5.66	1	0-28 CM	1	WHITE REFINED EARTHENWARE	UNDECORATED	1830-PRESENT	FMNH, 2016

The site area contains a single structure on the 1900 USGS *Dunkirk Quardrangle* (USGS, 1900) and two structures on the 1941 USGS *Cherry Creek Quadrangle* (USGS, 1941). The rubble mound (house) corresponds with the structure depicted on the 1900 map and one of the structures depicted on the 1941 map. The second structure depicted on the 1941 map corresponds with the foundation (barn) recorded at the site. No structures are depicted in the vicinity of the site on the 1854 Keeney map or the 1881 Beers map (Beers, 1881; Keeney, 1854). Mr. Chase noted that the farm had been referred to as "the Draggett Place" during his lifetime (Mason Chase personal communication, October 10, 2016).

NRHP Eligibility Recommendation and Project Effect: Chase Site 1 is currently recommended as unevaluated with regard to the S/NRHP. It represents the remains of a historic farmstead whose construction dates to between 1881 and 1900. EDR's testing identified a moderately dense artifact scatter at the site; however, additional subsurface testing

would be necessary to determine the full extent and nature of archaeological materials. Therefore, the site is currently unevaluated under criteria A, C, and D. Furthermore, additional research into local or regional history would be necessary to determine if the owner or owners of the farmstead (the Dragget family) played a significant role in local or regional history and, if so, if this site is associated with the activities and/or events that made them significant. Therefore, the site is also recommended as unevaluated under Criterion B.

Chase Site 1 has been avoided by Project design so there will be no Project-related impacts to the site. Therefore, there will be no effect to significant resources. No further work is recommended.

3.3.6 Green Highlands Site 1

Site Type: Prehistoric bifacial tool
Archaeology Survey Area: N/A
Associated Project Component: Not impacted by current layout

Site Description: Green Highlands Site 1 consists of a single prehistoric bifacial tool located in a corn field approximately 765 ft north of Engdahl Road and approximately 7,800 ft east of C. Johnson Road (Figure 7, Sheet 12). The site is situated on a moderate to steep south-facing slope below a flat topped hilltop to the north, and overlooking an unnamed east-trending tributary of Clear Creek to the south (see Figure 7, Sheet 12). Sediment is Busti Silt Loam which consists of somewhat poorly drained coarse loamy mixed material (Esri and NRCS, 2016a). Vegetation in the vicinity consists of planted corn and various weedy gasses and forbs within the cornfield. There is a small patch of mixed deciduous trees approximately 75 ft north of the site. Modern impacts to the area include plowing and other agricultural activities and erosion. Overall the site is moderately disturbed.

The site consists of a single bifacial tool made from opaque beige to pink fine-grained chert or siliceous shale with one small inclusion of semi-translucent very fine-grained gray chert (Appendix C, Photograph 80). The tool is roughly triangular in outline, plano-convex in cross section, and it measures 3.6 cm across the base of the triangle, 4.0 cm long, and 0.6 cm thick at the thickest point. The tool is completely bifacially flaked on what appears to have been the dorsal surface of the original flake. Approximately 75% of the apparent ventral surface has been retouched as well. The majority of the edge is bifacially flaked, although finished or regularized. A 2.1-cm long portion of one side shows steep, scraper- or spokeshave-like unifacial retouch. It is hypothesized that this tool was either a scraper, spokeshave, or some multi-use tool. The tool's material is tentatively assigned to Vanport Siliceous Shale (also called Jefferson County Chert) which is known from sources in Jefferson County, Pennsylvania, approximately 80 miles south of the Project site (Burkett, 2016).

The tool was collected by an EDR ecologist during early wetlands/ecological reconnaissance for the Project. By the time the archaeological survey was initiated, the property parcel on which the tool had been found was no longer part of the Project, and EDR archaeologists were not allowed to access the parcel. As a result, the area around the find was not examined or shovel tested by archaeologists, and it is currently unknown whether additional archaeological materials are present there.

NRHP Eligibility Recommendation and Project Effect: Green Highlands Site 1 is currently recommended as unevaluated with regard to the S/NRHP. It consists of a single collected prehistoric unifacial tool; however, the extent of additional surface or subsurface archaeological material at the site is currently unknown because EDR archaeologists did not have access to the site area during their survey. Additional surface reconnaissance and subsurface testing by qualified archaeologists would be necessary to determine the full extent and nature of archaeological materials at the site. Therefore, the site is currently unevaluated under criteria A, B, C, and D.

Green Highlands Site 1 is no longer located within the Project site so there will be no Project-related impacts to the site. Therefore, there will be no effect to significant resources. No further work is recommended.

3.3.7 Higgs Site 1

Site Type: Historic Farmstead
Archaeology Survey Area: N/A
Associated Project Component: Not impacted by current layout

Site Description: Higgs Site 1 is a historic farmstead located adjacent to the northeast side of Mill Creek Rd. and approximately 175 ft northeast of Mill Creek (Figure 7, Sheet 4). The site is situated on a flat bench mid-way down the western slope of a large northwest/southeast trending ridge within the upper portion of the Mill Creek Drainage. A portion of the site occurs within a mapped wetland, and the ground surface in much of the surrounding area was very wet at the time of recording. Sediment is of Busti Silt Loam and Schuyler Silt Loam. Busti Silt Loam consists of somewhat poorly drained coarse loamy material; and Schuyler Silt Loam consists of moderately well drained fine loamy mixed material (Esri and NRCS, 2016a). Vegetation in the vicinity consists of various mature second-growth deciduous trees as well as mature non-native apple trees. The understory consists of various forbs and ferns. Modern impacts to the area include the nearby Mill Creek Road and a graded, gravel-surfaced woods road that passes through the site area; as well as the natural degradation of the features at the site. Overall, the site is moderately to heavily disturbed.

The site consists of three foundations (Foundations 1-3). EDR archaeologists conducted a thorough examination of the surrounding area and identified no additional surface features. Foundation 1 is a degraded formed concrete foundation set approximately 3 ft into the ground (Appendix C, Photograph 81). The foundation has been pushed around and only the northeast corner remains intact. A linear piece of the formed foundation is present on the ground north of the site. Additionally, the foundation has been largely filled in by earth and debris, including a kitchen range and an oven. The feature, in its current state, forms an irregular four-sided polygon: the north side is approximately 35 ft long, the east side is approximately 18 ft long, the south side is approximately 30 ft long, and the west side is approximately 22 ft long. This foundation likely represents the remains of the farmhouse.

Foundation 2 consists of an alignment of large cobbles which appear to represent an informal pier type foundation for an ephemeral outbuilding such as a chicken coop or saw-mill (Appendix C, Photograph 82). The long access of the feature is oriented north/south with five cobbles along the west side which is approximately 29 ft long and four cobbles along the east side which is approximately 25 ft long.

Foundation 3 consists of a severely degraded concrete pad which likely represents the remains of a barn (Appendix C, Photograph 83). The feature is heavily overgrown with various sedges and forbs, including goldenrod. Given the heavily degraded and overgrown state of the foundation, the dimensions measured by EDR archaeologists are approximate as it was not always possible to identify the precise location of corners or edges. The north side of the feature is approximately 41 ft long, the east side is approximately 20 ft long, the south side is approximately 41 ft long and the west side is approximately 15 ft long. The pad is located on a slightly raised and leveled area on the west side of the woods road that passes through the site. The concrete used to make the pad is relatively rough, containing large pebbles. Given its size, nature, and location, this foundation appears to represent the remains of either a barn or a garage.

