Conservation Commission Packet For 06/01/2016

NANTUCKET CONSERVATION COMMISSION

Updated Meeting Notice/Agenda for Wednesday, June 1st 2016

4:00 P.M. in the **2nd Floor** of the Public Safety Facility 4 Fairgrounds Road

*Matter has not been heard

I. PUBLIC MEETING

A. Public Comment

II. PUBLIC HEARING

A. Notice of Intent

1. Pocomo Neighbours – 47,53,55,57,61,63 & 69 Pocomo Road (Multiple) SE48-2874
2. The Trustees of Reservations –Costaka Coatue Wildlife Refuge and Great Point (7-1.7) SE48- 2884
3. Nantucket Islands Land Bank – 17 Commerical Wharf & Unnumbered Lot New Whale St (42.2.4-7 & 8) SE48-2885
4. Lindsay – 15 Pippins Way (43-94.3) SE48-2888
5. Knight – 12 E Lincoln Ave (42.4.1-47) SE48-2889
6. *Haulover – 165 Wauwinet Rd (7-1.1) SE48-2894
7. *Edell & Alderson – 8 High Brush Path (56-370) SE48-
8. *Beach Nut LLC – 1A Crow's Nest Way (12-24) SE48-2895
9. *Madaket Wheelhouse LLC – 13 Massachusetts Ave (60-75) SE48-2893
10. *3 Beacon Lane NT – 3 Beacon Lane (21-26.9) SE48-2892

B. Amended Order of Conditions

1. *Glenhurst West Realty Trust – 137 Cliff Rd (30-610) SE48-2384
2. *Polpis Harbor – 250 Polpis Rd (26-27) SE48- 2779

II. PUBLIC MEETING

A. Request for Determination

1. *Hanson RT – 11 Massachusetts Ave (60-80)
2. *Elliot – 1 Elliot's Way (92.4-319)
3. *Olof Clausson – 30 Eel Point Rd (40-44.1)
4. *MBC RT & Alice C. Wetherill – Henry St btw 45 & 47 Hulbert Ave (29-16 & 15)

B. Certificate of Compliance

1. *Nantucket Islands Land Bank – 21 Sesachacha Pond (21-17) SE48-2775
2. *Nantucket Islands Land Bank – 28 Washington St (42.3.2-23.1) SE48-2526
3. *Four Saratoga LLC – 14 Tennessee Ave (60.1.2-6) SE48-2506

C. Orders of Conditions (If the public hearing is closed – for discussion and/or issuance)

Discussion of other closed Notices of Intent

1. Pocomo Neighbours – 47,53,55,57,61,63 & 69 Pocomo Road (Multiple) SE48-2874
2. The Trustees of Reservations –Costaka Coatue Wildlife Refuge and Great Point (7-1.7) SE48- 2884
3. Nantucket Islands Land Bank – 17 Commerical Wharf & Unnumbered Lot New Whale St (42.2.4-7 & 8) SE48-2885
4. Lindsay – 15 Pippins Way (43-94.3) SE48-2888
5. Knight – 12 E Lincoln Ave (42.4.1-47) SE48-2889
6. Hilderbrand – 60 Crooked Lane (41-198) SE48-2886
7. *Haulover – 165 Wauwinet Rd (7-1.1) SE48-2894
8. *Edell & Alderson – 8 High Brush Path (56-370) SE48-
9. *Beach Nut LLC – 1A Crow's Nest Way (12-24) SE48-2895
10. *Madaket Wheelhouse LLC – 13 Massachusetts Ave (60-75) SE48-2893
11. *3 Beacon Lane NT – 3 Beacon Lane (21-26.9) SE48-2892

D. Extension Requests

1. *97 Squam Road NT- 97 Squam Road (12-30) SE48-2583

E. Monitoring Reports

1. *Nantucket Islands Land Bank – 27 North Cambridge St (38-24) SE48-2527
2. *Nantucket Islands Land Bank - 72 Washington St (42.2.3-17) SE48-2741
3. *Nantucket Islands Land Bank - 21 Sesachacha Pond (21-17) SE48-2775
4. *Nantucket Islands Land Bank – 28, 30A & 30B Washington St (42.3.2-23.1) SE48-2526
5. *Nantucket Islands Land Bank – 22 Cathcart Rd (43-68) SE48-2810
6. *Nantucket Islands Land Bank – 158 Orange St (55-61.1) SE48-2689
7. *97 Squam Road NT – 97 Squam Road (12-30) SE48-2583

F. Other Business

1. Approval of Minutes 05/18/2016
2. Enforcement Action
3. Reports: CPC, NP&EDC, Mosquito Control Committee, Other
4. Commissioner's Comment
5. Administrator/ Staff Reports.

PUBLIC MEETINGS AND PUBLIC HEARING

(from pp. 5-7 of the Nantucket Conservation Commission's Information and Procedures)

Public Meetings and Public Hearings are not the same. Public Meetings are conducted so that the Commission may discuss matters affecting the interests of the public and the rights of individuals in an open forum. To act on a matter, a quorum of the Commission (four of the seven members) must be present. Public Hearings are conducted for the same overall reasons as the Public Meeting – to protect both the public interest and the rights of individuals – with the additional purpose of gathering relevant information from the applicant, interested parties, and the public at large, and providing the Commission with the means of gathering the information necessary to developing an informed opinion and to issuing Orders that are fully supported by the appropriate facts, laws, and science.

Public Meetings, and Public Hearings held within Public Meetings, are held in conformance with the Massachusetts Open Meetings Law, M.G.L. Ch. 39 §§23A-C, and the Code of the Town of Nantucket §§1-7, 2-1, et seq., 136-4, where applicable. Pursuant to Section 1-7 of the Code of the Town of Nantucket, the Commission conducts business in accordance with parliamentary procedure as set out by Roberts Rules. The tenth edition is the most recent and presently effective version of Robert Rules. Additionally, where appropriate, the Commission follows the guidelines for Conservation Commission Meetings and Hearings set out by the Massachusetts Association of Conservation Commissions (MACC), the state umbrella organization of Conservation Commissions that works for strong, workable, science-based laws and regulations.

The Chairman or Chairwoman (hereinafter "Chair") presides at Public Meetings and Public Hearings. In the absence of the Chair, the Vice Chair, or another Commissioner designated by the Chair presides. Public Hearings are conducted with an appropriate degree of formality, in accordance with Roberts Rules of Order, and with reference to state and local laws and regulations. During the Public Hearing portion of the Public Meeting, the Commission follows the following procedures:

A. The Hearing is called by the applicant's name and the address of the proposed activity. The applicant may or may not be the owner of the property.
B. The applicant, or the applicant's representative, presents the proposal to the Commission by describing the activity or project, its environmental impact, and its location relative to resource areas and buffer zones.
C. The Commissioners or the Commission staff may at this point have questions for the applicant or the applicant's representative relating to clarity of the application.
D. Interested parties, whether abutters, representatives of other entities, or the public, are invited to provide evidence or propose questions relevant to the project, to the resource area, to the protected interests arising by statute or regulation in relation to the resource area, and/or to the performance standards for such activities in such resource areas. Any questions must be directed to and through the Chair, not to the applicant or another person at the hearing. The time available for such public input may be limited by the Chair, especially where a large number of people seek to address the Commission. Public input should be limited to new information—if someone already has provided the same information to the Commission it is unnecessary for it to be restated by another speaker. For the above reasons, it is helpful to the Commission, and often will have more impact, if comments or questions are submitted in writing, in advance if at all possible.
E. The Commission staff and/or technical consultants retained by the Commission will provide any additional information they may deem relevant to the application, may answer questions from the Commission, and may provide a recommendation to the Commission.
F. The Commissioners may have additional questions from either the applicant or from persons who have provided evidence or other input to the Hearing.
G. The Chairman will ask if the applicant has any additional information based on the questions and input outlined above.
H. The Commission then will deliberate and decide a course of action. The Commission should not be interrupted during its deliberations.

Comments and questions are welcomed at the appropriate time in the hearing. Those most helpful to assisting the Commission in fulfilling its legal mandate are those comments or questions that pertain to the proposal or resource areas that are the subject of the Public Hearing. Issues beyond the Commission's jurisdiction are not legally relevant and should be avoided.

Because of the acoustics of the room in which the Commissions conducts Pubic Meetings, it can be difficult for Commissioners to hear those appearing before the Commission, or each other for that matter, if people are engaging in conversation elsewhere in the room. Please take all private conversations to the hallway outside.

Please note that the Commission keeps minutes of its proceedings in accordance with state law. The person keeping the minutes must record the names of persons addressing the Commission, and those addressing the Commission may need to spell their names if the spelling is not obvious. The files related to applications are available for public review at the Commission's office during normal business hours in advance of, and following the Pubic Meeting. They are not available for such review during the meeting, when such review would be distracting to Commissioners and staff, and would interfere with the orderly conduct of the Public Meeting.

Typically, the persons appearing before the Commission are professionals, that is, persons who are paid to attend the hearings on behalf of their client or employer. Such persons are expected to understand the rules and procedures of the Commission, and the relevancy of evidence, commentary, or questions submitted to the Commission.

It is not unusual for members of the public to appear before the Commission, especially in response to a notice that an activity is proposed on an abutting or nearby property. The Commission's staff is available to assist the public in understanding the applications under consideration by the

Commission relative to resource areas and protected interests. The public may visit the Commission's office and examine the application, the plans that are part of the application, and other materials that may be related to the proposal. Recognizing that non-professionals are not as familiar with the rules and procedures, the Chair is likely to allow them a little more leeway than might be permitted professionals practicing before the Commission. Nevertheless, this guide to Information & Procedures is designed to inform everyone of the practices and procedures. The Chair may redirect anyone at any point if they go beyond what is appropriate under the Commission's rules of procedure.

Pocomo Neighbours

47,53,55,57,61,63 & 69 Pocomo Road

(Multiple)

SE48-2874

NOTICE OF INTENT APPLICATION

For Coastal Bank Stabilization

At

47, 53, 55, 57, 61, 63, 67, 69 Pocomo Road
Nantucket, MA

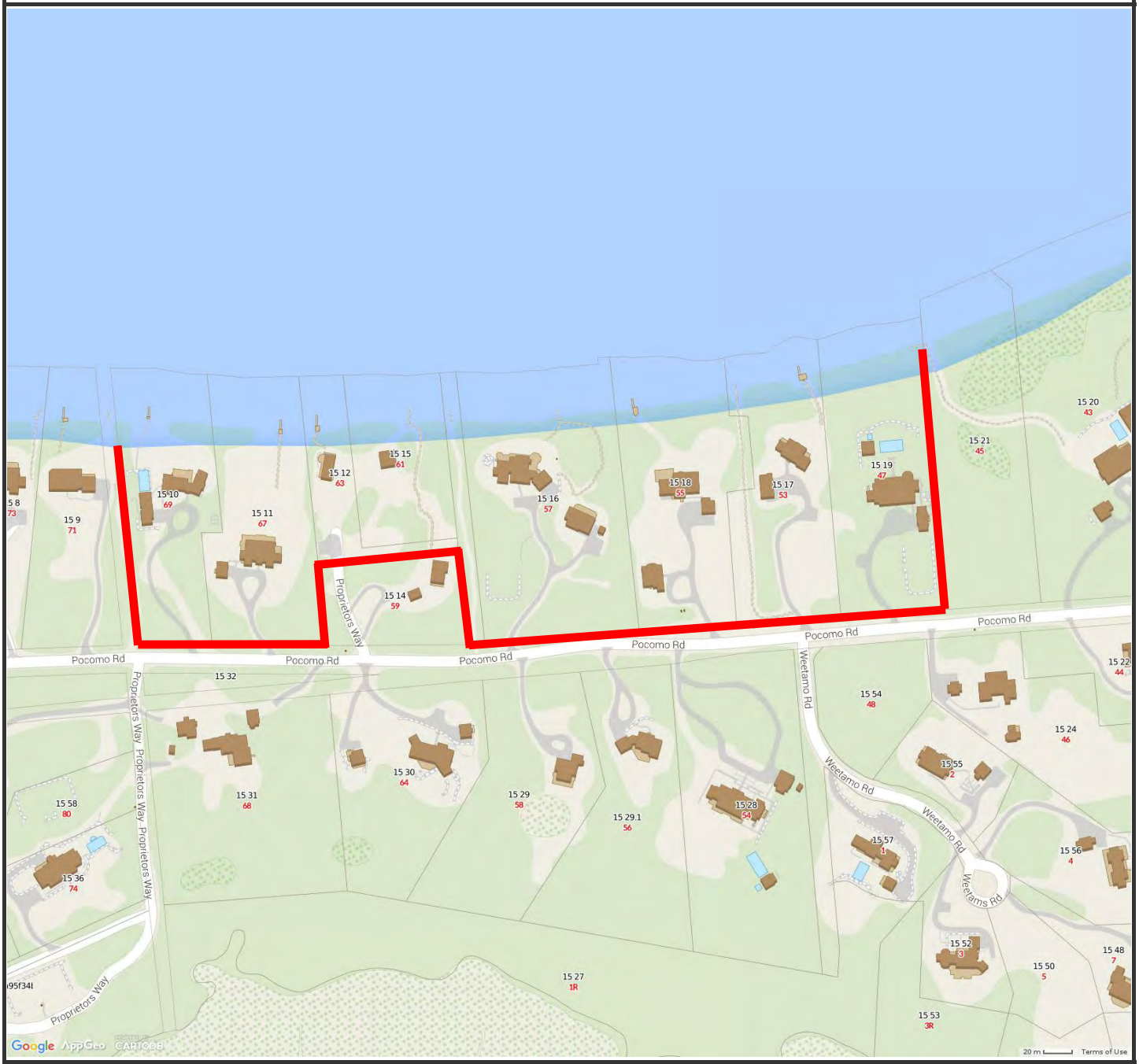
March 2016

Prepared For

POCOMO NEIGHBORS

20 Mary Ann Drive • Nantucket, MA 02554
508-825-5053 • www.NantucketEngineer.com

Locus Map - 47, 53, 55, 57, 61, 63, 67, 69 Pocomo Road



MAP FOR REFERENCE ONLY
NOT A LEGAL DOCUMENT

Town and County of Nantucket, MA makes no claims and no warranties, expressed or implied, concerning the validity or accuracy of the GIS data presented on this map.

Parcels updated December, 2014
Properties updated January, 2015

March 17, 2016

Mr. Ernest Steinauer, Chair
Nantucket Conservation Commission
2 Bathing Beach Road
Nantucket, MA 02554

Re: Notice of Intent for Coastal Bank Stabilization
47, 53, 55, 57, 61, 63, 67, 69 Pocomo Road
Nantucket, Massachusetts

Dear Mr. Steinauer:

On behalf of the property owners listed on the attached document titled Applicants for Pocomo Neighbors Coastal Stabilization Project, Nantucket Engineering & Survey, P.C. is submitting this Notice of Intent (NOI) to the Nantucket Conservation Commission for proposed Coastal Bank stabilization activities at the above referenced Pocomo Road properties (the "Site") in Nantucket, Massachusetts.

Proposed activities consist of stabilization, nourishment, and planting of American Beach Grass along the length of Coastal Bank located at the Site. Resource areas at the Site include Coastal Bank, Coastal Beach, Land Subject to Coastal Storm Flowage and Land Under the Ocean. No alteration is proposed to the Coastal Beach but it will be used as a working area during proposed Coastal Bank stabilization activities. Attached are permit drawings, including plans showing a site locus, existing conditions including resource area locations, and proposed construction areas.

A completed WPA Form 3 – Notice of Intent is attached along with the NOI Wetland Fee Transmittal Form including checks for $1,012.50, $25 and $200 to cover the WPA filing fee, Nantucket Wetland by-law fee and the Nantucket Expert Review fee. Also included is a check for $266.90 to the Inquirer & Mirror for publication of the notice of the public hearing. A Waiver Request from Section 2.05.B.3 of the Town of Nantucket Bylaw Chapter 136 has also been provided with this letter.

Notification of this NOI filing was provided to all abutting property owners by certified mail. This property owner listing was obtained from the Town of Nantucket Assessor's office. Documentation of the notification is provided including a copy of the notification letter, the property owner listing and certified mail receipts.

Attached is a publication by the Massachusetts Office of Coastal Zone Management which promotes this type of alternative for coastal stabilization. Also included are pages from the Order of Conditions (SE48-2789) issued on August 19, 2015 for a very similar project with similar conditions within Nantucket Harbor. The pages contain the Additional Conditions which this applicant also agrees to adhere to. That project has been constructed without apparent adverse impact to the interests protected by the Commission.

Please refer to the attached Site Assessment Report prepared by Lee Weishar, Ph.D. of the Woods Hole Group for additional supporting information.

Site Description

The Properties at 47, 53, 55, 57, 61, 63, 67, 69 Pocomo Road are listed as Map 15, Parcels 19, 17 18, 16, 15, 12, 11, 10 (Respectively) by the Town of Nantucket Assessor's Office. The combined property area is approximately 21-acres, and located in a residential area along the northern side of Pocomo Point. The properties are bounded to the north by Nantucket Harbor and to the east, west by existing residential properties. Pocomo Road runs along the southern side of the properties. Resource Areas on the Site consist of Coastal Bank and Coastal Beach and associated buffer zones, Land Subject to Coastal Storm Flowage and Land under the Ocean (Nantucket Harbor). No work is proposed in Nantucket Harbor (Land Subject to Coastal Storm Flowage), or below Mean High Water.

The Coastal Beach is located between the harbor and the existing Coastal Bank. Work proposed in this resource area includes only temporary machine activity associated with the project.

The Coastal Bank is located between the Coastal Beach and the upland areas (dunes). Work in this area consists of installation of five rows of sand-filled fiber rolls anchored into the Coastal Bank with duckbill anchors and anchor posts. The fiber rolls will be covered with sand and planted with American Beach Grass. Performance standards within this area are met, due to available sediment for transfer from the bank and fiber rolls to the adjacent resource areas. The 4 by 4-inch anchor posts at 5 feet on center are necessary to provide structural stability to the embankment slope and the toe until such time a full vegetative cover is established.

Land Subject to Coastal Storm Flowage extends to the 100-year flood elevation of 10 (NAVD88). The performance standards within this area are met as the ability of the land to contain flood waters is not impacted.

A portion of the project area is located within National Heritage and Endangered Species Program (NHESP) Priority Habitats of Rare Species or Estimated Habitats of Rare Wildlife. A copy of this application has been provided to NHESP for review and comment.

Project Description

The Pocomo Neighbors will retain an experienced contractor to perform the proposed Coastal Bank stabilization. The plans show the proposed construction details, including final grading and planting details. The proposed Coastal Bank stabilization that is the subject of this NOI consists of the following:

- Temporarily removing existing stairs;
- Adjustment of the embankment grade to 1:1.5 slope;
- Installing proposed stabilization system consisting of horizontal rows of 20-inch diameter fiber rolls, anchored in with duckbill anchors and anchor posts;
- Placement of erosion control blanket over the upper slope with a hand dug lock in trench;
- Placement of sand fill over fiber rolls (approximately 6 inches);
- Planting of American Beach Grass and other native species on the fiber rolls and on the slope.

Work Description

The applicant proposes to re-establish a vegetated slope on the face of the Coastal Bank, and enhance the ability of the landform to maintain a vegetated slope with the installation of biodegradable sand-filled fiber rolls with anchors, re-vegetation of the Coastal Bank, and maintenance of sand over the rolls. The sand cover will serve as sacrificial sediment to replicate a natural bank for storm damage protection and will maintain the available supply of sediment to the littoral system during storms.

The construction access for the project will be from the end of Pocomo Road to the beach along the existing sand track. This access will be used for once daily trips to get a small track excavator to the beach. No equipment will be left on the beach overnight or during severe storms. The beach access will be restored to match the existing conditions. Before and after construction photographs will be provided to the Commission to document appropriate restoration of the access area.

Sand and materials for the project will be delivered to the upland portion of the property for staging and transported to the beach as needed via small hoppers or front end loader.

Existing sand will be used as available and tested for grain size as part of this work. Supplemental sand brought in from offsite will be tested to confirm similar grain size characteristics to the existing sand.

Upon completion of the project, the face of the Coastal Bank will be vegetated with American Beach Grass and other appropriate native species.

Monitoring & Maintenance

The applicant proposes to conduct the following observation and maintenance program for the installed slope stabilization:

- Visit the site twice per year in early spring and late fall to observe condition of the slope and assess need for maintenance.
- Visit the site after each significant storm to assess conditions and provide as needed repairs.
- When significant storm damage is observed, the Conservation Commission will be notified to implement corrective measures.

Conclusion

The work as proposed will not affect the ability of the resource areas to function as they currently do, and will result in an improvement to the stability and vegetative community of the coastal bank system. The project will not result in an adverse impact on the areas or the interests protected by the Commission including flood control, erosion control, storm damage prevention, prevention of pollution, wildlife, and scenic views.

Sincerely,

Arthur D. Gasbarro, PE, PLS, LEED AP

NANTUCKET ENGINEERING & SURVEY, PC

POCOMO NEIGHBORS COASTAL STABILIZATION PROJECT

20 Mary Ann Drive • Nantucket, MA 02554
508-825-5053 • www.NantucketEngineer.com

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WPA Form 3 – Notice of Intent

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40
And the Town of Nantucket Wetlands Bylaw Chapter 136

Provided by MassDEP:

MassDEP File Number

Document Transaction Number

NANTUCKET
City/Town

A. General Information

1. Project Location (**Note:** electronic filers will click on button to locate project site):

47, 53, 55, 57, 61, 63, 67, 69 Pocomo Road — a. Street Address
Nantucket — b. City/Town
02554 — c. Zip Code

Latitude and Longitude:
41d 18' 57" N — d. Latitude
70d 01' 30" W — e. Longitude

15 — f. Assessors Map/Plat Number
19, 17 18, 16, 15, 12, 11, 10 (Respectively) — g. Parcel /Lot Number

2. Applicant:

Refer to Attached List ("Pocomo Neighbors") — a. First Name
b. Last Name
c. Organization

c/o Arthur I. Reade, Jr., P.O. Box 2669 — d. Street Address
Nantucket — e. City/Town
MA — f. State
02584 — g. Zip Code
508-228-3128 — h. Phone Number
i. Fax Number
air@readelaw.com — j. Email Address

3. Property owner (required if different from applicant): ☒ Check if more than one owner

Refer to Attached List — a. First Name
b. Last Name
c. Organization
d. Street Address
e. City/Town
f. State
g. Zip Code
h. Phone Number
i. Fax Number
j. Email address

4. Representative (if any):

Arthur D. — a. First Name
Gasbarro, PE, PLS, LEED AP — b. Last Name
Nantucket Engineering & Survey, P.C. — c. Company
20 Mary Ann Drive — d. Street Address
Nantucket — e. City/Town
MA — f. State
02554 — g. Zip Code
508-825-5053 — h. Phone Number
i. Fax Number
art@nantucketengineer.com — j. Email address

5. Total WPA Fee Paid (from NOI Wetland Fee Transmittal Form):

$2,000 + $25 + $200 — a. Total Fee Paid
$987.50 — b. State Fee Paid
$1,012.50 + $25 + $200 — c. City/Town Fee Paid

A. General Information (continued)

6. General Project Description:

The applicants are proposing to install an anchored fiber roll array with reinforced soil lifts, timber posts, sand nourishment cover and beach grass/native species plantings along the face of a coastal bank. The existing debris and fence posts will be removed and the entire area cleaned up. Please refer to the attached Project Narrative and Site Plan for additional information.

7a. Project Type Checklist:

1. ☐ Single Family Home
2. ☐ Residential Subdivision
3. ☐ Limited Project Driveway Crossing
4. ☐ Commercial/Industrial
5. ☐ Dock/Pier
6. ☐ Utilities
7. ☐ Coastal Engineering Structure
8. ☐ Agriculture (e.g., cranberries, forestry)
9. ☐ Transportation
10. ☒ Other

7b. Is any portion of the proposed activity eligible to be treated as a limited project subject to 310 CMR 10.24 (coastal) or 310 CMR 10.53 (inland)?

1. ☐ Yes ☐ No If yes, describe which limited project applies to this project:

2. Limited Project

8. Property recorded at the Registry of Deeds for:

NANTUCKET	Refer to Attached List ("Pocomo Neighbors")
a. County	b. Certificate # (if registered land)
c. Book	d. Page Number

B. Buffer Zone & Resource Area Impacts (temporary & permanent)

1. ☐ Buffer Zone Only – Check if the project is located only in the Buffer Zone of a Bordering Vegetated Wetland, Inland Bank, or Coastal Resource Area.
2. ☐ Inland Resource Areas (see 310 CMR 10.54-10.58; if not applicable, go to Section B.3, Coastal Resource Areas).

Check all that apply below. Attach narrative and any supporting documentation describing how the project will meet all performance standards for each of the resource areas altered, including standards requiring consideration of alternative project design or location.

For all projects affecting other Resource Areas, please attach a narrative explaining how the resource area was delineated.

Resource Area	Size of Proposed Alteration	Proposed Replacement (if any)
a. ☐ Bank	1. linear feet	2. linear feet
b. ☐ Bordering Vegetated Wetland	1. square feet	2. square feet
c. ☐ Land Under Waterbodies and Waterways	1. square feet	2. square feet
	3. cubic yards dredged	

B. Buffer Zone & Resource Area Impacts (temporary & permanent) (cont'd)

Resource Area	Size of Proposed Alteration	Proposed Replacement (if any)
d. ☐ Bordering Land Subject to Flooding	1. square feet	2. square feet
	3. cubic feet of flood storage lost	4. cubic feet replaced
e. ☐ Isolated Land Subject to Flooding	1. square feet	
	2. cubic feet of flood storage lost	3. cubic feet replaced
f. ☐ Riverfront Area	1. Name of Waterway (if available)	

2. Width of Riverfront Area (check one):

☐ 25 ft. - Designated Densely Developed Areas only

☐ 100 ft. - New agricultural projects only

☐ 200 ft. - All other projects

3. Total area of Riverfront Area on the site of the proposed project: _____ square feet

4. Proposed alteration of the Riverfront Area:

a. total square feet _____ b. square feet within 100 ft. _____ c. square feet between 100 ft. and 200 ft. _____

5. Has an alternatives analysis been done and is it attached to this NOI? ☐ Yes ☐ No

6. Was the lot where the activity is proposed created prior to August 1, 1996? ☐ Yes ☐ No

3. ☒ Coastal Resource Areas: (See 310 CMR 10.25-10.35)

Check all that apply below. Attach narrative and supporting documentation describing how the project will meet all performance standards for each of the resource areas altered, including standards requiring consideration of alternative project design or location.

Online Users: Include your document transaction number (provided on your receipt page) with all supplementary information you submit to the Department.

Resource Area	Size of Proposed Alteration	Proposed Replacement (if any)
a. ☐ Designated Port Areas	Indicate size under Land Under the Ocean, below	
b. ☐ Land Under the Ocean	1. square feet	
	2. cubic yards dredged	
c. ☐ Barrier Beach	Indicate size under Coastal Beaches and/or Coastal Dunes below	
d. ☐ Coastal Beaches	1. square feet	2. cubic yards beach nourishment
e. ☐ Coastal Dunes	1. square feet	2. cubic yards dune nourishment

B. Buffer Zone & Resource Area Impacts (temporary & permanent) (cont'd)

	Size of Proposed Alteration	Proposed Replacement (if any)
f. ☒ Coastal Banks	1,800' +/- Fiber Rolls, Sand Fill & Beach Grass Plantings	
g. ☐ Rocky Intertidal Shores	1. square feet	
h. ☐ Salt Marshes	1. square feet	2. sq ft restoration, rehab., creation
i. ☐ Land Under Salt Ponds	1. square feet 2. cubic yards dredged	
j. ☐ Land Containing Shellfish	1. square feet	
k. ☐ Fish Runs	Indicate size under Coastal Banks, inland Bank, Land Under the Ocean, and/or inland Land Under Waterbodies and Waterways, above 1. cubic yards dredged	
l. ☒ Land Subject to Coastal Storm Flowage	21,000+/- 1. square feet	

4. ☐ Restoration/Enhancement
If the project is for the purpose of restoring or enhancing a wetland resource area in addition to the square footage that has been entered in Section B.2.b or B.3.h above, please enter the additional amount here.

a. square feet of BVW | b. square feet of Salt Marsh

5. ☐ Project Involves Stream Crossings

a. number of new stream crossings | b. number of replacement stream crossings

C. Other Applicable Standards and Requirements

Streamlined Massachusetts Endangered Species Act/Wetlands Protection Act Review

1. Is any portion of the proposed project located in **Estimated Habitat of Rare Wildlife** as indicated on the most recent Estimated Habitat Map of State-Listed Rare Wetland Wildlife published by the Natural Heritage and Endangered Species Program (NHESP)? To view habitat maps, see the *Massachusetts Natural Heritage Atlas* or go to http://www.mass.gov/dfwele/dfw/nhesp/regulatory_review/priority_habitat/online_viewer.htm.

a. ☒ Yes ☐ No **If yes, include proof of mailing or hand delivery of NOI to:**

Natural Heritage and Endangered Species Program
Division of Fisheries and Wildlife
Route 135, North Drive
Westborough, MA 01581

10/1/08
b. Date of map

C. Other Applicable Standards and Requirements (cont'd)

If *yes*, the project is also subject to Massachusetts Endangered Species Act (MESA) review (321 CMR 10.18). To qualify for a streamlined, 30-day, MESA/Wetlands Protection Act review, please complete Section C.1.C, and include requested materials with this Notice of Intent (NOI); *OR* complete Section C.1.d, if applicable. *If MESA supplemental information is not included with the NOI, by completing Section 1 of this form, the NHESP will require a separate MESA filing which may take up to 90 days to review (unless noted exceptions in Section 2 apply, see below).*

1. c. Submit Supplemental Information for Endangered Species Review*

   1. ☒ Percentage/acreage of property to be altered:

      (a) within wetland Resource Area — 3% / 27,000+/- s.f. (of combined properties) (percentage/acreage)

      (b) outside Resource Area — 0 (percentage/acreage)

   2. ☒ Assessor's Map or right-of-way plan of site

   3. ☒ Project plans for entire project site, including wetland resource areas and areas outside of wetlands jurisdiction, showing existing and proposed conditions, existing and proposed tree/vegetation clearing line, and clearly demarcated limits of work ********

      (a) ☒ Project description (including description of impacts outside of wetland resource area & buffer zone)

      (b) ☒ Photographs representative of the site

      (c) ☒ MESA filing fee (fee information available at: http://www.mass.gov/dfwele/dfw/nhesp/regulatory_review/mesa/mesa_fee_schedule.htm). Make check payable to "Commonwealth of Massachusetts - NHESP" and ***mail to NHESP*** at above address

      *Projects altering **10 or more acres** of land, also submit:*

      (d) ☐ Vegetation cover type map of site

      (e) ☐ Project plans showing Priority & Estimated Habitat boundaries

   d. OR Check One of the Following

      1. ☐ Project is exempt from MESA review.
         Attach applicant letter indicating which MESA exemption applies. (See 321 CMR 10.14, http://www.mass.gov/dfwele/dfw/nhesp/regulatory_review/mesa/mesa_exemptions.htm; the NOI must still be sent to NHESP if the project is within estimated habitat pursuant to 310 CMR 10.37 and 10.59.)

