

Squibnocket Beach Restoration and Access Project

Chilmark, Massachusetts

SUBMITTED TO

Executive Office of Energy and Environmental Affairs
Massachusetts Environmental Policy Act Office

PREPARED FOR

Town of Chilmark
401 Middle Road, PO Box 119
Chilmark, MA 02535

and

Squibnocket Farm, Inc.
279 Great Plains Road
West Tisbury, MA 02575

PREPARED BY

VHB, Inc.,

and

Vineyard Land Surveying & Engineering, Inc.

IN COOPERATION WITH

Ropes and Gray, LLP

and

Haley & Aldrich, Inc.

October, 2015



Table of Contents

MEPA Environmental Notification Form.....	1
ENF Narrative.....	29
Introduction.....	30
Project Background	31
Proponents and Land Ownership	32
Regulatory Context.....	34
MEPA Status	35
Existing Conditions.....	35
Wetland Resource Areas	36
Project Description	42
Proposed Improvements	42
Access Project.....	42
Town Project.....	44
Construction Sequence	46
Access Project.....	46
Town Project.....	47
Alternatives Analysis	48
Purpose and Need.....	48
Review Criteria	48
Parking Alternatives.....	48
Access Alternatives	51
Wetland Impacts / Preferred Alternative.....	55
Access Project.....	55
Town Project.....	56
Mitigation Measures	57
Long-term Design Related Mitigation Measures	57
Town Project.....	57
Access Project.....	59
Short-term Construction Related Measures	59
Regulatory Compliance	60
Massachusetts Environmental Policy Act (MEPA)	61
Massachusetts Wetlands Protection Act (WPA).....	61
Massachusetts Coastal Zone Management Plan.....	62
Massachusetts Natural Heritage and Endangered Species Program	65
M.G.L. Chapter 91 – Waterways Licensing	66
M.G.L. Chapter 9, Sections 26-27C – Historic Preservation	67
Conclusion.....	67



Attachment A	Figures
Attachment B	Distribution List

Environmental Notification Form

For Office Use Only

EEA#: _____

MEPA Analyst: _____

The information requested on this form must be completed in order to submit a document electronically for review under the Massachusetts Environmental Policy Act, 301 CMR 11.00.

Project Name: Squibnocket Beach Restoration and Access Project

Street Address: Squibnocket Road

Municipality: Chilmark

Watershed: Islands

Universal Transverse Mercator Coordinates:
41.318306, -70.765583

Latitude: 41°19'05.9"N

Longitude: 70°45'56.1"W

Estimated commencement date: Spring 2016

Estimated completion date: Fall 2016

Project Type: Roadway and parking lot replacement, and beach restoration

Status of project design: 20 %complete

Proponent: Jointly proposed by ^(A)Town of Chilmark and ^(B)Squibnocket Farm, Inc.

Street Address: ^(A) 401 Middle Road ^(B) 279 Great Plains Road

Municipality: ^(A) Chilmark ^(B) West Tisbury

State: MA

Zip Code: ^(A) 02535 ^(B) 02575

Name of Contact Person: ^(A) Reid Silva ^(B) Daniel Padien

Firm/Agency: ^(A) Vineyard Land Survey and Engineering ^(B) VHB

Street Address: ^(A) P.O. Box 421
^(B) 99 High Street, 10th Floor

Municipality: ^(A) West Tisbury ^(B) Boston

State: MA

Zip Code: ^(A) 02575 ^(B) 02110

Phone: ^(A) 508-693-3774
^(B) 617-607-2973

Fax: ^(A) 508-629-0440
^(B) 617-727-7782

E-mail: ^(A) Reid@vlse.net
^(B) DPadien@vhb.com

Does this project meet or exceed a mandatory EIR threshold (see 301 CMR 11.03)?

☐ Yes ☒ No

If this is an Expanded Environmental Notification Form (ENF) (see 301 CMR 11.05(7)) or a Notice of Project Change (NPC), are you requesting: No.

- Single EIR? (see 301 CMR 11.06(8)) ☐ Yes ☐ No
- Special Review Procedure? (see 301 CMR 11.09) ☐ Yes ☐ No
- Waiver of mandatory EIR? (see 301 CMR 11.11) ☐ Yes ☐ No
- Phase I Waiver? (see 301 CMR 11.11) ☐ Yes ☐ No

(Note: Greenhouse Gas Emissions analysis must be included in the Expanded ENF.)

Which MEPA review threshold(s) does the project meet or exceed (see 301 CMR 11.03)?

301 CMR 11.03(3)(b) 6 (construction of a pile-supported structure of 2,000 or more sf of base area).

Which State Agency Permits will the project require?

- MHC Archaeological Permit

Identify any financial assistance or land transfer from an Agency of the Commonwealth, including the Agency name and the amount of funding or land area in acres:

The Town of Chilmark received a grant of \$280,000 for Fiscal Year 2016 from the office of Coastal Zone Management through the Green Infrastructure for Coastal Resilience program for expenses related to the Town Project (as defined below).

Summary of Project Size & Environmental Impacts ¹	Existing	Change	Total
LAND			
Total site acreage	3.7 ±		
New acres of land altered	-	0.5	
Acres of impervious area	0.49	-0.40	0.09
Square feet of new bordering vegetated wetlands alteration		1,006± SF direct 3,600 SF shading	
Square feet of new other wetland alteration		2.74 ac (coastal bank, barrier beach, dune, LSCSF)	
Acres of new non-water dependent use of tidelands or waterways	0	0	
STRUCTURES			
Gross square footage	0	3,600	3,600 ²
Number of housing units	0	0	0
Maximum height (feet)	NA	TBD ³	TBD
TRANSPORTATION			
Vehicle trips per day	176 ⁴	8 ⁴	184 ⁴
Parking spaces	44±	+2	46
WASTEWATER			
Water Use (Gallons per day)	-	-	-
Water withdrawal (GPD)	-	-	-
Wastewater generation/treatment (GPD)	-	-	-
Length of water mains (miles)	-	-	-
Length of sewer mains (miles)	-	-	-

1 All figures provided are cumulative for the Town Project and the Access Project (each as defined below).

2 Proposed structures limited to pile-supported low-causeway.

3 The height of the proposed low causeway will be determined during final design following completion of the required geotechnical analysis. The design is subject to approval by the Chilmark Board of Selectmen and Conservation Commission.

4 ADT reflects conservatively estimated peak summer usage based on lot size and vehicle turnover two times per day.

Has this project been filed with MEPA before?

☐ Yes (EEA # _____) ☒ No

Has any project on this site been filed with MEPA before?

☐ Yes (EEA # _____) ☒ No

GENERAL PROJECT INFORMATION – all proponents must fill out this section

PROJECT DESCRIPTION:

Please see the attached project narrative for more information about the Projects.

Describe the existing conditions and land uses on the project site:

Two co-located Projects are presented in this ENF, one as the “Town Project” and the other as the “Access Project.” The Projects share the same Project Site, which is depicted on Figures 1 and 2 to the attached project narrative. The Project Site includes an existing parking lot used to access Squibnocket Beach (the “Existing Town Lot”), portions of Squibnocket Road, and the Revetment (as defined below). Undeveloped areas of the Project Site include Squibnocket Beach, the hillside between Squibnocket Road and Squibnocket Pond, and state-regulated Bordering Vegetated Wetlands between the pond and the Existing Town Lot.

The Existing Town Lot comprises approximately 14,200 square feet of soil cement pavement and is armored on its seaward edge by a revetment composed of stacked stones extending laterally for approximately 200 linear feet and vertically approximately 6 feet from the grade of the barrier beach (the “Parking Lot Revetment”). Located to the west of the Existing Town Lot is the “Causeway Revetment”, which is composed of a total of approximately 317 linear feet of dry-laid stones armoring both the seaward and landward/pondward sides of the road as it approaches Money Hill. The Causeway Revetment and Parking Lot Revetment are referred to as the Revetment.

The Project Site contains local and state-regulated wetland resources areas, the locations and boundaries of which were field delineated by VHB environmental scientists in October 2013, independently delineated by LEC Environmental Consultants in August 2014, and reviewed by Epsilon Associates under the direction of a committee formed by the Town. In July 2015, the Chilmark Conservation Commission issued two Orders of Conditions confirming the resource area boundaries (See DEP File No. 012-741 and No. 012-743) and authorizing exploratory borings and test pits at the Project Site in furtherance of the Project design process.

The Project Site includes the following state-regulated wetland resource areas (and, in some instances, the 100-foot buffer zone for each resource area) as each is defined in the Wetlands Protection Act and implementing regulations at 310 CMR 10.00: Bordering Vegetated Wetlands, Coastal Bank, Land Subject to Coastal Storm Flowage, Coastal Beach, Barrier Beach, Coastal Dune and, Land Subject to Tidal Action.

Describe the proposed project and its programmatic and physical elements:

The Projects involve the following basic elements:

Access Project:

- Construction of a relocated roadway in two segments, one at-grade and the other on a pile-supported low causeway, with a combined length of approximately 580 feet; and
- Relocation of utilities to a location on, about, or under the relocated roadway.

Town Project:

- Construction of a 46±-space parking lot on land owned by the Town to replace the Existing Town Lot and support access to the restored Squibnocket Beach (referred to here as the “Relocated Town Lot”);
- Construction of a relocated skiff launch area providing access to Squibnocket Pond;
- Removal of approximately 520 linear feet of the Revetment;
- Demolition of the Existing Town Lot and removal of unsuitable materials from the barrier beach; and
- Construction of a vegetated dune landform connecting Money Hill with the seaward end of the northern point of the Existing Town Lot to restore a more natural landform along this section of barrier beach.

The Projects have been designed to comply with all applicable performance standards under the Wetlands Protection Act and its implementing regulations and will result in a substantial net benefit to the barrier beach by removing approximately 520 linear feet of the Revetment and approximately 0.4 acres of soil cement pavement.

The Projects are consistent with state and regional guidance regarding managed retreat from sensitive coastal areas and the use of pile-supported structures to minimize impacts to coastal processes.

NOTE: The project description should summarize both the project’s direct and indirect impacts (including construction period impacts) in terms of their magnitude, geographic extent, duration and frequency, and reversibility, as applicable. It should also discuss the infrastructure requirements of the project and the capacity of the municipal and/or regional infrastructure to sustain these requirements into the future.

Describe the on-site project alternatives (and alternative off-site locations, if applicable), considered by the proponent, including at least one feasible alternative that is allowed under current zoning, and the reasons(s) that they were not selected as the preferred alternative:

For the Town Project, the proponents considered a No Build and six (6) build alternatives to identify a suitable location for a replacement parking lot to serve Squibnocket Beach. The preferred alternative was selected because the replacement parking lot will be located off the barrier beach, set back at a protective distance from the shoreline but still proximal to the beach, will preserve the existing parking capacity, and is substantially located within a currently paved road.

For the Access Project, the alternatives included a No Build and eight (8) build alternatives with varying amounts of impact to coastal and inland wetland resource areas. The preferred alternative was selected because it minimizes wetland impacts, meets the project purpose of providing long term access to Squibnocket Point, promotes the natural migration of sand on the barrier beach, and moves the vehicular access farther from the shoreline than any of the other viable alternative considered.

All the alternatives considered, except for the No Build alternatives, were vetted by a committee formed by the Town of Chilmark. The Committee's preferred alternatives were presented to and approved by the Chilmark Town Meeting in February 2015.

NOTE: *The purpose of the alternatives analysis is to consider what effect changing the parameters and/or siting of a project, or components thereof, will have on the environment, keeping in mind that the objective of the MEPA review process is to avoid or minimize damage to the environment to the greatest extent feasible. Examples of alternative projects include alternative site locations, alternative site uses, and alternative site configurations.*

Summarize the mitigation measures proposed to offset the impacts of the preferred alternative:

The purpose of the Projects is to reverse or mitigate the environmental impacts of past activities at the Project Site. They are intended to improve the quality and value of wetland resources at the Project Site, while enhancing and prolonging public recreational amenities and preserving long-term vehicular access to Squibnocket Point. Removal of the existing engineered structures and infrastructure from vulnerable areas and restoration of the natural coastal landform will substantially improve storm damage prevention, flood control, and environmental conditions at the Project Site.

The Town seeks to replace the Revetment, a hard structure that attempts to oppose wave energy and stabilize the shoreline, with improvements that will harmonize the imperative of securing long-term vehicular access to Squibnocket Point with the maintenance of a dynamic shoreline, capable of shifting and changing naturally. The restored beach and dune aspects of the Town Project will permit the barrier beach to perform its natural functions, including providing a buffer to storm waves and protecting landward areas from storm damage.

In addition to the net environmental benefits inherent in the Projects, short-term construction related and long-term operational measures are proposed to avoid, minimize and mitigate impacts to coastal wetland resource areas. These include a comprehensive set of measures to minimize, to the extent practicable, construction period and permanent alterations to wetland resources and associated buffer zones.

If the project is proposed to be constructed in phases, please describe each phase:

The Projects are anticipated to be constructed within a single phase; however, the Projects will be constructed sequentially with the Access Project constructed first, followed by the Town

Project.

AREAS OF CRITICAL ENVIRONMENTAL CONCERN:

Is the project within or adjacent to an Area of Critical Environmental Concern?

☐ Yes (Specify _____)

☒ No

if yes, does the ACEC have an approved Resource Management Plan? ____ Yes ____ No;

If yes, describe how the project complies with this plan.

Will there be stormwater runoff or discharge to the designated ACEC? ____ Yes ____ No;

If yes, describe and assess the potential impacts of such stormwater runoff/discharge to the designated ACEC.

RARE SPECIES:

Does the project site include Estimated and/or Priority Habitat of State-Listed Rare Species? (see http://www.mass.gov/dfwele/dfw/nhosp/regulatory_review/priority_habitat/priority_habitat_home.htm)

☒ Yes (Specify PH 15/EH 79 – northern harrier) ☐ No

HISTORICAL /ARCHAEOLOGICAL RESOURCES:

Does the project site include any structure, site or district listed in the State Register of Historic Place or the inventory of Historic and Archaeological Assets of the Commonwealth?

☒ Yes (Specify See below) ☐ No

There are no listed or inventoried above-ground historic resource in the vicinity of the project site. However, the project site is located in an area of known archaeological sensitivity for prehistoric resources associated with the early use of Squibnocket Point and the surrounding areas by native Americans. The State Historic and Archaeological Inventory lists archaeological sites with ½ mile of the project site.

If yes, does the project involve any demolition or destruction of any listed or inventoried historic or archaeological resources? ☐ Yes (Specify _____) ☒ No

An intensive locational survey was completed in September 2015 pursuant to a permit issued by MHC. The results of that investigation will be reported to MHC and will inform the design and construction parameters necessary to avoid, minimize and mitigate potential impacts to any archaeological resources that may be identified at the Project Site. No demolition of any listed or inventories resource is proposed or anticipated.

WATER RESOURCES:

Is there an Outstanding Resource Water (ORW) on or within a half-mile radius of the project site? ____Yes X No; if yes, identify the ORW and its location. _____

(NOTE: Outstanding Resource Waters include Class A public water supplies, their tributaries, and bordering wetlands; active and inactive reservoirs approved by MassDEP; certain waters within Areas of Critical Environmental Concern, and certified vernal pools. Outstanding resource waters are listed in the Surface Water Quality Standards, 314 CMR 4.00.)

Are there any impaired water bodies on or within a half-mile radius of the project site? ____Yes X No; if yes, identify the water body and pollutant(s) causing the impairment:_____.

Is the project within a medium or high stress basin, as established by the Massachusetts Water Resources Commission? ____Yes X No

STORMWATER MANAGEMENT:

Generally describe the project's stormwater impacts and measures that the project will take to comply with the standards found in MassDEP's Stormwater Management Regulations:

The project will result in a net reduction of soil cement pavement on the barrier beach. Stormwater runoff from the Relocated Town Lot, relocated road and low causeway will be collected, treated and infiltrated using a pervious parking surface, vegetated swales and infiltrating catch basins (in the manner described in the attached project narrative). No new point source discharges are proposed.

MASSACHUSETTS CONTINGENCY PLAN:

Has the project site been, or is it currently being, regulated under M.G.L.c.21E or the Massachusetts Contingency Plan? Yes ___ No X; if yes, please describe the current status of the site (including Release Tracking Number (RTN), cleanup phase, and Response Action Outcome classification): _____

Is there an Activity and Use Limitation (AUL) on any portion of the project site? Yes ___ No X; if yes, describe which portion of the site and how the project will be consistent with the AUL: _____.

Are you aware of any Reportable Conditions at the property that have not yet been assigned an RTN? Yes ___ No X; if yes, please describe: _____

SOLID AND HAZARDOUS WASTE:

If the project will generate solid waste during demolition or construction, describe alternatives considered for re-use, recycling, and disposal of, e.g., asphalt, brick, concrete, gypsum, metal, wood:

Stone from the Revetment will be reused on-site in the retaining wall proposed west of the Relocated Parking Lot. Asphalt and concrete removed from the Existing Town Lot and any materials removed that relate to the utilities presently located beneath existing roadway and Existing Town Lot will be recycled or disposed of in accordance with applicable local, state and federal requirements.

(NOTE: Asphalt pavement, brick, concrete and metal are banned from disposal at Massachusetts landfills and waste combustion facilities and wood is banned from disposal at Massachusetts landfills. See 310 CMR 19.017 for the complete list of banned materials.)

Will your project disturb asbestos containing materials? Yes ___ No X; if yes, please consult state asbestos requirements at <http://mass.gov/MassDEP/air/asbhom01.htm>

Describe anti-idling and other measures to limit emissions from construction equipment:

The Commonwealth of Massachusetts' anti-idling law will be enforced during the construction phase of the Project, including the installation of on-site anti-idling signage and including such requirements in the project specifications.

DESIGNATED WILD AND SCENIC RIVER:

Is this project site located wholly or partially within a defined river corridor of a federally designated Wild and Scenic River or a state designated Scenic River? Yes ___ No X; if yes, specify name of river and designation:

If yes, does the project have the potential to impact any of the "outstandingly remarkable" resources of a federally Wild and Scenic River or the stated purpose of a state designated Scenic River?

Yes ____ No ____ ; if yes, specify name of river and designation: _____;
if yes, will the project will result in any impacts to any of the designated "outstandingly remarkable" resources of the Wild and Scenic River or the stated purposes of a Scenic River.
Yes ____ No ____ ;
if yes, describe the potential impacts to one or more of the "outstandingly remarkable" resources or stated purposes and mitigation measures proposed.

ATTACHMENTS:

1. List of all attachments to this document.
2. U.S.G.S. map (good quality color copy, 8-½ x 11 inches or larger, at a scale of 1:24,000) indicating the project location and boundaries.
- 3.. Plan, at an appropriate scale, of existing conditions on the project site and its immediate environs, showing all known structures, roadways and parking lots, railroad rights-of-way, wetlands and water bodies, wooded areas, farmland, steep slopes, public open spaces, and major utilities.
- 4 Plan, at an appropriate scale, depicting environmental constraints on or adjacent to the project site such as Priority and/or Estimated Habitat of state-listed rare species, Areas of Critical Environmental Concern, Chapter 91 jurisdictional areas, Article 97 lands, wetland resource area delineations, water supply protection areas, and historic resources and/or districts.
5. Plan, at an appropriate scale, of proposed conditions upon completion of project (if construction of the project is proposed to be phased, there should be a site plan showing conditions upon the completion of each phase).
6. List of all agencies and persons to whom the proponent circulated the ENF, in accordance with 301 CMR 11.16(2).
7. List of municipal and federal permits and reviews required by the project, as applicable.

LAND SECTION – all proponents must fill out this section

I. Thresholds / Permits

A. Does the project meet or exceed any review thresholds related to **land** (see 301 CMR 11.03(1) ____ Yes X No; if yes, specify each threshold:

II. Impacts and Permits

A. Describe, in acres, the current and proposed character of the project site, as follows:

	<u>Existing</u>	<u>Change</u>	<u>Total</u>
Footprint of buildings	<u>0</u>	<u>0</u>	<u>0</u>
Internal roadways	<u>0</u>	<u>0</u>	<u>0</u>
Parking and other paved areas	<u>0.49</u>	<u>-0.40</u>	<u>0.09</u>
Other altered areas	<u>0</u>	<u>+0.08</u>	<u>0.08</u>
Undeveloped areas	<u>3.19</u>	<u>+0.40</u>	<u>3.59</u>
Total: Project Site Acreage	<u>3.7</u>	<u>0</u>	<u>3.7</u>

B. Has any part of the project site been in active agricultural use in the last five years?
____ Yes X No; if yes, how many acres of land in agricultural use (with prime state or locally important agricultural soils) will be converted to nonagricultural use?