Other than the kitchen range and oven observed within Foundation 1, no artifacts were noted on the surface at Higgs Site 1. At the time of the survey, the archaeological APE in the area (a proposed access road which has since been moved) followed the previously disturbed woods road and, therefore, no shovel testing was conducted within the vicinity of the site. However, the distribution of features is considered to be an adequate basis for a site boundary at this point.

The 1900 USGS *Dunkirk Quardrangle* (USGS, 1900) and the 1941 USGS *Cherry Creek Quadrangle* (USGS, 1941) each depict a single structure at the location of Higgs Site 1. Given the depicted structure's location relative to Mill Creek Road, it corresponds well with EDR's Foundation 1. No structures are depicted in the vicinity of the site on the 1854 Keeney map or the 1881 Beers map (Beers, 1881; Keeney, 1854).

NRHP Eligibility Recommendation and Project Effect: Higgs Site 1 is currently recommended as unevaluated with regard to the S/NRHP. It represents the remains of a historic farmstead whose construction dates to between 1881 and 1900; however, subsurface testing would be necessary to determine the full extent and nature of archaeological materials at the site. Therefore, the site is currently unevaluated under criteria A, C, and D. Furthermore, additional research into local or regional history would be necessary to determine if the owner or owners of the farmstead played a significant role in local or regional history and, if so, if this site is associated with the activities and/or events that made them significant. Therefore, the site is also recommended as unevaluated under Criterion B.

Higgs Site 1 has been avoided by Project design so there will be no Project-related impacts to the site. Therefore, there will be no effect to significant resources. No further work is recommended.

3.3.8 Reynolds Site 1

Site Type: Historic Farmstead
Archaeology Survey Area: N/A
Associated Project Component: Not impacted by current layout

Site Description: Reynolds Site 1 is a historic farmstead located approximately 3,500 ft south of Dybkas Rd., approximately 3,900 ft west of Plank Rd, and approximately 5,200 ft northeast of Chautauqua County Route 85 (Figure 7, Sheet 3). The site is located on a small saddle on the upper north slope of South Hill overlooking the head of a west-trending drainage that feeds into a north/south-trending tributary of the West Branch of Conewango Creek. The drainage area immediately south and west of the site was very wet at the time of recording. Sediment on site is Busti Silt Loam which consists of somewhat poorly drained coarse loamy material (Esri and NRCS, 2016a). Vegetation in the vicinity consists of mixed young second-growth deciduous trees and larch, with a scrubby understory of various weedy forbs and shrubs. Modern impacts to area are limited to the natural degradation of the site Features. Overall, the site is lightly to moderately disturbed.

Reynolds Site 1 consists of a single foundation (Foundation 1), a cistern, and a small bottle dump. Twenty to thirty apple trees have been planted in the area, many of them in a concentration approximately 200 ft west of the site area. Foundation 1 is a dry-laid fieldstone foundation set approximately 2 ft into the ground (Appendix C, Photograph 84). The top of the foundation is approximately level with the current ground surface. The feature measures 28 ft north/south and 26 ft east/west. There is a concentration of cobbles near the center that may represent a collapsed fire place/chimney. An approximately 6 x 26 ft area adjacent to the north side of the foundation delineated by large cobbles may indicate the former location of a porch.

The cistern is located approximately 10 ft east of Foundation 1. It consists of an approximately 10-ft diameter cobble-lined depression with standing water in the bottom (Appendix C, Photograph 85). This feature is currently interpreted as a cistern but it may also represent a collapsed/filled in well.

A small bottle dump was identified approximately 130 ft north of Foundation 1. It consists of three complete amber glass bottles and one complete green glass bottle. Two of the amber glass bottles have cork-type finishes with machine molds all the way up the sides and the other amber bottle has a crown-type finish. The green glass bottle has a cork type finish and an Owens-Illinois maker's mark indicative of a date of manufacture between 1929 and ca. 1960 (BLM and SHA, 2016). The amber bottle has "CERTO" "All US Patent" embossed on it, along with "FOR HALF BOTTLE FILL TO HERE ON SIDE". This appears to be a bottle CERTO brand concentrated fruit pectin which was manufactured by the Pectin Sales Company, Inc. of Rochester, NY beginning in 1921 (Cole, 1922). Therefore, the bottle dump is consistent with a Depression-era to mid-century dumping episode.

EDR conducted subsurface testing within the Project APE in the vicinity of Reynolds Site 1 (designated EDR Survey Area B10). Archaeologists excavated 92 shovel tests within the survey area and did not encounter any buried cultural material.

The 1941 USGS *Cherry Creek Quadrangle* (USGS, 1941) depicts two structures in the vicinity of Reynolds Site 1 as well as a road trending east/west through the area and connecting Plank Road and Chautauqua County Route 85. The trace of this road was evident in the vicinity of the site, although it is moderately to severely overgrown and eroded. EDR archaeologists searched the vicinity of Reynolds Site 1, particularly focusing on the former road and adjacent area, but did not identify any additional archaeological features that could correspond to the other structure noted on the 1941 map. No structures are depicted in the vicinity of the site on the 1854 Keeney map, the 1881 Beers map, or the 1900 USGS Map (Beers, 1881; Keeney, 1854; USGS, 1900).

NRHP Eligibility Recommendation and Project Effect: Reynolds Site 1 is currently recommended as unevaluated with regard to the S/NRHP. It represents the remains of a historic farmstead whose construction postdates 1900; however, subsurface testing would be necessary to determine the full extent and nature of archaeological materials at the site. Therefore, the site is currently unevaluated under criteria A, C, and D. Furthermore, additional research into local or regional history would be necessary to determine if the owner or owners of the farmstead played a significant role in local or regional history and, if so, if this site is associated with the activities and/or events that made them significant. Therefore, the site is also recommended as unevaluated under Criterion B.

Reynolds Site 1 has been avoided by Project design so there will be no Project-related impacts to the site. Therefore, there will be no effect to significant resources. No further work is recommended.

3.3.9 State Site 1

Site Type: Depression/Possible Historic Foundation
Archaeology Survey Area: D4
Associated Project Component: Overhead collection line along north side of Boutwell Hill Rd.

Site Description: State Site 1 is a depression/possible historic foundation located approximately 55 ft northwest of Boutwell Hill Rd. and approximately 150 ft northeast of an unnamed southeast-trending drainage (Figure 7, Sheet 7). The site is located on a gradual southwest-facing slope overlooking the unnamed southeast-trending drainage (Appendix C, Photograph 86). Sediment is Busti Silt Loam which consists of somewhat poorly drained coarse loamy material (Esri and NRCS, 2016a). Vegetation in the vicinity consists of mixed second-growth deciduous trees, including beech, maple, black cherry, and non-native apple. The understory consists of raspberry and blackberry shrubs, various ferns and mosses, and non-native day-lilies. Modern impacts to the area include nearby Boutwell Hill Road and the natural degradation of the site. Overall the site is moderately to severely disturbed.

State Site 1 consists of a single depression/possible historic foundation (Foundation 1) (Appendix C, Photograph 87). Foundation 1 is a roughly rectangular depression with two unmodified fieldstones visible in one wall and one additional unmodified stone visible in the bottom. It measures approximately 18 ft north/south, the east wall is 23 ft long, and the west wall is 29 ft long. The depression is approximately 4 ft deep, and at the time of recording there was approximately 1.5 ft of standing water in the bottom of the feature. EDR archaeologists excavated 60 shovel tests in the vicinity of the site (designated survey area D4), none of which contained cultural material.

