

SUPPLEMENTAL CULTURAL RESOURCES MANAGEMENT PLAN

**Champlain Hudson Power Express HVDC Transmission Line Project
Ballston to Glenville, Saratoga and Schenectady Counties -CP Rail
(Segment 6, Package 4A)**

[Redacted for Public Distribution]

Lake Champlain to New York City
Saratoga and Schenectady Counties, New York

HAA 4268-83
SHPO 09PR03910

Submitted to:

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MANAGEMENT SUMMARY

SHPO Number: 09PR03910
Involved Agencies: U.S. Department of Energy, U.S. Army Corps of Engineers, NYSHPO
Phase of survey: Supplemental Cultural Resources Management Plan

LOCATION INFORMATION

Municipality: Towns of Ballston, Clifton Park, and Glenville
County: Saratoga and Schenectady Counties

CULTURAL RESOURCE MANAGEMENT PLAN OVERVIEW

Objective: *The purpose of this Supplemental Cultural Resources Management Plan is to synthesize data sets into one document, and to provide OPRHP/DPS contact information for identified roles within the Cultural Resource Management Plan drafted by TRC in 2015 and finalized in 2021.*
The plan also proposes Programmatic Allowances and an Archeological Monitoring Plan to assist with ongoing review and compliance as stipulated in the Programmatic Agreement between DOE and NYSHPO in 2021.
The current Supplemental CRMP focuses on Package 4A, Segment 6 which will primarily be located along the CP Rail ROW between the Town of Ballston, Saratoga County and the Town of Glenville, Schenectady County.

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Appendices

Appendix 1: Champlain Hudson Power Express Cultural Resources Management Plan (TRC)
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LIST OF ACRONYMS

ACHP – Advisory Council on Historic Preservation
AMP – Archeological Monitoring Plan
APE – Area of Potential Effect
BMP – Best Practices Management Plan (2012)
CA – Consulting Archeologist
CFR – code of federal regulations
CHPE, LLC – Champlain Hudson Power Express, LLC
CLG – Certified Local Government
CMP – corrugates metal pipe
CRMP – Cultural Resources Management Plan
CRIS – Cultural Resource Inventory System (NYSHPO)
EM&CP – Environmental Management and Construction Plan
DOE – U.S. Department of Energy
GIS – Geographic Information System
GPS – Global Positioning System
HABS – Historic American Building Survey
Hartgen – Hartgen Archeological Associates, Inc.
HDD – horizontal directional drilling
HAER – Historic American Engineering Record
HALS – Historic American Landscape Survey
HVAC – high-voltage alternating current
HVDC – high-voltage direct current
LOW – Limits of Work
MOA – Memorandum of Agreement
MP – mile post, railroad
MW – megawatt
NHPA – National Historic Preservation Act
NRE – National Register-eligible
NHL – National Historic Landmark
NRHP – National Register of Historic Places
NYAC – New York Archaeological Council
NYSHPO – New York State Historic Preservation Officer
NYSM – New York State Museum
OPRHP – Office of Parks, Recreation and Historic Preservation
PPO – Project Preservation Officer
RCP – Reinforced concrete pipe
ROW – Right-of-Way
SOI – Secretary of the Interior
SRHP – State Register of Historic Places
TRC – TRC Companies, Inc

CULTURAL RESOURCES MANAGEMENT PLAN

1 Introduction

Hartgen Archeological Associates, Inc. (Hartgen) has been retained to create a Supplemental Cultural Resources Management Plan (CRMP) for the proposed Champlain Hudson Power Express (Project) located over multiple counties through New York. The current phase of work focuses on the overland portion along the CP Rail ROW between the Town of Ballston, Saratoga County through the Town of Clifton Park and ending in the Town of Glenville, Schenectady County. The current segment extends 10.2 miles largely north to south.

The Project has received approvals by the U.S. Department of Energy (DOE) and the U.S. Army Corps of Engineers, with consultation from the NYSHPO. The goal of the CRMP is to provide a framework for managing potential impacts to known, relevant historical properties and archeological sites (determined to be eligible for or listed in the National Register of Historic Places). Sites discovered during construction activities will also be managed in the Supplemental CRMP's framework. In addition, this management plan will create a comprehensive framework for identifying and undertaking additional archeological work that may be required prior to and during the construction of the Project.

TRC Companies, Inc. (TRC) created a draft comprehensive Management Plan in 2015, finalized in 2021 to include three additional reports. This management plan is referred to throughout the current document (Appendix 1), with this document serving to fully incorporate all the relevant information for Phase I of construction into one succinct document. In the event of a conflict between this document and that provided in Appendix 1, the CRMP (2021) will prevail.

This plan was enacted to comply with Section 106 of the National Historical Preservation Act and will be reviewed by the New York State Office of Parks, Recreation and Historic Preservation (OPRHP) as well as the aforementioned federal agencies. This plan was established according to the New York Archaeological Council's *Standards for Cultural Resource Investigations and the Curation of Archaeological Collections* (1994), which are endorsed by OPRHP.

The Programmatic Agreement Among The U.S. Department of Energy, And The New York State Historic Preservation Officer For Managing Historic Properties That May Be Affected By Authorizing The Construction, Operation, Connection And Maintenance Of The Champlain Hudson Power Express HVDC Transmission Line Project (Programmatic Agreement), executed in 2021, stipulates completion of a Cultural Resources Management Plan (CRMP) to create procedures for the consideration and management of historic properties within the Champlain Hudson Power Express HVDC Transmission Line Project (Project).

Stipulation IV(B) within the Programmatic Agreement specifies the CRMP will be applied in lieu of Section 106 implementing regulations 36 CFR Part 800.4 – 800.6 to satisfy requirements of compliance with Section 106 of the National Historical Preservation Act (16 U.S.C. 470) related to identification of historic properties (36 CFR Part 800 800.4), assessment of adverse effects (36 CFR Part 800 800.5), and resolution of adverse effects (36 CFR Part 800.6).

This Supplemental CRMP has been developed in response to Programmatic Agreement Stipulation IV(B) and Stipulation II(C)(8 – 11 and 19). In 2015, TRC completed the *Champlain Hudson Power Express HVDC Transmission Line Project Cultural Resources Management Plan* which was revised in 2021 (TRC 2021). This document provided detailed procedures for unanticipated discoveries, monitoring during construction-related ground disturbance, and monitoring during post-construction operations; all stipulations of the CRMP (2021) remain applicable.

Current design and engineering requirements indicate effects to historic and landscape resources may also require consideration throughout project execution; this Supplemental CRMP supports streamlined coordination and consultation with NYSHPO through agreement on programmatic allowances and treatments. This Supplemental CRMP provides structure and process for implementing requirements of the Programmatic Agreement and the CRMP (2021).

2 Supplemental CRMP Objectives

All components of the segment (splice locations and vaults, HDD, work areas, access roads, etc.) were evaluated to determine whether the proposed work lies within the permitted route (APE) or outside the permitted route. Areas outside the permitted route were further evaluated to determine whether the areas have been previously disturbed (lacking archeological potential) or undisturbed (having archeological potential). Recommendations are proposed for either archeological monitoring during construction in the manner described in Section 5, or archeological testing.

Archeological testing may be utilized in advance of construction. Testing would be conducted by the excavation of 40-centimeter tests placed at 50-foot intervals within the areas defined in Table 8. Excavated soil would be passed through 0.25-inch hardware mesh when feasible and examined for both precontact (Native American) and historic artifacts. The stratigraphy of each test would be recorded including the depth, soil description, and artifact content. The location of each shovel test would be plotted on the project map.

The testing shall adhere to the New York Archaeological Council's *Standards for Cultural Resource Investigations and the Curation of Archaeological Collections* (1994), which are endorsed by OPRHP. The investigation shall be overseen by an Archeologist as defined under the Secretary of the Interior's Professional Qualification Standards outlined in *Archeology and Historic Preservation: Secretary of the Interior's Standards and Guidelines as Amended and Annotated* and required under Title 36 of the Code of Federal Regulations, Section 61 (36 CFR 61).

The survey report(s) shall be prepared according to OPRHP's *State Historic Preservation Office (SHPO) Phase I Archeological Report Format Requirements* (2005) or another format acceptable to OPRHP. As appropriate, reports will contain text, tables, color maps and photographs, shovel test records, and an artifact inventory.

