
NORTH SENECA
SOLAR PROJECT

North Seneca Solar Project

ORES Permit Application No. 23-00036

1100.2-10 Exhibit 9

Cultural Resources

REDACTED

Revision 1

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EXHIBIT 9 CULTURAL RESOURCES

North Seneca Solar Project, LLC (the Applicant), is proposing to construct and operate the North Seneca Solar Project, an up to 90-megawatt solar energy generating facility in the Towns of Junius and Waterloo, Seneca County, New York (the Facility). The Applicant has completed cultural resources studies for the Facility in accordance with the requirements of 16 New York Codes Rules and Regulations (NYCRR) 1100-1.3(h)(2), 1100-2.9, and 1100-2.10(b).

The Applicant consulted with the New York State Historic Preservation Office (NYSHPO) to develop the scope and methodology for cultural resources studies for the Facility.¹ The Applicant initiated consultation with the NYSHPO on August 9, 2022. To date, formal consultation with NYSHPO has included initiating Facility review and consultation through the NYSHPO’s Cultural Resources Information System (CRIS) website,² submission of work plans, completing cultural resources surveys, and completion of follow-up cultural resource survey technical reports. The cultural resources reports and chronology of submission/review of these reports by NYSHPO are summarized within this exhibit. Correspondence with the NYSHPO, Cayuga Nation, Seneca Nation of Indians, Tonawanda Seneca Nation (hereafter referred to as Nations), and local historic preservation groups regarding cultural resources studies is included as Appendix 9-A.

Table 9-1. Summary of Cultural Resources Correspondence

Date	Sender	Recipient(s)	Content
August 9, 2022	EDR on behalf of North Seneca Solar Project, LLC (Applicant)	New York State Office of Parks, Recreation and Historic Preservation (NYSHPO)	Formal consultation initiated with NYSHPO via the CRIS website (EDR, 2022a).
August 10, 2022	NYSHPO	EDR; Applicant	Response to initial request for consultation and request for Phase IA archaeological survey (NYSHPO, 2022a).
August 10, 2022	NYSHPO	EDR; Applicant	Response to initial request for consultation and request for a historic resources survey methodology (NYSHPO, 2022b).
November 9, 2022	EDR	NYSHPO; Cayuga Nation; Seneca Nation of Indians; Tonawanda Seneca Nation	<i>Phase IA Archaeological Survey</i> (EDR, 2022b) and Project Introduction Letters (EDR, 2022c).
December 2, 2022	NYSHPO	EDR	Request for survey area shapefile (NYSHPO, 2022c).

¹ The proposed Facility is a utility-scale solar generating project located in Seneca County, New York with a generating capacity of up to 90-megawatts-alternating current (MW-AC). The proposed components of the Facility will include linear rows of photovoltaic (PV) panels and their racking/support systems; direct current (DC) collection lines and communications cables connecting the panels to the inverters; fencing and gates around individual PV arrays or groups of PV arrays; access roads; temporary construction laydown areas; an operations and maintenance (O&M) facility; a substation where the Facility’s electrical output voltage will be combined, and its voltage increased to the transmission line voltage via step-up transformers; and a generation tie line that will connect the Facility to the designated Point-of-Interconnection.

² NYSHPO’s Cultural Resource Information System is accessible at: <http://cris.parks.ny.gov>.

Date	Sender	Recipient(s)	Content
December 5, 2022	EDR	NYSHPO	Facility Site shapefile submitted per NYSHPO's request (EDR, 2022d).
December 19, 2022	NYSHPO	EDR	Response to <i>Phase IA Archaeological Survey</i> and approval of Phase IB testing methodology (NYSHPO, 2022d).
July 31, 2023	EDR	Seneca County Historian, Town of Junius Historian, Town of Waterloo Historian, Waterloo Library & Historical Society	Local stakeholder consultation initiated in order to identify potential historic resources located within the Historic Resources Study Area.
August 25, 2023	EDR	NYSHPO	<i>Phase IA Historic Resources Survey Methodology</i> (EDR, 2023a).
August 30, 2023	NYSHPO	EDR	Response to <i>Phase IA Historic Resources Survey Methodology</i> and request for a Historic Resources Survey (NYSHPO, 2023a).
October 16, 2023	EDR	NYSHPO	Request for Stakeholder Input on Visually Sensitive Resources and Representative Viewpoints (EDR, 2023b).
October 25, 2023	NYSHPO	EDR	<i>New York State Historic Preservation Office Guidelines for Solar Facility Development Cultural Resources Survey Work</i> (NYSHPO, 2023b).
January 5, 2024	EDR	NYSHPO	<i>Historic Resources Survey Report and Effects Assessment</i> (EDR, 2024a).
January 5, 2024	EDR	NYSHPO	<i>Phase IB Archaeological Survey</i> (EDR, 2024b).
January 8, 2024	EDR	Cayuga Nation; Seneca Nation of Indians; Tonawanda Seneca Nation	<i>Phase IB Archaeological Survey</i> (EDR, 2024b).
January 30, 2024	NYSHPO	EDR; Applicant; ORES	Response to <i>Historic Resources Survey Report</i> and request to review Article VIII Application Exhibits 8 and 9 (NYSHPO, 2024a).
February 2, 2024	NYSHPO	EDR; Applicant; ORES	Response to <i>Phase IB Archaeological Survey</i> and request for an Archaeological Avoidance Plan (NYSHPO, 2024b).
February 26, 2024	EDR	NYSHPO	<i>Archaeological Avoidance Plan</i> (EDR, 2024c).
February 26, 2024	Cayuga Nation	EDR	Acknowledgement of receipt of <i>Archaeological Avoidance Plan</i> (CN, 2024a).
March 5, 2024	EDR	NYSHPO	<i>Exhibit 8 Visual Impacts and Exhibit 9 Cultural Resources</i> (EDR, 2024d).
March 13, 2024	Seneca Nation of Indians	EDR	Response to <i>Archaeological Avoidance Plan</i> stating that the Nation had no comments (SNI, 2024a).
March 14, 2024	Cayuga Nation	EDR	Response to <i>Archaeological Avoidance Plan</i> stating that the Nation does not object to the Project (CN, 2024b).

