

November 26, 2012

MEMORANDUM

TO: Bill Helmer (TDI)

FROM: Robert Quiggle (HDR Engineering, Inc.)

SUBJECT: **Champlain Hudson Power Express Transmission Line Project
Summary of October 24, 2012 Consultation Meeting with the
Advisory Council on Historic Preservation**

1.0 Introduction and Background

This memorandum provides a summary of the October 24, 2012 consultation meeting with the Advisory Council on Historic Preservation (ACHP) regarding the proposed Champlain Hudson Power Express Transmission Line Project (Project). Champlain Hudson Power Express, Inc. (CHPEI) has applied to the U.S. Department of Energy's (DOE) Office of Electricity Delivery and Energy Reliability for a Presidential Permit to construct, operate, maintain, and connect the Project. The purpose of this meeting was to provide the ACHP with an overview of the Project, describe the cultural resources studies conducted to date, and discuss the approach to fulfilling the DOE's responsibilities pursuant to Section 106 of the National Historic Preservation Act (Section 106).

The consultation meeting was held from 11:00 AM – 11:45 AM at the ACHP's office located in the Old Post Office Pavilion in Washington, D.C. Representatives from the ACHP, DOE, HDR Environmental, Operations and Construction, Inc. (HDR EOC), and HDR Engineering, Inc. (HDR Engineering) participated in the consultation meeting. Specifically, meeting participants included:

- Charlene Dwin Vaughn (ACHP)
- Lee Webb (ACHP)
- Brian Mills (DOE)
- Greg Lockard (HDR EOC)
- Robert Quiggle (HDR Engineering)

2.0 Meeting Summary

- HDR Engineering provided an introduction to the Project and the meeting participants.
 - As noted above, the Project will require a Presidential Permit from the DOE. CHPEI filed an application for a Presidential Permit on January 27, 2010. CHPEI subsequently modified its application on August 6, 2010; July 7, 2011; and February 28, 2012.
 - The DOE has authorized HDR EOC to prepare an Environmental Impact Statement (EIS) for this Project pursuant to the National Environmental Policy Act (NEPA). The EIS will include an analysis of the Project's potential effects on cultural resources, including historic properties.
 - HDR Engineering is coordinating consultation activities pursuant to the Section 106 process.
- HDR Engineering presented a PowerPoint presentation detailing the technical aspects of the Project, the Project's proposed route, and transmission cable installation methods. This presentation is enclosed as an attachment to this meeting summary.
- The presentation also included information regarding the permitting process.
 - In addition to the Presidential Permit, HDR Engineering also noted that the Project will require a permit from the U.S. Army Corps of Engineers (USACE) pursuant to Section 404 of the Clean Water Act and a permit from the U.S. Coast Guard (USCG). The DOE explained that the DOE is the lead federal agency for purposes of consultation under Section 106, but that the USACE and the USCG are cooperating agencies.
 - HDR Engineering explained that the Project will require a Certificate of Environmental Compatibility and Public Need (Certificate) from the New York State Public Service Commission (PSC) pursuant to Article VII of the New York State Public Service Law.
 - Settlement discussions regarding the Certificate resulted in a Joint Proposal (JP) signed by New York State agencies, non-governmental organizations, the City of New York and the City of Yonkers.
 - The JP includes guidelines for the Environmental Management and Control Plan(s) (EM&CP) as well as Best Management Practices (BMP) for Project construction. Both the EM&CP and BMP guidance documents include provisions for addressing cultural resources.
 - The JP also includes a proposed Water Quality Certificate pursuant to Section 401 of the Clean Water Act.
 - The PSC has received the JP and the hearing process regarding the Certificate has been completed.
- The ACHP asked if consultation pursuant to Section 106 was being coordinated with the NEPA process. HDR Engineering explained that consultation under Section 106 was initiated in January 2011, but consultation activities were delayed to allow the settlement parties to reach a JP.
- The ACHP noted that, given the existing JP and the consensus regarding the Project, the DOE may wish to coordinate compliance with Section 106 with the steps taken to meet the NEPA process. The ACHP explained that 36 CFR § 800.8 of the ACHP's regulations describes the regulatory process for coordinating Section 106 and NEPA, although no applicant for a federal license or permit has pursued this coordinated approach. The ACHP is preparing new

guidance for coordinating the Section 106 and NEPA processes, with the goal of encouraging federal agencies and applicants for federal permits or licenses to follow the regulatory approach described in 36 CFR § 800.8.