3 Project Information

The Project involves the construction of approximately 339 miles of a high voltage direct current underground and underwater transmission line, running from Montréal, Canada to Queens, New York. This transmission line will bring 1,250 megawatts of hydropower to replace the use of fossil fuels, reducing carbon emissions and helping achieve renewable and clean energy in New York State. This proposed project will provide enough power for more than 1 million homes in New York State. Installation of this transmission line will occur primarily beneath the ground within roadway and railroad right of way. Direct impacts to streams and waterbodies are avoided through means such as attaching to existing infrastructure (bridges and culverts) or incorporating the use of horizontal directional drilling (HDD).

Several archeological reports by Hartgen and TRC examined and detailed the sensitivity and potential of the APE. These resources have been utilized in the creation of the Supplemental CRMP.

The bolded reports include portions of the most current Project (Segment 6) and provide relevant background information.

- Hartgen. 2010a. Pre-Phase IA Archeological Screening: Champlain Hudson Power Express.
- **Hartgen. 2010b. Phase IA Literature Review and Archeological Sensitivity Assessment: Champlain-Hudson Power Express.**
- **Hartgen. 2012. Phase IB Archaeological Field Reconnaissance and Phase II Archeological Site Evaluation: Champlain Hudson Power Express, Canadian Pacific Railway Segment.**
- Hartgen. 2013a. GIS Analysis: Archeological Sites within APE Archeological Sites Intersected by a 50-ft wide Construction Corridor Along the November 2012 CHPE/TDI Centerline.
- Hartgen. 2013b. GIS Analysis NRHP Properties within APE National Register of Historic Place Eligible (NRE) and Listed (NRL) Properties Intersected by a 50-ft wide Construction Corridor along the November 2012 CHPE/TDI Centerline.

- Hartgen. 2013c. GIS Analysis Underwater Resources within APE Underwater Anomalies and Sites within Lake Champlain and the Hudson River Intersected by a 50-ft wide Construction Corridor along the November 2012 CHPE/TDI Centerline.
- TRC. 2020a. Phase IA Archeological Assessment of Champlain-Hudson Alternative Routes, New York.
- TRC. 2020b. Phase IA Archeological Assessment of Champlain Hudson Astoria Converter Station and Astoria Preferred Alternative Route, Boroughs of Queens, New York.
- TRC. 2020c. Phase IA Archeological Assessment of Champlain-Hudson Power Express Project, Harlem Rail Yard Preferred Alternative, Boroughs of Queens, New York.
- TRC. 2021. Phase IA Archaeological Assessment of the Champlain-Hudson New Scotland Converter Station, New Scotland, Albany County, New York.
- TRC. 2022. Phase IA Archaeological Survey letter for the Stony Point Horizontal Directional Drill (HDD), Stony Point, Rockland County, New York.

3.1 Description of the Project

The area of potential effects (APE) includes portions of the Project that will be directly altered by the proposed undertaking. The overall APE encompasses 339 linear miles; the width of the APE varies. For the overall cable route, the Project is divided into 14 Packages with their associated Environmental Management and Construction Plan (EM&CP) submittals (Table 1).

Table 1. CHPE Packages, Segments, Locations and Dates.

EM&CP		Location Description	Segment Length (miles)	Anticipated (or Actual) Filing with DPS	PSC Approval of EM&CP	Anticipated Start of Construction
Construction Segment	Design Package					
Overland Segments						
1, 2	Package 1A/ Package 1B	Putnam to Dresden/ Dresden to Whitehall	17.6	(April 15, 2022)	October 13, 2022	November 2022
3	Package 1C/2	Whitehall to Fort Ann/ Fort Ann to Fort Edward	20.8	(December 23, 2022)	May 18, 2023	May 2023
8	Package 5A	Rotterdam to Bethlehem	16.99	(December 21, 2022)	June 22, 2023	July 2023
9	Package 5B	Selkirk Bypass	5.31	(December 21, 2022)	June 22, 2023	July 2023
4, 5	Package 3	Fort Edward to Milton	26.5	(April 24, 2023)	TBD	August 2023
10	Package 6	Ravena to Catskill	20.9	August 2023	TBD	October 2023
13, 14, 15	Package 8	Queens	2.13	August 2023	TBD	September 2023
6	Package 4A	Ballston to Glenville	10.2	August 2023	TBD	September 2023
7	Package 4B	Schenectady to Rotterdam	9.6	August 2023	TBD	September 2023
11	Package 7A	Catskill to Germantown	23.84	(March 30, 2023)	TBD	August 2023
12	Package 7B	Stony Point to Haverstraw	7.6	(April 28, 2023)	TBD	August 2023
Laydown Yards EM&CP	Package 3, 5B, 6	Fort Edward, Bethlehem, Coxsackie	N/A	(November 11, 2022)	February 21, 2023	March 2023
Marine Segments						
16	Package 9	Transitional HDD (Stony Point)	N/A	(September 29, 2022)	March 20, 2023	September 2023
17	Package 10	3 Transitional HDDs (Putnam, Catskill, Congers)	N/A	(December 14, 2022)	April 20, 2023	May 2023
18A	Package 11A	Lake Champlain (Pre-Lay Mattressing)	96	(April 4, 2023)	TBD	August 2023
18B	Package 11B	Lake Champlain (Cable Installation)	96	November 2023	TBD	May 2024
19	Package 12	Hudson River (Pre-Lay Mattressing)	89.1	July 2023	TBD	September 2023
20	Package 13	Hudson River (Cable Installation)	89.1	December 2023	TBD	July 2024
21	Package 14	Harlem River	6.3	December 2023	TBD	July 2024
New York City Interconnection						
22	TBD	Converter Station, Astoria Complex (Queens)	N/A	(January 31, 2023)	May 18, 2023	June 2023
23	TBD	Astoria Rainey Cable HVAC System (Queens)	3.5	November, 2023	TBD	August 2024

Changes in the APE, including those necessary to avoid known historic and archaeological resources, may be required to accommodate project implementation. Changes to the APE will follow methodology outlined in the CRMP (2021). The CRMP states: *If the corridor is changed or if a construction zone wider than 55 feet (terrestrial) or 50 feet (in-water) is required to build the Project, then the APE will be adjusted accordingly. All additional efforts to identify, assess, and manage cultural resources shall use the same guidance as that stipulated in the CRMP. It shall be the responsibility of the PPO and his/her designee to work with the appropriately trained archaeologist to ensure that survey and assessment of new APE construction areas is completed before construction takes place* (TRC 2021). Changes in the APE and associated survey and reporting will be provided to Signatories of the Programmatic Agreement in conjunction with annual reporting requirements (Section 3.6 Reporting Requirements).

3.2 Segment 6, Package 4A Activities

This package extends from the Town of Ballston, near the Village of Ballston Spa, on CP Rail ROW to the Town of Glenville. The construction activities in this segment include both open trench and duct bank excavations. The trenches will typically be 4.5 feet in depth and 2.4 feet in width and the base. The open trenches will be backfilled with sand around the conduit and flowable fill above. The duct bank excavations will be placed in concrete with flowable fill above and appropriate subbases, bases and asphalt pavement repair (Figure 1).

Disturbance beyond the typical trench cuts include the location of splice boxes, and boring/receiving pits for HDD installation (see Tables 2 and 3) These are discussed in detail below relative to potential archeological resources and previous evaluation and assessment.

3.2.1 Splices

Various splice vaults/link vaults will also be installed to connect the cable segments together into an integrated whole. The splice and transition vaults will generally be about 15 by 40 feet in size. Most splice locations also include an associated work area that averages about 40 by 100 feet in size. In all, 20 splice locations or vaults will be installed in the Package 4A portion of the Project (Splices 118 to 138, 132 has been eliminated). Although extensive testing was previously conducted along the permitted route by Hartgen (2012), the APE has now changed to accommodate a number of excursions from the permitted route. This includes 10 of the Splice areas, and therefore testing or monitoring is recommended in these locations: Splices 120, 121, 125, 127, 130, 131, 133-136.

Table 2. Splice Locations and Recommendations for Segment 6, Package 4A.

Item	Station Number	Conditions	Notes/Recommendations
Splice 118	40023+76	Sloped. Largely within permitted route.	No archeological work.
Splice 119	40048+29	Within wet area, extends outside permitted route.	No archeological work.
Splice 120	40058+87	Turn-around, work area outside of permitted route.	Testing or monitoring.*
Splice 121	40090+68	Within permitted route. Associated turn-around, work area is outside permitted route.	Testing or monitoring.*
Splice 122	40121+96	Within wet area, inside permitted route.	No archeological work.
Splice 123	40152+36	Work area slightly outside permitted route.	No archeological work.
Splice 124	40184+91	Work area slightly outside permitted route. Sloped.	No archeological work.
Splice 125	40215+31	Work area outside permitted route.	Testing or monitoring work area.*

* The area may be shovel-tested by a qualified archeologist prior to construction or monitored by a qualified archeologist during construction, see Sections 2 and 5, respectively.

