

HIGH RIVER ENERGY CENTER

Case No. 17-F-0597

1001.20 Exhibit 20

Cultural Resources

Contents

Exhibit 2	0 Cultura	al Resources1							
20(a)	Study	of the Impacts of Construction and Operation on Archaeological Resources2							
(1)	Town Consultation								
(2)	Summary of the Nature of Probable Impacts on Archaeological/Cultural and Avoidance and Minimization Measures								
(3)	Phase IA Archaeological/Cultural Study								
(4)	Phase	e IB Archaeological Survey7							
(5)	Phase II Archaeological Studies								
(6)	Phase III Archaeological Studies								
(7)	Phase IB Recovered Artifacts								
(8)	Unant	Unanticipated Discovery Plan							
20(b)	Study of the Impacts on Historic Architectural Resources								
(1)	SHPO Consultation and Definition of Area of Potential Effects (APE)16								
20(c)	Consultation with Federally Recognized Tribes								
20(d)	(d) Collection Line Installation								
Tables	i								
A Table 20-2.		reviously Recorded Archaeological Sites in a One Mile Radius of the Project							
		omplete Artifact Inventory – Phase IB Excavation of High River Energy enter11							
Appen	dices								
Appendix 20-1		Phase IA/B Archaeological/Cultural Resource Study							
Appendix 20-2		Historic Architectural Survey and Effects Report							
Appendix 20-3		Cultural Resources-Related Correspondence							

Exhibit 20: Cultural Resources

This Exhibit will track the requirements of proposed Stipulation 20, dated August 26, 2019, and therefore, the requirements of 16 NYCRR § 1001.20. This Exhibit addresses 16 NYCRR § 1001.20, which requires a study of the potential impacts of the construction and operation of the Project, its interconnection, 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) § 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 Project will require a Nationwide Permit from the United States Army Corps of Engineers (USACE), in addition to the Article 10 permit, consultation for the Project follows the Section 106 review process.

OPRHP-SHPO Consultation

Consistent with 16 NYCRR § 1001.20 and 36 CFR § 800, the Applicant, through its consultant, TRC, initiated formal consultation with the OPRHP to develop the scope and methodology for cultural resources studies for the Project (see Appendix 20-3 for the Project correspondence with OPRHP). The consultants exceed the Secretary of the Interior's professional qualifications 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 of May 3, 2018: Proposed High River Solar Energy Center,
 Town of Florida, Montgomery County; and
- Project shapefiles that present the preliminary Project layout.

On May 10, 2018, the OPRHP requested a Phase IA/B archaeological investigation in areas of substantial proposed ground disturbance, including areas of grading, grubbing, tree removal, and excavations more than one foot wide and six inches deep. Archaeological fieldwork is not recommended for panel arrays, perimeter fencing, and utility poles as long as the associated posts are driven or drilled and the disturbances mentioned above are not involved.

To date, the Applicant has completed the necessary Phase IA/B archaeological survey as currently designed. Additional fieldwork may be required for newly proposed disturbed areas, the results of which will be provided as soon as they are finalized. Archaeological fieldwork was conducted June 10-18, 2019. Fieldwork for the reconnaissance-level architectural survey was conducted August 22-25, 2019. Details of work completed to date and pending surveys are provided in this document. 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 as Section 20(a)(8).

20(a) Study of the Impacts of Construction and Operation on Archaeological Resources

(1) Town Consultation

The Applicant has requested input from Town Historian (Timothy Sievers) and the Town Supervisor to identify locally significant archaeological/cultural resources in the vicinity of the Project Area. At the time of the Application, no response has been received.

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

A Phase IB archaeological survey of the Project Area was conducted June 10-18, 2019. A total of 2,413 shovel test pits (STPs) were excavated, leading to the identification of one non-site historic field scatter (see Appendix 20-1).

