GARNET ENERGY CENTER

Case No. 20-F-0043

1001.20 Exhibit 20

Cultural Resources

Contents

Appendices

Exhibit 20 Cultural Resources

This Exhibit will track the requirements of proposed Stipulation 20, dated March 5, 2021, and therefore, the requirements of 16 New York Codes, Rules and Regulations (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 State 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). OPRHP 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 wetland permit from the United States Army Corps of Engineers (USACE), in addition to the Article 10 certificate, 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 20-2 for the Project 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 Resource Information System (CRIS) website consisting of the following technical documents for OPRHP review:

- *Request for Consultation Letter of June 24, 2020;*
- *Phase IA Archaeological Survey and Sensitivity Assessment (September 2020);*
- *Historic Architectural Resources Survey Methodology; and*
- *Historic Architectural Resources Trekker Survey data.*

On June 29, 2020, the OPRHP requested a Phase IA archaeological investigation to identify previously recorded archaeological sites and other cultural resources within or near the Project Area, and to assess the archaeological sensitivity of the Project Area. The Phase IA report was submitted to OPRHP on September 18, 2020 (Appendix 20-1). In a letter dated October 8, 2020, OPRHP concurred with the recommendations presented in the Phase IA report that Phase IB archaeological testing be conducted in areas of substantial proposed ground disturbance that fall within areas of high archaeological sensitivity. Substantial proposed ground disturbance includes grading and excavation more than six inches deep; grubbing, tree and stump removal; and trenches more than three feet wide. A Phase IB survey is not recommended for: panel arrays; perimeter fencing and utility posts if their associated posts are driven or drilled into the ground and no grubbing or grading is involved; and for excavations and grading less than six inches in depth.

Details of work completed to date 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 Section 20(a)(7).

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

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

The Project's Phase 1B archaeological investigation is complete, and the report is under OPRHP review. The results will be filed with the Siting Board immediately after the review has been completed. Measures to avoid impacts to any potentially significant archaeological resources will be taken throughout Project design.

If resources are identified within 100 feet (approximately 31 meters) of proposed Facility-related impacts, and can be avoided, the Applicant will identify their locations as "Environmentally Sensitive Areas" on the final construction drawings and will mark them in the field prior to construction with fencing and signs that restrict access. These measures are considered by OPRHP to be adequate to ensure that impacts to potentially significant archaeological resources are avoided.

(2) Phase IA Archaeological Study

Phase IA Study Methods and Results

Background research included examination of 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 study (see Appendix 20-1); a cultural synopsis is provided below. Documentation of SHPO's receipt, review, and concurrence with the Phase IA report is provided within Appendix 20-2.

A site file search conducted on the OPRHP web-based CRIS system indicates that portions of the Project Area are within an area that is archaeologically sensitive for prehistoric period

resources. Two previously recorded archaeological sites are noted within a one-mile radius of the Project Area, one of which is located within the Project Area.

Two New York State Museum (NYSM) areas (NYSM 1534 and 7402) are located within a one-mile radius of the Project Area. No NYSM sites are noted within a one-mile radius of the Project Area. Two cemeteries are identified within a one-mile radius of the Project Area: Conquest Village Cemetery, located 0.33 mile southwest of the Project Area, and Emerson Cemetery, located 0.1 mile east of the Project Area.

An archaeological sensitivity analysis of the original 1,899-acre Project Area determined that approximately 246 acres (ac) (approximately 13 percent) were considered to have high sensitivity for archaeological resources. Areas of moderate sensitivity constituted approximately 753 ac (approximately 39.6 percent of the Project Area), and 900 ac (approximately 47.4 percent of the Project Area) were considered to have low archaeological sensitivity. Since that analysis was completed, the Project Area has added 389 ac for a total of 2,288.3 ac. The archaeological sensitivity of the additional acreage will be considered during the Phase IB study. Areas located in close proximity to known archaeological resources, as well as level areas with well-drained soils located near freshwater sources, are considered to have high sensitivity for prehistoric archaeological resources. Moderate sensitivity areas include locations displaced from water sources, and areas of low sensitivity are steeply sloped or poorly drained.

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 northern region of New York State has been occupied for about 12,500 years. The prehistory of this region is conventionally divided into the Paleoindian, Archaic, Woodland, and Contact cultural periods. The recorded history of the Project region ranges from early exploration and contact with the Iroquois through modern-day development.

Prehistoric Overview

The Paleoindian period represents the earliest human occupation in the northeastern United States. Paleoindian 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 are rare and are generally 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 to 700 BC, was a transitional period in which subsistence and settlement systems changed, and new artifact types were introduced (Dincauze 1975; Turnbaugh 1975).