C. Is any part of the project site currently or proposed to be in active forestry use?
____ Yes X No; if yes, please describe current and proposed forestry activities and indicate whether any part of the site is the subject of a forest management plan approved by the Department of Conservation and Recreation:

D. Does any part of the project involve conversion of land held for natural resources purposes in accordance with Article 97 of the Amendments to the Constitution of the Commonwealth to any purpose not in accordance with Article 97? ____ Yes X No; if yes, describe:

E. Is any part of the project site currently subject to a conservation restriction, preservation restriction, agricultural preservation restriction or watershed preservation restriction? ____ Yes X No; if yes, does the project involve the release or modification of such restriction? ____ Yes No; if yes, describe:

A portion of the project site is currently owned by a charitable foundation that seeks to conserve open land on Martha's Vineyard, but is not subject to any conservation or other restriction formally created pursuant to M.G.L. c. 184.

F. Does the project require approval of a new urban redevelopment project or a fundamental change in an existing urban redevelopment project under M.G.L.c.121A? ____ Yes X No; if yes, describe:

G. Does the project require approval of a new urban renewal plan or a major modification of an existing urban renewal plan under M.G.L.c.121B? Yes ____ No X; if yes, describe:

III. Consistency

A. Identify the current municipal comprehensive land use plan
Title: The 1985 Chilmark Master Plan, as superseded by the 2000-'03 Supplement (the "Chilmark Master Plan") Date: 2003 (last updated)

B. Describe the project's consistency with that plan with regard to:

1) economic development:

The Chilmark Master Plan describes the Town's rural character as "the Town's most valuable natural resource" and sets forth goals for retaining natural resources and open space. The Town Project directly responds to this goal, as the purpose is to allow Squibnocket Beach to return to its natural barrier beach state. The Town Project could not proceed without providing long-term vehicular access to Squibnocket Point, as Squibnocket Point includes lawfully constructed residential structures. However, by relocating vehicular access from its current location to one setback farther from the recreational area, the experience of beach-goers seeking a rural beach environment should be improved. Further, the Access Project will preserve the existing rural character of the area in its final design to the extent reasonably practicable. Finally, the Access Project as proposed in this ENF was approved at the February 2015 Chilmark Town Meeting, as further described in the attached project narrative.

2) adequacy of infrastructure:

The Chilmark Master Plan is silent as to the goal of ensuring adequate infrastructure, though it notes problems with traffic at Squibnocket Beach and insufficient parking capacity. However, the Projects will improve the infrastructure currently serving Squibnocket Beach and Squibnocket Point by increasing the parking capacity for recreational access to the beach and providing long-term access to Squibnocket Point. The Projects will produce more sustainable infrastructure, reducing maintenance and emergency repair expenses for the proponents, as the infrastructure will be at a more inland location and the vehicular access will be more protected at a higher elevation. Additionally, the Access Project is funded entirely (including post-construction maintenance) by private landowners.

3) open space impacts:

One of the stated goals of the Chilmark Master Plan is to "[i]dentify and reserve adequate land for future requirements for town facilities, open space and recreation." The Projects will directly preserve and enhance open space and natural resources because it involves the restoration of Squibnocket Beach for recreational uses and shifting vehicular access to a location farther from the recreational area.

The Chilmark Master Plan also requires the Town to make efforts to acquire additional shoreline property. In connection with the Projects, the proponents intend to enter into a long term lease to extend the Town's beach rights at Squibnocket Beach by approximately 1,000 linear feet to the west of the current leased premises. No construction activities or capital improvements are proposed in the expanded beach area, other than the kayak launch.

4) compatibility with adjacent land uses:

The Chilmark Master Plan is silent as to a project's compatibility with adjacent uses. The goal of the Projects is to support the long-term viability of existing residential and

recreational land uses adjacent to the Project Site. If the Projects are not built, these adjacent land uses likely will cease to be viable in the medium to long term.

- C. Identify the current Regional Policy Plan of the applicable Regional Planning Agency (RPA)
RPA: Martha's Vineyard Commission

Title: The Island Plan Date: December 10, 2009

- D. Describe the project's consistency with that plan with regard to:

- 1) economic development:

Similar to the Chilmark Master Plan, the Island Plan seeks to limit development and preserve the character of Martha's Vineyard. For the same reason the Projects are consistent with the Chilmark Master Plan, the Projects are consistent with the Island Plan.

- 2) adequacy of infrastructure:

To prepare for climate change, the Island Plan suggests minimizing shoreline armoring. The Projects are directly responsive to this directive in the Island Plan, as they involve the removal of an existing man-made revetment and the construction of a new roadway and parking facility that will not require armoring and will permit the natural process of sediment transportation essential to a barrier beach.

- 3) open space impacts:

The Island Plan promotes the preservation of open space and shoreline acquisition for public use. As stated in Part C (3) above, the Projects are fully aligned with these goals.

RARE SPECIES SECTION

I. Thresholds / Permits

- A. Will the project meet or exceed any review thresholds related to **rare species or habitat** (see 301 CMR 11.03(2))? ___ Yes X No; if yes, specify, in quantitative terms:

(NOTE: If you are uncertain, it is recommended that you consult with the Natural Heritage and Endangered Species Program (NHESP) prior to submitting the ENF.)

- B. Does the project require any state permits related to **rare species or habitat**? ___ Yes X No
- C. Does the project site fall within mapped rare species habitat (Priority or Estimated Habitat?) in the current Massachusetts Natural Heritage Atlas (attach relevant page)? X Yes ___ No.
- D. If you answered "No" to all questions A, B and C, proceed to the **Wetlands, Waterways, and Tidelands Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Rare Species section below.

II. Impacts and Permits

- A. Does the project site fall within Priority or Estimated Habitat in the current Massachusetts Natural Heritage Atlas (attach relevant page)? X Yes ___ No. If yes,
1. Have you consulted with the Division of Fisheries and Wildlife Natural Heritage and Endangered Species Program (NHESP)? X Yes ___ No; if yes, have you received a determination as to whether the project will result in the "take" of a rare species? ___ Yes X No; if yes, attach the letter of determination to this submission.

The NHESP determined that the exploratory work authorized in two Orders of Conditions issued by the Chilmark Conservation Commission on July 15, 2015 (DEP File Nos. 012-741 and 012-743) will not result in a take under the Massachusetts Endangered Species Act. The proponents will continue to consult with NHESP as the project design is prepared and the next Notices of Intent for the Projects are prepared.

1. Will the project "take" an endangered, threatened, and/or species of special concern in accordance with M.G.L. c.131A (see also 321 CMR 10.04)? ___ Yes X No; if yes, provide a summary of proposed measures to minimize and mitigate rare species impacts.

The Projects are not expected to result in a take because the Projects are not expected to adversely affect any nesting habitat or the capacity of the site to provide hunting habitat for the state listed species.

2. Which rare species are known to occur within the Priority or Estimated Habitat?

Northern harrier (*Circus cyaneus*)

4. Has the site been surveyed for rare species in accordance with the Massachusetts Endangered Species Act? X Yes ___ No

If your project is within Estimated Habitat, have you filed a Notice of Intent or received an Order of Conditions for this project? X Yes ___ No; if yes, did you send a copy of the Notice of Intent to the Natural Heritage and Endangered Species Program, in accordance with the Wetlands Protection Act regulations? X Yes ___ No

Initial Orders of Conditions were obtained in July 2015 authorizing design-related investigations within resource areas at the Project Site. The Notices of Intent were shared with the Program.

- B. Will the project "take" an endangered, threatened, and/or species of special concern in accordance with M.G.L. c.131A (see also 321 CMR 10.04)? ____ Yes X No; if yes, provide a summary of proposed measures to minimize and mitigate impacts to significant habitat:

WETLANDS, WATERWAYS, AND TIDELANDS SECTION

I. Thresholds / Permits

A. Will the project meet or exceed any review thresholds related to **wetlands, waterways, and tidelands** (see 301 CMR 11.03(3))? X Yes No; if yes, specify, in quantitative terms:

B. Does the project require any state permits (or a local Order of Conditions) related to **wetlands, waterways, or tidelands**? X Yes No; if yes, specify which permit:
Local Order of Conditions

C. If you answered "No" to both questions A and B, proceed to the **Water Supply Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Wetlands, Waterways, and Tidelands Section below.

II. Wetlands Impacts and Permits

A. Does the project require a new or amended Order of Conditions under the Wetlands Protection Act (M.G.L. c.131A)? X Yes No; if yes, has a Notice of Intent been filed? Yes X No; if yes, list the date and MassDEP file number: ; if yes, has a local Order of Conditions been issued? Yes No; Was the Order of Conditions appealed? Yes No. Will the project require a Variance from the Wetlands regulations? Yes No.

Notices of Intent for the Access Project and the Town Project will be filed after completion of the design investigations authorized by the Orders of Conditions issued in July 2015.

B. Describe any proposed permanent or temporary impacts to wetland resource areas located on the project site:

The Projects include substantial net benefits to coastal bank, coastal dune and barrier beach through the removal of approximately 0.4 acres of soil cement pavement and approximately 520 linear feet of stone revetment from the project site. The Town Project includes the alteration of approximately 970 square feet of BVW and construction of approximately 1,250 SF of replacement wetlands. The Access Project will not result in the loss of any wetlands but will shade approximately 3,600 SF of BVW.

C. Estimate the extent and type of impact that the project will have on wetland resources, and indicate whether the impacts are temporary or permanent:

<u>Coastal Wetlands</u>	<u>Area (square feet) or Length (linear feet)</u>	<u>Temporary or Permanent Impact?</u>
Land Under the Ocean	<u> 0 </u>	<u> </u>
Designated Port Areas	<u> 0 </u>	<u> </u>
Coastal Beaches	<u> 0 </u>	<u> </u>
Coastal Dunes	<u> 15,850 SF </u>	<u>permanent enhancement</u>
Barrier Beaches	<u> 36,680 SF </u>	<u>permanent enhancement</u>
	<u> 6,500 SF </u>	<u>permanent</u>
Coastal Banks	<u> 2,600 LF </u>	<u>permanent (access project)</u>
	<u> 8,600 SF </u>	<u>permanent enhancement</u>
Rocky Intertidal Shores	<u> 0 </u>	<u> </u>
Salt Marshes	<u> 0 </u>	<u> </u>
Land Under Salt Ponds	<u> 0 </u>	<u> </u>

Land Containing Shellfish	<u>0</u>	<u></u>
Fish Runs	<u>0</u>	<u></u>
Land Subject to Coastal Storm Flowage	<u>48,910</u>	<u>permanent</u>

Inland Wetlands

Bank (If)	<u>0</u>	<u></u>
Bordering Vegetated Wetlands	<u>3,600 SF</u>	<u>permanent shading</u>
	<u>970 SF</u>	<u>permanent</u>
Isolated Vegetated Wetlands	<u>0</u>	<u></u>
Land under Water	<u>0</u>	<u></u>
Isolated Land Subject to Flooding	<u>0</u>	<u></u>
Bordering Land Subject to Flooding	<u>0</u>	<u></u>
Riverfront Area	<u>0</u>	<u></u>

D. Is any part of the project?

1. proposed as a **limited project**? Yes X No; if yes, what is the area (in sf)?
2. the construction or alteration of a **dam**? Yes X No; if yes, describe:
3. fill or structure in a **velocity zone** or **regulatory floodway**? X Yes No
4. dredging or disposal of dredged material? Yes X No; if yes, describe the volume of dredged material and the proposed disposal site:
5. a discharge to an **Outstanding Resource Water (ORW)** or an **Area of Critical Environmental Concern (ACEC)**? Yes X No
6. subject to a wetlands restriction order? X Yes No; if yes, identify the area (in sf):

See Order recorded in 1974 in Dukes Registry of Deeds in Book 319, Page 442. The total area covered by this Order is large and indeterminate, however we estimate that this Order affects approximately 12,700 SF of the Project Site, including the southernmost portions of the Project Site located between Squibnocket Pond and the Atlantic Ocean. These portions of the Project Site will be used for a small section of the low causeway and at-grade roadways related to the Access Project and the relocated skiff launch on Squibnocket Pond to be constructed as part of the Town Project. The Order encourages the use of elevated roadways and other pile-supported structures "as to permit the reasonably unobstructed flow of the tide and preserve the natural contour of the marsh" such as those proposed herein. The Order also allows for construction and maintenance of access "where alternative means of access from a public way to unrestricted land of the same owner is unavailable" and the construction of "boat launching ramps." The Projects are consistent with all applicable terms of the Order.

7. located in buffer zones? X Yes No; if yes, how much (in sf) 13,000±

E. Will the project:

1. be subject to a local wetlands ordinance or bylaw? X Yes No
2. alter any federally-protected wetlands not regulated under state law? Yes X No; if yes, what is the area (sf)?

III. Waterways and Tidelands Impacts and Permits

A. Does the project site contain waterways or tidelands (including filled former tidelands) that are subject to the Waterways Act, M.G.L.c.91? Yes X No; if yes, is there a current Chapter 91 License or Permit affecting the project site? Yes No; if yes, list the date and license or permit number and provide a copy of the historic map used to determine extent of filled

tidelands:

- D. Does the project require a new or modified license or permit under M.G.L.c.91? ____ Yes X No;
if yes, how many acres of the project site subject to M.G.L.c.91 will be for non-water-dependent
use? Current ____ Change ____ Total ____

If yes, how many square feet of solid fill or pile-supported structures (in sf)?

- C. For non-water-dependent use projects, indicate the following:

Area of filled tidelands on the site: _____

Area of filled tidelands covered by buildings: _____

For portions of site on filled tidelands, list ground floor uses and area of each use:

Does the project include new non-water-dependent uses located over flowed tidelands?

Yes ____ No ____

Height of building on filled tidelands _____

Also show the following on a site plan: Mean High Water, Mean Low Water, Water-dependent Use Zone, location of uses within buildings on tidelands, and interior and exterior areas and facilities dedicated for public use, and historic high and historic low water marks.

- D. Is the project located on landlocked tidelands? ____ Yes X No; if yes, describe the project's impact on the public's right to access, use and enjoy jurisdictional tidelands and describe measures the project will implement to avoid, minimize or mitigate any adverse impact:

- E. Is the project located in an area where low groundwater levels have been identified by a municipality or by a state or federal agency as a threat to building foundations? ____ Yes X No; if yes, describe the project's impact on groundwater levels and describe measures the project will implement to avoid, minimize or mitigate any adverse impact:

- F. Is the project non-water-dependent **and** located on landlocked tidelands **or** waterways or tidelands subject to the Waterways Act **and** subject to a mandatory EIR? ____ Yes X No;

(NOTE: If yes, then the project will be subject to Public Benefit Review and Determination.)

- G. Does the project include dredging? ____ Yes X No; if yes, answer the following questions:

What type of dredging? Improvement ____ Maintenance ____ Both ____

What is the proposed dredge volume, in cubic yards (cys) _____

What is the proposed dredge footprint ____ length (ft.) ____ width (ft.) ____ depth (ft.);

Will dredging impact the following resource areas?

Intertidal Yes ____ No ____; if yes, ____ sq. ft.

Outstanding Resource Waters Yes ____ No ____; if yes, ____ sq ft

Other resource area (i.e. shellfish beds, eel grass beds) Yes ____ No ____; if yes ____ sq. ft.

If yes to any of the above, have you evaluated appropriate and practicable steps to: 1) avoidance; 2) if avoidance is not possible, minimization; 3) if either avoidance or minimize is not possible, mitigation?

If no to any of the above, what information or documentation was used to support this determination?

Provide a comprehensive analysis of practicable alternatives for improvement dredging in accordance with 314 CMR 9.07(1)(b). Physical and chemical data of the sediment shall be included in the comprehensive analysis.

Sediment Characterization

Existing gradation analysis results? ____ Yes ____ No; if yes, provide results.

Existing chemical results for parameters listed in 314 CMR 9.07(2)(b)6? ☐ Yes
☐ No; if yes, provide results.

Do you have sufficient information to evaluate feasibility of the following management options for dredged sediment? If yes, check the appropriate option.

Beach Nourishment ☐

Unconfined Ocean Disposal ☐

Confined Disposal:

Confined Aquatic Disposal (CAD) ☐

Confined Disposal Facility (CDF) ☐

Landfill Reuse in accordance with COMM-97-001 ☐

Shoreline Placement ☐

Upland Material Reuse ☐

In-State landfill disposal ☐

Out-of-state landfill disposal ☐

(NOTE: This information is required for a 401 Water Quality Certification.)

IV. Consistency:

- A. Does the project have effects on the coastal resources or uses, and/or is the project located within the Coastal Zone? ☒ Yes ☐ No; if yes, describe these effects and the projects consistency with the policies of the Office of Coastal Zone Management:

See Table 4 of the attached project narrative for a description of how the Projects comply with all relevant CZM policies.

- B. Is the project located within an area subject to a Municipal Harbor Plan? ☐ Yes ☒ No; if yes, identify the Municipal Harbor Plan and describe the project's consistency with that plan:

WATER SUPPLY SECTION

I. Thresholds / Permits

A. Will the project meet or exceed any review thresholds related to **water supply** (see 301 CMR 11.03(4))? ___ Yes X No; if yes, specify, in quantitative terms:

B. Does the project require any state permits related to **water supply**? ___ Yes X No; if yes, specify which permit:

C. If you answered "No" to both questions A and B, proceed to the **Wastewater Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Water Supply Section below.

II. Impacts and Permits

A. Describe, in gallons per day (gpd), the volume and source of water use for existing and proposed activities at the project site:

	<u>Existing</u>	<u>Change</u>	<u>Total</u>
Municipal or regional water supply	_____	_____	_____
Withdrawal from groundwater	_____	_____	_____
Withdrawal from surface water	_____	_____	_____
Interbasin transfer	_____	_____	_____

(NOTE: Interbasin Transfer approval will be required if the basin and community where the proposed water supply source is located is different from the basin and community where the wastewater from the source will be discharged.)

B. If the source is a municipal or regional supply, has the municipality or region indicated that there is adequate capacity in the system to accommodate the project? ___ Yes ___ No

C. If the project involves a new or expanded withdrawal from a groundwater or surface water source, has a pumping test been conducted? ___ Yes ___ No; if yes, attach a map of the drilling sites and a summary of the alternatives considered and the results. _____

D. What is the currently permitted withdrawal at the proposed water supply source (in gallons per day)? _____ Will the project require an increase in that withdrawal? ___ Yes ___ No; if yes, then how much of an increase (gpd)? _____

E. Does the project site currently contain a water supply well, a drinking water treatment facility, water main, or other water supply facility, or will the project involve construction of a new facility? ___ Yes ___ No. If yes, describe existing and proposed water supply facilities at the project site:

	<u>Permitted Flow</u>	<u>Existing Avg Daily Flow</u>	<u>Project Flow</u>	<u>Total</u>
Capacity of water supply well(s) (gpd)	_____	_____	_____	_____
Capacity of water treatment plant (gpd)	_____	_____	_____	_____

F. If the project involves a new interbasin transfer of water, which basins are involved, what is the direction of the transfer, and is the interbasin transfer existing or proposed?

G. Does the project involve:

1. new water service by the Massachusetts Water Resources Authority or other agency of the Commonwealth to a municipality or water district? ___ Yes ___ No
2. a Watershed Protection Act variance? ___ Yes ___ No; if yes, how many acres of alteration?
3. a non-bridged stream crossing 1,000 or less feet upstream of a public surface drinking water supply for purpose of forest harvesting activities? ___ Yes ___ No

III. Consistency

Describe the project's consistency with water conservation plans or other plans to enhance water resources, quality, facilities and services:

WASTEWATER SECTION

I. Thresholds / Permits

A. Will the project meet or exceed any review thresholds related to **wastewater** (see 301 CMR 11.03(5))? ___ Yes X No; if yes, specify, in quantitative terms:

B. Does the project require any state permits related to **wastewater**? ___ Yes X No; if yes, specify which permit:

C. If you answered "No" to both questions A and B, proceed to the **Transportation -- Traffic Generation Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Wastewater Section below.