      2. ☐ Separate MESA review ongoing. — a. NHESP Tracking # ____ b. Date submitted to NHESP ____

* Some projects **not** in Estimated Habitat may be located in Priority Habitat, and require NHESP review (see http://www.mass.gov/dfwele/dfw/nhesp/nhesp.htm, regulatory review tab). Priority Habitat includes habitat for state-listed plants and strictly upland species not protected by the Wetlands Protection Act.

** MESA projects may not be segmented (321 CMR 10.16). The applicant must disclose full development plans even if such plans are not required as part of the Notice of Intent process.

C. Other Applicable Standards and Requirements (cont'd)

3. ☐ Separate MESA review completed.
Include copy of NHESP "no Take" determination or valid Conservation & Management Permit with approved plan.

2. For coastal projects only, is any portion of the proposed project located below the mean high water line or in a fish run?

a. ☐ Not applicable – project is in inland resource area only

b. ☐ Yes ☒ No If yes, include proof of mailing or hand delivery of NOI to either:

South Shore - Cohasset to Rhode Island, and the Cape & Islands:

Division of Marine Fisheries -
Southeast Marine Fisheries Station
Attn: Environmental Reviewer
1213 Purchase Street – 3rd Floor
New Bedford, MA 02740-6694

North Shore - Hull to New Hampshire:

Division of Marine Fisheries -
North Shore Office
Attn: Environmental Reviewer
30 Emerson Avenue
Gloucester, MA 01930

Also if yes, the project may require a Chapter 91 license. For coastal towns in the Northeast Region, please contact MassDEP's Boston Office. For coastal towns in the Southeast Region, please contact MassDEP's Southeast Regional Office.

3. Is any portion of the proposed project within an Area of Critical Environmental Concern (ACEC)?

a. ☐ Yes ☒ No If yes, provide name of ACEC (see instructions to WPA Form 3 or MassDEP Website for ACEC locations). **Note:** electronic filers click on Website.

b. ACEC

Online Users: Include your document transaction number (provided on your receipt page) with all supplementary information you submit to the Department.

4. Is any portion of the proposed project within an area designated as an Outstanding Resource Water (ORW) as designated in the Massachusetts Surface Water Quality Standards, 314 CMR 4.00?

a. ☐ Yes ☒ No

5. Is any portion of the site subject to a Wetlands Restriction Order under the Inland Wetlands Restriction Act (M.G.L. c. 131, § 40A) or the Coastal Wetlands Restriction Act (M.G.L. c. 130, § 105)?

a. ☐ Yes ☒ No

6. Is this project subject to provisions of the MassDEP Stormwater Management Standards?

a. ☐ Yes. Attach a copy of the Stormwater Report as required by the Stormwater Management Standards per 310 CMR 10.05(6)(k)-(q) and check if:

1. ☐ Applying for Low Impact Development (LID) site design credits (as described in Stormwater Management Handbook Vol. 2, Chapter 3)

2. ☐ A portion of the site constitutes redevelopment

3. ☐ Proprietary BMPs are included in the Stormwater Management System.

b. ☒ No. Check why the project is exempt:

1. ☒ Single-family house

C. Other Applicable Standards and Requirements (cont'd)

2. ☐ Emergency road repair

3. ☐ Small Residential Subdivision (less than or equal to 4 single-family houses or less than or equal to 4 units in multi-family housing project) with no discharge to Critical Areas.

D. Additional Information

Applicants must include the following with this Notice of Intent (NOI). See instructions for details.

Online Users: Attach the document transaction number (provided on your receipt page) for any of the following information you submit to the Department.

1. ☒ USGS or other map of the area (along with a narrative description, if necessary) containing sufficient information for the Conservation Commission and the Department to locate the site. (Electronic filers may omit this item.)

2. ☒ Plans identifying the location of proposed activities (including activities proposed to serve as a Bordering Vegetated Wetland [BVW] replication area or other mitigating measure) relative to the boundaries of each affected resource area.

3. ☒ Identify the method for BVW and other resource area boundary delineations (MassDEP BVW Field Data Form(s), Determination of Applicability, Order of Resource Area Delineation, etc.), and attach documentation of the methodology.

4. ☒ List the titles and dates for all plans and other materials submitted with this NOI.

Site Plan to Accompany a Notice of Intent – 2 Sheets
a. Plan Title

Blackwell & Associates, Inc.&
Nantucket Engineering & Survey, P.C.

Arthur D. Gasbarro, PE, PLS, LEED AP
c. Signed and Stamped by

March 17, 2016
d. Final Revision Date

1" = 30'
e. Scale

Site Assessment by Woods Hole Group, Lee Weishar, Ph.D
f. Additional Plan or Document Title

g. Date

5. ☒ If there is more than one property owner, please attach a list of these property owners not listed on this form.

6. ☒ Attach proof of mailing for Natural Heritage and Endangered Species Program, if needed.

7. ☐ Attach proof of mailing for Massachusetts Division of Marine Fisheries, if needed.

8. ☒ Attach NOI Wetland Fee Transmittal Form

9. ☐ Attach Stormwater Report, if needed.

E. Fees

1. ☐ Fee Exempt: No filing fee shall be assessed for projects of any city, town, county, or district of the Commonwealth, federally recognized Indian tribe housing authority, municipal housing authority, or the Massachusetts Bay Transportation Authority.

Applicants must submit the following information (in addition to pages 1 and 2 of the NOI Wetland Fee Transmittal Form) to confirm fee payment:

108	3/13/16
2. Municipal Check Number	3. Check date
107	3/13/16
4. State Check Number	5. Check date
Kenneth G.	Bartels (P N. Account)
6. Payor name on check: First Name	7. Payor name on check: Last Name

F. Signatures and Submittal Requirements

I hereby certify under the penalties of perjury that the foregoing Notice of Intent and accompanying plans, documents, and supporting data are true and complete to the best of my knowledge. I understand that the Conservation Commission will place notification of this Notice in a local newspaper at the expense of the applicant in accordance with the wetlands regulations, 310 CMR 10.05(5)(a).

I further certify under penalties of perjury that all abutters were notified of this application, pursuant to the requirements of M.G.L. c. 131, § 40. Notice must be made by Certificate of Mailing or in writing by hand delivery or certified mail (return receipt requested) to all abutters within 100 feet of the property line of the project location.

Agent	3/16/16
1. Signature of Applicant	2. Date
Agent	3/16/16
3. Signature of Property Owner (if different)	4. Date
	3/16/16
5. Signature of Representative (if any)	6. Date

For Conservation Commission:
Two copies of the completed Notice of Intent (Form 3), including supporting plans and documents, two copies of the NOI Wetland Fee Transmittal Form, and the city/town fee payment, to the Conservation Commission by certified mail or hand delivery.

For MassDEP:
One copy of the completed Notice of Intent (Form 3), including supporting plans and documents, one copy of the NOI Wetland Fee Transmittal Form, and a **copy** of the state fee payment to the MassDEP Regional Office (see Instructions) by certified mail or hand delivery.

Other:
If the applicant has checked the "yes" box in any part of Section C, Item 3, above, refer to that section and the Instructions for additional submittal requirements.

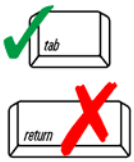
The original and copies must be sent simultaneously. Failure by the applicant to send copies in a timely manner may result in dismissal of the Notice of Intent.

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

NOI Wetland Fee Transmittal Form

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Important: When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



A. Applicant Information

1. Applicant:

Refer to Attached List ("Pocomo Neighbors")
a. First Name | b. Last Name

c. Organization

c/o Arthur I. Reade, Jr., P.O. Box 2669
d. Mailing Address

Nantucket | MA | 02584
e. City/Town | f. State | g. Zip Code

h. Phone Number | i. Fax Number | j. Email Address

2. Property Owner (if different):

Refer to Attached List ("Pocomo Neighbors")
a. First Name | b. Last Name

c. Organization

d. Mailing Address

e. City/Town | f. State | g. Zip Code

h. Phone Number | i. Fax Number | j. Email Address

3. Project Location:

47, 53, 55, 57, 61, 63, 67, 69 Pocomo Road | Nantucket
a. Street Address | b. City/Town

B. Fees

To calculate filing fees, refer to the category fee list and examples in the instructions for filling out WPA Form 3 (Notice of Intent).

The fee should be calculated using the following six-step process and worksheet. **Please see Instructions before filling out worksheet.**

Step 1/Type of Activity: Describe each type of activity that will occur in wetland resource area and buffer zone.

Step 2/Number of Activities: Identify the number of each type of activity.

Step 3/Individual Activity Fee: Identify each activity fee from the six project categories listed in the instructions.

Step 4/Subtotal Activity Fee: Multiply the number of activities (identified in Step 2) times the fee per category (identified in Step 3) to reach a subtotal fee amount. Note: If any of these activities are in a Riverfront Area in addition to another Resource Area or the Buffer Zone, the fee per activity should be multiplied by 1.5 and then added to the subtotal amount.

Step 5/Total Project Fee: Determine the total project fee by adding the subtotal amounts from Step 4.

Step 6/Fee Payments: To calculate the state share of the fee, divide the total fee in half and subtract $12.50. To calculate the city/town share of the fee, divide the total fee in half and add $12.50.

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

NOI Wetland Fee Transmittal Form

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

B. Fees (continued)

Step 1/Type of Activity	Step 2/Number of Activities	Step 3/Individual Activity Fee	Step 4/Subtotal Activity Fee
Install fiber rolls, sand fill & plant American beach grass.	1,800 l.f.	$4/foot	$2,000 (Max.)
Nantucket Wetland By-law Fee			$25
Nantucket Expert Review Fee			$200

Step 5/Total Project Fee: $2,000 + $25 + $200

Step 6/Fee Payments:

Total Project Fee:	$2,000 + $25 + $200 a. Total Fee from Step 5
State share of filing Fee:	$987.50 b. 1/2 Total Fee **less $**12.50
City/Town share of filling Fee:	$1012.50 c. 1/2 Total Fee **plus** $12.50

C. Submittal Requirements

a.) Complete pages 1 and 2 and send with a check or money order for the state share of the fee, payable to the Commonwealth of Massachusetts.

Department of Environmental Protection
Box 4062
Boston, MA 02211

b.) **To the Conservation Commission:** Send the Notice of Intent or Abbreviated Notice of Intent; a **copy** of this form; and the city/town fee payment.

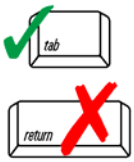
To MassDEP Regional Office (see Instructions): Send a copy of the Notice of Intent or Abbreviated Notice of Intent; a **copy** of this form; and a **copy** of the state fee payment. (E-filers of Notices of Intent may submit these electronically.)

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

NOI Wetland Fee Transmittal Form

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Important: When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



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a. First Name | b. Last Name

c. Organization

c/o Arthur I. Reade, Jr., P.O. Box 2669
d. Mailing Address

Nantucket | MA | 02584
e. City/Town | f. State | g. Zip Code

h. Phone Number | i. Fax Number | j. Email Address

2. Property Owner (if different):

Refer to Attached List ("Pocomo Neighbors")
a. First Name | b. Last Name

c. Organization

d. Mailing Address

e. City/Town | f. State | g. Zip Code

h. Phone Number | i. Fax Number | j. Email Address

3. Project Location:

47, 53, 55, 57, 61, 63, 67, 69 Pocomo Road | Nantucket
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Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

NOI Wetland Fee Transmittal Form

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

B. Fees (continued)

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Nantucket Expert Review Fee			$200

Step 5/Total Project Fee: $2,000 + $25 + $200

Step 6/Fee Payments:

Total Project Fee:	$2,000 + $25 + $200 a. Total Fee from Step 5
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Box 4062
Boston, MA 02211

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To MassDEP Regional Office (see Instructions): Send a copy of the Notice of Intent or Abbreviated Notice of Intent; a **copy** of this form; and a **copy** of the state fee payment. (E-filers of Notices of Intent may submit these electronically.)

APPLICANTS FOR POCOMO NEIGHBORS COASTAL STABILIZATION PROJECT

Owner	(#Pocomo Rd)	Map 15 Parcel	Certificate of Title
Jacqueline R. McCoy, Trustee Savel Nominee Trust 31 St. James Ave, Suite 740 Boston, MA 02116	(#47 & 53)	19 17	22,538 24,570
Arthur B. Page, Trustee Fifty-Five Pocomo Realty Trust P.O. Box 1022 Marlborough, MA 01752	(#55)	18	20,152
Robert S. Shapiro, Trustee Lois K. Shapiro, Trustee Pocomo Realty Trust II 273 Lansing Island Rd Satellite Beach, FL 32937	(#57)	16	13,605
Pocomo, LLC c/o York Capitol 767 5th Ave 17th Floor New York, NY 10153	(#61)	15	19,629
Peter Barrett & Mary V. Barrett 303 Columbus Ave #401 Boston, MA 02116	(#63)	12	19,639
Martin Wayne & Susan Wayne 440 Harris Road Bedford Hills, NY 10507	(#67)	11	22,595
Kenneth G. Bartels, Trustee 69 Pocomo Nominee Trust 38 Close Road Greenwich, CT 06831	(#69)	10	22,603

Pages from Title Documents

For Project Properties

Transfer Certificate of Title

Cert No:22538
Doc No:119609

From Transfer
Certificate No. 21999 Originally Registered October 31, 2005

the Registry District of Nantucket County

This is to Certify that

JACQUELINE R. MCCOY, Trustee of SAVEL NOMINEE TRUST, u/d/t dated March 5, 2007, registered as Document No. 119610 at the Registry District of Nantucket County,

of Paul McCoy Family Office Services LLP, 31 St. James Avenue, Suite 880, Boston in the County of Suffolk and the Commonwealth of Massachusetts 02116,
is the owner in fee simple, of that land situated in Nantucket,
in the County of Nantucket and said Commonwealth, bounded and described as follows:

SOUTHERLY	by the line of Pocomo Road, two hundred twenty and 74/100 (220.74) feet;
WESTERLY	by Lot 4 on plan hereinafter mentioned, measuring on the upland, about five hundred eighty-five (585.+-) feet;
NORTHERLY	by Nantucket Harbor; and
EASTERLY	by land now or formerly of Richard M. Everett et al, Trs., measuring on the upland, about six hundred twenty-four (624.+-) feet.

All of said boundaries, except the water lines, are determined by the Court to be located as shown upon plan numbered 20689-D, drawn by J. E. Marcklinger & Associates, Inc., Surveyors, dated April 14, 1982, and filed with Certificate of Title No. 10208 at the Registry District of Nantucket County. Said land is shown thereon as Lot 5.

There is appurtenant to said land the right to use, in common with all other persons lawfully entitled thereto, all the Proprietors Roads, shown on Plan No. 22667-A, which are not public, adjacent to the said land, to and from Pocomo Road and Nantucket Harbor.

And it is further certified that said land is under the operation and provisions of Chapter 185 of the General Laws, and that the title of said

JACQUELINE R. MCCOY, Trustee of SAVEL NOMINEE TRUST

to said land is registered under said Chapter subject, however, to any of the encumbrances mentioned in section forty-six of said chapter, which may be subsisting, and subject also as aforesaid; also subject to any and all public rights legally existing in and over the same below mean high water mark.

Witness **KARYN F. SCHEIER**, Esquire, Chief Justice of the Land Court, at Nantucket in said County of

Nantucket the twelfth day of March in the year two thousand and seven

at two o'clock and twelve minutes in the afternoon.

Attest , with the Seal of said Court, Jennifer H. Ferreira
Jennifer H. Ferreira, Assistant Recorder

Purported Property Address: 47 Pocomo Road

Land Court Case No. 20689

CERTIFICATE OF TITLE NO. **22538**

2012 00139365
Cert: 24570 Doc: DD
Registered: 12/18/2012 03:15 PM

DEED

I, JOHN G. McMILLIAN, Trustee of the McMILLIAN FAMILY TRUST under Declaration of Trust dated May 12, 2010, registered with Nantucket Registry District as Document No 134920, of Park City Utah, for consideration paid in the amount of $6,000,000.00, grant to JACQUELINE McCOY, Trustee of the SAVEL NOMINEE TRUST, under Declaration of Trust dated March 5, 2007, registered with Nantucket Registry District as Document No. 119610, with a mailing address of Suite 740, 31 St. James Avenue, Boston, Massachusetts 02116, with QUITCLAIM COVENANTS,

The land, together with all buildings, structures and improvements existing thereon, now known and numbered as 53 Pocomo Road, Town and County of Nantucket, Massachusetts, more particularly bounded and described as follows:

SOUTHERLY	by	Pocomo Road, Two Hundred Thirty-One and 01/100 (231.01) feet;
WESTERLY		Two Hundred Eighty-Nine and 12/100 (289.12) feet;
NORTHERLY		Forty-One and No/100 (41.00) feet;
WESTERLY		One Hundred Fifty and No/100 (150.00) feet;
SOUTHERLY		Forty-One and No/100 (41.00) feet;
WESTERLY		measuring on the upland about One Hundred (100±) feet, by Lot 6, as shown on a plan hereinafter mentioned;
NORTHERLY	by	Nantucket Harbor; and

EASTERLY by Lot 5, as shown on said plan, measuring on the upland about Five Hundred Seventy-Two (572±) feet.

Said land is shown as Lot 7 on Land Court Plan No. 20689-E.

Said land is conveyed subject to real estate taxes assessed by the Town of Nantucket for the fiscal year 2013 commencing on July 1, 2012.

For title, see Certificate of Title No. 24024.

The undersigned, by virtue of his execution hereof, hereby certifies that: (a) he is the sole Trustee of McMillian Family Trust; (b) said Trust has not been altered, amended, revoked, or terminated; (c) that no beneficiary of said Trust is a minor or under any incapacity; and (d) that he has been authorized and directed by all of the beneficiaries of said Trust to execute, acknowledge, and deliver the within deed.

Executed and sealed on December 15, 2012.

NANTUCKET LAND BANK
CERTIFICATE
☑ Paid $ 120,000.00
☐ Exempt
☐ Non-applicable
334169 12/18/12
No. Date
Authorization

John G. McMillian, Trustee of
McMillian Familty Trust

STATE OF UTAH

MASSACHUSETTS EXCISE TAX
Nantucket County ROD #16 001
Date: 12/18/2012 03:15 PM
Ctrl# 460377 26952 Doc# 00139365
Fee: $27,360.00 Cons: $6,000,000.00

SUMMIT, ss.

On this 15TH day of December, 2012, before me, the undersigned notary public, personally appeared John G. McMillian proved to me through satisfactory evidence of identification, which was PERSONALLY KNOWN, to be the person whose name is signed on the preceding or attached document, and acknowledged to me that he signed voluntarily for its stated purpose and who swore or affirmed to me that the contents of the document are truthful and accurate to the best of his knowledge and belief.

Notary Public

My commission expires:
6/20/2014

NOTARY PUBLIC
PETER ANDREW GARLAND
Commission No. 583147
Commission Expires
JUNE 20, 2014
STATE OF UTAH

TRANSFER CERTIFICATE OF TITLE

Cert. No. 20152
Docu. No. 95181

From TRANSFER Certificate No. 18045 Originally Registered

September 22, 1997 in Registration Book 95 Page 23

for the Registry District of Nantucket County.

THIS IS TO CERTIFY that ARTHUR B. PAGE, TRUSTEE of the FIFTY-FIVE POCOMO REALTY TRUST u/d/t dated 11/26/2001 and registered as document # 95180, of P.O. Box 1022, Marlborough in the County of Middlesex and Commonwealth of Massachusetts 01752

is the owner in fee simple

of that land situated in NANTUCKET

in the County of Nantucket and Commonwealth of Massachusetts, bounded and described as follows:

Lot 8 on plan 20689-F, drawn by Nantucket Surveyors, Inc., Surveyors, dated April 7, 1994, filed with Certificate of Title No. 13,604 at the Registry District of Nantucket County.

So much of the land hereby registered as is included within the limits of Pocomo Road, shown on said plan, is subject to the rights of the public in and over the same.

So much of the land hereby registered as is included within the limits of said Proprietors Road is subject to the rights of all persons lawfully entitled thereto in and over the same.

And it is further certified that said land is under the operation and provisions of Chapter 185 of the General Laws, and that the title of said ARTHUR B. PAGE, TRUSTEE of the FIFTY-FIVE POCOMO REALTY TRUST

to said land is registered under said chapter, subject, however, to any of the encumbrances mentioned in section forty-six of said chapter, which may be subsisting and subject as aforesaid; and to the memoranda of encumbrances for this certificate; and to any and all public rights legally existing in and over the same below mean high water mark.

WITNESS, PETER W. KILBORN, Esquire, Chief Justice of the Land Court, at Nantucket, in said County of Nantucket.

The eighteenth day of December in the year two thousand and one at 9 o'clock and 5 minutes in the forenoon.

Attest, with the seal of said court,

Joanne L. Kelley
Joanne L. Kelley, Assistant Recorder

Case # 20689

Purported Address of Property:
55 POCOMO ROAD
CERTIFICATE OF TITLE NO. 20152

FORM E

Bk 71
Pg 55

Transfer Certificate of Title.

No.13,605

From Transfer Certificate No. 8863, Originally Registered September 6, 19 79, in Registration Book 46 Page 43 for the Registry District of Nantucket County.

This is to Certify that ROBERT S. SHAPIRO and LOIS K. SHAPIRO Trustees of POCOMO REALTY TRUST III u/d/t dated April 19, 1988 and registered as Document No. 43509 at the Registry District of Nantucket County, of 50 Century Lane, Watchung in the State of New Jersey 07060 are the owners in fee simple of that certain parcel of land situate in Nantucket, in the County of Nantucket and Commonwealth of Massachusetts, bounded and described as follows:

SOUTHERLY by Proprietors Road, three hundred ten (310.00) feet;

WESTERLY by Proprietors Road, measuring on the upland, about five hundred forty-seven (547.±) feet;

NORTHERLY by Nantucket Harbor; and

EASTERLY by Lot 2 on plan hereinafter mentioned, measuring on the upland, about five hundred seventy-eight (578.±) feet.

All of said boundaries, except the water lines, are determined by the Court to be located as shown upon plan numbered 20689-C, drawn by Josiah S. Barrett, Engineer, dated April 8, 1963, and filed with Certificate of Title No. 4792 at the Registry District of Nantucket County. Said land is shown thereon as Lot 1.

So much of said premises as is included within the limits of Pocomo Road is subject to the rights of the public in and over the same.

And it is further certified that said land is under the operation and provisions of Chapter 185 of the General Laws, and that the title of said ROBERT S. SHAPIRO and LOIS K. SHAPIRO Trustees as aforesaid to said land is registered under said Chapter, subject, however, to any of the encumbrances mentioned in Section forty-six of said Chapter, which may be subsisting, and subject also to as aforesaid; and to any and all public rights legally existing in and over the same below mean high water mark.

WITNESS, MARILYN M. SULLIVAN, Esquire, Judge of the Land Court, at Nantucket in the County of Nantucket the twentieth day of April in the year nineteen hundred and eighty-eight at four o'clock and three minutes in the afternoon.

Attest, with the Seal of said Court,

Land Court Case No. 20689
Document No. 43508

Sandra M. Chadwick
Assistant Recorder.

FORM E

Book 87
Page 198

Transfer Certificate of Title.

No. 16,315

From Transfer Certificate No. 13,604, Originally Registered April 20th, 19 88, in Registration Book 71 Page 54 for the Registry District of Nantucket County.

This is to Certify that ROBERT S. SHAPIRO and LOIS K. SHAPIRO Trustees of POCOMO REALTY TRUST III u/d/t dated April 19, 1988, registered as Document No. 43509 at the Registry District of Nantucket County, of 50 Century Lane, Watchung in the State of New Jersey 07060,

are the owners in fee simple

of that certain parcel of land situate in Nantucket, of Massachusetts, in the County of Nantucket and Commonwealth, bounded and described as follows:

Lot 9 as shown upon plan numbered 20689-F, drawn by Nantucket Surveyors, Inc., Surveyors, dated April 7, 1994, and filed with Certificate of Title No. 13,604 at the Registry District of Nantucket County.

So much of the land hereby registered as is included within the limits of Pocomo road, shown on said plan, is subject to the rights of the public in and over the same.

So much of the land hereby registered as is included within the limits of said Proprietors Road is subject to the rights of all persons lawfully entitled thereto in and over the same.

And it is further certified that said land is under the operation and provisions of Chapter 185 of the General Laws, and that the title of said ROBERT S. SHAPIRO and LOIS K. SHAPIRO Trustees as aforesaid to said land is registered under said Chapter, subject, however, to any of the encumbrances mentioned in Section forty-six of said Chapter, which may be subsisting, and subject also as aforesaid; and to any and all public rights legally existing in and over the same below mean high water mark.

WITNESS, ROBERT V. CAUCHON, Esquire, Judge of the Land Court, at Nantucket in the County of Nantucket the twenty-fourth day of May in the year nineteen hundred and ninety-four at two o'clock and twenty minutes in the after noon.

Attest, with the Seal of said Court,

Land Court Case No. 20689
Document No. 64831

Sandra M. Chadwick
Assistant Recorder.

TRANSFER CERTIFICATE OF TITLE

Cert. No. 19629
Docu. No. 90418

From TRANSFER Certificate No. 19346 Originally Registered

February 23, 2000

for the Registry District of Nantucket County.

THIS IS TO CERTIFY that POCOMO, LLC of 550 PARK AVENUE, NEW YORK IN THE STATE OF NEW YORK 10021

is the owner in fee simple

of that land situated in NANTUCKET

in the County of Nantucket and Commonwealth of Massachusetts, bounded and described as follows:

Lot 43 as shown on plan numbered 22667-M, drawn by Schofield Brothers Inc., Surveyors, dated July 14, 1971, filed with Certificate of Title No. 6515 at the Registry District of Nantucket County.

So much of the land hereby registered as is included within the limits of all Proprietors' Roads not marked public on said plan is subject to the rights of all persons lawfully entitled thereto in and over the same.

So much of said Lot 15A as is included within the limits of Pocomo Road shown on said plan, is subject to the rights of the public in and over the same.

And it is further certified that said land is under the operation and provisions of Chapter 185 of the General Laws, and that the title of said POCOMO, LLC

to said land is registered under said chapter, subject, however, to any of the encumbrances mentioned in section forty-six of said chapter, which may be subsisting and subject as aforesaid; and to the memoranda of encumbrances for this certificate and subject to the memoranda of encumbrances for this certificate and to any and all public rights legally existing in and over the same below mean high water mark.

WITNESS, PETER W. KILBORN, Esquire, Chief Justice of the Land Court, at Nantucket, in said County of Nantucket.

The twenty-second day of September in the year two thousand at 1 o'clock and 30 minutes in the afternoon.

Attest, with the seal of said court,

Joanne L. Kelley
Joanne L. Kelley, Assistant Recorder

Case # 22667

Purported Address of Property:
61 POCOMO RD
CERTIFICATE 19629

TRANSFER CERTIFICATE OF TITLE

Cert. No. 19639
Docu. No. 90488

From TRANSFER Certificate No. 6515 Originally Registered

April 26, 1972 in Registration Book 33 Page 115

for the Registry District of Nantucket County.

THIS IS TO CERTIFY that PETER BARRETT and MARY V. BARRETT of 84 LORDS HIGHWAY, EAST, WESTON IN THE STATE OF CONNECTICUT 06883

are the owner(s) in fee simple as joint tenants with rights of survivorship

of that land situated in NANTUCKET

In the County of Nantucket and Commonwealth of Massachusetts, bounded and described as follows:

NORTHERLY	by Nantucket Harbor;
EASTERLY	by Lot 43 on plan hereinafter mentioned, about three hundred twenty-six (326.+-) feet;
NORTHERLY	by said Lot 43, two hundred (200.00) feet;
EASTERLY	by Proprietors Road, twenty (20.00) feet;
SOUTHERLY	by Lots 41 and 42 on said plan, three hundred (300.00) feet; and
WESTERLY	by Lot 39 as shown on said plan, about three hundred fifty-four (354.+-) feet.

All of said boundaries, except the water line, are determined by the Court to be located as shown upon plan numbered 22667-M, drawn by Schofield Brothers, Inc., Surveyors, dated July 14, 1971, and filed with Certificate of Title No. 6515 at the Registry District of Nantucket County. Said land is shown thereon as Lot 44.

So much of the land hereby registered as is included within the limits of all Proprietors' Roads not marked public on said plan is subject to the rights of all persons lawfully entitled thereto in and over the same.

Said Lot 44 is restricted for the benefit of other property of the Grantors, to single-family residential usage and shall not be further subdivided.

Said Lot 44 is subject to a ten (10) foot wide easement way over its westerly border to Nantucket Harbor in favor of Lots 41 and 42 on said plan together with the reserved rights appurtenant to Lots 41 and 42 to use the beach front of Lot 44 for the purposes of bathing and boating.

And it is further certified that said land is under the operation and provisions of Chapter 185 of the General Laws, and that the title of said PETER BARRETT and MARY V. BARRETT

to said land is registered under said chapter, subject, however, to any of the encumbrances mentioned in section forty-six of said chapter, which may be subsisting and subject as aforesaid; and to the memoranda of encumbrances for this certificate and to any and all public rights legally existing in and over the same below mean high water mark.

WITNESS, PETER W. KILBORN, Esquire, Chief Justice of the Land Court, at Nantucket, in said County of Nantucket.