Date	Sender	Recipient(s)	Content
March 25, 2024	NYSHPO	EDR	Acceptance of <i>Archaeological Avoidance Plan</i> (NYSHPO, 2024c).
April 12, 2024	NYSHPO	EDR	Finding of Adverse Impact and request for removal of vegetative screening at two locations from the planting plan, and preparation of a historic resources mitigation plan (NYSHPO, 2024d).
May 24, 2024	NYSHPO	EDR	Email correspondence stating vegetative screening Module 4 may be used in areas where NYSHPO previously requested removal of screening from planting plan (NYSHPO, 2024e).
July 24, 2024	EDR	NYSHPO	<i>Supplemental Phase IB Archaeological Survey</i> (EDR, 2024e).
July 29, 2024	EDR	Cayuga Nation; Seneca Nation of Indians; Tonawanda Seneca Nation	<i>Supplemental Phase IB Archaeological Survey</i> (EDR, 2024e).
August 13, 2024	Seneca Nation of Indians	EDR	Response to <i>Supplemental Phase IB Archaeological Survey</i> stating that the Nation had no comments (SNI, 2024b).
August 14, 2024	NYSHPO	EDR	Acceptance of <i>Supplemental Phase IB Archaeological Survey</i> (NYSHPO, 2024f).

Cultural resources studies completed for the Facility include:

- *Phase IA Archaeological Survey Report* (EDR, 2022b; Appendix 9-B)
- *Phase IA Historic Resources Survey Methodology Report* (EDR, 2023a; Appendix 9-C)
- *Historic Resources Survey Report and Effects Assessment* (EDR, 2024a; Appendix 9-D)
- *Phase IB Archaeological Survey Report* (EDR, 2024b; Appendix 9-E)
- *Archaeological Avoidance Plan* (EDR, 2024c; Appendix 9-F)
- An Unanticipated Discovery Protocol (Appendix 9-G)
- *Supplemental Phase IB Archaeological Survey* (Appendix 9-H)

The Article VIII regulations require the definition of a Project Impact Area (PIA) for consideration of potential impacts to cultural resources. The cultural resources studies for the Facility identified a PIA, also referred to as the Area of Potential Effect (APE),³ which defines the potential impacts and appropriate study area within which to evaluate those potential impacts. For the Facility, this includes two APEs: an Archaeological APE consisting of areas where physical impacts are proposed to occur during construction, and an APE for Visual Effects,⁴ which includes those areas where the Facility may result in effects on historic resources. These

³ The PIA as defined in 16 NYCRR Section 1100-1.3(h) is synonymous with the Archaeological APE where physical impacts will occur as described in this exhibit and all associated support studies.

⁴ The PIA as defined in 16 NYCRR Section 1100-2.10 is synonymous with the APE for Visual Effects as described in this exhibit and all associated support studies.

potential effects, and the studies undertaken to evaluate the Facility's potential effects on cultural resources, are described in the following subsections.

(a) Archaeological Resources

The following subsections provide a study of the impacts of the construction and operation of the Facility, interconnections, and related facilities on archeological/cultural resources within the Project Impact Area.

(1) Summary of Impacts and Avoidance Measures

Solar facilities result in minimal soil disturbance relative to other types of development projects, and therefore have a lower relative potential to affect archaeological resources. The Applicant has sited the Facility in a rural agricultural region in an effort to reduce the need for land clearing and minimize the need for typical construction processes such as surface grading and soil compaction. The PV modules will be installed on a low-profile racking system, which typically consists of small I-beam posts, helical piles, or ground screw piles driven or screwed into the ground, without the need for foundations. Limited grading may be necessary in some areas. In those areas where soil disturbance is necessary, topsoil will be stripped and stockpiled for restoration purposes (see Exhibit 15 [Agricultural Resources]). Following construction, a vegetation groundcover will be established underneath and around the PV arrays. Areas of soil disturbance located in areas that will remain in agricultural production (such as the routes of proposed buried collection lines) will be restored to their pre-existing condition. The Applicant is committed to minimizing soil disturbance associated with the proposed Facility to minimize impacts to cultural and natural resources.

Construction of the Facility will be accomplished with machines that are generally consistent in terms of size, weight, and tread with the agricultural machines that are currently used on these properties. Therefore, the existing conditions within the Facility Site⁵, coupled with the specific construction/installation measures that will be used to construct the Facility, will serve to minimize impacts to archaeological resources.

