

Squibnocket Beach & Parking Area Public Forum # 2: January 7, 2014



Map 35 Lot 1.30
Chilmark, MA



7/12/2013



Tonight's Agenda

- **Respond to questions raised on December 3 and provide updates.**
 - **How did we get here?**
 - **Review other Town beach options that were considered, but not pursued and why.**
 - **Summarize the current proposal.**

Tonight's Agenda

- As planned, we would like to hire two consultants to evaluate the Town's Squibnocket Beach and Parking Area concept.
- A third evaluation will be provided through the Woods Hole Oceanographic Institute at no cost to the Town.
- Plus, the Coastal Planner for the Martha's Vineyard Commission (MVC) will provide an assessment.

Independent Consultants Scope of Work

- **Evaluate the Town's beach and parking proposal and its effects on the barrier beach and the adjacent Squibnocket Pond.**
- **Review and evaluate the existing conditions land survey, published shoreline erosion data, FEMA flood data and their integration into the project.**

Independent Consultants Scope of Work

- **Analyze the existing and proposed parking area locations and project impacts of future erosion and possible sea level rise.**
- **Address questions and concerns raised at the December 3 public meeting regarding the project.**

Independent Consultants Scope of Work

- Offer alternatives analysis and considerations for the current proposal.

Independent Consultants

1. Reid Silva; PE, PLS and owner of Vineyard Land Surveying & Engineering.
2. Jim O'Connell, Coastal Geologist & Land Use Specialist; Brant Rock, MA.

Independent Consultants

3. **Greg Berman, M.S. Geological Oceanography; Coastal Processes Specialist; Woods Hole Oceanographic Institute.**
4. **Jo-Ann Taylor, M.A. Geology; Martha's Vineyard Commission Coastal Planner.**