To date, no archaeological sites were identified within the Project Area and no impact to archaeological resources is anticipated. Should any additional surveys be conducted resulting in the identification of archaeological resources, then measures to avoid impacts to such resources will be undertaken throughout Project design. Where resources are identified within 100 feet (31 meters) of proposed Facility-related impacts, and can be avoided, the Applicant will identify their locations as "Environmentally Sensitive Areas" on the Project construction drawings and will mark them in the field by construction fencing with signs that restrict access prior to construction. These measures are considered adequate to ensure that impacts to potentially significant archaeological resources are avoided.

(3) Phase IA Archaeological/Cultural Study

This section addresses proposed Stipulation 20(a)(3), which requires an archaeological/cultural resources review for the APE and any areas to be used for interconnections or related facilities, including a description of the methodology used for such study.

Phase IA Study Methods and Results

Background research included examination of the site files and archives at the OPRHP, 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 Project Area. The historical assessment of the Project Area 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 Project Area which are presented in detail in the Phase IA/B survey report (see Appendix 20-1); a cultural synopsis is provided below.

The OPRHP CRIS database indicates that a small portion of the Project Area is located within an archaeologically sensitive area. The OPRHP records confirm there are no NRHP-listed or eligible archaeological sites within the APE for archaeological resources, which is defined as all potential ground-disturbance areas of the Project. As part of the Phase IA/B study, a search of OPRHP records indicated that three archaeological investigations and ten consultation projects have been conducted and 12 archaeological sites have been previously recorded in a one-mile radius of the Project Area (Table 20-1).

Table 20-1. Previously Recorded Archaeological Sites in a One Mile Radius of the Project Area

Site Number	Site Name	Description	NRHP Status			
05701.000106	Durham Project 77	Historic, unknown	Undetermined			
05701.000010	New York State Museum (NYSM) 1575	Prehistoric, unknown	Undetermined			
05701.000011	Truax Site	Prehistoric	Undetermined			
05704.000111	Durham Project 110	Historic, unknown	Undetermined			
05701.000107	Durham Project 189	Historic, unknown	Undetermined			
05701.000108	Durham Project 109	Historic, unknown	Undetermined			
05701.000126	Swart Flats Site	Prehistoric, unknown	Undetermined			
05101.000017	UB 1340 Thomson 5	Prehistoric, unknown	Listed			
05701.000015	Luer (Groot) Site	Prehistoric, unknown	Undetermined			
05701.000013	Adruitha	Prehistoric, unknown	Undetermined			
05701.000009	De Graaf Rockhouse	Prehistoric, unknown	Undetermined			
05701.000117	Durham Project 24	Historic, unknown	Undetermined			

Source: OPRHP site files June 2019.

An archaeological sensitivity analysis of the Project Area determined that approximately 525 acres of the 1,221-acre Project Area (ca. 43 percent) are considered as having high sensitivity for archaeological resources. Areas of moderate archaeological sensitivity constitute approximately 459 acres (ca. 38 percent) and 235 acres (ca. 19 percent) are 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 are 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.

Cultural Synopsis

A synopsis of the prehistoric and historic periods is presented to provide a context for interpreting cultural resources of the Project Area. The central region of New York State has been occupied since about 12,500 years ago. The prehistory of this region is conventionally divided into the Paleoindian, Archaic, Woodland, and Contact cultural periods. The history of the Project region ranges from early exploration and contact with the Iroquois, particularly the Mohawk, through modern-day development.

Prehistoric Overview

The Paleoindian period represents the earliest human occupation in the northeastern United States. Paleo-Indian populations were highly mobile hunter-gatherers who specialized in hunting large game (Funk 1976). Subsistence patterns included hunting of a variety of smaller game, as well as fishing and the exploitation of available plant foods (McNett, 1985; Nicholas, 1983 and 1987). Fluted projectile points are characteristic of Paleoindian peoples. Paleoindian sites in this region have been classified as either camps or quarry workshops, although many "sites" consist merely of isolated fluted point finds (Ritchie and Funk, 1973).