A *Phase IA Archaeological Survey Report* (Appendix 9-B) was developed by EDR on behalf of the Applicant and submitted to the NYSHPO in November 2022 for review and comment (EDR, 2021b). The report and project introduction letters (EDR, 20233c) were also submitted to the Nations at this time. Shapefiles of the Facility Site boundaries were requested (NYSHPO, 2022c) and submitted by EDR (EDR, 2022d) in December 2022. The Phase IA report defines the Facility's Archaeological APE for potential ground disturbance, identifies any previously documented archaeological resources in the vicinity of the APE, and develops an archaeological sensitivity model of the Facility Site (Appendix 9-A).

NYSHPO responded with a request for a Phase IB archaeological survey (NYSHPO, 2022d). EDR completed the Phase IB archaeological survey on behalf of the Applicant and in accordance with the

⁵ As defined throughout this Application, the Facility Site includes the parcels proposed to host the Facility components. This includes parcels currently under, or being pursued, for lease, purchase, or easement (or other real property interests) by the Applicant for the location of all Facility components.

approved Phase IA archaeological survey and research design. The archaeological survey was conducted in a series of mobilizations between June and November 2023, concurrent with evolving Facility design. The *Phase IB Archaeological Survey Report* (EDR, 2024b; Appendix 9-E⁶) was submitted to NYSHPO via CRIS and emailed to the Nations on January 5, 2024.

The Phase IB archaeological survey identified a total of **BEGIN CONFIDENTIAL INFORMATION** <[REDACTED]> **END CONFIDENTIAL INFORMATION** archaeological resources, **BEGIN CONFIDENTIAL INFORMATION** <[REDACTED]> **END CONFIDENTIAL INFORMATION** of which were recommended for avoidance by the limits of significant ground disturbance (LSGD). These sites have not been evaluated for their eligibility to the State and National Register of Historic Places (S/NRHP). The proposed Facility layout as currently designed avoids and/or minimizes impacts to all archaeological resources, so no Phase II site investigations are anticipated to be necessary. NYSHPO responded to the Phase IB Archaeological Survey Report on February 2, 2024, and requested an Archaeological Avoidance Plan for the Facility (NYSHPO, 2024b). EDR subsequently prepared an Archaeological Avoidance Plan which was submitted to NYSHPO for review on February 26, 2024 (EDR, 2024c; Appendix 9-F).

The mapped locations of all potentially significant (i.e., S/NRHP-eligible or unevaluated) archaeological sites within or near (i.e., approximately 50 feet) of the LSGD will be identified as “Environmentally Sensitive Areas” or similar on Facility 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 Facility’s Unanticipated Discovery Protocol (Appendix 9-G) will include provisions to stop all work in the vicinity of the archaeological finds until those resources can be evaluated and documented by an archaeologist. With the adoption of these measures, and based on continued consultation with the NYSHPO, the proposed North Seneca Solar Project is not anticipated to impact any significant archaeological resources.

(2) Phase IA Archaeological Survey

In compliance with the requirements of 16 NYCRR Section 1100-1.3(h)(1), the Applicant initiated consultation regarding the Facility with the NYSHPO by EDR on August 9, 2022, that included a description of the proposed Facility, a map of the Facility Area, and a proposed methodology (EDR, 2022a). On August 10, 2022, the NYSHPO provided a response letter requesting a Phase IA archaeological survey, including Phase IB testing recommendations (NYSHPO, 2022a; see Appendix 9-A).

⁶ Per Section 14.09 of the New York State Historic Preservation Act, archaeological site location information is considered sensitive and appropriate to be treated confidentially: “... Information on archaeological sites that may be damaged by unauthorized investigators if their location be generally known may be withheld from the public at the discretion of the commissioner in consultation with the commissioner of Education, and will be released, where appropriate, in a format approved by such commissioners” (also summarized within NYSDOT, 2015). Therefore, the *Phase IB Archaeological Survey Report* is a confidential report. The results of the Phase IB survey are summarized herein.

In compliance with the requirements of 16 NYCRR Section 1100-1.3(h)(2), the Applicant prepared a *Phase IA Archaeological Survey Report* (EDR 2022b; Appendix 9-B), which was submitted to NYSHPO through the CRIS website on November 9, 2022. The Phase IA report was also submitted to the Nations on November 9, 2022, to accompany project introductions letters (EDR, 2022c). NYSHPO requested submission of Facility Site shapefiles on December 2, 2022 (NYSHPO, 2022c); these were submitted by EDR on December 5, 2022 (EDR, 2022d). The Phase IA report was approved by NYSHPO on December 19, 2022, with a letter concurring with EDR's scope of work (NYSHPO, 2022d; see Appendix 9-A).

The purpose of the Phase IA archaeological survey was to: 1) define the Facility's Archaeological APE based on the anticipated area of disturbance for Facility components; 2) determine whether previously identified archaeological resources were located in the Archaeological APE; and 3) propose a methodology to identify additional archaeological resources within the Archaeological APE, evaluate their eligibility for the S/NRHP, and assess the potential effect of the Facility on those resources. The Phase IA report was prepared by professionals who satisfy the qualification criteria per the Secretary of the Interior's Standards for archaeology (36 CFR 61) and in accordance with applicable portions of the NYSHPO's *Phase I Archaeological Report Format Requirements* (NYSHPO, 2005).