II. Impacts and Permits

A. Describe the volume (in gallons per day) and type of disposal of wastewater generation for existing and proposed activities at the project site (calculate according to 310 CMR 15.00 for septic systems or 314 CMR 7.00 for sewer systems):

	<u>Existing</u>	<u>Change</u>	<u>Total</u>
Discharge of sanitary wastewater	_____	_____	_____
Discharge of industrial wastewater	_____	_____	_____
TOTAL	_____	_____	_____
	<u>Existing</u>	<u>Change</u>	<u>Total</u>
Discharge to groundwater	_____	_____	_____
Discharge to outstanding resource water	_____	_____	_____
Discharge to surface water	_____	_____	_____
Discharge to municipal or regional wastewater facility	_____	_____	_____
TOTAL	_____	_____	_____

B. Is the existing collection system at or near its capacity? ___ Yes ___ No; if yes, then describe the measures to be undertaken to accommodate the project's wastewater flows:

C. Is the existing wastewater disposal facility at or near its permitted capacity? ___ Yes ___ No; if yes, then describe the measures to be undertaken to accommodate the project's wastewater flows:

D. Does the project site currently contain a wastewater treatment facility, sewer main, or other wastewater disposal facility, or will the project involve construction of a new facility? ___ Yes ___ No; if yes, describe as follows:

	<u>Permitted</u>	<u>Existing Avg Daily Flow</u>	<u>Project Flow</u>	<u>Total</u>
Wastewater treatment plant capacity (in gallons per day)	_____	_____	_____	_____

E. If the project requires an interbasin transfer of wastewater, which basins are involved, what is the direction of the transfer, and is the interbasin transfer existing or new?

(NOTE: Interbasin Transfer approval may be needed if the basin and community where wastewater will be discharged is different from the basin and community where the source of water supply is located.)

F. Does the project involve new sewer service by the Massachusetts Water Resources Authority (MWRA) or other Agency of the Commonwealth to a municipality or sewer district? ____ Yes ____ No

G. Is there an existing facility, or is a new facility proposed at the project site for the storage, treatment, processing, combustion or disposal of sewage sludge, sludge ash, grit, screenings, wastewater reuse (gray water) or other sewage residual materials? ____ Yes ____ No; if yes, what is the capacity (tons per day):

	<u>Existing</u>	<u>Change</u>	<u>Total</u>
Storage	_____	_____	_____
Treatment	_____	_____	_____
Processing	_____	_____	_____
Combustion	_____	_____	_____
Disposal	_____	_____	_____

H. Describe the water conservation measures to be undertaken by the project, and other wastewater mitigation, such as infiltration and inflow removal.

III. Consistency

A. Describe measures that the proponent will take to comply with applicable state, regional, and local plans and policies related to wastewater management:

B. If the project requires a sewer extension permit, is that extension included in a comprehensive wastewater management plan? ____ Yes ____ No; if yes, indicate the EEA number for the plan and whether the project site is within a sewer service area recommended or approved in that plan:

TRANSPORTATION SECTION (TRAFFIC GENERATION)

I. Thresholds / Permit

A. Will the project meet or exceed any review thresholds related to **traffic generation** (see 301 CMR 11.03(6))? ____ Yes X No; if yes, specify, in quantitative terms:

C. Does the project require any state permits related to **state-controlled roadways**? ____ Yes X No; if yes, specify which permit:

C. If you answered "No" to both questions A and B, proceed to the **Roadways and Other Transportation Facilities Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Traffic Generation Section below.

II. Traffic Impacts and Permits

A. Describe existing and proposed vehicular traffic generated by activities at the project site:

	<u>Existing</u>	<u>Change</u>	<u>Total</u>
Number of parking spaces	_____	_____	_____
Number of vehicle trips per day	_____	_____	_____
ITE Land Use Code(s):	_____	_____	_____

B. What is the estimated average daily traffic on roadways serving the site?

	<u>Roadway</u>	<u>Existing</u>	<u>Change</u>	<u>Total</u>
1.	_____	_____	_____	_____
2.	_____	_____	_____	_____
3.	_____	_____	_____	_____

C. If applicable, describe proposed mitigation measures on state-controlled roadways that the project proponent will implement:

D. How will the project implement and/or promote the use of transit, pedestrian and bicycle facilities and services to provide access to and from the project site?

C. Is there a Transportation Management Association (TMA) that provides transportation demand management (TDM) services in the area of the project site? ____ Yes ____ No; if yes, describe if and how will the project will participate in the TMA:

D. Will the project use (or occur in the immediate vicinity of) water, rail, or air transportation facilities? ____ Yes ____ No; if yes, generally describe:

E. If the project will penetrate approach airspace of a nearby airport, has the proponent filed a Massachusetts Aeronautics Commission Airspace Review Form (780 CMR 111.7) and a Notice of Proposed Construction or Alteration with the Federal Aviation Administration (FAA) (CFR Title 14 Part 77.13, forms 7460-1 and 7460-2)?

III. Consistency

Describe measures that the proponent will take to comply with municipal, regional, state, and federal plans and policies related to traffic, transit, pedestrian and bicycle transportation facilities and services:

TRANSPORTATION SECTION (ROADWAYS AND OTHER TRANSPORTATION FACILITIES)

I. Thresholds

A. Will the project meet or exceed any review thresholds related to **roadways or other transportation facilities** (see 301 CMR 11.03(6))? ____ Yes X No; if yes, specify, in quantitative terms:

B. Does the project require any state permits related to **roadways or other transportation facilities**? ____ Yes X No; if yes, specify which permit:

C. If you answered "No" to both questions A and B, proceed to the **Energy Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Roadways Section below.

II. Transportation Facility Impacts

A. Describe existing and proposed transportation facilities in the immediate vicinity of the project site:

B. Will the project involve any

1. Alteration of bank or terrain (in linear feet)? _____
2. Cutting of living public shade trees (number)? _____
3. Elimination of stone wall (in linear feet)? _____

III. Consistency -- Describe the project's consistency with other federal, state, regional, and local plans and policies related to traffic, transit, pedestrian and bicycle transportation facilities and services, including consistency with the applicable regional transportation plan and the Transportation Improvements Plan (TIP), the State Bicycle Plan, and the State Pedestrian Plan:

ENERGY SECTION

I. Thresholds / Permits

A. Will the project meet or exceed any review thresholds related to **energy** (see 301 CMR 11.03(7))?
___ Yes X No; if yes, specify, in quantitative terms:

B. Does the project require any state permits related to **energy**? ___ Yes X No; if yes, specify which permit:

C. If you answered "No" to both questions A and B, proceed to the **Air Quality Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Energy Section below.

II. Impacts and Permits

A. Describe existing and proposed energy generation and transmission facilities at the project site:

	<u>Existing</u>	<u>Change</u>	<u>Total</u>
Capacity of electric generating facility (megawatts)	_____	_____	_____
Length of fuel line (in miles)	_____	_____	_____
Length of transmission lines (in miles)	_____	_____	_____
Capacity of transmission lines (in kilovolts)	_____	_____	_____

B. If the project involves construction or expansion of an electric generating facility, what are:

1. the facility's current and proposed fuel source(s)?
2. the facility's current and proposed cooling source(s)?

C. If the project involves construction of an electrical transmission line, will it be located on a new, unused, or abandoned right of way? ___ Yes ___ No; if yes, please describe:

D. Describe the project's other impacts on energy facilities and services:

III. Consistency

Describe the project's consistency with state, municipal, regional, and federal plans and policies for enhancing energy facilities and services:

AIR QUALITY SECTION

I. Thresholds

A. Will the project meet or exceed any review thresholds related to **air quality** (see 301 CMR 11.03(8))? ____ Yes X No; if yes, specify, in quantitative terms:

B. Does the project require any state permits related to **air quality**? ____ Yes X No; if yes, specify which permit:

C. If you answered "No" to both questions A and B, proceed to the **Solid and Hazardous Waste Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Air Quality Section below.

II. Impacts and Permits

A. Does the project involve construction or modification of a major stationary source (see 310 CMR 7.00, Appendix A)? ____ Yes ____ No; if yes, describe existing and proposed emissions (in tons per day) of:

	<u>Existing</u>	<u>Change</u>	<u>Total</u>
Particulate matter	_____	_____	_____
Carbon monoxide	_____	_____	_____
Sulfur dioxide	_____	_____	_____
Volatile organic compounds	_____	_____	_____
Oxides of nitrogen	_____	_____	_____
Lead	_____	_____	_____
Any hazardous air pollutant	_____	_____	_____
Carbon dioxide	_____	_____	_____

B. Describe the project's other impacts on air resources and air quality, including noise impacts:

III. Consistency

A. Describe the project's consistency with the State Implementation Plan:

B. Describe measures that the proponent will take to comply with other federal, state, regional, and local plans and policies related to air resources and air quality:

SOLID AND HAZARDOUS WASTE SECTION

I. Thresholds / Permits

A. Will the project meet or exceed any review thresholds related to **solid or hazardous waste** (see 301 CMR 11.03(9))? ___ Yes X No; if yes, specify, in quantitative terms:

B. Does the project require any state permits related to **solid and hazardous waste**? ___ Yes X No; if yes, specify which permit:

C. If you answered "No" to both questions A and B, proceed to the **Historical and Archaeological Resources Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Solid and Hazardous Waste Section below.

II. Impacts and Permits

A. Is there any current or proposed facility at the project site for the storage, treatment, processing, combustion or disposal of solid waste? ___ Yes ___ No; if yes, what is the volume (in tons per day) of the capacity:

	<u>Existing</u>	<u>Change</u>	<u>Total</u>
Storage	_____	_____	_____
Treatment, processing	_____	_____	_____
Combustion	_____	_____	_____
Disposal	_____	_____	_____

B. Is there any current or proposed facility at the project site for the storage, recycling, treatment or disposal of hazardous waste? ___ Yes ___ No; if yes, what is the volume (in tons or gallons per day) of the capacity:

	<u>Existing</u>	<u>Change</u>	<u>Total</u>
Storage	_____	_____	_____
Recycling	_____	_____	_____
Treatment	_____	_____	_____
Disposal	_____	_____	_____

C. If the project will generate solid waste (for example, during demolition or construction), describe alternatives considered for re-use, recycling, and disposal:

D. If the project involves demolition, do any buildings to be demolished contain asbestos? ___ Yes ___ No

E. Describe the project's other solid and hazardous waste impacts (including indirect impacts):

III. Consistency

Describe measures that the proponent will take to comply with the State Solid Waste Master Plan:

HISTORICAL AND ARCHAEOLOGICAL RESOURCES SECTION

I. Thresholds / Impacts

A. Have you consulted with the Massachusetts Historical Commission? X Yes No; if yes, attach correspondence. For project sites involving lands under water, have you consulted with the Massachusetts Board of Underwater Archaeological Resources? Yes No; if yes, attach correspondence.

B. Is any part of the project site a historic structure, or a structure within a historic district, in either case listed in the State Register of Historic Places or the Inventory of Historic and Archaeological Assets of the Commonwealth? Yes X No; if yes, does the project involve the demolition of all or any exterior part of such historic structure? Yes No; if yes, please describe:

C. Is any part of the project site an archaeological site listed in the State Register of Historic Places or the Inventory of Historic and Archaeological Assets of the Commonwealth? X Yes No; if yes, does the project involve the destruction of all or any part of such archaeological site? Yes X No; if yes, please describe:

D. If you answered "No" to all parts of both questions A, B and C, proceed to the **Attachments and Certifications** Sections. If you answered "Yes" to any part of either question A or question B, fill out the remainder of the Historical and Archaeological Resources Section below.

II. Impacts

Describe and assess the project's impacts, direct and indirect, on listed or inventoried historical and archaeological resources:

The Project Site is within an archaeologically sensitive area; therefore the Proponents have, and will continue to work with a Massachusetts Professional Archaeologist and the Massachusetts Historical Commission (MHC) consistent with applicable MHC regulations.

III. Consistency

Describe measures that the proponent will take to comply with federal, state, regional, and local plans and policies related to preserving historical and archaeological resources:

In September 2015, a Massachusetts Professional Archaeologist completed an intensive (locational) survey pursuant to archaeological permit # 3594 issued by the State Archaeologist's Office at the MHC. The results of this survey will be reported in writing to MHC in accordance with the applicable regulations. See attached project narrative for more information.

CERTIFICATIONS:

1. The Public Notice of Environmental Review has been/will be published in the following newspapers in accordance with 301 CMR 11.15(1):

(Name) Vineyard Gazette (Date) _____

2. This form has been circulated to Agencies and Persons in accordance with 301 CMR 11.16(2).

Signatures:

Town Project

Date	Signature of Responsible Officer or Proponent	Date	Signature of person preparing ENF (if different from above)
			Reid Silva, P.E., R.L.S.
	Name (print or type)		Name (print or type)
	Town of Chilmark		Vineyard Land Survey and Engineering
	Firm/Agency		Firm/Agency
	401 Middle Road, P.O. Box 119		P.O. Box 421
	Street		Street
	Chilmark, MA 02535		West Tisbury, MA 02575
	Municipality/State/Zip		Municipality/State/Zip
	(508) 645-2101		(508) 693-3774
	Phone		Phone

Access Project

Date	Signature of Responsible Officer or Proponent	Date	Signature of person preparing ENF (if different from above)
			Daniel Padien
	Name (print or type)		Name (print or type)
	Squibnocket Farm, Inc.		VHB, Inc.
	Firm/Agency		Firm/Agency
	279 Great Plains Road		99 High Street, 10 th Floor
	Street		Street
	West Tisbury, MA		Boston, MA 02110
	Municipality/State/Zip		Municipality/State/Zip
			(617) 607-2985
	Phone		Phone

ENF Narrative

This Environmental Notification Form (ENF) is jointly filed on behalf of the Town of Chilmark (the “Town”) and Squibnocket Farm, Inc. (“Squibnocket Farm” and together with the Town, “the Proponents”) pursuant to the Massachusetts Environmental Protection Act (M.G.L. Chapter 30, Section 61 through 62I) and the implementing regulations at 301 CMR 11.00. This ENF describes two projects located on and adjacent to Squibnocket Beach in Chilmark, Massachusetts as depicted on Figure 1 (USGS Topographic Map) and Figure 2 (MassGIS Aerial Photograph).

Squibnocket Farm proposes to relocate portions of existing Squibnocket Road, which provides the exclusive means of vehicular access to the Squibnocket Farm residential subdivision and other portions of the Squibnocket section of the Town of Chilmark (“Squibnocket Point”). Approximately 300 linear feet of the relocated portion of Squibnocket Road will be at-grade, and approximately 280 additional linear feet will be on a pile-supported low causeway with its northern end on land presently owned by the Town and its southern end on land owned or to be purchased by Squibnocket Farm. Squibnocket Farm’s proposed roadway relocation and causeway construction project is referred to in this ENF as the “Access Project.” The purpose of the Access Project is to provide continued vehicular access to the existing subdivision and other land on Squibnocket Point using a roadway significantly less prone to erosion and sea level rise than the existing road. The Access Project is entirely privately funded.

The Town has operated a beach (“Squibnocket Beach”) and associated parking lot (“Existing Town Lot”) at Squibnocket since the 1950’s. Squibnocket Beach and the Existing Town Lot are at risk from the same forces of erosion and sea level rise that jeopardize Squibnocket Road. The Town proposes to remove approximately 520 linear feet of the existing man-made stone revetment system, which has two discrete components: one of approximately 200 linear feet armoring the seaward side of the Existing Town Lot (the “Parking Lot Revetment”), and the other armoring both the seaward (~160 linear feet) and landward (~157 linear feet) sides of a short section of the road, sometimes referred to as the “causeway,” that runs from the southern edge of the Existing Town Lot to an elevated landform referred to as Money Hill (the “Causeway Revetment,” which together with the Parking Lot Revetment, is referred to in this ENF as the “Revetment”). Following Revetment removal, the Town proposes to restore Squibnocket Beach by eliminating the Existing Town Lot and creating a new parking facility at a more protected location on land recently acquired by the Town, and construct a relocated skiff launch for public access into Squibnocket

Pond. These activities comprise the “Town Project,” which, together with the Access Project, are referred to in this ENF as the “Projects.” The purpose of the Town Project is to restore the existing Squibnocket Beach, remove artificial features that have inhibited the natural migration of sand and sediment along this portion of the coastline, and create parking facilities that (like the relocated roadway) will be significantly less prone to erosion and sea level rise. The Town Project is funded, in part, by a grant from the Massachusetts Office of Coastal Zone Management.

The Projects are described separately in this ENF because they are independent undertakings, to be pursued by unrelated entities, with separable environmental impacts that can be identified and analyzed discretely. But, as discussed below, the Projects are co-located, address a common set of threats, and were conceived in the same public process. It is, therefore, arguable that the Projects could be viewed as one “Project” and should be submitted for a single MEPA review consistent with 310 CMR 11.01(2)(c).

The Proponents respectfully request a determination from the Secretary of the Executive Office of Energy and Environmental Affairs (“the Secretary”) that this ENF adequately and properly complies with MEPA and that no further MEPA review is required prior to state agency actions.

Introduction

Figure 1 and Figure 2 depict the project site (the “Project Site”). Squibnocket Beach has been leased by the Town from Squibnocket Farm (or its predecessors) since 1956 for use as a recreational beach for Chilmark residents and their guests. Squibnocket Beach exists laterally between two coastal banks of dense glacial till and forms a barrier between the Atlantic Ocean Beach and Squibnocket Pond located to the west of the project site. Squibnocket Beach is located on the southwest corner of Martha’s Vineyard facing south to south east on the Atlantic Ocean and is, therefore, subject to high wind and wave energy developed from coastal storms and hurricanes.

Squibnocket Road has two major sections. One connects State Road to the Town beach, and the other runs roughly parallel to the ocean from the town Beach to the south. The Projects focus on the transition point between these two sections. At this location, the road traverses the Existing Town Lot and leads to Squibnocket Point, which is the site of approximately 12 residences, a private beach club, and several acres of conservation land, all located south of Squibnocket Beach. Squibnocket Road provides the sole means of vehicular access and egress to Squibnocket Point, and also is the only corridor for bringing essential utility services to the residences on Squibnocket Point. The relevant segment of Squibnocket Road is armored by the Revetment. As the road traverses the Existing Town Lot, it is protected from storm

damage and erosion by the Parking Lot Revetment and, immediately south of the Existing Town Lot, by the Causeway Revetment.

The Revetment protects the Existing Town Lot and Squibnocket Road from storm damage and erosion; however, with sea level rise and increased storm intensity, the Revetment requires more frequent and significant repairs. Both the Town and Squibnocket Farm have independently and jointly studied long-term solutions to the common threats posed to the Road, the Existing Town Lot, and the existing Town beach. Numerous public meetings have been held dating back to late 2013, at which experts from the private and governmental sector and interested members of the public have offered testimony and discussed alternative approaches. The public process culminated with the formation of the Town Committee on Squibnocket in mid-2014 (the “Town Committee”), the issuance of the Town Committee’s recommendations in December, 2014, and the unanimous endorsement of the Town Committee’s recommendations at a special Town meeting in February, 2015. The Projects presented in this ENF are consistent with the outcome of this process. Extensive background materials related to the Town Committee’s work and the Projects are available through a Town-maintained website.¹

Project Background

The Projects are separate but coordinated actions by Squibnocket Farm and the Town to address two critical threats that rising sea level and increased storm intensity pose at the Project Site:

1. **Beach access:** The shoreline of Squibnocket Beach has been migrating landward in a manner typical of such exposed shorelines in the Commonwealth. The erosion has resulted in the progressive loss of dry beachfront for recreational purposes and has threatened the Existing Town Lot. In order to preserve the Existing Town Lot, the Town has historically repaired and maintained the Parking Lot Revetment. As the shoreline continues to erode and storm activity becomes more intense, the Town recognizes the need to relocate beach parking to an upland location and to restore the Existing Town Lot to its natural state to allow for the continued recreational use of Squibnocket Beach.
2. **Vehicular access to Squibnocket Point:** Squibnocket Road provides the exclusive means of vehicular access and egress, and utility service, to Squibnocket Point. A section of Squibnocket Road traverses the Existing Town Lot, and this and the adjacent section of the road armored by the Causeway Revetment are threatened by the same shoreline erosion processes that threaten the Town’s continued ability to access and use its beach. Squibnocket Farm has been

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¹ Available at http://www.chilmarkma.gov/Pages/ChilmarkMA_squibnocket/index.



repairing and maintaining the Causeway Revetment in an effort to preserve access to Squibnocket Point.

The impetus for the Projects arose in late 2012 following Superstorm Sandy, which severely damaged the Existing Town Lot, including portions of Squibnocket Road, eroded a substantial amount of land on or surrounding Squibnocket Beach (including a “soft” reinforcement to Money Hill that had been recently constructed at MassDEP’s suggestion), and compromised the underground utility lines which serve Squibnocket Point.

Throughout 2013 and 2014, Squibnocket Farm, acting through its consultant team, prepared a conceptual access solution for consideration by the Town. The Town sought to expand the private effort to include a solution for erosion issues facing the Existing Town Lot and Squibnocket Beach. In April 2014, the Chilmark Town Meeting established the Town Committee to review alternative approaches to solving the joint threats confronting the Town and Squibnocket Farm. After six months of deliberation, 23 public meetings and 13 presentations, the Town Committee recommended the Projects described in this ENF. In February, 2015, the Chilmark Town Meeting approved the Town Committee’s recommendations by a unanimous vote.

