

# **BROOKSIDE SOLAR, LLC**

Matter No. 21-00917

900-2.10 Exhibit 9

**Cultural Resources** 

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### Acronym List

AES	The AES Corporation, Inc.
APE	Area of Potential Effects
CFR	Code of Federal Regulations
CRIS	Cultural Resources Information System
CWA	Clean Water Act
GIS	geographic information system
GPS	Global Positioning System
LOD	limit of disturbance
NAGPRA	Native American Graves Protection and Repatriation Act
NHPA	National Historic Preservation Act
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
NYAC	New York Archaeological Council
NYCRR	New York Codes, Rules and Regulations
NYHPA	New York Historic Preservation Act
NYSDPS	New York State Department of Public Service
NYSM	New York State Museum
OPRHP	Office of Parks, Recreation, and Historic Preservation
ORES	Office of Renewable Energy Siting
ROWs	rights-of-way
SHPO	State Historic Preservation Office
SRHP	State Register of Historic Places
STPs	shovel test pits
THPO	Tribal Historic Preservation Office
USC	United States Code
USDA	United States Department of Agriculture
WQC	Water Quality Certification
ZVI	Zone of Visual Impact

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## **Glossary Terms**

Applicant	Brookside Solar, LLC, a subsidiary of The AES
	Corporation, Inc. (AES), the entity seeking a siting
	permit for the Facility from the Office of Renewable
	Energy Siting (ORES) under Section 94-c of the New
	York State Executive Law.
Facility	The proposed components to be constructed for the
	collection and distribution of energy for the Brookside
	Solar Project, which includes solar arrays, inverters,
	electric collection lines, and the collection substation.
Facility Site	The parcels encompassing Facility components, which
	totals 1,471 acres in the Towns of Burke and
	Chateaugay, Franklin County, New York.
Limits of Disturbance	The area to which construction impacts will occur,
	totaling approximately 645 acres.



#### **Exhibit 9: Cultural Resources**

# 9(a) Study of the Impacts of Construction and Operation on Archaeological and Cultural Resources

This exhibit addresses the requirements specified in 19 New York Codes, Rules and Regulations (NYCRR) §900-2.10, which requires a study of the potential impacts of the construction and operation of the Facility, its interconnections, and its related facilities on cultural resources (archaeological and historic architecture).

#### Introduction and Record of Consultation

The New York Historic Preservation Act (NYHPA) of 1980 (Chapter 354 of Parks, Recreation and Historic Preservation Law) established a review process for state agency activities affecting historic or cultural properties, requiring consultation with the Commissioner of the Office of Parks, Recreation, and Historic Preservation (OPRHP), which serves as the State Historic Preservation Office (SHPO). The NYHPA requires state agencies to consult with OPRHP if it appears that a proposed project may cause any change, beneficial or adverse, in the quality of any historic, architectural, archaeological, or cultural property that is listed in the National Register of Historic Places (NRHP) or in the State Register of Historic Places (SRHP), or that is determined by the Commissioner to be eligible for listing in the SRHP. It requires that state agencies, to the fullest extent practicable, be consistent with other provisions of the law and fully explore all feasible and prudent alternatives to avoid, minimize, or mitigate adverse impacts.

Section 14.09 of the NYHPA indicates that if a project has a federal permitting nexus, the OPRHP review process follows Section 106 of the National Historic Preservation Act (NHPA) and its implementing regulations at 36 Code of Federal Regulations (CFR) Section 800 (Public Law 89-665, as amended by Public Law 96-515; 16 United States Code [USC] 470 et seq.). Section 106 requires that agencies with jurisdiction over a proposed project take into account the effect of the undertaking on cultural resources listed in or eligible for listing in the NRHP and afford the SHPO and the Advisory Council on Historic Preservation an opportunity to comment.

Because the Facility will require a Clean Water Act (CWA) Section 401 Water Quality Certification (WQC) and coverage under Section 404 of the CWA for minor wetland impacts, in addition to the Section 94-c siting permit, consultation for the Facility follows the Section 106 review process.