State Site 1 does not directly correspond to an MDS; however, a structure is depicted in the vicinity of the site on both the 1854 Keeney map and the 1881 Beers map of the area (Beers, 1881; Keeney, 1854). On the 1854 Keeney map, the property is labeled as “Wm. Howd” and on the 1881 Beers map it is labeled as “A. Curran”. It seems likely that the feature recorded either represents the extremely degraded remains of a house associated with this (or these) farmstead(s) or the remains of an outbuilding. No structures are depicted in the vicinity of the site on the later 1900 and 1941 USGS maps (USGS, 1900; 1941).

The proximity of the feature to the road, the depiction of structures in this area on historic maps, and the non-native vegetation (apple trees and day lilies) noted in the vicinity all suggest that the depression represents a domestic

foundation of some sort. However, the depression does not contain a clear stone foundation, no historic artifacts were noted on the ground surface in the area, and shovel testing did not recover any buried historic artifacts.

NRHP Eligibility Recommendation and Project Effect: State Site 1 is currently recommended as unevaluated with regard to the S/NRHP. It represents some portion of the remains of a historic farmstead whose construction predates 1853; however, additional subsurface testing and surface reconnaissance would be necessary to determine the full extent and nature of archaeological materials at the site. Therefore, the site is currently unevaluated under criteria A, C, and D. Furthermore, additional research into local or regional history would be necessary to determine if the Howd and Curran families (the apparent owners of the farmstead) played a significant role in local or regional history and, if so, if this site is associated with the activities and/or events that made them significant. Therefore, the site is also recommended as unevaluated under Criterion B.

State Site 1 is crossed by the overhead collection line along the north side of Boutwell Hill Rd. However, no poles will be placed within the site boundary and all physical impacts to the site will be avoided during construction. Therefore, there will be no effect to significant resources. No further work is recommended.

3.3.10 State Site 2

Site Type: Historic Debris Scatter
Archaeology Survey Area: D5
Associated Project Component: Overhead collection line along north side of Mill Creek Rd.

Site Description: State Site 2 is a historic debris scatter located approximately 10 ft north of Mill Creek Rd., and approximately 1,900 northeast of the upper Mill Creek drainage (Figure 7, Sheet 6). The site is located on a gentle to moderate west-facing slope immediately west of the summit of Arab Hill (Appendix C, Photograph 88). Sediment is Busti Silt Loam and Chautauqua Silt Loam. Busti Silt Loam consists of somewhat poorly drained coarse loamy material, and Chautauqua Silt Loam consists of moderately well drained coarse loamy mixed material (Esri and NRCS, 2016a). Vegetation in the vicinity consists of second growth deciduous forest dominated by beech and maple with an understory of beech and evergreen saplings, as well as wild onions, and various ferns and mosses. Modern impacts to the area include a gravel-surfaced equestrian trail which passes through the site and the nearby Mill Creek Road. Overall, the site is moderately disturbed.

State Site 2 consists of a small scatter of historic debris. Artifacts observed on the surface are summarized in Table 7 and artifacts collected from shovel tests are summarized in Table 8. Overall, the artifact assemblage is consistent with

a small-scale household dump. The assemblage is dominated by household ceramics, stove parts, and automotive parts. EDR collected a small number of nails and fragments of flat glass but, in general, the assemblage lacks architectural material. Therefore, there is no indication that this site represents the remains of a structure.

Table 7. Summary of Surface Artifacts at State Site 2 (not collected).

Provenience	Depth	Count	Description	Comments	Date Range	Sources
Surface	--	3	Cast-iron woodstove parts		--	--
Surface	--	5	Steel automotive parts		--	--
Surface	--	1	Undecorated white earthenware		--	--
Surface	--	1	Blue-glazed white earthenware		--	--
Surface	--	1	Clear flat glass		--	--
Surface	--	1	Screw top amber glass bottle.	"Dispose of Properly" embossed on body; "7" embossed on base.	Probably 1970s or 1980s	Coca-Cola Bottle Man, 2016
Surface	--	2	Screw top clear glass bottle. Screw top finish.	"NY" + "D18" + "80" embossed on base.	Possibly 1980	--

Table 8. Subsurface Artifacts at State Site 2 (collected).

Shovel Test	Stratum	Depth	Count	Description	Comments	Date Range	Sources
D5.07	1	0-20 CM	1	AQUA FLAT GLASS			
D5.07	1	0-20 CM	1	IRONSTONE CHINA	UNDECORATED, BASAL FRAGMENT	1830- 20TH C	MACL, 2016
D5.07	1	0-20 CM	1	SOLARIZED VESSEL GLASS	SOLARIZED, MOLDED		
D5.08	1	0-30 CM	2	CLEAR FLAT GLASS			
D5.09	1	0-28 CM	3	AQUA FLAT GLASS			
D5.09	1	0-28 CM	5	IRONSTONE CHINA	2 MOLDED RIM FRAGMENTS	1830- 20TH C	MACL, 2016
D5.09	1	0-28 CM	1	MOLDED AQUA GLASS	MOLDED, KNURLED ON REVERSE		
D5.09	1	0-28 CM	1	STONEWARE		19th C	New York State Museum (NYSM), 2016
D5.11	1	0-30 CM	6	AQUA FLAT GLASS			
D5.11	1	0-30 CM	1	CUT NAIL		1810S - EARLY 20TH CENTURY	UVM, 2016
D5.12	1	0-25 CM	1	BOLT			

D5.12	1	0-25 CM	2	AQUA FLAT GLASS			
D5.12	1	0-25 CM	1	WIRE NAIL		1890s-PRESENT	UVM, 2016
D5.12	1	0-25 CM	2	GLAZED REFINED EARTHENWARE	INCLUSIONS IN GLAZE, GREY DISCOLORATION, GLAZE APPEARS MELTED		
D5.14	1	0-20 CM	1	AQUA FLAT GLASS			
D5.14	1	0-20 CM	1	CLEAR FLAT GLASS			
D5.14	1	0-20 CM	1	GLAZED YELLOW WARE		MID 19TH- 20TH C	FMNH, 2016
D5.14	1	0-20 CM	1	WHITE REFINED EARTHENWARE TRASFERPRINT	LIGHT BLUE TRANSFER	1830-1867	MACL, 2016
D5.15	1	0-27 CM	1	CLEAR VESSEL GLASS			
D5.15	1	0-27 CM	2	AQUA FLAT GLASS			
D5.15	1	0-27 CM	1	EMBOSSED OPAQUE WHITE GLASS	"…DY…"	1870-1920	BLM/SHA, 2016
D5.17	1	0-20 CM	2	AQUA FLAT GLASS			
D5.17	1	0-20 CM	1	WHITE REFINED EARTHENWARE	UNDECORATED	1830-PRESENT	FMNH, 2016
D5.17	1	0-20 CM	1	STONEWARE	SALT GLAZED	19th C	NYSM, 2016

State Site 2 occurs in the vicinity of a structure depicted on the 1854 Keeney map and the 1881 Beers map of the area (Beers, 1881; Keeney, 1854). On the 1854 map, there is a structure labeled as “E. Niles” somewhat west of the site; and on the 1881 map there is a structure labeled as “Mary V. Emley” in the approximately location of the site. A small unlabeled structure is also depicted in the vicinity of the site on both the1900 and 1941 USGS maps (USGS, 1900; 1941). However, no evidence of a former structure was encountered during the testing and surface reconnaissance at State Site 2, and the limited historic debris scatter is consistent with a small dump, not a former dwelling.