This ENF describes the Project Site, alternatives analysis and proposed improvements and describes potential environmental impacts and mitigation to avoid and reduce such impacts to the extent practicable.

Proponents and Land Ownership

The Access Project is proposed by:

Squibnocket Farm, Inc.
279 Great Plains Road
Tisbury, Massachusetts 02575

Legal Representative:

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ROPES & GRAY LLP
Prudential Tower, 800 Boylston Street
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Permitting Representative:

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Boston, MA 02110
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Geotechnical and Structural Engineer

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HALEY & ALDRICH, Inc.
465 Medford Street, Suite 2200
Boston, MA 02129
T 617-886-7400 | F 617-886-7600
MHaley@HaleyAldrich.com
RSchuck@HaleyAldrich.com

The Town Project is proposed by:

Town of Chilmark
401 Middle Road
P.O. Box 119
Chilmark, Massachusetts 02535

Permitting Representative:

Reid Silva, P.E., P.L.S.
VINEYARD LAND SURVEY & ENGINEERING, INC.
P.O. Box 421
West Tisbury, MA 02575
T 508 693-3774 | F 508 629-0440
Reid@VLSE.net

The Project Site includes land owned in fee by the following parties:

1. Town of Chilmark;
2. Squibnocket Farm, Inc. and
3. Vineyard Open Land Foundation
P.O. Box 4608
Vineyard Haven, Massachusetts 02568
Eric Peters, Chairman of the Board of Trustees

Regulatory Context

The Projects are anticipated to require the local, state and federal permits and approvals described in Table 1.

Table 1 Anticipated Permits and Approval

Agency	Permit / Approval	Status
<u>Federal</u>		
U.S. Environmental Protection Agency	National Pollutant Discharge Elimination System Construction General Permit	To be filed 30 days prior to construction
<u>Commonwealth of Massachusetts</u>		
Massachusetts Historical Commission	Project Notification Form Archaeology Permit	Filed 8/13/2015 Issued 8/25/2015
Executive Office of Energy and Environmental Affairs	Environmental Notification Form	This document
Martha's Vineyard Commission (MVC)	Modification to Development of Regional Impact	Referral to MVC by the Chilmark Conservation Commission anticipated after the filing of the Orders of Conditions listed below for the Access Project and Town Project
<u>Town of Chilmark</u>		
Conservation Commission	Orders of Conditions <ul style="list-style-type: none"> Exploratory work 	Issued July 15, 2015 DEP File No. 012-741 (preliminary to Town Project) DEP File No. 012-743 (preliminary to Access Project)
	Orders of Conditions <ul style="list-style-type: none"> Access Project Town Project 	Notices of Intent to be filed Fall 2015

MEPA Status

The following provides a detailed description of the Projects.

Access Project

When considered as a separate “Project,” the Access Project is not subject to MEPA jurisdiction because it does not involve Financial Assistance, require any Permit, or involve any Land Transfer (as such terms are defined in 301 CMR 11.02). The Access Project does, however, involve work that exceeds the review threshold set forth in 301 CMR 11.03(3)(b) 6 (construction of a pile-supported structure of 2,000 or more sf of base area). The Squibnocket Project includes the Low Causeway (as defined below), which is a pile-supported structure of approximately 3,000 sf of base area.

Town Project

The Town Project involves Financial Assistance in the form of a grant issued by the Massachusetts Office of Coastal Zone Management. The Town Project is, therefore, subject to MEPA jurisdiction. Unlike the Access Project, the Town Project does not exceed any of the review thresholds set forth in 301 CMR 11.03. Therefore, if considered as a separate “Project” for MEPA purposes, the Town Project is not subject to MEPA review because it does not exceed a review threshold.

MEPA Jurisdictional Conclusion

If considered collectively, the Access Project and Town Project are subject to MEPA review because (i) the Town Project involves Financial Assistance and (ii) the Access Project exceeds the review threshold set forth at 301 CMR 11.03(3)(b)6.

The Access Project and the Town Project are being designed, permitted and funded by different Proponents, are separate undertakings, have independent utility, and have separately analyzable environmental impacts. This ENF is being filed on a coordinated basis, however, because the Projects address a common problem, share a common genesis, are adjacent to each other, will be coordinated logistically, and when viewed as a single project trigger the need for MEPA review.

Existing Conditions

The Project Site includes the Existing Town Lot, portions of Squibnocket Road, and the Revetment. Undeveloped areas of the Project Site include Squibnocket Beach, the hillside between Squibnocket Road and Squibnocket Pond, and state-regulated Bordering Vegetated Wetlands between the pond and the Existing Town Lot.

The Existing Town Lot comprises approximately 14,200 square feet of pavement and is armored on its seaward edge by the Parking Lot Revetment, which is composed of stacked stones extending laterally for approximately 200 linear feet and vertically approximately 6 feet from the grade of the barrier beach. Located to the south of the Existing Town Lot is the Causeway Revetment, which is composed of a total of approximately 317 linear feet of dry-laid stones armoring both the seaward and landward/pondward sides of the road as it approaches Money Hill.

The shoreline in Chilmark is eroding along with the similar south facing shorelines on Martha's Vineyard as documented in the Massachusetts Coastal Zone Management Smart Coasts Study. Figure 3 depicts the project site and the estimated shoreline changes over the course of the study period (1844-2009). Squibnocket Beach is rapidly eroding and the dry beach in front of the Existing Town Lot exists only during the lower half of the tidal cycle.

When confronted with large storm events, residents of Squibnocket Point are forced to either evacuate their homes, or risk being temporarily stranded on Squibnocket Point until safe access can be restored. The Existing Town Lot and Squibnocket Road have been rendered impassable during and after some recent storms (e.g., Sandy). In the absence of the Projects, this condition is expected to worsen with continued sea level rise and increased storm intensity and frequency. These same factors threaten to further reduce and ultimately eliminate the recreational value of Squibnocket Beach and the beach's intertidal habitat. Continued efforts to repair the Revetment following routine and storm damage will become more expensive and difficult to execute, and ultimately will prove futile as the ocean overtakes the landform.

Wetland Resource Areas

The Project Site contains local and state-regulated wetland resources areas, the locations and boundaries of which were field delineated by VHB environmental scientists in October 2013, independently delineated by LEC Environmental Consultants in August 2014, and reviewed by Epsilon Associates under the direction of the Committee on Squibnocket. In July 2015, the Chilmark Conservation Commission issued two Orders of Conditions confirming the resource area boundaries (See DEP File No. 012-741 and No. 012-743) and authorizing the advancement of temporary exploratory borings and test pits at the Project Site in furtherance of the Project design process.

The Project Site includes the following state-regulated wetland resource areas (and, in some instances, the 100-foot buffer zone for each resource area) as each is defined in the Wetlands Protection Act (the "WPA") and implementing regulations at 310 CMR 10.00 (the "Wetland Regulations"):²



² We note the Chilmark Wetlands Protection Bylaw differs lightly in its definition of certain resource areas.

- Bordering Vegetated Wetlands (“BVW”)
- Coastal Bank
- Land Subject to Coastal Storm Flowage (“LSCSF”)
- Coastal Beach
- Barrier Beach
- Coastal Dune
- Land Subject to Tidal Action

Bordering Vegetated Wetlands

The Wetland Regulations at 310 CMR 10.55 define Bordering Vegetated Wetlands (BVW) as an area of generally low topography with perennially saturated soils or surface water inundation such that 50% or more of the vegetation community consists of wetland indicator plants. Vegetated wetlands can include disturbed or filled areas.

The Project Site includes vegetated wetlands extending landward of the edge of Squibnocket Pond in the direction of the Existing Town Lot and Causeway Revetment. These vegetated wetlands are adjacent to and contiguous with Squibnocket Pond and therefore are regulated as BVW.

The BVW at the site is a palustrine scrub-shrub (PSS) community, transitioning to a palustrine emergent (PEM) community at the edge of the pond. In the area between the revetment and the pond, a population of common reed (*Phragmites australis*) has become established; to the southwest, narrow-leaved cattail (*Typha angustifolia*) lines the edge of the pond. A portion of the slope to the northeast of the pond, down gradient from Squibnocket Road, also consists mainly of cattails; runoff from the road or possibly a buried drainage structure keeps this slope saturated. Other dominant species in the BVW include northern arrowwood (*Viburnum dentatum*), seaside goldenrod (*Solidago sempervirens*), and sensitive fern (*Onoclea sensibilis*). The soils in the pond and up the saturated slope are composed of decayed organic matter, forming a thick histosol layer (16 inches and greater).

Within the Project Site, the area between Squibnocket Road and Squibnocket Pond receives sediment (sand) from seasonal flooding; this area exhibits reduced, saturated sands, with some redoximorphic features present in the top 12 inches. The upgradient soils presented a fairly uniform layer (14 inches and greater) of medium sand with no redoximorphic features. A 100-foot buffer zone extends from the delineation of BVW (and Bank) at the edge of Squibnocket Pond.

Coastal Bank

Coastal Bank is defined in the Wetlands Regulations at 310 CMR 10.30 as:



[T]he seaward face or side of any elevated landform, other than a coastal dune, which lies at the landward edge of a coastal beach, land subject to tidal action, or other wetland. (Emphasis added)

The state's regulatory definition of Coastal Bank is further elaborated on in MassDEP's Wetlands Policy 92-1, *Coastal Banks*, which includes the following suggested clarifications on defining the "top of coastal bank":

- A. *The slope of a coastal bank must be greater than or equal to 10:1.*
- B. *For a coastal bank with a slope greater than or equal to 4:1 the "top of coastal bank" is that point above the 100-year flood elevation where the slope becomes less than 4:1.*
- C. *For a coastal bank with a slope greater than or equal to 10:1 but less than 4:1, the top of coastal bank is the 100-year flood elevation.*
- D. *A "top of coastal bank" will fall below the 100-year flood elevation and is the point where the slope ceases to be greater than or equal to 10:1.*
- E. *There can be multiple coastal banks within the same site. This can occur where the coastal banks are separated by land subject to coastal storm flowage [an area less than 10:1].*

The Project Site includes two distinct areas of Coastal Bank described as follows.

Area 1 – Seaward face of the existing parking lot and causeway revetments.

The seaward face of the natural and manmade landform located at the edge of the coastal beach consists of the face of the Parking Lot Revetment and the base of the Causeway Revetment. This man-made coastal bank extends from the toe of the revetments to the top of the slope, ending at the first break in slope where the slope of the revetment becomes less than 10:1, pursuant to DEP Policy 92-1(A). The elevation at the top of this section of Coastal Bank is located between elevation 10 FT and 11 FT (NAVD88).

Money Hill is a small elevated landform lying to the south of the Existing Town Lot and the Causeway Revetment (as shown on Figure 2). Along the seaward face of Money Hill, the top of coastal bank is more sinuous, but by regulation ends where the slope is flatter than 10:1. The top of Coastal Bank along the seaward face of Money Hill is located between elevation 11 FT and 13 FT (NAVD88).



Area 2 – Seaward Landform between Squibnocket Road and Squibnocket Pond.

A portion of the hillside between Squibnocket Road and Squibnocket Pond is presumed to contain Coastal Bank up to the limit of Land Subject to Coastal Storm Flowage (Elevation 15 FT NAVD88) because it consists of a seaward landform with a slope steeper than 10:1 but less than 4:1, pursuant to DEP Policy 92-1(C).

Area 3 – Landward Facing Landform on the Backside of Money Hill

The landward face of Money Hill variably slopes down from a highpoint at the top of the hill (approximate Elevation 19 FT NAVD88) to the edge of Squibnocket Pond at elevation 2 FT (NAVD88). These portions of the slope are steeper than 10:1, are located with Land Subject to Coastal Storm Flowage and are conservatively assumed to be regulated as Coastal Bank under 310 CMR 10.30.

The limits of Coastal Bank at the Project Site are shown on Figure 4 and the attached project plans attached as Figure 5 (the “Project Plans”).

Coastal Beach

The Wetlands Regulations at 310 CMR 10.27 define Coastal Beach as

[U]nconsolidated sediment subject to wave, tidal and coastal storm action which forms the gently sloping shore of a body of salt water and includes tidal flats.

Coastal beaches extend from the mean low water line landward to the dune line, coastal bankline or the seaward edge of existing human-made structures, when these structures replace one of the above lines, whichever is closest to the ocean.

Coastal Beach at the Project Site is located seaward of the Revetment as shown on the Project Plans.

Land Subject to Tidal Action

The Wetlands Regulations at 310 CMR 10.04 define Land Subject to Tidal Action as:

[L]and subject to the periodic rise and fall of a coastal water body, including spring tides.

Land Subject to Tidal Action at the Project Site includes Coastal Beach and that portion of Coastal Bank located on the seaward face of the Existing Town Lot, the Causeway Revetment, and Money Hill up to and including the Spring High Tide mark.

Land Subject to Coastal Storm Flowage

The Wetlands Regulations at 310 CMR 10.04 define Land Subject to Coastal Storm Flowage (“LSCSF”) as:

[L]and subject to any inundation caused by coastal storms up to and including that caused by the “100 year storm” surge of record or local storm of record, whichever is greater.

The WPA defines the limit of LSCSF as the lateral extent of the 100-year storm or surge of record as depicted on the most recently issued Federal Emergency Management Agency Flood Insurance Rate Map. The current FEMA map of record for the Project Site was issued on July 6, 2010 (see Figure 6)³ and identifies the following floodplain segments:

- Zone VE (El. 12 FT) along the Coastal Beach, generally defined by the top of the Existing Town Lot and Causeway Revetment and the seaward face of Money Hill.
- Zone A0 (Depth 2FT) along the seaward face of Money Hill, landward of the VE Zone defined above.
- Zone AE (El. 8 FT) along the northern shoreline of Squibnocket Pond and the entire pond area adjacent to the project site.

FEMA recently completed revisions to its coastal floodplain study on Martha’s Vineyard, and issued a preliminary FIRM for Dukes County, including the Project Site, on April 27, 2015 (See Figure 6).⁴ This Preliminary FIRM substantially revises the predicted 100-year coastal flood elevations at the Project Site, placing the entire area within the following mapped velocity zones.

- Zone VE (Elevation 16 FT) located generally at the landward edge of the Existing Town Lot and the landward face of Money Hill.
- Zone VE (Elevation 15 FT) located within Squibnocket Pond and its adjacent Bordering Vegetated Wetlands.

While the current map of record is the FIRM issued on July 6, 2010, the Preliminary FIRM map was prepared to reflect a more comprehensive assessment of the coastal floodplain using updated methodologies and calculations. This ENF assumes the Preliminary FIRM will be adopted without significant revisions. This conservative assumption is reflected in the LSCSF boundaries depicted on the Project Plans and approved by the Chilmark Conservation Commission.

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³ Federal Emergency Management Agency, Flood Insurance Rate Map. Community Panel 25007 C0159H, Chilmark MA.
⁴ Federal Emergency Management Agency, Preliminary Flood Insurance Rate Map. Community Panel 25007 C0159J, Chilmark MA., Issued April 27, 2015.

Barrier Beach

The Wetlands Regulations at 310 CMR 10.29 define Barrier Beach(es) as:

[A] narrow low-lying strip of land generally consisting of coastal beaches and coastal dunes extending roughly parallel to the trend of the coast.

Portions of the Project Site are located within a federally designated Coastal Barrier Resource unit and have been informally mapped as a barrier beach by MassDEP. Based on the site topography and orientation of the existing landforms relative to the downgradient Coastal Beach, Barrier Beach begins at the bottom of the slope adjacent to Squibnocket Road and extends generally south and west past Money Hill. The limits of Barrier Beach are shown on the Project Plans.

Coastal Dune

The Wetlands Regulations at 310 CMR 10.28, define Coastal Dune as:

[A]ny natural hill, mound, or ridge of sediment landward of a coastal beach deposited by wind action or storm overwash. Coastal dune sediment deposited by artificial means also serves the purpose of storm damage prevention or flood control.

The definition of Coastal Dune recognizes the importance of artificially deposited dune sediments (i.e., sand) to storm damage prevention. However, the Revetment and Existing Town Lot are not classifiable as Coastal Dune under these definitions.

Accordingly, Coastal Dunes present at the Project Site are limited to sediment landward of the coastal beach and deposited by wind action or storm overwash. While the land between the landward edge of the Existing Town Lot and Squibnocket Pond does not constitute a “natural hill, mound or ridge of sediment,” the natural accretion of this land and the altered nature of the Existing Town Lot and Causeway Revetment indicate that this area has likely functioned as a Coastal Dune in the past. The Project Plans identify the area between the Existing Town Lot and Squibnocket Pond as Coastal Dune.

The Chilmark Conservation Commission recently approved the limits of Coastal Dune described above. Accordingly, the developed portions of the Project Site – comprising the Existing Town Lot, portions of Squibnocket Road, and the Revetment—do not contain the resource area Coastal Dune.

Project Description

Proposed Improvements

The Projects involve the following basic elements:

Access Project:

- Construction of a relocated roadway in two segments, one at-grade and the other on a pile-supported low causeway (referred to here, respectively, as the At-Grade Roadway and the Low Causeway), with a combined length of approximately 580 feet; and
- Relocation of utilities to a location on, about, or under the relocated roadway.

Town Project:

- Construction of a 46±-space parking lot on land owned by the Town to replace the Existing Town Lot and support access to the restored Squibnocket Beach (referred to here as the “Relocated Town Lot”);⁵
- Construction of a relocated skiff launch area providing access to Squibnocket Pond;
- Removal of approximately 520 linear feet of the Revetment;
- Demolition of the Existing Town Lot and removal of unsuitable materials from the barrier beach; and
- Construction of a dune landform connecting Money Hill with the seaward end of the northern point of the Existing Town Lot to restore a more natural landform along this section of barrier beach.

Access Project

The Access Project will replace the most erosion and overwash-prone sections of the at-grade road that has provided access to Squibnocket Point since at least 1850 (See Figure 7 – “*Wallings Map of Chilmark*”, circa 1850). This section of the road has survived to the present day only through the construction and maintenance of the Revetment. Squibnocket Farm has determined that continued reliance on the Revetment for this purpose would not be practicable, and the Town Committee and its experts agreed with this judgment. The roadway improvements proposed in this ENF will move the centerline of the road approximately 100 to 500 feet landward of existing mean high water at Squibnocket Beach, raise a portion of the road on piles to



⁵ The Relocated Town Lot will also serve an extension of the Town's existing beach rights over southerly portions of Squibnocket Beach pursuant to a modification of the 1950 lease between the Proponents. No construction, development or beach restoration or alteration work is proposed on the expanded portion of the leased premises (other than installation of the skiff launch and portions of the Access Project).



a prudent and secure elevation consistent with the Town Committee's recommendations, and, once complete, allow for the removal of the Revetment.

The Access Project will be designed and constructed in accordance with current Massachusetts Coastal Zone Management Policies Guide (MassCZM), specifically Coastal Hazards Policy #1, which requires projects to:

"Preserve, protect, restore, and enhance the beneficial functions of storm damage prevention and flood control provided by natural coastal landforms, such as dunes, beaches, barrier beaches, coastal banks, land subject to coastal storm flowage, salt marshes, and land under the ocean."

MassCZM makes recommendations for siting, designing and constructing projects in coastal hazard areas such as the Project Site and, in accordance with the Wetlands Regulations, strongly encourages (or requires) a project to:

- Avoid the construction of solid-fill coastal engineering structures because of their tendency to deflect rather than absorb wave energy;
- Avoid construction or reconstruction in hazard prone areas by locating or moving developed areas landward from eroding shorelines to effect managed retreat; and
- Building new structures on piles, elevating foundation elements above the current FEMA-mapped velocity zone to avoid interference with the natural movement of sand and the migration of barrier beaches landward. The proposed Low Causeway will be designed to withstand wave forces consistent within a finished elevation within the velocity zone.

The Access Project furthers all of these regulatory imperatives, and once completed and operational, will make it possible for the Town to restore the natural shoreline at Squibnocket Beach.

Design Elements

A conceptual design has been developed for the Access Project. A definitive design will be developed following the completion of required test pits, soil borings and associated geotechnical analyses. The conceptual design depicted on the attached exhibits includes the following elements:

- A one-lane 300-foot long paved at-grade road with passing turnouts and a maximum slope of 10 % in accordance with Town of Chilmark standards⁶ connecting the existing Squibnocket Road with the Low Causeway (the "At-Grade Roadway"). The At-Grade Roadway is proposed to be sited in the 100-

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⁶ Town of Chilmark Rules and Regulations of the Subdivision of Land, Section 3.07 "Road Grades" and Appendix C, Section C02(h) thereto.

foot buffer zone to BVW and Coastal Bank and within the resource area Land Subject to Coastal Storm Flowage. None of these activities require replacement wetlands or other compensatory wetlands.