Transfer Certificate of Title

Cert No:22595
Doc No:120206

From Transfer
Certificate No. 13939 Originally Registered January 10, 1989

the Registry District of Nantucket County

This is to Certify that

MARTIN WAYNE and SUSAN WAYNE

of 440 Harris Road, Bedford Hills in the State of New York 10507, are the owners in fee simple, as tenants by the entirety of that land situated in Nantucket, in the County of Nantucket and Commonwealth of Massachusetts, bounded and described as follows:

NORTHERLY	by Nantucket Harbor;
EASTERLY	by Lot 36 on L.C. Plan 22667-J, about five hundred ninety-nine (599±) feet;
SOUTHERLY	by Lot 40 as shown on plan hereinafter mentioned, three hundred ninety-four and 51/100 (394.51) feet;
WESTERLY	by Proprietors' Road, sixty and 29/100 (60.29) feet;
NORTHERLY	by Lot 37 on L.C. Plan 22667-K, one hundred fifty (150.00) feet;
WESTERLY	by said Lot 37, two hundred forty (240.00) feet;
NORTHERLY	by said Lot 37, fifty (50.00) feet; and
WESTERLY	by said Lot 37, about two hundred ninety (290±) feet.

All of said boundaries, except the water lines, are determined by the Court to be located as shown upon plan numbered 22667-L, drawn by Schofield Brothers, Inc., Surveyors, dated June 17, 1969, and filed with Certificate of Title No. 5924 at the Registry District of Nantucket County. Said land is shown thereon as Lot 39.

So much of the land hereby registered as is included within the limits of all Proprietors' Roads not marked public on said plan is subject to the rights of all persons lawfully entitled thereto in and over the same.

So much of said Lot 39 as is included within the limits of Pocomo Road, as shown on said plan, is subject to the rights of the public in and over the same.

Said Lot 39 is subject to the restriction that no building or structure will be built or maintained on Lot 39 northerly of a line running easterly across Lot 39 from the bound at the southeast corner of the 50.00 foot jog as appearing on said plan and on the same course.

And it is further certified that said land is under the operation and provisions of Chapter 185 of the General Laws, and that the title of said

MARTIN WAYNE and SUSAN WAYNE

to said land is registered under said Chapter subject, however, to any of the encumbrances mentioned in section forty-six of said chapter, which may be subsisting, and subject also as aforesaid; and to any and all public rights legally existing in and over the same below mean high water mark.

Witness **KARYN F. SCHEIER**, Esquire, Chief Justice of the Land Court, at Nantucket in said County of

Nantucket the first day of May in the year two thousand and seven

at two o'clock and no minutes in the afternoon.

Attest , with the Seal of said Court, Jennifer H. Ferreira

Jennifer H. Ferreira, Assistant Recorder

Transfer Certificate of Title

Cert No:22603
Doc No:120359

From Transfer
Certificate No. 21978 Originally Registered October 17, 2005

the Registry District of Nantucket County

This is to Certify that

KENNETH G. BARTELS, Trustee of 69 POCOMO NOMINEE TRUST u/d/t dated May 15, 2007, and registered as Document No. 120358 at the Registry District of Nantucket County

of 38 Close Road, Greenwich in the State of Connecticut, 06831 is the owner in fee simple, of that land situated in Nantucket, in the County of Nantucket and Commonwealth of Massachusetts, bounded and described as follows:

NORTHERLY	by Nantucket Harbor;
EASTERLY	by Lot 38 on plan hereinafter mentioned, about two hundred ninety (290.+-) feet;
SOUTHERLY	by said Lot 38, fifty (50.00) feet;
EASTERLY	by said Lot 38, two hundred forty (240.00) feet;
SOUTHERLY	by the line of Pocomo Road, one hundred fifty (150.00) feet; and
WESTERLY	by a Proprietors Road, about five hundred forty-one (541.+-) feet.

All of said boundaries, except the water lines, are determined by the Court to be located as shown upon plan numbered 22667-K, drawn by Schofield Brothers, Inc., Registered Land Surveyors, dated November 20, 1967, and filed with Certificate of Title No. 5476 at the Registry District of Nantucket County. Said land is shown thereon as Lot 37.

Said property is subject to the restriction that no dwelling or other structure shall be constructed within thirty (30) feet of the easterly boundary of Lot 37, or within sixty-two (62) feet of the top of the bank as presently existing on said plan.

So much of the land hereby registered as is included within the limits of all Proprietors Roads not marked public on said plan is subject to the rights of all persons lawfully entitled thereto in and over the same.

So much of Lot 37 as is included within the limits of Pocomo Road, as shown on said plan, is subject to the rights of the public in and over the same.

And it is further certified that said land is under the operation and provisions of Chapter 185 of the General Laws, and that the title of said

KENNETH G. BARTELS, Trustee of 69 POCOMO NOMINEE TRUST

to said land is registered under said Chapter subject, however, to any of the encumbrances mentioned in section forty-six of said chapter, which may be subsisting, and subject also as aforesaid; and to any and all public rights legally existing in and over the same below mean high water mark.

Witness **KARYN F. SCHEIER**, Esquire, Chief Justice of the Land Court, at Nantucket in said County of

Nantucket the fifteenth day of May in the year two thousand and seven

at one o'clock and thirty-seven minutes in the afternoon.

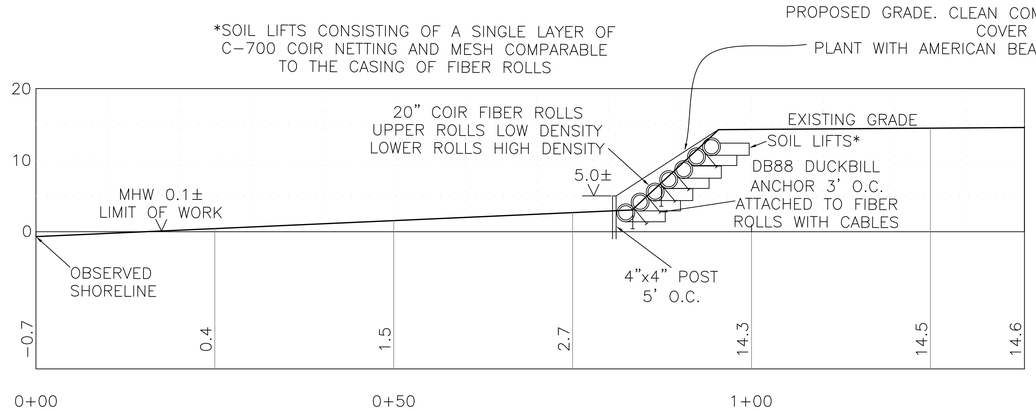
Attest, with the Seal of said Court, Jennifer H. Ferreira
Jennifer H. Ferreira, Assistant Recorder

Purported Property Address: 69 Pocomo Road

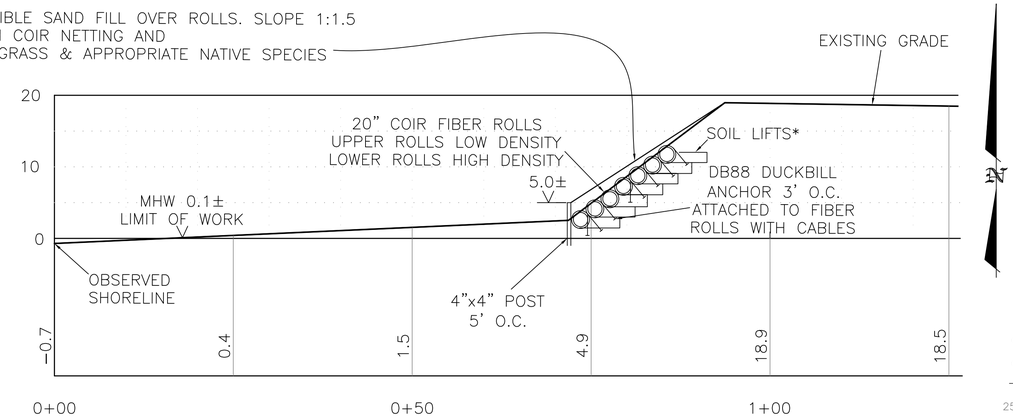
Land Court Case No. 22667

CERTIFICATE OF TITLE NO. **22603**

Project Plans

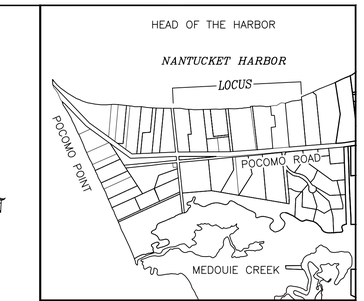


TRANSECT 1 PROFILE 1"=10'



TRANSECT 2 PROFILE 1"=10'

NANTUCKET HARBOR

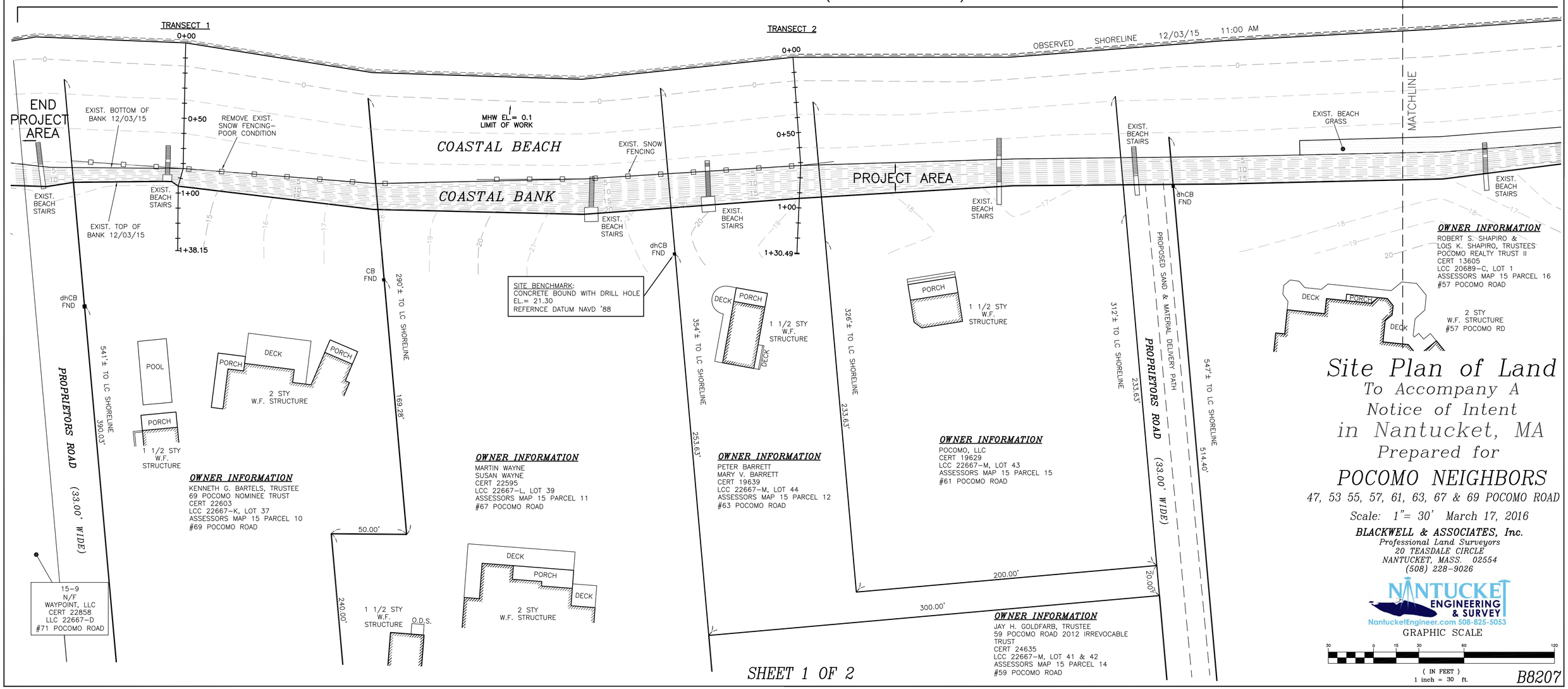


LOCUS MAP SCALE: 1"= 960' ±

LEGEND

- dhCB ■ DENOTES CONCRETE BOUND WITH DRILLHOLE FOUND
- dhCB ⊡ DENOTES CONCRETE BOUND WITH DRILLHOLE FOUND
- DENOTES EXIST. WOOD w/WIRE FARM FENCE
- 25 DENOTES EXIST. GRADE CONTOUR
- x24.3 DENOTES EXIST. GRADE SPOT ELEVATION

PROJECT LENGTH 1775'± (ALONG BANK FACE)



Site Plan of Land

To Accompany A Notice of Intent in Nantucket, MA

Prepared for

POCOMO NEIGHBORS

47, 53 55, 57, 61, 63, 67 & 69 POCOMO ROAD

Scale: 1"= 30' March 17, 2016

BLACKWELL & ASSOCIATES, Inc.
Professional Land Surveyors
20 TEASDALE CIRCLE
NANTUCKET, MASS. 02554
(508) 228-9026

NANTUCKET ENGINEERING & SURVEY
NantucketEngineer.com 508-825-5053

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.

SHEET 1 OF 2

B8207

GENERAL NOTES:

1. THE CONTRACTOR SHALL PROVIDE ALL MATERIAL, LABOR AND EQUIPMENT TO PERFORM THE WORK DESCRIBED ON THESE PLANS, AND AS APPROVED BY THE NANTUCKET CONSERVATION COMMISSION.

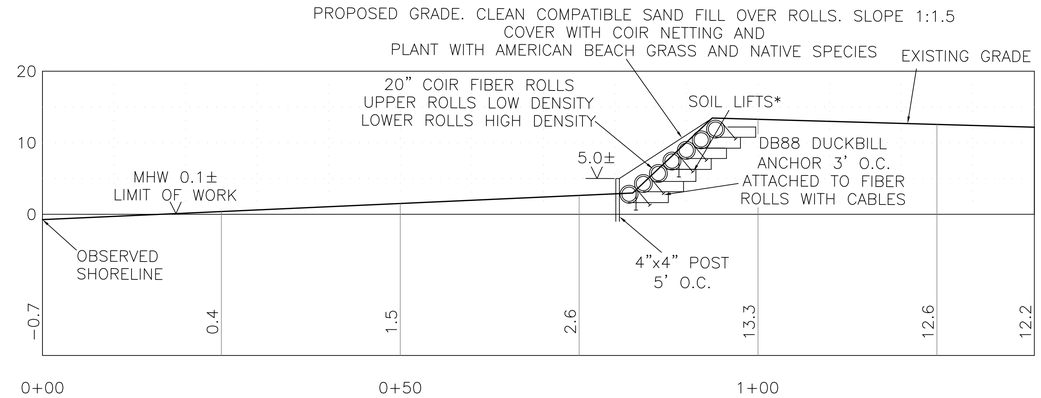
2. WORK SHALL BE IN COMPLIANCE WITH THE PLANS, SPECIFICATION AND THE ORDER OF CONDITIONS ISSUED BY THE NANTUCKET CONSERVATION COMMISSION.

3. THE CONTRACTOR SHALL ATTEND A PRE-CONSTRUCTION ON-SITE MEETING WHICH WILL BE ATTENDED BY THE ENGINEER, WITH NOTIFICATION TO A REPRESENTATIVE OF THE NANTUCKET CONSERVATION COMMISSION. THE CONTRACTOR WILL PRESENT THE PROPOSED METHODS AND MEANS TO CONSTRUCT THE PROPOSED IMPROVEMENTS.

4. THE CONTRACTOR SHALL NOT VARY FROM THE PLANS, SPECIFICATION, ORDER OF CONDITIONS OR INSTRUCTIONS PROVIDED AT THE PRE-CONSTRUCTION MEETING, WITHOUT FIRST OBTAINING APPROVAL OF THE CONSERVATION COMMISSION REPRESENTATIVE AND THE ENGINEER.

5. ONLY CLEAN COMPATIBLE FILL SHALL BE USED FOR FILL AND COVER FOR THIS PROJEFCT. THE CONTRACTOR AGREES TO OBTAIN SEDIMENT GRAIN SIZE DISTRIBUTION ANALYSIS, FROM A QUALIFIED LABORATORY, IF REQUESTED BY THE CONSERVATION COMMISSION REPRESENTATIVE.

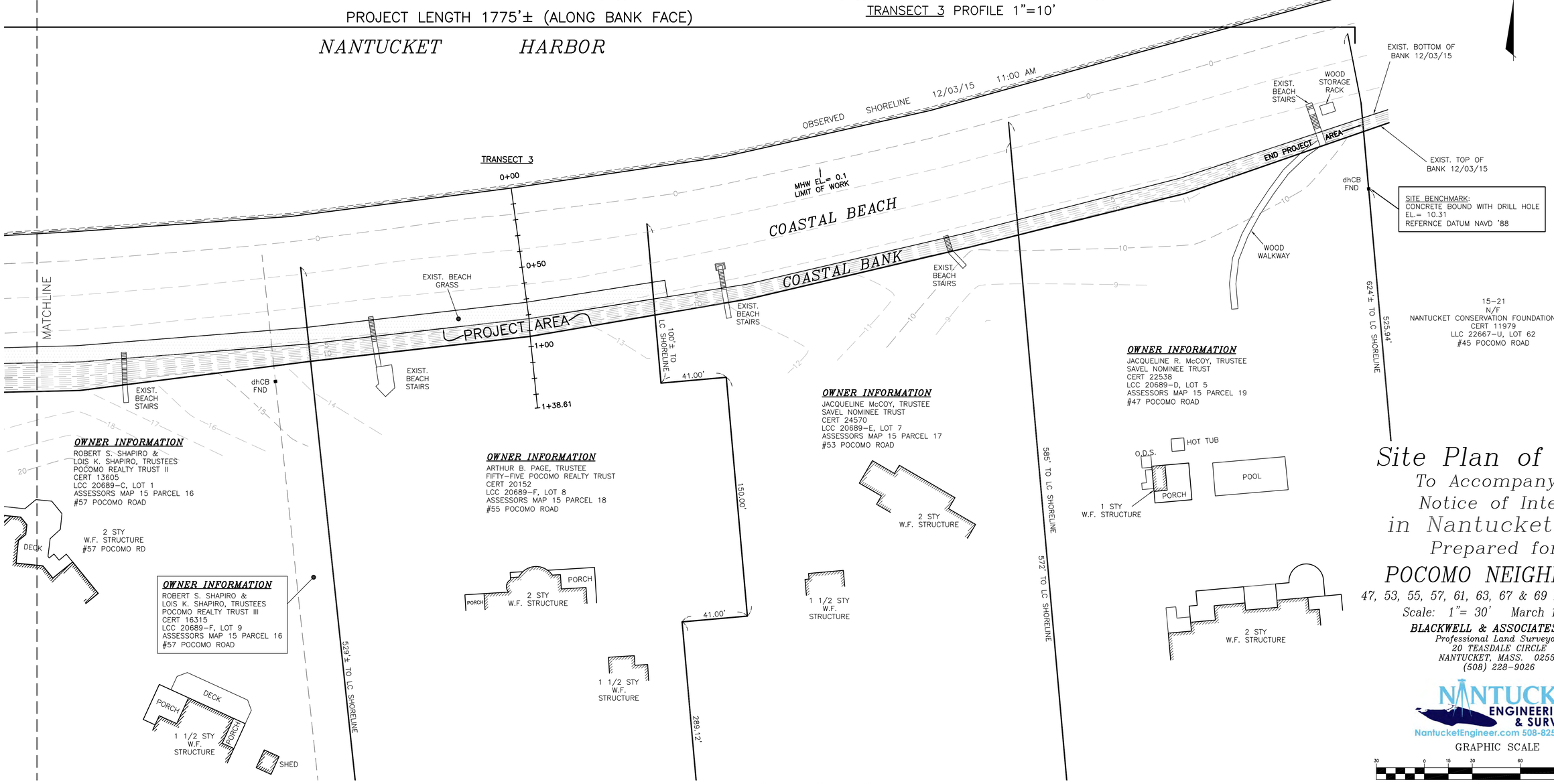
6. UPON COMPLETION OF RESTORATION, AND PRIOR TO DEMOBILIZATION OF EQUIPMENT, THE CONTRACTOR SHALL ARRANGE FOR A POST-CONSTRUCTION MEETING WITH THE ENGINEER. SHORT COMINGS AND DEFICIENCIES WILL BE OUTLINED TO THE CONTRACTOR AT THIS MEETING, THAT MUST BE CORRECTED PRIOR TO DEMOBILIZATION AND FINAL PAYMENTS FOR THE WORK.



TRANSECT 3 PROFILE 1"=10'

LEGEND

dhCB ■	DENOTES CONCRETE BOUND WITH DRILLHOLE FOUND
dhCB ⊡	DENOTES CONCRETE BOUND WITH DRILLHOLE FOUND
—□—□—	DENOTES EXIST. WOOD w/WIRE FARM FENCE
25 — — —	DENOTES EXIST. GRADE CONTOUR
x24.3	DENOTES EXIST. GRADE SPOT ELEVATION



Site Plan of Land

To Accompany A
Notice of Intent
in Nantucket, MA
Prepared for

POCOMO NEIGHBORS

47, 53, 55, 57, 61, 63, 67 & 69 POCOMO ROAD

Scale: 1"= 30' March 17, 2016

BLACKWELL & ASSOCIATES, Inc.
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20 TEASDALE CIRCLE
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(508) 228-9026

NANTUCKET ENGINEERING & SURVEY
NantucketEngineer.com 508-825-5053

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.

B8207

Waiver Request,
Impact Analysis of Protected Interests
&
Alternatives Analysis

March 15, 2016

Nantucket Conservation Commission
2 Bathing Beach Road
Nantucket, MA 02554

RE: Waiver Request

Dear Commission Members,

The purpose of this letter is to request and justify a waiver from Section 2.05.B.3 of Wetland Protection Regulations for administering the Town of Nantucket Wetlands By-law Chapter 136, which reads:

> 2.05.B.3: *All projects shall be restricted to activity as determined by the Commission to have no adverse effect on bank height, bank stability, wildlife habitat, vegetation, wetland scenic view, or the use of a bank as a sediment source.*

The request is to allow the placement of anchored fiber rolls with reinforced sand lifts and sand fill within a Coastal Bank Resource Area. The bank face will then be planted with American Beach Grass at eighteen inches on center.

The commission may grant a waiver from these regulations when the commission finds that a project will provide long-term net benefit/improvement to the resource area, provided any adverse effects are minimized by carefully considered conditions. However, no such project may be permitted which could have adverse effect on rare wildlife species. All proposed work is also being submitted to MA NHESP for review per the Mass. Endangered Species Act and will comply with their suggestions so there will be no adverse effects to rare or endangered species. Waivers from the By-law can be granted for a number of reasons including:

Chapter 1.03 F.3.a. (No Reasonable Alternative with No Adverse Impact) & **Chapter 1.03 F.3.d. (Long-term net benefit/improvement)** The proposed work in the Buffer Zone will improve the resource area without any adverse impact to the interests of the resource area protected by the Commission including storm damage prevention, erosion and flood control, serve as a sediment source for beach and inter-tidal areas, provide

wildlife habitat, and serve to provide important wetland scenic views and recreation. The fence and plantings will improve the existing bare bank by meeting the interest described in the Regulations, Section 2.05.A.1 – "Vegetation tends to stabilize a coastal bank and reduce the rate of erosion due to wind and rain runoff. Vegetated banks are critical to reducing wind and rain erosion and for providing important habitat and biodiversity."

We therefore request that the Commission grant a waiver under Sections 1.03 F.3.a & 1.03 F.3.d because there are no reasonable alternatives that would allow the project to proceed in compliance with the Regulations. As described in the cover letter included with the Notice of Intent, the supporting documents and presented to the Commission, the project will have no adverse effect on the protected interests, and will result in a long-term net benefit and improvement to the resource areas.

I plan to attend the Public Hearing on this matter to address any questions or concerns.

Sincerely,

Arthur D. Gasbarro, PE, PLS, LEED AP

Impact Analysis of Protected Interests of Coastal Bank and Coastal Beach Resource Areas

Bank Height – The project will have no adverse effect or impact on the height of the bank, which is not expected to change.

Bank Stability – The project will have no adverse effect or impact on the stability of the bank. Instead, the purpose of the project is to increase the stability of the bank.

Wildlife Habitat – The project will have no adverse effect or impact on wildlife through the utilization of protective measures such as monitoring for wildlife activity. The stabilized and vegetated bank will provide improved wildlife habitat.

Vegetation – The project will have no adverse effect or impact on vegetation on the bank. Instead, the purpose of the project is to stabilize the bank, protecting existing vegetation and supplementing with additional plantings along the restored portions of the bank.

Use of the Bank as a Sediment Source – The project will alter the rate at which sediment is available without an adverse effect or impact by supplying additional sediment for the beach from the sacrificial cover over the fiber rolls. Frequent monitoring to add cover when needed, along with biannual inspection and reporting to the Commission will ensure no adverse effect.

Wetland Scenic Views – The project will have no adverse effect or impact on the wetland scenic views because views will not be altered.

Public or Private Water Supply – The project will not interfere with water supplies in any way, and therefore have no impact on public or private water supplies.

Groundwater – The project will have no impact to groundwater. No dewatering or handling of water is proposed as part of this project.

Flood Control – The project will improve flood control by reducing wave energy through absorption, and providing sacrificial nourishment as a buffer, with no adverse impact on flood control.

Erosion Control – The project will have no adverse impact on erosion control and will improve conditions by supplying additional sediment for the beach from the sacrificial layer.

Storm Damage Prevention – The project will have no adverse impact to storm damage prevention. The project will stabilize the existing Coastal Bank and provide a sacrificial cover layer that will reduce wave energy.

20 Mary Ann Drive • Nantucket, MA 02554
508-825-5053 • www.NantucketEngineer.com

Water Pollution – The project will not cause water pollution. The property use remains the same and the project will not result in pollution of surface water or groundwater.

Fisheries – The project will have no adverse impact on fisheries because no work is proposed below the mean high water line.

Shellfish – The project will have no adverse impact on shellfish because no work is proposed below the mean high water line.

Rare species, including rare, threatened or endangered plant species and animals and habitats – The project will have no adverse impact on rare species as the work will adhere to conditions provided by NHESP.

Recreation – The project will have no adverse impact on recreation because the use of the property is not changing. Access across the beach will be maintained at all times during construction.

Alternatives Analysis

No Action – The Coastal Bank will continue to be damaged by storm-related erosion if no action is taken. This alternative would not achieve the goal of the proposed project.

Sand Drift Fence with Nourishment – This option allows for the rapid transport of unconsolidated nourishment material, and does not provide adequate protection for the property and staircase structures on the properties. This alternative would not achieve the goal of the proposed project.

Anchored Coir Fiber Rolls with Reinforced Sand Lifts and Cover Nourishment *(Most Favorable Alternative)* – This option is the most preferable alternative to achieve the goal of the proposed project and is detailed in the submitted documents. This alternative will require considerable maintenance effort as is described in this NOI.

Geotextile Fabric Tubes – This option would provide good resistance to wave damage however there are concerns with wave refraction impacts on the beach and considerable on-going maintenance costs. This option is also susceptible to damage from vandalism, debris, and UV degradation.

Stone Gabions – This option would provide good resistance to wave damage. However, there are concerns with wave refraction and wave energy impacts on adjacent areas, as well as past unfavorable action by the Commission. Disposal of materials could be a concern if removal was required in the future.

Marine Mattresses – This option would provide good resistance to wave damage. However, this option is considered to be hard, not friendly to the natural habitat creation, uncharacteristic

with the greater Nantucket inner harbor setting and will result in wave refraction impacts. Other concerns about this option include some on-going maintenance costs and past unfavorable action by the Commission.

Stone Revetment – This option provides a high level of protection but is dismissed due to concern for wave refraction impacts, alteration of natural habitat and uncharacteristic with the natural shoreline of Nantucket Harbor, and past unfavorable action by the Commission.

Wooden Bulkhead – This option provides a high level of protection but is dismissed due to concern for wave refraction impacts and past unfavorable action by the Commission.

Site Assessment Report

By

Woods Hole Group

Lee Weishar, Ph.D.

WHG Project # 2015-0168

March 18, 2016

Mr. Ernest Steinauer, Chairman
c/o Mr. Jeff Carlson
Natural Resource Coordinator
2 Bathing Beach Road
Nantucket, MA 02554

Transmitted via electronic mail: jcarlson@nantucket-ma.gov

Re: Site Assessment at 47, 53, 55, 57, 61, 63, 67, & 69 Pocomo Road, Nantucket, MA

Dear Mr. Steinauer:

The Woods Hole Group was asked to perform a site assessment and make recommendations on the most appropriate method to stabilize the coastal bank located at 47, 53, 55, 57, 61, 63, 67, & 69 Pocomo Road, on Nantucket. The purpose of the assessment was to examine the conditions on the beach, quantify the coastal processes at the site, determine the rate of change on the coastal beach and coastal bank, and to assess the impacts of sea level rise on the project. The results of my assessment are described in the following paragraphs.

The following letter presents the winds, water levels, and shoreline change at the property, makes recommendations on the best method to protect the coastal bank, and discusses if the project provides adequate sediment to replace sediment that would have been provided by erosion of the coastal bank. Additionally, the letter explains how this project is permittable under both the Massachusetts Wetland Protection Act and the Nantucket Wetlands Bylaws.

Project Setting

The proposed project is located within Nantucket Harbor on a north facing shoreline (Figures 1 & 2). The shoreline is generally oriented in the east-west (Figure 2). The coastal beach is protected from waves generated in Nantucket Sound by the barrier beach that encloses Nantucket Harbor, known as Coatue. The beach is oriented predominately to the east and west, however, there is a slight arcuate shape to the beach. The two apexes of the beach are located at the east and west ends while the middle of the project is slightly curved to the south (Figure 2).