- The ACHP noted that the coordinated process would allow the record of decision prepared pursuant to NEPA to satisfy the DOE's responsibilities under Section 106.
- The ACHP agreed to provide the DOE with the new guidance regarding coordination of the NEPA and Section 106 processes following approval (anticipated to occur during the ACHP's November 15, 2012 meeting).
- HDR Engineering described the cultural resources studies conducted to date. The studies have been conducted by an experienced local team including HDR Engineering, Hartgen Archaeological Associates, Inc., and the Lake Champlain Maritime Museum. The studies were developed in consultation with the New York State Historic Preservation Officer (NYSHPO), and have included background literature reviews, analyses of side scan sonar data, and subsurface testing conducted along portions of the Project's prospective area of potential effects (APE). Information regarding these studies is included in the presentation enclosed with this meeting summary.
- HDR Engineering noted that the DOE has identified consulting parties, and that formal consultation with these parties has been initiated. CHPEI intends to convene a meeting in November 2012 to finalize the definition of the APE and to review the results of the studies conducted to date.
- The DOE intends to develop a Programmatic Agreement pursuant to 36 CFR § 800.14(b) to address the Project's potential effects on historic properties. The PA will require development of a Cultural Resources Management Plan (CRMP) in consultation with the consulting parties prior to the initiation of Project construction activities. HDR Engineering noted that a CRMP is also required by the JP.
- The ACHP indicated that development of a PA could be facilitated by coordinating the NEPA and Section 106 processes. The Draft EIS could include a list of activities and issues to be addressed in the PA, as well as a schedule and milestones for PA development. This approach would also facilitate a holistic approach to potential mitigation activities to address the adverse effects of the Project as a whole rather than on a resource-specific basis. The ACHP noted that a PA should address a public education component, and provide opportunities for Indian tribes to participate in cultural resources studies.
- The ACHP also recommended that the PA include language to allow other federal agencies (in addition to the DOE, USACE, and USCG) to be included in the PA. The ACHP agreed to provide the DOE with recommended language.
- The ACHP noted that coordination of the NEPA and Section 106 processes should be initiated by notifying the NYSHPO, Indian tribes, and the ACHP.
- The DOE agreed to consider coordination of the NEPA and Section 106 processes and to review the forthcoming guidelines from the ACHP.

ATTACHMENT

**PRESENTATION TO THE
ADVISORY COUNCIL ON HISTORIC PRESERVATION**

Champlain Hudson Power Express

Advisory Council on Historic Preservation Briefing



October 24, 2012

HDR

Agenda

- Champlain Hudson Power Express Project Introduction
 - Project Overview
 - Regulatory Framework
- Cultural Resources
 - Regional Overview
 - Status of Cultural Resources Studies
- Next Steps
 - Programmatic Approach
 - Cultural Resources Management Plan
- Questions and Discussion