- The At-Grade Roadway is planned to include low-impact stormwater management features such as stone-lined vegetated swales to promote infiltration, reduce runoff and promote pollutant uptake by vegetation; and
 - No catch basins or other structural stormwater management structures are planned.
- A one-lane pile-supported low causeway, approximately 280 feet in length, spanning the BVW adjacent to Squibnocket Pond in a generally north-south direction approximately 100-500 feet laterally from the mean high water mark of the Atlantic Ocean at Squibnocket Beach (the “Low Causeway”).
 - The Low Causeway is contemplated to consist of a concrete-filled epoxy coated steel pile-supported structure with concrete pile caps and a concrete panel roadway deck with appropriately designed safety railings and finishings consistent with the Project’s coastal setting, and confirmed in the final design;
 - The existing underground electric and telecom utilities will be relocated and included within conduits built into the bridge deck of the Low Causeway; and
 - The finished elevation of the Low Causeway will be determined based on the Town Committee recommendations, and will allow for wash-over to occur in significant storms, to a degree and frequency consistent with sound engineering practice.

Town Project

The Town Project is intended to further the goals of the Massachusetts Coastal Zone Management Coastal Hazards Policy # 1 by relocating the Existing Town Lot to a new parking area of approximately 46± spaces to be located a minimum of 200± landward of the existing shoreline (the “Relocated Town Lot”), and restoring the Existing Town Lot as a beach. The process of removing the Existing Town Lot will occur in stages, starting with the removal of the existing parking surface comprised of approximately 14,200 SF of concrete and asphalt surface, followed by the removal of approximately 520 linear feet of the Revetment, followed by a beach restoration effort involving the placement of a man-made coastal dune located in part within the footprint of the removed parking area and Revetment. In addition to the Relocated Town Lot and beach restoration elements, the Town Project will also include the construction of a



relocated skiff launch into Squibnocket Pond to facilitate public access to the Great Pond.

Design Elements

The Town Project includes the following design elements:

- Demolition and removal of approximately 14,200 SF of the Existing Town Lot to remove unsuitable material;
- Construction of approximately 46± replacement parking spaces, a bus stop and vehicle turn-around at an upland location shown on the attached Project Plans, potentially supported by a retaining wall along its southern edge (the "Relocated Town Lot");
- Excavation, grading and installation of stormwater management features to collect, treat and convey stormwater runoff from the Relocated Town Lot;
 - The proposed stormwater management system is planned to include low-impact stormwater management features to promote infiltration, pollutant uptake by vegetation and avoid point source discharges;
- The construction of the Relocated Town Lot includes filling within approximately 975 SF of BVW to allow for the construction of a cul-de-sac / vehicle turn-around at the seaward end of the Relocated Town Lot. This turn-around is critical to providing bus access to Squibnocket Beach and universal accessibility as close to Squibnocket Beach as practicable.
 - As required by the WPA and the Chilmark Wetlands Protection Bylaw, a minimum of 1:1 wetland replacement will be required for loss of BVW. The proposed wetland replacement area is shown on the attached Project Plans.
- Demolition and removal of approximately 520 linear feet of the Revetment (total approximate length of the Parking Lot Revetment (~200 linear feet), seaward side of the Causeway Revetment (~160 linear feet) and pondward side of Causeway Revetment (~157 linear feet);
- Construction of an approximately 360-foot long restored coastal dune occupying a footprint of approximately 32,000 SF (0.75 acres).
 - The dune, as presently designed is planned to extend from approximate elevation 8 FT (NAVD88) to a dune ridge at approximate elevation 10 FT (NAVD88).

- Construction of a relocated skiff launch into Squibnocket Pond, consisting of the removal of vegetation from approximately 225 sf of BVW from the edge of Squibnocket Pond.

Construction Sequence

Access to Squibnocket Point must be maintained continuously for the safety and convenience of property owners. For this reason, until the Access Project is built and usable, the existing access road, Existing Town Lot and associated Revetment must be maintained.

Access Project

The construction of the Access Project is planned to be sequenced as follows:

Preparation and Staging

Initial mobilization efforts would include the installation of perimeter and erosion controls at the limit of work, stockpiling emergency supplies and vegetation clearing within the planned road alignment. Vegetation within the Low Causeway alignment would be removed only on a selective basis to allow machine access.

Low Causeway Construction

The Low Causeway construction will consist of the following:

- Installation of machine-driven pipe-piles within the planned alignment.
- Installation of pile caps
- Installation of concrete decking including conduits for utilities
- Installation of utilities within conduits
- Installations of guardrails, finish elements and utility connections

It is assumed that the Existing Town Lot or portions thereof will be used for staging the Low Causeway construction elements. This will minimize the placement of construction materials and mechanized equipment on the barrier beach.

At-Grade Roadway Construction

The At-Grade Roadway construction would commence following initial mobilization and may advance at the same time as Low Causeway construction depending on contractor-determined mobilization needs. The planned construction sequence for the At-Grade Roadway section is expected to include the following:

- Vegetation clearing;

- Preliminary grading / placement of fill within upland areas and buffer zones;
- Installation of underground utilities and stormwater management elements;
- Final grading and stabilization of disturbed soils by paving, seeding or other temporary measures.

Town Project

Preparation and Staging

After construction of the Access Project is complete and the relocated roadway is operable, the Town Project will begin. Siltation barriers and construction fencing will be placed between the project limits and the wetland and dune area. The vegetation and organic material will be removed from the site of the Relocated Town Lot in preparation for construction. Structural fill and base hardener material will be placed and compacted within this area, which will then be used for construction staging during the removal of the Existing Town Lot and construction of the retaining walls for the Relocated Town Lot.

Dune / Barrier Beach Restoration

Surface and fill material within the Existing Town Lot, the abandoned portions of Squibnocket Road and the Revetment will be stripped and removed. The stones comprising the pond-facing portion of the Causeway Revetment will be removed and reused as retaining wall stone adjacent to the Relocated Town Lot. The stones comprising the ocean-facing portion of the Causeway Revetment will remain in place while dune nourishment sand is imported to the site. This temporarily retained revetment stone will act as a siltation and construction barrier, as well as protect the restoration area through the construction and grading process. Nourishment material will be off-loaded from trucks and graded with loaders and bulldozers. Vegetation will be planted on the pond side of the restored dune area. The remaining revetment stone will then be removed and used to complete the retaining wall at the Relocated Town Lot. The ocean side of the dune will then be graded. The small BVW replication area will be graded and constructed just prior to final grading of the dune restoration area adjacent to the Relocated Town Lot.

Relocated Town Lot Construction

Stone removed from the Revetment will be used to complete the retaining wall construction on the pond side of the Relocated Town Lot. Catch basins and drainage swales will be constructed for storm water management. Base hardener will then be placed and graded within the Relocated Town Lot. Asphalt paving will be installed within the cul-de-sac area and handicap parking spaces. The balance of the parking area will be surfaced with gravel.

Skiff Launch

The relocated skiff launch area on the eastern edge of Squibnocket Pond will be constructed after final construction of the Relocated Town Lot. The work area will be cleared of vegetation and all organic and root matter will be removed. Washed gravel will be placed and compacted within the access area.

Alternatives Analysis

The purpose of and need for the Projects, and alternative approaches to accomplishing these objectives, were discussed and debated in various public forums in the Town of Chilmark from between mid-2013 and early 2015. Midway through this process, the Chilmark Town Meeting voted to establish the Town Committee on Squibnocket. The Town Committee met in public session on 23 occasions over a six month period. It reviewed at least 14 primary alternatives for ensuring long-term vehicular access to Squibnocket Point in a manner compatible with the public's continued access to, and use of, a restored and improved Squibnocket Beach. The Town Committee issued the report on its recommendations in December, 2015. In that report, the Town Committee selected two primary alternatives that achieved these dual purposes, resulted in the greatest net benefit to the environment, and were permissible under applicable regulations. The following describes the purpose and need for the project and summarizes the review criteria used to select the preferred alternative.

Purpose and Need

The purpose of the Access Project is to provide a safe and reliable means of vehicular access and utility service to Squibnocket Point for at least 50 years.

The purpose of the Town Project is to improve residents of Chilmark's access to Squibnocket Beach while maintaining parking capacity at the site in support of the residents' use of the beach. The secondary purpose of the Town Project is to remove the Revetment and restore some or all of the natural coastal processes at the Project Site.

The need for both projects arises from the accelerating rise in sea level in this location, and the threats that this phenomenon, coupled with intensifying storms, have already posed and will continue to pose to the private and public interests at stake.

Review Criteria

The Town Committee bifurcated its analysis into the two categories: (i) access alternatives to Squibnocket Point (the “Access Alternatives”), and (ii) parking alternatives for continued recreational use of Squibnocket Beach (the “Parking Alternatives”). The Town Committee considered many factors in considering Access Alternatives and Parking Alternatives, including the following:

- Wetland Impacts
- Permits Required (and obtainable)
- Comparative Visual Impacts
- Land Acquisition Requirements
- Constructability
- Construction Costs
- Long-term Maintenance Costs

The selection of the two preferred alternatives was primarily driven by considerations of cost, regulatory feasibility (permittability), and public acceptance. With respect to permittability, the focus was on the Wetlands Protection Act and whether the alternative achieved the Projects’ purposes in a manner that minimizes wetlands impacts to the extent practicable.

The following provides a summary of Parking Alternatives and Access Alternatives and describes the selection of the preferred alternative.

Parking Alternatives

The Town Committee considered the following principal Parking Alternatives, to which this ENF adds a “no-build” alternative consistent with MEPA practice:

No Build

This alternative would limit activities to the continued repair and maintenance of the Revetment, Squibnocket Road and the Existing Town Lot. This alternative would be expected to require more frequent and significant repair of the Revetment and parking surface in coming years as erosion continues and sea level continues to rise. This alternative would not require any new local or state issued permits until and unless storm damage to the Revetment exceeded the limits of emergency repair rights available under the WPA and any Emergency Regulations issued thereunder or existing Order of Conditions allowing the Town to repair the existing Revetment.

The no-build parking alternative would not achieve the purpose of the Town Project, which is to remove the Existing Town Lot from its exposed and vulnerable position to

a more inland location, and in the process allow for restoration and rehabilitation of the Squibnocket Beach using the footprint of the removed parking area.

Parking Alternative 1: New parking area on “Vytlacil Lot”

This alternative involved the creation of a new beach parking lot on a parcel of land fronting on Squibnocket Road and Squibnocket Pond several hundred feet inland of the Existing Town Lot (See Figure 8)

The Town Committee rejected this alternative because it would require the costly acquisition and demolition of a historic structure, and the new parking area was at too great a distance from and elevation above the beach to be accepted by the public.

Parking Alternative 2: New Parking area on combined “Orphanos/Weldon Non-Conforming Lots” (Preferred Alternative)

This alternative involved the use of an existing portion of Squibnocket Road and adjacent land (consisting of two unbuildable lots and the Vytlacil lot) between Squibnocket Road and Squibnocket Pond for a relocated parking area. (See Figure 9) This alternative would provide approximately 46± parking spaces and a vehicle turn-around located off of the Barrier Beach, but in part within the adjacent hillside, which is regulated as Coastal Bank because it is below the elevation of Land Subject to Coastal Storm Flowage. To accommodate the vehicle turn-around, this alternative would require the filling of approximately 975 SF of BVW and the construction of replacement wetlands. This alternative would require an Order of Conditions under the WPA for work within BVW, LSCSF, Coastal Bank and the 100-foot buffer zone to Coastal Bank.

A variation of this alternative without the use of the Vytlacil lot (See Figure 5) was selected as the preferred alternative by the Town Committee because it avoided construction of a new parking lot on the barrier beach, moved the existing parking function away from the shoreline (but to a location still proximal to the beach) and preserved the existing parking capacity. Town Meeting unanimously approved the selection of this alternative and also authorized the Selectmen to acquire the land necessary to implement this alternative.

Parking Alternative 3: New parking area to the South of Money Hill

This alternative entailed the clearing of at least 3,500 SF of existing vegetation on the barrier beach and construction of a new parking facility within the existing Coastal Dune located south of Money Hill (See Figure 10).

This alternative was dismissed by the Town Committee because of its impacts on Coastal Dune resources and related concerns about its permissibility under the WPA.

Parking Alternatives 4 and 5: New parking entirely or partially on north side of Squibnocket Road (Weldon 3.8 acre parcel)

These alternatives involved the creation of replacement parking on a 3.8 acre parcel of land fronting along the north side of Squibnocket Road as it approaches the ocean (See Figure 11). One would also have used one of the undersized parcels on the other side of the road. Each would have required the acquisition of valuable, buildable land with ocean frontage, and was rejected as too costly.

Parking Alternative 6: Remote parking

This alternative, which was suggested to the Town Committee but not fully evaluated, involved the removal of the Existing Town Lot and the creation of replacement parking at an unspecified remote location, connected to Squibnocket Beach by shuttle buses. This alternative did not progress to formal evaluation because it was considered to be impractical, operationally difficult, and would not eliminate the need for the construction of new infrastructure at the beach (e.g., a drop off and turn around area for busses, and handicap accessibility improvements).

Access Alternatives

The Town Committee identified or was presented with, and considered, the following principal Access Alternatives, to which this ENF adds a “No Build” alternative. Figure 12 depicts all of the access alternatives.

No Build

This alternative is identical to the No Build alternative for parking. The No-Build access alternative would not achieve the purpose of the Access Project, which is to provide reliable and safe long-term vehicular access and utility service to Squibnocket Point.

Access Alternative 1: Causeway #1

This alternative included an approximately 300 foot long elevated causeway spanning from approximately the point where Squibnocket Road turns south to run parallel with the ocean to Money Hill. This Access Alternative would be sited entirely on land owned in fee by Squibnocket Farm, Inc.

This alternative included a pile-supported concrete structure with a finished elevation at approximate elevation 13 FT. This design would place the structure above the mapped velocity zone at the site as depicted on the current FEMA map of record. The proposed structure would be located approximately 120 feet landward of the existing high water mark and approximately 100 feet landward of the Revetment at its

northern end and approximately 80 feet landward of the mean high water at its landing near Money Hill.

This structure's minimal wetland impacts would be limited to the installation of piles within BVW and Coastal Dune.

This alternative was disfavored by the Town Committee because it was deemed too close to the existing shoreline to provide long-term viable access following the Town's planned removal of the Revetment.⁷

Access Alternative 2: Causeway #2

This access alternative is a variation on Access Alternative #1 and included an approximately 300 FT long elevated causeway connecting Squibnocket Road with Money Hill. Based on materials reviewed by the Committee, the northern landing point for the causeway would be located approximately 50 to 100 feet landward of the northern landing of Causeway #1, and the Money Hill landing point would be located approximately 50 feet to the south of the Causeway #1 southerly landing point.

This alternative had a perceived advantage over Causeway #1 because it was located farther inland. It required the use of an existing undeveloped lot owned by a third party. Like Causeway #1, it avoided fill in wetlands.

This alternative was disfavored by the Town Committee because it was deemed too close to the shoreline following the planned Town removal of the Revetment. But the Town Committee identified it as a suitable alternative in the event that land could not be acquired to accommodate the preferred alternative (Access Alternative 7).

Access Alternative 3: Causeway #3

This Access Alternative was a hybrid of Causeway #1 and Causeway #2, essentially using the northerly landing point of the former and the southerly landing point of the latter. This alternative included an approximately 300 to 350 long pile-supported elevated causeway located entirely on land owned by Squibnocket Farm. It did not require any land acquisitions.

Like Causeways #1 and 2, this alternative was disfavored by the Town Committee because it was deemed too close to the shoreline following the planned Town removal of the Revetment.

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⁷ On an independent basis, assuming the preservation of the Revetment, Squibnocket Farm had determined that an elevated causeway in this location would have sufficient useful life to meet the objectives of the access project.

Access Alternatives 4 and 5: Dune with at-grade road

These two alternatives included the following elements:

- A 10 to 12 foot high by 100 foot wide dune created along the shoreline with its seaward edge located approximately 0 to 35 feet landward of the Revetment;
- An approximately 635 foot long at grade gravel roadway along the landward side of the proposed dune; and
- Direct alteration by filling of approximately 4,350 SF of BVW for the construction of the dune and road.

These alternatives differed slightly in their alignment and need for the use of third party properties, but were similar in concept, dimensions and impacts. The basic design concept behind these alternatives was to provide a coastal dune to replace the Revetment. The dune and associated roadbed would migrate landward over time. The design assumed routine maintenance of the dune and roadway to ensure access, and periodic physical relocations of the dune and road to a more landward location to respond to the inland migration of the beach.

The Town Committee rejected these alternatives for a variety of reasons, including the complexity and cost of operations and maintenance and the difficulty of obtaining permits. These alternatives would require a variance under the WPA because each involved the alteration of greater than 5,000 SF of BVW and would not meet the performance standards prescribed by 310 CMR 10.55(4)(b). Such a project would not be considered a “limited project” under 310 CMR 10.53(3)(e) or be eligible for a variance because a reasonable alternative is available that meets the performance standards.

Access Alternative 6: At-Grade Road with Berm and Culverts over Wetlands

This Access Alternative is a variation of the dune with at-grade roadway alternatives discussed above and includes the following elements:

- A 400 foot long at grade roadway extending down the hill from Squibnocket Road to the edge of the BVW;
- An 8 to 11 foot high by 90 foot wide dune created along the shoreline with its seaward edge located approximately 0 to 50 feet landward of the existing revetment;
- An 270 foot long gravel roadway constructed on a 2 to 3 foot high earthen berm constructed with culverts to provide hydraulic connections beneath the road surface; and
- Direct alteration by filling of approximately 4,975 SF of BVW for the construction of the dune and road.

This alternative evolved out of the dune alternative with at-grade roadway (Access Alternatives 4 and 5) with the added feature of providing a hydraulic connection between the Atlantic Ocean and Squibnocket Pond beneath the at-grade road.

The Town Committee rejected this alternative for the same reasons that it rejected Access Alternatives 4 and 5.

Access Alternative 7: At Grade Road with 300 FT Causeway Over Wetlands (Preferred Alternative)

This Access Alternative includes the following elements:

- A 300 foot long at grade roadway extending down the hill from Squibnocket Road to the edge of the BVW;
- A 280 foot long pile supported causeway crossing the BVW adjacent to Squibnocket Pond.

This Access Alternative would allow for the natural movement of sand by wind and wave driven coastal processes without significant interruption in vehicular access to Squibnocket Point. Because the elevated causeway in this alternative is located at a more inland location than the causeways in Access Alternatives 1, 2 or 3, the road deck for the causeway in this alternative could be set at a slightly lower elevation without creating an unacceptable risk of service interruption and damage from frequent overwash. Access Alternative 7 requires the use of property now owned by the Town, purchased in contemplation of the Projects.

The Town Committee selected Access Alternative 7 as the preferred alternative because it was permissible under the WPA, met the project purpose of providing long-term vehicular access to Squibnocket Point, minimized impacts to wetlands, allowed for the natural migration of the shoreline, improved wildlife habitat and allowed for a lower road deck elevation that, consistent with engineering considerations, could be over washed with some frequency without resulting in significant damage or service interruption.

Access Alternative 8: Emergency Access through Blacksmith Valley

This Access Alternative would create a new means of emergency access to Squibnocket Point by constructing a bridge in two sections across Squibnocket Pond, the first running from Squibnocket Point to the eastern side of an undeveloped island known as Beach Grass Island and the second running from the western side of Beach Grass Island to an area of Chilmark known as Blacksmith Valley, which is comprised of various properties owned by third parties. This alternative is labeled "Access

Road” on Figure 12⁸ and was considered by the Town Committee as a potential means of providing life-safety access to existing residences on Squibnocket Point in the event the existing access corridor was destroyed in a storm.

The Town Committee rejected this alternative as unworkable because of opposition expressed by stakeholders at Committee meetings and the need for potentially costly and controversial land acquisitions or takings.

Wetland Impacts / Preferred Alternative

The Projects will restore natural coastal processes by removing existing structures from vulnerable and sensitive areas, replicating the natural dune system with sand nourishment and native plantings, and positioning new structures farther inshore and above resource areas. The Projects are anticipated to result in substantial net improvement to wetlands and coastal resources, including potentially improving hydrologic connections between Squibnocket Pond and the Atlantic Ocean and improving storm damage prevention and flood control by restoring the more natural state of the Barrier Beach.

Although the Projects offer substantial net long-term benefits to wetlands, during the construction period, the Projects will have unavoidable impacts on wetland resources. These impacts are quantified in the following sections. New wetland impacts have been minimized to the extent feasible and, where impacts could not be avoided or further minimized, mitigation is proposed to offset those impacts.

