

## PARADISE COVE

Chatham, MA

Coastal Engineering Co. performed full scope Structural, Civil and Marine engineering services for this bluff-top site overlooking Ryder's Cove. Coastal worked with the architects and owners to make the most of the indoor and outdoor living spaces: a swimming pool and patio were added on the property, an I/A septic system allowed for an extra bedroom, and a lateral load resisting system was designed to support multiple windows and to resist code-required wind and gravity loads. Coastal also provided engineering and environmental permitting services which were required for coastal bank stabilization using Bio D Blocks complemented by plant community restoration within "no-disturb" zone.

### SERVICES

- Existing conditions site plan, including topographic survey, research at Board of Health, Registry of Deeds, Town Hall, pre-marking utilities, and arranging for Dig-Safe
- Proposed site plan suitable for filing for regulatory review
- Structural foundation and framing plans and lateral load resisting system design
- New I/A sewage disposal system design
- Site grading and stormwater drainage design
- Engineering design of shorefront protection
- Environmental permitting, including Notice of Intent preparation and filing, and hearing representations with Conservation Commission, Board of Health, and Zoning Boards of Appeals
- Construction survey layout and as-built plan