Project Introduction

Project Introduction

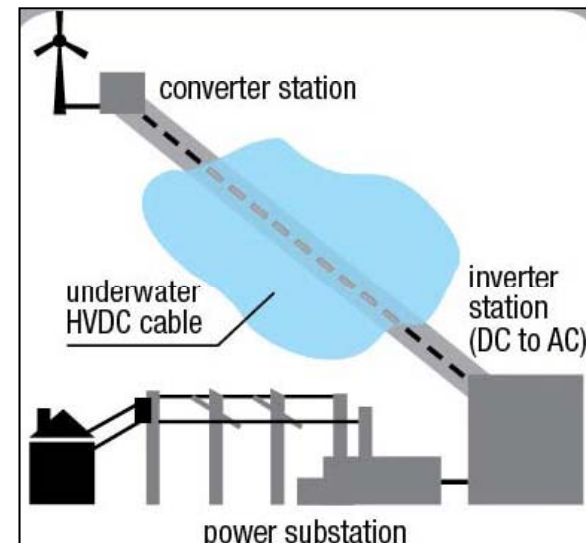
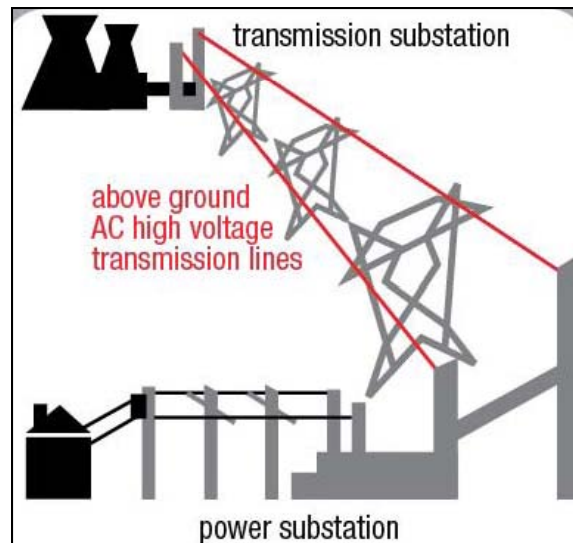
- Champlain Hudson Power Express, Inc. (CHPEI) has applied to the U.S. Department of Energy's (DOE) Office of Electricity Delivery and Energy Reliability for a Presidential Permit to construct, operate, maintain, and connect the proposed Champlain Hudson Power Express Transmission Line Project (Project).
 - The proposed Project consists of a 1,000-megawatt (MW) high-voltage direct current (HVDC) Voltage Source Converter-controllable transmission system extending from the Canadian Province of Quebec to New York City.
 - CHPEI's application for a Presidential Permit was submitted to the DOE on January 27, 2010. CHPEI subsequently modified its application on August 6, 2010; July 7, 2011; and February 28, 2012.
 - The Project will bridge the gap between renewable sources of generation in Canada and the New York City load center.

Project Introduction



Project Introduction

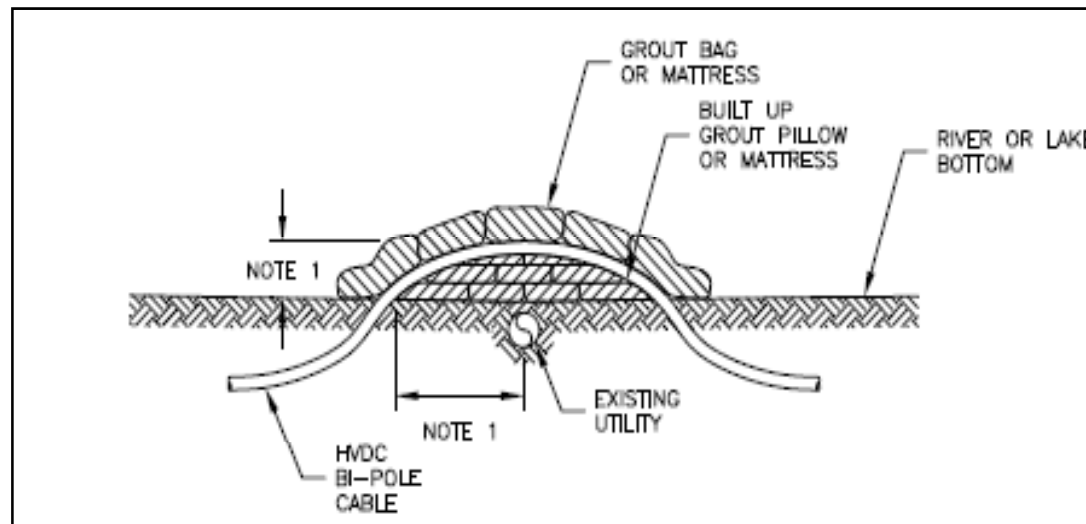
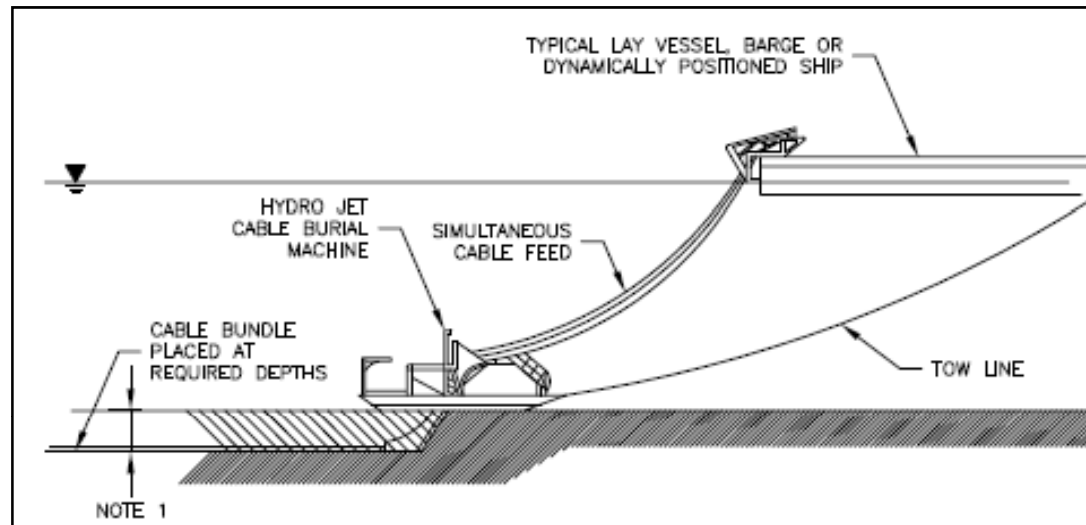
- Selection of HVDC technology for this Project offers significant benefits over traditional alternating current (AC) transmission systems
 - HVDC technology allows high-voltage transmission over greater distances with minimal line loss and without generation of EMF.
 - CHPEI proposes to install the cables within waterways, and within the rights-of-way of existing transportation infrastructure, including railroads and roadways.
 - This innovative routing will avoid the adverse impacts to viewscales associated with traditional transmission infrastructure.