Wetland impacts were calculated based on field delineated resource areas accepted by the Chilmark Conservation Commission in July 2015. Impacts identified herein are approximate. Final impacts and associated mitigation will be confirmed through final design and the wetland permitting process.

Access Project

Beginning immediately west of the Relocated Beach Lot, the At-Grade Roadway will travel along the natural contour of the bank before transitioning to the Low Causeway. The use of piles is intended to substantially reduce the footprint of the project and to minimize impacts to BVW. The Low Causeway will terminate on the opposite bank where it reconnects to the existing dirt roadway leading to Squibnocket

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⁸ Figure 12 depicts two access alternatives that involve a bridge spanning across Squibnocket Pond – the “Access Road” and the “Emergency Access”. According to the minutes from the Town Committee’s meeting on October 31, 2014, the Town Committee quickly dismissed the bridge labeled “Emergency Access” from the formal review process because the route “would be flooded during an emergency that impairs regular access, and... therefore, an emergency access further to the west should be considered.” Upon dismissal of the “Emergency Access” bridge, the Town Committee proceeded to formally evaluate the “Access Road” bridge, which was ultimately rejected as noted above.

Point. Anticipated impacts to resource areas associated with the elements of the Access Project are summarized in Table 2.

Table 2 Access Project Wetland Impacts

Resource Area	Impact (SF)
Coastal Beach	0
Bordering Vegetated Wetland	3,600 (shadows) 36 (direct impact from piles)
Coastal Bank	2,600 (36 LF)
Barrier Beach	6,500
Coastal Dune	0
Land Subject to Coastal Storm Flowage	2,800

Town Project

The Town Project will occur after the completion of the Access Project. Removal of the Existing Town Lot and restoration of the beach with a man-made dune is anticipated to improve wetland function and habitat value along and within Squibnocket Beach and Squibnocket Pond.

Anticipated impacts to resource areas associated with the elements of the Town Project are summarized in Table 3.

Table 3 Town Project Wetlands Impacts

Resource Area	Impact (SF)
Coastal Beach	0
Bordering Vegetated Wetland	970
Coastal Bank	8,600
Barrier Beach	36,680
Coastal Dune	15,850
Land Subject to Coastal Storm Flowage	46,110

Mitigation Measures

The Projects will mitigate the environmental impacts of past activities at the Project Site. They are intended to improve the quality and value of wetland resources in the Project Area, while enhancing and prolonging public recreational amenities and securing future access to Squibnocket Point in a manner that will allow the removal of the Revetment and the restoration of natural geologic processes on the barrier beach. Removal of the existing engineered structures and infrastructure from vulnerable areas and restoration of the natural coastal landform will substantially improve storm damage prevention, flood control, and environmental conditions at the Project Site.

The Projects will replace a hard structure that attempts to oppose wave energy and stabilize the shoreline with improvements that allow for a dynamic shoreline, capable of shifting and changing naturally. The restored beach and dune will improve recreational value by creating a wider and more gently sloping beach accessible throughout the entire tide cycle, and provide more dependable access to properties located on Squibnocket Point. Public boating access to the Pond also will be enhanced.

In addition to the net environmental benefits inherent in the Projects, short-term construction related and long-term operational measures are proposed to avoid, minimize and mitigate impacts to coastal wetland resource areas. These include a comprehensive set of measures to minimize, to the extent practicable, construction period and permanent alterations to wetland resources and associated buffer zones.

Long-term Design Related Mitigation Measures

The Projects include the following planned long-term operational measures to avoid, minimize and mitigate potential impacts to coastal wetland resource areas.

Town Project

The Town Project affects two distinct sites requiring different approaches to long-term maintenance and impact avoidance. The Relocated Beach Lot and its associated retaining walls, surfaces and drainage structures will require routine inspection and maintenance on an as-needed basis to ensure continued operation as desired. The beach restoration portion of the Town Project is expected to require less formal maintenance due to the dynamic nature of the proposed landform. The following measures are proposed:

Stormwater Management

The Relocated Beach Lot will include stormwater management features designed to collect and treat stormwater runoff from the portions that are paved. Storm water management on all paved surfaces will be accomplished through surface collection at catch basins and vegetated swales, with discharge through subsurface leaching facilities. The balance of the Relocated Beach Lot will be a gravel surface. Gravel surfaces will remain pervious and bordered at their perimeter by gravel trenches.

The following measures are planned in accordance with the MassDEP Stormwater Management Policies as implemented by the Wetlands Regulations:

- Pervious Parking Surface – the gravel portions of the parking surface of the Relocated Beach Lot is planned to consist of crushed stone reinforced by a plastic geo-grid type stabilizer to maintain the surface, reduce impervious surfaces and promote infiltration;
- Vegetated Drainage Swales – The southeastern (seaward) edge of the Relocated Beach Lot (including the cul-de-sac) will include narrow vegetated drainage swales lined with crushed stone to provide water quality treatment;
- Infiltrating Catch basins – The proposed paved surfaces at the Relocated Beach Lot will be graded, in part, to drain towards an infiltrating catch basin designed to collect and treat runoff from the 1-inch storm event. Additional stormwater will be allowed to run off from the paved portion of the lot by sheet flow, avoiding new point source discharges.

Dune Stabilization

The landside slope of the proposed dune will be planted by appropriate indigenous species, subject to approval by the Chilmark Conservation Commission.

Inspection and Maintenance

The inspection and maintenance requirements for the Town Project will be determined in consultation with the Chilmark Conservation Commission during permitting but may include the following elements as may be deemed necessary:

- Semi-annual inspection of drainage swales and leaching catch basins to identify maintenance needs and to clear debris and accumulated sediment to maintain design capacities.
- Semi-annual inspection of the paved and unpaved surfaces of the Relocated Beach Lot to identify areas of erosion or damage to surfaces requiring repair.
- Annual or semi-annual shoreline profile survey and shoreline survey update/assessment performed during the spring and fall to monitor the

stabilization of the restored coastal system. The duration of this monitoring program will be determined by the Town in consultation with the Massachusetts Office of Coastal Zone Management.

Access Project

The Access Project requires routine inspection and maintenance to ensure long-term success in meeting the project needs while minimizing potential impacts to coastal wetland resource areas. The following long-term measures are proposed:

- Semi-annual inspection of drainage swales associated with the At-Grade Roadway to identify maintenance needs, clear debris and accumulated sediment to maintain design capacities; and
- Semi-annual visual inspection of paved surfaces and the Low Causeway structure during the initial two years of operation. Based on the results, inspections are anticipated to be reduced to annually and following large coastal storm events.

Short-term Construction Related Measures

The following short-term construction-related measures are proposed for the Projects:

- Perimeter Controls – A well-defined limit of work will be established in the field using highly visible orange fencing to minimize inadvertent impacts to resource areas and buffer zones.
- Perimeter Erosion and Sedimentation Controls – An erosion control barrier will be installed at the planned limit of disturbance using an entrenched silt fence/hay-bale barrier, coir logs or other controls deemed necessary by the Chilmark Conservation Commission. Perimeter erosion controls will remain in-place until the tributary area has been permanently stabilized by pavement, crushed stone or vegetation or as may be approved by the Chilmark Conservation Commission in administering the Orders of Conditions that it issues for the Projects' construction phase.
- Soil Stockpiles - No long-term soil stockpiles are anticipated during the construction of the parking lot or roadway. However, if such stockpiles are necessary to remain onsite greater than 10 days, they will be surrounded by perimeter erosion controls approved in advance by the Chilmark Conservation Commission.
- Spill Prevention and Containment – The Projects may collectively or individually require a U.S. EPA Construction General Permit for storm water

discharges. This will depend on area of disturbance calculations to be performed once designs are finalized. If required, this permit involves the preparation and implementation of a Stormwater Pollution Prevention Plan (SWPPP), which will include a spill prevention and containment plan to prevent releases of petroleum from mechanical construction equipment. The content of the SWPPP is dictated by the general permit, and will include details regarding:

- Daily inspections of limit of work and erosion control barriers;
 - Twice-daily inspections of all hydraulic equipment;
 - Restrictions on storage of construction equipment in resource areas;
 - Prohibitions on refueling construction equipment or vehicles in resource areas; and
 - Maintenance of an on-site emergency spill containment kit and emergency erosion control supplies.
- Construction Sequencing Plan – The project team, in coordination with the selected contractor(s) will develop a detailed construction sequencing plan designed to:
 - Ensure that vehicular access to Squibnocket Point is maintained at all times;
 - Maintain appropriate pedestrian access to Squibnocket Beach during the construction phase;
 - Minimize potential impacts to public access to Squibnocket Pond;
 - Provide for the phased construction of the At-Grade Roadway, Low Causeway, and Town Project;
 - Protect the active worksite from storm events by maintaining appropriate sections of the Revetment during beach restoration activities;
 - Stabilization of constructed dune as soon as practicable through the use of temporary snow fencing and permanent planting of appropriate indigenous plant species.

Regulatory Compliance

The Projects have been designed to comply with all applicable state statutes, policies and regulations, including principally the following:

- Massachusetts Environmental Policy Act
- Massachusetts Wetlands Protection Act
- Massachusetts Coastal Zone Management Plan
- Massachusetts Natural Heritage and Endangered Species Program
- M.G.L. Chapter 91 – Waterways Licensing
- M.G.L. Chapter 9, Sections 26-27C – Historic Preservation



The Projects' compliance with each of these statutes and regulatory programs is described below.

Massachusetts Environmental Policy Act (MEPA)

Any requirement of the Projects to prepare an ENF is fulfilled by the preparation, filing and circulation of this ENF. The Proponents anticipate the issuance of a certificate by the Secretary for Energy and Environmental Affairs stating that the Projects have properly complied with MEPA and the preparation of an Environmental Impact Report is not required.

Massachusetts Wetlands Protection Act (WPA)

The Projects are subject to regulation under the WPA because they include alteration of coastal and inland wetland resource areas defined in the WPA and implementing regulations at 310 CMR 10.00 (the "Wetland Regulations").

The Projects include work in the following resource areas (and, in some instances, the 100 foot buffer zone associated with each resource area):

- Barrier Beach;
- Coastal Beach
- Coastal Dune;
- Coastal Bank;
- Bordering Vegetated Wetlands (BVW);
- Land Subject to Coastal Storm Flowage (LSCSF); and
- Land Subject to Tidal Action⁹

The Projects have been designed to comply with all applicable performance standards in the Wetlands Regulations for work in these resource areas and will produce substantial net benefits to the protection of the public interests in these resource areas. The Projects have been designed to:

- Avoid the placement of fill in BVW to the extent practicable for the construction of the Low Causeway, in accordance with 310 CMR 10.55;
- Minimize the placement of fill in BVW for the construction of the Relocated Parking Lot (including the cul-de-sac), and providing replacement wetlands

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⁹ Note that, while the Projects includes work in several state-regulated wetland resource areas listed in 301 CMR 11.03(3)(b)(1)(a)-(f), the Projects do not require a Permit (as defined in 301 CMR 11.01) and, therefore, does not trigger MEPA review under the standards set forth in 301 CMR 11.03(3)(b)(1)(a)-(f).

as required by 310 CMR 10.55;

- Substantially enhance the capacity of coastal bank at the project site to serve as a sediment source for lateral drift through the removal of approximately 520 linear feet of the Revetment in accordance with 310 CMR 10.30;
- Maintain the capacity of coastal bank at the site to serve as a vertical barrier providing flood control and storm damage prevention as described in 310 CMR 10.30; and
- Substantially enhance the capacity of coastal dune present at the Project Site to provide storm damage prevention, flood control and the protection of wildlife habitat by removing approximately 14,200 s.f. of pavement from the Project Site and constructing an enhanced dune in its place.

In July 2015, the Chilmark Conservation Commission issued Orders of Conditions confirming the boundaries of regulated wetland resource areas present at the Project Site and authorizing test pits and soil borings to be performed in furtherance of the project design process.

The construction of the Projects will require the issuance of additional Orders of Conditions for work in jurisdictional resource areas and buffer zones.

Massachusetts Coastal Zone Management Plan

The Projects are located in the Massachusetts Coastal Zone as determined by the regulations at 301 CMR 20.00. The Projects are not subject to formal individual federal consistency review because neither the Access Project nor the Town Project require a federal agency action other than potential coverage under USEPA's general permit for storm water discharges from construction activity. Absent unusual factors, CZM does not require additional consistency review for projects using such general permits. Still, because the Projects are located in an important and dynamic coastal setting and the Town Project is in part funded by a Green Infrastructure Grant from the Massachusetts Office of Coastal Zone Management, the Projects have been designed to be consistent with the policies that CZM has promulgated under the Massachusetts Coastal Zone Management Act. Table 4 provides a summary of applicable MassCZM Program Policies and how the Projects comply.¹⁰

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¹⁰ Massachusetts Coastal Zone Management Policy Guide, October 2011. Executive Office of Energy and Environmental Affairs, Massachusetts Office of Coastal Zone Management

Table 4 – Consistency with Applicable Massachusetts Coastal Zone Management Policies

MCZM Policy	Policy Summary	Project Consistency
Coastal Hazard Policy # 1	Preserve, protect, restore, and enhance the beneficial functions of storm damage prevention and flood control provided by natural coastal landforms	The Projects will restore natural coastal landforms and remove artificial structures from prone areas. In doing so, they will enhance storm damage resiliency and flood control.
Coastal Hazards Policy # 3	Ensure that state and federally funded public works projects would be safe from flood and erosion-related damage	The Town Project could potentially be considered a state funded public works project. It will meet applicable regulations for work in coastal floodplain.
Energy Policy # 2	Encourage energy conservation and use of renewable sources	Not applicable. The Projects will have no energy demand once completed as no lighting or energy demanding equipment is proposed.
Growth Management Policy #1	Encourage sustainable development that is consistent with state, regional, and local plans	The Projects will incorporate sustainable design elements by removing existing pavement and the Revetment from the barrier beach, restoring the capacity of the coastal system to migrate landward in response to coastal storms, erosion and potential sea level rise. The Projects are consistent with regional, state, and local plans.
Growth Management Policy #2	Ensure that state and federally funded infrastructure projects serve developed urban areas	The Projects are intended to maintain access to existing developed areas and public amenities, and will not facilitate new development or the urbanization of undeveloped land.
Growth Management Policy #3	Encourage revitalization and enhancement of existing development in the coastal zone	The Project will revitalize Squibnocket Beach for public use by removing the Revetment and restoring the capacity of the Project Site to respond to natural coastal processes. The project will maintain access to existing homes on Squibnocket Point.
Habitat Policy # 1	Protect coastal, estuarine, and marine habitats to preserve wildlife habitats	The Projects will result in substantial improvements to the capacity of the Project Site to provide coastal wildlife habitats by removing approximately 0.3 acres of soil cement pavement and 520 linear feet of the Revetment and restoring a dynamic coastal environment at the site. After the Projects are completed, the Project Site will offer improved wildlife habitat within the footprint of the existing town lot and causeway. The Access Project is designed to allow for the natural movement of sand by wave and wind action.

MCZM Policy	Policy Summary	Project Consistency
Habitat Policy # 2	Advance the restoration of degraded or former habitats in coastal areas	The Projects will comply with MassDEP and U.S. EPA requirements, and will restore the shoreline to a more natural state by removing 0.3 acres of pavement and approximately 520 linear feet of the Revetment from the barrier beach.
Protected Areas Policy # 3	Minimize adverse effect to historic properties and districts	<p>The Project Site does not contain any above ground structures or historic properties and is not located within any established historic district. The Project Site is located within an area of known prehistoric archaeological sensitivity. No construction work will occur until an intensive assessment of the Project Site's archaeological resources is completed pursuant to an archaeological permit that the Massachusetts Historical Commission issued on August 26, 2015 with initial site work occurring during the week of September 8th.</p> <p>Areas of proposed ground alteration at the Project Site will be reviewed by an archaeologist in advance and completed in consultation with the state archaeologist and the Tribal Historic Preservation Officer as appropriate.</p>
Ports Policy # 4	Preserve and enhance waterfront for vessel-related activities	The Town Project includes the relocation of a skiff launch to Squibnocket Pond. The Projects will otherwise have no effect on vessel-related activities.
Public Access Policy # 1	Ensure that development would promote general public use and enjoyment of water front	The Projects will improve access to the shoreline and recreational opportunities on the beach by removing the Revetment and relocating the Existing Town Lot an adjacent location outside the barrier beach system.
Public Access Policy # 2	Improve public access to coastal recreational facilities; facilitate multiple uses; minimize adverse impacts of developments	The Projects will improve and enhance access to coastal recreational facilities by maintaining public parking and recreating` a more natural coastal environment at the site.
Public Access Policy # 3	Expand coastal recreational facilities and develop new public areas for recreational activities	The Projects will improve coastal recreational facilities by creating a wider beach (with time), maintaining existing parking and providing a relocated skiff launch area on Squibnocket Pond.

MCZM Policy	Policy Summary	Project Consistency
Water Quality Policy # 1	Ensure that point-source discharges do not compromise water quality standards	The Projects do not include any new point source discharge. Stormwater runoff will be collected and treated in a series of vegetated treatment swales and infiltrating catch basins and will fully comply with the Massachusetts Stormwater Management Policies as implemented by the Wetland Regulations.
Water Quality Policy # 2	Implement nonpoint pollution controls	The Projects will use Best Management Practices to minimize non-point source pollution at the Project Site.

Massachusetts Natural Heritage and Endangered Species Program

The Project Site is located within mapped Estimated Habitat of the rare vertebrate species northern harrier (*Circus cyaneus*).¹¹ Based on the developed nature of the Existing Town Lot and Revetment, we understand that portion of the site offers relatively poor quality habitat. (See Figure 13) The portion of the Project Site consisting of BVW is dominated by the common reed (*Phragmites australis*), and therefore provides only marginally better habitat value than the Existing Town Lot and Revetment.

The Project will result in substantial improvements to wildlife habitat overall and northern harrier habitat in particular for the following reasons:

- The restored beach area will substantially improve the potential for the site to provide preferred habitat for northern harrier prey;
- The removal of the Revetments and construction of the coastal dune has the potential, over time, to increase the frequency of storm overwash events increasing the amount of salt water passing through the BVW and into Squibnocket Pond. This partial restoration of the natural coastal system is expected to reduce the dominance of the common reed in the BVW, further improving the capacity of the site to provide preferred habitat for northern harrier prey; and
- The removal of the Revetments, existing Town Lot and construction of the coastal dune will enhance the coastal environment at the Project Site resulting in a net increase in potential wildlife habitat, including the habitat for the state-listed northern harrier.

▼
¹¹ Note that The Project Site does not contain mapped significant habitat and is not a Priority Site of Rare Species Habitats or Exemplary Communities (as such terms are defined in 310 CMR 10.04) and does not trigger MEPA review under 301 CMR 11.03(2).

In response to the Project-related Notices of Intent submitted to the Chilmark Conservation Commission in June, 2015, NHESP issued a letter on July 14, 2015 determining that the exploratory investigations proposed in those NOIs were exempt from the Massachusetts Endangered Species Act. NHESP further commented that the planned construction of the Projects was not expected to be exempt and would require review by NHESP.

As described above, the project is expected to result in a net benefit to northern harrier habitat and is therefore not expected to result in a take of the species as defined in Massachusetts Endangered Species Act (MESA). The proponents will consult with NHESP again during the design phase and provide copies of the Notices of Intent filed in connection with the Projects' construction phase.

The proponents are committed to continuing to work with NHESP to avoid any takes of endangered species in compliance with MESA.

M.G.L. Chapter 91 – Waterways Licensing

Massachusetts General Law Chapter 91 ("Chapter 91") requires a state-issued license for construction, alteration or changes in use to present or former land and waters subject to tidal action, Great Ponds, and filled tidelands. Chapter 91 is implemented by MassDEP under the regulations at 310 CMR 9.00.

The Projects are located between flowed tidelands of the Atlantic Ocean and Squibnocket Pond, but do not include any activities below mean high water of either water body. The Projects do, however, include activities (principally the installation of piles for the Low Causeway) on accreted land historically below mean high water of Squibnocket Pond.

Under 310 CMR 9.04, Chapter 91 jurisdiction extends to all filled tidelands (except landlocked tidelands), which tidelands are defined in 310 CMR 9.02 as:

"[F]ormer submerged lands and tidal flats which are no longer subject to tidal action due to the presence of fill"

Fill is further defined in 310 CMR 9.02 as:

"[A]ny unconsolidated material that is confined or expected to remain in one place in a waterway, except for material placed by natural processes not caused by the owner or any predecessor in interest..."

Sediment deposition along Squibnocket Pond is a result of natural sediment migration, and therefore not subject to licensure under Chapter 91. (See Figure 14)



Additionally, all existing fill and structures are located landward of the contemporary and historic water lines at the Project Site.

