



Monmouth County Park System Portland Place Slope Stabilization, Hartshorne Woods Park

PROJECT INFORMATION

PROJECT DESCRIPTION:

Hurricane Sandy dealt a heavy blow to the Monmouth County Area. Hartshorne Woods Park, located between the Sandy Hook Bay and the Navesink River, sustained heavy damage from both high winds and storm surge flooding. Portland Place is a National and State registered historic site located within Hartshorne Woods Park. The site is perched on 20-foot high bluffs above the Navesink River. Due to high storm surge waters from Hurricane Sandy, the bluff was severely eroded and large mature trees were lost. The Park System recognized the need for some form of protection, but also wanted to use the site as a model for other residents on the river. The basic concept is to reinforce the slope and then cover the reinforcement with vegetation. The access for construction will require working from the base of the bluff along the river so the Park System is taking the opportunity to remove a large path of invasive phragmites and intends to restore the area with native salt marsh grasses. The project construction is estimated to cost between \$550,000 and \$650,000.

REASON FOR PROJECT: To protect against future loss of the bluff and to protect integrity of historic site landscape features.

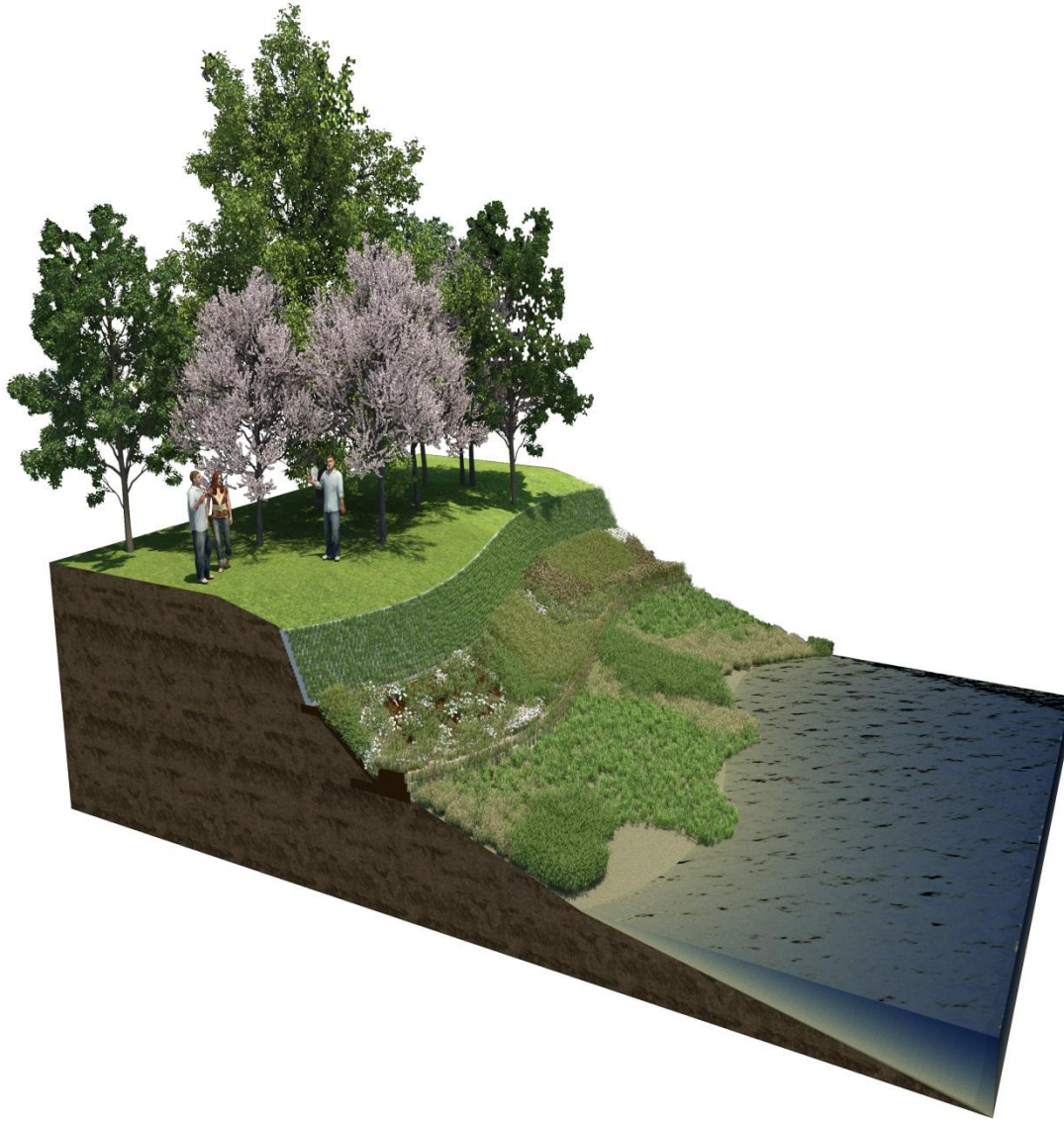
DESIGN APPROACH: Design a protective matrix to withstand forces of future storms. Install vegetative plantings to provide a natural appearance and to remove and manage against invasive plant species (primarily phragmites). The vegetated approach is known as a "living shoreline" which utilizes vegetation to protect land through growth of roots and plant mass against wave action.

ENVIRONMENTAL CONSIDERATIONS: Obtain necessary New Jersey Department of Environmental Protection permits. Obtain clearance from State Historic Preservation Office (project site listed on National and State Registers of Historic Places).

PROJECT STATUS: ***Engineering consultant has completed construction plans and documents. DEP and Army Corp permits approved. Bidding scheduled for January 2019. Due to permitting requirements, construction will not begin until September 2019.***

CONTACT INFORMATION: Andrew North, Chief Landscape Architect
Monmouth County Park System, Acquisition & Design Department
(732) 842-4000 ext.4262

SEE PLAN ATTACHED (Page 2)



Depiction of protected slope matrix with vegetation cover. Water level shown during low tide.