Project Introduction

- From the international border between the United States and Canada, two cables (comprising a single bipole) would extend south approximately 330 miles to an HVDC Converter Station to be located near Luyster Creek, north of 20th Avenue in Astoria, Queens.
 - Where possible, the Project will be installed along existing waterways, including Lake Champlain, the Hudson River, the Harlem River, and the East River.
 - Installation within waterways will primarily be accomplished by jet plow.
 - Shear plow or remote-operated vehicles (ROV) may be used for installation in deeper waters.
 - Target burial depth is an anticipated maximum of 6 feet, although burial depth may be less if conditions permit.
 - The construction corridor is approximately 15 feet wide.
 - If existing utilities or other infrastructure are present or lake/river bottom conditions do not permit burial, the cable will be installed on the lake or river bottom and armored.

Project Introduction



Project Introduction

- The cables will follow an upland route when necessary to avoid environmentally sensitive areas or areas undergoing polychlorinated biphenyl (PCB) mitigation.
 - The upland sections of the Project will generally follow existing transportation infrastructure rights-of-way (ROW), including
 - Canadian Pacific Railroad ROW
 - CSX Railroad ROW
 - New York State (NYS) Route 22
 - Surface Streets
 - CHPEI has also proposed to install cables via horizontal directional drilling (HDD) techniques to avoid impacts to Rockland Lakes State Park and Hook Mountain State Park
- Upland installation will generally use a cut-and-fill technique and will encompass an area within 9 feet from either side of the centerline (including a deviation zone). Burial depths will be approximately 6 feet.
- Transitions from marine to upland sections of the Project's route will be accomplished via HDD
- High-voltage AC cables will connect the Luyster Creek Converter Station to Consolidated Edison's Rainey Substation

Project Introduction

Section	Distance	Description
US/Canadian border to Town of Dresden	101 miles	Marine installation within Lake Champlain
Town of Dresden to Village of Whitehall	11 miles	Upland installation within the ROW of NYS Route 22
Village of Whitehall to the City of Schenectady	65 miles	Upland installation primarily along CP ROW
City of Schenectady to the Town of Rotterdam	1.3 miles	Upland installation along surface streets and within CP ROW
Town of Rotterdam to the Town of Selkirk	24 miles	Upland installation primarily along CSX ROW
Town of Selkirk to Hamlet of Cementon	29 miles	Upland installation along CSX ROW
Hamlet of Cementon to Town of Stony Point	67.05 miles	Marine installation within Hudson River
Stony Point to point south of Rockland Lake State Park	7.66 miles	Upland installation including CSX ROW, NYS Route 9 and HDD beneath parkland
south of Rockland Lake State Park to Spuyten Duyvil	20.07 miles	Marine installation within Hudson River
Spuyten Duyvil to the Bronx	6.58 miles	Marine installation within Harlem River
Bronx to East River	1.1 miles	Upland installation primarily along railroad ROW
East River to Converter Station in Astoria, Queens	River crossing	Marine installation in East River
Converter Station to Rainey Substation	3 miles	HVAC installation along surface streets