Item	Station Number	Conditions	Notes/Recommendations
Splice 126	40247+22	Work area slightly outside permitted route. Sloped.	No archeological work.
Splice 127	40275+98	Work area outside permitted route.	Testing or monitoring work area.*
Splice 128	40293+01	Work area slightly outside permitted route. Sloped.	No archeological work.
Splice 129	40319+23	Largely within permitted route, sloped.	No archeological work.
Splice 130	40344+13	Outside permitted route.	Testing or monitoring.*
Splice 131	40374+35	Outside permitted route.	Testing or monitoring.*
Splice 133	40405+58	Work area outside permitted route.	Testing or monitoring work area.*
Splice 134	40423+34	Work area outside permitted route.	Testing or monitoring work area.*
Splice 135	40454+23	Outside permitted route, appears undisturbed.	Testing or monitoring.*
Splice 136	40479+98	Outside permitted route, appears undisturbed.	Testing or monitoring.*
Splice 137	40506+29	Work area slightly outside permitted route (Town of Glenville).	No archeological work.
Splice 138	40537+15	Within wet area, work area extends slightly outside permitted route.	No archeological work.

3.2.2 HDD

In the Package 4A portion of Segment 6, additional HDD will be required to avoid and minimize impacts to various drainage crossings, road crossings, and other resources. HDDs include the boring and receiving pits at both ends of the drilled cable. By and large, the drilled cable will not have any impact on archeological resources as they are typically 15 to 45 feet below ground surface. The associated pits themselves are estimated to generally be 10 by 5 by 5 feet in size. The work areas are generally larger, about 175 feet by 80 feet in size.

Although extensive testing was previously conducted along the permitted route by Hartgen (2012), the APE has now changed to accommodate a number of excursions from the permitted route. This includes a number of the proposed HDD locations.

In all, 10 HDD locations have been identified: HDD 51 to 53, 53A, 54, 59, 59A, 59B, 60, and 61 (Table 3). Archeological testing or monitoring is recommended for six of the HDD locations and their associated work areas: HDD 51, 53, 53A, 59A, 59B, and 61.

Table 3. HDD Locations and Recommendations for Segment 6, Package 4A.

Item	Station Number	Activity	Notes/Recommendations
HDD 51	40002+05 to 40022+15	Under High Street. Northern work areas extend slightly outside of permitted route. Southern work areas well beyond permitted route in a high sensitivity area.	Testing or monitoring southern work area.
HDD 52	40060+85 to 40087+85	Under wetlands, work areas inside permitted route.	No archeological work.

* The area may be shovel-tested by a qualified archeologist prior to construction or monitored by a qualified archeologist during construction, see Sections 2.2 and 6, respectively.

Item	Station Number	Activity	Notes/Recommendations
HDD 53	40098+50 to 40106+65	Under NY Route 67. Northern and southern work zones in wet areas. Southern work area outside of permitted route appears somewhat wet. Adjacent access road/staging area outside of permitted route.	Testing or monitoring of dry areas of the staging areas.*
HDD 53A	40227+60 to 40233+85	Under drainage. Southern work areas outside permitted route.	Testing or monitoring southern work areas.*
HDD 54	40277+70 to 40283+41	Under drainage, northern and southern work areas extend slightly outside of permitted route.	No archeological work.
HDD 59	40408+85 to 40420+20	Under drainage, northern and southern work areas extend slightly outside of permitted route. Southern area sloped.	No archeological work.
HDD 59A	40425+50 to 40443+80	Under Blue Barns Road and RR tracks. Southern work area outside permitted route.	Testing or monitoring southern work area.*
HDD 59B	40511+20 to 40524+40	Under tracks, from east side to west side. Northern pit and work area outside permitted route.	Testing or monitoring northern pit and work area.*
HDD 60	40505+00 to 40518+30	Under Alplaus Kill. Southern work areas extend slightly outside of permitted route. Work areas appear disturbed.	No archeological work.
HDD 61	40521+00 to 40527+80	Under Hetcheltown Road and Glenridge Road. Northern and southern work areas extend slightly outside of permitted route. Northern work areas appear disturbed. Southern work area outside permitted route.	Testing or monitoring southern work areas.*

3.2.3 Access Roads

This segment will also require temporary access roads to move equipment and workers from public roadways to the CP Rail ROW. The roads may be constructed in a variety of manners including timber matting on the existing ground surface, or placing geotextile fabric on the ground surface with gravel or other stone material atop it. These would require minimal, if any, mechanical grading. Grading up to 16 inches may be necessary in some locations to remove the topsoil, which will be stockpiled and returned once construction activities end. In Package 4A, a total of three access roads have been identified, and archeological testing is recommended for Access Road 2 which lies within the National Register-eligible Robertson Cemetery [sic] House property (Table 4).

Table 4. Access Roads for Segment 6, Package 4A.

Access Roads	Station Number	Location	Notes/Recommendations
1	40052+00	Dominic Drive, an existing graveled drive. CP Rail MP 30.55.	No archeological work.
2	40989+00 to 40101+00	NY Route 67, sloped in sections, and wooded throughout. Robertson Cemetery [sic] House (09101.000151) Eligible for NRHP.	Testing or monitoring, field verify cemetery before construction.*
3	40132+00	McCrea Hill Road, sloped in parts, wooded. Existing utility access road. CP Rail MP 29.06.	No archeological work.

* The area may be shovel-tested by a qualified archeologist prior to construction or monitored by a qualified archeologist during construction, see Sections 2.2 and 6, respectively.

3.2.4 Deviations/Excursions from Permitted Route

Due to other design and engineering constraints, particularly wetlands and other environmental factors, the proposed cable route deviates outside of the area previously archeologically considered (permitted route). In general, the excursions will include access roads parallel to the railroad, several turn-arounds, and deviations of the cable installation. Many of these deviation areas are within wet areas, areas of slope along the railroad berm and natural topography, and/or along the existing access roads for the railroads.

Although extensive testing was previously conducted along the permitted route by Hartgen (2012), the APE has now changed to accommodate a number of excursions from the permitted route.

Several of the five segments are quite long to avoid utilities and other built resources, such as recreational trails. Testing or monitoring is recommended throughout Excursions 1-3, and 8. Portions of Excursion 5 are also recommended for testing or monitoring, 40130+00 to 40222+00, 40287+00 to 40355+00 and 40380+00 and 40426+00 (Table 5).

Table 5. Areas of Deviation/Excursions from Permitted Route and Recommendations for Segment 6, Package 4A.

Excursion	Sta. Numbers	Activity	Conditions/Observations	Recommendations
1	40000+00 to 40007+00	Parallel access road.	Appears undisturbed.	Test or monitor the parallel access road.*
2	40021+50 to 40022+00 40024+75 to 40030+25	HDD 51.	Appears undisturbed, includes Splice 118 work area that is wet and appears disturbed.	Test or monitor the parallel access road south of Splice 118.*
3	40034+55 to 40061+00	Cable route and parallel access road.	Appears undisturbed until Zepko Lane. South of Zepko Lane appears wet. Includes Splices 119 and 120 and Access Road 1 and northern part of HDD 52.	Test or monitor the parallel access road south of Zepko Lane, see also Splice 120 work area.*
4	40061+00 to 40130+00	Cable route and parallel access road.	Mostly wet south of Splice 120. Robertson Cemetary [sic] House (09101.000151) near 40099+00.	No archeological work for parallel access road (see HDD 52, 53, and Splice 121).
5	40130+00 to 40439+00	HDD 52 and 53, Splice 121, and cable route and parallel access road.	Mostly level, dry and undisturbed, west of recreational trail. South of Main Street along Firemens Lane.	Test or monitor the parallel access road between 40130+00 to 40222+00, 40287+00 to 40355+00 and 40380+00 and 40426+00.*
6	40441+00 to 40445+50	Cable route and parallel access road, includes Splices 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, and 134. HDD 58A and 59 (see Tables 2 and 3).	Along public road (Rustic Bridge Rd.) and rail. Appears disturbed.	None for parallel access road. (see HDD 59A southern work area)
7	40452+50 to 40456+00	Cable route and parallel access roads. Includes HDD 59A.	Appears undisturbed and dry.	None for parallel access road. See Splice 135 recommendations to Test or monitor the work area.*

* The area may be shovel-tested by a qualified archeologist prior to construction or monitored by a qualified archeologist during construction, see Sections 2.2 and 6, respectively.