Relative to the potential for archaeological sites to be located in the Facility Site, the results of the *Phase IA Archaeological Survey Report* can be summarized as follows:

- The NYSHPO's CRIS database included **BEGIN CONFIDENTIAL INFORMATION**< [REDACTED]
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- Several historically map-documented structures (MDS) were noted within the Facility Site. Portions of the Facility Site located in the immediate vicinity — within approximately 200 feet (61 meters) — of MDS locations were considered to have high potential for the presence of historically documented archaeological resources. The remaining (non-MDS) portions of the Facility Site exhibited minimal (if any) likelihood for significant historical archaeological sites to be present.
- A site-specific GIS-based archaeological sensitivity model was prepared for the Facility Site consistent with guidance received from the NYSHPO, which resulted in the identification of elevated archaeological sensitivity across 654 acres of the Facility Site.

In addition, the *Phase IA Archaeological Survey Report* (Appendix 9-B) proposed a methodology to conduct a Phase IB archaeological survey for the Facility, which was reviewed and approved by the NYSHPO (Appendix 9-A; NYSHPO, 2022d). The results of the Phase IB archaeological survey are described below.

(3) Phase IB Cultural Resources Study

On behalf of the Applicant, EDR conducted a Phase IB archaeological survey to identify archaeological sites within the Facility Site. The *Phase IB Archaeological Survey Report* (EDR, 2024b; Appendix 9-E) was submitted to NYSHPO via CRIS on January 5, 2024, and was submitted to the Nations via email on

January 8, 2024 (Appendix 9-A). The Phase IB survey was conducted under the supervision of Registered Professional Archaeologists (RPAs) in a manner consistent with the New York Archaeological Council's (NYAC) *Standards for Cultural Resource Investigations and Curation of Archaeological Collections in New York State* (the NYAC Standards) (NYAC, 1994). The *Phase IB Archaeological Survey Report* was prepared in accordance with the NYSHPO's *Phase I Archaeological Report Format Requirements* (NYSHPO, 2005).

For utility-scale solar projects in New York State, the NYSHPO recommends Phase IB archaeological testing for areas of proposed significant ground disturbance, which typically include the locations of proposed roads, substations, points of interconnection, built facilities, retention ponds/basins, laydown areas, collection line trenches over a foot wide, and areas of grubbing and grading. The NYSHPO typically does not require Phase IB archaeological testing for areas where no grading or grubbing is required, including the panel array areas, security fencing, and utility poles if their associated posts are driven or screwed into the ground (if grading is required in these areas, then Phase IB archaeological survey would be required).

For the purposes of the Phase IB survey, the Facility's Archaeological APE is defined as those areas where soil disturbance is proposed to occur during construction. Within this area is the LSGD, which represents the total area that could be temporarily disturbed by construction, including areas of grading and excavation exceeding six inches deep, grubbing, tree and stump removal, and trenches more than three-feet wide (NYSHPO, 2023c). The Phase IB fieldwork was conducted in areas of LSGD classified as having elevated archaeological sensitivity, which totaled approximately 62 acres.

As the fieldwork for the Phase IB archaeological survey occurred concurrent with the Facility design process, design plans were not available prior to the onset of the survey. A pedestrian survey was conducted in June 2023 when ground surface visibility was greater than 70% in the recently plowed fields of the Archaeological APE. The pedestrian fieldwork methodology included the investigation of all areas of elevated archaeological sensitivity where *potential* significant ground disturbance could occur. This approach resulted in testing 139 acres in and around areas of elevated archaeological sensitivity within the Facility Site.