The Archaic Period denotes the early cultures in the New York region that had not yet developed ceramic technology and were dependent on hunting, gathering, and fishing for subsistence (Ritchie, 1980; Ritchie and Funk, 1973). The subsistence and technological changes associated with the end of the Pleistocene are reflected in new technologies and tool types that define the increasing resource utilization of the Archaic Period. The Terminal Archaic, which some researchers date from 1700–700 BC, was a transitional period in which subsistence and settlement systems changed and new artifact types were introduced.

The Woodland Period is denoted by the appearance of new cultural traits, such as the widespread use of ceramics, as well as the intensification of older traits that were carried over from the Late and Terminal Archaic subperiods (Ritchie, 1980; Ritchie and Funk, 1973). During the Woodland

period (1000 BC – AD 1600), the adoption of horticulture played an integral part in population growth, subsistence, and settlement systems as well as in the establishment of large villages in mostly riverine settings. The Iroquoian Mohawk tribe inhabited the area that would become Montgomery County at the time of European contact. Powerful both politically and economically, the Mohawk hunted and traded throughout the mid-Atlantic and played a significant role in colonial affairs and commerce from Virginia to New York with the English, French, Dutch, and Swedish colonies. The replacement of tools and other materials manufactured by Native American technologies by those manufactured by Europeans (brass kettles, iron knives, glass beads, etc.) defines the Contact Period (Wray, 1973).

Historic Overview

The Mohawk retained control of their traditional lands until the early-eighteenth century. The Mohawk and Hudson River valleys gave the area strategic transportation, political, and economic importance. The first Europeans settled in the area in the early-eighteenth century as part of Albany County. The first European settlers in the area include Palatine Germans in the 1720s and 1730s and Scots-Irish immigrants in the mid-eighteenth century (Roscoe, 1882). European settlers utilized the American Indian trails that bisected the area to further settlement, trade, and violence during the French and Indian and Revolutionary wars (Sullivan, 1927). The economy of the area was primarily subsistence agriculture, with nascent agricultural related industries emerging (Noyes, 1964). Hostilities between the colonists and Mohawk occurred during the French and Indian War and American Revolution, exacerbated by the importance of the area as a transportation connection between the population centers along the Atlantic Ocean and Canada.

During the Revolutionary War, the Hudson and Mohawk Rivers were of great importance to both the British and American armies and the area surrounding the two rivers saw increased military activity as the two armies jostled for dominance. Located to the south and west, the area saw hostilities primarily in the form of small skirmishes and raids by British-allied American Indians. The area also provided much needed agricultural products to support the war effort (Mohawk Valley History, 2019). By the end of the War, much of the area was depopulated and farms were left abandoned as residents fled. The Tyron County militia, formed 1772, fought and won a battle against the British at the Battle of Oriskany in August 1777 (Montgomery County Tourism, 2019).

After the Revolutionary War, Tyron County was renamed Montgomery County (Roscoe, 1882). The Mohawk River Valley continued to function as a crucial trade route between the Atlantic

Ocean and the interior of North America via the Great Lakes. Transportation improvements, including roads, railroads, and canals, helped further population and economic advancement. The Erie Canal, begun in 1817 and completed in 1825, helped moved products and people through the area and spurred industrialization and immigration in the Mohawk Valley (Montgomery County Tourism, 2019; Finch, 1925; Roberts, 2017). The New York Central Railroad was constructed through the Mohawk Valley, further increasing the industrial allure of the region.

While agriculture remained common in the countryside, the area surrounding the Mohawk River saw increasing industrialization throughout the nineteenth century. Factories for shoes, clothing, cooking oil, paper, iron, clothes wringers, soap, springs, coffins, wagon hubs, and buttons were also found throughout Montgomery County. The factories of Amsterdam were particularly appealing, drawing thousands of immigrants, primarily from Eastern Europe. Agriculture remains an important part of the economy of Montgomery County. Farms, orchards, and dairies operate throughout the county, supporting a bourgeoning agri-tourism industry. Other important industries include construction, manufacturing, health care, and education (Sullivan, 1927).