Excursion	Sta. Numbers	Activity	Conditions/Observations	Recommendations
8	40462+00 to 40481+50	Cable route and parallel access roads, includes Splice 135.	Appears undisturbed and dry.	Test or monitor the parallel access road and cable installation. See also Splice 136.*
9	40484+00 to 40493+00	Cable route and parallel access roads. Includes Splice 136.	Appears undisturbed and dry.	None for parallel access road. See HDD 59B recommendations to test or monitor the work area.*
10	40495+00 to 40527+00	Cable route and parallel access roads. HDD 59B	Northern section crosses railroad grade and along the embankment is wet.	None for parallel access road, See HDD 59B north pit and work area.
11	40532+00 to 40542+97	Cable route and parallel access roads. HDD southern work area for 59B. Also includes HDD 60.	South of Glenridge Road the parallel access road is wet.	None for parallel access road. See HDD 61 southern work area.

* The area may be shovel-tested by a qualified archeologist prior to construction or monitored by a qualified archeologist during construction, see Sections 2.2 and 6, respectively.

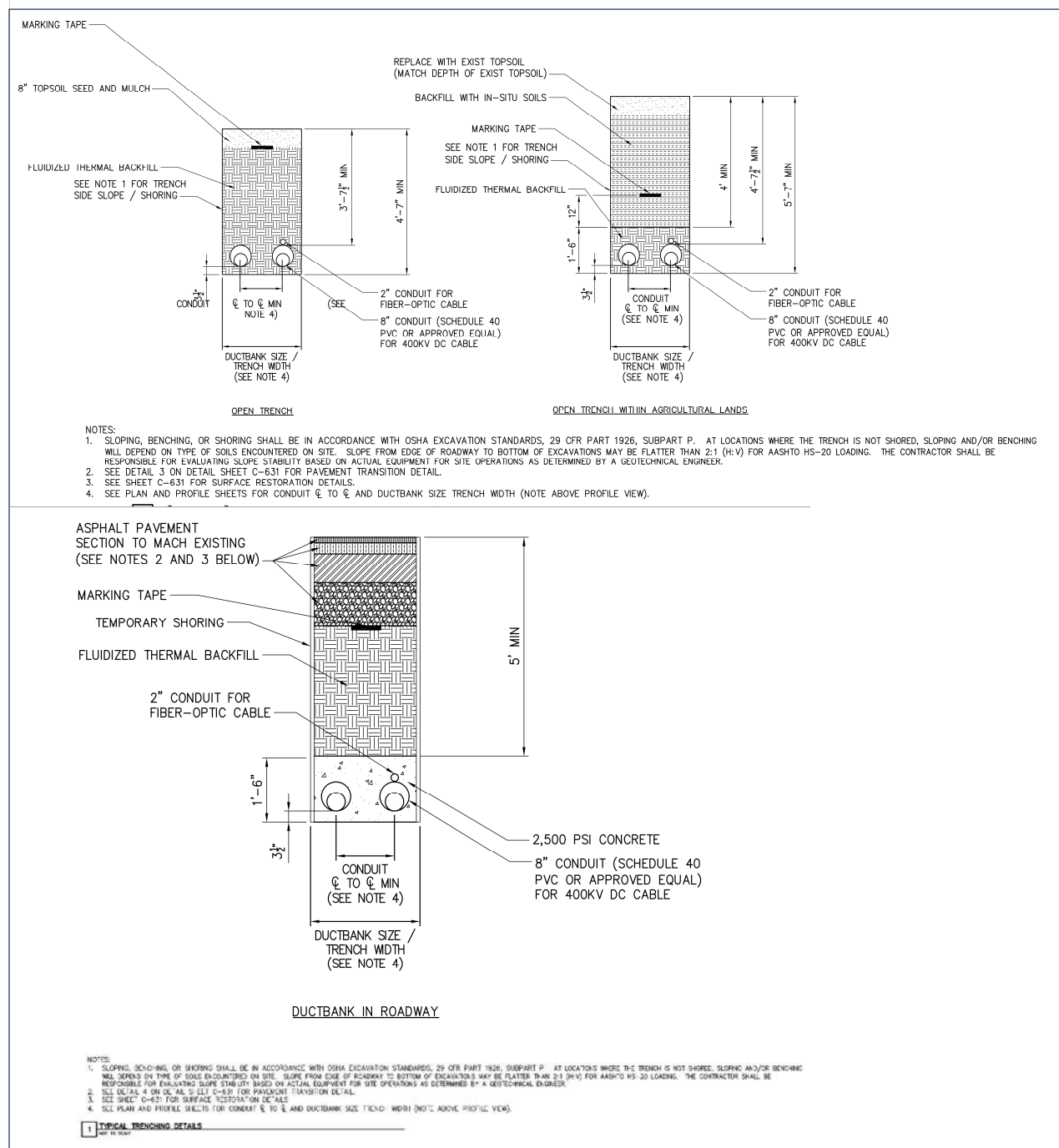


Figure 1 Typical open trench (railroad) and duct bank (roadway) installation of the cable illustrated.

3.3 Historic/Archeological Properties within/along the Cable Route

There are 10 previously reported archeological sites along Package 4A, Segment 6 of the Project. There is also one inventoried property which is considered eligible for the National Register (Hartgen Archeological Associates 2013). The proposed cable route in relation to these resources is described in more detail below.

Five sites were discovered by Hartgen (2012) for the CP Rail ROW portion of the Project in this Segment:

- CHPE Site 18, Biggs Wagon Shop (09101.000243),
- CHPE Site 17, Main Street Midden (09101.000242),
- CHPE Site 16, Mill Street Midden (09101.000241),
- CHPE Site 15 Brumaghim Historic Site (NYSM 11674)(09302.000163),
- CHPE Site 14, Alplaus Kill Midden (09302.000198).

The sites are summarized below (Table 6), all are historic in age and most date to the late 19th through 20th centuries. No additional work was recommended for CHPE Sites 16 and 18 by Hartgen (2012). CHPE Sites 14 and 17 will be avoided as the cable will be placed on the opposite side of the railroad tracks from both sites, and no additional archeology or protective measures are recommended.

CHPE Site 15 Brumaghim Historic Site (NYSM 11674) has been subject to Phase III excavations. The mitigation efforts were fairly substantial within the area west of the railroad tracks, and no further work was recommended. The site will largely be avoided. No additional archeological work is currently recommended.

Four other sites have been reported in this segment. They include:

- SRWT Site 11 Zepko Rd Historic Site (09140.001474),
- Ballston Lake Electric Traction Powerhouse Site (HS-1)(09101.000124),
- South Ballston Railroad Station (09101.000010),
- East Glenville Shack Historic Archeological Site (NYSM 11673) (09302.000162).

These sites are also historic in age, and largely date to the late 19th and early 20th centuries. All are adjacent to the Project and will not be subject to direct impacts from the Project. As such, no additional archeological work is recommended, nor are protective measures proposed.

One historic property has been identified in the vicinity of the Segment 6 cable route. The Robertson Cemetary [sic] House is located west of the route. The property contains a small family plot that includes the remains of early settlers in the Ballston area. It has been determined eligible by NYSHPO. Temporary Access Road 2 is proposed to extend through the property, the road will not likely affect the property. Archeologist will field verify the cemetery (believed to be further to the north and west) before construction. In accordance with Sections 4.4 and 4.8, the Project will make a determination of effect, and if warranted, will select the appropriate treatment measures.

Table 6. Archeological and Historic Resources within or near Package 4A, Segment 6.