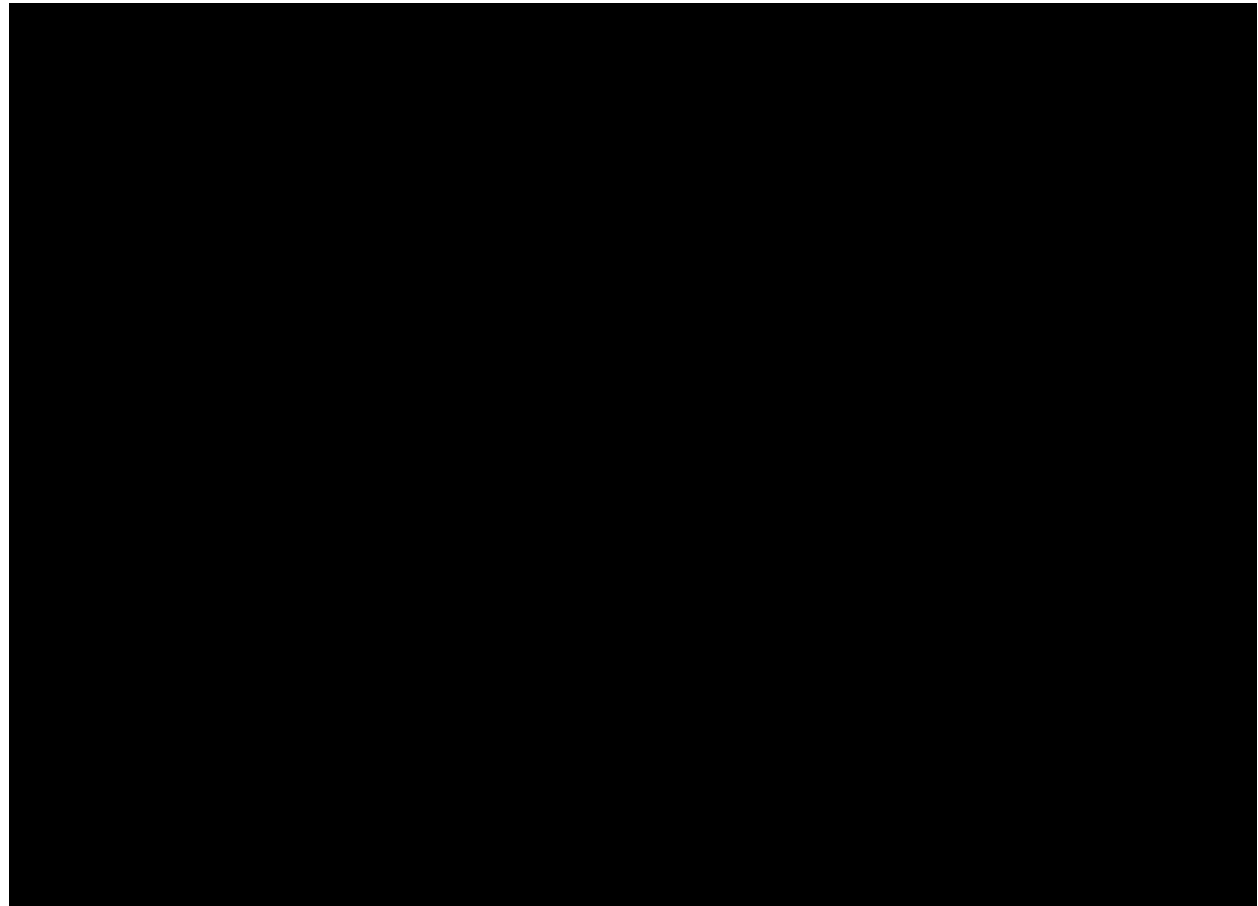
Fieldwork for the Phase IB archaeological survey consisted of shovel testing during October and November 2023 in accordance with the Phase IA research design reviewed and approved by the NYSHPO (Appendix 9-B; NYSHPO, 2022d). This portion of the survey included the excavation of 1,194 shovel test pits (STPs) and an additional 4 acres of pedestrian survey where ground visibility was sufficient.

As summarized below in Table 9-2 and further described in the *Phase IB Archaeological Survey Report* (EDR, 2024b; Appendix 9-E), the archaeological survey resulted in the identification of **BEGIN**
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Table 9-2. Summary of Archaeological Resources Identified During the Phase IB Survey

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Of the **BEGIN CONFIDENTIAL INFORMATION** < [REDACTED] **>END CONFIDENTIAL INFORMATION** were recommended for avoidance. More information is needed for an S/NRHP-eligibility determination of these sites. The Phase IB report was submitted to the NYSHPO on January 5, 2024, for review and comment (EDR, 2024b). The NYSHPO responded to the Phase IB report on February 2, 2024, concurring with EDR's S/NRHP eligibility recommendations for all nine archaeological sites that were identified in the Phase IB report and requesting an archaeological avoidance plan (NYSHPO, 2024b). EDR subsequently prepared an *Archaeological Avoidance Plan* which was submitted to NYSHPO for review on February 26, 2024 (EDR, 2024c; Appendix 9-F).

All **BEGIN CONFIDENTIAL INFORMATION**<[REDACTED]>**END CONFIDENTIAL INFORMATION** archaeological resources identified during the Phase IB study will be avoided by the Facility design. **BEGIN CONFIDENTIAL INFORMATION**<[REDACTED]>**END CONFIDENTIAL INFORMATION** of the identified resources are no longer within the Archaeological APE. **BEGIN CONFIDENTIAL INFORMATION**<[REDACTED]>**END CONFIDENTIAL INFORMATION** of the identified resources are located within the boundaries of the Facility components but are located in locations that include only PV panel arrays, fence lines and vegetative screening using herbaceous plants, none of which are associated with significant ground disturbance. As previously stated, PV array racking structures that are driven or screwed into the ground are not considered to be significant ground disturbance by the NYSHPO. **BEGIN CONFIDENTIAL INFORMATION**<[REDACTED]>**END CONFIDENTIAL INFORMATION** additional sites have been avoided by Facility redesign to avoid significant ground disturbance through horizontal directional drilling. The NYSHPO approved of these avoidance measures in a letter dated March 25, 2024 (NYSHPO, 2024c).

Due to a minor layout modification subsequent to the *Archaeological Avoidance Plan*, a supplemental Phase IB archaeological survey was conducted in June 2024 across 5.8 acres of the modified LSGD with elevated archaeological sensitivity that was not previously surveyed. A pedestrian survey of 2.6 acres and excavation of 70 STPs encountered no cultural materials or archaeological sites. A *Supplemental Phase IB Archaeological Survey* memorandum documenting these efforts was submitted to the NYSHPO on July 24, 2024 (EDR, 2024e; Appendix 9-H). The NYSHPO approved this memorandum in a letter dated August 14, 2024 (NYSHPO, 2024f). Layout modifications did not occur near any of the identified archaeological resources, which therefore remain avoided by significant ground disturbance.

