

November 26, 2012

MEMORANDUM

TO: Bill Helmer (TDI)

FROM: Robert Quiggle (HDR Engineering, Inc.)

**SUBJECT: Champlain Hudson Power Express Transmission Line Project
Summary of September 12, 2012 Consultation Meeting with the
New York State Historic Preservation Office**

1.0 Introduction and Background

This memorandum provides a summary of the September 12, 2012 consultation meeting with the New York State Historic Preservation Office (NYSHPO) regarding maritime archaeological resources (e.g., shipwrecks) and anomalies of potential cultural origin identified within the prospective area of potential effects (APE) for the proposed Champlain Hudson Power Express Transmission Line Project (Project). Specifically, the purpose of this meeting was to determine appropriate avoidance measures and/or additional information needs through a review of a representative subset of maritime archaeological resources and anomalies.

The consultation meeting was held from 10:30 AM – 2:00 PM at the offices of Hartgen Archaeological Associates, Inc. (HAA, Inc.) in Rensselaer, New York. Representatives from the NYSHPO, Champlain Hudson Power Express, Inc. (CHPEI), HAA, Inc., and HDR Engineering, Inc. (HDR) participated in the consultation meeting. Specifically, meeting participants included:

- Brian Yates (NYSHPO)
- Bill Helmer (CHPEI)
- Matt Kirk (HAA, Inc.)
- Tracy Miller (HAA, Inc.)
- Robert Quiggle (HDR)

2.0 Meeting Summary

- CHPEI and HDR provided the NYSHPO with a status update on ongoing cultural resources studies and the overall permitting process for the Project.
- HDR noted that CHPEI had previously consulted with the NYSHPO to identify a suitable buffer distance for avoiding adverse effects on maritime archaeological resources. Based on this consultation a 50-meter (164-foot) buffer around maritime archaeological resources was originally proposed. Based on a review of data provided by CHPEI in 2011, the NYSHPO determined in May 2012 that this buffer area could be reduced to a distance of 40 meters (131 feet) from the Project's APE. For the maritime sections of the Project, the APE will include a 4.6-meter-wide (15-foot-wide) corridor where disturbance of lake or river bottoms may occur during installation of the transmission cables.
- The NYSHPO confirmed that a 40-meter buffer from the APE was generally appropriate to avoid adverse Project-related effects on maritime archaeological resources. However, the NYSHPO noted that this could be adjusted on a case-by-case basis depending on the nature of the identified resource, the analyses previously conducted by the Lake Champlain Maritime Museum (LCMM), and/or the sonar signature of the resource or anomaly.
- HDR briefly summarized the process that was completed for identifying maritime archaeological resources and anomalies within the Project's APE. Maritime archaeological resources and anomalies were identified by the LCMM and HAA, Inc. through an analysis of side scan sonar data collected along the extent of proposed maritime sections of the Project's APE. The side scan sonar data was compared to information available from existing archaeological site files, historical records regarding shipwrecks, previous studies conducted by the LCMM and others within Lake Champlain and the Hudson River, and other sources of information regarding known, reported, or potential cultural resources within the Lake Champlain, Hudson River, Harlem River, and East River sections of the Project's APE.
- The comprehensive analysis conducted by the LCMM and HAA, Inc. resulted in the development of a geographic information system (GIS) database of maritime archaeological resources and anomalies identified by the LCMM within approximately 300 meters (984 feet) of the Project's centerline. In 2011, modifications to the Project's alignment along an 80-kilometer (50-mile) segment of the proposed transmission cable corridor within the Hudson River required a reanalysis of side scan sonar data provided by the New York State Department of Environmental Conservation (NYSDEC). This analysis of NYSDEC data identified maritime archaeological resources and anomalies and within 100 meters (328 feet) along sections of the Hudson River.
- In preparation for the September 12, 2012 consultation meeting, HAA, Inc. developed 40-meter buffers around maritime archaeological resources and potential cultural anomalies to identify resources that would be avoided by Project construction.
- Based on the results of this GIS analysis, HAA, Inc. prioritized identified archaeological resources or potential cultural anomalies. Those resources or anomalies within 40 meters of the APE were assigned a higher potential for Project-related effects. This information was combined with data compiled from the background literature review and LCMM's analyses of the side scan sonar data to develop a preliminary assessment of significance for high-

potential maritime resources and anomalies. If analyses or documentary evidence indicated that a high-potential resource or anomaly may represent a potentially significant cultural features (e.g., a documented shipwreck or remnants of a historic bridge), the resource or anomaly was ranked as a higher priority. However, if the LCMM's analysis of side scan sonar data indicated that the identified high-potential resource or anomaly likely represented a non-cultural feature (e.g., tree stump, bedrock outcropping, etc.), the resource or anomaly was given a lower classification in regards to potential priority.

- HDR explained that, for purposes of discussion, HAA, Inc. had selected a subset of high priority maritime archaeological resources and potential cultural anomalies that generally represented high-potential locations categorized by HAA, Inc. as having a high potential significance (typically documented or suspected shipwrecks within proximity to the Project's APE).
- The NYSHPO, CHPEI, HDR, and HAA, Inc. reviewed approximately 40 high priority archaeological resources and anomalies on a case-by-case basis. For each of these resources, the NYSHPO made recommendations regarding avoidance or the need for additional information.
- In most cases, the proposed transmission cable installation corridor will sufficiently avoid high priority resources.
- In other cases, potential modifications to the Project's alignment were proposed that would allow the Project to avoid adverse effects on maritime archaeological resources or potential cultural anomalies. CHPEI agreed to consult with their engineering staff to determine if potential modifications to the Project's route were feasible.
- The NYSHPO recommended that CHPEI complete the ongoing marine route survey and prepare additional information regarding proposed anomalies that may be unavoidable. This information could be used to provide additional information regarding the nature of these anomalies and whether they actually represent cultural features.
- CHPEI agreed to review the recommendations provided by the NYSHPO and consult the results of the ongoing marine route survey (expected to be completed in Q1 of 2013). Based on this information, CHPEI will present recommendations for each site and/or anomaly within the APE and consult with the NYSHPO to determine whether proposed avoidance measures are appropriate or additional data collection or mitigation measures may be necessary.