Because the Projects do not involve any activities in flowed tidelands lying below the contemporary high water mark or in filled tidelands, or within Squibnocket Pond, the Projects do not require a license pursuant to Chapter 91.

M.G.L. Chapter 9, Sections 26-27C – Historic Preservation

The Project Site does not contain any above-ground historic resources within the Historic Inventory of the Commonwealth and is not located within any state or National Register Historic District.

The Project Site is located in an area of known archaeological sensitivity for prehistoric resources associated with the early use of Squibnocket Point and the surrounding areas by Native Americans.¹² The State Historic and Archaeological Inventory includes documented archaeological sites with ½ mile of the Project Site.

The Proponents are continuing to comply with M.G.L. Chapter 9, Sections 26-27C and the implementing regulations at 950 CMR 70.00 and 950 CMR 71.00 (the “Archeology Regulations”). The Proponents jointly filed a Massachusetts Historic Commission (MHC) Project Notification Form and application for an archaeology permit for an intensive (locational) survey of the Project Site. In response, the State Archaeologist’s Office of MHC issued archaeology permit #3594 on August 26, 2015. This permit authorized the professional archaeologist engaged by the Proponents to perform 0.5 x 0.5 meter hand-dug test pits in the areas (i) to be altered by the Proponents during preliminary geotechnical testing related to the Access Project and (ii) areas within the footprint of the Replacement Town Lot and this field work was performed during the weeks of September 7th and 14th. A detailed technical report based on this field investigation is in process and will be provided to MHC and the Proponents upon its completion. This report will provide findings of the field investigations and recommendation based on these field investigations so that the Proponents can, if necessary, incorporate design features into the Projects to avoid, minimize or mitigate potential impacts to any archaeological resources that may be identified at the Project Site as required by the Archaeological Regulations.



¹² While the potential for impacts to archaeological resources is subject to detailed field investigation, if such resources were identified at the Project Site, no construction could continue until a memorandum of agreement among the parties were completed with the Massachusetts Historical Commission. Therefore, we presume that the Projects will not exceed the MEPA review threshold at 301 CMR 11.03(10).

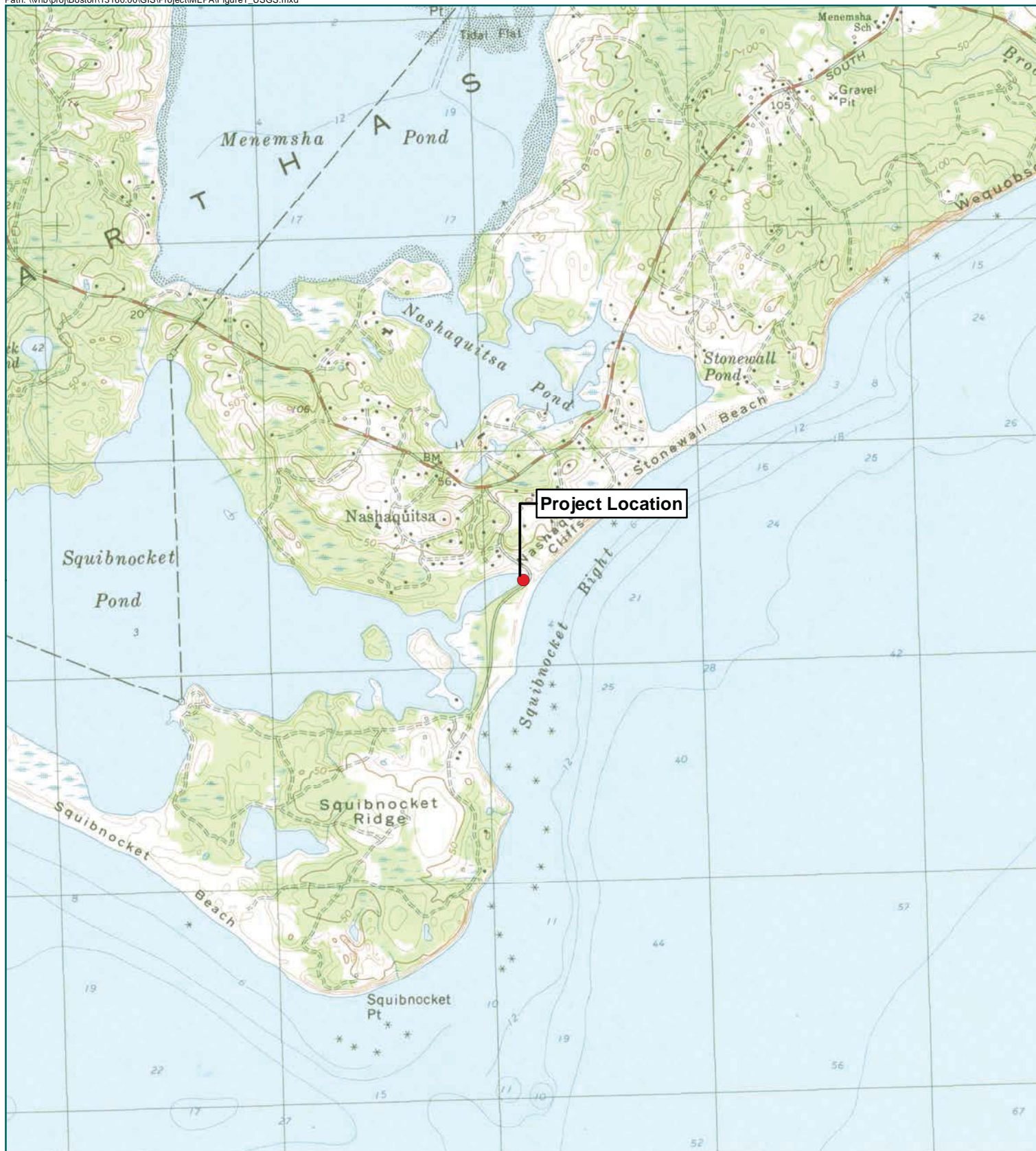
Conclusion

Apart from minimal and temporary construction-period effects, the environmental impacts of the proposed Projects are entirely positive. This is largely owing to the tireless efforts of the Town Committee on Squibnocket to find compatible and environmentally beneficial solutions to the challenges that rising sea level and increased storm intensity pose to private access and public recreation at the Project Site. The Proponents now seek to implement the Projects consistent with the Town Committee's recommendations and the unanimous votes taken at Town Meeting, and in compliance with all applicable laws and regulations. Due to the extensive history of review and the environmental benefits inherent in the Projects, the Proponents respectfully request a determination from the Secretary that this ENF adequately and properly complies with MEPA and that no further MEPA review is required prior to state agency actions.



Attachment B

Figures



● Project Location



**Figure 1- USGS Site Location Map
Squibnocket Beach, Chilmark, MA**

Source: MassGIS, VHB





— Proposed Conditions



**Figure 2 - Aerial Map
Squibnocket Beach, Chilmark, MA**

Source: MassGIS, VHB





Proposed Conditions
Shoreline Change Transects



**Figure 3 – Shoreline Erosion
Squibnocket Beach, Chilmark, MA**

Source: MassGIS, MORIS, VHB





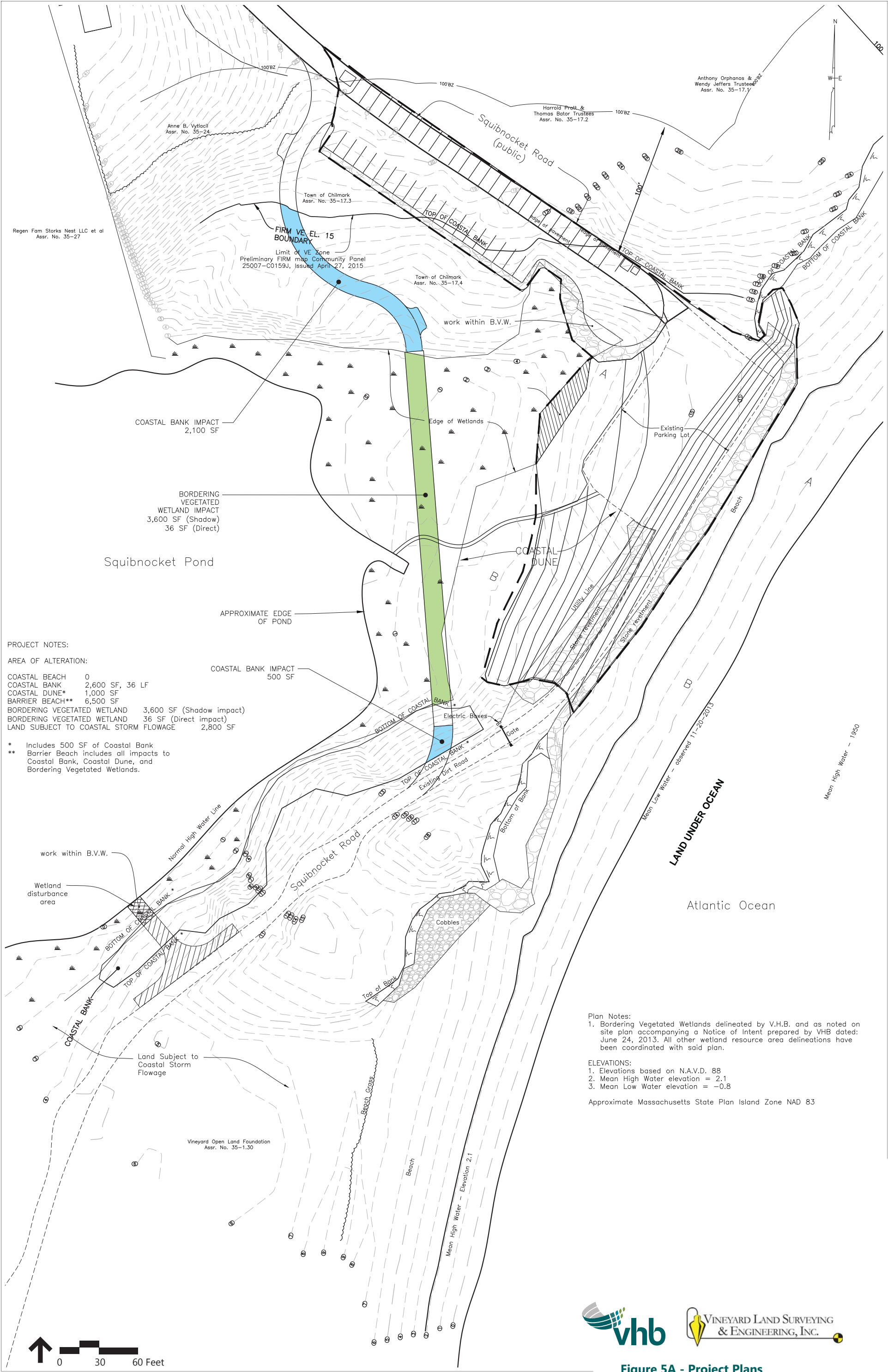
- Proposed Conditions
- Bordering Vegetated Wetlands
- Stone Revetment/Causeway
- Coastal Bank

0 125 250 Feet

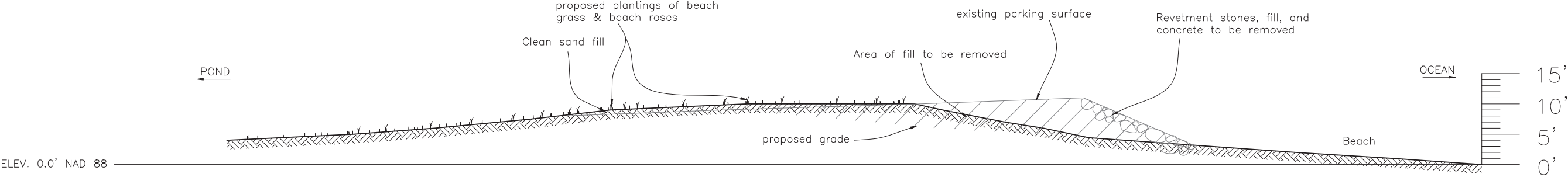


**Figure 4 - Wetland Resource Areas
Squibnocket Beach, Chilmark, MA**

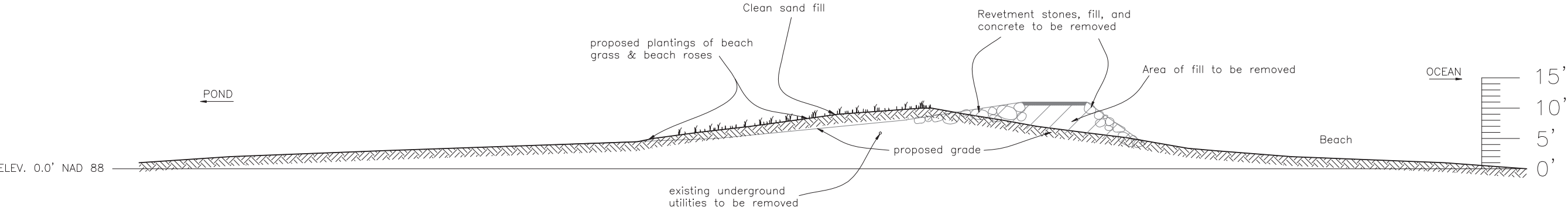
Source: MassGIS, VHB



**Figure 5A - Project Plans
Squibnocket Beach, Chilmark, MA**



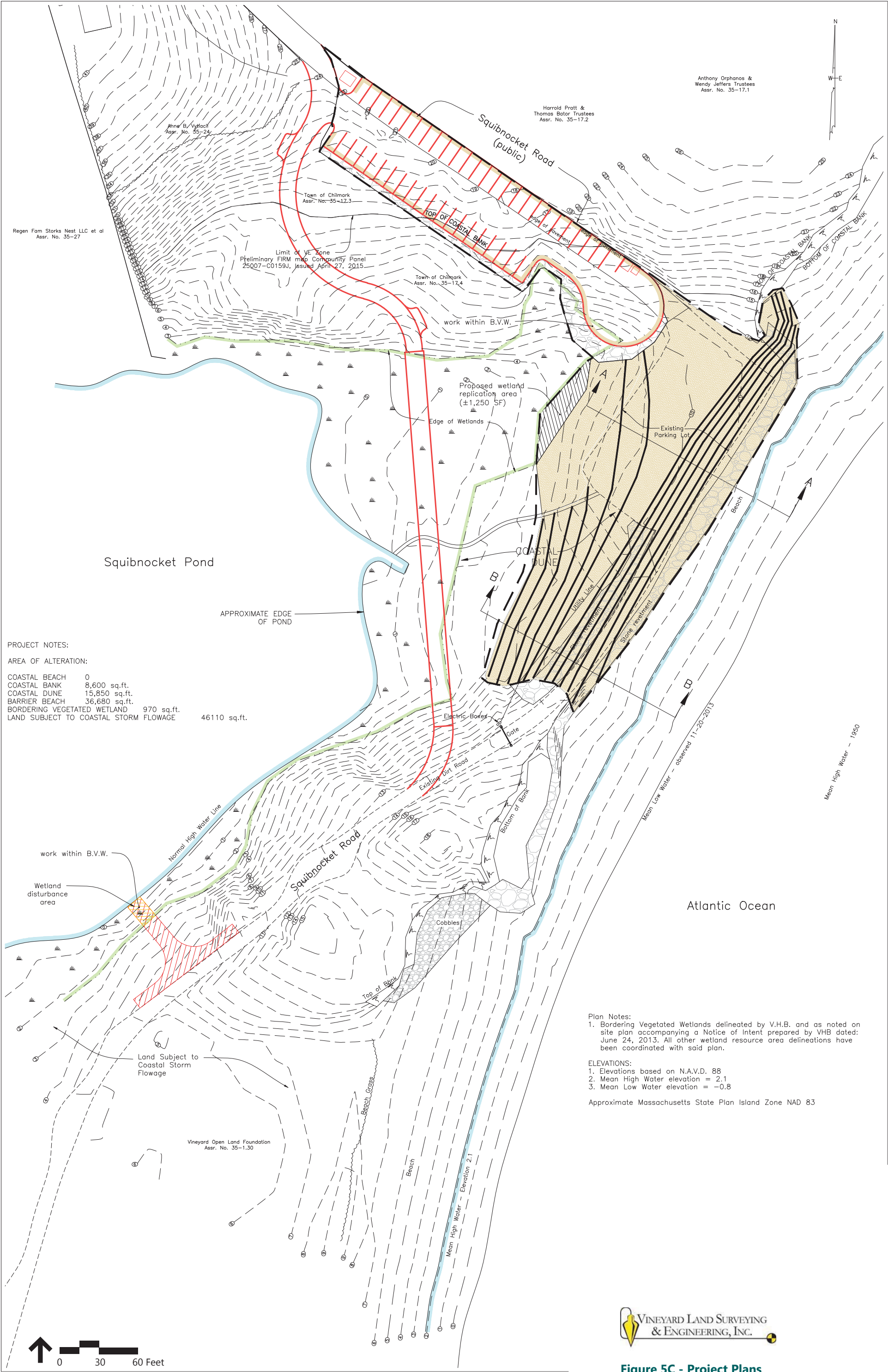
CROSS SECTION A-A THROUGH EXISTING PARKING AREA 1" = 10'



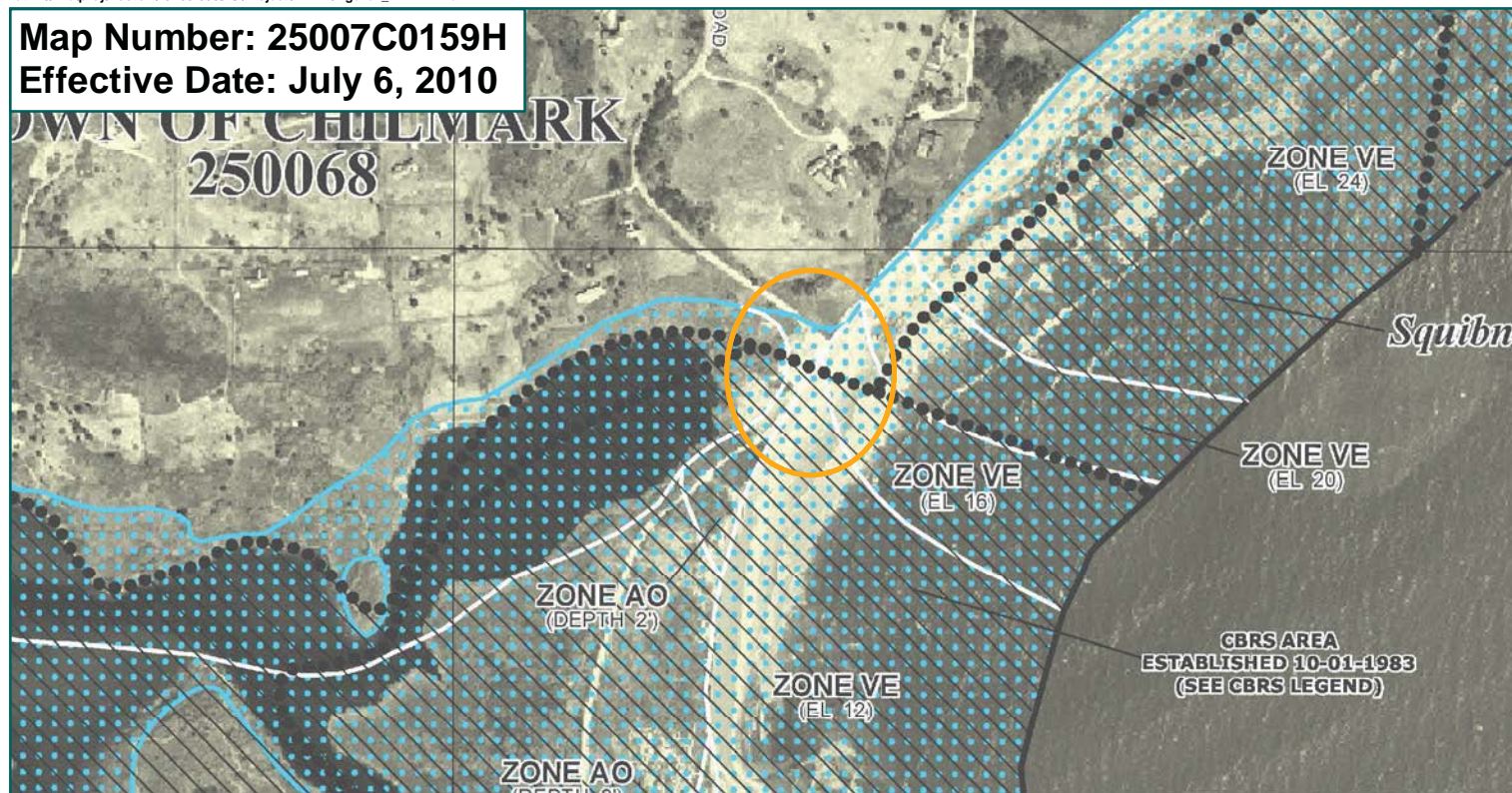
CROSS SECTION B-B THROUGH EXISTING ACCESS ROAD 1" = 10'