#### **OPRHP-SHPO** Consultation

Pursuant to section 900-1.3(h) of this Part, the Applicant, through its consultant, TRC, initiated formal consultation with the OPRHP to develop the scope and methodology for cultural resources studies for the Facility (see Appendix 9-2 for the Facility correspondence with OPRHP). The consultants exceed the Secretary of the Interior's professional qualification standards (36 CFR 61) for Archaeologists, Historians, and Architectural Historians in their respective disciplines. To date, formal consultation with the OPRHP has included submissions through OPRHP's Cultural Resources Information System (CRIS) website consisting of the following technical documents for OPRHP review:

- Request for Consultation Letter (June 15, 2020);
- Phase IA Archaeological Survey and Sensitivity Assessment (September 18, 2020);
- Historic Architecture Survey Methodology (October 30, 2020);
- Phase IB Archaeological Survey Report (July 14, 2021);
- Historic Architectural Resources Survey and Effects Report (August 6, 2021); and
- Phase IB Archaeology Survey Addendum Report (December 28, 2021).

On September 18, 2020, the OPRHP requested a Phase IA archaeological investigation to identify previously recorded archaeological sites and other cultural resources within or near the Facility Site, and to assess the archaeological sensitivity of the Facility Site. The Phase IA report was submitted to OPRHP on September 18, 2020 (Appendix 9-1). In a letter dated October 22, 2020, OPRHP concurred with the recommendations presented in the Phase IA report that Phase IB archaeological testing be conducted where significant proposed ground disturbances fall within areas characterized as having moderate or high archaeological sensitivity. Areas of significant ground disturbance include areas of grading and excavation more than six inches deep, grubbing, tree and stump removal, and trenches more than three feet wide. Archaeological field work is not recommended for panel arrays, perimeter fencing, and utility poles as long as the associated posts are driven or drilled and grading or grubbing are not involved. However, if these tasks require excavation over six inches in depth or if grading or grubbing is necessary, archaeological field work is recommended.

In October 2020, OPRHP released revised Phase IB archaeological survey guidelines (*New Guidelines*) and requested that all in progress projects adhere to the new guidelines (via email correspondence, October 19, 2020). The *New Guidelines* provide a universal definition of high



and low archaeological sensitivity and provide a pre-design Phase IB survey option. The definition of significant proposed ground disturbance remained unchanged.

To conform to the *New Guidelines*, TRC recalculated the total area of high archaeological sensitivity. The pre-design Phase IB survey option presented in the *New Guidelines* recommends 100 percent sampling of all areas designated as high archaeological sensitivity (Appendix 9-4).

Details of work completed to date are provided in this Exhibit. An Unanticipated Discovery Plan that identifies the actions to be taken in the unexpected event that resources of cultural, historical, or archaeological importance are encountered during the excavation process is included in this Exhibit.

#### Tribal Historic Preservation Office Consultation

Based on the Facility's geographical location and guidance from the OPRHP and the Indian Nations of New York State, the Applicant is consulting with the federally recognized St. Regis Mohawk Tribe. The Tribal consultation procedures included preparing initial outreach correspondence submitted via mail to the Tribal Historic Preservation Office (THPO) on 11/29/21; the correspondence included submittal of both the Phase IA and IB archaeological survey reports to the St. Regis Mohawk Tribe. The Applicant has requested comments from the THPO on any potential effects from the Facility on Tribal resources or lands. Documentation of these consultations is included in the Appendix 9-2 of the Application.

### (1) Summary of the Nature of Probable Impacts on Archaeological/Cultural Resources and Avoidance and Minimization Measures

This section includes a summary of the nature of the probable impact to any archaeological / cultural resources identified and addresses how those impacts will be avoided or minimized. A Phase IB archaeological survey was conducted in November and December 2020 and May and June 2021; the Phase IB archaeological survey report was submitted to OPRHP on July 19 30, 2021. OPRHP issued its report comments on July 22, 2021, concurring with the report findings and requesting no additional archaeological studies. Additional fieldwork was completed in November and December 2021 and a Phase IB addendum report was submitted to OPRHP on December 28, 2021. OPRHP issued its report comments on January 10, 2022, concurring with the report findings and requesting no additional archaeological studies. OPRHP issued a BROOKSIDE SOLAR, LLC 7

Determination of Effect Finding on December 11, 2022, stating the proposed project will have No Adverse Impact to historic and cultural resources (Appendix 9-2).