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 to 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. By the Late Woodland period (A.D. 1000 to 1600), the antecedents of the historically recognized Native groups, such as the Iroquois, become recognizable. The Cayuga were the predominant resident culture in the area during the time of European contact (A.D. 1600 to 1660). This period is marked by the replacement of tools and other materials manufactured by Native American technologies by those manufactured by Europeans (Wray 1973).

Historic Overview

European presence in the Project Area vicinity was restricted during the colonial period due to the presence of the Cayuga and Seneca tribes, consisting primarily of traders and missionaries. The 1779 Sullivan-Clinton Campaign during the Revolutionary War led to the destruction of Iroquoian villages throughout the area and opening up of the area for Euro-American settlement (Cayuga County 2020).

After the Revolutionary War, the area was divided into Military Tracts, each 600 acres, with parcels promised to soldiers for their military service. Eight of the original 24 tracts were located in what would become Cayuga County. Although few soldiers received their promised land, as tract deeds were sold, traded, and bequeathed, this subdivision led to the development of towns

and villages throughout central New York (Cayuga County 2020). The Project Area is located within what was known as the Central New York Military Tract.

Cayuga County was established in 1799 from a portion of Onondaga County, with Auburn named the county seat in 1806. Located 13 miles south of the Project Area, Auburn became an important manufacturing and transportation center during the nineteenth century (Cayuga County 2020). The area that would become the Town of Conquest was first settled in 1800 by George Snyder, a Revolutionary War soldier, and Israel Wolverton. The town was officially formed in 1821 from a portion of the Town of Cato (Storke 1879: 36).

The early economy of Cayuga County, particularly the northern portion of the county, focused on subsistence agriculture and timber extraction. The fertile land and easy access to water transportation led to a flourishing agricultural industry by the late nineteenth century. Early industry in the county utilized the flowing water provided by Seneca River and Cayuga Lake, with mills and small manufacturing industries forming in the early nineteenth century. The construction of the Erie Canal, along with its crucial feeder canals by 1835, and the expansion of railroads throughout the region during the mid to late nineteenth century further opened the area up to settlement, a wider market economy, and industrial improvements as both industries and farmers benefitted from increased access to non-local markets (Cayuga County 2020).

Cayuga County provided a home for people of various races and religious and political practice. Immigrant labor, primarily from Italy and Poland, helped spur the economic expansion of the county during the nineteenth century. The Abolitionist movement kept several safe houses along the Underground Railroad to help those seeking refuge from slavery. Harriet Tubman resided in Auburn beginning in 1859 and died there in 1913. The Women's Suffrage movement also found a welcome home in Cayuga County (Cayuga County 2020).

The twentieth century saw a decline in manufacturing within the county and the consolidation of small farms into large agricultural enterprises. Limestone quarries were and still are common. Agriculture and dairying remain key industries, particularly in the rural areas of the county. In the twenty-first century, tourism has surged within the county, becoming a new driving force for economic development (Cayuga County 2020). As of the 2010 Census, the population of Cayuga County was 80,026, and the population of the Town of Conquest was 1,819 (U.S. Census Bureau 2010).

(3) Phase IB Archaeological Survey

A Phase IB archaeological survey was conducted in April and May 2021 to determine whether archaeological sites are located in the areas of proposed ground disturbance for the Project, as determined in consultation with OPRHP and according to updated Phase IB Archaeological Survey recommendations provided by OPRHP (see Appendix 20-4). In total, 2,660 STPs were excavated, resulting in the identification of two historic sites (**TRC-GAR-1, TRC-GAR-2**), two prehistoric isolated finds (**TRC-IF-1, TRC-IF-2**), and three non-site historic scatters. Sites **TRC-GAR-1 and TRC-GAR-2** are recommended for avoidance or further study. Site **TRC-GAR-1** is a historic stone foundation with two standing walls dating to the nineteenth century. Site **TRC-GAR-2**, is a rubble and poured concrete dam possibly associated with a historically mapped structures, dating from the mid-nineteenth century through the mid-twentieth century. The isolated find spots **TRC-IF-1 through 2** are, by definition, considered ineligible for the National Register and are recommended for no further study. The three historic non-site scatters located during the survey are not considered cultural resources by the OPRHP. As previously stated, the results will be filed with the Siting Board immediately after the report has been reviewed by the OPRHP.