In 1918, the Erie Canal was replaced by the larger New York State Barge Canal. The new canal replaced much of the original route, leaving abandoned sections, and focused on canalizing certain rivers, including the Mohawk River. The Canal continues to operate, with an increasing focus on historic tourism and recreational use (Montgomery County Tourism, 2019; Roberts, 2017). The Project Area is near the Erie Canal National Heritage Corridor. As of the 2010 census, Montgomery County was home to 50,219 residents (U.S. Census Bureau, 2010). The town of Florida is a rural, agricultural town in southeastern Montgomery County. The town was established in 1793 on the anniversary of the discovery of Florida by Juan Ponce de Leon. The town has a total area of 51.5 square miles (Montgomery County Tourism, 2019; Town of Florida, 2018). As of the 2010 Census, the population of Florida was approximately 2,696 (U.S. Census Bureau, 2010).

(4) Phase IB Archaeological Survey

A Phase IB archaeological survey was conducted to determine whether archaeological sites are located in the Project Area of Potential Effects (APE), which is defined as those areas of substantial proposed ground disturbance for the Project that also have a high or moderate archaeological sensitivity.

Field Methods

Phase IB field methods consisted of both pedestrian survey and STP excavation to locate all archaeological resources within the Project APE. In portions of the Project APE with high and moderate archaeological sensitivity, TRC excavated STPs at 15-meter intervals along survey transects in all proposed construction impact areas. During the Phase IA/B research, TRC identified areas of high archaeological sensitivity as areas in close proximity to historic features, floodplains, stream confluences, areas adjacent to water sources (within 100 meters), headwater zones, prominent knolls, ridge fingers, benches, wetland edges, and rock overhangs. Areas of moderate archaeological sensitivity included relatively level uplands displaced from perennial water sources (greater than 100 meters). Areas of low archaeological sensitivity included moderate to steeply sloping surfaces and areas of existing ground disturbance.

To help ascertain the viability of the probability-defined field methods, as per *OPRHP Guidelines*, TRC examined up to 5 percent of all areas identified as high and moderate archaeological sensitivity with a 5-meter STP interval. The locations of the smaller subset of close interval testing in areas of high and moderate archaeological sensitivity were based on suitable areas as determined in the field.

In areas of low archaeological sensitivity, a combination of pedestrian survey and judgmental STP excavation was conducted. Pedestrian survey was conducted in lieu of shovel testing where steep slope, exposed bedrock, wetlands, and/or ground disturbance precludes the utility of shovel testing. Judgmental STPs were excavated in areas of micro-topography, such as small level benches on steep slope, possible rock shelter locations, and narrow, ephemeral stream crossings.

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

Laboratory Methods and Curation

Artifacts, photographs, field form records, field notes, and maps were returned to TRC's Lanham, Maryland office for processing. Artifact processing and analysis is currently in progress. Artifacts were cleaned, catalogued, and analyzed according to the *New York Archaeological Council Standards*, and selected items illustrated. 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 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 Project'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 New York Archaeological Council's (NYAC) Standards for Cultural Resource Investigations and Curation of Archaeological Collections in New York State (NYAC, 1994; the NYAC Standards). A list of recovered artifacts is provided in 20(a)(7) below.

Survey Report

Following completion of the research and fieldwork, TRC prepared a Phase IA/B archaeological survey report following the OPRHP Guidelines. The report summarized the Phase IA/B research, 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 to the report. The Phase IA/B survey report provided recommendations on whether the 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. A Draft Report will be produced and submitted to the OPRHP for preliminary review. Following OPRHP review, TRC will make necessary changes and a Final Report will be produced and submitted within two calendar weeks.

(5) Phase II Archaeological Studies

If necessary, based on the Phase IB study results and as determined in consultation with OPRHP, a Phase II archaeological study will be conducted 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 the New York Public Service Commission (NYPSC). 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.