(4) Phase II Study

The Applicant is implementing Project design measures to avoid or minimize impacts to the locations of archaeological sites with undetermined eligibility for the S/NRHP, as well as other sensitive environmental locations, such as wetlands. It should be noted that Phase II investigations are not warranted for archaeological sites that do not meet the criteria for listing on the S/NRHP. Although undetermined sites have not been evaluated by Phase II site examination to provide information for an S/NRHP eligibility determination, they are being treated as potentially eligible for the purposes of site avoidance. The Applicant has redesigned the Facility to avoid and/or minimize impacts to archaeological resources, so no Phase II site investigations are anticipated to be necessary. The Applicant will continue to consult with the NYSHPO to determine if additional site avoidance measures are warranted as per the requirements of 16 NYCRR Section 1100-1.3(h)(3).

(5) Unanticipated Discovery Protocol

An Unanticipated Discovery Protocol (UDP) is included as Appendix 9-G of this Application. The UDP identifies the actions to be taken in the unexpected event that resources of cultural, historical, or archaeological importance are encountered during Facility construction. The plan includes a provision for work stoppage upon the discovery of possible archaeological or human remains. Evaluation of such discoveries, if warranted, will be conducted by a professional archaeologist, qualified according to the NYAC *Standards* (NYAC, 1994).

(b) Historic Resources

Historically significant resources are defined herein to include buildings, districts, objects, structures, and/or sites that have been listed in the S/NRHP, as well as those properties that NYSHPO has formally determined are eligible for listing in the S/NRHP. The Applicant conducted a systematic program of public outreach to assist in the identification of visually sensitive resources, including historic properties potentially eligible for listing for the S/NRHP (Appendices 8-A and 9-A). Outreach included town and village historians in addition to other stakeholders relevant to historic properties (town supervisors, mayors, business owners, etc.). Specific to historic properties, the Applicant has undertaken outreach to the following stakeholders:

- Walter J. Gable – Seneca County Historian and Town of Waterloo Historian;
- C. Ernest Brownell – Town of Junius Historian; and
- Cyndi Park-Sheils – Waterloo Library and Historical Society.

(1) Historic Resources Surveys

The Applicant has engaged in ongoing consultation with NYSHPO in order to evaluate the Facility's potential effect on historic resources listed or eligible for listing in the S/NRHP.

(i) Area of Potential Effect Relative to Aboveground Historic Resources

Per the requirements set forth in 16 NYCRR Section 1100(bx), the study area to be used for analysis of major electric generating facilities is defined as the area within 1 mile of the Project Site, hereafter referred to as the Historic Resources Study Area. The Historic Resources Study Area, defined by NYSHPO's *Guidelines for Solar Facility Development Cultural Resources Survey Work* (hereafter, *Guidelines*, NYSHPO, 2021) as the appropriate study area for indirect effects on aboveground historic resources listed on the S/NRHP or designated a National Historic Landmark, includes portions of the Towns of Junius and Waterloo in Seneca County as well as a small portion of the Town of Phelps in Ontario County, New York.

The Facility will have no direct physical impacts to aboveground historic resources (i.e., no historic structures will be damaged or removed). The Facility's potential effect on a given historic property would be a change in the property's visual setting (resulting from the introduction of PV arrays or other Facility components). Therefore, the APE for Visual Effects on historic resources includes those areas where Facility components (including PV arrays) will be visible. The APE for Visual Effects was developed based on a viewshed analysis utilizing a digital surface model of the Historic Resources Study Area.

Effects to historic properties could theoretically consist of auditory and/or visual effects; however, solar facilities produce minimal sound beyond the boundaries of the Facility, so auditory effects resulting from the proposed Facility are not considered a significant impact to the setting of historic resources. Therefore, potential visual effects associated with the proposed Facility are the most significant consideration for defining the APE for Visual Effects discussed herein. Any possible concerns about the sound emissions from a solar project are largely confined to the step-up

transformer in the project substation, electrical inverters and transformers within the various PV array areas, and temporary activities during construction. A detailed discussion of potential noise impacts of the Facility is provided in Exhibit 7 (Noise and Vibration) of this Application. Adverse noise impacts will be avoided or minimized through careful siting of Facility components. The noise emitted by a solar project is limited to daytime periods only for the majority of the components. No mitigation is required at any of the central inverters across the Facility. Exhibit 7 concluded that modeled sound levels within the immediate vicinity are at or below the noise limits established in the Article VIII regulations. Therefore, no auditory effects are anticipated to occur as a result of the Facility, and no auditory effects will occur to any historic resources.

With respect to visual effects, the proposed PV arrays could be a significant new feature in the visual landscape. The preparation of a GIS-based preliminary viewshed analysis is discussed in the *Historic Resources Survey Report and Effects Assessment* (Appendix 9-D) and in Exhibit 8 (Visual Impacts) of this Application. Although the PV arrays would be the most widespread Facility component (and are not expected to be more than 12 feet above grade), the tallest structures associated with the Facility would be the interconnection equipment, specifically the steel riser poles (including lightning protection masts) that allow the facility to connect to the existing transmission line.

(ii) *Historic Resources Survey*

EDR initiated consultation with the NYSHPO via the CRIS website on August 9, 2022. Initial consultation included a memorandum describing the proposed Facility as well as a summary of proposed cultural resources survey methodologies, and accompanying maps (EDR, 2022a). On August 10, 2022, NYSHPO provided a response via CRIS concurring with EDR's general approach to the historic resources survey and requested that they be provided with the methodology and scope of work for historic resources surveys for the Facility. A *Phase IA Historic Resources Survey Methodology* was submitted to NYSHPO via the CRIS website on August 25, 2023 (EDR, 2023a). The *Phase IA Historic Resources Survey Methodology* identified resources within the Facility's APE for Visual Effects that appear to satisfy S/NRHP eligibility criteria and proposed a scope of work and methodology for additional survey of a 1-mile study area surrounding the Facility per the NYSHPO *Guidelines* (NYSHPO, 2021). On August 30, 2023, NYSHPO provided a response which concurred with the work plan outlined in the Phase IA survey methodology.