NRHP Eligibility Recommendation and Project Effect: State Site 2 is currently recommended as not eligible for listing on the S/NRHP under any criteria. It appears to be a low-intensity historic dumping locus utilized throughout the 19th and 20th centuries. The site’s integrity of setting and feeling have been moderately compromised by modern residential development in the area. Its integrity of materials, design, and workmanship have been severely compromised as the vast majority of artifacts appear to have been damaged or moved by the construction or maintenance of an equestrian trail that passes through the site. The site’s integrity of location is somewhat compromised because its artifacts have been moved and rearranged to an unknown extent by the trail and passersby.

The site's integrity of association is severely compromised because the artifacts are too few and too highly fragmented to firmly associate the site with specific historic trends. The site cannot be associated with significant historic trends or individuals and it does not embody significant engineering or design attributes. Therefore, it is not eligible for listing on the S/NRHP under criteria A, B, or C. Historic and modern trash dumps of this sort are very common in rural areas of New York and further research at the site is unlikely to obtain significant data pertinent to understanding regional history. Therefore, the site is not eligible under Criterion D.

State Site 2 is crossed by the overhead collection line along the north side of Mill Creek Rd. However, no poles will be placed within the site boundary and all physical impacts to the site will be avoided during construction. Therefore, there will be no effect to the site. No further work is recommended.

3.3.11 State Site 3

Site Type: Historic Farmstead
Archaeology Survey Area: D6
Associated Project Component: Overhead collection line along north side of Mill Creek Rd.

Site Description: State Site 3 is a historic farmstead located approximately 10 ft north of Mill Creek Rd., approximately 230 ft west of Overland Trail Rd., and approximately 1,000 ft northeast of the upper Mill Creek drainage (Figure 7, Sheet 5). The site is located on a gradual west-facing slope on the west side of Arab Hill. Sediment is primarily Fremont Silt Loam with a small portion of the site occurring on Busti Silt Loam. Fremont Silt Loam consists of somewhat poorly drained fine to coarse loamy mixed material and Busti Silt Loam consists of somewhat poorly drained coarse loamy mixed material. Vegetation in the vicinity consists of some mature maples, but primarily successional vegetation including goldenrod, young deciduous trees, and various weedy grasses and forbs. Modern impacts to the area include the nearby Mill Creek Road and associated mowing/brush-clearing of the right-of-way, logging, and natural degradation and erosion.

State Site 3 consists of one Foundation, one Rubble Mound, one possible well, and one camp grill. The Foundation is represents the remains of a large barn. It consists of a rectangular mixed concrete and dry-laid fieldstone foundation with two large earthen mounds on its east side (see Figure 7, Sheet 5) (Appendix C, Photographs 90 and 91). There is an approximately 10-ft wide gap between the two mounds and the northern mound stands approximately 10 ft above the base of the foundation while the southern mound stands approximately 5 ft above the base. The foundation measures approximately 74 ft north/south and 35 ft east/west and stands approximately 1 ft above the ground surface. The south side of the foundation is concrete but the remainder is dry-laid fieldstone which is heavily degraded/eroded.

The northwest corner of the foundation is filled with a large pile of fieldstones that measures approximately 15 ft north/south, and approximately 10 ft east/west, and approximately 2 ft tall. The purpose or function (if any) of this pile is not known. A small metal pipe, approximately 4-inches in diameter, protrudes approximately 1-ft above the ground surface approximately 20 ft north of the Foundation (Appendix C, Photograph 92).

The Rubble Mound is located 335 ft east of the Foundation and appears to represent the remains of a house, based on its location and other nearby features (a well and a camp grill) (Appendix C, Photographs 93-95). The Rubble Mound forms an irregular four-sided polygon: the north side is 22 ft long, the east side is 39 ft long, the south side is 28 ft long, and the west side is 39 ft long. The mound is heavily overgrown with goldenrod and successional shrubs, but some fragments of a concrete foundation are visible through the vegetation. There is an approximately 5-ft diameter depression adjacent to the north side of the mound that may represent a dug well (see Appendix C, Photograph 94). There is also a camp grill made out of tabular stones, concrete and cast iron grill pieces approximately 30 ft from the rubble mound (see Appendix C, Photograph 95). The majority of the area around the Rubble Mound has been graded and the surface has been covered with gravel, probably for use as a driveway when there was a standing structure at this location.

EDR archaeologists excavated 24 shovel tests in the vicinity of the Foundation (EDR Survey Area D6), only two of which contained cultural material. The two positive shovel tests, D6.21 and D6.23, contained one wire nail and one fragment of aqua flat glass, respectively. No shovel tests were excavated in the vicinity of the Rubble Mound given the graded and disturbed nature of the ground surface in that area. Surface reconnaissance of the site area did not identify any historic artifacts on the surface. Overall, there seems to be a very limited artifact scatter associated with the site.

State Site 3 occurs in the vicinity of a structure depicted on the 1854 Keeney map and the 1881 Beers map of the area (Beers, 1881; Keeney, 1854). On the 1854 map, the site appears to best correspond either to a structure labeled as "H. Jameson" or one labeled as "E. Niles" and on the 1854 map, the Rubble Mound (house) corresponds to the "E. Loun" house and property, whereas the Foundation (barn) corresponds to the "R. Main" property which contains a structure (presumably a house) on the south side of Mill Creek Road. The Project site was restricted to the north side of the road at this location, so EDR personnel did not examine the south side of the road in this vicinity. The historic map analysis suggests that the two clusters of features recorded at this site may not have belonged to the same property historically. No structures are depicted in the vicinity of the site on the later 1900 and 1941 USGS maps (USGS, 1900; 1941).

NRHP Eligibility Recommendation and Project Effect: State Site 3 is currently recommended as unevaluated with regard to the S/NRHP. It represents some portion of the remains of a historic farmstead (or farmsteads) whose

construction predates 1853; however, additional subsurface testing and surface reconnaissance would be necessary to determine the full extent and nature of archaeological materials at the site. Therefore, the site is currently unevaluated under criteria A, C, and D. Furthermore, additional research into local or regional history would be necessary to determine if the Jameson, Niles, Loun, and/or Main families (the potential owners of various pieces of the site at various times) played a significant role in local or regional history and, if so, if this site is associated with the activities and/or events that made them significant. Therefore, the site is also recommended as unevaluated under Criterion B.

State Site 3 is crossed by the overhead collection line along the north side of Mill Creek Rd. However, no poles will be placed within the site boundary and all physical impacts to the site will be avoided during construction. Therefore, there will be no effect to significant resources. No further work is recommended.