Resource (USN)	Description	Status	Impact/Recommendation
SRWT Site 11 Zepko Rd Historic Site (09140.001474)	Town of Ballston. Small assemblage of 19th-century materials.	Undetermined.	Site is on opposite side of tracks from Project. No additional archeological work.
Robertson Cemetary [sic] House (09101.000151)	Early settlement family plots. No site form or other information.	Eligible.	Field verify location of cemetery and protect and preserve if necessary.
Ballston Lake Electric Traction Powerhouse Site (HS-1) (09101.000124)	Standing ruins and associated light scatter of architectural materials.	Undetermined.	Site is west of proposed parallel access road. Will be avoided. No additional archeological work.
CHPE Site 18, Biggs	East side of tracks. No	Undetermined.	No additional archeological work or

Resource (USN)	Description	Status	Impact/Recommendation
Wagon Shop (09101.000243)	further work recommended after Phase IB (Hartgen 2012).		protection measures.
CHPE Site 17, Main Street Midden (09101.000242)	Immediately along west side of tracks.	Undetermined.	Site will be avoided. No additional archeology or protective measures.
South Ballston Railroad Station (09101.000010)	Immediately along west side of tracks.	Undetermined.	Site will be avoided. No additional archeology or protective measures.
CHPE Site 16, Mill Street Midden (09101.000241)	East side of tracks. No further work recommended after Phase IB (Hartgen 2012).	Undetermined.	No additional archeology. Appears to have been disturbed also from demolition of nearby outbuildings.
CHPE Site 15, Brumaghim Historic Site (NYSM 11674) (09302.000163)	Both sides of tracks. Historic mill and farmstead site, subject to Phase II and Phase III excavations.	Undetermined.	No additional archeology near HDD 60 and 61.
East Glenville Shack Historic Archeological Site (NYSM 11673) (09302.000162)	Small assemblage of late historic materials. West side of tracks, west of Project. Avoided by HDD.	Not Eligible.	No additional archeology or protective measures.
CHPE Site 14, Alplaus Kill Midden (09302.000198)	Likely 20 th -century dump site. East of tracks.	Undetermined.	Site will be avoided. No additional archeology or protective measures.

3.4 Construction Timeline

The construction timeline is November 2022 to December 2025 for the entire project.

4 Cultural Resource Management Plan

4.1 Objective

It is the objective of this CRMP to demonstrate a comprehensive plan for the encounter of cultural resources during the construction and installation of the transmission line, as well as the various other components affiliated with the line.

TRC created a CRMP for the permitting process, with an overall permitting CRMP created in 2015, and subsequent revisions and addenda in 2021. The plan provides guidance for those monitoring activities not indicated in the CRMP (TRC 2021) which specifically addressed previously identified sites within or along the permitted route, and also dealt with unanticipated discoveries when an archeologist is not present.

No areas of monitoring have been previously identified in the current segment of the Project. This current report serves as the Supplemental CRMP for the now planned construction activities, tasked with synthesizing the previously reported data into one document and identifying roles and points of contact for communication ease.

4.2 Heritage Areas, Special Events, and Other Resources

As part of the Section 106 process, the federal agency solicited comment and feedback from Tribal Nations that have expressed an interest in the regions in which the Project is to be constructed. As part of that endeavor, no traditional cultural properties were identified within or immediately adjacent to the Project. No other heritage areas or special events have been identified within this segment of the Project. The Certificate Holder, and its assignees, continues to solicit information from the public and other stakeholders to identify such areas,

should they exist. No heritage areas, special events or other resources have been identified for this package by other stakeholders.

4.3 Project Preservation Officer (PPO)

Hartgen will act as the Consulting Archeologist (CA) for the purpose of this effort. The CA will work closely with the Project Preservation Officer (PPO); the PPO or their designee will be present for all ground disturbing activities and will have “stop-work” authority. The PPO, currently Ashley L. Bushey, will be part of the prime construction management team, Kiewit Corporation.

It is the responsibility of the CA to train this individual as a PPO and to provide a hands-on workshop for construction personnel, as designated by the PPO. The PPO and the construction team should have an understanding of cultural resources present in different areas, as well as understanding the potential for unknown cultural deposits. It is the responsibility of the PPO to implement the CRMP (TRC 2021) and ensure that the requirements and conditions of the CRMP are met. Table 7 includes the necessary contact information.

The PPO (or designee) will have the authority to cease excavation or construction work. In the event of encountering cultural materials or human remains, it is the responsibility of the PPO (or designee) to halt construction activities and contact and coordinate with the CA to visit the location of the discoveries as quickly as possible.

The Project Preservation Officer (PPO), shall in turn notify the Certificate/Permit Holder (TDI/CHPE), who shall notify NY SHPO, the US Army Corps of Engineers (USACE), DPS, other stakeholders and Tribal Nations, as appropriate within 24 hours of the initial reporting of the finds, per the Certificate Conditions 110 and 111 and USACE Permit NAN-2009-01089-M7, General Conditions C.

During this time, work in the immediate vicinity of the find must halt and the area of concern fenced or otherwise protected from construction activities. Once the area is secured, activity adjacent to the find may continue during the consultation process. Per 36 CFR Part 800.13(b)(3), NY SHPO, other stakeholders and Tribal Nations will have 48 hours from the time of notification to respond.

In the event of these discoveries, the CA will have up to three workdays to excavate and remove cultural material from the APE before the construction continues. The CA, in consultation with the PPO and the NYSHPO, may request additional archeological field assistance to complete the necessary work in a timely manner. It is the responsibility of the PPO (or designee) to work with the appropriately trained archeologists to ensure that the survey and assessment of any change in the APE is completed prior to construction taking place.

4.4 Identification of Historic Properties

Changes in the APE or modifications to work proposed within the APE will prompt review of the subject location(s) for historic properties. The review will include archeological survey as specified in the CRMP (TRC 2021) in addition to completion of a files search that will include previous survey data through New York CRIS, and which may be supplemented with local assessor records, historic topographic maps, historic aerial images, Sanborn Fire Insurance and other historic maps, and other resources as available.

Properties are typically considered to hold historic potential when they meet or exceed 50 years of age. The Project may elect to consider the historic potential of properties approaching this age threshold to accommodate anticipated construction horizons. The Project will complete a survey evaluation for properties that meet or exceed the age threshold for historic potential, have no existing determination of NRHP eligibility or a determination ten or more years old, and may be affected by project activities. The evaluation will be completed by a cultural resource specialist who meets or exceeds the Secretary of the Interior’s Professional Qualification Standards (SOI Standards) in a discipline appropriate for the subject site; archeological sites will be evaluated by professionals who meet or exceed the SOI Standards in the area of archeology; architectural and landscape sites will be evaluated by professionals who meet or exceed the SOI Standards in the area of Architectural History. Survey evaluations will be subject to quality assurance review by a professional other

than the author(s) who meets or exceeds applicable SOI Standards. Survey information will be input into the New York CRIS system prior to submission of annual reports on January 10 of each calendar year this agreement is in effect.

4.5 Barriers and Other Protective Measures

No additional protective measure with respect to cultural resources have been identified or requested by stakeholders for Segment 6 of the Project. If the Robertston Cemetary [sic] is located, protection measures in the form of fencing and signage may be warranted. If portions of the Project are altered, additional assessment, which may include desktop review, pedestrian survey, and/or archeological shovel tests, will be required to determine the presence or absence of cultural resources. Should cultural resources be identified, the Certificate Holder will avoid these resources if possible. If not possible, see Section 5.5 for Programmatic Allowances for potential mitigation and additional SHPO consultation.

Protective measures may include installation of temporary fencing and/or site delineation on Facility maps. Should an archeological site be impacted by Project activities, mitigation will include notification procedures and data recovery as stipulated in the Section 4.0 of the CRMP (TRC 2021), and/or other treatment measures determined through consultation with NYSHPO, Tribal Nations, and consulting parties.

4.6 Reporting Requirements

The CRMP (TRC 2021) establishes a requirement for annual reporting concerning activities conducted under the CRMP: *The PPO will prepare an annual report to the DOE and NYSHPO (and any of the other signatory or consulting parties listed in the Programmatic Agreement), which summarizes activities conducted under this CRMP on an annual basis for as long as this CRMP is in effect (i.e., through post-construction monitoring). The report will be completed and submitted on or before January 10 of each year. The CRMP may be updated and/or revised as appropriate to improve its implementation so long as concurrence is reached by the parties involved is achieved. The annual report will include a summary of all historic properties and archaeological resources that may have been encountered during construction and how they were treated. Post-construction reports will identify which cultural resources were monitored and provide a summary of resource conditions and whether looting or other forms of ground disturbance were noted* (TRC 2021).

The PPO will establish and maintain:

- A system of tracking archeological monitoring reports;
- Application of Program Comments, Exemptions, or Program Alternatives;
- Application of Programmatic Allowances;
- Implementation of Treatment Measures;
- Potential changes to APE;
- Annual report that summarizes the above items stipulated by the CRMP (TRC 2021).

4.7 Programmatic Allowances

Activities considered Programmatic Allowances are not exempt from archeological monitoring and remain subject to unanticipated discovery protocols, including stop-work provisions, as contained in the CRMP (TRC 2021).

Programmatic Allowances include actions where historic properties will not be affected or effects to historic properties hold limited potential to diminish historic integrity. Where Programmatic Allowance(s) are applicable, the action will not require independent consultation with the State Historic Preservation Office (SHPO).