Three historic sites (TRC-BS-1, TRC-BS-2, TRC-BS-3) were identified during the Phase IB archaeological survey. They are not recommended for further study based on low density of artifacts and absence of identified cultural features.

#### (2) Phase IA Archaeological/Cultural Study

Pursuant to section 900-1.3(h) of this Part, this section addresses the Phase IA archeological / cultural resources study for the proposed Facility.

#### Phase IA Study Methods and Results

Background research included examination of site files and archives at the OPRHP, the online CRIS database, and the NRHP database. This research yielded information on recorded sites and previous cultural surveys in the surrounding area. Local histories, cartographic data, and other relevant information on the prehistoric and historic archaeological sites in the area were also reviewed. The United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Soil Survey Geographic Database was also examined to obtain information on soil types in the Facility Site. The historical assessment of the Facility Site included a review of historical maps, aerial photographs, a literature search, and a review of County historical documents located at the New York State and County repositories. This work was conducted to develop historic and prehistoric contexts of the Facility Site which are presented in detail in the Phase IA study (see Appendix 9-1).

The OPRHP CRIS database indicates that small portions of the Facility Site area are located within an archaeologically sensitive area. The OPRHP records confirm there are no NRHP-listed or eligible archaeological sites within the Area of Potential Effects (APE) for archaeological resources, which is defined as all potential ground-disturbance areas of the Facility. As part of the Phase I study, a search of OPRHP records indicated that six archaeological investigations have been conducted within a one-mile radius of the Facility Site, none of which include portions of the current Facility Site. Nine previously recorded archaeological sites are located within a one-mile radius of the Facility Site, one of which is within the Facility Site. No known cemeteries are located within the Facility Site.



An archaeological sensitivity analysis of the Facility Site determined that approximately 198 acres of the 1,471-acre Facility Site (approximately 14 percent) was considered to have high sensitivity for archaeological resources. Areas of moderate sensitivity constituted approximately 977 acres (approximately 69 percent), and 238 acres (approximately 16.9 percent) were considered to have low archaeological sensitivity. Areas of high sensitivity for historic resources include locations near historic roads and areas where structures have appeared on historic mapping. Hilltops, ridgelines, and river and stream terraces overlooking water sources were considered high sensitivity for prehistoric resources. Moderate sensitivity areas include upland, well drained areas displaced from water sources, and areas of low sensitivity are steeply sloped, poorly drained, or previously developed.

Prior to the Phase IB survey, the archaeological sensitivity of the Facility Site limit of disturbance (LOD) was revised using the *New Guidelines*; as such, approximately 512 acres were considered to have high archaeological sensitivity while the remaining 545 acres were considered to have low archaeological sensitivity.

#### (3) Phase IB Archaeological Survey

In October 2020, after submittal to (and review by) the OPRHP of the Phase IA report, the OPRHP issued *New Guidelines* for Phase IB archaeological survey for large solar facilities. The *New Guidelines* adopted a Sensitivity Model developed by OPRHP that defined only areas of high sensitivity and low sensitivity. Areas of high sensitivity, where archaeological sites are most likely to be identified, consisted of areas:

(1) within 100 meters (328 feet) of permanent water (rivers, streams, wetlands, ponds, lakes, and hydric soils) and on slopes equal to or less than 12 percent;

- (2) within known archaeological sites; and
- (3) locations of standing or demolished historic structures.