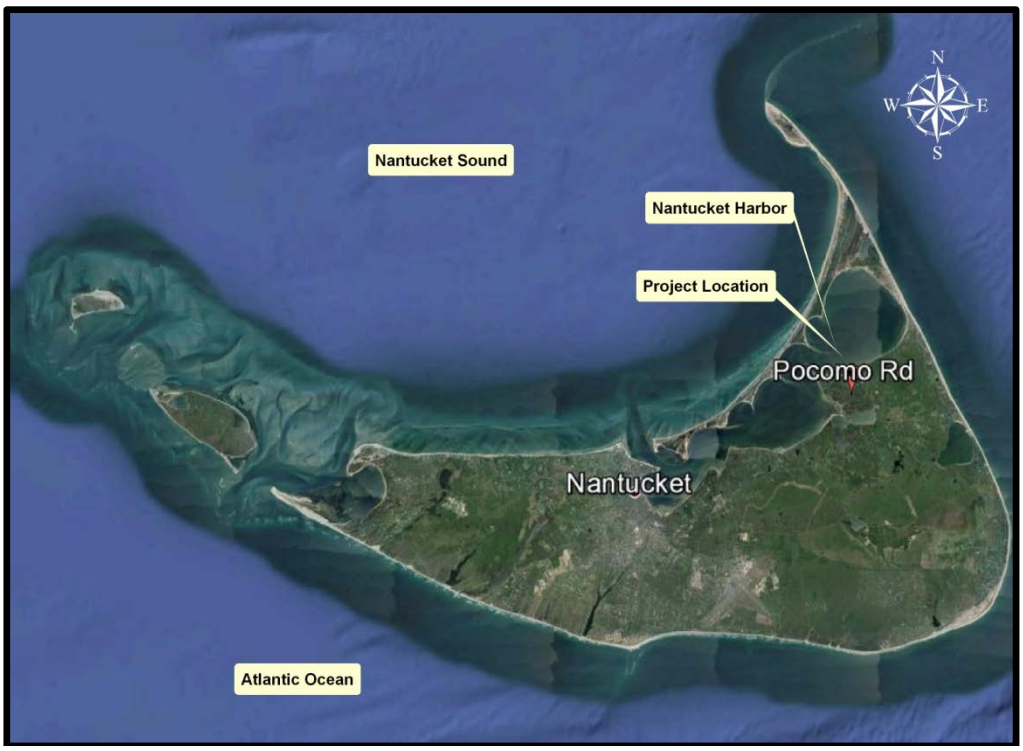

Figure 1. Project location within Nantucket Harbor.

Figure 2. This figure shows the project location, shoreline orientation and fetch lengths in the project boundaries.

The coastal resources located on the beach front are land subject to coastal storm flowage, land under the ocean, coastal beach, and coastal bank. At the time of the writing of this letter report there was no coastal dune present on the property. The proposed project will provide stabilization to the toe of the coastal bank for eight (8) properties and encompasses approximately 1,800 ft of shoreline.

The average width of the beach varies as you move through the project area. The average width of the beach from Mean Low Water to base of the coastal bank is approximately 80 ft while the average width of the high tide beach measured from the Mean Tide Level to the toe of the coastal bank is approximately 30 ft wide. The height of the coastal bank (measured from the toe of the bank to the crest) above the beach varies along the project length from a high of about 18 ft to a low of approximately 6 ft.

Because the beach is isolated from Nantucket Sound by the Coatue barrier beach the beach is exposed only to waves that are locally generated within Nantucket Harbor. The fetch lengths (the continuous distance over water that the wind can blow) for the project area are shown in Figure 2. The fetch lengths are 1.0, 2.1, and 1.9 miles from the northwest, north, and northeast respectively as shown in Figure 2. The relatively short fetch lengths will generate fetch-limited waves that in combination with storm surge will erode and destabilize the face of the coastal bank.

Site Visit

A site visit was performed on January 13, 2016. During the site visit, I had the opportunity to observe the project site, the costal beach, and coastal bank. The project encompasses approximately 1,800 ft of beach within Nantucket Harbor. The beach is generally oriented from the east to the west and is slightly arcuate. The width of the low tide beach varies as you travel from the east to the west. In general, the widest low tide beaches are located at the eastern and western ends of the project (approximately 80 ft in width). The narrowest beaches are located in the center of the project area which is in the center of the arc. The high tide beach is relatively narrow and is approximately 30 ft wide in the project area.

I began the site visit by walking the beach from the west to the east. Figure 3 was taken at the western end of the project and is looking to the east and shows the eroded coastal bank which is vertical and has a pronounced undercut at the top of the bank. This is clearly seen by the stranded roots hanging down the face of the bank. Figure 3 also shows the remnants of a sand fence. The fence has been destroyed over the years by waves and storm surge from winter and spring storms. Figure 4 also was taken from the western side of the project and is looking to the east. This figure shows an almost continuous line of sand fence that is mostly not functional. The bank is slightly undercut (not as pronounced as shown in Figure 3) and is unstable. The bank is composed of glacial till and while it is mostly sand it does have a large fraction of gravel and some small cobble. Figure 5 is again looking to the east and shows the relatively wide low tide beach that is composed of sand. Figure 6 looking to the east and shows the near vertical bank and the vegetation that has slumped down the face of the bank. Evidence of bank slumping is apparent along the entire bank face throughout the entire project area. This figure also shows the stranded sand fence.

Figure 3. A view looking to the east from the western project terminus.

Figure 4. A view to the east showing the eroded coastal bank and dilapidated sand fence.

Figure 5. A view showing the shallow and flat inter-tidal beach.

Figure 6. A view of the dilapidated sand fence, vegetation slumps on the bank face, and the undercut top of bank.

Figure 7 is a view taken from the eastern boundary of the project looking back to the west. This figure shows that the coastal bank is lower in elevation and is eroding. The vegetation has eroded from the top of the bank and has slumped down the bank face to the toe of the bank. The intertidal beach is wide along this section of beach. However, the high tide beach remains relatively narrow. There are no stranded sand fences or other debris on this section of beach. This figure also shows the arcuate shape of the beach extending to the east.

Figure 7. A view from the western project terminus looking to the east showing the eroded bank and inter-tidal beach.

Figure 8 was taken along the same section of beach looking to the east and shows the relatively wide and flat intertidal beach which is characteristic of the project area.

Storms Impacting Nantucket Harbor's Shoreline

As previously stated, the shoreline is generally oriented in east and west directions. The longest fetches are from the northeast clockwise through the north-northeast (Figure 2). Therefore, storms that generate winds from the northwest through the north-northeast produce waves which will impact the project shoreline.

Anecdotal observations and meteorologists have suggested that there have been more storms over the past several years and the frequency and intensity of these storms will continue to increase over the next several years and into the future. However, we have observed over the years that storm frequency and intensity tends to be cyclic. In order to determine if this was true, we analyzed the number of storms that occurred between 1980 and 2015 during the storm season. We defined the storm season to be between September and May of two successive years.

The 2015 storm season contained storm data only through mid February 2016. Therefore, wind data was parsed between the fall of one year and the spring of the next. The sustained wind data was binned first by direction, then by events that had sustained wind gusts with velocities equal to or greater than 25 miles per hour, and then finally if the event had a duration of 3 hours or greater. This means a storm was accepted for the analysis if it approached the Nantucket Harbor shore, had sustained wind gusts that exceeded 25 mph, and lasted at least 3 hours.

Figure 8. A view of the inter-tidal beach from the west end of the project.

Figure 9 shows the data for sustained winds with sustained gust velocities of 25 knots or greater and a duration of at least 3 hours or longer for the years 1980 through 2015. This figure shows that in general there as a steady increase of storms between 1982 and 1989. There was a decrease in the number of storms that occurred during the period between 1989 and 1993. In general, there is a 2 to 4 year cycle of increasing and decreasing frequency of storms. The last cycle shown on the graph shows a decrease in storm frequency between 2000 and 2001. While the cyclic nature of the storm frequency is clearly shown in Figure 9, the long-term average number of storms has been increasing since 1992[1].

The winds for the January 22-25, 2016 storm are shown in Figure 10. This figure shows the winds beginning out of the northeast early on January 23. The steady wind velocities increase to over 25 knots with sustained wind of over 30 knots with wind gusts over 40 knots. The sustained wind speeds lasting for over 24 hours. The storm surge produced by the January 22-25, 2016 storm is shown in Figure 11. This figure shows that at the height of the storm, the elevation of the storm surge exceeded MHW for four consecutive tidal cycles (Figure 11).

[1] Note that the 2015 data contained wind data only through mid February 2016.

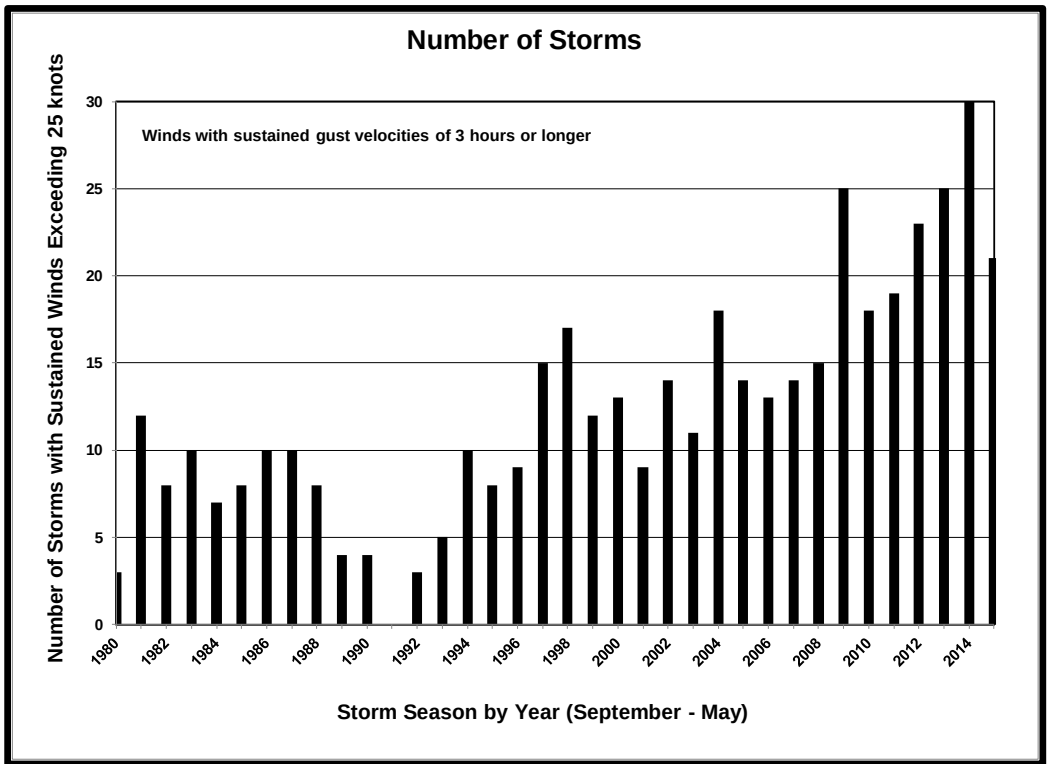

Figure 9. Number of storms occurring for each storm season from 1980 through 2014. The 2015 storm season has data only through February 16, 2016.

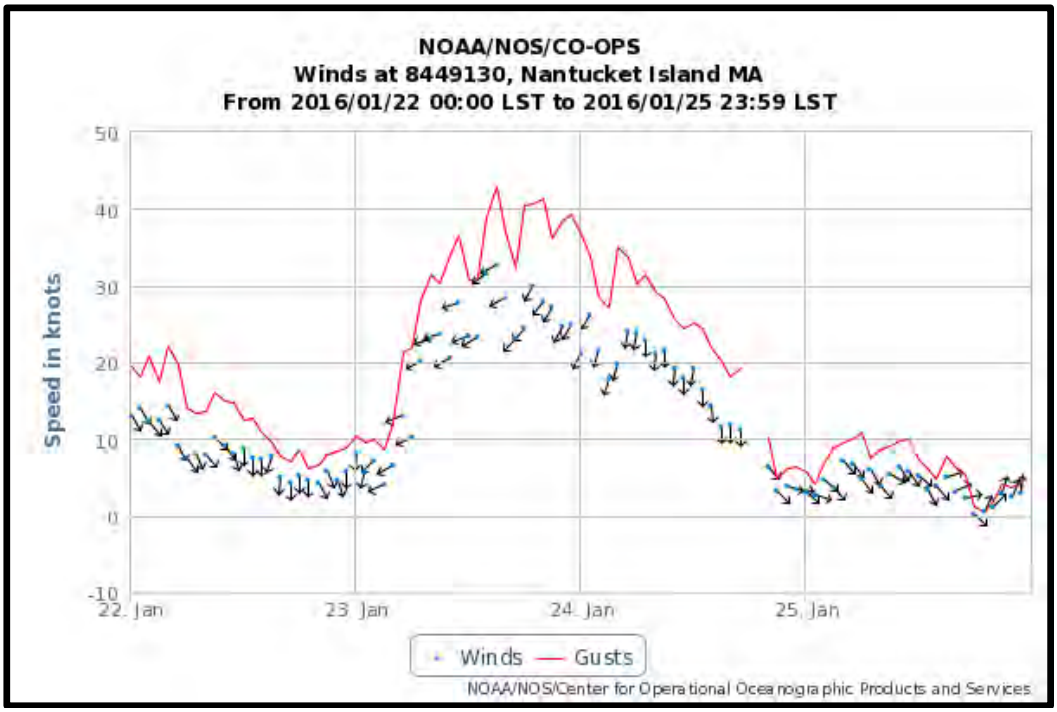

Figure 10. Figure showing a typical storm event that met the threshold criteria with winds out of the north & northeast, velocities greater than 25 knots, and lasing over 3 hours.

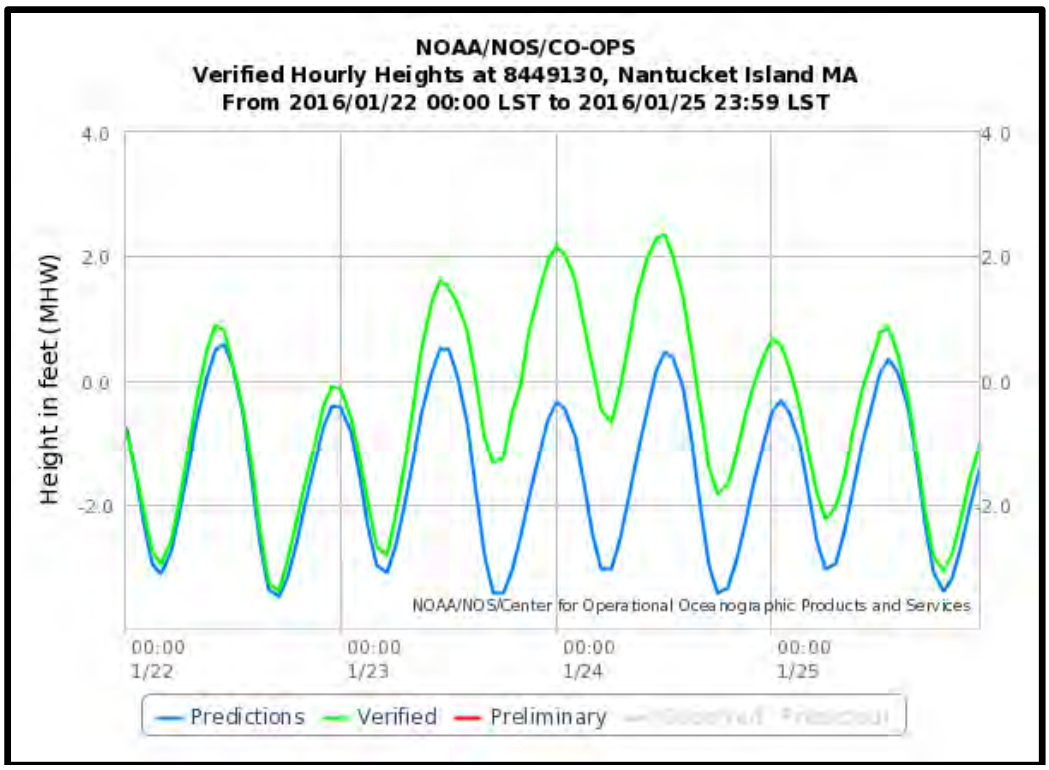

Figure 11. Water levels produced by the January 22, 2016 storm winds shown in Figure 10.

At the height of the storm, the water level was over 2.2 ft above MHW. All the while, the wind and waves were battering the shoreline and the toe of the coastal bank. Figure 12 shows the effect of this storm on the beach and the coastal bank at the site. Figure 21A shows the beach looking to the east along the shoreline and Figure 21B shows looking to the west along the beach. Both Figures show that the storm surge has completely inundated the high tide beach and that the waves and run-up are attacking the toe of the coastal bank.

Another disturbing trend was observed in the wind and wave data. The increase in storms has produced an increase in the number of storm surge events that have impacted the shoreline. While examining the data many smaller storms were noted that did not exceed the threshold criteria but produced water levels that were above MHW for one or more tidal cycles. This means that with the increased frequency of storm events, the toe of the coastal bank is being inundated and attacked on a more frequent basis.

Waves at the Site

Storm surge increases the depth of water in the nearshore and allows waves to break on the beach or directly at the base of the coastal bank. Therefore, an analysis was completed to calculate the maximum wave height that would be produced during a storm. Waves generated offshore can break either offshore in the nearshore zone or on the beach and at the base of the coastal bank. The waves breaking offshore of the beach are important because they are responsible for eroding the beach and transporting sediment downdrift of the breaking waves. The second breaker line will occur high on the beach and at the base of the coastal bank if the storm surge is high enough and will result in erosion of the toe of the bank.

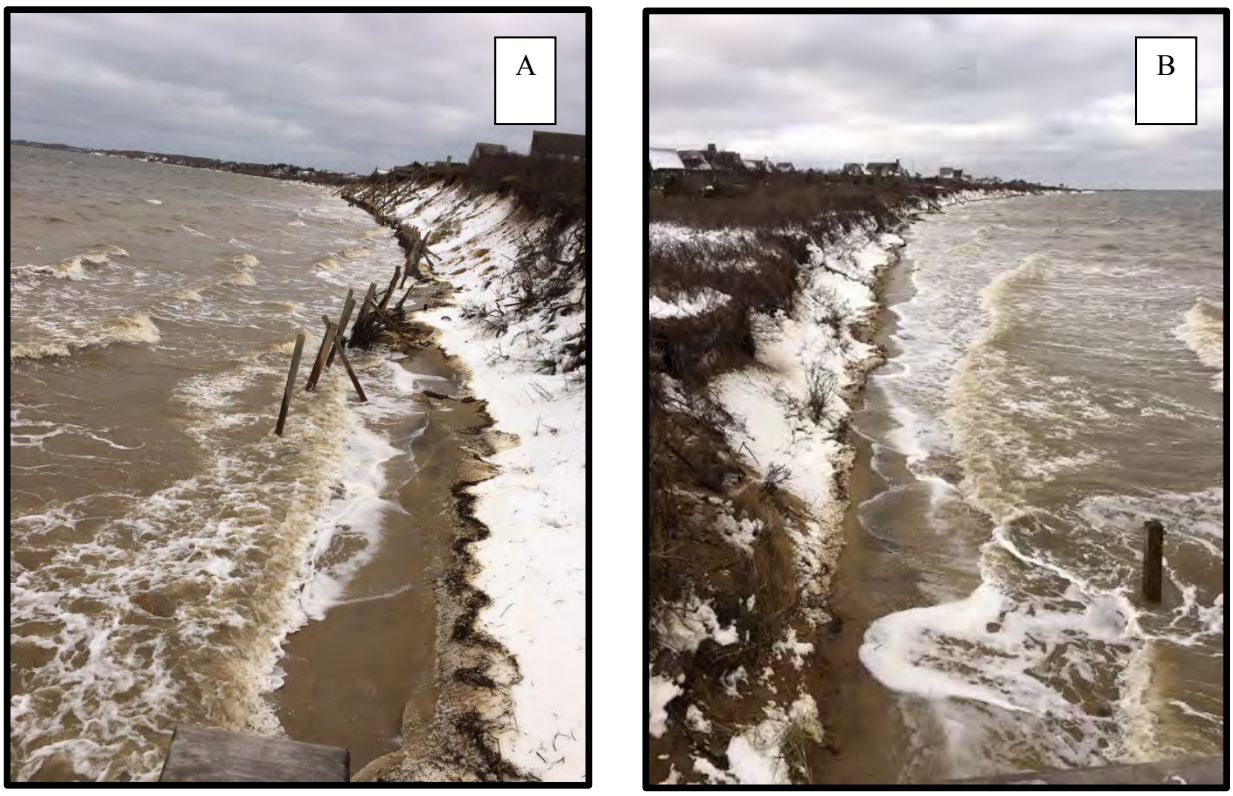

Figure 12. View of the project looking to the east (A) and from the west (B) during the storm shown in Figure 11.

As a result, waves were calculated using two methods. The first method utilized the US Army Corps of Engineers (USACE) Automated Coastal Engineering System (ACES) models. This group of computer programs was developed by the USACE Coastal Engineering Research Center[2] at the Waterways Experiment Station. The second technique used linear wave theory to calculate the maximum wave height that can be supported for a given water depth on the beach.

The ACES analysis calculates the maximum wave height that can be generated in Nantucket Harbor for a given wind speed and direction. A general storm (average) storm condition was synthesized using a wind speed of 40 miles per hour was used with a duration of 4 hours. We also ran the computer model for two storms conditions that occurred on Nantucket. The first was Nemo, a nor'easter that occurred on January 26, 2015 and the second unnamed nor'easter that occurred on January 22, 2016. Table 1 shows the results obtained from the ACES wave model for wind directions from the northwest clockwise through the north-northeast for these storms. These are the maximum wave heights that will be generated offshore of the beach during these storms. A larger storm will increase the water level, last longer, and will produce larger waves. Table 1 also shows the waves generated for the conditions shown in Figure 10 and 13A.

[2] Now the USACE Coastal and Hydraulic Laboratory.

Table 1. Wave heights in the harbor calculated from ACES.

Direction (deg)	Wave Height (ft) Winds ~40 mph 3 hr	Wave Height (ft) Nemo 1-26-15	Wave Height Nor'Easter (ft) 1-22-16
340	1.9	1.9	1.7
0	2.1	2.7	2.3
20	2.1	2.6	2.2

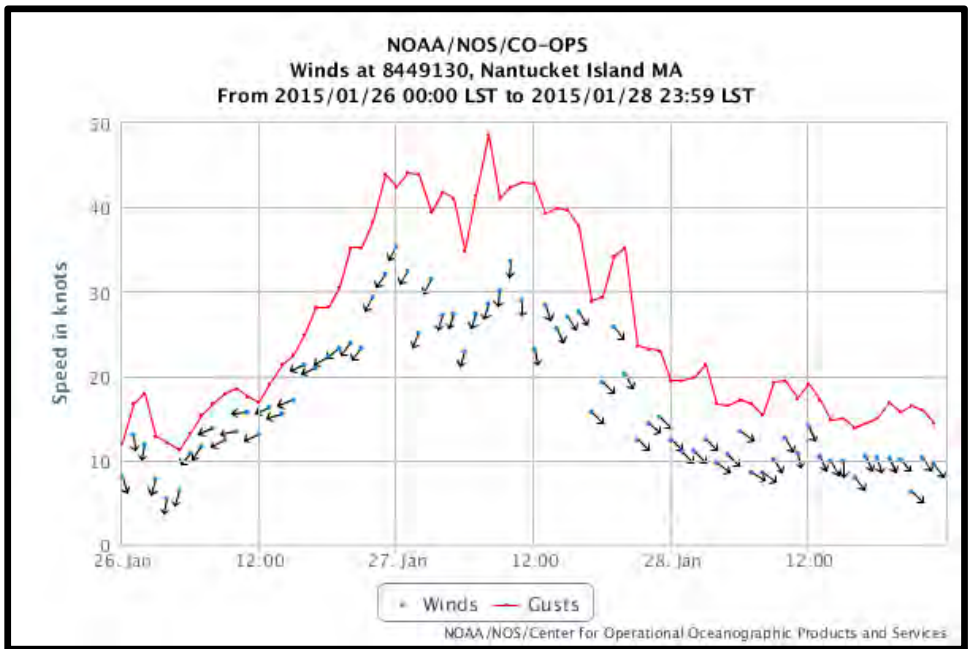

Figure 13A. Winds generated during the nor'easter Nemo January 2015.

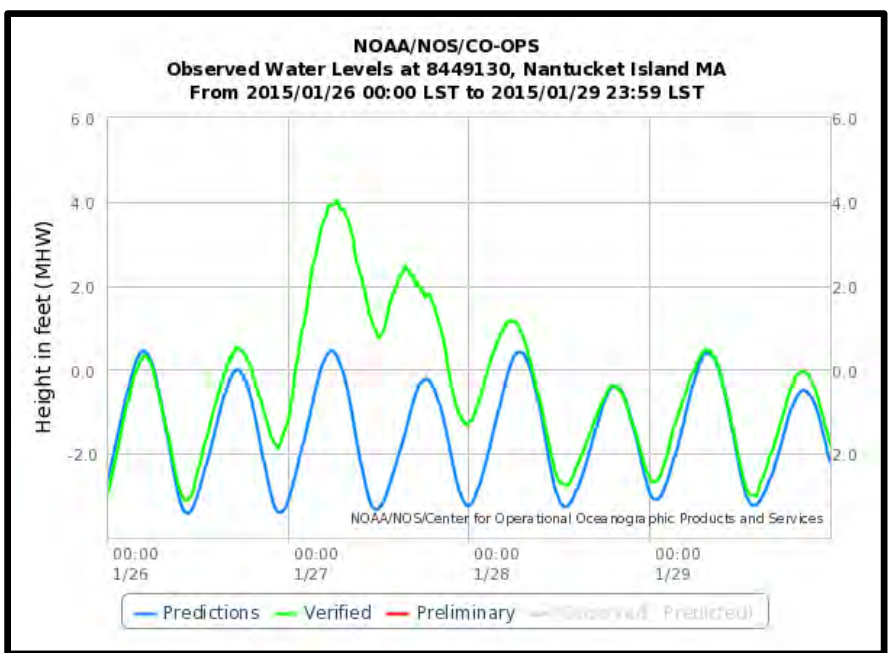

Figure 13B. Water levels that occurred during the nor'easter Nemo January 2015.

The waves calculated clearly show that the frequently occurring storms produce waves that will erode the beach and water levels that will inundate the entire beach.

The ACES model calculated wave heights in Nantucket Harbor. However, it is instructive to calculate the height of the wave that will break on the toe of the coastal bank. A height of a wave that approaches the beach and breaks on or at the toe of the bank will be dependent only on the depth of water at the toe of the coastal bank. Table 3 shows the depth of the water during the peak of the storm and the maximum height if the wave that will break at the toe of the coastal bank for the average, Nemo, and the January 22, 2016 storms. The water level during the peak of the storm shown in Figure 12 resulted in a water depth of approximately 0.5 – 0.75 ft at the base of the bank and produced a braking wave heights of 0.6 ft at the toe of the coastal bank. Nemo and the January 20126 nor'easter produced breaking wave heights of 4.0 and 2.7 ft respectively. These conditions allowed waves to not only break at the toe of the bank but also run up the face of the bank. The result is that during normal storm conditions the storm surge reaches the base of the bank allowing waves to break on the lower 1 ft of the bank. These conditions ensure that the bank face will remain vertical and will not have a chance to reach an angle of repose and to naturally vegetate.

Table 3. Water depths at the toe of the coastal bank

Date of Storm	Depth of water at the base of bank (ft)	Wave at Base of Bank (ft)
Normal Storm	0.8	0.6
Nemo 1/26/2015	5.1	4.0
1/22/2016	3.4	2.7

Flood Zone Elevations at the Project Site

The Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRMs), dated June 9, 2014. The flood zone data for the project are is shown on Map Panel #25019C00884G. The flood insurance map shows that at the beach there is a Zone VE (EL10) (Figure 14) while just to the east the VE zone drops to a Zone VE (EL9). The Flood Insurance Study ("Brown Book") shows that the 10- and 50-year still water flood zone elevations are 3.6[3] and 5.1 ft respectively. This indicates that during a storm with a 10-year return period the toe of the bank will be attacked by storm surge and waves.

Shoreline Change Analysis

A shoreline change analysis was conducted to evaluate long- and short-term shoreline response of the coastline along the subject properties. There are several techniques that can be used to calculate shoreline change. The most accurate is to compare topographic surveys of the property that have been obtained over the years. However, most properties do not have a back-log of topographic surveys and if they did, the surveys would most likely be confined to the property of

[3] FEMA flood zone elevations are in NAVD88.

interest and not include adjacent properties. Therefore, an aerial photographic analysis is commonly used to calculate shoreline change. The method analyses successive aerial photographs and calculates the change in position of the shoreline or the top of the coastal bank. This allows the investigator to calculate rates of change for the beach or top of bank.

The Massachusetts Coastal Zone Management (CZM) has completed a shoreline change analysis for most of Massachusetts. The results of the CZM shoreline change analysis is reported in their Massachusetts Ocean Resource Information System (MORIS). CZM analyzed shorelines from 1844 through 2009 and calculated the shoreline change rates along equally spaced transects throughout Massachusetts. There are ten transects (Figure 14) that fall within the project boundaries (MORIS Transects N-1600 thru N-1610). The MORIS results in Table 2 show that the shoreline change is erosive along this section of shoreline.

Figure 14. Location of he CZM MORS shoreline change transects.

MORIS long-term erosion rates were calculated using the entire 150-year data set. The short-term rates of change were calculated using data spanning the most recent 30-year data set.

Table 2 shows that the long-term shoreline change is -0.6 ft/yr. The short-term rate of shoreline change is -1.7 ft/yr. The short-term shoreline change rate is usually used when determining how the shoreline will respond in the next 10 years because the short-term shoreline change rate includes the most recent storms but the data set spans a sufficiently long period so that the analysis is not biased by any one large erosion or accretion event.

Table 2. CZM MORIS long- and short-term erosion rates.