Field Methods

Phase IB field methods consisted of both pedestrian and shovel test pit (STP) survey to locate all archaeological resources within the Project Area of Potential Effects (APE). In areas of high archaeological sensitivity, TRC excavated STPs at 15-meter intervals along survey transects in all proposed construction impact areas. Updated Phase IA sensitivity model guidelines from OPRHP (October 2020) identify areas of high archaeological sensitivity as: 1) areas within 100-meters of permanent water and on slopes equal to or less than 12 percent; 2) within known archaeological sites; and 3) locations of standing or demolished historic structures. Areas with hydric soils are also considered to have high archaeological sensitivity. The OPRHP does not recommend Phase IB surveys in areas of low archaeological sensitivity.

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 slopes, possible rock shelter locations, and narrow, ephemeral stream crossings.

To avoid impacts to or within previously reported archaeological sites, OPRHP recommends a 50-foot buffer zone be established around each known archaeological site once the location is

reestablished. If avoidance is not feasible, an assessment of whether Phase II site examinations are warranted will occur.

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 tests 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 were discovered in an isolated shovel test context, a minimum of eight additional shovel tests at 1-meter (approximately 3.3 feet) and 3-meter (approximately 10 feet) intervals were excavated. All work was be conducted inside the Project 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 New York Archaeological Council (NYAC) Standards for Cultural Resource Investigations and Curation of Archaeological Collections in New York State (NYAC 1994; 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 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 of the parcel(s) 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 were processed in a manner consistent with professional standards, such as the NYAC Standards.

Survey Report

Following completion of the research and fieldwork, TRC prepared a Phase I archaeological survey report following the OPRHP Guidelines. The report summarized the Phase IA research, focused on 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 as needed. The report provided recommendations on whether the sites are eligible or ineligible for inclusion on the NRHP, or if additional Phase II studies are required to determine site eligibility. A draft report was produced and was submitted to the OPRHP for preliminary review. Following review, the Project will make any necessary changes and a final report will be produced and filed with the Siting Board.

(4) Phase II Archaeological Investigations

If necessary, based on the Phase IB survey results and as determined in consultation with the 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 and 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 State Department of Public Service (DPS). 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 the approval of the applicable Compliance Filing. Documentation of SHPO's receipt of the Phase II report will be provided under confidential cover.

(5) Phase III Data Recovery Plan

If necessary, a Phase III Data Recovery Plan will be proposed, following completion of a Phase II archaeological study, if any identified NRHP-eligible 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 OPRHP and submitted to the Secretary, or 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).

(6) List of Recovered Artifacts

A detailed list of artifacts recovered during excavations will be provided following completion of the excavation and subsequent laboratory processing and analysis.

(7) Artifact Processing and Curation

All archaeological materials recovered during excavations will be cleaned, catalogued, inventoried, and curated according to NYAC standards. Recovered artifacts will be sorted by general categories (historic, prehistoric faunal) and then by material type within each category (i.e., prehistoric lithics or ceramics; historic glass, ceramics, architectural material, etc.). To the extent possible, artifacts will be identified by material, temporal or cultural/chronological association, and style and function. Each artifact will be counted and weighed to the nearest 0.1 gram (g).

The artifact inventory will be generated using a computerized data management system developed by TRC and written in Microsoft Excel 2013. Each artifact will be described by basic type utilizing descriptive information (characteristics). All artifacts and original field records generated from this survey will be temporarily curated at the TRC Lanham, Maryland office until a permanent curation facility is designated.

(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 potentially significant cultural, historical, or 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 quickly, minimizing the impacts to the construction schedule if possible.

As the Project Area is considered to be archaeologically sensitive, a potential exists for identifying archaeological resources in the Project Area. 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 construction, the environmental monitor 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 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. 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 would be flagged as being off-limits for work but would not be identified as an 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 2018). 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 2018), 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.

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

TRC has completed a Historic Architectural Resources Survey for the Project. The survey identified the presence of architectural resources aged 50 years or older within the Zone of Visual Impact (ZVI), 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 Project 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 on-line databases, historical maps, aerial imagery, secondary historical sources, on-line county tax parcel data, and county histories. An initial review of previously identified resources located within a two-mile radius of the Project Area will record NRHP-listed historic properties, previously determined NRHP-eligible historic properties, 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 ZVI as determined by bare-earth topography geographic information system (GIS) modeling and in consultation with OPRHP using the Trekker mobile survey application. The field survey consisted of revisiting all previously recorded resources and documenting newly identified architectural resources fifty 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 Project 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 via photography, and resource inventory forms will be 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.

During the course of the fieldwork, TRC identified two (2) cemeteries. Fieldwork did not find resources associated with the Underground Railroad, Native American burial grounds, and surface features that may have been part of caves, buried shafts, mines, or root cellars. As the survey was undertaken only from public roadways, TRC did not enter private property to ground-truth surface openings that may have engineering, storage, extractive, or funerial functions and historic associations. Cemeteries were photographed from the public roadway.