Hydric soils were included to account for areas that may not be currently near water but were in the past. The 100-meter cut off from water was based on data presented by Robert E. Funk in his 1993 *Archaeological Investigations in the Upper Susquehanna Valley, New York State.* The OPRHP new Guidelines further stated that archaeological survey should conform to the 1994 New York Archaeological Council (NYAC) Standards. All other portions of a given project area



were considered to have low sensitivity for the presence of archaeological sites, including areas of previous ground disturbance. The OPRHP has no archaeological concerns with low sensitivity areas and does not recommend Phase IB testing in these locations.

Additionally, the *New Guidelines* included a provision for Phase IB survey ahead of design if project design flexibility or shovel ready status was desired. Under this provision, the OPRHP recommended 100 percent sampling of all highly sensitive areas irrespective of the nature and type of construction impacts. With this approach, changes in project design would not require further archaeological consultation except for changes that may impact archaeological sites or that increase the size of the project area.

Pursuant to section 900-1.3(h) of this Part, in November and December 2020 a Phase IB archaeological survey was initiated following the OPRHP's *New Guidelines* Phase IB 100 percent survey provision to determine whether archaeological sites are located in OPRHP-defined areas of high sensitivity (Appendix 9-4). Phase IB survey was completed in November and December 2020, May and June 2021, and November and December 2021. Starting in May 2021 the Facility Site design was advanced far enough to complete the survey according to proposed construction feature disturbance. In total, 4,907 shovel test pits (STPs) were excavated, and 16.37 acres of systematic surface survey was conducted, resulting in the recovery of 326 artifacts from three historic sites: TRC-BS-1, TRC-BS-2, and TRC-BS-3. These sites were not recommended for further study based on low density of artifacts and absence of identified cultural features.

#### **Field Methods**

As indicated, the *New Guidelines* for Phase IB archaeological survey adopted a universal definition of high archaeological sensitivity and added a pre-design Phase IB survey option which was followed for the initial Phase IB survey. Survey conducted after May 2021 was completed according to proposed construction feature disturbance. Phase IB field methods consisted of both pedestrian and STP surveys to locate archaeological resources within the Facility APE. STPs were excavated at 15-meter intervals along survey transects. Per OPRHP Guidelines, all STPs measured 30 to 50 centimeters in diameter and were excavated to sterile subsoil. All excavated soil was screened through ¼-inch hardware cloth over tarps or plastic sheeting. Soil strata within each shovel test was recorded on standardized forms describing Munsell color and USDA soil types. All shovel tests were backfilled after completion and were



recorded using a Trimble sub-meter accurate Global Positioning System (GPS) unit and plotted on aerial photographs and Facility maps. Per *OPRHP Guidelines*, if artifacts were discovered in an isolated shovel test context, a minimum of 8 additional shovel tests at 1-meter (3.3 feet) and 3-meter (10 feet) intervals were excavated. All work was conducted inside the Facility APE.

#### Laboratory Methods and Curation

Photographs, field form records, field notes, and maps were returned to TRC's Lanham, Maryland office for processing. Artifacts recovered during the survey were cleaned, catalogued, and analyzed according to the NYAC Standards, and selected items illustrated. All analysis was conducted according to the OPRHP Guidelines, and the Secretary of the Interior's Standards and Guidelines for Curation (36 CFR 79). Lab work was undertaken to determine the age, function, cultural affiliation, and significance of the identified sites. Deeds of gift will be obtained for any collections derived from this investigation prior to submittal to the New York State Museum (NYSM) or other identified repository for permanent curation at a state-approved facility (to be identified via consultation with the OPRHP).

The Applicant understands that all artifacts recovered during this contract are the property of the landowner from which the artifacts were recovered. The Applicant also anticipates that the Facility's cultural resources consultant will curate any recovered artifacts in a manner consistent with professional standards. If appropriate, the consultant may identify local repositories (such as local historical societies or archaeological museums) for disposition of recovered artifacts. Collected artifacts will be processed in a manner consistent with professional standards, such as the NYAC Standards for Cultural Resource Investigations and Curation of Archaeological Collections in New York State (NYAC 1994; the NYAC Standards).