MORIS Transect Number	CZM Morris Long-Term Rate (ft/yr)	CZM Morris Short-Term Rate (ft/yr)
N-1600	-0.7	-1.7
N-1601	-0.7	-1.9
N-1602	-0.6	-1.9
N-1603	-0.5	-1.4
N-1604	-0.5	-1.6
N-1605	-0.7	-1.4
N-1606	-0.7	-1.7
N-1607	-0.6	-1.6
N-1608	-0.6	-1.7
N-1609	-0.5	-1.8
N-1610	-0.6	-1.7
Averge Change	-0.6	-1.7

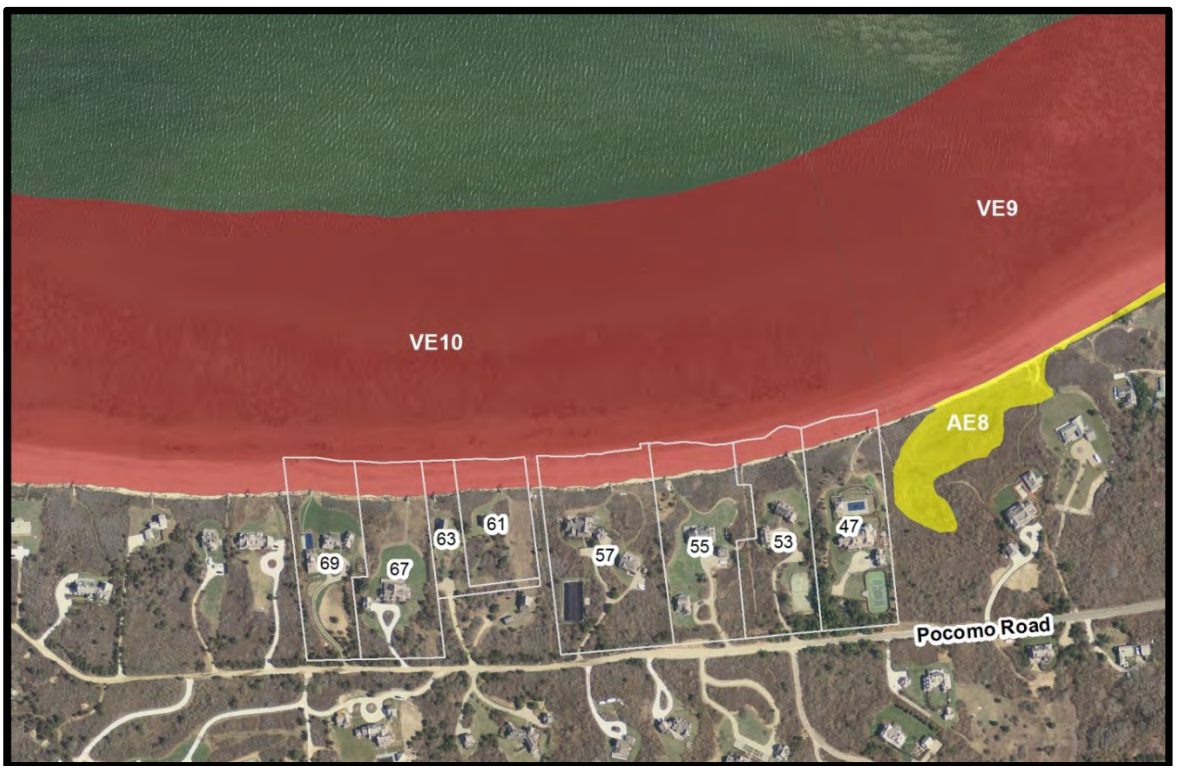

Figure 14. FEMA Flood Zones along the northern shore of Pocomo Road, Nantucket.

The MORIS data set only includes shoreline data up to 2009. Additionally, we have occasionally found some discrepancies in the shoreline change rates that have been reported in MORIS. Therefore, the Woods Hole Group performed its own shoreline change analysis to ensure there were no errors in the MORIS data and to bring the shoreline change analysis forward to include data from 2012, 2014, and 2015.

A computer-based shoreline mapping methodology within a Geographic Information System (GIS) framework was used to compile and analyze changes in historical shoreline positions for the properties along the north shore of Pocomo Road, and the adjacent area. The purpose of this task was to quantify the spatial and temporal changes in shoreline position using the most accurate data sources and compilation procedures available, and to evaluate the long-term and recent rates of change. Assuming that the trends continue at the same rate into the future, the information from the shoreline change analysis can also be used to predict patterns of shoreline erosion over the next several decades.

Woods Hole Group compiled and analyzed data from Google Earth imagery, MassGIS orthophotography, Massachusetts Coastal Zone Management (CZM) shoreline change study data and single-frame historical aerial photographs. Data covering thirteen (13) time periods were evaluated spanning the 128-year period from 1887 to 2015 (Table 3).

Table 3. Data Sources for Shoreline Change Analysis

Year	Source
2015	Google Earth
2014	MassGIS
2012	Google Earth
2009	MassGIS
2003	MassGIS
1999	Col-East, Inc.
1994	MassGIS
1990	Col-East, Inc.
1978	Mass CZM Shoreline
1971	Col-East, Inc.
1963	Col-East, Inc.
1955	Mass CZM Shoreline
1887	Mass CZM Shoreline

Woods Hole Group acquired the photos from MassGIS as georeferenced orthoimagery and the vector shorelines from Mass CZM. However, the aerial photographs from Col-East, Inc. and those extracted from Google Earth required georeferencing. Georeferencing was accomplished by identifying a series of evenly spaced control points on the images for which real world x, y coordinates were known. The 2014 MassGIS orthoimagery was utilized as the base image from which the ground control was obtained for all georeferencing.

Once the additional photographs were geo-referenced, and all data sources were brought to a common coordinate system, the locations of the mean high water line (MHW) and the top of bank (where identifiable) were located and digitized from each of the thirteen (13) data sources. Once these data were compiled, spatial and temporal changes in the data were computed. This was accomplished by identifying a series of shore normal transects along the coastline where discrete measurements of change could be made through time, and where rates of change could be determined. To analyze the shoreline change rates, a total of 95 shore normal transects were established at 50 foot evenly-spaced intervals along the coastline from the western end of

Pocomo Road to Lauretta Lane to the west. At each transect, the magnitude of shoreline and bank movement was calculated, and annual rates of change were determined using the various time intervals between the data sources. Rates of change were calculated using the linear regression method. In this method, an average rate of change is based on a best-fit line to a series of points representing the shoreline/bank position over time. The linear regression method is most accurate when looking at long-term averages and is most often used for planning purposes and management decisions.

The digitized locations of the shorelines, as well as the transect locations across the entire study area, are shown in Figure 15. Shoreline change rates were analyzed for the entire time period (1887 to 2015) (Figure 16), as well as two more recent sub-periods; the last 45 years (1971 to 2015) and the last 13 years (2003 to 2015) (Figures 17 & 18). The linear regression rates of shoreline change from these time periods are presented in the graph in Figure 19.

In general, all time periods analyzed show a trend of erosion across the entire study area for both the shoreline and the top of bank, with the rates of shoreline erosion generally greater than the rates of bank erosion. The average shoreline erosion rates for the entire study area were -0.6 ft/yr (1887 to 2015), -1.0 ft/yr (1971 to 2015), and -0.9 ft/yr (2003-2015). The average shoreline erosion rates immediately in front of the subject properties (transects 27 to 62) followed this trend, but with slightly higher rates of -0.8 ft/yr, -1.1 ft/yr and -1.2 ft/yr respectively. Average rates of shoreline change were also computed from the transects on each individual property and are listed in Table 4.

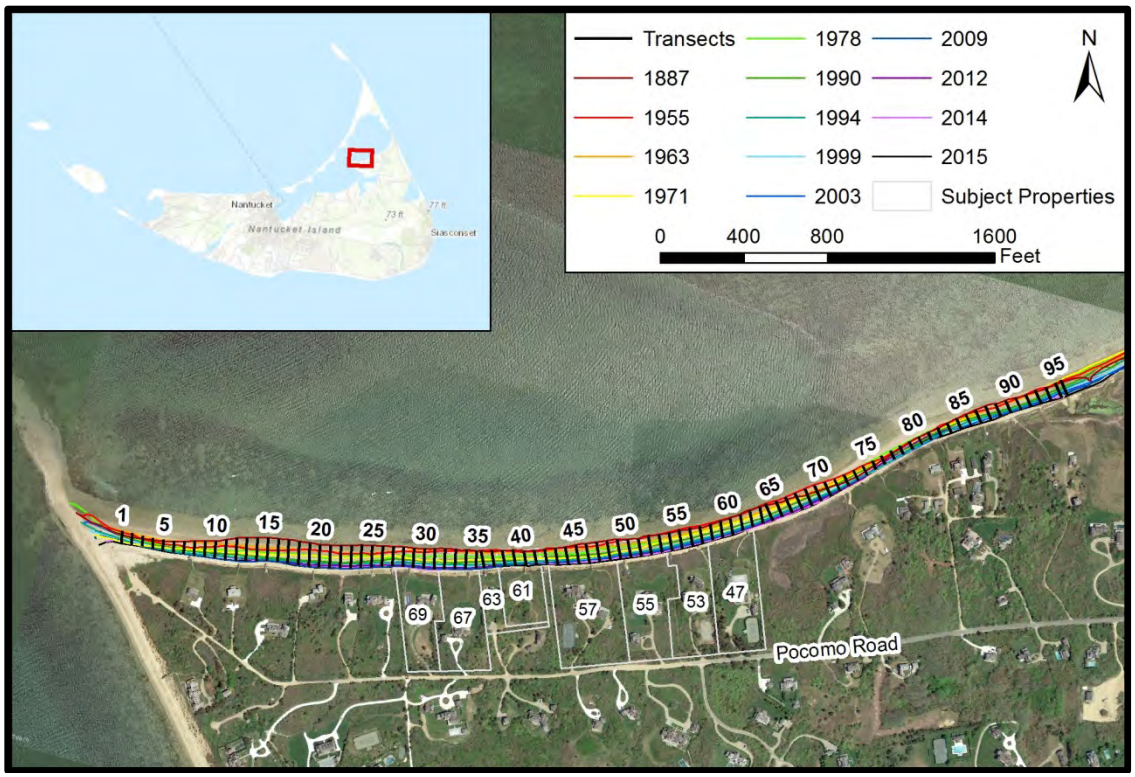

Figure 15. Historical shoreline positions and locations of analysis transects. Background is from 2015 GoogleEarth imagery. Pocomo Road subject properties are identified by their parcel boundaries and street address numbers.

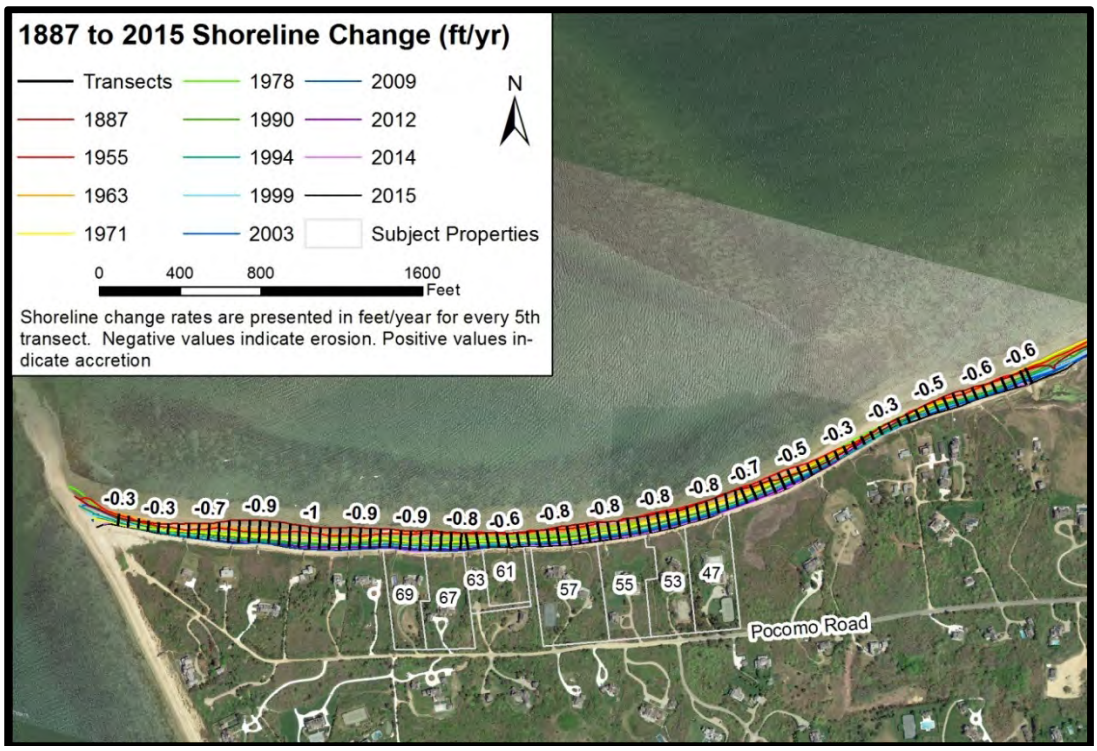

Figure 16. Long-term (1887-2015) rates of shoreline change (feet/year). Background is from 2015 GoogleEarth imagery.

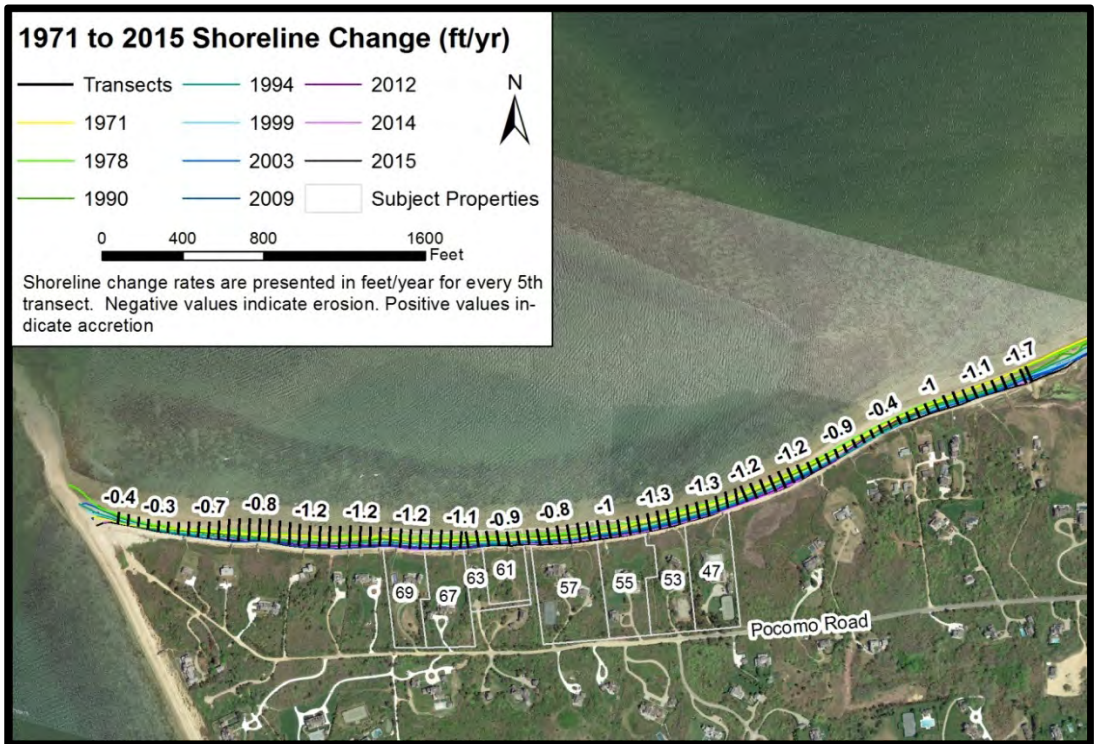

Figure 17. Recent (1971-2015) rates of shoreline change (feet/year). Background is from 2015 GoogleEarth imagery.

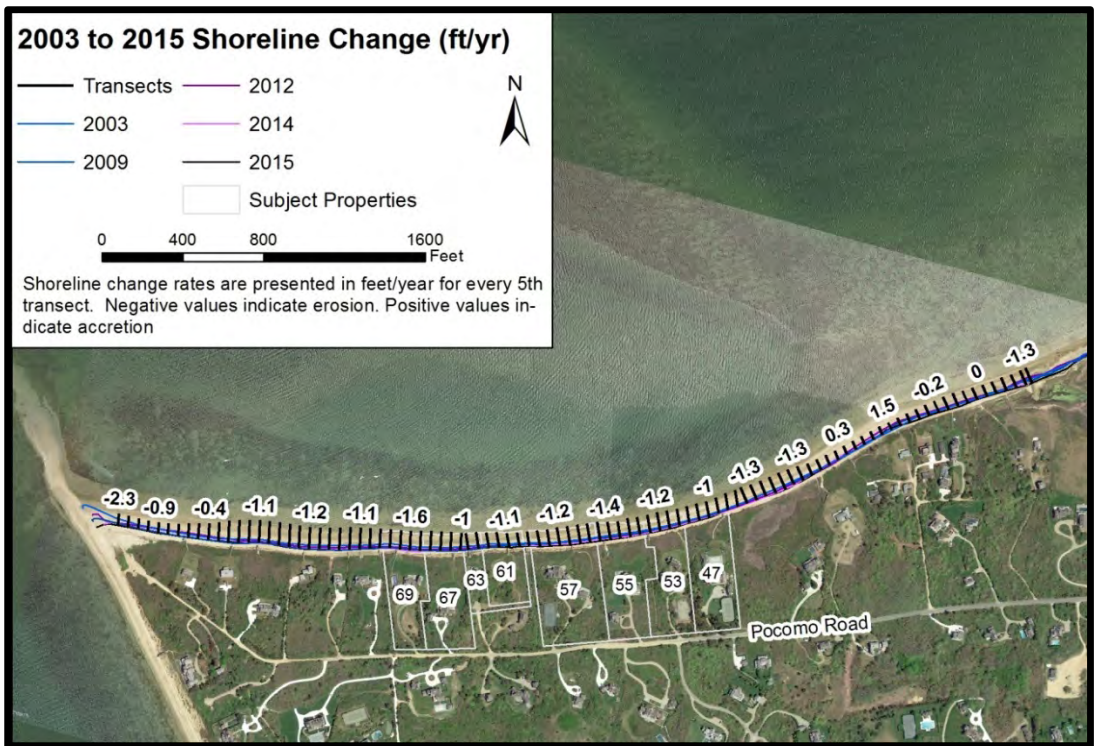

Figure 18. Short-term (2003-2015) rates of shoreline change (feet/year). Background is from 2015 GoogleEarth imagery.

Table 4. Average rate of shoreline and bank change along each subject property's coastline.

		Linear regression Shoreline		
Property	Transects	1887-2015	2003-2015	1971-2015
69 Pocomo Road	27 to 31	-0.8	-1.5	-1.2
67 Pocomo Road	32 to 35	-0.9	-1.1	-1.2
63 Pocomo Road	36 to 37	-0.8	-1.0	-1.0
61 Pocomo Road	38 to 41	-0.6	-1.1	-0.9
57 Pocomo Road	42 to 48	-0.7	-1.3	-0.9
55 Pocomo Road	49 to 53	-0.8	-1.5	-1.1
53 Pocomo Road	54 to 57	-0.8	-1.2	-1.3
47 Pocomo Road	58 to 62	-0.7	-0.9	-1.3
Average	**27 to 62**	**-0.8**	**-1.2**	**-1.1**

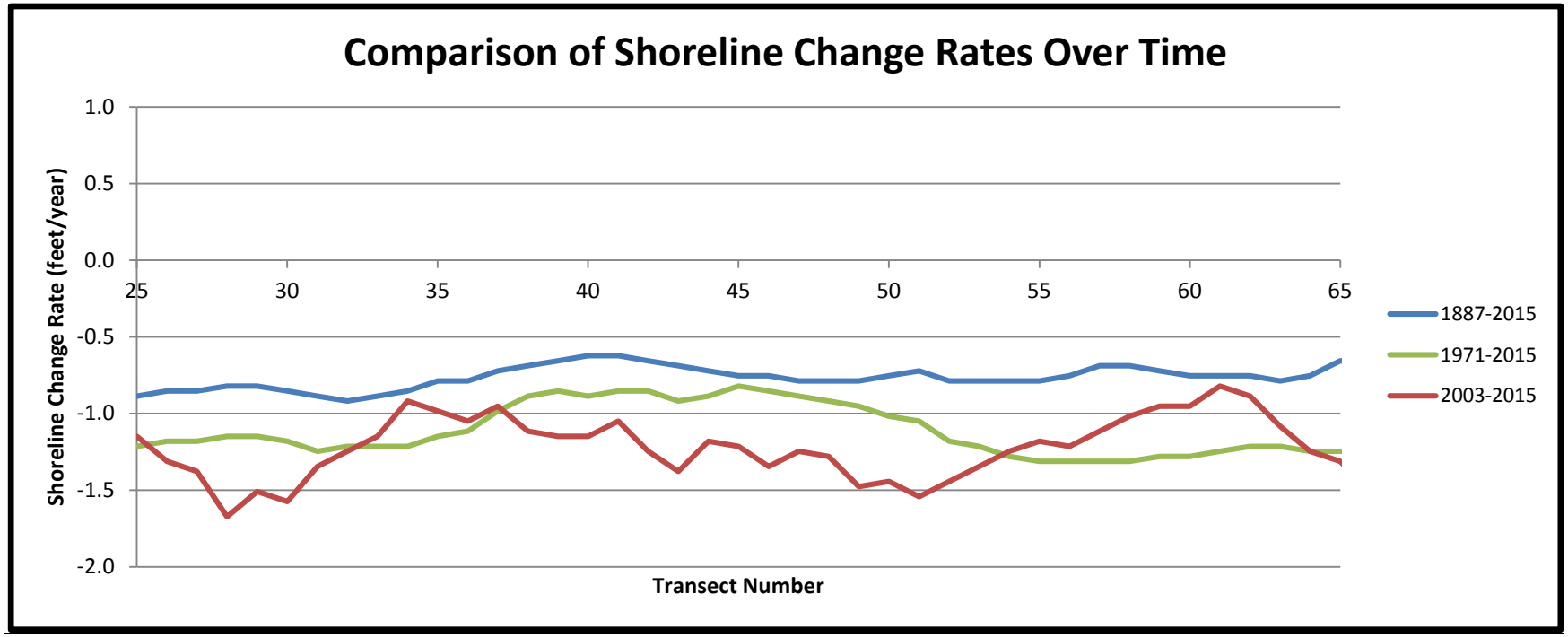

Figure 19. Rates of historical shoreline change for the entire study period (1887-2015), as well as two recent time periods (1971-2015 and 2003-2015) for the transects fronting the subject properties.

Sediment Contribution from the Coastal Bank

Erosion of the bank provides sediment to the littoral system and helps mitigate erosion that occurs downdrift of the property. The bank erodes under the influence of the storm surge and waves produced by coastal storms that have been described above. Therefore, it is important to quantify the shoreline change rates along this section of coast in order to determine how much sand is provided to the beach from coastal bank erosion. The average of the short-term erosion rates calculated from MORIS and from the Woods Hole Group analysis are shown in Table 5.

Table 5. Sediment contribution by the coastal bank calculated from MORIS and the Woods Hole Group rates.

MORIS Short-Term Erosion Rate (ft/yr)	MORIS Annual Bank Contribution (cu yd)	WHG Short-Term Erosion Rate (ft/yr)	WHG Annual Bank Contribution (cu yd)
-1.7	1,253	-1.2	885

The annual sediment contribution calculated using the MORIS shoreline erosion rate of -1/7 ft/yr is 1,253 cu yd/yr and the sediment contribution calculated using the Woods Hole Group short-term erosion rate is 885 cud yd/yr.

Sea Level Rise

Beach nourishment is one of the most effective methods to maintain beaches and minimize the effects of sea level rise. This is because sea level rise is small compared to the effects of storm surge and the design life of a beach nourishment project. A beach nourishment project will need maintenance and will need to periodically be replaced as storms attack the coast and erode the project. However, that is how beach nourishment is intended to work. The beach nourishment is designed to absorb the impact of the waves and erode thus providing sediment to the littoral system while providing protection to the back-beach and toe of the bank.

Sea level rise is on the order of 1.4 millimeters/year in the Barnstable area (Figure 12). This estimate was derived from an examination of tide gauges along the East Coast. A more recent study published by NOAA[4] showed that the sea level rise for the Boston area is 2.63 millimeters/year. In order to put this in perspective; 2.6 millimeters (Figure 13) is about the thickness of two nickels placed on top of each other. Therefore, a project would require a design life of 30 or 40 years before sea level rise would even become a design factor.

The beach nourishment portion of the project will help mitigate the effects of sea level rise by providing a long-term sediment source to the beach and littoral system. Additionally, the design life of the revetment is effectively 20 to 30 years. Using the information provided above, the water level can be expected to increase between 1.3 and 2.0 inches over the design life of the structure. As a result, the proposed design will not be impacted by sea level rise.

[4] http://tidesandcurrents.noaa.gov/sltrends/sltrends_station.shtml?stnid=8443970

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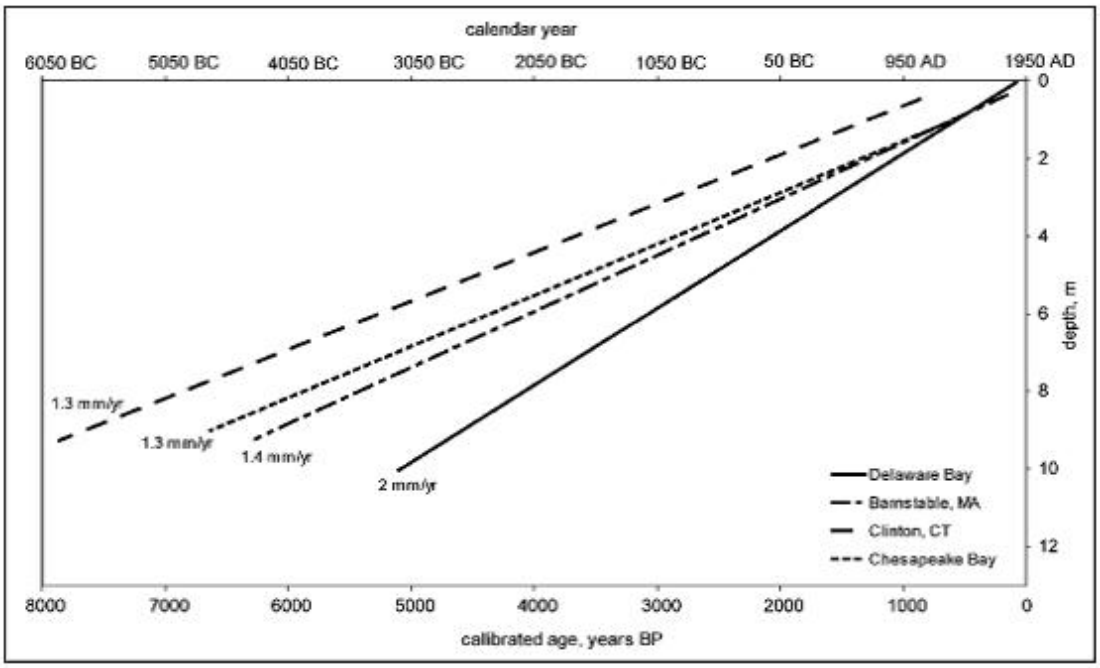

Figure 12. Showing the estimated long-term sea level rise for Barnstable Massachusetts[5].

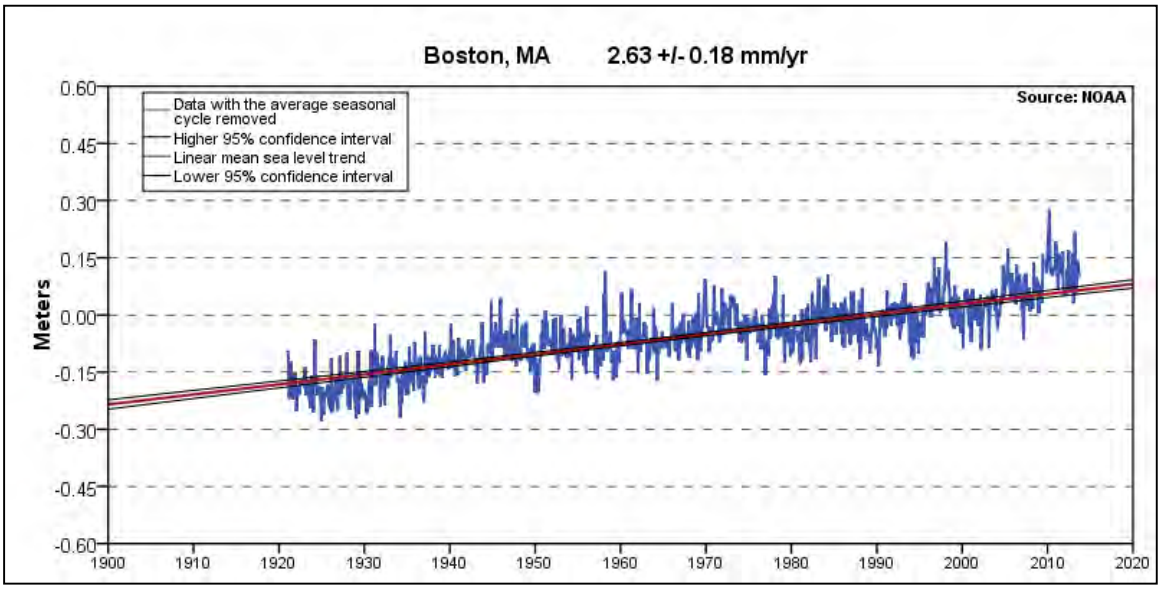

Figure 13. Sea Level Rise graph obtained from the NOAA COOPs web site.

[5] Relative long-term sea-level trends for Delaware Bay; Clinton, Connecticut; Barnstable, Massachusetts; and Chesapeake Bay (from Larsen and Clark, 2006. A search for scale in sea-level studies. *Journal of Coastal Research*, ***22(4)*** ,788–800).

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Proposed Project

The proposed project is located with Nantucket Harbor and is approximately 1,800 ft long. The applicant is proposing to install an anchored fiber roll array with reinforced soil lifts. The project will include a series of timber posts to help support and protect the fiber roll array from sliding. The project also includes approximately 1,000 cy of clean beach quality sand to replace sediment that would have been contributed by the coastal bank and to cover the lifts and fiber rolls. The face of the coastal bank will be planted with beach grass.

Performance Standards & Compliance Assessment

Wetland resource areas within one hundred feet seaward of the Project and protected by the Act and Bylaw include Coastal Beach, Coastal Bank and Land Subject to Coastal Storm Flowage. Due to the design of the project and proposed mitigation, the project will not have an adverse affect on any of these resources areas.