3.3.12 State Site 4

Site Type: Historic Farmstead
Archaeology Survey Area: D7
Associated Project Component: Overhead collection line along north side of Mill Creek Rd

Site Description: State Site 4 is a historic farmstead approximately 10 ft north of Mill Creek Rd., approximately 1,350 ft west-northwest of Overland Trail Road, and approximately 800 ft east-northeast of Mill Creek Rd. (Figure 7, Sheet 5). The site is located on flat to gently west-sloping ground mid-way down the west side of Arab Hill, overlooking the upper portion of the Mill Creek Drainage to the south and west (Appendix C, Photograph 96). Sediment is Fremont Silt Loam which consists of somewhat poorly drained fine loamy mixed material (Esri and NRCS, 2016a). Vegetation in the vicinity consists of second growth mixed deciduous/coniferous forest dominated by maple, beech, white pine, and spruce. The understory contains spruce saplings, as well as various ferns, grasses, and forbs. Modern impacts to the area include the proximity to Mill Creek Road and logging within the last 50 years. Overall, the area is moderately disturbed.

The site consists of a single foundation and no associated artifacts. The foundation is made of dry-laid fieldstone and is set approximately 2.5 ft into the ground (Appendix C, Photograph 97). The feature is moderately degraded, forming an irregular four-sided polygon: the north side is 30 ft long, the east side is 16 ft long, the south side is 24 ft long, and the west side is 12 ft long. There is an approximately 6-ft wide opening on the north side of the foundation that may represent a doorway. The west side of the feature appears to have been pushed together and piled at the northwest

corner in a small rubble mound (see Appendix C, Photograph 98). This damage may have occurred during logging in the area. The size of the foundation is consistent with a small house.

EDR archaeologists excavated 24 shovel tests adjacent to the site (designated EDR Survey Area D7), none of which contained any cultural material.

State Site 4 occurs in the vicinity of a structure depicted on the 1881 Beers map, labeled as "R.W. Main" (Beers, 1881). None of the other maps reviewed for the Project (Keeney, 1853; USGS, 1900; USGS, 1941) show a structure in the vicinity of the site. A former road takes off from Mill Creek Road and trends north approximately 100 ft east of the site; however, no road is depicted at this location on any of the historic maps reviewed for the Project. It seems likely, therefore, that this represents a particularly well developed woods road or driveway, not a historic town road.

NRHP Eligibility Recommendation and Project Effect: State Site 4 is currently recommended as unevaluated with regard to the S/NRHP. It represents some portion of the remains of a historic farmstead whose construction dates to between 1853 and 1881; however, additional subsurface testing and surface reconnaissance would be necessary to determine the full extent and nature of archaeological materials at the site. Therefore, the site is currently unevaluated under criteria A, C, and D. Furthermore, additional research into local or regional history would be necessary to determine if the Main family (the historic owners of the site) played a significant role in local or regional history and, if so, if this site is associated with the activities and/or events that made them significant. Therefore, the site is also recommended as unevaluated under Criterion B.

State Site 4 is crossed by the overhead collection line along the north side of Mill Creek Rd. However, no poles will be placed within the site boundary and all physical impacts to the site will be avoided during construction. Therefore, there will be no effect to significant resources. No further work is recommended.

3.3.13 Tenpas Site 1

Site Type: Historic Farmstead
Archaeology Survey Subarea: F4
Associated Project Component: Not impacted by current layout

Site Description: Tenpas Site 1 consists of a historic farmstead located approximately 10 ft southwest of Cleland Rd., approximately 1,150 ft southeast of intersection of Cleland Rd. and Boutwell Hill Rd., and approximately 10 ft north of an unnamed east-southeast-trending tributary of Clear Creek (Figure 7, Sheet 10). The site is situated on a flat to

gently south sloping area overlooking an unnamed northeast-trending unnamed tributary of Clear Creek (Appendix C, Photograph 99). Sediment is Busti Silt Loam which consists of somewhat poorly drained coarse loamy mixed material. Vegetation in the vicinity consists of mixed second growth forest dominated by maple and spruce with an understory dominated by non-native *vinca*, as well as various grasses and forbs. The spruce trees primarily occur in a dense patch across a driveway from the archaeological site and were likely planted there as part of state and/or federal depression-era reforestation efforts. Modern impacts to the site include the nearby Cleland Road, the nearby driveway/farm lane located immediately northwest of the site, possible artifact collection/looting (see discussion below), as well as natural degradation and erosion. Overall the area is lightly disturbed and the archaeological features appear to be in good condition.

The site consists of a foundation (Foundation 1), an outhouse, a well, a small brick concentration, and a small artifact concentration (see Figure 7, Sheet 10). Foundation 1 is constructed from dry-laid fieldstone and is set approximately 4 ft into the ground (Appendix C, Photograph 100). The foundation itself is largely collapsed, but the cellar hole remains fairly intact and has not caved in substantially. The feature forms an irregular four sided polygon: the north wall is 28 ft long, the east wall is 26 ft long, the south wall is 25 ft long, and the west wall is 19 ft long. Given the size of this feature and its location relative to the road and the driveway/farm lane, it appears to be the remains of a house.

The outhouse consists of a depression in the ground between Foundation 1 and the creek that has a diameter of approximately 4 ft (Appendix C, Photograph 101; see Figure 7, Sheet 10). The surface artifact concentration is located within and immediately adjacent to the outhouse and may represent a looter's pile (Appendix C, Photograph 102). However, the outhouse feature itself does not appear to have been completely excavated.

The well is a circular dug well with an interior diameter of approximately 4-ft. The well is lined with cobbles and filled in below a depth of approximately 4 ft (see Appendix C, Photograph 103). Two broken metal casings, each approximately 4 inches in diameter, protrude vertically above the filled in portion.

The brick concentration is located between Foundation 1 and the creek, approximately 30 ft downslope (south) of the foundation (see Figure 6, Sheet 10). It consists of approximately 5 whole and partial bricks (Appendix C, Photograph 104). This concentration may represent the remains of a fallen chimney formerly associated with the house (Foundation 1).

Artifacts observed in the surface artifact concentration include 1 partial white earthenware coffee/tea cup, 1 fragment of solarized vessel glass, and 1 fragment of colorless vessel glass. Solarized glass is produced from a reaction between

manganese in the glass and ultraviolet radiation. Glass makers in the United States stopped using manganese ca. 1920 (Lockhart, 2006).

EDR archaeologists excavated 24 shovel tests at Tenpas Site 1 (designated EDR Survey Area F4) which recovered a total of 13 artifacts consisting of two pieces of ceramic, seven pieces of glass, and four nails (Appendix C, Photograph 105). Artifacts collected from the shovel tests are summarized in Table 9.

Table 9. Artifacts Collected at Tenpas Site 1.

Shovel Test	Stratum	Depth	Count	Description	Comments	Date Range	Sources
F4.01	1	0-30 CM	5	AQUA FLAT GLASS			
F4.01	1	0-30 CM	1	CLEAR FLAT GLASS			
F4.01	1	0-30 CM	1	REFINED EARTHENWARE	UNDECORATED		
F4.01	1	0-30 CM	2	CUT NAIL	1 NAIL, 1 NAIL FRAGMENT	1810s-EARLY 20TH C	UVM, 2016
F4.03	2	30-40 CM	1	IRONSTONE CHINA	1 RIM FRAGMENT, UNDECORATED	1830- EARLY 20TH C	MACL, 2016
F4.04	1	0-20 CM	1	CLEAR VESSEL GLASS			
F4.12	2	20-30 CM	2	WIRE NAIL	2 FRAGMENTS	1890S-PRESENT	UVM, 2016

Tenpas Site 1 occurs in the vicinity of a structure labeled as "W. Shannon" on the Beers 1881 map and a structure is also depicted at the location on the 1900 USGS map (Beers, 1881; USGS, 1900). No structures are depicted in the vicinity of the site on the 1854 Keeney map or the 1941 USGS map (Keeney, 1854; USGS, 1941).