Identification of Historic Properties

TRC conducted the Historic Architectural Resources Survey between February 8 and 11, 2021, identifying a total of fifty (50) architectural resources in the APE, among which were eight (8) previously identified architectural resources. Of these, one linear historic property is listed in the National Register of Historic Places and is a National Historic Landmark, one previously inventoried architectural resource was determined NRHP-eligible, and the remaining six previously inventoried resources had undetermined status. TRC surveyed an additional forty-two (42) newly identified architectural resources aged fifty years old or older. TRC recommends five as NRHP-eligible and the remaining thirty-seven (37) newly identified architectural resources as not eligible for NRHP listing due to lack of architectural merit, insufficient integrity, or no historical significance.

TRC concludes that while the Project has no potential to physically affect any historic architectural properties, there may be some positive visibility of the Project from historic architectural properties within the APE. However, the potential effects of visible infrastructure from the solar development will not be adverse because the Project will not significantly affect the NRHP qualifying characteristics of any NRHP-recommended eligible architectural resources in the APE.

Reporting

TRC's Historic Architectural Resources Survey and Effects Report is included as Appendix 20-3. The report includes a description of the Project, statement of methodology, historic context, summary of surveyed resources, and field results. Survey results include recommendations of NRHP eligibility and a preliminary assessment of Project effects. Surveyed resources have been submitted to OPRHP using CRIS Trekker.

Preliminary Assessment of Effects

In order to identify and summarize the nature of probable effects to historic architectural resources pursuant to Section 106 and Article 10, TRC's Historic Architectural Resources Survey and Effects Report includes a preliminary assessment of potential effects to historic architectural resources. To assess potential Project 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

The OPRHP replied to the initial Request for Consultation Letter (June 24, 2020) with a request for visibility mapping (June 29, 2020). Subsequently, OPRHP requested an architectural resource survey (October 14, 2020) of the ZVI using CRIS Trekker within a two-mile radius. To comply with OPRHP's request, TRC submitted a survey methodology for OPRHP approval on January 22, 2021. OPRHP also requested identification of all NRHP and SRHP-listed resources and National Historic Landmarks (NHL) with positive visibility of the Project, based on bare-earth topography visibility modelling, within a five-mile radius of the Project. OPRHP approved TRC's survey methodology on January 26, 2021.

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 Project. The APE also includes areas that may have visual and indirect impacts. In keeping with OPRHP Guidelines (July 30, 2020), the term APE is synonymous with ZVI and will be used interchangeably to denote areas within two miles of the Project that have positive visibility of the Project based on bare-earth topography GIS modelling.

Identification of effects (visual, atmospheric, or audible) includes investigations of those areas removed in distance, where Project 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 Project. The ZVI for the survey encompasses all areas within the two-mile buffer area of the Project that have visibility of the Project, 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 Project will not require demolition or physical alteration of any NRHP eligible or recommended eligible historic properties within the APE. Therefore, no physical effects on historic properties are anticipated as a result of the Project. However, construction of the Project has the potential to result in visual effects 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, the undertaking would have no adverse effect on a historic property.

All eight historic properties that bare-earth viewshed modeling suggests may have some level of visibility of Project components are located outside of the Project Area, and therefore beyond the LOD. The listed historic property and the seven recommended eligible historic properties evaluated as part of the Historic Architectural Resources Survey have significantly reduced potential for views of Project visible infrastructure due to distance or intervening visual screening such as vegetation, development, or roadways. Thus, the Project 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.

(3) Mitigation Measures

Should there be unavoidable adverse impacts of the Project to State or NRHP-eligible historic architectural resources, TRC will coordinate consultation between Garnet Energy Center, LLC, and OPRHP to resolve potential adverse effects by proposing mitigation treatments.

20(c) Consultation with Federally Recognized Tribes

On behalf of the DPS, consultation with federally recognized Indian Nations will be undertaken by OPRHP, consistent with government-to-government consultations and based on the Project's geographical location.

The Tribal Historic Preservation Office (THPO) for any Indian Nations with whom OPRHP consults will be included on the Master Stakeholder List and documentation of these consultations will be included in the Application and reflected in the Meeting Log, as applicable.

20(d) Collection Line Installation

Installation methods used for collection lines will include typical methods such as horizontal directional drilling (HDD) and open trench. Potential impacts on any cultural resources as a result of collection line installation will be minimized to the maximum extent practicable through avoidance of identified cultural resources.

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