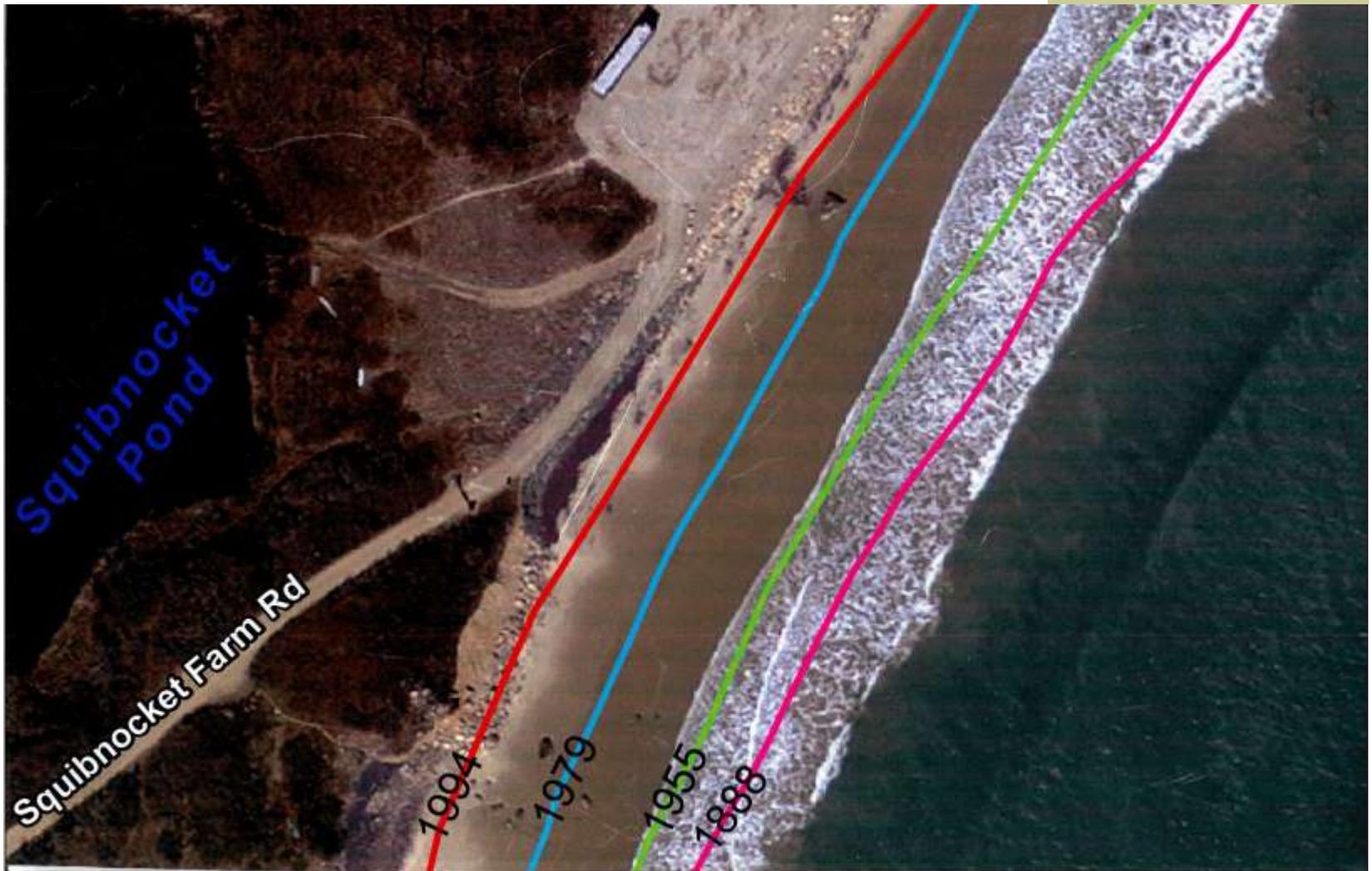
Independent Consultants

Timing & Cost

- We expect to have their assessments in late February or early March.
- The cost for Reid Silva's and Jim O'Connell's assessments and reports will not exceed \$7,500.
- Greg Berman's evaluation will be no charge as he is providing consulting services that is funded by a separate Woods Hole Oceanographic Institute Sea Grant.
- Jo-Ann Taylor's evaluation is funded through the Town's annual MVC budget assessment.

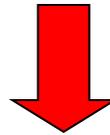
Why are we here?

Beach Shoreline Migration 1888 - Today



How did we get here?

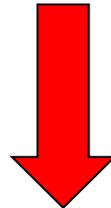
- **2010**: Squibnocket Farm Homeowner's Association (SFHA): Commonwealth's Superseding Order of Conditions.
- **2011**: Hurricane Irene.
- **2012**: Hurricane Sandy.



SFHA hires engineering firm Haley & Aldrich to design a new roadway solution.

How did we get here?

- **2013**: SFHA reviews plan for the elevated roadway modeled after the Menemsha Drive-on dock with the Selectmen.



SFHA agrees to postpone their roadway permitting and construction plans.

Selectmen form Committee with SFHA and other disciplines – to find a long-term solution for the Town Beach and Parking that complements SFHA roadway plan.

Town Beach Problems caused by Severe Erosion

- 1. How to expand Town Beach?**
- 2. How to provide stable, long-term beach parking for Town residents?**

Town Beach Problems caused by Severe Erosion

- 3. What to do about the severe beach erosion?**
- 4. How to improve the long-term health of Squibnocket Pond with a practical exit strategy for removing the revetment and re-nourishing the barrier beach?**

Town Beach Problems caused by Severe Erosion

5. How to solve all of the Town's Squibnocket Beach problems without raising taxes to pay for it?

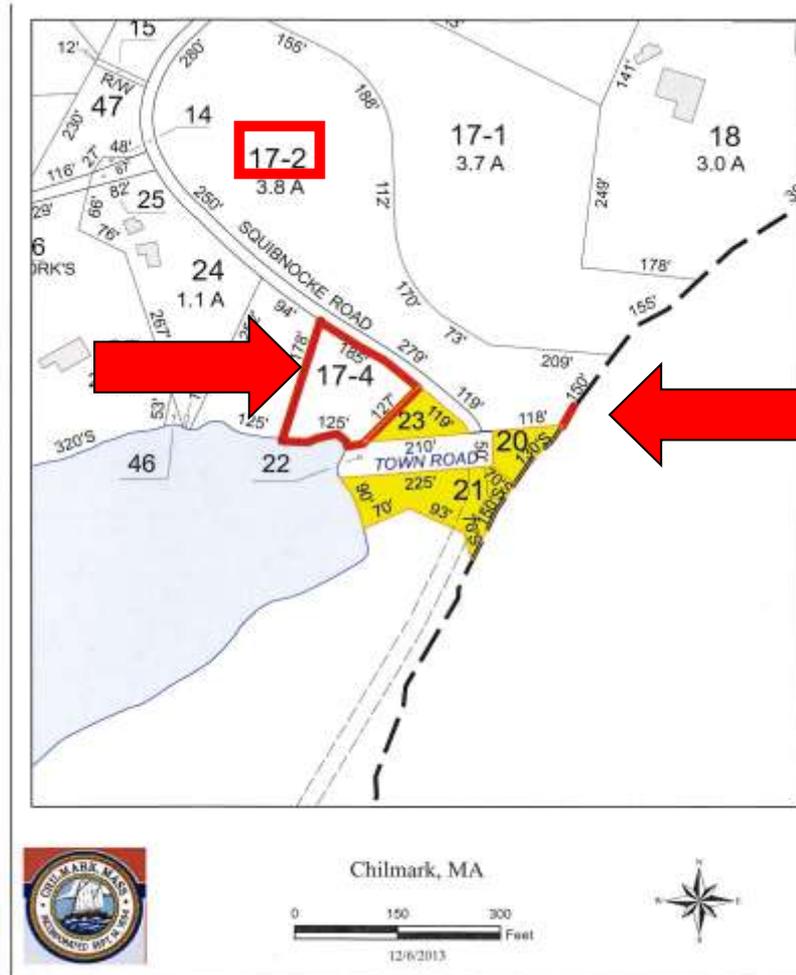
How did we get here?