NRHP Eligibility Recommendation and Project Effect: Tenpas Site 1 is currently recommended as unevaluated with regard to the S/NRHP. It represents the remains of a historic farmstead whose construction dates to between 1853 and 1881; and the features are in good condition. However, additional subsurface testing and surface reconnaissance would be necessary to determine the full extent and nature of archaeological materials at the site. Therefore, the site is currently unevaluated under criteria A, C, and D. Furthermore, additional research into local or regional history would be necessary to determine if the Shannon family (the historic owners of the site) played a significant role in local or regional history and, if so, if this site is associated with the activities and/or events that made them significant. Therefore, the site is also recommended as unevaluated under Criterion B.

Tenpas Site 1 has been avoided by Project design so there will be no Project-related impacts to the site. Therefore, there will be no effect to significant resources. No further work is recommended.

3.3.14 Wagner Site 1

Site Type: Historic/Modern Rubble Mound
Archaeology Survey Area: A9
Associated Project Component: Not impacted by current layout

Site Description: Wagner Site 1 is a historic rubble mound located approximately 10 ft west of Chautauqua County Route 77, approximately 2,900 ft north of Mill Creek, and approximately 3,450 ft south-southwest of the intersection of Route 77 and Cook Rd. (Figure 7, Sheet 1). The site is situated on a gradual southeast-facing slope between two northwest/southeast-trending ridges within the upper portions of a south-trending tributary drainage of Mill Creek. Sediment is Busti Silt Loam and Chautauqua Silt Loam. Busti Silt Loam consists of somewhat poorly drained coarse loamy mixed material, and Chautauqua Silt Loam consists of moderately well drained coarse loamy mixed material (Esri and NRCS, 2016a). Vegetation in the vicinity consists of a single mature black walnut tree and wild grape vines, as well as weedy successional grasses, burdocks, and briars. Modern impacts to the area include recent pushing and trash dumping on and around the rubble mound, the nearby corn field and farm lane, and the nearby Chautauqua County Route 77. Overall, the site is severely disturbed.

The site consists of a single rubble mound near the location of a MDS (see discussion below). The rubble mound measures approximately 50 ft north/south and approximately 25 ft east/west, and consists of concrete fragments, modern tires, bed springs, cinder blocks, lumber fragments, cobbles, and various metal fragments (Appendix C, Photographs 106-107). The feature may represent the remains of a structure, however, it has been severely disturbed by modern trash dumping and appears to have been pushed into its current location and configuration. Additionally, there is a utility pole standing in the center of the mound. EDR archaeologists conducted pedestrian survey of the nearby cornfield, with negative results. They did not excavate shovel tests near the rubble mound given the disturbed context of the area.

Wagner Site 1 occurs in the vicinity of a structure labeled as “D. Hoisington” on the 1854 Keeney Map (Keeney, 1854). There is also an unlabeled structure shown at the location on the 1941 USGS map (USGS, 1941); however, both structures may correspond to the standing house and outbuildings immediately south of the site on the west side of Chautauqua County Route 77. No structures are depicted in the vicinity of the site on the 1881 Beers map (Beers, 1881).

NRHP Eligibility Recommendation and Project Effect: Wagner Site 1 is currently recommended as not eligible for listing on the S/NRHP under any criteria. It appears to be a historic/modern historic dumping locus and rubble mound.

The site's integrity of setting and feeling have been moderately compromised by the nearby county road as well as modern residential development in the area. Its integrity of materials, design, and workmanship have been severely compromised as the majority of material is heavily fragmented and appears to have been moved from its original location of use. The site's integrity of location is also compromised because its artifacts have been moved and rearranged to an unknown extent by pushing and modern dumping. The site's integrity of association is compromised because it cannot be firmly associated with any MDS locations from historic maps, and the historic materials are too fragmented and mixed with modern materials to clearly associate the site with specific historic activities or trends. The site cannot be associated with significant historic trends or individuals and it does not embody significant engineering or design attributes. Therefore, it is not eligible for listing on the S/NRHP under criteria A, B, or C. Historic and modern trash dumps are very common in rural areas of New York and further research at the site is unlikely to obtain significant data pertinent to understanding regional history. Therefore, the site is not eligible under Criterion D.

Wagner Site 1 has been avoided by Project design so there will be no Project-related impacts to the site. Furthermore, the site is recommended as not eligible for listing on the S/NRHP so there will be no effect to significant resources. No further work is recommended.

3.3.15 Williams Site 1

Site Type: Prehistoric Lithic Scatter
Archaeology Survey Area: E1
Associated Project Component: Not impacted by current layout

Site Description: Williams Site 1 is a prehistoric lithic scatter located approximately 275 ft east of Hall Road, approximately 1,550 ft northeast of Mill Creek, and approximately 2,400 ft north of intersection of Hall Rd. and Chautauqua County Route 77 (Figure 7, Sheet 9). The site is situated on a moderate west-facing slope below a prominent knoll, overlooking the uppermost portion of an unnamed south-trending tributary of Mill Creek to the west (Appendix C, Photograph 108). Sediment is Chautauqua Silt Loam, which consists of moderately well drained coarse loamy mixed material (Esri and NRCS, 2016a). Vegetation in the vicinity consists of planted corn on site, as well as mixed grasses and forbs in an adjacent hay field. Ground surface visibility within the corn field at the time of recording was approximately 95%. Modern impacts to the area include annual plowing and other agricultural activity, as well as erosion. Overall the area is moderately disturbed.

The site consists of one unifacial tool and one unmodified flake (Appendix C, Photographs 109-110). The tool is made of medium gray chert and contains approximately 25% secondary cortex on its dorsal surface. It is made from a large

flake and contains fine unifacial retouch along 2.4 cm of one lateral margin. Within the area of retouch, there is one larger flake removal which creates a 0.6-cm wide and 0.2-cm deep notch. Some macroscopic polish is visible on the worked edge. The notch does not exhibit any macroscopic usewear or polish and may represent recent plow damage. Overall, the tool measures 6.1 cm long, 3.5 cm wide, and 0.9 cm thick at its thickest point.

The unmodified flake is made of dark gray/black chert and contains no dorsal cortex. It measures 1.7 cm long, 1.3 cm wide, and 0.3 cm thick at its thickest point.

As with the prehistoric artifacts from Allenbrand Sites 2 and 3 and Charrington Creek Site 1, it should be noted that the black and gray chert from which these artifacts were made is at least superficially similar to Onondaga Chert known from the Onondaga Escarpment in Central and Western New York and southern Ontario, Canada. However, EDR archaeologists noted widespread gray, black, and tan chert pebbles contained within glacial gravels throughout the Project site, and it seems likely that the artifacts originate from this local source. It is possible that the glacial gravels in this area contain Onondaga Chert pebbles that were pushed south and west from the Onondaga Escarpment by glacial movement.

Both artifacts were surface finds and were located within 1 meter of each other. EDR archaeologists excavated nine shovel tests at the location of the finds but did not encounter any buried cultural material. EDR also conducted an intensive surface survey of the area but did not located any additional artifacts. Williams Site 1 is approximately 800 ft (244 m) south of Williams Site 2 (see Figure 7, Sheet 9).