Project Introduction

- The Project will require a permit from the U.S. Army Corps of Engineers pursuant to Section 404 of the Clean Water Act.
- In addition to federal permits, the Project also requires a Certificate of Environmental Compatibility and Public Need from the NYS Public Service Commission (PSC) Pursuant to Article VII of the NYS Public Service Law.
- Settlement discussions conducted from November 2010 through February 2012 resulted in development of a Joint Proposal that was signed by 7 NYS agencies, three non-governmental organizations (NGOs), the City of New York, and the City of Yonkers.
 - The Joint Proposal includes guidelines for the Environmental Management and Control Plan(s) (EM&CP) as well as Best Management Practices (BMP) for Project construction. Both the EM&CP and BMP guidance documents include provisions for addressing cultural resources.
 - The Joint Proposal also includes a proposed Water Quality Certification pursuant to Section 401 of the Clean Water Act.
 - The PSC has received the proposal and the hearing process has been completed.



Cultural Resources

Introduction

- In considering a Presidential Permit for the Project, the DOE has the lead responsibility for compliance with applicable federal laws, regulations, and policies pertaining to historic properties, including the National Historic Preservation Act of 1966, as amended (NHPA). Section 106 of the NHPA (Section 106) directs federal agencies to take into account the effects of their undertakings on historic properties and to afford the Advisory Council on Historic Preservation (ACHP) a reasonable opportunity to comment.
 - The Project corridor includes portions of southeastern New York, the Hudson River Valley, and the Lake Champlain regions that have a rich history dating from the prehistoric period through the 20th century.
 - Early in the permitting process CHPEI initiated cultural resources studies and informal consultation to identify historic properties within the Project’s prospective area of potential effects (APE) that may be affected by this undertaking.

Cultural Resources Studies

- CHPEI assembled a local and experienced team of archaeologists, architectural historians, and experts in maritime archaeology to lead the identification of historic properties.

HDR

HARTGEN

archeological associates inc



Lake Champlain
MARITIME MUSEUM

HDR

Cultural Resources Studies

- On February 22, 2010 CHPEI distributed a letter to state and federal agencies, NGOs, Indian tribes, and other potential stakeholders with a prospective interest in the Project's potential effects on cultural and historic resources.
- The letter provided an overview of the proposed Project and included a request for additional information. The letter also described the need for additional studies to identify historic properties within the Project's vicinity and to determine the Project's potential effects on these resources.
- CHPEI initiated informal consultation with the New York State Historic Preservation Officer (NYSHPO) in 2010 to discuss the Project and identify specific concerns.

Cultural Resources Studies

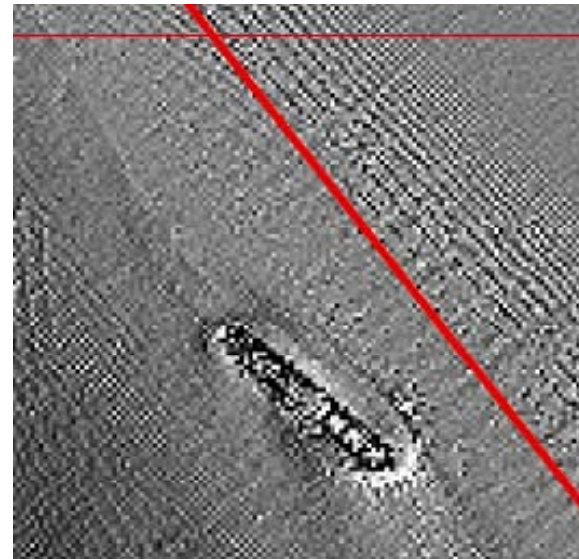
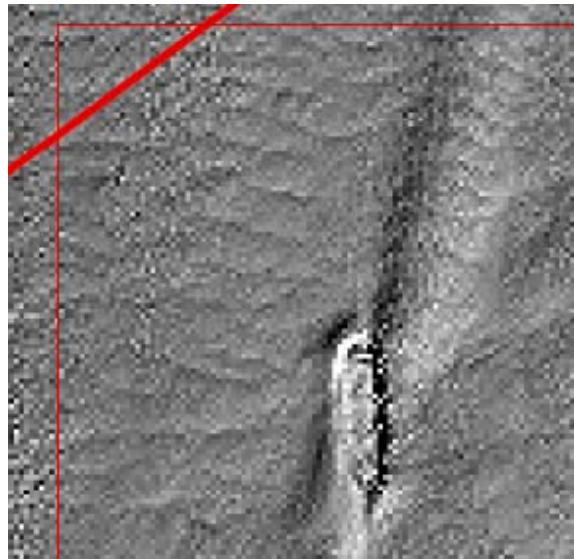
- Cultural resources studies were initiated in 2010.
- The study team initially compiled information from a variety of resources:
 - New York State Museum and New York State Office of Parks Recreation and Historic Preservation (OPRHP) site files
 - Shipwreck data from the Lake Champlain Maritime Museum
 - Side scan sonar for the Hudson River provided by the New York State Department of Environmental Conservation (NYSDEC)
 - Previous cultural resources studies conducted in the Project's vicinity
 - Information regarding properties listed in the National Register of Historic Places (NRHP) or determined eligible for the NRHP
 - Information regarding National Historic Landmarks within the Project's vicinity
 - Historic maps
 - Cultural contexts for the project area
- This information was presented in the April 9, 2010 *Pre-Phase IA Cultural Resources Screening Report* which was distributed to NYSHPO, Indian tribes, and other parties.