Application of Programmatic Allowances requires review by Project Preservation Officer (PPO). The PPO must complete:

- Memorandum to file containing a verbal description of work proposed, and a verbal description and map of the geographic area of the proposed work;
- Summary of file search and/or literature review conducted to identify potential historic properties,
- Description of historic properties affected (if any);
- Justification for the application of one or more Programmatic Allowances.

The Project will maintain a tracking system of memoranda applying Programmatic Allowances, which will be communicated to NYSHPO and the Programmatic Agreement signatories in an annual report.

In addition to the Programmatic Allowances contained in this document, the Project may include application of relevant Section 106 Program Comments and program alternatives including but not limited to:

- Program Comment for Actions Affecting Post-1945 Concrete and Steel Bridges (*Federal Register*, Vol. 77, No. 222, November 16, 2012)
https://www.achp.gov/sites/default/files/program_comments/2017-01/program%20comment%20concrete%20and%20steel%20bridges.pdf
- Program Comment to Exempt Consideration of Effects to Rail Properties within Rail Rights-of-Way (*Federal Register* Vol. 84, No. 125, June 28, 2019)
<https://www.govinfo.gov/content/pkg/FR-2019-06-28/pdf/2019-13779.pdf>
- Advisory Council on Historic Preservation (ACHP) Exemption Regarding Historic Preservation Review Process for Effect to the Interstate Highway System (*Federal Register* Vol 70, No. 46, March 10, 2005)
https://www.achp.gov/sites/default/files/exemptions/2017-01/final_interstate_exemption_notice.pdf

4.7.1 Transportation Facilities

- A. Resurfacing existing roadways and/or replacement in-kind of highway signals, signage, or appurtenances when approved by the owner of the transportation facility.
- B. Replacement in-kind of railroad signals, crossing materials, and other railroad features or appurtenances when approved by the owner of the transportation facility.
- C. Installation of utility attachments on bridges in areas with existing utility attachments.

4.7.2 Ground Disturbing Activities

- A. Ground disturbing activities within areas of documented previous disturbance.
- B. Ground disturbing activities within non-historic and non-contributing properties or features when no vertical improvements are proposed. Vertical improvements may consist of, but are not limited to, buildings, structures, and other form of infrastructure with height above ground and constructed by the project.
- C. Ground disturbing activities within historic and contributing properties when action is discrete (including but not limited to edges of agricultural fields, wooded areas, lawns, or curbs), where no contributing or potentially contributing buildings, structures, objects, sites, or features are present (including but not limited to slate sidewalks, hitching posts, carriage steps, mature trees, fences, retaining walls, and other landscaping dating to the historic period of 50 years or more in age).

4.7.3 Temporary Staging and Temporary Facilities

- A. Temporary staging or stockpiling within existing parking areas.
- B. Temporary staging or stockpiling within transportation rights of way.

- C. Temporary staging or stockpiling within areas with documented previous ground disturbance when the ground is returned to pre-construction appearance, including contours and vegetation.
- D. Installation of temporary construction support facilities when the ground is returned to pre-construction appearance, including contours and vegetation.
- E. Location of temporary construction trailers not requiring a foundation or pad.

4.7.4 Utilities, Lighting, and Maintenance Facilities

- A. Installation of underground utilities using directional bore drilling or similar method.
- B. Replacement, repair, and/or maintenance of existing underground utilities in-kind when work occurs within the existing utility footprint.
- C. Installation, replacement, or upgrade to lighting within transportation rights of way and/or at Project locations requiring routine maintenance.
- D. Establishing maintenance facilities within Project easements or right of way no more than 10-feet high with a footprint no more than 120 square feet when facility is not located within a State Register of Historic Places (SRHP) or National Register of Historic Places (NRHP) historic district.

4.7.5 Pre-Construction Due Diligence and Testing

- A. Conducting geotechnical testing, hazardous materials sampling, seismic or vibration testing or monitoring, or drill samples.
- B. Wetland testing and delineation.
- C. Wildlife surveys and inventories.
- D. Property line and ownership verification surveys.
- E. Utility location surveys.

4.7.6 Hazard and Hazardous Waste Removal

- A. Removal of debris related to weather or storm damage, or present as a result of modern dumping.
- B. Hazardous waste removal.

4.7.7 Environmentally Sensitive Area (ESA) Protection and Mitigation

- A. Installation of temporary fencing to protect areas of cultural, biological, or other environmentally sensitive area from the effects of construction.
- B. Obtaining credits in/from and existing wetland mitigation bank.
- C. Vegetation or landscaping to support habitat mitigation when the subject action affects less than one-half acre and does not occur within an archaeologically sensitive area, as defined by the Supplemental CRMP.

4.7.8 Drainage Improvements

- A. Erosion control measures including best management practices of the placement of rip rap within non-historic channels, and emergency erosion control measures.
- B. Re-grading or re-establishing existing drainage channels.
- C. Temporary drainage systems including culvert placement and grading, provided the area is returned to pre-construction appearance.
- D. Replacement or up-sizing corrugated metal pipe (CMP), concrete box culvert (CBC), reinforced concrete pipe (RCP), and plastic pipe culverts where no architectural headwalls or wingwalls are present or where these features, if present, will remain in place.

4.7.9 Signage and Surveillance

- A. Installation, maintenance, repair, or removal of security systems.
- B. Installation of signage not located within a NRHP district.
- C. Replacement of existing signs; including within a NRHP district when replacement is in-kind and at the same location as the sign to be replaced.
- D. Maintenance, repair, or removal of signage.
- E. Installation of less than 100 linear feet of security fence within Project easements or right of way when not located within a SRHP or NRHP historic district.

4.7.10 Easements and Right of Way

- A. Acquisition of easements or right of way from non-historic properties and when not located within a State Register of Historic Places (SRHP) or National Register of Historic Places (NRHP) historic district.
- B. Acquisition of easements or right of way for subterranean activities when no surface rights or access is conferred.

4.8 Treatment Measures

When Project actions do not qualify as Programmatic Allowances, the Project will complete an evaluation of the potential for actions to diminish the historic integrity of historic or archeological resources, as defined in 36 CFR Part 800.5(a)(1). The Project may reference applicable National Register Bulletins, published by the National Park Service, to support the evaluation. Project actions found to diminish integrity as defined in 36 CFR Part 800.5(a)(1) will require Treatment Measures. The Project will complete a memorandum documenting eligibility of the resource(s), application of the criteria of adverse effect, avoidance measures considered, efforts to minimize the effect, coordination with property owner(s) or local government(s) in selection of Treatment Measures if applicable, and rationale for application of the selected Treatment Measure, if applicable. A separate Memorandum of Agreement (MOA) will not be required when one or more of the following Treatment Measures are selected. If the Project action is determined not to diminish integrity, further action will not be required.

The Project will maintain a tracking system of memoranda and Treatment Measures, which will be communicated to NYSHPO and the Programmatic Agreement signatories in the annual report.

This section will not apply to designated National Historic Landmark properties, as consultation with the Department of the Interior is required (36 CFR Part 800.10), generally conducted via consultation with the National Park Service.

4.8.1 Data Recovery

Data recovery and reporting is the preferred mitigation for archeological sites. Implementation of this Treatment Measure will follow protocols contained in CRMP (IRC 2021) Section 4.0 Project Effects and Management Measures. Additional details concerning data recovery for resources identified during archeological monitoring, or that are unanticipated discoveries, are outlined below.

4.8.2 Certified Local Government or Historic Preservation Board/Commission Priority Project Sponsorship

The Project crosses through several Certified Local Government (CLGs) jurisdictions. CLG programs are divisions of municipal or county governments which create and implement local-level historic preservation planning and programming. Many CLGs maintain a formal historic preservation plan containing goals and priority projects for preservation activities within their jurisdiction. Whether or not a CLG maintains a formal historic preservation plan, all are required to maintain a system of identification and documentation of historic

properties, sometimes referred to as historic survey. Communities may also maintain a Historic Preservation Board, Commission, or similar entity and choose not to become a CLG. Each program will formally or informally document preservation priorities within their jurisdictions, often identifying lack of funding as a significant barrier to implementation.

Site-specific mitigation often has limited value to advance historic preservation in a community. To create broader impact to the historic properties and the communities they serve, the Project may coordinate with CLGs or Historic Preservation Boards/Commissions to sponsor one or more of the priority projects identified within that entity's jurisdiction and not necessarily within the Project APE.