(6) Phase III Archaeological Studies

If necessary, a Phase III Data Recovery Plan will be proposed, following completion of a Phase III archaeological study, if any identified archaeological site cannot be avoided through modification of Project design. The Phase III Data Recovery Plan will be prepared by the Applicant in consultation with the New York State (NYS) OPRHP and submitted as part of the Compliance Filing. The Phase III Data Recovery would be conducted in advance of any ground-disturbing activities and would serve to mitigate impacts caused by Project development to any NRHP-eligible archaeological site(s).

(7) Phase IB Recovered Artifacts

Table 20-2. Complete Artifact Inventory – Phase IB Excavation of High River Energy Center

Cat #	Spec #	Site	Survey Area	STP	Strat/ Lvl	Depth (cm)	Artifact Class	Artifact Subclass	Material	Artifact Type	Subtype	Portion	Quantity	Wgt. (g)	Description/ Comments
															domestic gray bodied stoneware with clear
															salt glaze exterior, slipped interior.
1	1	TRC-HR-1	2	STP FL 141	I	0-24	Historic	Domestic	Ceramic	Stoneware	Salt-glazed	Body	1	20.3	Undecorated.
															small whiteware body sherd (may be near
															rim) with black transfer print decoration one
1	2	TRC-HR-1	2	STP FL 141	I	0-24	Historic	Domestic	Ceramic	Whiteware	Transfer-print	Body	1	0.4	side. Decoration may be floral.
1	3	TRC-HR-1	2	STP FL 141	I	0-24	Historic	Architectural	Glass	Flat	Aqua	fragment	1	0.7	
1	4	TRC-HR-1	2	STP FL 141	I	0-24	Historic	Architectural	Brick	Red	UNID		1	0.6	small fragments of brick.
				STP FL 141 +							Machine-				
2	1	TRC-HR-1	2	1m E	I	0-33	Historic	Architectural	Brick	Red	made		7	48.9	
				STP FL 141 +											
2	2	TRC-HR-1	2	1m E	I	0-33	Historic	Architectural	Brick	Red	UNID		1	0.3	may be hand made. Soft.
				STP FL 141 +											small undecorated lead-glazed whiteware
2	3	TRC-HR-1	2	1m E	I	0-33	Historic	Domestic	Ceramic	Whiteware	Lead-glazed	Body	1	<0.1	body fragment.

(8) Unanticipated Discovery Plan

It is possible that archaeological resources could be discovered during construction at the Project Area. As such, this Unanticipated Discovery Plan presents the approach to address such emergency discoveries to ensure that any 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. 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 in a timely manner, minimizing the impacts to the construction schedule if possible.

Based on the background research conducted, portions of the Project Area are considered archaeologically sensitive, and a potential exists for identifying archaeological resources in the Project Area. Therefore, all involved personnel will follow standardized procedures in accordance with state and federal regulations that are 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 construction, the environmental monitors and construction personnel would be instructed to follow the specific requirements and notification procedures outlined below. Cultural resource discoveries that require reporting and notification include any human remains and any 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. No construction work at the site that could affect the artifacts or site would be performed until the archaeologist reviews the site. The site would be flagged as being off-limits for work but would not be identified as an archaeological site per se in order 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 Native American human remains are encountered, procedures for such discoveries would be followed in accordance with state regulations. This will involve consultation with the SHPO or Tribal Historic Preservation Office (THPO) and appropriate interested parties in an effort to identify and notify next of kin, closest lineal descendant, or the Indian tribes who may be culturally affiliated with the remains, and to determine appropriate treatment and disposition of the remains.

When human remains are encountered, all work in the near vicinity of the remains would cease and reasonable efforts made to avoid and protect the remains from additional impact. In cases of inclement weather, the human remains would be protected with tarpaulins. The County Medical Examiner would be notified of the discovery. If the remains are found to be other than human, construction will be cleared to proceed. If the remains are human, and are less than 75 years old, the Medical Examiner and local law enforcement officials will assume jurisdiction.