- **The Committee met three times and considered the following alternatives...to the current proposal of leasing the additional 10.5-acres of land west of the Squibnocket Beach parking area.**

Alternative # 1: Map 35 Lots 17- 2, 17- 4

- Lease a portion of shoreline on **Lot 17 – 2**.
- Lease **Lot 17 – 4**, the lot just north of the Town’s current leased land for a new parking area.
- Both lots have the same owner.

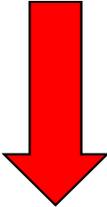
Alternative # 1: Map 35 Lots 17- 2, 17- 4



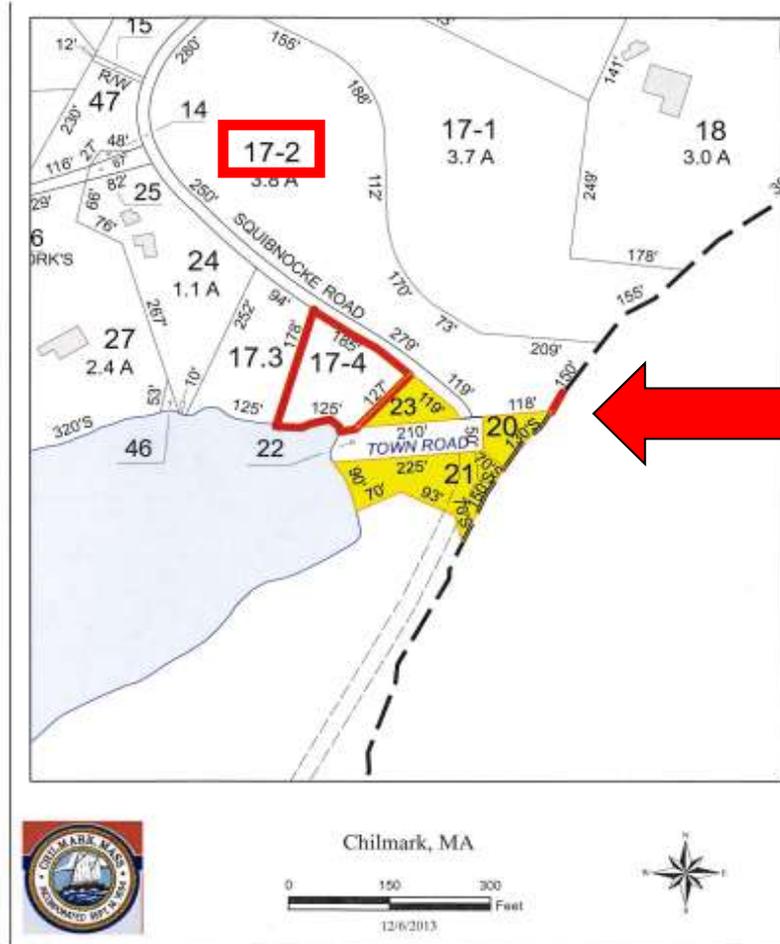
Alternative # 1: Map 35 Lot 17- 4

- **Alternative # 1** was not pursued because:
 - The topography of **Lot 17 – 4** has a significant elevation drop from Squibnocket Road to the pond.
 - A large portion of this lot is a wetland which therefore could not be filled in to create a level parking area.

Alternative # 1: Map 35 Lot 17- 4

- **Alternative # 1** was not pursued because:
 - A large portion of this lot is a wetland which therefore could not be filled in to create a level parking area.
- 
- Consequently, the possibility of a lease, its cost and terms were not pursued.

Alternative # 1: Map 35 Lot 17- 2



Alternative # 1: Map 35 Lot 17- 2

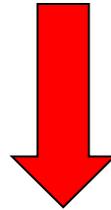


Alternative # 1: Map 35 Lot 17- 2

- **Alternative # 1** was not pursued because:
 - **Lot 17 – 2** is for sale for over \$3 million.
 - The cost to lease about 50 feet of shoreline and beach would impact the sale price.

Alternative # 1: Map 35 Lot 17- 2

- **Alternative # 1** was no pursued because:
 - **Lot 17 – 2** is for sale for over \$3 million.