Example projects include, but are not limited to, historic surveys, State or National Register Nominations, historic context documentation, completion (or update) of a strategic preservation plan, completion of a strategic historic survey plan, archaeological or architectural history field schools, historic preservation technical trainings or workshops, workshops related to historic preservation tax credits, and more.

New York CLGs are listed on the NYSHPO website at: <https://parks.ny.gov/shpo/certified-local-governments/listing.aspx>

4.8.3 Digital Photography Package

Prior to implementation of the work necessitating implementation of Treatment Measures, a digital photography package will be prepared by an individual meeting the Secretary of the Interior's Professional Qualification Standards. The photography package will include images demonstrating the property in its setting and context, images showing each exterior building elevation, images showing the spatial relationships of building(s) and features of the site, and appropriate detail images. A map showing photograph locations and view direction will be included. A photography log will be included containing photograph numbers, cardinal direction viewpoint, historic resource name and number (if applicable), street address (if applicable), city or town, county, state, and image description. The digital photography package will follow the National Park Service photography standards for the National Register of Historic Places:

https://www.nps.gov/subjects/nationalregister/upload/Photo_Policy_update_2013_05_15_508.pdf

Copies of the photography package on archival CD will be provided to NYSHPO, local Historic Preservation Boards or Commissions, and/or interested local or state repositories. One set of archivally produced, archivally labelled photographs will be provided to the NYSHPO.

4.8.4 National Park Service Heritage Documentation (HABS/HAER/HALS)

Prior to implementation of the work necessitating implementation of Treatment Measures, the property subject to the work will be documented to National Park Service standards using the appropriate heritage documentation form: Historic American Building Survey (HABS), Historic American Engineering Record (HAER), or Historic American Landscape Survey (HALS). Work will be completed by a Cultural Resource Specialist who meets or exceeds the Secretary of the Interior's Professional Qualification Standards. The appropriate level of documentation (Level I, Level II, Level III) will be selected based on the Secretary of the Interior's Standards and Guidelines for Architectural and Engineering Documentation, as published in the Federal Register July 21, 2003: https://www.NationalParkService.gov/hdp/standards/standards_regs.pdf

The Project will follow HABS/HAER/HALS Standards & Guidelines published by National Park Service Heritage Documentation Programs. The Project will coordinate with the National Park Service Northeast Region to obtain an applicable HABS/HAER/HALS. The Project will complete comment resolution with the National Park Service Northeast Region and submit final documentation for transmittal to the Library of Congress.

4.8.5 Public Interpretation

Public interpretation will be designed and produced, which may include print or digital media, on-site or off-site signage, workshops or technical trainings, or other means of engaging and educating interested public regarding historic properties. If the public interpretation involves physical signage, installation will require agreements from the landowner accepting the sign(s) including responsibility for maintenance.

Completion of public interpretation as a Treatment Measure will be executed independent of the commitment to provide \$5,000 in educational investment included in the CRMP (TRC 2021).

4.9 Property Owner Requests

The Project may accommodate property owner requests, including privately and publicly held properties, that may exceed Project needs or requirements. If a property owner request accommodated by the Project escalates permitting, consultation, or Treatment Measure requirements, the subject property owner will assume responsibility for associated costs.

5 Archeological Monitoring Methodology

5.1 Objective

The objective of the archeological monitoring is to identify and document archeological deposits that may be encountered in areas that were previously inaccessible for archeological survey or not considered during the initial resource assessment, specifically in those areas outside of the originally permitted route. The monitoring methodology is established to create an efficient and streamlined notification process and means to determine the potential eligibility of resources for inclusion on the National Register, and for the creation and adoption of timely and effective mitigation strategies.

5.2 Monitoring

The Consulting Archeologist will observe the contractor's excavations within designated areas as indicated by station numbers in the Supplement CRMPs. The areas of recommended monitoring are summarized in Section 8 of this report. On the basis of such observations, the Consulting Archeologist may request a short-term cessation of work in the vicinity of a potential archeological site or find in order to record information or to evaluate exposed archeological deposits. The Consulting Archeologist may request the on-site supervisor for time to evaluate significant finds, deposits, or other archeological materials in an effort to assess their eligibility for the National Register.

The Consulting Archeologist may direct the Contractor's workers in the use of machinery on a very limited basis to assist in the exposure of material of archeological importance. This assistance will comprise work which would otherwise be done without archeological involvement, but where archeological direction can ensure that significant material is not disturbed.

The Consulting Archeologist will inspect excavation areas, soil profiles, backdirt piles, and will collect artifact and soil samples as appropriate. The Consulting Archeologist will map and document archeological deposits using field notes, photography, and measured scale drawings. The locations of archeological deposits will be mapped with a submeter GPS unit.

Archeological monitoring and associated site or find evaluation time will vary depending on the type of site or find encountered. Typical stop-work requests to complete archeological evaluation will be accommodated within one hour or less, often within fifteen minutes. Stop-work will be limited to an area within 50 feet of the potential archeological find; work may continue outside the area of the potential archeological find provided work occurs in an area not subject to archeological monitoring or an additional archeologist(s) is available to observe the work.

5.3 Notification

For archeological finds that may be National Register-eligible but cannot be adequately recorded during a short cessation of work (typically one hour or less per find) and cannot be otherwise avoided, the Consulting Archeologist will notify the on-site Supervisor and request a halt to construction activities near the find. The Consulting Archeologist shall notify the Project Preservation Officer (PPO), who shall in turn notify the Certificate/Permit Holder (TDI/CHPE), NY SHPO, the US Army Corps of Engineers (USACE), DPS, other stakeholders and Tribal Nations, as appropriate within 24 hours of the initial reporting of the finds, per the Certificate Conditions 110 and 111 and USACE Permit NAN-2009-01089-M7, General Conditions C. During this time, work in the immediate vicinity of the find must halt and the area of concern fenced or otherwise protected from construction activities. Once the area is secured, activity adjacent to the find may continue during the consultation process. Per 36 CFR Part 800.13(b)(3), NY SHPO, other stakeholders and Tribal Nations will have 48 hours from the time of notification to respond.

5.4 Determination of Eligibility

The NYSHPO will make a determination of eligibility for the archeological resource based on the information provided by the Consulting Archeologist and PPO. The NYSHPO shall receive this information from electronic communications and respond within 48 hours, per 36 CFR Part 800.13(b)(3).

5.5 Determination of Effects, Mitigation Efforts and Dispute Resolution

It is expected that potential archeological finds will be located within a relatively narrow construction corridor with limited means for avoidance. When a site is determined eligible for inclusion on the National Register, avoidance is not possible, and continued construction requires disturbance of the site, the resulting Section 106 determination of effect will be Adverse Effect. Determinations of Adverse Effect require mitigation treatment to resolve; a separate Memorandum of Agreement will not be required when mitigation treatments contained within this document, or a Supplemental CRMP associated with the area of the subject archeological site, are selected. Dispute resolution among the parties will be guided by the CRMP (TRC 2021).

5.5.1 Data Recovery Mitigation Strategy

Data recovery mitigation strategy will be outlined in a brief plan that provides guidance on the level of effort expected, square meters of excavation, sampling percentage, and number of anticipated feature excavations. The strategy will provide a schedule for the proposed recovery/documentation efforts, including options to expedite the process, which may include 10-hour working days and additional crew. The mitigation plan shall also include a protocol for artifact collection, processing, cataloging, analyses, and final curation of materials, as outlined in the CRMP (TRC 2021), Section 4.3. The data recovery plan will be provided to NYSHPO, Tribes, and other stakeholders prior to implementation; these parties will have up to 15 days to review and provide comment. Mitigation efforts can move forward as soon as NYSHPO approves the work plan. The PPO will notify the NYSHPO, Tribes, and other stakeholders of the completion of the fieldwork and that portion of the project shall be cleared to resume construction.

5.5.2 Alternative Archeological Mitigation

Alternative archeological mitigation efforts that contemplate non-traditional excavation and/or data recovery methods may be appropriate considering the circumstances. Numerous treatment methods may be selected including, but not limited to, off-site archeology, non-invasive archeology in the vicinity, and other appropriate strategies. Factors that may influence such decisions include the Project's constraints (in terms of construction corridor width and depth), weather and soil conditions, hazardous work environments, other health and safety concerns, and Project schedule.

6 Deliverables

6.1 Periodic Updates

The PPO in coordination and under the guidance of the CA will provide periodic (bimonthly) updates on the progress of cable installation via email to the stakeholders. The communication will include project progress, discussion of unanticipated cultural resources, and the schedule for future work.