#### **Survey Report**

TRC prepared a Phase IB archaeological survey report following the OPRHP Guidelines. The report summarized the Phase IA research, described the fieldwork methods and results of the Phase IB survey, and provided recommendations. In support of the text, historical maps and photographs were prepared to illustrate findings. Tables including the artifact inventory were appended. The report also provided recommendations on whether newly identified archaeological sites are eligible or ineligible for inclusion on the NRHP, or if additional Phase II studies would be required to determine site eligibility. The Phase IB Report was produced and



submitted to OPRHP for review on July 14, 2021; OPRHP issued its report comments on July 23, 2021, concurring with the report findings and requesting no additional archaeological studies. Additional fieldwork was completed in November and December 2021 and a Phase IB addendum report was submitted to OPRHP on December 28, 2021. OPRHP issued its report comments on January 10, 2022, concurring with the report findings and requesting no additional archaeological archaeological studies.

#### (4) Phase II Archaeological Studies

If necessary, should any additional Phase IB survey be conducted resulting in site identification that warrants additional study, a Phase II archaeological study will be conducted in consultation with the OPRHP to assess the boundaries, integrity, and significance of cultural resources identified in proposed construction impact areas. Any Phase II investigations will be designed to obtain detailed information on the integrity, limits, structure, function, and cultural/historic context of an archaeological site, as feasible, sufficient to evaluate its potential eligibility for listing in the SRHP or NRHP.

The need for and scope of work for such investigations will be determined in consultation with the OPRHP and New York State Department of Public Service (NYSDPS). Should the outcome of a Phase II investigation result in the determination that an impacted site is not eligible for inclusion in the NRHP, then the proposed impact would not result in an adverse effect to cultural resources. Any Phase II studies, if required, will be conducted following any required Compliance Filing.

#### (5) Unanticipated Discovery Plan

It is possible that archaeological resources could be discovered during construction at the Facility Site. As such, this Unanticipated Discovery Plan presents the approach to address such emergency discoveries to ensure that potentially significant archaeological resources are dealt with in full accordance with state and federal requirements, including the most recent Standards for Cultural Resource Investigations and Curation of Archaeological Collections in New York State and NYAC Standards. This approach would also ensure that procedures and lines of communication with the appropriate government authorities are clearly established prior to the start of construction so that discoveries can be addressed quickly, minimizing the impacts to the construction schedule if possible.



Although the majority of the Facility Site is not considered to be archaeologically sensitive, a potential exists for identifying archaeological resources in the Facility Site. Therefore, the involved personnel will follow standardized procedures in accordance with state and federal regulations detailed below.

Both the environmental monitor and the construction personnel would be provided with a preconstruction briefing regarding potential cultural resources indicators. These indicators would include items such as recognizable quantities of bone, unusual stone or ash deposits, or black-stained earth that could be evident in spoil piles or trench walls during construction. In the event that potentially significant cultural resources or human remains are discovered during constructed to follow the specific requirements and notification procedures outlined below. Cultural resource discoveries that require reporting and notification include human remains and recognizable, potentially significant concentrations of artifacts or evidence of human occupation.

If cultural resources indicators are found by construction personnel, the construction supervisor would be notified immediately. The supervisor, in turn, would notify the environmental monitor, who would notify a designated archaeologist, who would be available to respond to this type of find. Based on the information provided, the archaeologist would determine if a visit to the area is required and, if so, would inform the construction crews. ORES Staff will be promptly notified indicating details of any such discovery of possible archaeological or human remains. No construction work at the potential archaeological site that could affect the artifacts or site would be performed until the archaeologist reviews the site. The potential archaeological site per se to protect the resources. The archaeologist would conduct a review of the site and would test the site as necessary. The archaeologist would determine, based on the artifacts found and on the cultural sensitivity of the area in general, whether the site is potentially significant and would consult with the OPRHP regarding site clearance.

