

PRIVATE RESIDENCE PILE FOUNDATION

Provincetown, MA

Coastal Engineering Company assisted the owners of a waterfront property with engineering and permitting services pertaining to change in use from commercial to residential, as well as building renovations and improvements. The existing pile support system required complete replacement and the existing structural framing needed additional support to meet code requirements. Portions of the existing building were within the Coastal High Hazard Zone.

SERVICES

- Environmental permitting, including Chapter 91, NOI, and COC
- Conditional assessment of existing building structure including pilings, foundations, structural framing and exterior wall construction where accessible, and decks
- Structural design of new land side foundation based on current Massachusetts State Building Code
- Engineering design of helical pier supported concrete “waffle-grid” foundation with reinforced concrete or timber piers and steel reinforced wood sub-frame
- First floor and roof deck framing augmentation and connections to safely connect the existing building to the new foundation system
- Preparation of construction documents for proposed piling replacement and structural deck framing suitable for permits and construction