NRHP Eligibility Recommendation and Project Effect: Williams Site 1 is currently recommended as not eligible for listing on the S/NRHP under any criteria. It consists of a small prehistoric lithic scatter of one unifacial tool and one unmodified flake that lacks a significant density or diversity of artifacts. Both artifacts were found on the ground surface within an agricultural field, and shovel testing at the site did not reveal additional artifacts. It is believed that the two artifacts recovered represent an isolated component not indicative of a significant archaeological site. The site's integrity of location is compromised because the two artifacts have likely moved following their initial deposition due to erosion and plowing of the field. Its integrity of setting and feeling have been moderately compromised by modern agricultural and residential development in the area. It lacks integrity of design and workmanship as the site consists of only two discarded fragments of chipped stone. The site's integrity of association is severely compromised because it cannot be dated or specifically associated with a period of significance. Integrity of materials remains strong; however, it does not make up for the overall lack of integrity and significance. The site cannot be associated with significant prehistoric trends or individuals, and it does not embody significant engineering or design attributes, therefore, it is not eligible for listing on the S/NRHP under criteria A, B, or C. Small isolated lithic scatters of this sort are relatively common

in the Allegheny Plateau and Escarpment, and further research at the site is unlikely to obtain significant data pertinent to understanding local or regional prehistory. Therefore, the site is not eligible under Criterion D.

Williams Site 1 has been avoided by Project design so there will be no Project-related impacts to the site. Therefore, there will be no effect to the site. No further work is recommended.

3.3.16 Williams Site 2

Site Type: Prehistoric Flake
Archaeology Survey Area: E1
Associated Project Component: Not impacted by current layout

Site Description: Williams Site 2 is an isolated prehistoric flake located approximately 150 ft east of Hall Road, approximately 1,900 ft northeast of Mill Creek, and approximately 3,200 ft north of the intersection of Hall Rd. and Chautauqua County Route 77 (Figure 7, Sheet 9). The site is situated on a moderate west-facing slope below a prominent knoll, overlooking the uppermost portion of an unnamed south-trending tributary of Mill Creek to the west (Appendix C, Photograph 111). Sediment is Chautauqua Silt Loam, which consists of moderately well drained coarse loamy mixed material (Esri and NRCS, 2016a). Vegetation in the vicinity consists of planted corn and sedges, willows and various other wetland forbs and shrubs in an adjacent wetland to the west. Ground surface visibility within the corn field at the time of recording was approximately 95%. Modern impacts to the area include annual plowing and other agricultural activity, as well as erosion. Overall the area is moderately disturbed.

The site consists of an isolated unmodified flake made of mottled light/dark gray chert (Appendix C, Photograph 112). The flake contains no dorsal cortex and its platform appears to have been crushed during removal. The lateral margins and distal termination remain intact. The flake measures 2.1 cm long.

The artifact was a surface find. EDR archaeologists excavated nine shovel tests at the location of the find but did not encounter any buried cultural material. EDR also conducted an intensive surface survey of the area but did not locate any additional artifacts. Williams Site 2 is located approximately 800 ft (244 m) north of Williams Site 1 (see Figure 7, Sheet 9).

As with the prehistoric artifacts from Allenbrand Sites 2 and 3, Charrington Creek Site 1, and Williams Site 1, it should be noted that the gray chert from which this flakes was made is at least superficially similar to Onondaga Chert known from the Onondaga Escarpment in Central and Western New York and southern Ontario, Canada. However, EDR

archaeologists noted widespread gray, black, and tan chert pebbles contained within glacial gravels throughout the Project site, and it seems likely that the artifact originates from this local source. It is possible that the glacial gravels in this area contain Onondaga Chert pebbles that were pushed south and west from the Onondaga Escarpment by glacial movement.

NRHP Eligibility Recommendation and Project Effect: Williams Site 2 is currently recommended as not eligible for listing on the S/NRHP under any criteria. It consists of an isolated prehistoric flake and lacks a significant density or diversity of artifacts. The artifact was found on the ground surface within an agricultural field, and shovel testing at the site did not reveal additional artifacts. It is believed that the artifact recovered represents an isolated component not indicative of a significant archaeological site. The site's integrity of location is compromised because the artifact has likely moved following its initial deposition due to erosion and plowing of the field. Its integrity of setting and feeling have been moderately compromised by modern agricultural and residential development in the area. It lacks integrity of design and workmanship as the site consists of a single casually discarded fragments of chipped stone debitage. The site's integrity of association is severely compromised because it cannot be dated or specifically associated with a period of significance. Integrity of materials remains strong; however, it does not make up for the overall lack of integrity and significance. The site cannot be associated with significant prehistoric trends or individuals, and it does not embody significant engineering or design attributes, therefore, it is not eligible for listing on the S/NRHP under criteria A, B, or C. Isolated prehistoric flakes of this sort are relatively common in the Allegheny Plateau and Escarpment, and further research at the site is unlikely to obtain significant data pertinent to understanding local or regional prehistory. Therefore, the site is not eligible under Criterion D.

Williams Site 2 has been avoided by Project design so there will be no Project-related impacts to the site. Therefore, there will be no effect to significant resources. No further work is recommended.

4.0 SUMMARY AND CONCLUSIONS

4.1 Summary of Archaeological Survey Methods and Results

This Phase 1B archaeological survey was completed in accordance with the Fieldwork Plan and research design previously reviewed and approved by NYSOPRHP (EDR, 2015; Herter, 2015; see Appendix B). At the time that the Fieldwork Plan was prepared, the layout and assumptions regarding temporary disturbance resulted in an archaeological APE of 498.3 acres. EDR actually surveyed 546.6 acres at the Phase 1B level. Subsequent to the preparation of the Fieldwork Plan, the Project layout was revised and assumptions regarding the limits of temporary disturbance during construction were refined for some Project components (see Sections 1.2 and 2.3). Based on the revised Project layout and impact assumptions, the archaeological APE for the Project is now 471.2 acres in size. The level of effort for the Phase 1B archaeological fieldwork (see Section 3) was based on the size of the APE as presented in the Fieldwork Plan (498.3 acres) (EDR, 2015), and EDR actually surveyed 546.6 acres. Therefore, the amount of archaeological survey fieldwork conducted for the Project significantly exceeds the required level of effort (per the *SHPO Wind Guidelines*) that would have been necessary to survey the APE for the revised Project layout.

The archaeological survey involved the excavation of 3,853 shovel tests and the pedestrian surface survey of 174.7 acres, from which 325 historic-period artifacts and nine prehistoric-period artifacts were collected. The Phase 1B survey resulted in the identification of six prehistoric-period archaeological sites and 10 historic-period archaeological sites: seven historic farmsteads, one isolated prehistoric tool, two isolated prehistoric flakes, three prehistoric lithic scatters, one historic debris scatter, one historic depression/possible foundation, and one historic rubble mound. Summary descriptions of these sites are provided as follows:

- **Allenbrand Site 1** is a historic farmstead consisting of three foundations, three concrete pads, one rubble mound, and two pieces of agricultural equipment. The site is currently recommended as not eligible for listing on the S/NRHP under any criteria. Allenbrand Site 1 is located within the Project APE along the proposed collection line and overhead transmission line west of Andrews Road and may be impacted by the Project. However, no poles will be placed within site features so there will be no physical impacts to the features at the site. Pole placement may impact a buried artifact scatter; however, this is not considered a significant portion of the site. Therefore, there will be no adverse effect to significant resources. No further work is recommended.
- **Allenbrand Site 2** is a prehistoric lithic scatter consisting of two unmodified chert flakes. The site is currently recommended as not eligible for listing on the S/NRHP under any criteria. Allenbrand Site 2 is located within the APE for the proposed collection line and overhead transmission line west of Andrews Road. However, the site will be avoided by pole placements for the overhead lines so there will be no physical impacts to the site

area (see Figure 7, Sheet 8). Regardless of potential impacts, the site is recommended as not eligible for listing on the S/NRHP so there will be no effect to significant resources. No further work is recommended.