#### **Discovery of Human Remains**

If human remains are encountered, procedures for such discoveries would be followed in accordance with State regulations and the OPRHP's Human Remains Discovery Protocol (August 2021). ORES Staff will be promptly notified indicating the details of any such discovery of possible archaeological or human remains. Human remains must be treated with dignity and

respect at all times. Should human remains or suspected human remains be encountered, work in the general area of the discovery will stop immediately and the location will be secured and protected from damage and disturbance. If skeletal remains are identified and the archaeologist is not able to conclusively determine whether they are human, the remains and any associated materials must be left in place. A qualified forensic anthropologist, bioarchaeologist, or physical anthropologist will assess the remains in situ to help determine if they are human. No skeletal remains or associated materials will be collected or removed until appropriate consultation has taken place and a plan of action has been developed.

The SHPO, the appropriate Indian Nations, the involved state and federal agencies, the coroner, and local law enforcement will be notified immediately. Requirements of the coroner and local law enforcement will be adhered to. A qualified forensic anthropologist, bioarchaeologist, or physical anthropologist will assess the remains in situ to help determine if the remains are Native American or non-Native American.

If human remains are determined to be Native American, they will be left in place and protected from further disturbance until a plan for their avoidance or removal can be generated. Please note that avoidance is the preferred option of the SHPO and the Indian Nations. The involved agency will consult SHPO and the appropriate Indian Nations to develop a plan of action that is consistent with the Native American Graves Protection and Repatriation Act (NAGPRA) guidance. Photographs of Native American human remains and associated funerary objects should not be taken without consulting with the involved Indian Nations.

If human remains are determined to be non-Native American, the remains will be left in place and protected from further disturbance until a plan for their avoidance or removal can be generated. Please note that avoidance is the preferred option of the SHPO. Consultation with the SHPO and other appropriate parties will be required to determine a plan of action. To protect human remains from possible damage, the SHPO recommends that burial information not be released to the public.

The plan will also include a provision for work stoppage in the immediate site of the find upon the discovery of possible archaeological or human remains. Evaluation of such discoveries, if warranted and as consistent with State regulations and the OPRHP's Human Remains Discovery Protocol (August 2021), will be conducted by a professional archaeologist, qualified according to the Secretary of the Interior's Standards and Guidelines for Archaeology and

Historic Preservation, including Professional Qualifications Standards found in 26 CFR Part 61, and the NYAC Standards. The Unanticipated Discovery Plan will also specify the degree to which the methodology used to assess any discoveries follows the Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation and the NYAC Standards.

#### 9(b) Study of the Impacts on Historic Resources and Consultation

TRC has completed a Historic Architectural Resources Survey for the Facility. The survey identified the presence of architectural resources aged 50 years or older within the Zone of Visual Impact (ZVI) based on topography only, evaluated these architectural resources for their eligibility for listing in the NRHP, and provided in a technical report an assessment of the potential adverse effects of the Facility on those historic architectural properties that are listed in, previously determined eligible for listing in, or recommended eligible for listing in the NRHP.

#### Background Research

In order to locate previously identified historic resources, TRC conducted an initial desktop analysis utilizing the OPRHP's CRIS and NRHP online databases, historical maps, aerial imagery, secondary historical sources, online county tax parcel data, and county histories. An initial review of previously identified resources located within a two-mile radius of the Facility recorded NRHP-listed historic properties, previously determined NRHP-eligible historic properties, National Historic Landmarks, resources with an undetermined eligibility status, and resources previously determined not eligible for NRHP listing.

#### Architectural Field Survey

TRC conducted a Historic Architectural Resources Survey of the Facility ZVI as determined by bare-earth topography geographic information system (GIS) modeling and in consultation with OPRHP using the Trekker mobile survey application between July 6 and 8, 2021. The field survey consisted of revisiting all previously recorded resources and documenting newly identified architectural resources 50 years old or older within the ZVI. Field survey included systematically driving or walking all public roads within the ZVI to identify resources present. TRC assessed all resources from public rights-of-way (ROWs). Per guidance from OPRHP (July 30, 2020), buildings within the ZVI were surveyed and inventoried into CRIS Trekker by TRC architectural historians.