Nantucket Wetland Regulations, Section 2.01B: Land Under The Ocean

Land under the ocean provides feeding areas, spawning and nursery grounds, and shelter for manycoastal organisms related to marine fisheries and wildlife. Destruction of eelgrass beds (Zostera marina) will harm scallop production. Nearshore areas, and in some cases offshore areas, of land under the ocean help reduce storm damage, erosion, and flooding by diminishing and buffering the high energy effects of storms. Submerged sand bars dissipate wave energy. Such areas provide a source of sediment for seasonal rebuilding of coastal beaches and dunes. The bottom topography and sediment type of nearshore areas of land under the ocean is critical to erosion control, storm damage protection, and flood control. Water circulation and flushing rates, distribution of grain size, water quality (including but not limited to turbidity, temperature, nutrients, pollutants, salinity, and dissolved oxygen), and the habitat of wildlife, finfish, and shellfish are all factors critical to the protection of significant wildlife habitat and marine fin and shell fisheries. Land under the ocean in an unobstructed state is important to recreational swimming, fishing, and shellfishing, to recreational boating and sailing, to commercial fishing and shellfishing, and to wetland scenic views.

In view of the foregoing, whenever a proposed project involves removing, filling, dredging, altering or building upon land under the ocean, the Commission shall find that such land is significant to the protection of the following interests: flood control, erosion control, storm damage prevention, fisheries, shellfish, wildlife, significant wildlife habitat, recreation, and wetland scenic views. These findings may be overcome only upon a clear showing that the Land Under the Ocean does not play a role in protecting any of the interests given above and only upon a specific written determination to that effect by the Commission.

> *8. Water dependent projects shall be designed and performed so as to cause no adverse effects on wildlife, erosion control, marine fisheries, shellfish beds, storm damage prevention, flood control, recreation, and aquatic vegetation.*

This project does not involve removing, filling, dredging, altering, or building on land under the ocean. has been specifically designed to not have an impact on land under the ocean. The project is at the toe of the bank and will not encroach below the Mean High Water Line.

Additionally, the quantity of sediment that will be placed on the face of the bank has been carefully calculated to ensure that only the quantity of sand that would naturally reach the beach and nearshore system will be available during storms. Therefore, no adverse impacts will occur to wildlife, erosion control, marine fisheries, shellfish beds, storm damage prevention, flood control, recreation, and aquatic vegetation will occur.

Coastal Beach

The proposed sacrificial sand cover to be placed at the base of the coastal bank, covering the reinforced soil lifts and the coir fiber roles at the base of the bank where it intersects the coastal beach resource area. The soil lifts and coir fiber rolls will be covered with beach quality sand which will be available to the beach during storms. The coastal beach resource areas are important because they assist in storm damage prevention, erosion and flood control by allowing absorbing wave energy thus aiding in the protection of the toe of the bank and provide sediment to feed the adjacent coastal beach. The cover material will be composed of beach compatible sand and will therefore serve as a source of sediment for downdrift coastal resource areas. The cover material will not reduce the ability of the coastal beach to perform as a protector for the coastal bank and as a source of sediment, and meets all of the following performance standards of a coastal beach found at 310 CMR 10.27 and NWR Section 2.02B:

Wetland Protection Act Regulations, 310 CMR 10.27 – Coastal Beach

Pursuant to 310 CMR 10.27, coastal beaches are significant to storm damage prevention, flood control and the protection of wildlife habitat as they dissipate wave energy by their gentle slope, their permeability and their granular nature, which permit changes in beach form in response to changes in wave conditions. Furthermore, coastal beaches serve as a sediment source for dunes and subtidal areas, and also serve as a sediment source for downdrift coastal areas.

Coastal beaches serve the purposes of storm damage prevention and flood control by dissipating wave energy, by reducing the height of storm waves, and by providing sediment to supply other coastal features. Additionally, wildlife (birds) may nest in the coastal berm, between the toe of a dune and the high tide line.

While the project involves limited work on the coastal beach, the presumption that the coastal beach is significant to storm damage prevention, flood control and the protection of wildlife habitat, is overcome. The coastal beach at this locus is deprived of sediment buildup due to erosion and thus currently cannot function effectively due to its location. Recent storms have left the beach depressed in elevation, thus allowing an abnormal amount of direct wave attack to the base of the bank. The frequent wave attacks have caused instability at the base of the coastal bank causing it to erode and slump. Hence, the coastal beach is starved of beach building sediment and is unable to perform its intended functions which are to break waves and protect the base of the coastal bank.

The Regulations provide that when a coastal beach is determined to be significant to storm damage prevention, flood control, or protection of wildlife habitat, the following performance standards apply (310 CMR 10.27(3) to (7)):

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3. 310 CMR 10.27(3). Any project on a coastal beach, except any project permitted under 310 CMR 10.30(3)(a) shall not have an adverse effect by increasing erosion, decreasing the volume or changing the form of any such coastal beach or an adjacent or downdrift coastal beach.

The sand cover over the fiber roll array will aid in storm damage prevention, erosion and flood control by dissipating wave energy before the waves severely erode the base of coastal bank which serves as the foundation associated with coastal bank stabilization. The proposed project will continue to provide for the replenishment of the volume of the beach and therefore decrease the rate of erosion. Therefore, the project meets the performance standard found in 310 CMR 10.27(3).

4. Any groin, jetty, solid pier, or other such solid fill structure which will interfere with littoral drift, in addition to complying with 310 CMR 10.27(3), shall be constructed as follows:

(a) It shall be the minimum length and height demonstrated to be necessary to maintain beach form and volume. In evaluating necessity, coastal engineering, physical oceanographic and/or coastal geologic information shall be considered.

(b) Immediately after construction any groin shall be filled to entrapment capacity in height and length with sediment of grain size compatible with that of the adjacent beach.

(c) Jetties trapping littoral drift material shall contain a sand by-pass system to transfer sediments to the downdrift side of the inlet or shall be periodically redredged to provide beach nourishment to ensure that downdrift or adjacent beaches are not starved of sediments.

This performance standard does not apply as the project does not include the construction of a groin, jetty, solid pier, or other such solid fill structure which will interfere with littoral drift.

5. Notwithstanding 310 CMR 10.27(3), beach nourishment with clean sediment of a grain size compatible with that on the existing beach may be permitted.

The cover material over the fiber rolls will provide for sand contribution to the beach and system as waves reach the base of the bank in storm events. The cover material consisting of the placement of clean supplemental material of similar grain size will be replaced at a minimum of once a year if it is eroded during a severe storm. The erosion of this supplemental material provides compatible material to the nearshore and the adjacent beaches and by removal of the sand cover during storm events, sand will be provided to the littoral system that normally would be available from a functioning coastal bank during a severe storm. This material will provide sacrificial sand along the toe of the coastal bank and will replace sand that would naturally be eroded from the foundation base of the coastal bank.

6. In addition to complying with the requirements of 310 CMR 10.27(3) and 10.27(4), a project on a tidal flat shall if water-dependent be designed and constructed, using best available measures, so as to minimize adverse effects, and if non-water-dependent, have no adverse effects, on marine fisheries and wildlife habitat caused by:

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(a) alterations in water circulation,
(b) alterations in the distribution of sediment grain size, and
(c) changes in water quality, including, but not limited to, other than natural fluctuations in the levels of dissolved oxygen, temperature or turbidity, or the addition of pollutants.

This performance standard does not apply as the project is not proposed on a tidal flat.

7. Notwithstanding the provisions of 310 CMR 10.27(3) through 10.27(6), no project may be permitted which will have any adverse effect on specified habitat sites or rare vertebrate or invertebrate species, as identified by procedures established under 310 CMR 10.37.

The existing conditions at the locus, caused by the lack of sediment buildup, do not allow for natural buildup of the beach elevation or creation of a natural dune at the base of the bank. The proposed project is not anticipated to remedy this situation. However, the project proposes to provide sediment at the base of the back along the beach as sacrificial material to feed the beach.

Nantucket Wetland Regulations, Section 2.02B: Coastal Beaches

1. The provisions of Section 2.01B (1-8) (Land Under the Ocean) shall apply to coastal beaches and tidal flats.

The project meets the performance standards found at NWR §2.01B (1-5) (Land Under the Ocean) as the project does not involve any dredging activity (NWR §2.01B(1)) and does not involve an aquacultural project or the construction, maintenance or repair of any pier (NWR §§2.01B(2 - 5)).

The project also satisfies the performance standard found at NWR §§2.01B(7) as it will cause no adverse effects on wildlife, erosion control, marine fisheries, shellfish beds, storm damage prevention, flood control and recreation. The existing coastal bank and coastal beach have been eroded by storms and the main purpose of the project is to prevent or slow down erosion at the property thereby increasing storm damage prevention and flood control resulting in a stabilized coastal bank that is significant to the interest of flood control, erosion control and storm damage prevention. With regard to wildlife, the project is located within an area of existing development and the coastal beach is currently used as a recreational beach. The proposed base stabilized coastal bank will be planted with vegetation, resulting in the project protecting the interest of wildlife and certainly presenting no greater effect on wildlife than those that may presently exist.

The project is a water dependent use and therefore does not require a waiver. We make this statement because the Nantucket Regulations define water dependent as follows:

Water Dependent Projects or Uses - projects which require direct wetlands access for their intended use and therefore cannot be located out of the Area Subject to Protection Under the Bylaw. ***Examples include but are not limited to****: docks, piers, boat landings,*

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boathouses, marinas, stairs to beaches, and boardwalks over wetland vegetation. Projects which benefit from wetlands access but which do not require it are not water dependent uses. Examples include: restaurants, dwellings, and commercial enterprises servicing marine-related uses such as fish markets, repair facilities, ships' chandleries, and general use recreational trails.

Our project is water dependent because it requires direct access to the wetland access and cannot be located outside the area subject to projections. The definition defines seven example projects. However, the regulations state that the examples include, but are not limited to, the examples stated.

2. No new bulkheads or coastal engineering structures shall be permitted to protect structures constructed, or substantially improved, after 8/78. Bulkheads may be rebuilt only if the Commission determines there is no environmentally better way to control an erosion problem, including in appropriate cases the moving of the threatened building. Other coastal engineering structures may be permitted only upon a clear showing that no other alternative exists to protect a structure built prior to 9/78, and not substantially improved, from imminent danger.

We are not proposing a coastal engineering structure such as a bulkhead, pier, or groin.

3. Dredging projects in flats must be done in accordance with such procedures as the Commission determines would disturb the absolute minimum amount of habitat possible.

This performance standard does not apply as the project does not include any dredging in flats.

4. Clean fill of similar grain size may be used on a Coastal Beach but not on a Tidal Flat, only if the Commission authorizes its use, and only if such fill is to be used for a beach or dune nourishment project. All possible mitigation measures shall be taken, as determined by the Commission, to limit the adverse effects of the fill.

The Applicant is proposing to use clean fill of similar grain size as sacrificial material for the coastal beach. No work is proposed on a tidal flat.

5. No part of any septic system shall be placed in shifting sands or on a coastal beach. The septic leach facility shall be at least 100 feet from the spring high tide line.

This performance standard does not apply as the project does not include the installation or repair of a septic system.

6. All work on projects which are not water dependent shall maintain at least a 25-foot natural undisturbed area adjacent to a coastal beach. All structures which are not water dependent shall be at least 50 feet from a coastal beach.

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This performance standard does not apply as the project requires direct resource area access for its intended use and consists of the installation of coir rolls and the placement of a sand cover over the rolls at the toe of the coast bank.

> *7. In areas of eroding shoreline, the distance from all buildings to the coastal beach shall be at least 20 times the average annual shoreline erosion or 100 feet, whichever is the lesser. The average annual shoreline erosion rate shall be determined by averaging the annual erosion rate over a 150 year period ending the date the NNOI was filed, or if no NNOI was filed, the date construction began. If erosion data is not available for the 150-year period, the Commission shall determine the average annual erosion rate from such lesser time period for which erosion data is available. In cases where documentation can be provided to show that the use of the 150-year period is inappropriate to existing shoreline characteristics and trends, alternate shoreline change rates may be used when based on a preponderance of credible evidence.*

This performance standard does not apply as the project does not include the construction of any buildings.

> *8. Vehicular access for existing houses or for recreational use shall be as unpaved ways and shall be done in accordance with such procedures as the Commission determines will minimize any adverse effect on the beach and the Interests of the Bylaw.*

This performance standard does not apply as the project does not include the installation, maintenance or repair of vehicular access.

E.2 <u>Coastal Bank</u>

The coastal bank is unable to properly sustain vegetation as a result of the slope becoming over-steepened due to erosion and slumping caused by the toe of the bank being eroded. Therefore, the existing coastal bank is not able to provide wildlife habitat to rare, endangered, and otherwise significant wildlife. The project seeks to improve the current condition of the coastal bank by stabilizing the foundation toe and lower face of the coastal bank using rows of anchored sand filled tubes along the base of the bank upward and the placement of sand cover over the face of the tubes. Additionally, the area of the scarped upper bank will be restored by adding fill and re-grading to a sustainable slope. The face of the upper bank will then be re-vegetated with beach grass. The project meets all of the following performance standards of a Coastal Bank found at 310 CMR 10.30 and NWR §2.05B:

<u>Wetland Protection Act Regulations, 310 CMR 10.30: Coastal Banks</u>

Pursuant to 310 CMR 10.30, coastal banks are likely to be significant to storm damage prevention and flood control by supplying sediment to coastal beaches, coastal dunes and barrier beaches and, due to their height, provide a buffer to upland areas from storm waters.

Coastal banks, because of their height and stability, may act as a buffer or natural wall, which protects upland areas from storm damage and flooding. Bank vegetation tends to stabilize the bank and reduce the rate of erosion due to wind and rain runoff. However, here, the coastal

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bank's ability to provide storm damage protection has been severely degraded as the bank is actively eroding.

The project recognizes that the coastal bank is significant to both storm damage prevention and flood control because it supplies sediment to coastal beaches, coastal dunes or barrier beaches and acts as a protective barrier. Therefore, the project is designed to allow the cover over the soil lifts to erode in response to wave action and supply material to downdrift coastal areas. The coastal bank is also significant to storm damage prevention and flood control as it serves as a vertical buffer to storm waters and therefore the project was also designed to stabilize the bank.

The Regulations provide that when a coastal bank is determined to be significant to storm damage prevention or flood control because it supplies sediment to coastal beaches, coastal dunes or barrier beaches and serves as a vertical buffer to storm waters, the following performance standards apply (310 CMR 10.30(3) to (8)):

> *3. No new bulkhead, revetment, seawall, groin or other coastal engineering structure shall be permitted on such a coastal bank except that such a coastal engineering structure shall be permitted when required to prevent storm damage to buildings constructed prior to the effective date of 310 CMR 10.21 through 10.37 or constructed pursuant to a Notice of Intent filed prior to the effective date of 310 CMR 10.21 through 10.37 (August 10, 1978), including reconstructions of such buildings subsequent to the effective date of 310 CMR 10.21 through 10.37, provided that the following requirements are met:*
>
> > *(a) a coastal engineering structure or a modification thereto shall be designed and constructed so as to minimize, using best available measures, adverse effects on adjacent or nearby coastal beaches due to changes in wave action, and*
> > *(b) the applicant demonstrates that no method of protecting the building other than the proposed coastal engineering structure is feasible.*
> > *(c) protective planting designed to reduce erosion may be permitted.*

This regulation does not apply as we are not proposing to construct a coastal engineering structure. Additionally, the project is designed to avoid, or at least mitigate, potential adverse effects on adjacent or nearby coastal beaches due to changes in wave action. The project is designed to stabilize the toe of the coastal bank with a soft engineering solution that is not a coastal engineering structure.

> *4. Any project on a coastal bank or within 100 feet landward of the top of a coastal bank, other than a structure permitted by 310 CMR 10.30(3), shall not have an adverse effect due to wave action on the movement of sediment from the coastal bank to coastal beaches or land subject to tidal action.*

Since the project is permitable pursuant to 310 CMR 10.30(3), this performance is not applicable. However, the project will improve the condition of the coastal beach and coastal bank. This performance standard is clearly met as the project proposes to stabilize the coastal bank while concurrently providing sediment to downdrift areas.

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5. The Order of Conditions and the Certificate of Compliance for any new building within 100 feet landward of the top of a coastal bank permitted by the issuing authority under M.G.L. c. 131, § 40 shall contain the specific condition: 310 CMR 10.30(3), promulgated under M.G.L. c. 131, § 40, requires that no coastal engineering structure, such as a bulkhead, revetment, or seawall shall be permitted on an eroding bank at any time in the future to protect the project allowed by this Order of Conditions.

This performance standard does not apply as the project is not proposing any new buildings.

6. Any project on such a coastal bank or within 100 feet landward of the top of such coastal bank shall have no adverse effects on the stability of the coastal bank.

The project meets this performance standard as the project will not adversely affect the stability of the coastal bank but actually seeks to improve the stability of the costal bank by stabilizing the foundation toe and lower face of the coastal bank. This sand cover will be replenished on a regular basis as it is removed by wave activity. The base of the bank would therefore continue to function as a sediment supply source.

7. Bulkheads, revetments, seawalls, groins or other coastal engineering structures may be permitted on such a coastal bank except when such bank is significant to storm damage prevention or flood control because it supplies sediment to coastal beaches, coastal dunes, and barrier beaches.

While the coastal bank is significant to both storm damage prevention and flood control in part by supplying sediment to coastal beaches, coastal dunes, and barrier beaches, it is permitable under 310CMR 10.30 because it is not coastal engineering structure. However, the project will result in a stabilized coastal bank which, along with sand cover will increase the stability of the coastal bank and improve its capability to provide storm damage protection as a vertical buffer. Additionally, the proposed project will provide sediment to downdrift areas.

8. Notwithstanding the provisions of 310 CMR 10.30(3) through (7), no project may be permitted which will have any adverse effect on specified habitat sites of rare vertebrate or invertebrate species, as identified by procedures established under 310 CMR 10.37.

The proposed project will not occur within the estimated habitat however, there is mapped potential habitat offshore of the beach and is presumed to be a feeding area for birds. According to previous letters from the Division of Fisheries & Wildlife, Natural Heritage & Endangered Species Program ("NHESP"), if work is prohibited between April 1 and August 31 of any year, "the project will not result in an adverse impact to the resource area habitats of state-listed wildlife species." If the Commission thinks it is appropriate, we will adhere to the time of year restrictions to avoid any potential conflict. Additionally, the proposed project is located within an area of existing development and the coastal beach is currently used as a recreational beach. The proposed improved coastal bank will be replanted with vegetation, resulting in the proposed project protecting the interest of wildlife and certainly presenting no greater effect on wildlife than those that may presently exist.

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Nantucket Wetland Regulations, Section 2.05B: Coastal Bank

1. No new bulkheads, coastal revetments, groin, or other coastal engineering structures shall be permitted to protect structures constructed, or substantially improved, after 8/78 except for public infrastructures. Bulkheads and groins may be rebuilt only if the Commission determines there is no environmentally better way to control an erosion problem, including in appropriate cases the moving of the threatened buildings and/or public infrastructure. Other coastal engineering structures may be permitted only upon a clear showing that no other alternative exists to protect a structure that has not been substantially improved or public infrastructure built prior to 9/78, from imminent danger.

This project employs soft engineering components and is not a coastal engineering structure.

2. Piers shall be constructed in compliance with the Town of Nantucket Zoning Bylaws (e.g. Section 136-22B 6/30/00) using procedures determined by the Commission to be the best available measures to minimize adverse effects on Interests Protected by the Bylaw.

This performance standard does not apply as the project does not include the construction of a pier.

3. All projects shall be restricted to activity as determined by the Commission to have no adverse effect on bank height, bank stability, wildlife habitat, vegetation, wetland scenic view, or the use of a bank as a sediment source.

The proposed project will not have any such adverse effects and will increase bank stability. The bank height will not be altered and the project proposes to stabilize the bank. Additionally, vegetation can act as habitat for endangered species. As the project proposes to stabilize the bank along with sand cover replenishment, it will vastly improve the bank's function as a sediment source without jeopardizing the foundation of the toe of the coastal bank. The project will replace the sand that would normally be eroded from the bank during storms however, since the Commission has required a waiver request for this paragraph for previous projects, we will submit a waiver request for this paragraph in the Notice of Intent.

4. Elevated walkways designed not to affect bank vegetation shall be required for pedestrian passage over a bank.

There are presently stairs over the bank to the beach at both of the properties. The stairs provide elevated access to the beach and prevent people from traversing the face of the coastal bank. We are asking to rebuild and to maintain these existing stairs as appropriate.

5. All projects which are not water dependent shall maintain at least a 25-foot natural undisturbed area adjacent to a coastal bank. All structures which are not water dependent shall be at least 50 feet from a coastal bank.

As stated above, this performance standard does not apply as the project is not proposing a structure and requires direct wetland access for its intended use. Additionally, the project seeks to protect a pre-existing structure, restore an eroding coastal bank, supply a source of sediment for downdrift coastal resource areas, and provide a safe access to the recreational beach.

> *6. The septic leach facility of a septic system shall be at least 100 feet from the top of the coastal bank and shall not be located within the face of the coastal bank.*

This performance standard does not apply as the project does not include the installation or repair of a septic system.

> *7. In areas of eroding shoreline, the distance from all buildings to the coastal bank shall be at least 20 times the average annual shoreline erosion or 100 feet, whichever is the lesser. The average annual shoreline erosion rate shall be determined by averaging the annual erosion over 150-year period ending the date the NOI was filed, or if no NOI was filed, the date construction began. If erosion data is not available for the 150-year period, the Commission shall determine the average annual erosion rate from such lesser time for which erosion data is available. In cases where documentation can be provided to show that use of the 150-year period is inappropriate to existing coastal shoreline characteristics and trends, alternate shoreline change rates may be used when based on a preponderance of credible evidence.*

This performance standard does not apply as the project does not include the construction of any buildings.

> *8. All permits issued for the construction of buildings under the Bylaw within 100 feet landward of the top of a coastal bank shall contain the specific condition that no coastal engineering structure of any kind shall be permitted on an eroding bank in the future to protect the project allowed by this permit, except those coastal engineering structures allowed by a waiver issued pursuant to Section 1.03F of these regulations.*

As stated above, this performance standard does not apply as the project does not include the construction of any buildings. However, due to the rapid erosion of the coastal bank the project seeks to protect the existing structure and the coastal bank from additional failure and seeks to protect the existing structure as the distance from the existing structure to the coastal beach is diminishing. Therefore, the project is necessary to maintain an adequate distance between the existing structure and the coastal beach in order to allow the coastal beach to properly function.

E.3 <u>Land Subject to Coastal Storm Flowage</u>
<u>Nantucket Wetland Regulations, Section 2.10B:</u>

> *1. The work shall not reduce the ability of the land to absorb and contain flood waters, or to buffer inland areas from flooding and wave damage.*

The proposed project will not reduce the ability of the land to absorb and contain flood waters and will not buffer inland areas from flooding and/or wave damage.

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2. Projects shall not cause ground, surface, or salt water pollution triggered by coastal storm flowage. All septic tanks shall be outside the 100-year floodplain.

The proposed project will not cause ground, surface, or salt water pollution triggered by coastal storm flowage and a septic system is not being proposed.

3. All private underground fuel tanks shall be outside the 100-year floodplain. Commercial tanks shall be outside the 100-year floodplain, or if the Commission determines this is not practicable, the commercial tanks shall be secured so that they cannot float loose.

This performance standard does not apply as the project does not include underground fuel tanks.

4. Building upon areas subject to coastal storm flowage in locations where such structure would be subject to storm damage may not be permitted. If permitted, all construction must be in compliance with state and local building code regulations for flood hazard areas.

This performance standard does not apply as the project does not propose a structure subject to state and local building codes regulations.

Conclusion

The proposed project will increase the ability of the coastal bank to act as a barrier to flood waters by stabilizing the toe of the bank. Additionally, the proposed project will provide sacrificial sediment that will be available during storm events to provide sediment to the beach and adjacent beaches. The proposed project complies with the regulations, bylaws, and performance standards of both Massachusetts and Nantucket. Therefore, it is permitable under both the Wetlands Protection Act and the Nantucket Wetland Protection bylaws.

Sincerely,

Lee L Weishar

Lee Weishar, PhD; PWS
Senior Scientist

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Work Protocol

By

Wilkinson Ecological Design, Inc.

Seth Wilkinson, President

WILKINSON
ECOLOGICAL DESIGN

Work Protocols for Fiber Roll Installation

47, 53, 55, 57, 61, 63, 67, & 69 Pocomo Road, Nantucket

March 16, 2016

Schedule and Access:

Initial stabilization work will be conducted in the Fall/Winter of 2016.

Two access routes are proposed for the project. The western route will bring equipment and materials along Pocomo Road and access the beach via its western terminus. The eastern route, along Proprietors Road between 61 and 57 Pocomo Road, will only be used for delivery of heavy materials such as fiber rolls and sand using compact equipment and noted on sheet one of the Site Plan of Land by Nantucket Engineering and Surveying. To protect existing vegetation within the eastern access route, brush mowing to a height of three inches is proposed. This proposed mowing will protect the root structures and allow regrowth of vegetation following construction. Given the considerable length of the shoreline associated with this project, two access points will reduce the total quantity of trips on the beach and reduce the duration of the project.

The lowest courses of fiber rolls are installed first and construction continues up gradient. Anchoring using Size DB88 Duckbill Anchors (or comparable equivalent) is installed as the array is constructed. All low-density fiber rolls will then be plugged with American beach grass and other native plant species at twelve inches on center.

The embankment will then be immediately seeded with the specified native seed mixture and then 100% biodegradable erosion control blankets will be properly installed over all disturbed sediments on the project area. Plugs of specified native herbaceous grass species will then be planted through the erosion control blankets. Bayberry and beach plum will be installed following the plugging of herbaceous species. A temporary irrigation system will also be installed at this time to water the bank and encourage rapid colonization of the embankment within the first three years after planting. Following establishment of the plantings, the irrigation system will be disconnected and removed from the embankment.

Sediment Nourishment:

Annually, in late March through early May, the fiber roll array will be re-nourished with compatible beach sand to address ongoing beach nourishment to preserve the function of supplying the adjacent coastal resources with an ongoing sediment source and extend the life of the fiber roll array. The goal of the sediment nourishment will be to annually maintain 4-6" of sediment cover over the fiber rolls. The access via the western route on Pocomo Road and the eastern route on Proprietors Road between 61 and 57 Pocomo Road will be utilized for the annual nourishment.

Ongoing Maintenance:

Maintenance of the fiber roll array and associated plants and bioengineering materials is critical for the long-term success of this erosion management strategy. On an annual basis, two primary activities are proposed. The annual sand nourishment is an activity which is described above and should be conducted on a long-term basis in order to maintain compliance with the protected function of providing adjacent coastal resource areas with a sediment source. Additionally, in the winter months it is anticipated that minor maintenance activities such as tightening anchor cables, repairing erosion control blankets and repositioning fiber rolls, if needed. The only other ongoing activities which could be necessary are repairs following damage from significant storms. Upon the necessity of any repairs or for regularly scheduled maintenance, the Conservation Commission shall be notified through its conservation administrator in advance of conducting any activities.

WILKINSON
ECOLOGICAL DESIGN

Planting Specification

47, 53, 55, 57, 61, 63, 67, & 69 Pocomo Road, Nantucket
March 16, 2016

Coastal Bank Planting Forbes and Grasses

Common Name	Latin Name	Size	Density
American Beach Grass	*Ammophila breviligulata*	2″ Plugs	12″ O.C.
Little Bluestem	*Schizachyrium scoparium*	2″ Plugs	12″ O.C.
Purple Love Grass	*Eragrostis spectabilis*	2″ Plugs	12″ O.C.
Seaside Goldenrod	*Solidago semprivirens*	2″ Plugs	12″ O.C.
Switchgrass	*Panicum virgatum*	2″ Plugs	12″ O.C.

Coastal Bank Planting Shrubs

Common Name	Latin Name	Size	Density
Beachplum	*Prunus maritima*	1 Gallon Pot	4′ O.C. in Clusters
Bayberry	*Myrica pensylvanica*	1 Gallon Pot	4′ O.C. in Clusters

Wilkinson Salt-Tolerant Native Grass Seed Mixture

Common Name	Latin Name	Percentage by Weight
Broomsedge	*Andropogon virginicus*	18%
Creeping Red Fescue	*Festuca rubra*	20%
Purple Love Grass	*Eragrostis spectabilis*	3%
Little Bluestem	*Schizachyrium scoparium*	18%
Sideoats Grama	*Bouteloua curtipendual*	8%
Switchgrass	*Panicum virgatum*	8%
Virgina Wildrye	*Elymus virginicus*	25%

28 LOTS HOLLOW RD. I ORLEANS, MA 02653 TEL: (508) 255-1113 FAX: (508) 255-9477 WWW.WILKINSONECOLOGICAL.COM

Pages from Order of Conditions – SE48-2789

For

Similar Project Approved and Installed at

48 Shimmo Pond Road

149780

2015 00149780
Cert: 22341 Doc: OOC
Registered: 10/30/2015 01:47 PM

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WPA Form 5 – Order of Conditions- Revised and Restated

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40
And the Town of Nantucket Wetlands Bylaw Chapter 136

Provided by MassDEP:
SE48- 2789
MassDEP File #

eDEP Transaction #

Nantucket
City/Town

A. General Information

1. From: Nantucket
Conservation Commission

2. This issuance is for (check one): a. ☒ Order of Conditions b. ☐ Amended Order of Conditions

3. To: Applicant:

Donald
a. First Name

Burns
b. Last Name

48 SPR LLC
c. Organization

450 Royal Palm Way # 450
d. Mailing Address

Palm Beach
e. City/Town

FL
f. State

33480
g. Zip Code

4. Property Owner (if different from applicant):

Same As Applicant
a. First Name

b. Last Name

c. Organization

d. Mailing Address

e. City/Town

f. State

g. Zip Code

5. Project Location:

48 Shimmo Pond Rd
a. Street Address

Nantucket
b. City/Town

43
c. Assessors Map/Plat Number

79
d. Parcel/Lot Number

Latitude and Longitude, if known: 41d17'10"
d. Latitude

70d04'31"
e. Longitude

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands
WPA Form 5 – Order of Conditions- Revised and Restated
Massachusetts Wetlands Protection Act M.G.L. c. 131, §40
And the Town of Nantucket Wetlands Bylaw Chapter 136

Provided by MassDEP:
SE48- 2789
MassDEP File #

eDEP Transaction #

Nantucket
City/Town

A. General Information (cont.)

6. Property recorded at the Registry of Deeds for (attach additional information if more than one parcel):

Nantucket — a. County
22341 — b. Certificate Number (if registered land)
c. Book
d. Page

7. Dates: 05/22/15 — a. Date Notice of Intent Filed; 08/19/2015 — b. Date Public Hearing Closed; 08/19/2015 — c. Date of Issuance

8. Final Approved Plans and Other Documents (attach additional plan or document references as needed):

Plans for Notice of Intent Coastal Stabilization Fig 1-8
a. Plan Title

GEI Consultants — b. Prepared By
Varoujan Y. Hagopian — c. Signed and Stamped by
July 2015 — d. Final Revision Date
1" 5' — e. Scale

f. Additional Plan or Document Title
g. Date

B. Findings

1. Findings pursuant to the Massachusetts Wetlands Protection Act:

Following the review of the above-referenced Notice of Intent and based on the information provided in this application and presented at the public hearing, this Commission finds that the areas in which work is proposed is significant to the following interests of the Wetlands Protection Act (the Act). Check all that apply:

a. ☐ Public Water Supply
b. ☐ Land Containing Shellfish
c. ☒ Prevention of Pollution
d. ☐ Private Water Supply
e. ☐ Fisheries
f. ☒ Protection of Wildlife Habitat
g. ☐ Groundwater Supply
h. ☒ Storm Damage Prevention
i. ☒ Flood Control
j. ☐ Wetland Scenic Views (bylaw)
k. ☐ Recreation (Bylaw)

2. This Commission hereby finds the project, as proposed, is: (check one of the following boxes)

Approved subject to:

a. ☒ the following conditions which are necessary in accordance with the performance standards set forth in the wetlands regulations. This Commission orders that all work shall be performed in accordance with the Notice of Intent referenced above, the following General Conditions, and any other special conditions attached to this Order. To the extent that the following conditions modify or differ from the plans, specifications, or other proposals submitted with the Notice of Intent, these conditions shall control.