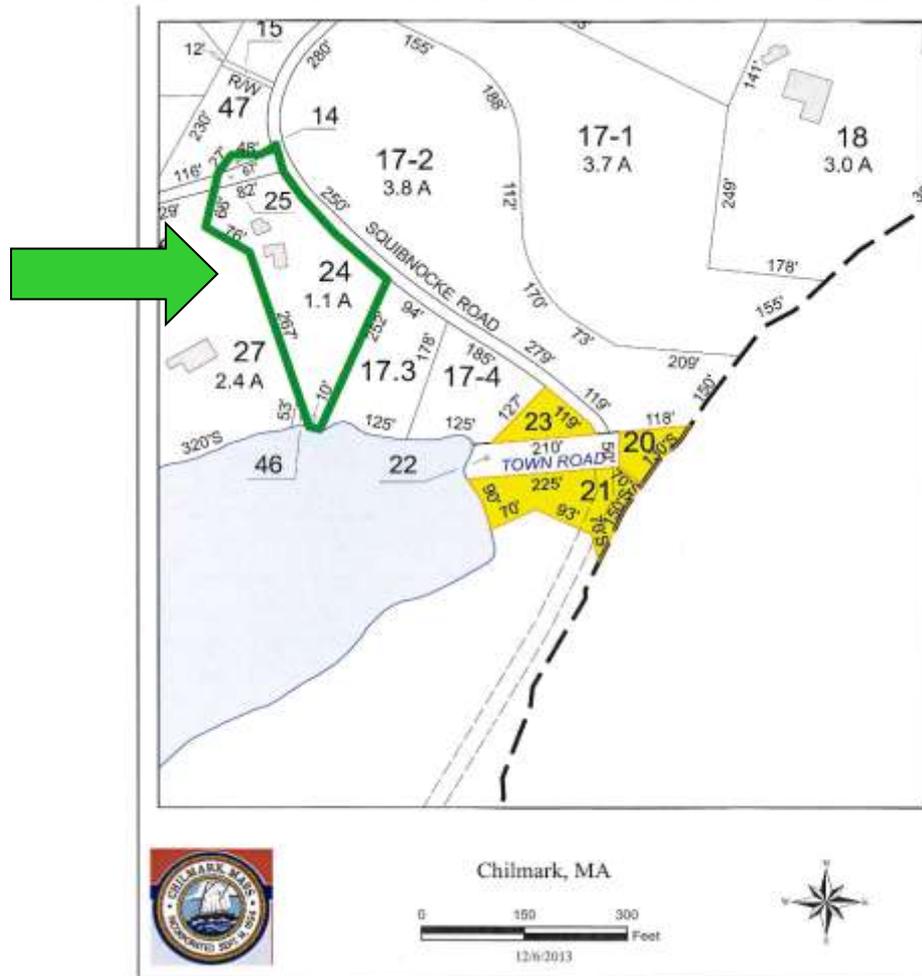


- After review, this section of shoreline is exposed and subject to erosion. Mean high tide level is near the coastal bank. The current proposal to lease 10.5-acres seemed more feasible. Lot 17 - 2 was not pursued further.

Alternative # 2: Map 35 Lot 24

- Purchase **Lot 24** which is for sale for \$2.6 million.
- Use this lot as a new parking area.