If the remains are found to be human and older than 75 years, the OPRHP will be notified and may assume jurisdiction of the remains. If jurisdiction is assumed by the OPRHP, they will a) determine whether the human remains represent a significant archaeological resource, and b) make a reasonable effort to identify and locate persons who can establish direct kinship, tribal community, or ethnic relationship with the remains. If such a relationship cannot be established, then the OPRHP may consult with a committee to determine the proper disposition of the remains. This committee shall consist of a human skeletal analyst, Native American members of current State tribes recommended by the Governor's Council on Indian Affairs, and "an individual who has special knowledge or expertise regarding the particular type of the unmarked human burial."

A plan for the avoidance of any further impact to the human remains and/or mitigative excavation, re-interment, or a combination of these treatments will be developed in consultation with the OPRHP and if applicable, appropriate Native American tribes or closest lineal descendants. All parties will be expected to respond with advice and guidance in an efficient time frame. Once the plan is agreed to by all parties, the plan will be implemented.

The plan will include 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*. The Unanticipated

Discovery Plan will specify the degree to which the methodology used to assess any discoveries follows the NYAC *Standards*.

20(b) Study of the Impacts on Historic Architectural Resources

This section addresses proposed Stipulation 20(b), which requires a study of the impacts of the construction and operation of the Project and the interconnections and related facilities on historic resources, including the results of field inspections and consultation with local historic preservation groups to identify sites or structures listed or eligible for listing on the State or NRHP within the viewshed of the Project and within the Study Area, including an analysis of potential impact on any standing structures which appear to be at least 50 years old and potentially eligible for listing in the State or NRHP, based on an assessment by a person qualified pursuant to federal regulation (36 C.F.R. 61). Mitigation measures, such as local improvement projects, will be discussed should there be any unavoidable impacts to cultural resources. Audible or visual impacts, if any, will also be addressed.

TRC completed a Historic Architecture Reconnaissance Survey for the Project, consistent with Section 106 of NHPA and OPRHP *Guidelines*. The purpose of the architectural survey is to identify the presence of historic architectural properties resources aged 50 years or older within the APE for the architectural survey, evaluate these historic architectural resources for their eligibility for listing in the NRHP, and to provide an assessment of the potential adverse effects of the Project on those historic architectural resources that are listed in, previously determined eligible for listing in, or recommended and/or 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 data, historical maps, aerial photographs, secondary historical sources, online county tax parcel data, and county histories. Survey information collected from OPRHP's online CRIS database included twenty architectural resources within the APE: three NRHP listed, two previously determined eligible, one previously determined not eligible, and 14 with undetermined eligibility status.

Architectural Field Survey

An architectural field survey of the proposed APE was conducted following the OPRHP *Guidelines*. The architectural field survey revisited all previously recorded resources and documented newly identified architectural resources 50 years old or older within the Project APE.

Field survey included systematically driving all public roads within the APE to identify resources present. Resources were assessed from public ROWs. Based on previous consultation with OPRHP for other large-scale solar energy development, buildings that are not sufficiently old (less than 50 years), clearly lack architectural integrity, or are otherwise evaluated by the architectural historian as lacking historical or architectural significance were not included in the survey.

Previously identified NRHP-listed and eligible historic properties were checked and photographed to record existing conditions and reassess their current NRHP status. Each previously identified but unevaluated resource and each newly identified resource were documented via photography, its location was recorded on field maps, and field notes taken describing the style, physical characteristics, materials, condition, integrity, and other noteworthy characteristics of each resource.

Identification of Historic Properties

TRC conducted the architectural survey between August 22 and 25, 2019 and identified a total of 100 architectural properties aged 50 years or older in the APE. Of those 100, three are NRHP-listed, 13 are recommended eligible for NRHP listing, and 84 are recommended not eligible for NRHP listing due to loss of integrity or lack of historical significance. TRC identified two potential historic districts during the survey that are recommended eligible for NRHP listing. Based on resource location proximal to Project Components, TRC recommends that the Project does not have the potential to directly or indirectly affect any historic architectural properties. TRC's analysis of the undertaking in relation to historic properties concludes that construction activities will not directly or indirectly affect the character-defining features that contribute to the significance of any NRHP listed, eligible, or recommended eligible qualifying characteristics of any historic property architectural resources in the architectural APE.