REVISED AND RESTATED
FINDINGS and ADDITIONAL CONDITIONS

Massachusetts Wetlands Protection Act (MGL Chapter 131, Section 40)
Town of Nantucket Wetlands Bylaw (Chapter 136)

Address:	48 Shimmo Pond Road
Assessor's Map and Parcel:	43-79
Property Owner:	48 SPR LLC
Applicant:	48 SPR LLC
DEP File Number:	SE48-2789
Filing Date:	May 22, 2015
Date Hearing Closed:	August 5, 2015
Date Orders Issued:	August 19, 2015
Plan of Record Information:	Notice of Intent for Coastal Bank Stabilization, dated July 2015, and stamped by Varoujan Hagopian, P.E.

Permit Overview:

This Order permits the applicant to repair existing stone revetments, construct and maintain sand filled coir tubes, sand drift fencing, maintaining of a sacrificial sand cover, removal of duneguard fencing, and removal of other coastal engineering structures on a Coastal Bank, Coastal Beach and Land Subject to Coastal Storm Flowage.

Additional Findings:

1. The Commission finds that the areas subject to regulation are coastal beach, coastal bank, land subject to coastal storm flowage and their associated buffer zones.
2. The Commission finds that the property is located within Priority Habitat of Rare Species or Estimated Habitat of Rare Wildlife as defined by the Massachusetts Natural Heritage and Endangered Species Program.
3. The Commission finds that the project is a water dependent project as it requires direct wetlands access for its intended use and therefore cannot be located out of the Area Subject to Protection Under the Bylaw.
4. The Commission finds that coastal beach is determined to be significant to storm damage prevention, flood control and protection of wildlife habitat as defined by the Commonwealth of Massachusetts Wetlands Protection Act (MGL Chapter 131§40).
5. The Commission finds that coastal bank is determined to be significant to storm damage prevention, and flood control because it supplies sediment to the coastal beach as defined by the Commonwealth of Massachusetts Wetlands Protection Act (MGL Chapter 131§40).
6. The Commission finds that coastal bank is determined to be significant to storm damage prevention, and flood control because it is a vertical buffer to storm waters as defined by the Commonwealth of Massachusetts Wetlands Protection Act (MGL Chapter 131§40).
7. The Commission finds that the coastal beach is significant to the protection of the following interests: flood control, erosion control, storm damage prevention, fisheries, shellfish, wildlife, recreation and wetland scenic views as defined by the Town of Nantucket Wetlands Protection Bylaw (Chapter 136).
8. The Commission finds that the coastal bank is significant to the protection of the following interests: flood control, erosion control, storm damage prevention,

wildlife, and wetland scenic views as defined by the Town of Nantucket Wetlands Protection Bylaw (Chapter 136).

9. The Commission finds that the land subject to coastal storm flowage is significant to the protection of the following interests: flood control, erosion control, storm damage prevention, wildlife, and water quality as defined by the Town of Nantucket Wetlands Protection Bylaw (Chapter 136).
10. The Commission recognizes that the coastal bank is unstable and subject to collapse and/or erosion due to wave action, overland stormwater erosion and/or groundwater flow/discharge.
11. The Commission recognizes the coastal bank to exist in a highly dynamic coastal environment and to be comprised of mixed glacial till material with locally perched groundwater.
12. The Commission finds that the project as conditioned by this Order will not adversely impact the interests protected by the Town of Nantucket Wetlands Protection Bylaw (Chapter 136) and is conditioned to mitigate effects to the resource areas. Further, the Commission finds that given the historical site conditions and current site conditions that there are no reasonable alternatives to this project as conditioned.
13. The Commission finds that this specific make-up, configuration of materials, its proposed rate of breakdown and the focus on natural vegetation is a bio-engineered option and is not a coastal engineering structure.

In addition to the General Conditions contained elsewhere in this document, the Commission includes the following Special Conditions pursuant to MGLCh131s40 and the Town of Nantucket Wetlands Protection Bylaw, Chapter 136:

14. All work shall be performed in accordance with the Site and Work Description contained within the Notice of Intent and plan notes set out on the plan of record, provided project narratives, waiver requests and protocols.
15. The only work areas permitted by this Order include the land specific to the project area as shown on the plan of record. No work is to be performed outside of this area.
16. A detailed as-built plan, stamped by a licensed engineer or surveyor is required to be filed with the Commission upon completion of initial construction. This survey shall include the entire project area.
17. Detailed survey plans as stamped by a licensed surveyor or licensed engineer shall be submitted to the Commission twice a year and post storm events, with storm events being defined as a period of sustained winds in excess of 40MPH for a period of 6 hours, to show from the top of the bank to the beach/bank interface landward of the toe and then extending to Mean Low Water. This survey shall include the entire project area. Reports shall be submitted to the Commission showing the amount of sand delivered to the project area and to which project area it was delivered.
18. Photographs of the project area are required quarterly and in addition photographs shall be required to be submitted, demonstrating the condition of the entire project area within 24 hours of each storm event.
19. All structural materials, such as the coir logs, posts, and anchors, shall be marked for identification. Distinguishing marks shall include tagging of plastic and branding of wood or metal.

20. The applicant shall be responsible for retrieving any and all materials stored, dislodged or washed off site for the life of the project.
21. Should the monitoring reports show an adverse impact to surrounding properties, an adverse impact to the project area, or the narrowing of the beach to where the mean high water mark is contacting the base of the project, the applicant shall appear before the Commission to discuss the proper action to take to mitigate the condition, including but not limited to the removal of the structure, repair of the structure or revision to the nourishment program.
22. The applicant will be required to provide the bi-annual reporting for one year post removal of the structure to demonstrate any impacts from the structure to the remaining coastal beach/bank.
23. Nourishment is required to be maintained to the volumes specified in the plan of record. All nourishment sands are to be beach compatible sand. The applicant shall provide the Commission with a grain size analysis from each sand source being used for the nourishment prior to the delivery to the beach. Following the installation of any post-construction nourishment a new detailed as-built by a licensed surveyor or engineer must be provided to the Commission showing the new profile and location.
24. The applicant shall provide the Commission with contact information including name, mailing address, and phone number of all participants in the project as well as any contractor working on the project.
25. The applicant shall get a written sign off from the Beach Manager on a bi-weekly basis from April 1st to September 15th to use vehicles on the beach. The sign-off will serve to confirm the presence or absence of any protected species within the project area or route of travel to and from the project area.
26. Pedestrian access across the public beach shall be maintained at all times.
27. No machinery or materials are to be stored on the beach.
28. The fence posts shall not exceed 4" x 4"
29. The initial monitoring report shall be presented to the Commission as part of a regular meeting of the Commission and is to take place one year after the installation is completed.
30. The coir logs shall be kept in good repair and if they are damaged they shall be repaired and notice provided to the Commission of the repair.
31. If less than 75% of the plantings are living plants the applicant shall come before the Commission for what remedial action is needed to return the structure into compliance.

WAIVERS UNDER THE NANTUCKET WETLANDS BYLAW/REGULATIONS

Waivers are required to Section 2.01(B)(8) that water dependent projects shall be designed and performed so as to cause no adverse effects on wildlife, erosion control, marine fisheries, shellfish beds, storm damage prevention, flood control and recreation, Section 2.05(B)(3) that all projects shall be restricted to activity as determined by the Commission to have no adverse effect on bank height, bank stability, wildlife habitat, vegetation, wetland scenic view or the use of a bank as a sediment source, and Section 2.10(B)(1) that the work shall not reduce the ability of the land to absorb and contain flood waters, or to buffer inland areas from flooding and wave damage of the Nantucket Wetlands Protection Regulations. The Commission finds that given the existing site conditions, the site specific historic conditions of previous and abutting structures and the site specific coastal dynamics that the project as proposed and conditioned will not have an adverse impact and that there are no reasonable alternatives to this project. Therefore the Commission grants a waiver under Section 1.03(F)(3)(a) of the Nantucket Wetland Protection Regulations.

StormSmart Properties Fact Sheet 4:
Bioengineering - Coir Rolls on Coastal Banks

By

Massachusetts Office of Coastal Zone Management

StormSmart Coasts

StormSmart Properties Fact Sheet 4: Bioengineering - Coir Rolls on Coastal Banks

The coast is a very dynamic environment and coastal shorelines—especially beaches, dunes, and banks—change constantly in response to wind, waves, tides, and other factors such as seasonal variation, sea level rise, and human alterations to the shoreline system. Consequently, many coastal properties are at risk from storm damage, erosion, and flooding. Inappropriate shoreline stabilization methods can actually do more harm than good by exacerbating beach erosion, damaging neighboring properties, impacting marine habitats, and diminishing the capacity of beaches, dunes, and other natural landforms to protect inland areas from storm damage and flooding. StormSmart Properties—part of the Massachusetts Office of Coastal Zone Management's (CZM) StormSmart Coasts program—provides coastal property owners with important information on a range of shoreline stabilization techniques that can effectively reduce erosion and storm damage while minimizing impacts to shoreline systems. This information is intended to help property owners work with consultants and other design professionals to select the best option for their circumstances.

What Are Bioengineering and Coir Rolls?

Coastal bioengineering projects reduce erosion and stabilize eroding shorelines by using a combination of deep-rooted plants and erosion-control products made of natural, biodegradable materials, such as coir rolls. Coir rolls are cylindrical rolls that span 12 to 20 inches in diameter, are packed with coir fibers (i.e., coconut husk fibers), and are held together with mesh. The rolls are typically 10- to 20-feet long and can be stitched together to provide continuous shoreline coverage. In contrast, coir envelopes are coir fabric filled with sand. Coir envelopes have very different impacts and design considerations and should not be confused with coir rolls.

No shoreline stabilization option permanently stops all erosion or storm damage. The level of protection provided depends on the option chosen, project design, and site-specific conditions such as the exposure to storms. All options require maintenance, and many also require steps to address adverse impacts to the shoreline system, called mitigation. Some options, such as seawalls and other hard structures, are only allowed in very limited situations because of their impacts to the shoreline system. When evaluating alternatives, property owners must first determine which options are allowable under state, federal, and local regulations and then evaluate their expected level of protection, predicted lifespan, impacts, and costs of project design, installation, mitigation, and long-term maintenance.

Below: This coir roll has been planted wth vegetation prior to installation.

PHOTO BY WILKINSON ECOLOGICAL DESIGN

As with all coastal bioengineering projects, salt-tolerant vegetation with extensive root systems is used with coir rolls to help stabilize the site. The vegetation is planted directly into the coir rolls and on the surrounding site. For important instructions on using plants in bioengineering projects, see S*tormSmart Properties Fact Sheet 3: Planting Vegetation to Reduce Erosion and Storm Damage*, which includes specific information on how vegetation reduces erosion and storm damage; instructions on selecting, properly planting, and caring for appropriate species; tips on maximizing the effectiveness of vegetation projects and minimizing impacts; and specifics on project design and implementation.

This fact sheet focuses on the use of coir rolls on coastal banks (also known as bluffs), where coir rolls are typically installed at the toe (i.e., base) of the bank—although they can also be installed up the bank face. In coastal areas, coir rolls can also be used to help reduce erosion problems created by to hard structures (i.e., seawalls and revetments). See "Appropriate Locations" in the Design Consideration section (page 4) for additional information.

Coir rolls are often used in conjunction with other techniques for erosion management, such as natural fiber blankets, runoff control, and beach nourishment. Natural fiber blankets are woven mats of natural fibers that are used to stabilize the ground surface while plants become established. Runoff control projects reduce and slow the flow of water over the ground surface, reducing coastal erosion problems. Beach nourishment adds sediment (i.e., sand, gravel, and cobble) from an off-site source to address beach erosion issues. See the following StormSmart Properties fact sheets for more information: *Controlling Overland Runoff to Reduce Coastal Erosion*, *Bioengineering - Natural Fiber Blankets on Coastal Banks*, and *Beach Nourishment*.

How Coir Rolls Reduce Storm Damage on Coastal Banks

If the toe of a bank is eroding, the upper bank may collapse even if it is well vegetated. Coir rolls can be used to protect and stabilize the toe by providing a physical barrier that buffers waves, tides, and currents, reducing erosion of exposed sediments.

Coir rolls provide stability and protection to the site while the vegetation planted in and above the rolls becomes established. As the coir rolls disintegrate, typically over 5-7 years, the plants take over the job of site stabilization. The dense root systems of the plants hold sand, gravel, and soils in place and help reduce erosion from rain, wind, tides, and waves. In addition, by taking up water directly from the ground and breaking the impact of raindrops or wave-splash, the plants slow the rate and reduce the quantity of upland water runoff that can lead to erosion.

For sites exposed to high wave energy, it may be necessary to replace and maintain coir rolls at the toe of the bank to provide longer-term stability. If the beach in front of the bank is narrow or narrows over time, if the beach elevation is too low or erodes down over time, or if the shoreline has a steep drop off below the low tide line, it may be necessary to combine bioengineering with other techniques, such as dune and beach nourishment, to ensure a successful project. (See the following StormSmart Properties fact sheets for more information: *Artificial Dunes and Dune Nourishment* and *Beach Nourishment*.) A professional with demonstrated success installing bioengineering projects in dynamic environments should be consulted to assess each site and make recommendations regarding the appropriate technique or combination of techniques.

PHOTO BY MASSACHUSETTS OFFICE OF COASTAL ZONE MANAGEMENT

Waves and tides eroded the toe of this bank, causing this collapse of a well vegetated section of the bank face.

PHOTOS BY NEW ENGLAND ENVIRONMENTAL

Top left: an exposed bank that was eroding at two feet per year before coir rolls and erosion-control vegetation were installed. Top right: the same site 10 years after project completion. (Note: This site has survived Hurricane Irene and Hurricane Sandy.)

Left: the same site during installation of the coir rolls, which were placed at the toe and up the face of the bank. Natural fiber blankets were also installed on the bank face. The site was then planted with salt-tolerant vegetation.

Relative Benefits and Impacts Compared to Other Options

Coir rolls provide direct, physical protection to a bank. Because they are made from natural, biodegradable materials and are planted with vegetation, coir rolls absorb much more wave energy than seawalls, rock revetments, or other "hard" shoreline stabilization structures, which reflect significantly more of the wave energy that hits them onto beaches or neighboring properties. The design of a hard structure affects how much wave energy is reflected, for example vertical walls reflect more wave energy than sloping rock revetments. These reflected waves erode beaches in front of and next to a hard structure, eventually undermining and reducing the effectiveness of the structure and leading to costly repairs. This erosion also lowers the elevation of the beach in front of the structure, ultimately leading to a loss of dry beach at high tide and reducing the beach's value for storm damage protection, recreation, and wildlife habitat. Coir roll projects also allow some natural erosion from the site while hard structures impede virtually all natural erosion of sediment. Without this sediment supply, down-current areas of the beach system are subject to increased erosion. In addition, coir rolls can often be installed without the use of mechanized equipment that can significantly impact the site. Because they are made with natural fibers and planted with vegetation, coir rolls also help preserve the natural character and habitat value of the coastal environment.

Under the Massachusetts Wetlands Protection Act, new hard structures are typically prohibited on all beaches and dunes. On coastal banks, hard structures are only allowed when necessary to protect buildings permitted before August 10, 1978, and only if no other alternative is feasible. In many cases, coir roll projects and other non-structural alternatives are therefore the only options available for reducing erosion and storm damage on coastal properties.

Like all shoreline stabilization options, however, coir roll projects can result in negative impacts when inappropriately designed or sited. While less severe than with hard structures, coir rolls can reflect some wave energy and they can inhibit the natural supply of sediment to down-current areas. Coir rolls made with synthetic materials or covered in wire mesh can cause additional significant impacts. Synthetic and wire mesh that remains after the rolls are degraded or is found on rolls that have been ripped away from a bank during a storm has the potential to entangle wildlife, disrupt navigation (e.g., by getting wrapped around boat propellers), and harm recreational beach users (e.g., rusted wire can puncture bare feet). To help address this issue, local officials often require identification tags to be sewn on coir rolls when they are installed to ensure proper disposal if the rolls are dislodged from the project site. In addition, wire mesh should not be used on coastal sites and the use of synthetic mesh should be minimized. For sites with higher wave energy, it is often necessary to use high density rolls (7-9 pounds per foot) in the bottom row, which are only available with synthetic mesh. This targeted use of synthetic materials is preferable to using more structural options such as a rock revetment to stabilize the site, which have greater adverse impacts.

Design Considerations for Coir Rolls on Coastal Banks

This section covers a variety of factors that should be considered to minimize adverse impacts and ensure successful design, permitting, construction, and maintenance of coir roll bioengineering projects on a coastal banks.

Appropriate Locations

For coastal bank projects, coir rolls can be used on both sheltered sites and sites exposed to wave energy. However, they are most effective in areas with higher beach elevations with some dry beach at high tide, where the rolls are not constantly subject to erosion from tides and waves. If the dry beach is narrow, the beach elevation is relatively low, and/or the site is exposed to moderate wave energy, more than one row of coir rolls will likely be needed on the face of the bank, as well as at the base. In these exposed conditions, the rolls will have a shorter lifespan and will require more frequent maintenance such as resetting, anchoring, or replacement. Additional erosion-control options may be needed at these sites, such as beach nourishment (see *StormSmart Properties Fact Sheet 8: Beach Nourishment*). It is essential to have a site-specific evaluation conducted by a professional with demonstrated experience and success implementing coir roll projects in exposed settings to determine the viability of coir rolls in these areas.

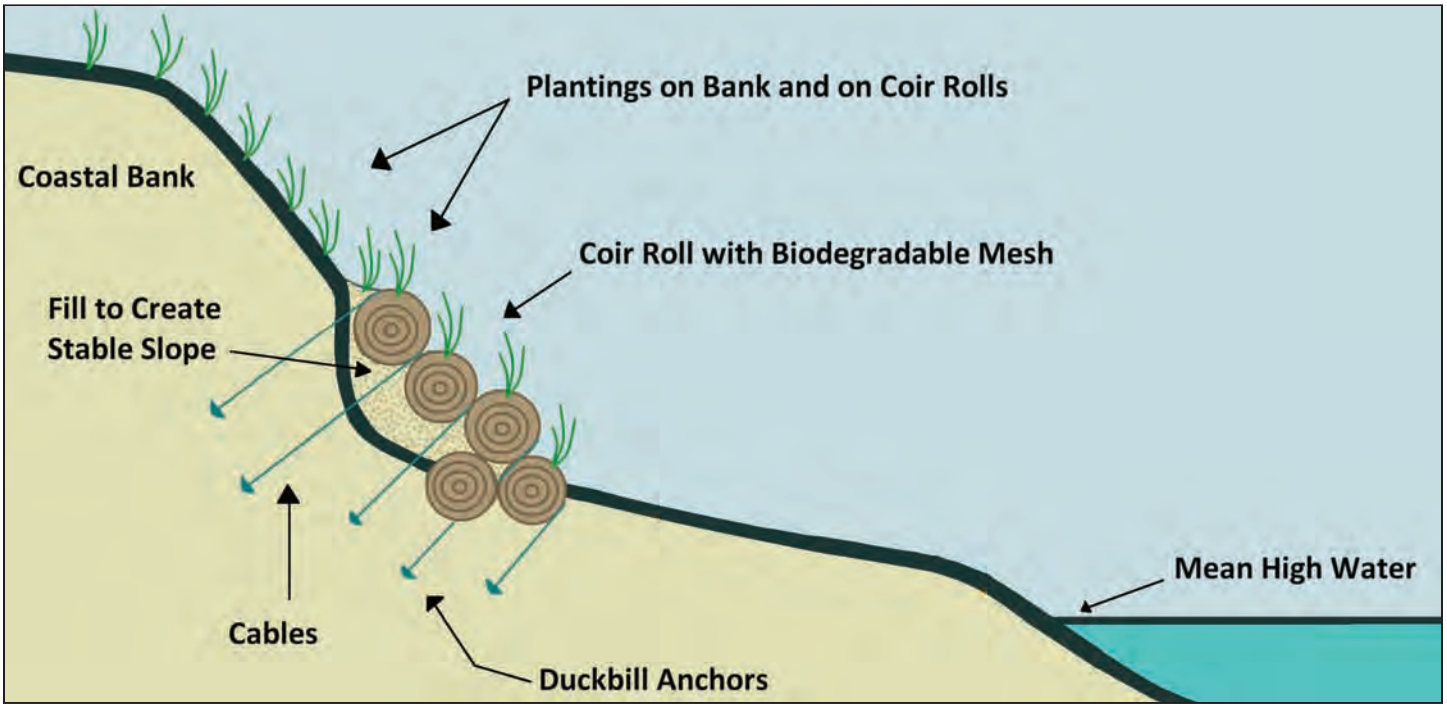
In some cases, coir rolls can also be used to effectively reduce erosion from hard structures such as seawalls. Coir rolls can be effectively installed at the base of and next to hard structures to help reduce erosion problems under the structure and on neighboring properties. They are also used on the face of the bank above the structure to stabilize the area.

PHOTO BY WILKINSON ECOLOGICAL DESIGN

A coir roll, natural fiber blanket, and fill were installed to minimize erosion at the end of this bulkhead.

Establishing a Stable Slope

On banks, a stable slope is essential for project success. If the bottom of the bank has eroded and its slope is steeper than the upper portion of the bank, the bank is likely unstable. Even when heavily planted with erosion-control vegetation, banks with unstable slopes are extremely vulnerable to



Cross-section of a bioengineering project on a bank in an exposed setting.

slumping or collapse that can endanger property landward of the bank. Before installing coir rolls or planting vegetation, therefore, the bank slope should be stabilized.

Ideally, soil of a similar type to that on the bank or beach is brought in as fill and added to the lower part of the bank to create a slope that matches or is less steep than the upper slope. However, if adding fill brings the toe of the bank within the reach of high tides, the fill will erode quickly and undermine the rest of the bank. In these cases, regrading the bank slope by removing sediment from the top of the bank is a better option. While removing part of the upper portion of the bank does reduce the land area of the property, it can be done in a controlled fashion that improves the overall stability and storm-damage prevention capacity of the bank. And if the slope is not stabilized by either adding fill at the bank toe or regrading the top of the bank, bank collapse during a storm could cause substantially more loss of land area to the sea. In addition, any investment in coir rolls, vegetation, and other site stabilization methods will be lost if the bank collapses. On sites where the top of the bank is well vegetated with mature, salt-tolerant species with extensive roots, the appropriate approach to stabilize the bank should be carefully developed by a professional with extensive experience successfully stabilizing similar sites.

Removing/Replacing Invasive Plants

Invasive plants (i.e., introduced species that thrive at the expense of native plants) should be removed and replaced with appropriate native plants if they are preventing establishment of erosion-control vegetation on a bank. This effort is particularly warranted when bank stability is severely compromised by the invasive plant. Because of their tenacity, successful control of invasive plants can take years to accomplish and may require perpetual monitoring and management. Effective ways to manage invasive species on the bank should therefore be incorporated into project design. See *StormSmart Properties Fact Sheet 3: Planting Vegetation to Reduce Erosion and Storm Damage* for more information.

Controlling Erosion from Overland Runoff and Other Sources

To help ensure the success of newly planted vegetation, sources of erosion on the site—including upland runoff and waves—should be identified and addressed as part of the site evaluation and design process. If overland runoff is causing erosion, this runoff should be reduced or redirected to give newly planted vegetation the best chance of survival (see *StormSmart Properties Fact Sheet 2: Controlling Overland Runoff to Reduce Coastal Erosion* for details). In areas subject to regular erosion from waves, tides, currents, wind, and coastal storms, additional techniques can be used to improve site protection. For example, beach nourishment (i.e., adding sediments, such as sand, gravel, and cobble to widen the beach—see *StormSmart Properties Fact Sheet 8: Beach Nourishment*) can protect coir roll projects by widening beaches in areas with relatively narrow beaches at high tide.

Protecting Vegetation

In addition to controlling erosion (see above), other steps should be taken to protect vegetation. Exposed areas should not be planted during the winter when the plants are dormant because wind or waves are likely to pull them out before they can get established. To prevent trampling of plants, pedestrian access to the shoreline should be restricted to designated access paths or walkways and the number of access points should be limited as much as possible. Often, multiple properties can use a common access point. To limit shading impacts to vegetation, access structures should be elevated on open pilings and their size should be minimized as much as possible.

Maintaining Sediment Supply to the System

Bank erosion is an important source of sediment to beaches and dunes in the shoreline system. To maintain this sediment supply, projects using two or more rows of coir rolls can bring in sediment from an offsite source on a regular basis (e.g., annually and after major storms) and place it on the beach in front of the rolls. This sediment will also help provide storm damage protection to the site by dissipating wave energy before it reaches the bank.

Minimizing Reflected Wave Energy

The ends of a coir roll project should be carefully designed to minimize any redirection of waves onto adjacent properties. Tapering the rolls down in number and height so that the project blends in to the adjacent bank helps address this problem.

PHOTO BY MASSACHUSETTS OFFICE OF COASTAL ZONE MANAGEMENT

This bioengineering project with coir rolls, natural fiber blankets, and vegetation was designed to minimize erosion on the adjacent property. At the end of the property, the number of rolls was tapered down to one and the bank's slope was reduced and blended in to the adjacent bank.

Project Installation and Coir Roll Anchoring

Coir rolls should be placed end to end and laced together with jute or coir twine to create continuous rolls parallel to the shoreline. The rolls are typically anchored by stakes on the seaward side of the rolls, earth anchor systems, or a combination of these two techniques. Wooden stakes are biodegradable but do not always hold well in areas with higher wave energy. Earth anchors, which are typically used for sites exposed to higher rates of erosion, consist of a metal duckbill anchor that extends into the bank and is connected to the coir roll by wire cables. Although earth anchors are not biodegradable, exposed portions of the cable system can be cut off and removed after the coir rolls have broken down to reduce marine debris impacts.

The anchoring system is critical to the success of the project. A professional is needed to determine the appropriate number and type of anchors for the site. It is also essential that the installation be carefully supervised and conducted by contractors with experience installing projects that have survived multiple storms. Anchors may need to be tightened after a period of time. To improve the longevity of the project, a professional can monitor the rolls over time and identify needed maintenance.

Coir rolls should be fully covered with sediment or tied into the existing bank at both ends of the project to minimize the potential for waves to get behind the rolls and erode the bank. The project can fail if the ends of the coir rolls become exposed.

Coir Roll Configuration and Size

The number of rows of coir rolls needed and their diameter depend on: 1) how exposed the site is to waves, 2) how frequently waves reach the base of the bank, and 3) the steepness of the bank face. In more sheltered sites or on relatively shallow bank slopes, one or two rows of 12-inch-diameter coir rolls may be sufficient. In more exposed areas and on steeper banks, multiple rows of 20-inch-diameter rolls may be needed up the face of the bank to provide effective site stabilization. The bottom row of coir rolls is often buried during installation to prevent undermining by beach erosion during a storm. In some cases, two side-by-side rows of rolls are installed at the base to provide more stability for the rows of rolls above.

Density of Coir Fibers

How densely the coconut husk fibers are packed into the coir rolls is also an important design element. While more densely packed rolls provide greater initial erosion protection, loosely packed rolls can be more heavily planted (because the vegetation can be easily inserted into the roll). This heavy planting allows the plants to become established more quickly, allowing the plant roots to effectively stabilize the site as the coconut fibers degrade. Both high-density and low-density coir rolls can be used together when heavily planted low-density rolls are installed adjacent to high-density rolls to help ensure the high-density rolls become vegetated over time. The professional designing the project should determine where rapid plant colonization or initial structural integrity is most important and then design a mix of rolls accordingly.

Reducing Damage from Sun Exposure

Plants can be used to shade the rolls and slow the degradation of the coir fibers that occurs from exposure to sunlight. The coir rolls can also be covered with sediment and natural fiber blankets (woven mats of natural fibers) to shade the coir rolls and slow degradation.