Alternative # 2: Map 35 Lot 24

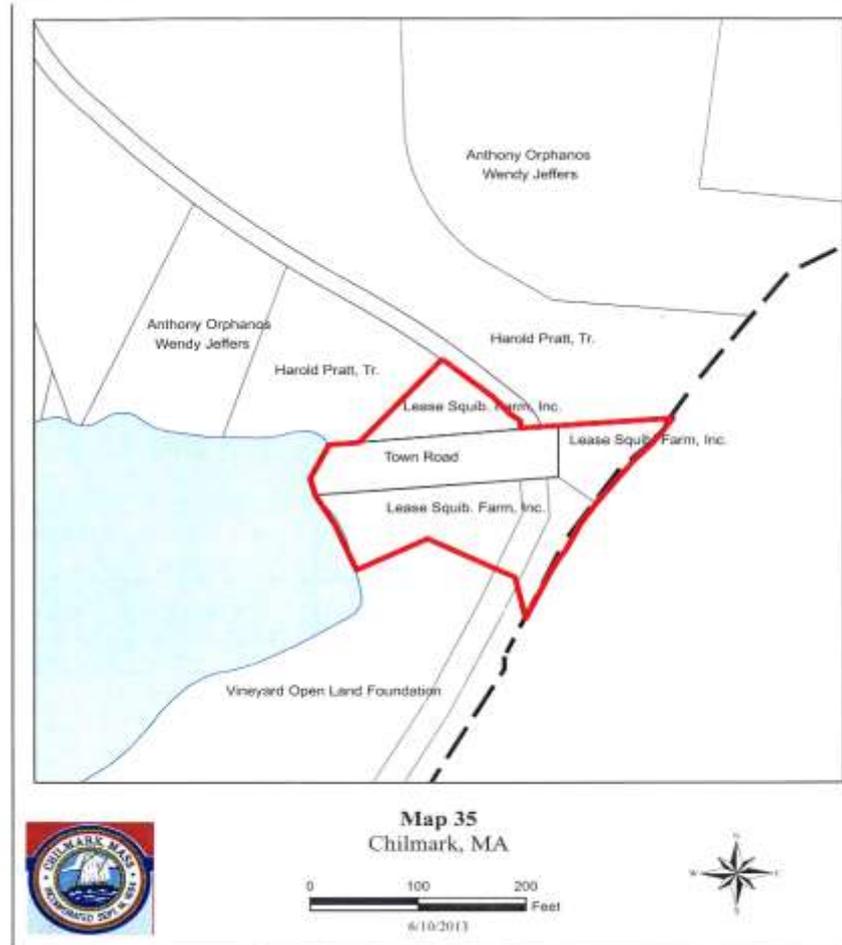


Alternative # 2: Map 35 Lot 24

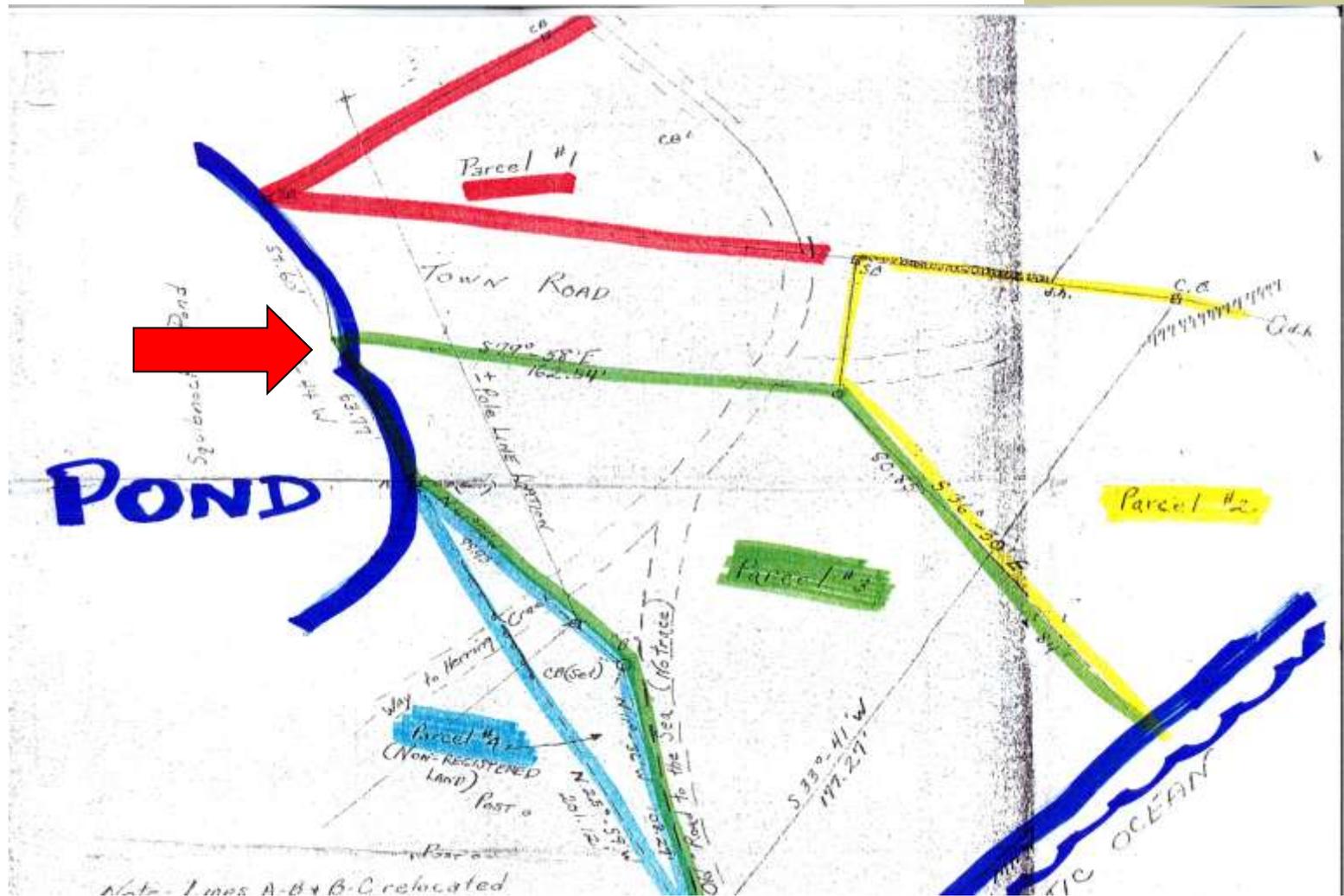
- **Alternative # 2** was not pursued because:
 - While this might solve the parking area problem, it does not solve the need for additional beach shoreline.
 - Too expensive. The Selectmen did not want to incur additional debt service payments which would raise taxes.

The Current Proposal - Summary

Current Lease 1950 - 2050 Assessors Map



1950 Survey of Leased Land (Notice Pond Shoreline)



Leased Land - Today (Notice No Pond Shoreline)



Copyright ©2007 Pictometry International Corp.