TRC field-checked and photographed all previously identified S/NRHP-eligible properties to record existing conditions and reassess their current S/NRHP status. Each previously identified but unevaluated resource and each newly identified resource were documented with field notes and photography, and preliminary resource inventory forms were completed using CRIS Mobile Pro Trekker and Survey123 in the field. TRC used CRIS Trekker to complete resource inventory forms, which included georeferenced locations, physical descriptions, materials, condition, integrity, and other noteworthy characteristics of each resource, as well as proposed eligibility for NRHP listing.

#### Identification of Historic Properties

TRC identified a total of 36 potential historic architectural properties in the APE. Based on results of the Historic Architectural Survey, 30 of these architectural resources are considered historic properties based on their NRHP eligibility status or recommendations. These consist of 28 previously surveyed resources that were determined eligible, one resource previously determined not eligible that TRC recommends be reassigned as eligible, and one newly identified resource that is recommended eligible as a result of this survey. The remaining six architectural resources, including four previously surveyed resources, and two newly surveyed resources, were recommended not eligible for NRHP listing due to their lack of architectural merit, historic significance, or demolition. None of the potential historic properties are in the LOD. No National Historic Landmark historic properties are present in the ZVI.

#### Reporting

TRC's Historic Architectural Resources Survey and Effects Report is included as Appendix 9-3. The report includes a description of the Facility, statement of methodology, historic context, summary of surveyed resources, and field results. Survey results include recommendations of NRHP eligibility and a preliminary assessment of Facility effects. Surveyed resources will be submitted to OPRHP using CRIS Trekker. TRC concludes that while the Facility has no potential to physically affect any historic architectural properties, there may be some positive visibility of the Facility from historic architectural properties within the APE. However, the potential effects of visible infrastructure from the solar development will not be adverse because the Facility will not significantly affect the NRHP qualifying characteristics of any NRHP-



recommended eligible architectural resources in the APE. In a letter dated January 11, 2022, OPRHP concurred with TRC's recommendation that the undertaking will have no adverse impact on historic and cultural resources.

#### Preliminary Assessment of Effects

In order to identify and summarize the nature of probable effects to 30 historic architectural resources pursuant to Section 106 and Section 94-c, TRC's Historic Architectural Resources Survey and Effects Report includes a preliminary assessment of potential effects to historic architectural resources. To assess potential Facility effects, TRC applies the Secretary of the Interior's Standards for the Treatment of Historic Properties in combination with the Advisory Council on Historic Preservation's Criteria of Adverse Effect (36 CFR § 800.5 (a)). Additional guidance derives from the Council of Environmental Quality's Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act (40 CFR § 1500 – 1508).

#### (1) Consultation and Definition of Area of Potential Effects (APE)

#### SHPO Consultation

TRC initiated consultation with OPRHP on June 15, 2020. OPRHP responded with recommendations for a Historic Architecture Survey. The response indicated that only potential historic properties with positive visibility within the two-mile radius of the solar array should be surveyed. OPRHP, in its review comments received on September 28, 2020, through the CRIS, requested a Historic Architecture Survey be conducted. On October 30, 2020, TRC provided OPRHP with methodology for the survey. The methodology stated that the ZVI is defined as areas within the two-mile radius of the solar field that the bare earth topography visibility modelling shows will have positive visibility of the Facility. On December 23, 2020, OPRHP approved TRC's methodology and initiated a Trekker survey for the Facility.

A request was made by OPRHP for additional documentation illustrating the proposed solar arrays to address concerns with potential impacts to the historic St. Patrick and Atwater cemeteries. TRC submitted the additional documentation on December 15, 2021. OPRHP sent a Determination of Effect letter dated January 11, 2022, in response to this submission, that found No Adverse Effects of the Facility on historic and cultural resources.



