

**UNDERWATER ARCHAEOLOGY  
NORWALK RAILROAD BRIDGE REPLACEMENT  
NORWALK, CONNECTICUT**

The State of Connecticut is replacing the historic railroad swing bridge over the Norwalk River in Norwalk, Connecticut. The replacement of this bridge involves significant impacts to the underwater and intertidal resources of the Norwalk River, including the erection of new piers and burying utility lines deep into the river bottom.



Historically, the Norwalk River has been dredged several times to allow for increased access for industrial shipping; however, after performing a bathymetric survey, AHS identified areas that had not been dredged and had the potential to preserve buried archaeological sites. Much of the Area of Potential Effect (APE) of the terrestrial and underwater work consists of filled-in marsh and former near-marsh land or submerged land, areas that may contain pre-colonial Native American archaeological resources. An “ancient Native American fort” is noted in an early deed and on a historic map.

AHS developed a customized field strategy to assess underwater archaeological potential, using a vibracoring system. Vibracores are coring systems that use an electric- or gas-powered vibrating head to drive a core barrel into underwater sediments, which reduces frictional and compressive disturbances to sediments and provides continuous sample recovery. The vibracore system that AHS employed for this project was a catamaran made from two canoes. This sampling design is a practical and economical method for 1) evaluating the presence and/or potential for underwater cultural materials; 2) reconstructing paleogeography, evaluating depositional environments, and potentially recording changes in historical land use and sea level change; and 3) providing recommendations for further investigations or mitigation based on an overall assessment of underwater archaeological potential within the APE.