1950 Survey of Land – Today (Notice Leased Land in Ocean)



New Beach & Parking Area Lease 2014 - 2113

- Re-new the lease of the existing beach and parking area, and lease 10.5-acres of additional land abutting the currently leased land in order to:
 - Expand the Town Beach shoreline (5 X larger).
 - **Current Squibnocket Beach = Approx. 280 feet**
 - **+ Additional Beach = + Approx. 1,125 feet**
 - **New Total Squib. Beach = Approx. 1,405 feet**

Source: Assessor's Map

New Beach & Parking Area Lease 2014 - 2113

- **Relocate the Parking Area – the roadway will not pass through the parking area. The new parking area will be more efficiently designed and will accommodate more than the 40-car maximum for the current lot. The new area is also on naturally protected ground.**

New Beach & Parking Area Lease 2014 - 2113

- **There will be native vegetation screening between the new parking area and Squibnocket Farm Rd. to the north.**
- **Relocate the security gate past the parking area.**
- **Relocate the commercial skiff (10 HP Max.) and recreational boat launch path across from new parking area for Squibnocket Pond access.**

Relocate Current Skiff Launch Path for Squibnocket Pond Access



New Beach & Parking Area Lease 2014 - 2113

- **Add a walking path from the parking area to the shore.**
- **Stable and porous (pea stone gravel) parking area surface.**

New Beach & Parking Area Lease 2014 - 2113

- **Combine the currently leased land with the additional 10.5-acres of land abutting the current beach. Have a new, 99-year, lease that expires in year 2113,**
- **For a proposed rental payment of \$400,000 to the Squibnocket Farm Homeowner's Association.**

New Beach & Parking Area Lease 2014 - 2113

- The Community Preservation Committee reviewed the proposal and voted unanimously to recommend that voters consider using \$400,000 of existing CPA reserve funds to pay for the new 99-year lease with \$10,000 added for related and legal expenses.

New Beach & Parking Area Lease 2014 - 2113



Proposed Expanded Beach and Relocated Parking Area



Revetment Exit Plan and Beach Re-nourishment

- After all construction is finished, the Town will develop an exit strategy and plan for removing the revetment and re-nourishing the barrier beach with sand.
- The current parking area and beach will eventually return to their original barrier beach state. The ocean will most likely have a natural water exchange with the wetlands and pond during significant storm events – without disrupting the SFHA's plan for an elevated roadway.

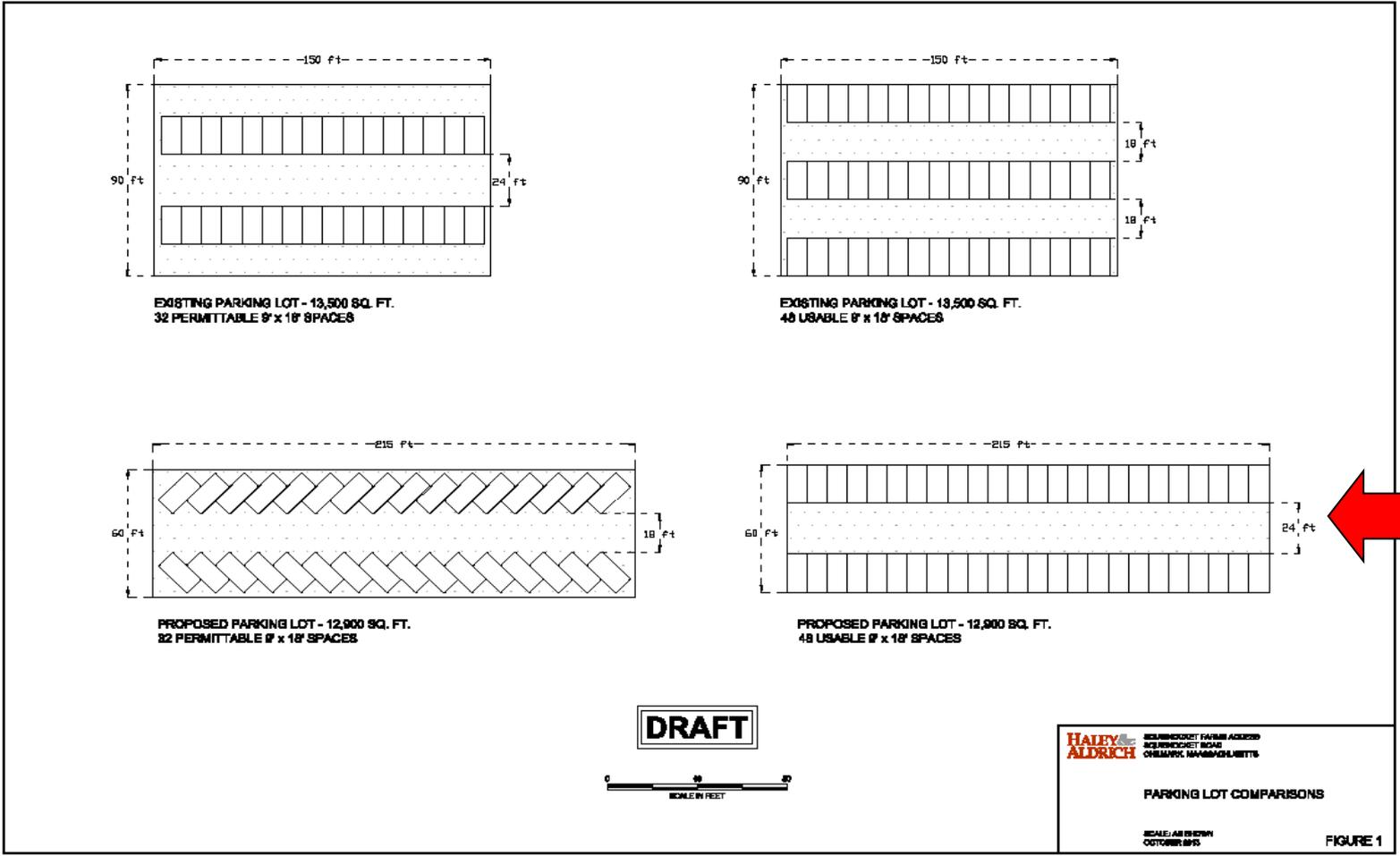
Squibnocket Beach - Early 1900's No Revetment