A Historic Resources Survey was conducted in November 2023 in accordance with the survey methodology approved by NYSHPO. The purpose of the Historic Resources Survey was to identify and document those buildings within the APE for Visual Effects that, in the opinion of EDR's architectural historian, appear to satisfy S/NRHP eligibility criteria. The Historic Resources Survey included review of previous similar studies within the Historic Resources Study Area, site visits to identify and evaluate potential historic resources within the Historic Resources Study Area and APE for Visual Effects, and supplemental research on specific historic properties (as necessary). As previously noted, EDR also contacted local historians and historical societies seeking input regarding the identification of historic resources with historic or architectural significance located within the APE for Visual Effects and Historic Resources Study Area.

All Historic Resources Survey fieldwork was conducted by qualified architectural historians who meet the Secretary of Interior's Standards for Historic Preservation Projects as defined in 36 CFR Part 61 (CFR, 2024). Historic Resources Survey fieldwork included systematically walking and/or driving all public roads within the Historic Resources Study Area and APE for Visual Effects to evaluate the S/NRHP eligibility of structures and properties within the APE. Historic resources survey fieldwork was conducted on November 2, 2023. When historic properties were identified that were not previously surveyed but appeared to satisfy S/NRHP eligibility criteria, EDR's architectural historians documented the existing conditions of the property, using the Esri ArcGIS® Collector application software to collect geospatial location data. Photographs of the resource(s) (and associated property when necessary) and field notes describing the style, physical characteristics and materials (e.g., number of stories, plan, external siding, roof, foundation, and sash), condition, physical integrity, and other noteworthy characteristics were recorded for each resource. Following the historic resources survey fieldwork, geospatial location data, photographs, brief descriptions, and additional information about surveyed resources were entered into survey forms in the CRIS Trekker Manager application. The digital Trekker survey forms were submitted to NYSHPO for review on December 6, 2023.

EDR's evaluation of historic resources within the Historic Resources Study Area and APE for Visual Effects focused on the physical condition and integrity (with respect to design, materials, feeling, and association) to assess the potential architectural significance of each resource. Note that all properties included in the historic resources survey were photographed and assessed from public rights-of-way. The condition and integrity of all resources were evaluated based solely on the visible exterior of the structures. No inspections or evaluations requiring access to the interior of buildings, or any portion of private property, were conducted as part of this assessment. In accordance with the NYSHPO *Guidelines* (NYSHPO, 2021), buildings that were not sufficiently old (i.e., are less than 50 years in age), that lacked historic or architectural integrity, or have been evaluated by EDR's architectural historians as lacking historical or architectural significance were not included in or documented during the survey.

A total of 10 resources located within the Historic Resources Study Area and APE for Visual Effects were evaluated in the Historic Resources Survey. The results of the survey are summarized as follows:

- A total of six resources within the Historic Resources Study Area and APE for Visual Effects were previously identified in the CRIS database:
 - EDR recommends that that four resources meet S/NRHP eligibility criteria;
 - EDR recommends that one resource does not meet S/NRHP eligibility criteria; and
 - One resource, a cemetery, could not be evaluated due to its lack of visibility from the public right-of-way.
- Four newly identified resources are recommended to meet S/NRHP eligibility criteria.

- Consultation with local stakeholders did not identify any previously undocumented historic resources within the Historic Resources Study Area and APE For Visual Effects.
- One resource recommended to meet S/NRHP eligibility criteria is located within the Facility Site.
- No additional Historic Resources Surveys are recommended for the Facility.

A *Historic Resources Survey Report and Effects Assessment* (Appendix 9-D) summarizing the findings of this survey was submitted to NYSHPO via the CRIS website on January 5, 2024. NYSHPO provided a response on January 30, 2024, requesting submission of the Article VIII Application Exhibits 8 and 9 for the Facility (NYSHPO, 2024; Appendix 9-A).

In review correspondence dated April 12, 2024, NYSHPO concurred with the recommendations of S/NRHP eligibility for the 10 resources included in the *Historic Resources Survey Report and Effects Assessment*, and determined that the Facility will have an Adverse Impact on historic resources. The Applicant's proposed measures to avoid, minimize, or mitigate the impacts are addressed in Section 2(c) below. In addition, NYSHPO requested development of a mitigation plan that outlines proposed projects and funding to offset these impacts, which is currently under development. The April 12, 2024 correspondence also included a request to remove vegetative screening at two historic locations adjacent to historic properties (NYSHPO, 2024d; Appendix 9-A). However, following a meeting between NYSHPO and ORES, NYSHPO followed up on May 24, 2024 clarifying that they have no concerns with the use of vegetative screening Module 4 (the least dense screening module) where they had previously requested removal of all vegetative screening (NYSHPO, 2024e; Appendix 9-A).