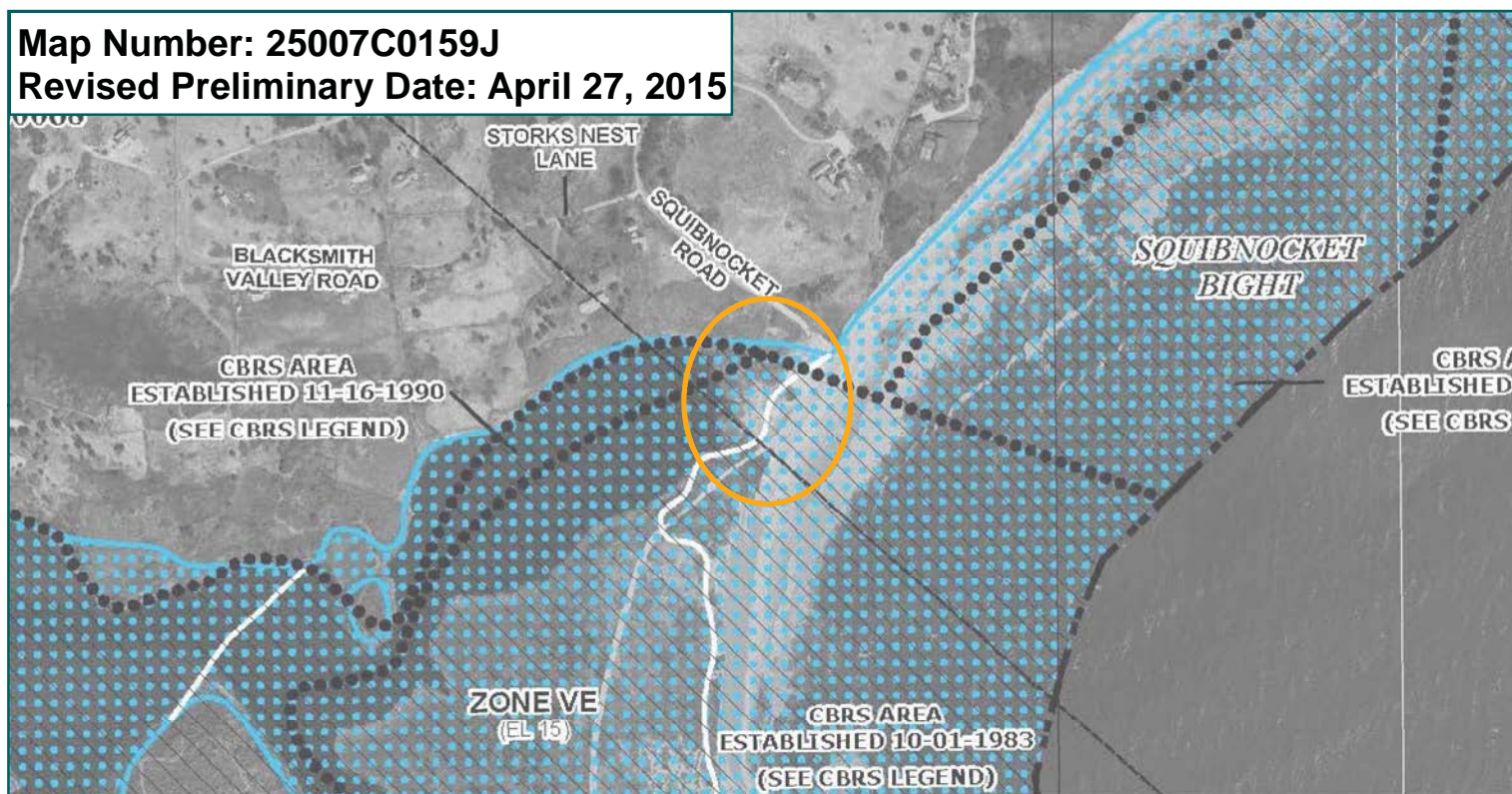
Figure 5B - Project Plans
Squibnocket Beach, Chilmark, MA



Map Number: 25007C0159H
Effective Date: July 6, 2010



Map Number: 25007C0159J
Revised Preliminary Date: April 27, 2015



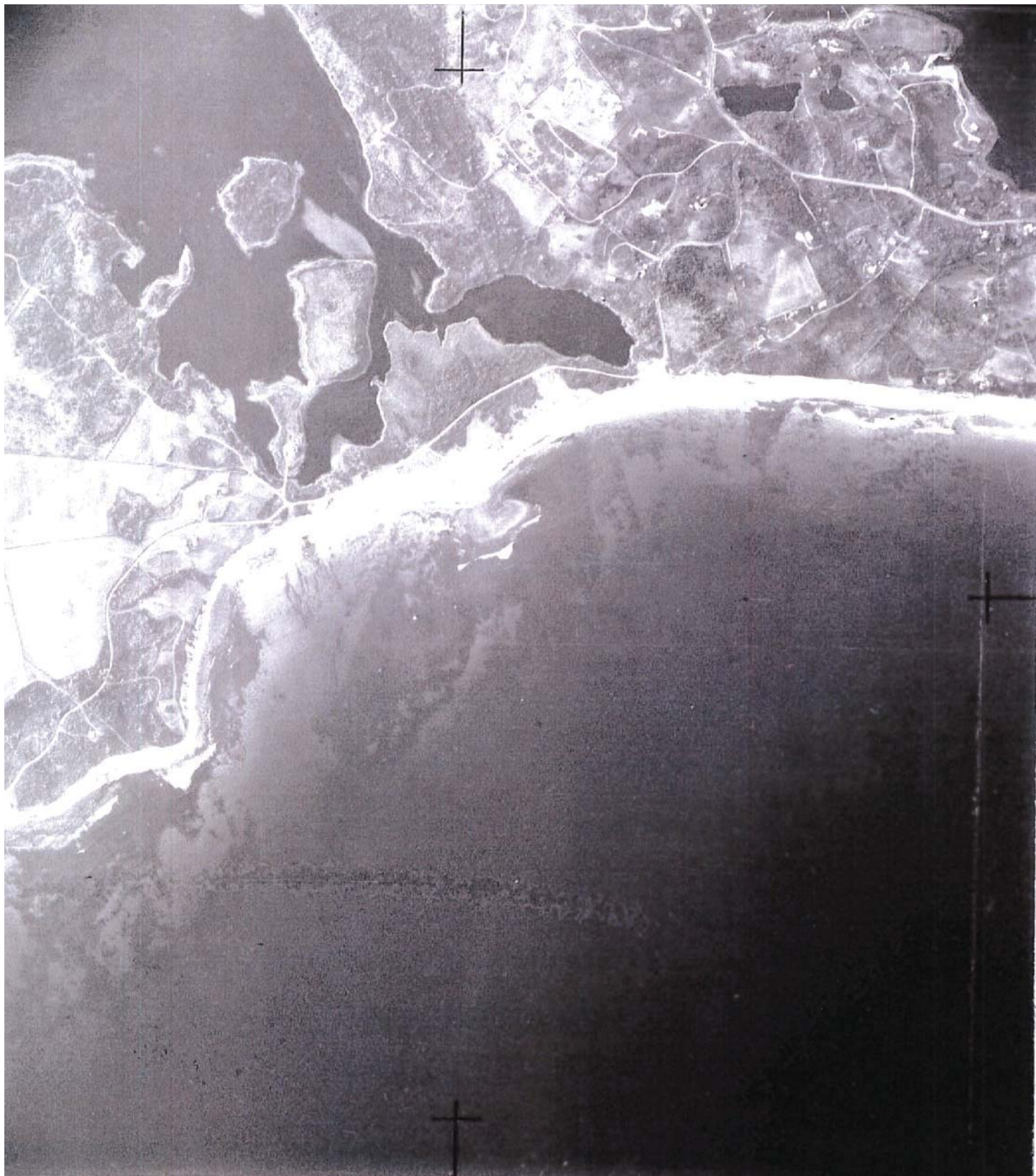
Project Site



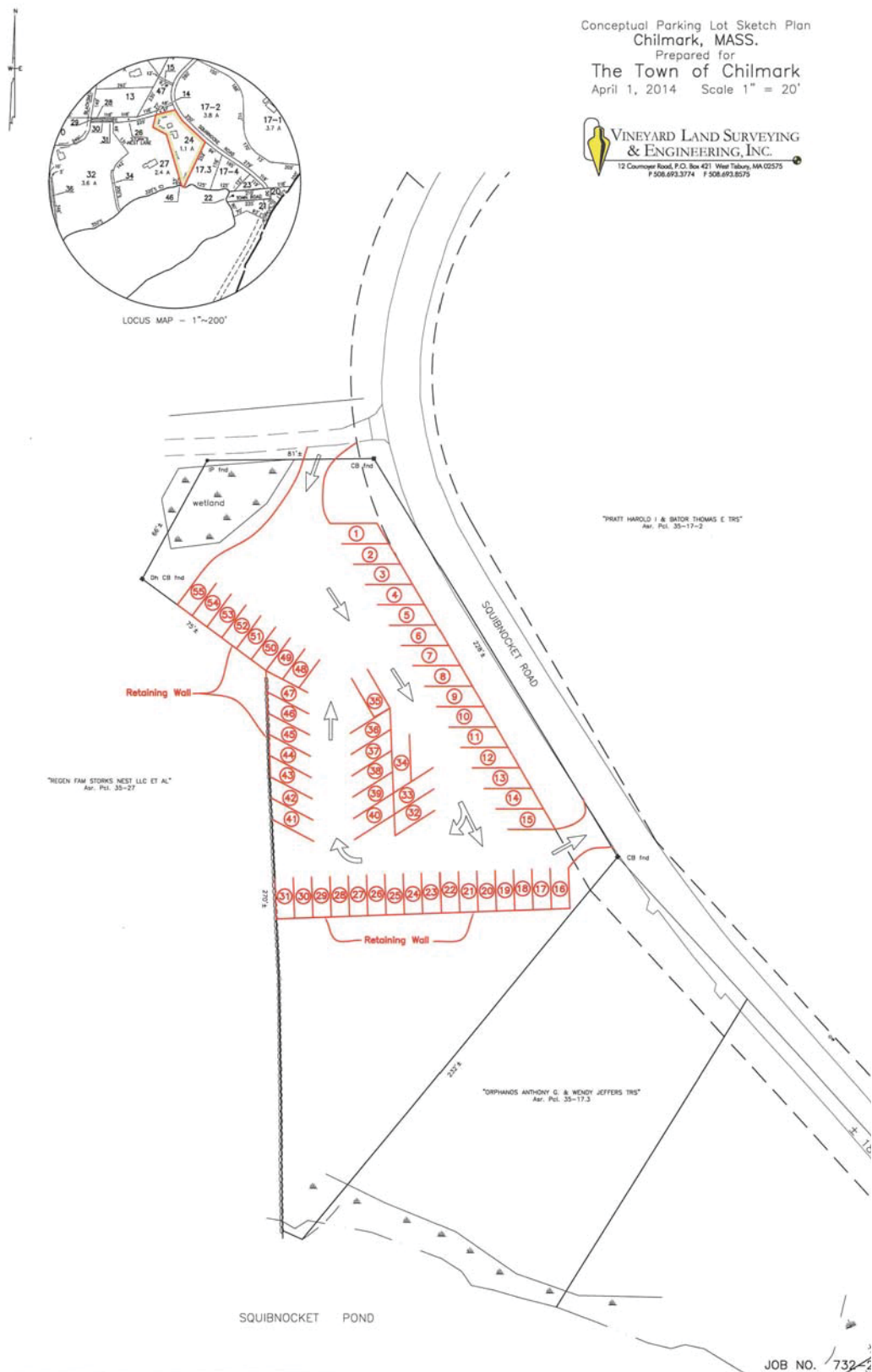
Figure 6 - FEMA Flood Insurance Rate Maps
Squibnocket Beach, Chilmark, MA

Source: MassGIS, FEMA, VHB





**Figure 7 - Early 1900's Aerial
Squibnocket Beach, Chilmark, MA**



**Figure 8 - Parking Layout for Vytlacil Only
Squibnocket Beach, Chilmark, MA**

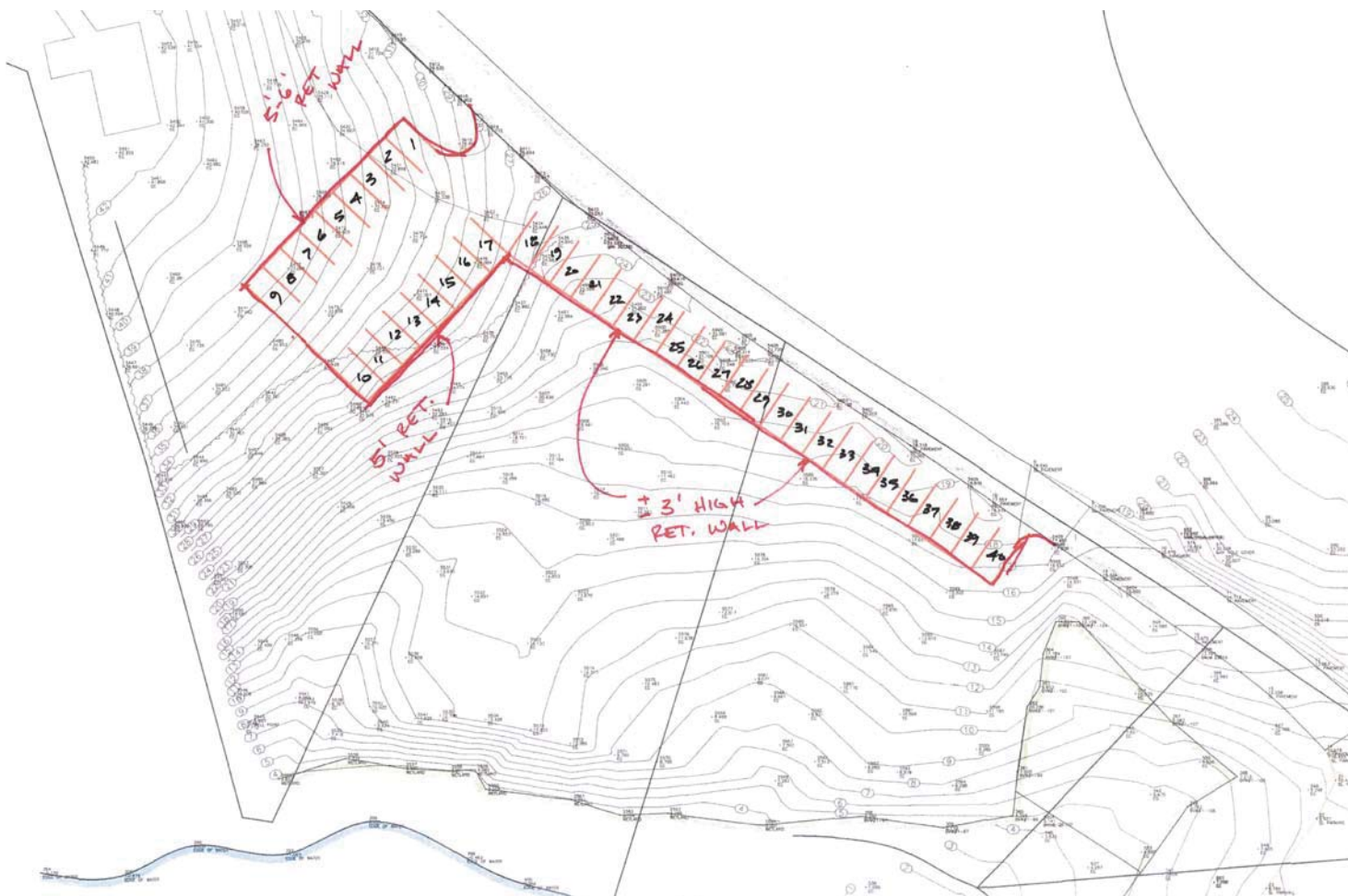


Figure 9 - Parking Layout for Vytlacil, Orphanos, Weldon Squibnocket Beach, Chilmark, MA



**Figure 10 - Parking Concept South of Money Hill
Squibnocket Beach, Chilmark, MA**



**Figure 11 - Parking Concept for "Big Weldon"
Squibnocket Beach, Chilmark, MA**



Imagery Data: 2009



Roadway Options

- Access Road
- Access Road
- At Grade with Dune
- Berm, Culvert
- Causeway #1
- Causeway #2
- Dune
- Emergency Access
- Parcel Boundary



**Figure 12 - All Access Alternatives
Squibnocket Beach, Chilmark, MA**

Source: MassGIS, VHB





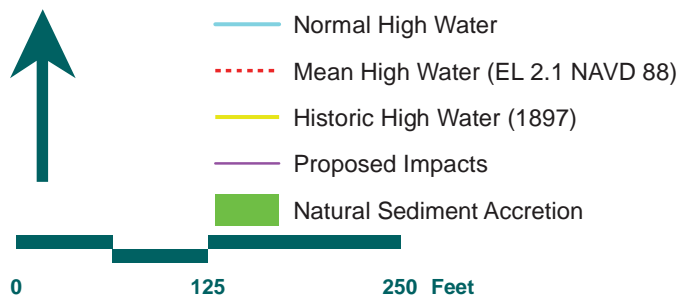
- Proposed Conditions
- NHESP Priority & Estimated Habitat Polygon EH79/PH15 Northern Harrier (*Circus cyaneus*)



Figure 13 - Natural Heritage Atlas
Squibnocket Beach, Chilmark, MA

Source: MassGIS, VHB





**Figure 14 - Chapter 91 Jurisdiction
Squibnocket Beach, Chilmark, MA**

Source: MassGIS, VHB



— Proposed Conditions



**Figure 15 - Photograph Location Map
Squibnocket Beach, Chilmark, MA**

Source: MassGIS, VHB





1 – Looking south to southeast across the Existing Town Lot



2 – Looking east from adjacent property to the west



3 – Looking north to northeast from Money Hill



4 – Looking south to southeast along the existing Causeway Revetment



5 – Revetment settlement following severe storm event



6 – Parking lot debris and damage following a severe storm event



Figure 16 - Site Photos
Squibnocket Beach, Chilmark, MA



Attachment B Distribution List

In accordance with the MEPA regulations at 301 CMR 11.16, the Proponent is distributing/circulating this Environmental Notification Form (ENF) to the public agencies and interested stakeholders listed below.

Notice of the availability of this ENF will be published in the *Massachusetts Environmental Monitor*, initiating a 20-day public comment period described in the Notice.

Commonwealth of Massachusetts

Secretary Matthew Beaton
Executive Office of Energy and Environmental Affairs (EEA)
Attn: MEPA Office
100 Cambridge Street, Suite 900
Boston, MA 02114

Department of Environmental Protection
Commissioner's Office
One Winter Street
Boston, MA 02108

DEP/Southeastern Regional Office
Attn: MEPA Coordinator
20 Riverside Drive
Lakeville, MA 02347

Massachusetts Department of Transportation (MassDOT)
District #5
Attn: MEPA Coordinator
1000 County Street
Taunton, MA 02780



Massachusetts Department of Transportation (MassDOT)
Public/Private Development Unit
10 Park Plaza
Boston, MA 02116

Massachusetts Historical Commission
ATTN: MEPA Coordinator
The Massachusetts Archives Building
220 Morrissey Boulevard
Boston, MA 02125

Natural Heritage and Endangered Species Program
Massachusetts Division of Fisheries & Wildlife
1 Rabbit Hill Road,
Westborough, MA 01581

Coastal Zone Management
Attn: Project Review Coordinator
251 Causeway Street, Suite 800
Boston, MA 02114

Division of Marine Fisheries (South Shore)
Attn: Environmental Reviewer
1213 Purchase Street - 3rd Floor
New Bedford, MA 02740-6694

Regional Planning Authority

Martha's Vineyard Commission
Attn: Jo-Ann Taylor
P.O. Box 1447
Oak Bluffs, MA 02557

Distribution List



Town of Chilmark

Chilmark Board of Selectmen
P.O Box 119
401 Middle Road
Chilmark, MA 02535-0119

Chilmark Planning Board
P.O Box 119
401 Middle Road
Chilmark, MA 02535-0119

Chilmark Conservation Commission
P.O Box 119
401 Middle Road
Chilmark, MA 02535-0119

Chilmark Board of Health
P.O Box 119
401 Middle Road
Chilmark, MA 02535-0119