Review Other Updates

- **Lease negotiation: In progress.**
- **Shared roadway maintenance negotiation: In progress.**
- **Expanded View Shed Analysis of the proposed parking area.**

Parking Lot Design Options



COMMONWEALTH MASSACHUSETTS DEPARTMENT OF TRANSPORTATION, 850 CENTRE STREET, WILMINGTON, MASSACHUSETTS 01890

HALEY ALDRICH
 850 CENTRE STREET, WILMINGTON, MASSACHUSETTS 01890
 TEL: 978.250.1000 FAX: 978.250.1001
 WWW.HALEYALDRICH.COM
PARKING LOT COMPARISONS
 SCALE: AS SHOWN
 OCTOBER 2015

FIGURE 1

New Beach & Parking Area

Est. New Parking Area Location



Parking Area Understory July 2013



Parking Area View Shed Impact

**Map 35 Lot 27 View Current
Parking Area No Zoom**



Map 35 Lot 27 View Current Parking Area With Zoom



Map 35 Lot 27 View New Parking Area No Zoom No Screening



Map 35 Lot 27 View New Parking Area With Zoom No Screening



**Map 35 Lot 32 View Current
Parking Area Gate No Zoom**



Map 35 Lot 32 View Current Parking Area Gate With Zoom



**Map 35 Lot 32 View New Parking Area
No Zoom No Screening**



Map 35 Lot 32 View New Parking Area With Zoom No Screening



Map 35 Lot 38 No View Current Parking Area No Zoom



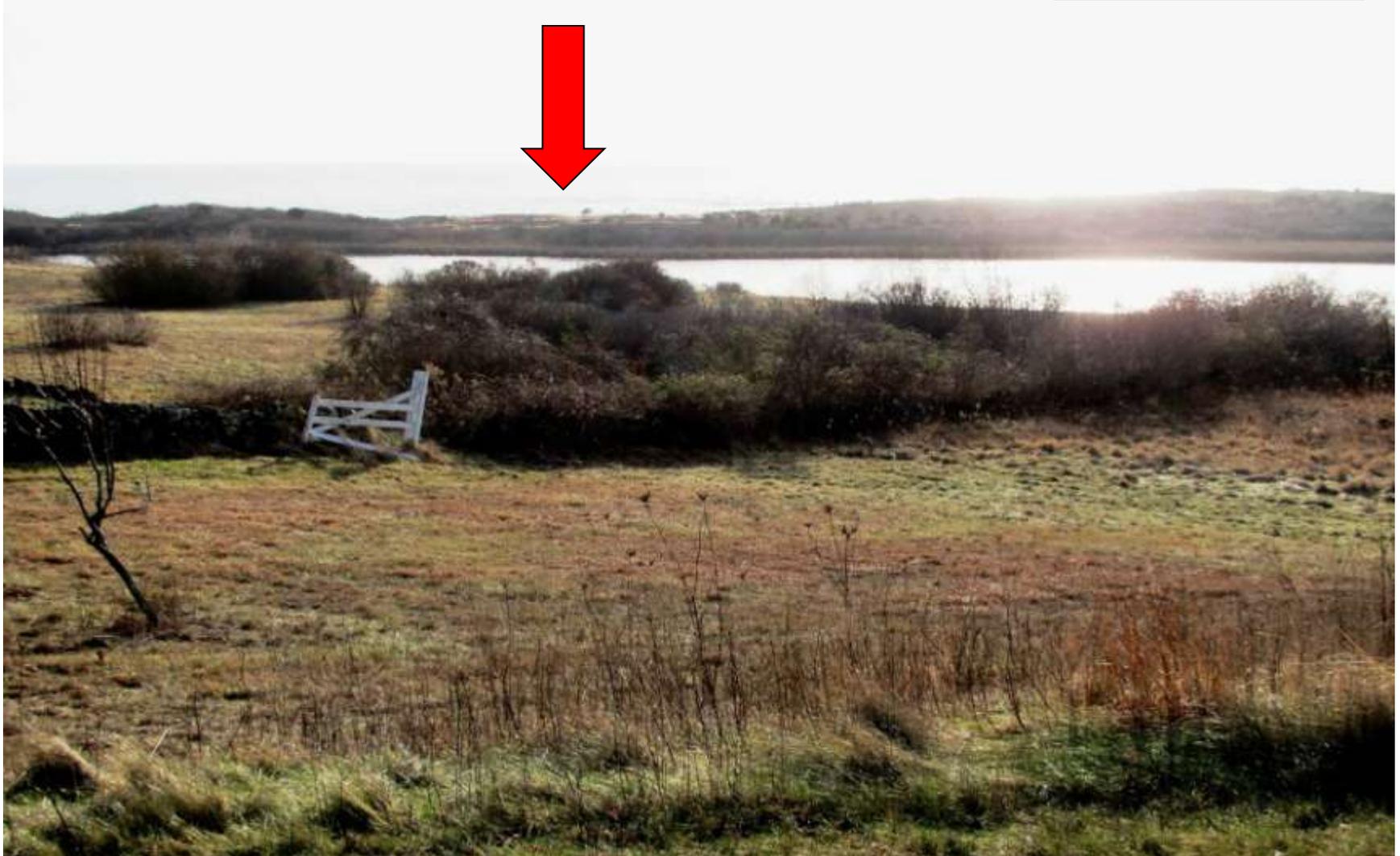
Map 35 Lot 38 No View Current Parking Area With Zoom