(2) Analysis of Potential Impacts to Historic Resources

The *Historic Resources Survey Report and Effects Assessment* (Appendix 9-D) describes the potential impacts on historic resources located within the APE for Visual Effects. Construction of the Facility will not require the demolition or physical alteration of any buildings or other potential historic resources. No direct physical impacts to historic architectural resources will occur as a result of construction and/or operation of the Facility.

The Facility's potential effect on a given historic resource would be a change (resulting from the introduction of PV arrays) in the resource's setting. As it pertains to historic resources, *setting* is defined as "the physical environment of a historic property" and is one of seven aspects of a resource's *integrity*, which refers to the "ability of a property to convey its significance" (NPS, 1990). The other aspects of integrity include location, design, materials, workmanship, feeling, and association (NPS, 1990). The potential effect resulting from the introduction of PV arrays into the visual setting for any historic or architecturally significant resource is dependent on a number of factors including distance, visual dominance, orientation of views, viewer context and activity, and the types and density of modern features in the existing view (such as buildings/residences, overhead electrical transmission lines, cellular towers, billboards, highways, and silos).

The Federal Regulations entitled "Protection of Historic Resources" (36 CFR 800) include in Section 800.5(2) a discussion of potential adverse effects on historic resources. The following types of effects apply to the North Seneca Solar Project:

Adverse effects on historic properties include but are not limited to: [items i-iii do not apply]; (iv) Change of the character of the property's use or of physical features within the property's setting that contribute to its historic significance; (v) Introduction of visual, atmospheric or audible elements that diminish the integrity of the property's significant historic features; [items vi-vii do not apply] (CFR, 2024).

The implementing regulations for New York State Parks, Recreation and Historic Preservation Law, Section 14.09 (9NYCRR §428.7) state:

- a. In determining whether an undertaking will have an adverse impact on eligible or register property, the commissioner shall consider whether the undertaking is likely to cause:
 1. destruction or alteration of all or part of the property;
 2. isolation or alteration of the property's environment;
 3. introduction of visual, audible or atmospheric elements which are out of character with the property or alter its setting;
 4. neglect of the property resulting in its deterioration or destruction.

Much of the Facility's APE for Visual Effects is located in areas consisting of farmsteads and agricultural landscapes with a traditional rural character. These landscape elements include open fields, pastures, hedgerows, forest stands, and other rural landscape features. Many of these open areas extend beyond the APE for Visual Effects and the Historic Resources Study Area, cross municipal and parcel boundaries, are inaccessible to the public, and are not associated with any specific historic resources previously identified by NYSHPO. Consequently, the various rural landscapes and open agricultural areas located within the APE were not evaluated as specific historic resources as a part of the Historic Resources Survey (Appendix 9-D). However, the potential effects of the Facility on these rural landscapes will be evaluated as part of a Visual Impact Assessment to be included as part of the Article VIII Application for the Facility, as well as Exhibit 8 (Visual Impacts) of the Application.

Relative to historic properties, the potential visual effect of the Facility is therefore limited to the overall effect on the traditional agricultural landscape that serves as the setting for historic properties in the region. The introduction of modern interventions such as PV arrays enclosed in perimeter security fencing in the formerly open agricultural space will alter the historic character of the visual setting. To help minimize these effects, the Applicant has developed a visual mitigation planting plan, using native species designed to mimic the character and pattern of existing vegetation observed in the study area, which is intended to provide a visual buffer of natural vegetation forms and colors between the Facility and the viewer. This and other measures proposed by the Applicant to avoid, minimize, and mitigate potential adverse visual impacts associated with the Facility are discussed in Exhibit 8 (Visual Impacts) and Appendix 8-B (Visual Impact Minimization and Mitigation Plan) of the Application.

(c) Avoidance, Minimization and Mitigation

In accordance with section 1100-10.2(g) of the Article VIII regulations, the Applicant will complete a Cultural Resources Avoidance Minimization and Mitigation Plan (CRAMMP) as part of the Pre-Construction Compliance Filings, consisting of the following:

- (1) A demonstration that impacts of construction and operation of the facilities on cultural resources (including archeological sites and any stone landscape features, and historic resources) will be avoided or minimized to the extent practicable by selection [of] the proposed facility's location, design and/or implementation of identified mitigation measures.
- (2) A Cultural Resources Mitigation and Offset Plan, either as adopted by federal permitting agency in subsequent National Historic Preservation Act (NHPA) Section 106 review, or as proposed in the Application Supplements and as revised in further consultation with New York State Historic Preservation Office (SHPO) in the event that the NHPA Section 106 review does not require that the mitigation plan be implemented, or as further supplemented pending any negotiations among parties. Proof of mitigation funding awards for offset facility implementation to be provided within two (2) years of the start of construction of the facility shall be included.

The *Archaeological Avoidance Plan* (EDR, 2024f; Appendix 9-F) previously prepared and approved by NYSHPO in review correspondence dated March 25, 2024 (NYSHPO, 2024c) satisfies the requirements of section 1100-10.2(g)(1). The April 12, 2024, review correspondence from NYSHPO requested development of a historic resources mitigation plan to "establish specific preservation/history projects and/or funding intended to offset what this office believes will be significant visual impacts associated with this undertaking" (NYSHPO, 2024d; Appendix 9-A). This plan is currently under development and will satisfy the requirements of section 1100-10.2(g)(2). The *Archaeological Avoidance Plan* (EDR, 2024f; Appendix 9-F) and forthcoming historic resources mitigation plan will be included as part of the CRAMMP.

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