Friends of Squibnocket

Presentation to Town Committee on Squibnocket

Overview of Analytic Effort & Abstract of Work To Be Performed

July 8, 2014

Friends of Squibnocket

We are a voluntary community of interested people dedicated to protecting and enhancing the Squibnocket environment

Why are we here? We think this is one of the most difficult planning problems Chilmark will confront over the next 25 years and possibly the one the most complex projects to be evaluated by the Commonwealth and various regulatory bodies

We want to get it right....

Friends of Squibnocket Objectives

- Address defined issues with the least amount of adverse environmental effects:
 - Coastal beach, barrier beach
 - Coastal bank and coastal dunes
 - Wetlands and pond
- Scope includes roadways (access), utilities (access), revetments, beach, and parking

Friends of Squibnocket Design Principles

- Managed Retreat (VCS & Others)
- Removal of all revetments
- No new hard structures
- Restoration of Coastal Dunes
- Retention of natural barrier beach

Summary of Proposal Intent — Friends of Squibnocket Reconstructed Dune Ridge with Alternative Roadway and Parking Analyses

The Friends of Squibnocket is completing a series of engineering analyses in order to propose a solution to the issues defined in the charge to 'Town Committee on Squibnocket'.

Our approach will include analysis of the future of the shoreline under conditions that will include the removal of all revetments, as recommended by the Mass DEP, in order to mitigate uneven erosion. Into this environment, we intend to design and evaluate a reconstructed dune ridge and a relocated road. This effort will include an assessment of the impact of the fill for the dune ridge on the surrounding wetlands as well as the impact of wave run-up under various dune designs and wave conditions. The beauty of this solution, should it prove to be feasible, is an enhanced town beach at the present location.

The scale of dune needed to provide sustainable protection of the roadway relative to the available land (as determined by wetlands definition) will be determined by two significant criteria: (a) consistency of design with wetlands regulations and (b) sustainability of the roadway.

If it is determined that the dune ridge with roadway is feasible, we will provide design information on the basic approach to construction, materials, and sectional views. If the dune ridge proves not to be feasible, we will evaluate alternative locations for an elevated roadway, including an approach set back from the existing eroding shoreline.

The second part of our analysis will focus on parking alternatives for Squibnocket Beach. Again, the focus will be on the collection and analysis of sufficient data to determine feasibility, including topographical, soils, and wetlands definition.

Three different properties will be examined for parking potential, possibly in combination. Based on feasibility review, high-level designs will be developed for the various parking solution alternatives. The criteria for feasibility is the same as for the dune ridge & roadway.

All of our analyses will be performed in a way that is consistent with permitting requirements.

View from the East With Structures and Roads (Showing 'Line')



Road Solution - Presented at Town Meeting



Abstract of Analytic Effort

- Shoreline after revetment removal
- Reconstructed dune ridge
 - Impact of fill on wetlands
- Roadway behind dune ridge
- · Improved beach
- Parking by Town's Squibnocket Road
- Determination of feasibility
 - Consistency with WPA
 - Sustainability
- Departure point of analysis: dune ridge

Status

- Defined 'frame of reference'
- (Town Meeting on April 28)
- Developed Statements of Work
- Contracted with engineers
- Work scheduled & has started (July 1st)