Cultural Resources

- CHPEI consulted with the SHPO to develop an approach to completing additional studies of the Project's prospective Area of Potential Effects (APE).
- A Phase IA Literature Review and Archaeological Sensitivity Assessment was prepared and distributed to the SHPO, Indian tribes and other parties in September 2010. The Phase IA report included recommendations .
 - The Appendix A of the Phase IA report included a Study Plan that described the recommended testing strategy for each section of the Project's proposed alignment.
 - The testing strategy proposed in the Study Plan was developed through initial, informal consultation and discussions with the NYSHPO. The NYSHPO reviewed the Phase IA report and concurred with the methodologies proposed for the Phase IB studies (with minor modifications) in a letter dated March 14, 2011.

Cultural Resources

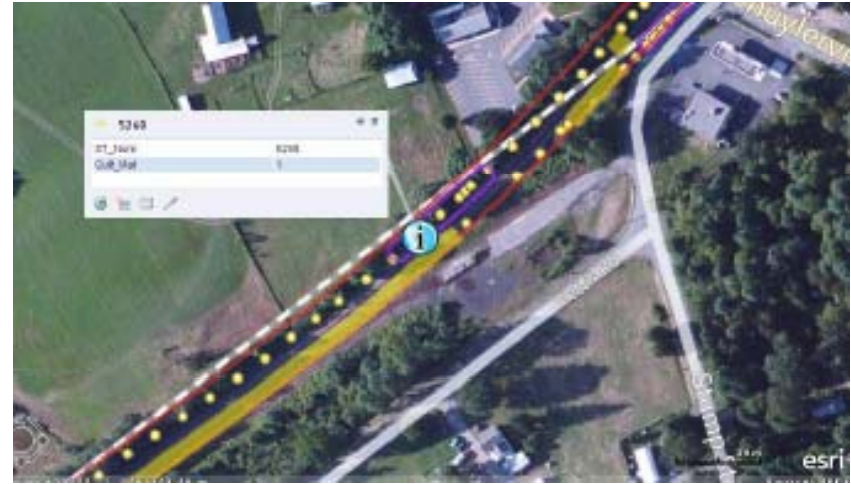
- Concurrent with the Phase IA study, CHPEI undertook additional analyses to identify potential maritime archaeological resources within or adjacent to the Project's alignment.
- The Lake Champlain Maritime Museum (LCMM) conducted a comprehensive review of side scan sonar data collected for the Project's maritime route to identify known shipwrecks, potential shipwrecks, and other anomalies that may represent cultural material.



Cultural Resources Studies

- Based on the study methodology approved by the NYSHPO, CHPEI conducted Phase IB Archaeological Field Reconnaissance along portions of the Project's alignment in 2010.
 - Hartgen Archaeological Associates, Inc. (HAA) conducted subsurface testing along approximately 66 miles of the CP ROW.
 - Testing indicated that there was significant prior disturbance associated with construction of the railroad.
 - A total of 11 archaeological sites were identified within the prospective APE.
 - At CHPEI's request, HAA conducted Phase II Archaeological Evaluations of these 11 sites to provide additional information suitable for the NYSHPO to make a determination of NRHP eligibility.
 - Of the 11 sites, 1 was recommended as eligible for the NRHP, and 3 were recommended for avoidance or additional archaeological investigations.
- The Phase IB report was submitted in draft form to the NYSHPO for review in July 2012. The NYSHPO concurred with the recommendations and findings.