6.2 Annual Report

The CA will provide an annual report detailing the activities completed under the CRMP (TRC 2021) and the supplemental CRMPs to the DOE and NYSHPO for as long as the CRMP (TRC 2021) is in effect. This report will be completed and submitted on or before January 10th each year. This report will include a summary of all historic properties and archeological resources that may have been encountered during construction and how they were treated. Post construction reports will identify which cultural resources were monitored and provide a summary of resource conditions and whether forms of disturbance were noted.

7 Communications

Through the many moving parts of this Project, efficient and immediate contact and consultation will be vital. The Project contacts are listed in the table below:

Table 7. Project Contacts.

Agency/Organization	Role	Contact person	Contact information
Kiewit Corporation	Project Preservation Officer	Ashley L. Bushey	Ashley.Bushey@Kiewit.com 802.349.6388
CHA Consulting, Inc.	Consulting Engineer	Chris Einstein	ceinstein@chacompanies.com 518.453.4505
U.S. Department of Energy	Stakeholder	Melissa Pauley	melissa.pauley@hq.doe.gov
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Agency/Organization	Role	Contact person	Contact information
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8 Summary of Archeological Recommendations

In Package 4A of Segment 6, there are 21 project components or areas where additional archeological field/monitoring efforts are proposed (Table 8). These include HDD 51, 53, 53A, 59A, 59B, and 61. Areas to test or monitor for splices and associated work areas include Splice 120, 121, 125, 127, 130-136. Access road perpendicular to the cable where testing or monitoring are recommended include Access Road 2 near Robertson Cemetary [sic] House (09101.000151), as well. In addition, archeological testing or monitoring recommended for portions of Excursions 1-3, 5 and 8.

Table 8. Resources and Archeological Recommendations for Package 4A, Segment 6.

Resources	Activity	Stations	Conditions	Recommendation
High Archeological Sensitivity	HDD 51	40002+05 to 40022+15	Under High Street. Northern work areas extend slightly outside of permitted route. Southern work areas well beyond permitted route.	Testing or monitoring of southern work area.*
High Archeological Sensitivity	Splice 120	40058+87	Turn-around, work area outside of permitted route.	Testing or monitoring.*
High Archeological Sensitivity	Splice 121	40090+68	Within permitted route. Associated turn-around, work area is outside permitted route.	Testing or monitoring.*
Robertson Cemetary [sic] House (09101.000151)	--	--	Adjacent access road/staging area outside of permitted route.	Testing or monitoring of dry areas of the staging areas.* Field verify location of cemetery and protect and preserve if necessary.
Near Ballston Lake Electric Traction Powerhouse Site (HS-1) (09101.000124)	--	--	Work area outside permitted route.	Testing or monitoring.*
High Archeological Sensitivity	Splice 127	40275+98	Work area outside permitted route.	Testing or monitoring work area.*
High Archeological Sensitivity	HDD 53A	40227+60 to 40233+85	Under drainage. Southern work areas outside permitted route.	Testing or monitoring southern work areas.*
High Archeological Sensitivity	Splice 130	40344+13	Outside permitted route.	Testing or monitoring.*
High Archeological Sensitivity	Splice 131	40374+35	Outside permitted route.	Testing or monitoring.*

* The area may be shovel-tested by a qualified archeologist prior to construction or monitored by a qualified archeologist during construction, see Sections 2 and 5, respectively.

Resources	Activity	Stations	Conditions	Recommendation
High Archeological Sensitivity	Splice 133	40405+58	Work area outside permitted route.	Testing or monitoring work area.*
High Archeological Sensitivity	Splice 134	40423+34	Work area outside permitted route.	Testing or monitoring work area.*
High Archeological Sensitivity	HDD 59A	40425+50 to 40443+80	Under Blue Barns Road and RR tracks. Southern work area outside permitted route.	Testing or monitoring southern work area.*
High Archeological Sensitivity	Splice 135	40454+23	Outside permitted route, appears undisturbed.	Testing or monitoring.*
High Archeological Sensitivity	Splice 136	40479+98	Outside permitted route, appears undisturbed.	Testing or monitoring.*
High Archeological Sensitivity	HDD 59B	40511+20 to 40524+40	Under tracks, from east side to west side. Northern pit and work area outside permitted route.	Testing or monitoring northern pit and work area.*
Near CHPE Site 15, Brumaghim Historic Site (NYSM 11674) (09302.000163)	--	--	Northern and southern work areas extend slightly outside of permitted route. Northern work areas appear disturbed. Southern work area outside permitted route.	Testing or monitoring.*
High Archeological Sensitivity	Excursion 1	40000+00 to 40007+00	Appears undisturbed.	Test or monitor the parallel access road.*
High Archeological Sensitivity	Excursion 2	40021+50 to 40022+00 40024+75 to 40030+25	Appears undisturbed, includes Splice 118 work area that is wet and appears disturbed.	Test or monitor the parallel access road south of Splice 118.*
Near SRWT Site 11 Zepko Rd Historic Site (09140.001474)	--	--	Appears undisturbed.	Test or monitor the parallel access road.*
Near multiple archeological resources	Excursion 5	40130+00 to 40439+00	Mostly level, dry and undisturbed, west of recreational trail. South of Main Street along Firemens Lane.	Test or monitor the parallel access road between 40130+00 to 40222+00, 40287+00 to 40355+00 and 40380+00 and 40426+00.*
High Archeological Sensitivity	Excursion 8	40462+00 to 40481+50	Appears undisturbed and dry.	Test or monitor the parallel access road and cable installation. See also Splice 136.*

* The area may be shovel-tested by a qualified archeologist prior to construction or monitored by a qualified archeologist during construction, see Sections 2 and 5, respectively.

9 Bibliography

Hartgen Archeological Associates, Inc.

- 2012 Phase IB Archeological Field Reconnaissance and Phase II Archeological Site Evaluations, Champlain-Hudson Power Express Canadian Pacific Railway Segment Whitehall to Rotterdam, Washington, Saratoga, and Schenectady Counties New York HAA 4268-21.
- 2013 Phase IA Literature Review and Archeological Sensitivity Assessment Addendum II, Champlain-Hudson Power Express Potential Terrestrial Route Modifications: Canadian Border to Rouses Point; Putnam Station to Dresden; Fort Ann-Old State Road Bypass; and Haverstraw Bay Bypass.

New York Archaeological Council (NYAC)

- 1994 *Standards for Cultural Resource Investigations and the Curation of Archaeological Collections in New York State*. NYAC, n.p.

TRC

- 2021 Champlain Hudson Power Express HVDC Transmission Line Project, Cultural Resources Management Plan (Final), on file at OPRHP, Peebles Island, New York.

**Appendix 1: Champlain Hudson Power Express Cultural Resources Management Plan
(TRC 2021)**

THIS DOCUMENT IS CONSIDERED PRIVILEGED AND CONFIDENTIAL AND NOT INCLUDED

Appendix 2: SHPO Human Remains Protocol 2021

**State Historic Preservation Office/
New York State Office of Parks, Recreation and Historic Preservation
Human Remains Discovery Protocol
(January 2021)**

If human remains are encountered during construction or archaeological investigations, the New York State Historic Preservation Office (SHPO) recommends that the following protocol is implemented.

- Human remains shall be treated with dignity and respect. Should human remains or suspected human remains be encountered, work in the general area of the discovery shall stop immediately and the location shall be secured and protected from damage and disturbance.
- If skeletal remains are identified and the archaeologist is not able to conclusively determine if they are human, the remains and any associated materials shall be left in place. A qualified forensic anthropologist, bioarchaeologist or physical anthropologist shall assess the remains in situ to help determine if they are human.
- If the remains are determined to be human, law enforcement, the SHPO, the appropriate Indian Nations, and the involved state and federal agencies shall be notified immediately. If law enforcement determines that the burial site is not a criminal matter, no skeletal remains or associated materials shall be removed until appropriate consultation takes place.
- If human remains are determined to be Native American, they shall be left in place and protected from further disturbance until a plan for their avoidance or removal is developed. Please note that avoidance is the preferred option of the SHPO and the Indian Nations. The involved agency shall consult SHPO and the appropriate Indian Nations to develop a plan of action. Photographs of Native American human remains and associated materials should not be taken without consulting with the involved Indian Nations.
- If human remains are determined to be non-Native American, the remains shall be left in place and protected from further disturbance until a plan for their avoidance or removal is developed. Please note that avoidance is the preferred option of the SHPO. The involved agency shall consult SHPO and other appropriate parties to develop a plan of action.
- The SHPO recommends that burial information is not released to the public to protect burial sites from possible looting.