#### Definition of APE and ZVI

The APE is defined as the geographic area or areas within which an undertaking may directly or indirectly cause changes in the character or use of historic properties. The APE is determined in relation to the scale of the undertaking, including new construction, improvements, or demolitions to be made during operation and maintenance of the Facility. The APE also includes areas that may have direct visual and indirect impacts. In keeping with OPRHP Guidelines (July 30, 2020), the term APE is synonymous with ZVI and is used interchangeably to denote areas within two miles of the Facility that have positive visibility of the Facility based on bare-earth topography GIS modelling.

Identification of effects (visual, atmospheric, or audible) includes investigations of those areas removed in distance, where Facility components will be visible and where there is a potential for a significant visual effect. The survey buffer used for the requested architectural resources survey is a two-mile radius of the Facility. The ZVI for the survey encompasses all areas within the two-mile buffer area of the Facility that have visibility of the Facility, based on bare-earth topography modelling, GIS-based analysis that does not include visual impediments such as trees and buildings.

#### (2) Analysis of any Adverse Effects to Historic Properties

Construction of the Facility will not require demolition or physical alteration of any NRHP eligible, listed, or recommended eligible historic properties within the APE. Therefore, no physical effects on historic properties are anticipated as a result of the Facility. However, construction of the Facility has the potential to result in visual impacts on recommended eligible historic properties in the APE. The undertaking's potential to affect any historic property depends upon that historic property's NRHP qualifying characteristics. If a historic property's setting is less important to its significance than its architectural merit or historic qualities, then changes to setting may not adversely diminish the qualities or character-defining features that support a historic property's NRHP eligibility. Therefore, TRC recommended that the undertaking would have no adverse effect on a historic property, and OPRPH concurred with this recommendation in a letter dated January 11, 2022.



Thirty historic properties identified in the survey ZVI may have some level of visibility of aboveground Facility components based on bare-earth viewshed modeling. The surveyed and inventoried historic properties evaluated as part of the Historic Architectural Resources Survey have significantly reduced potential for views of Facility visible infrastructure due to distance or intervening visual screening such as vegetation, existing development, or roadways. Thus, TRC further determined the Facility will not introduce new visual elements into views from these properties that would affect character-defining features that contribute to their historic significance and NRHP eligibility and will have no adverse effect on these historic properties. As stated above, OPRHP concurred with TRC's analysis of No Adverse Effect in their letter dated January 11, 2022.

#### (3) Mitigation Measures

Should there be unavoidable adverse impacts of the Facility to S/NRHP-eligible historic architectural resources, TRC will coordinate consultation between Brookside Solar, LLC, and OPRHP to resolve potential adverse effects by proposing mitigation treatments.

#### Conclusions

OPRHP issued a Determination of Effect Finding on December 11, 2021 and January 11, 2022, stating the proposed Facility will have No Adverse Impact to historic and cultural resources (Appendix 9-2). The initial Phase IB survey resulted in the discovery of 326 artifacts from three newly recorded archaeological sites, all of which have been determined not eligible for the NRHP and for no further study. The additional Phase IB survey did not result in the discovery of any artifacts or newly recorded archaeological resources. A landscape mitigation plan will be written so that landscaping at the Facility is conducted in a way that it diverts attention from the Facility's panel arrays. The Facility has been designed to comply with 19 NYCRR § 900-2.10 and the uniform standards and conditions and impacts related to cultural resources have been avoided and minimized to the maximum extent practicable.



#### References

- *Guidelines for Solar Facility Development Cultural Resources Survey Work.* 2020. Adopted by the New York State Office of Parks, Recreation, and Historic Preservation.
- *Human Remains Discovery Protocol.* 2021. Adopted by the New York State Office of Parks, Recreation, and Historic Preservation.
- New York Archaeological Council (NYAC) Standard for Cultural Resource Investigations and the Curation of Archeological Collections in New York State. 1994. Adopted by the New York State Office of Parks, Recreation, and Historic Preservation.

New York State Office of Parks, Recreation, and Historic Preservation (OPRHP)

Solar Facility, Phase IA/IB Archaeological Survey Recommendations/Sensitivity Model. 2018. Adopted by the New York State Office of Parks, Recreation, and Historic Preservation.