- **Allenbrand Site 3** consists of one unmodified prehistoric chert flake. The site is currently recommended as not eligible for listing on S/NRHP under any criteria. Allenbrand Site 3 is located within the APE for the proposed overhead transmission line west of Andrews Road. However, the site will be avoided by pole placements for the overhead line so there will be no physical impacts to the site area (see Figure 7, Sheet 8). Regardless of potential impacts, the site is recommended as not eligible for listing on the S/NRHP so there will be no effect to significant resources. No further work is recommended.
- **Charrington Creek Site 1** is a prehistoric lithic scatter consisting of two chert flakes. The site is currently recommended as not eligible for listing on the S/NRHP under any criteria. Charrington Creek Site 1 has been avoided by Project design so there will be no Project related impacts to the site. Regardless of potential impacts, the site is recommended as not eligible for listing on the S/NRHP so there will be no effect to significant resources. No further work is recommended.
- **Chase Site 1** is a historic farmstead consisting of consists of one rubble mound, one foundation, and a historic debris scatter. The site is currently recommended as unevaluated with regard to the S/NRHP. Chase Site 1 has been avoided by Project design so there will be no Project-related impacts to the site. Therefore, there will be no effect to significant resources. No further work is recommended.
- **Green Highlands Site 1** is an isolated prehistoric bifacial tool made from siliceous shale. The site is currently recommended as unevaluated with regard to the S/NRHP. Green Highlands Site 1 is no longer located within the Project site so there will be no Project-related impacts to the site. Therefore, there will be no effect to significant resources. No further work is recommended.
- **Higgs Site 1** is a historic farmstead consisting of three foundations (Foundations 1-3). The site is currently recommended as unevaluated with regard to the S/NRHP. Higgs Site 1 has been avoided by Project design so there will be no Project-related impacts to the site. Therefore, there will be no effect to significant resources. No further work is recommended.
- **Reynolds Site 1** is a historic farmstead consisting of a single foundation, a cistern, and a small bottle dump. The site is currently recommended as unevaluated with regard to the S/NRHP. Reynolds Site 1 has been avoided by Project design so there will be no Project-related impacts to the site. Therefore, there will be no effect to significant resources. No further work is recommended.
- **State Site 1** is a depression/possible historic foundation. The site is currently recommended as unevaluated with regard to the S/NRHP. State Site 1 is crossed by the overhead collection line along the north side of Boutwell Hill Rd. However, no poles will be placed within the site boundary and all physical impacts to the site will be avoided during construction. Therefore, there will be no effect to significant resources. No further work is recommended.

- **State Site 2** is a historic debris scatter. The site is currently recommended as not eligible for listing on the S/NRHP under any criteria. State Site 2 is crossed by the overhead collection line along the north side of Mill Creek Rd. However, no poles will be placed within the site boundary and all physical impacts to the site will be avoided during construction. Therefore, there will be no effect to the site. No further work is recommended.
- **State Site 3** is a historic farmstead consisting of one foundation, one rubble mound, one possible well, and one camp grill. The site is currently recommended as unevaluated with regard to the S/NRHP. State Site 3 is crossed by the overhead collection line along the north side of Mill Creek Rd. However, no poles will be placed within the site boundary and all physical impacts to the site will be avoided during construction. Therefore, there will be no effect to significant resources. No further work is recommended.
- **State Site 4** is a historic farmstead consisting of a single foundation and no associated artifacts. The site is currently recommended as unevaluated with regard to the S/NRHP. State Site 4 is crossed by the overhead collection line along the north side of Mill Creek Rd. However, no poles will be placed within the site boundary and all physical impacts to the site will be avoided during construction. Therefore, there will be no effect to significant resources. No further work is recommended.
- **Tenpas Site 1** consists of a historic farmstead consisting of a foundation, an outhouse, a well, a small brick concentration, and a small artifact concentration. The site is currently recommended as unevaluated with regard to the S/NRHP. Tenpas Site 1 has been avoided by Project design so there will be no Project-related impacts to the site. Therefore, there will be no effect to significant resources. No further work is recommended.
- **Wagner Site 1** is a historic rubble mound consisting of a single rubble mound near the location of a MDS. The site is currently recommended as not eligible for listing on the S/NRHP under any criteria. Wagner Site 1 has been avoided by Project design so there will be no Project-related impacts to the site. Furthermore, the site is recommended as not eligible for listing on the S/NRHP so there will be no effect to significant resources. No further work is recommended.
- **Williams Site 1** is a prehistoric lithic scatter consisting of one unifacial tool and one unmodified flake. The site is currently recommended as not eligible for listing on the S/NRHP under any criteria. Williams Site 1 has been avoided by Project design so there will be no Project-related impacts to the site. Therefore, there will be no effect to the site. No further work is recommended.
- **Williams Site 2** is an isolated unmodified prehistoric flake. The site is currently recommended as not eligible for listing on the S/NRHP under any criteria. Williams Site 2 has been avoided by Project design so there will be no Project-related impacts to the site. Therefore, there will be no effect to significant resources. No further work is recommended.

In EDR's opinion, the archaeological testing, pedestrian surface survey, and surface reconnaissance conducted at the 16 sites identified during the current survey was sufficient to determine the spatial boundaries of each site (for the

purpose of avoiding impacts to each site). Green Highlands Site 1 is an exception to this due to extenuating circumstances having to do with property access; however it is well outside the Project site and will not be impacted (see Section 3.3.6). The testing, surface survey, and reconnaissance was sufficient to identify foundations and other features, and generally assess the condition of archaeological resources located at each of the 16 sites in respect to proposed project components and areas of disturbance.

4.2 Recommendations

As described in Section 3.3 and Table 3 of this report, the archaeological sites identified within the Project site will be avoided during Project construction. The Project layout is currently being reviewed and, if necessary, minor modifications will be made to ensure that impacts to significant archaeological resources are avoided. In the event that a potentially significant archaeological resource is located within the APE, and Project facilities cannot be relocated to avoid impacts to the resource, then a Phase 2 archaeological site investigation (in consultation with NYSOPRHP) will be conducted. However, the Project layout is being intentionally sited to avoid archaeological resources so no Phase 2 site investigations are anticipated to be necessary.

The mapped locations of all identified archaeological sites within 100 feet (31 meters) of proposed Project-related impacts will be identified as "Environmentally Sensitive Areas" or similar on Project construction maps, and marked in the field by construction fencing with signs that restrict access. These measures should be adequate to ensure that impacts to archaeological resources are avoided.

In the event that unanticipated archaeological resources are encountered during construction, the Project's unanticipated discovery plan will include provisions to stop all work in the vicinity of the archaeological finds until those resources can be evaluated and documented by a Registered Professional Archaeologist.

With the adoption of these measures, the proposed Cassadaga Wind Project is not anticipated to affect any significant archaeological resources.

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