Cultural Resources Studies



Cultural Resources Studies

- Study Status

- Phase IA, IB, and Phase II studies have been conducted along 66 miles of the 142-mile long overland route. This represents approximately 46 percent of the terrestrial portion of the Project.
- Phase IA studies have been completed for the remainder of the Project’s alignment, including the modifications to the route described in the Joint Proposal.

Resource Type	Number*
Archaeological Sites	20
NRHP-eligible properties	18
NRHP-listed properties	15
National Historic Landmarks	0

*Represents reported number. Only 4 archaeological sites recommended as eligible or potentially eligible for the NRHP have been confirmed within the prospective APE through field investigations

Cultural Resources Studies

- Summary of Findings (Maritime Sections)
 - The NYSHPO has established a 40-meter buffer for avoidance around shipwrecks or anomalies.
 - CHPEI, HDR, and HAA reviewed shipwreck and anomaly data with the NYSHPO in September 2012 to identify shipwrecks and anomalies along the maritime sections of the route that may require avoidance or mitigation.
 - The buffer area for over 100 shipwrecks or anomalies may intersect with the prospective APE.
 - CHPEI's preference is to avoid these shipwrecks and/or anomalies. Additional side scan sonar data is currently being collected to identify certain anomalies and to determine if avoidance or mitigation of these is required.
 - CHPEI is currently assessing the engineering feasibility for avoidance, and has identified avoidance options for a majority of these resources in consultation with the NYSHPO.

Next Steps

- The DOE formally initiated consultation under Section 106 by letter dated January 13, 2011. The DOE has identified the following Consulting Parties:
 - ACHP
 - NYSHPO
 - St. Regis Mohawk Tribe
 - Delaware Nation
 - Stockbridge-Munsee Community
 - Bureau of Indian Affairs
- CHPEI intends to distribute the Phase IA, Phase IB and Phase II study reports to the Consulting Parties in November 2012.
- CHPEI will convene a meeting with the Consulting Parties to finalize the definition of the APE and to review the results of studies conducted to date.

Next Steps

- The DOE currently intends to develop a Programmatic Agreement (PA) pursuant to 36 CFR Part 800.14(b) to address the proposed Project's potential effects on historic properties.
- A PA is appropriate for this undertaking.
 - Cultural resources studies are ongoing, but significant data characterizing historic properties within or potentially within the APE has been collected.
 - CHPEI anticipates that the DOE will issue a Presidential Permit prior to completion of all cultural resources studies, and therefore the effects on all properties cannot be fully determined prior to approval of this undertaking.
 - A PA is consistent with the provisions in the Joint Proposal, including the EM&CP and BMPs.
- The DOE will consult with the Consulting Parties to develop a PA. Based on consultation with the NYSHPO, a draft PA is anticipated in December 2012.
- The PA will require the development of a Cultural Resources Management Plan (CRMP) for this Project in consultation with the Consulting Parties prior to the initiation of construction activities.
- A CRMP is also required under the Joint Proposal.

Next Steps

- At minimum, the CRMP will address:
 - Completion of additional studies to assess potential Project effects
 - Control measures to avoid Project effects on identified archaeological resources.
 - The process for conducting additional evaluations to determine the NRHP eligibility of archaeological sites that cannot reasonably be avoided by Project construction activities.
 - Procedures for determining the appropriate measures to minimize or mitigate adverse effects on historic properties that cannot reasonably be avoided by Project construction activities.
 - Procedures for the unanticipated discovery of archaeological resources.
 - Procedures for the unanticipated discovery of human remains.
 - Identification and proposed treatment, avoidance, or mitigation of Project effects on properties of traditional religious or cultural significance.
 - Parties responsible for coordinating activities conducted under the CRMP, including coordinating consultation and maintenance of relevant records.
 - The use of qualified cultural resources professionals.
 - CHPEI staff/contractor training requirements.
 - Appropriate standards for cultural resources investigations.
 - Standards and processes for artifact curation and/or repatriation.
 - Procedures for amendment to the CRMP.
 - Consultation requirements and contacts.
 - Scheduling considerations.

Questions/Discussion