Map 35 Lot 38 View New Parking Area No Zoom No Screening



Map 35 Lot 38 View New Parking Area With Zoom No Screening



Review Other Updates

- **Review rough cost estimates for the Town's construction elements. Available in late February.**
 - **Consultant review and permitting.**
 - **Surveying.**
 - **Wampanoag archaeological survey.**
 - **Clear parking area, walking and skiff launch paths, install parking area features.**
 - **Parking area landscape screening.**
 - **Revetment plan and beach nourishment.**

Review Other Updates

- **Grant funding application update.**
 - **U.S. Department of Interior: Hurricane Sandy Coastal Resiliency Competitive Grants Program.**



Plan on submitting application for revetment removal and beach restoration consulting, permitting and construction expenses.

D. O. I.; Hurricane Sandy Coastal Resiliency Competitive Grant

- **\$100 million available for all awarded grants. Approximately 50-125 grants will be awarded depending upon the cost of each selected proposal.**
- **Estimate 400 applications will be submitted from all regions affected by Hurricane Sandy.**

D. O. I.; Hurricane Sandy Coastal Resiliency Competitive Grant

- **December 17 application webinar.**
- **Applications due January 31, 2014.**
- **Notify selected grant recipients early May 2014.**

Other Questions

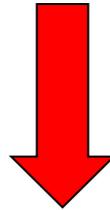
1. Does the proposed 10.5 - acres of additional leased land have a Conservation Restriction (CR) on it—that would prohibit relocating the parking area and installing the paths to the shore and for Squibnocket Pond access? **No.**

2. How long Will the New Parking Area Last?

- The consultants will address this question among others in detail.
- The Commonwealth's historical shoreline erosion data with mapping follows:

2. How long Will the New Parking Area Last?

- The rate of erosion of Squibnocket Beach has varied over time by the specific section of beach.
- Between 1994-2009, the rate of erosion for the section of beach shoreline east of the Mussel Bed and in front of the new parking area has averaged only 0.75 feet or 9 inches per year.



The Mussel Bed is providing natural protection against beach erosion for this section of beach.

2. How long Will the New Parking Area Last?

- The south (ocean side) edge of the new parking area will be approximately 120 feet north of the current shoreline.
- Based upon the historical rate of erosion, this section of the shoreline will not reach the new parking area for 120 – 150 years.

Source: http://maps.massgis.state.ma.us/map_ol/czm_shorelines.php

High Tide Shoreline Erosion by Beach Section 1844 - 2009



Transects and data from this image taken from: http://maps.mass.gov/arcgis/rest/map/shorelines_0102m_shorelines_0102m

Other Questions

- 3. How long will the understory vegetation last and help protect the land from excessive erosion?**

Parking Area Understory July 2013



Next Steps

- Award consultant contract and brief consultants.
- Plan on having Public Forum # 3 in late February or early March to review consultant opinions and other updates on negotiations, cost estimates and other issues.
- Plan on having Public Forum # 4 in April to review the final lease and maintenance terms and other updates.

Open Discussion

Thank you!

