

Triton Way Revetment Reconstruction New Seabury, Mashpee, Massachusetts

Project Characteristics:

- *Revetment design*
- *Environmental permitting*
- *Construction oversight*
- *Compliance reporting*

Woods Hole Group re-designed, permitted and oversaw construction of 750 linear feet of coastal revetments along the New Seabury shoreline during the past three years. Of particular interest was a joint project fronting 3 individual properties on Triton Way during the 2006/2007 winter and spring seasons. The three existing revetments were originally designed and constructed in the late 1980s and reconstructed in the late 1990's. Since that time, the entire Succonessett Point shoreline, extending from South Cape Beach to Popponessett Bay in Mashpee had undergone dramatic erosion and significant lowering of the beach had occurred. What once was a dry beach fronting the revetments became occupied by as much as 2 feet of water even during low tide, resulting in changes to the wave action affecting the structures. The three structures were redesign to withstand current oceanic conditions. Redesign parameters included:

- Increase in crest elevation to address wave run-up and overtopping
- Increase in toe and armor stone sizing to address increase wave action
- Increase in depth of toe burial to address exposure



Woods Hole Group worked cooperatively with the Mashpee Conservation Commission, Department of Environmental Protection (DEP) and the U.S. Army Corps of Engineers (ACE) to obtain environmental permits for the redesign of the revetments and the construction of a 1000-foot long, 15-foot wide, construction access comprised of large boulders that was built along the intertidal beach. In addition to the permitting, Woods Hole Group performed the contractor solicitation, assisted our clients with contractor selection, construction oversight, and obtained Certificates of Compliance from all of the regulatory agencies.

The project required a large management component due to the remote location of the properties along the shoreline and the required construction access along the beach that spanned over ½ mile of shoreline. Access and Escrow agreements had to be arranged with number adjacent property owners, including New Seabury Properties, for the use of the private beaches for access. The project required multiple on-site meetings with regulatory agencies, property owners, their consultants and legal representatives.