Reporting

TRC's Historic Architectural Survey and Effects Report is included as Appendix 20-2. The report includes a Project description, statement of methodology, historic context, summary of surveyed resource types, and field results. Survey results include recommendations of NRHP eligibility/non-eligibility and a preliminary assessment of Project effects, as well as any necessary recommendations for further work. Surveyed resources will be entered individually into CRIS with the report and Geographic Information System (GIS) shapefiles for the Project.

Preliminary Assessment of Effects

TRC's preliminary assessment of effects concludes that the proposed Project will not alter, directly or indirectly, any of the characteristics, significance, and/or integrity of the 16 identified historic properties that qualify them for inclusion in the NRHP. TRC recommends that the likelihood of incremental effects caused by the Project to historic properties in the APE from past, present, or reasonably foreseeable future actions is low. Thus, the project will have no reasonably foreseeable cumulative effect to historic properties. Accordingly, TRC offers preliminary recommendations of no effect to historic properties in the APE.

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

SHPO Consultation

The OPRHP replied to the initial Request for Consultation Letter (May 3, 2018) with a request for the Historic Architectural Resources Survey and Work Plan. In a phone conversation on May 31, 2019, the OPRHP requested that the work plan address an APE that include a two-mile-radius study area for above-ground, historic architectural resources identification and survey. Additionally, OPRHP requested that the workplan utilize an APE based on bare-earth topography GIS modeling. Such modeling excludes visual intrusions, namely vegetation and intervening buildings.

To that end, TRC and OPRHP consulted and agreed upon the survey goals and the delineation of the APE, consistent with OPRHP guidelines for cultural resources surveys and NRHP eligibility criteria, codified at 36 CFR 60.4. TRC provided a work plan on July 12, 2019, that outlined the survey goals, defined the APE, and indicted how TRC would implement the architectural survey. On July 15, 2019, OPRHP concurred with TRC's workplan.

Definition of Area of Potential Effects (APE)

The APE for cultural resources is the "geographic area or areas within which an undertaking may directly or indirectly cause changes in the character or use of historic properties, if any such properties exist" (36 CFR § 800.16 [d]). Scale and nature of the project influence the APE, resulting in delineated areas of effects that may be different for different kinds of effects caused by the undertaking. Direct effects occur in the area of physical impacts associated with construction and visual effects to historic properties beyond the construction limits. Indirect effects (atmospheric, and audible) can occur beyond the construction limits, be cumulative in nature, and vary depending on the nature of the undertaking. The APE includes both categories of effects.

Based on consultation with OPRHP, as described above, the APE for the Project is defined as the area within which bare-earth topography visibility modeling suggests that the project may be visible and within a two-mile radius of the Project LOD.

20(c) Consultation with Federally Recognized Tribes

The Applicant initiated consultation with local Native American Tribes. Based on the Project's geographical location and guidance from the NYS OPRHP and the Indian Nations of New York State, correspondence was sent to the following Federally Recognized Tribes: Delaware Nation, Delaware Tribe of Indians, Mohican Nation Stockbridge-Munsee Band (Stockbridge Munsee Community), and the St. Regis Mohawk Tribe. The Tribal consultation procedures included preparing correspondence to each THPO that describes the Project's location and design. The Applicant has requested comments from each THPO on any potential effects from the Project on Tribal resources or Tribal lands. Documentation of these consultations is included in the Application. Consultation letters were mailed to each above-named Federally Recognized Tribe on June 21, 2019 (Appendix 20-3). No responses have been received.

20(d) Collection Line Installation

The collection lines will be placed underground for the entirety of their length and installed primarily via direct trenching with some portions to be proposed via horizontal direction drill (HDD) in order to avoid wetland resources and roadways.

Impacts to cultural resources are not anticipated due to the careful siting of the HDD and minimal impact installation. Areas undergoing HDD will be surveyed and, if necessary, identified resources will be evaluated to determine impacts to cultural resources. Should a significant resource be identified, the route will be re-designed to avoid impacts.

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