Heavy Equipment

While heavy equipment is not typically needed for coir roll projects, a mini-excavator or other small mechanized equipment may be necessary. Minimizing the use of heavy equipment can help reduce temporary disturbances from the project. Access for any equipment must be carefully planned to avoid destruction of existing vegetation; creation of ruts; destabilization of banks, beaches, or other landforms; impacts to wildlife and nesting habitat for protected shorebird species (i.e., species that are considered endangered, threatened, or of special concern in Massachusetts); and related impacts. When mechanical equipment is being used, contractors should keep hazardous material spill containment kits on-site at all times in case there is a release of oil, gasoline, or other toxic substances.

Wildlife and Fisheries Protection

If the project is proposed in or adjacent to habitat for protected wildlife species or horseshoe crab spawning areas, there may be limitations on the time of year that the project can be constructed. Information about the location of these resources and special permitting requirements is available from the Natural Heritage and Endangered Species Program of the Massachusetts Division of Fisheries and Wildlife (for protected wildlife species) and the Massachusetts Division of Marine Fisheries (for horseshoe crabs).

Permitting and Regulatory Standards

Most options for addressing coastal erosion, storm damage, and flooding are likely to require a permit under the Massachusetts Wetlands Protection Act through the local Conservation Commission. Additional permits may be needed from the Massachusetts Department of Environmental Protection (MassDEP) Waterways Program and the U.S. Army Corps of Engineers if the project footprint extends below the mean high water line or seaward of the reach of the highest high tide of the year, respectively. Permits or approvals may also be required from other state agencies and local departments, depending on the location and the work involved. Often, Conservation Commission staff are available to meet with applicants to go over important factors that need to be considered early in the design process.

Generally, regulatory programs are supportive of projects that use non-structural approaches to manage coastal erosion, such as coir rolls and vegetation, as opposed to hard structures. To obtain a permit, projects need to be designed to comply with regulatory requirements, including minimizing or avoiding impacts to sensitive resource areas such as horseshoe crab spawning areas and protected species habitat, which are protected by the various regulatory programs.

Professional Services Required

An environmental professional with significant experience designing, implementing, and successfully maintaining coir rolls and vegetation projects in coastal areas should be chosen to: 1) identify regulatory requirements and ensure the project fully conforms with those requirements; 2) determine the size, density, and number of rows of coir rolls needed based on site conditions (such as erosion history; exposure to winds, wave climate, and soil types; and runoff patterns); 3) determine whether natural fiber blankets, beach nourishment, or other techniques should be used in conjunction with the rolls; 4) identify any additional site conditions (including oversteepened slopes, erosion from overland runoff, and the presence of invasive species) that must be addressed; 5) select plant species and develop a plan for planting and plant maintenance; 6) identify the volume and composition of fill (if needed to re-establish a stable slope); 7) determine the best time of year to install the various components of the project; 8) develop an access plan if heavy equipment is needed; 9) prepare plans for and oversee permitting; 10) prepare design specifications and oversee construction; and 11) monitor and maintain the project. To ensure that essential design elements are appropriately implemented, *construction should be conducted by a contractor with experience installing coir roll projects that have survived multiple storms and carefully supervised by a consultant with significant experience and demonstrated success with coastal coir roll projects. Monitoring and maintenance by a consultant with significant experience is also strongly recommended*.

Project Timeline

It may take as little as four to eight months to have a bioengineering project with coir rolls designed, permitted, and installed, assuming that only a Massachusetts Wetlands Protection Act permit is required—but it can take longer, depending on the factors involved. Factors influencing this timeline include the contractor's experience with designing and permitting similar projects, completeness of permit applications, special considerations in the permitting process (such as objections by abutters, sensitive resources to be protected, and availability of access for construction), the need for special timing to avoid impacts (e.g., a prohibition on construction during endangered species nesting season), special timing needed for planting vegetation, and/or weather conditions during construction.

Maintenance Requirements

Bioengineering projects with coir rolls and vegetation require ongoing maintenance to ensure their success. Maintenance needs will depend, in part, on the proximity of the coir rolls to the reach of high tide, the elevation and width of the beach, the frequency and severity of storms, and how established the plants are before a storm hits. To maintain the project's designed level of protection, the coir rolls and vegetation should be inspected regularly, particularly after rain and coastal storms. Any storm damage should be addressed immediately to avoid further deterioration—this includes replacing any sediment that erodes around the coir rolls, resetting or replacing coir rolls as needed, and replanting vegetation (which may have to be conducted at the appropriate time of year). The more frequently high tides and waves reach and overtop the coir rolls, the higher the likely erosion rate and deterioration rate of the rolls. Erosion rates will be even higher if the site is not vegetated. Because the replacement of sediment and plants removed by storms is typically necessary, the original permit application should include a maintenance plan. This plan should specify any replacement materials and activities that may be used on the site and how the site will be accessed so that maintenance can be conducted without additional permitting.

Experience with what works, what doesn't, and how to adjust a design as site conditions change is very important to the success of bioengineering projects, particularly in coastal areas. Therefore, it is strongly recommended that the consultant who designed the project be involved in the monitoring and maintenance after any erosion from rain or coastal storms.

Project Costs

With coir roll projects, a range of options are available that give increasing levels of protection with increased construction costs. In addition, whenever you hire a professional to conduct work on your property, total costs are expected to vary significantly based on site-specific considerations. The considerations that most influence the costs of coir roll projects on coastal banks are: the severity of erosion, the width and elevation of the beach in front of the bank, the grading needed to create a stable slope, the diameter and number of rows of rolls, and the type and size of plants selected. For comparison with other shoreline stabilization options, the relative costs for coir roll projects are:

- Low-medium for design and permitting.
- Medium-high for construction.
- Low-medium for maintenance.
- Low for mitigation.

See the StormSmart Properties web page at www.mass.gov/czm/stormsmart-properties for a *Relative Costs of Shoreline Stabilization Options* chart that gives a full comparison.

Additional Information

Bioengineering with coir rolls can be used in conjunction with many other techniques for erosion management. See the following fact sheets on the CZM StormSmart Properties web page at www.mass.gov/czm/stormsmart-properties for additional information:

- *StormSmart Properties Fact Sheet 1: Artificial Dunes and Dune Nourishment*.
- *StormSmart Properties Fact Sheet 2: Controlling Overland Runoff to Reduce Coastal Erosion*.
- *StormSmart Properties Fact Sheet 3: Planting Vegetation to Reduce Erosion and Storm Damage*.
- *StormSmart Properties Fact Sheet 5: Bioengineering - Natural Fiber Blankets on Coastal Banks*.
- *StormSmart Properties Fact Sheet 8: Beach Nourishment*.

The following publications and websites also provide valuable information on bioengineering with coir rolls and vegetation:

- CZM's Coastal Landscaping website (www.mass.gov/czm/coastal_landscaping) focuses on

landscaping coastal beaches, dunes, and banks with salt-tolerant vegetation to reduce storm damage and erosion.

- CZM's *Landscaping to Protect Your Coastal Property from Storm Damage and Flooding* fact sheet (www.mass.gov/eea/docs/czm/stormsmart/ssc/ssc6-landscaping.pdf; PDF, 955.7 KB) gives specific information for homeowners on appropriate plants for erosion control in coastal areas.
- Woods Hole Sea Grant's Marine Extension Bulletin, *Biodegradable Erosion Control* (www.whoi.edu/fileserver.do?id=82284&pt=2&p=88928; PDF, 722 KB), provides information on various components of a coir roll project for coastal erosion control.
- CZM's *Environmental Permitting in Massachusetts* (www.mass.gov/eea/agencies/czm/program-areas/federal-consistency-review/environmental-permitting-in-massachusetts.html) gives brief descriptions of major environmental permits required for projects proposed in Massachusetts.
- *Guidelines for Barrier Beach Management in Massachusetts* (www.mass.gov/eea/docs/czm/stormsmart/beaches/barrier-beach-guidelines.pdf; PDF, 12.5 MB), which was produced by the Massachusetts Barrier Beach Task Force in 1994, provides an overview of the Massachusetts Wetlands Protection Act Regulations and the function of beaches, dunes, barrier beaches, and other resource areas (in Chapter 2). This document also gives information on various erosion-management techniques, their potential impacts, and recommended management measures to minimize impacts (Chapter 5).
- Massachusetts Wetlands Protection Act Regulations (310 CMR 10.00) (www.mass.gov/eea/agencies/massdep/water/regulations/310-cmr-10-00-wetlands-protection-act-regulations.html) cover work in wetland resource areas and buffer zones.
- The Natural Heritage and Endangered Species Program website (www.mass.gov/eea/agencies/dfg/dfw/natural-heritage) provides information on protected species in Massachusetts, habitat maps, and regulatory review for projects in or adjacent to these habitats.
- The Massachusetts Division of Marine Fisheries can provide information on horseshoe crab protection and other fisheries resources. See their website at www.mass.gov/eea/agencies/dfg/dmf for contact information.
- The Massachusetts Ocean Resource Information System, or MORIS, is a web-based mapping tool for interactively viewing coastal data that is available at www.mass.gov/czm/mapping. It includes shoreline change data, which should be considered when evaluating and designing shoreline stabilization projects. Other data layers in MORIS (such as endangered species habitat, shellfish, and eelgrass) can help identify sensitive resource areas within or near the project site.

COMMONWEALTH OF MASSACHUSETTS
Deval L. Patrick, Governor

EXECUTIVE OFFICE OF ENERGY AND ENVIRONMENTAL AFFAIRS
Richard K. Sullivan Jr., Secretary

MASSACHUSETTS OFFICE OF COASTAL ZONE MANAGEMENT
Bruce K. Carlisle, Director

MASSACHUSETTS OFFICE OF COASTAL ZONE MANAGEMENT | 251 Causeway Street, Suite 800 | Boston, MA 02114 | (617) 626-1200
CZM INFORMATION LINE: (617) 626-1212 | **CZM WEBSITE:** www.mass.gov/czm

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PUBLICATION DATE: December 2013

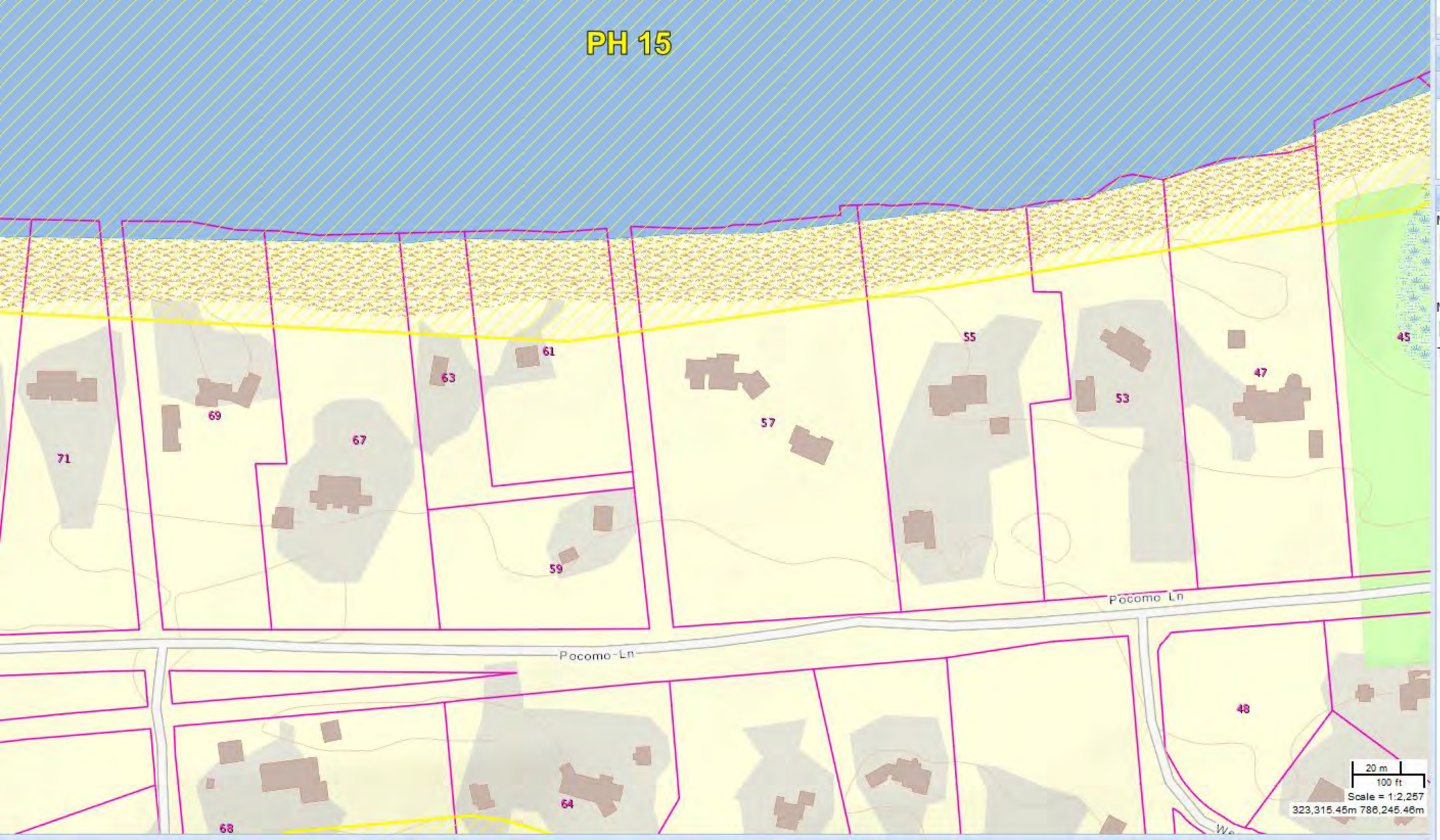
FEMA's National Flood Hazard Layer

20 Mary Ann Drive • Nantucket, MA 02554
508-825-5053 • www.NantucketEngineer.com

Estimated & Priority Habitat Mapping
On MassGIS

By

Massachusetts Natural Heritage & Endangered Species Program



Canoe Trips

Active Data Layers

Check all | Uncheck all

- NHESP Priority Habitats of Rare Spe
- NHESP Estimated Habitats of Rare W
- Tax Parcels for Query
- Detailed Features

Legend

NHESP Priority Habitats of Rare Species

NHESP Estimated Habitats of Rare Wildlife

Tax Parcels for Query

Head of the Harbor
Wauwinet
Wyers Point
Bess Point
Coatue
Pocomo Head
Squam Head
HARBOR
Pocomo
Squam
Third Point
Quaise Point
Quidnet
NANTUCKET
Sesachacha Pond
Savains Neck
Shawkemo
Polpis
Cranberry Bog
Quaise
Hoicks Hollow
Shimmo
Shawkemo Hills
Radio Facility
Altar Rock
Folger Hill
Lighthouse
NANTUCKET
Sauls Hills
NANTUCKET STATE FOREST
ISLAND
Gibbs Pond
Cranberry Bog
Cranberry Bog
Siasconset
Radio Towers
Nantucket Memorial Airport
Radio Towers
Coast Guard
LOW
BEACH
Tom Nevers Head

MESA PROJECT REVIEW CHECKLIST

Massachusetts Endangered Species Act M.G.L. c. 131A and Regulations (321 CMR 10.00)

Massachusetts Division of Fisheries & Wildlife
Natural Heritage & Endangered Species Program

~~~~ CONTACT INFORMATION ~~~~

If you already completed your Notice of Intent-Form 3, you can send page 1 of the NOI in place of questions 1 through 4 in this section.

1. Project Location:

See NOI Application Page 1

Street Address/Location | City/Town | Zip Code

Assessors Map/Plat Number | Parcel /Lot Number

2. Applicant:

First Name | Last Name | Company

Mailing Address

City/Town | State | Zip Code

Phone Number | Fax Number | Email address

3. Property owner (if different from applicant):

First Name | Last Name | Company

Mailing Address

City/Town | State | Zip Code

Phone Number | Fax Number | Email address

4. Representative (if any):

The MESA does not allow project segmentation. Your filing must reflect all anticipated work associated with the proposed project (CMR 321 10.16).

Company

Arthur D. | Gasbarro, PE, PLS, LEED AP

Contact Person First Name | Contact Person Last Name

20 Mary Ann Drive

Mailing Address

Nantucket | MA | 02554

City/Town | State | Zip Code

508-825-5053 | 5 | art@nantucketengineer.com

Phone Number | Fax Number | Email address

~~~~ADDITIONAL INFORMATION ~~~~

1. Will this project require a filing with the Conservation Commission and/or DEP? ☐ No ☑ Yes
2. Will this project meet any threshold for a MA Environmental Policy Act (MEPA) filing (excluding rare species, 301 CMR 11.03 (2))? ☑ No ☐ Yes
3. Has this project previously been issued a NHESP Tracking Number (either by previous NOI Submittal or MESA Information Request Form)? ☑ No ☐ Yes – Tracking No._____

from top:
Golden Winged Warbler - E

Small whorled pogonia - E

Marbled Salamander - T

* For an electronic copy of this form, visit www.nhesp.org *

~~~~PROJECT DESCRIPTION (attach separate sheet, as needed)~~~~

Certain projects or activities are exempt from review, see 321 CMR 10.14

The applicants are proposing to install an anchored fiber roll array with reinforced soil lifts, timber posts, sand nourishment cover and beach grass/native species plantings along the face of a coastal bank. The existing debris and fence posts will be removed and the entire area cleaned up. Please refer to the attached Project Narrative and Site Plan for additional information.

~~~~INCLUDE THE FOLLOWING INFORMATION ~~~~

We will notify the applicant within 30 days if the materials submitted do not satisfy requirements for a filing and request submission of any missing materials (321 CMR 10.18(1)).

ALL Applicants must submit:

- ☑ USGS map(1:24,000 or 1:25,000) with property boundary clearly outlined
- ☑ Project plans with existing and proposed conditions
- ☑ Assessor's map or right-of-way plan of site
- ☑ Project description
- ☑ Statement/proof that applicant is the Record Owner or that applicant is a person authorized in writing by the record owner to submit this filing
- ☑ Photographs representative of the site

Projects altering* 10 or more acres, must also submit:

- ☐ A vegetation cover type map of the site
- ☐ Project plans showing Priority Habitat boundaries

*Alteration: Any physical alteration of land, soils, drainage or destruction of plant life, see "Project or Activity" (321 CMR 10.02). If only a portion of the project site is located within Priority Habitat, indicate total area of disturbance for site as a whole

We may request additional information, such as, but not limited to, species and habitat surveys, wetland reports, soil map and reports, and stormwater management reports (321 CMR 10.16).

~~~~ FILING FEES ~~~~

For fees, see www.nhesp.org

a. Total MESA Fee Paid	b. Acreage of Alteration*	c. Total Site Acreage
$300.00	0.6+/-	21 +/-

~~~~ REQUIRED SIGNATURES~~~~

I hereby certify under the penalties of perjury that the foregoing MESA filing and accompanying plans, documents, and supporting data are true and complete to the best of my knowledge.

Arthur D. Salvo Agent — 3/16/16

Signature of Property Owner/Record Owner of Property — Date

Signature of Applicant (required, if different from Owner) — Date

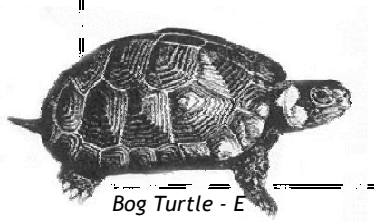
Please send form, required information, and filing fee (payable to "NHES Fund") to:

Regulatory Review
Natural Heritage & Endangered Species Program
North Drive, Route 135
Westborough, MA 01581

Natural Heritage & Endangered Species Program
Massachusetts Division of Fisheries & Wildlife

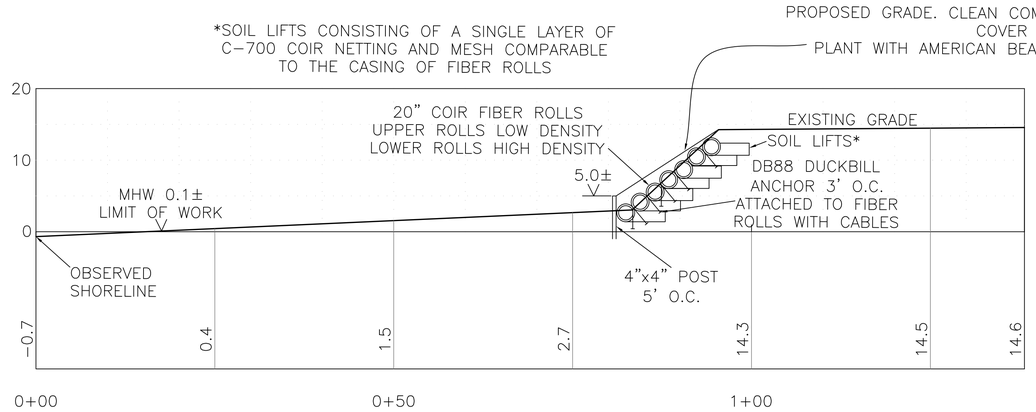
Telephone: 508-792-7270, Fax: 508-792-7821

Questions or Comments? natural.heritage@state.ma.us

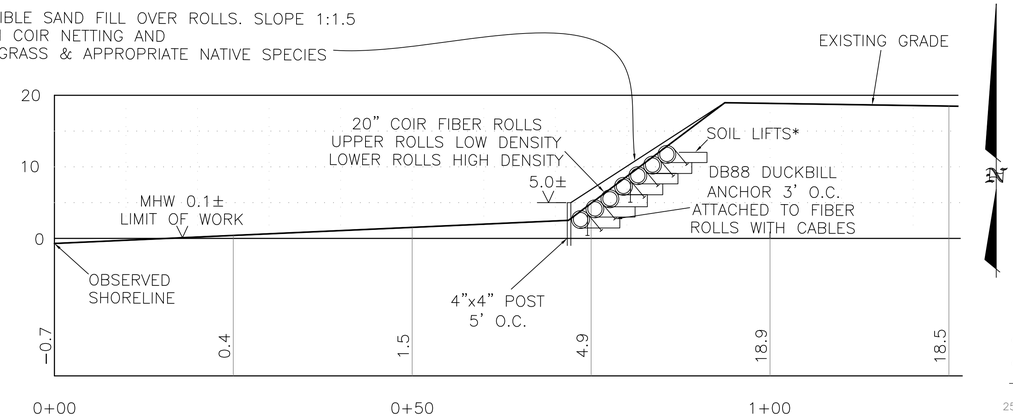


Bog Turtle - E

* For an electronic copy of this form, visit www.nhesp.org *

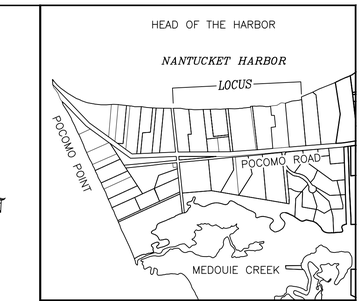


TRANSECT 1 PROFILE 1"=10'



TRANSECT 2 PROFILE 1"=10'

NANTUCKET HARBOR

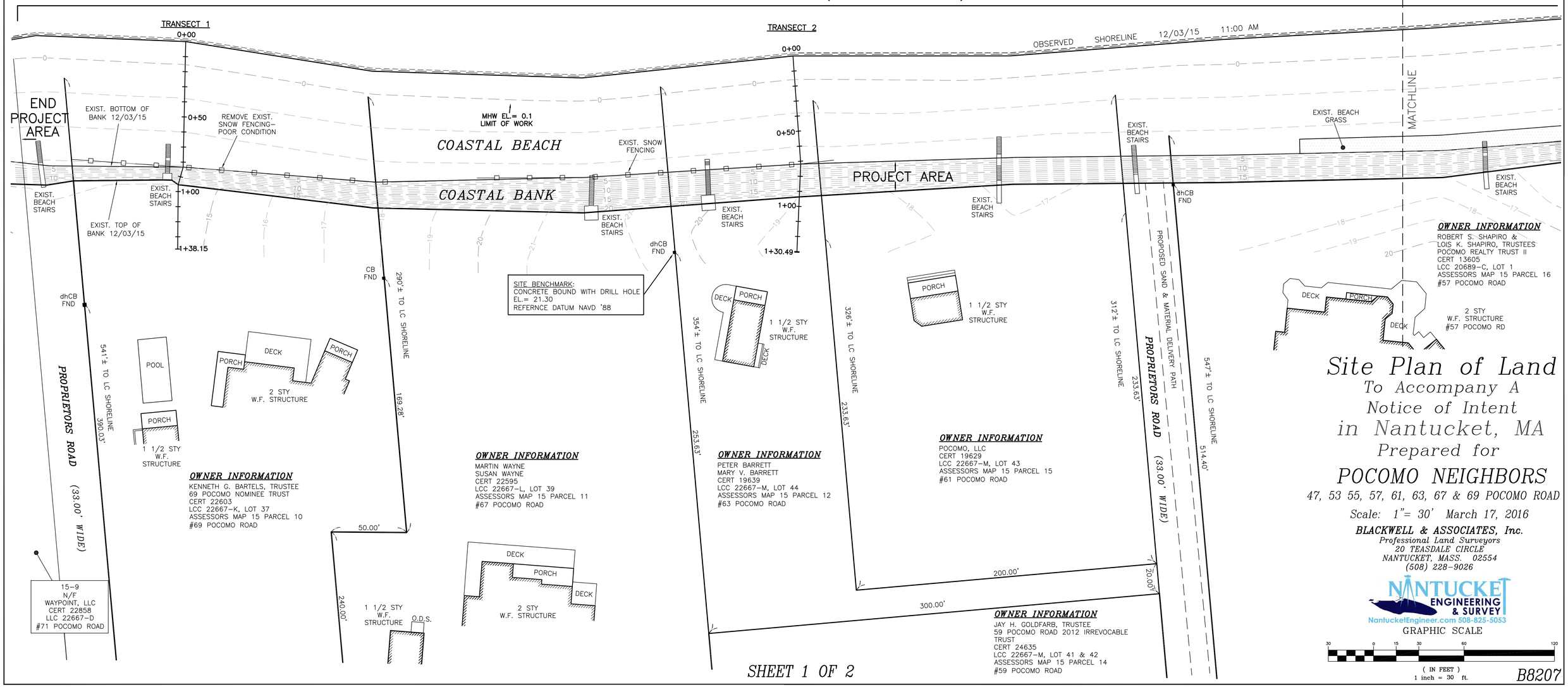


LOCUS MAP SCALE: 1"= 960' ±

LEGEND

- dhCB ■ DENOTES CONCRETE BOUND WITH DRILLHOLE FOUND
- dhCB ⊡ DENOTES CONCRETE BOUND WITH DRILLHOLE FOUND
- DENOTES EXIST. WOOD w/WIRE FARM FENCE
- 25 DENOTES EXIST. GRADE CONTOUR
- x24.3 DENOTES EXIST. GRADE SPOT ELEVATION

PROJECT LENGTH 1775'± (ALONG BANK FACE)



Site Plan of Land

To Accompany A
Notice of Intent
in Nantucket, MA
Prepared for

POCOMO NEIGHBORS

47, 53 55, 57, 61, 63, 67 & 69 POCOMO ROAD

Scale: 1"= 30' March 17, 2016

BLACKWELL & ASSOCIATES, Inc.
Professional Land Surveyors
20 TEASDALE CIRCLE
NANTUCKET, MASS. 02554
(508) 228-9026

NANTUCKET ENGINEERING & SURVEY
NantucketEngineer.com 508-825-5053

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.

SHEET 1 OF 2

B8207

GENERAL NOTES:

1. THE CONTRACTOR SHALL PROVIDE ALL MATERIAL, LABOR AND EQUIPMENT TO PERFORM THE WORK DESCRIBED ON THESE PLANS, AND AS APPROVED BY THE NANTUCKET CONSERVATION COMMISSION.

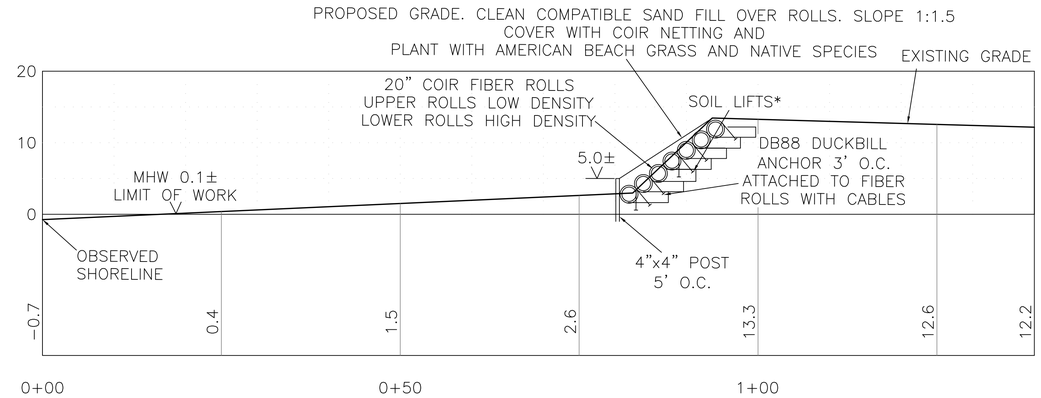
2. WORK SHALL BE IN COMPLIANCE WITH THE PLANS, SPECIFICATION AND THE ORDER OF CONDITIONS ISSUED BY THE NANTUCKET CONSERVATION COMMISSION.

3. THE CONTRACTOR SHALL ATTEND A PRE-CONSTRUCTION ON-SITE MEETING WHICH WILL BE ATTENDED BY THE ENGINEER, WITH NOTIFICATION TO A REPRESENTATIVE OF THE NANTUCKET CONSERVATION COMMISSION. THE CONTRACTOR WILL PRESENT THE PROPOSED METHODS AND MEANS TO CONSTRUCT THE PROPOSED IMPROVEMENTS.

4. THE CONTRACTOR SHALL NOT VARY FROM THE PLANS, SPECIFICATION, ORDER OF CONDITIONS OR INSTRUCTIONS PROVIDED AT THE PRE-CONSTRUCTION MEETING, WITHOUT FIRST OBTAINING APPROVAL OF THE CONSERVATION COMMISSION REPRESENTATIVE AND THE ENGINEER.

5. ONLY CLEAN COMPATIBLE FILL SHALL BE USED FOR FILL AND COVER FOR THIS PROJEFCT. THE CONTRACTOR AGREES TO OBTAIN SEDIMENT GRAIN SIZE DISTRIBUTION ANALYSIS, FROM A QUALIFIED LABORATORY, IF REQUESTED BY THE CONSERVATION COMMISSION REPRESENTATIVE.

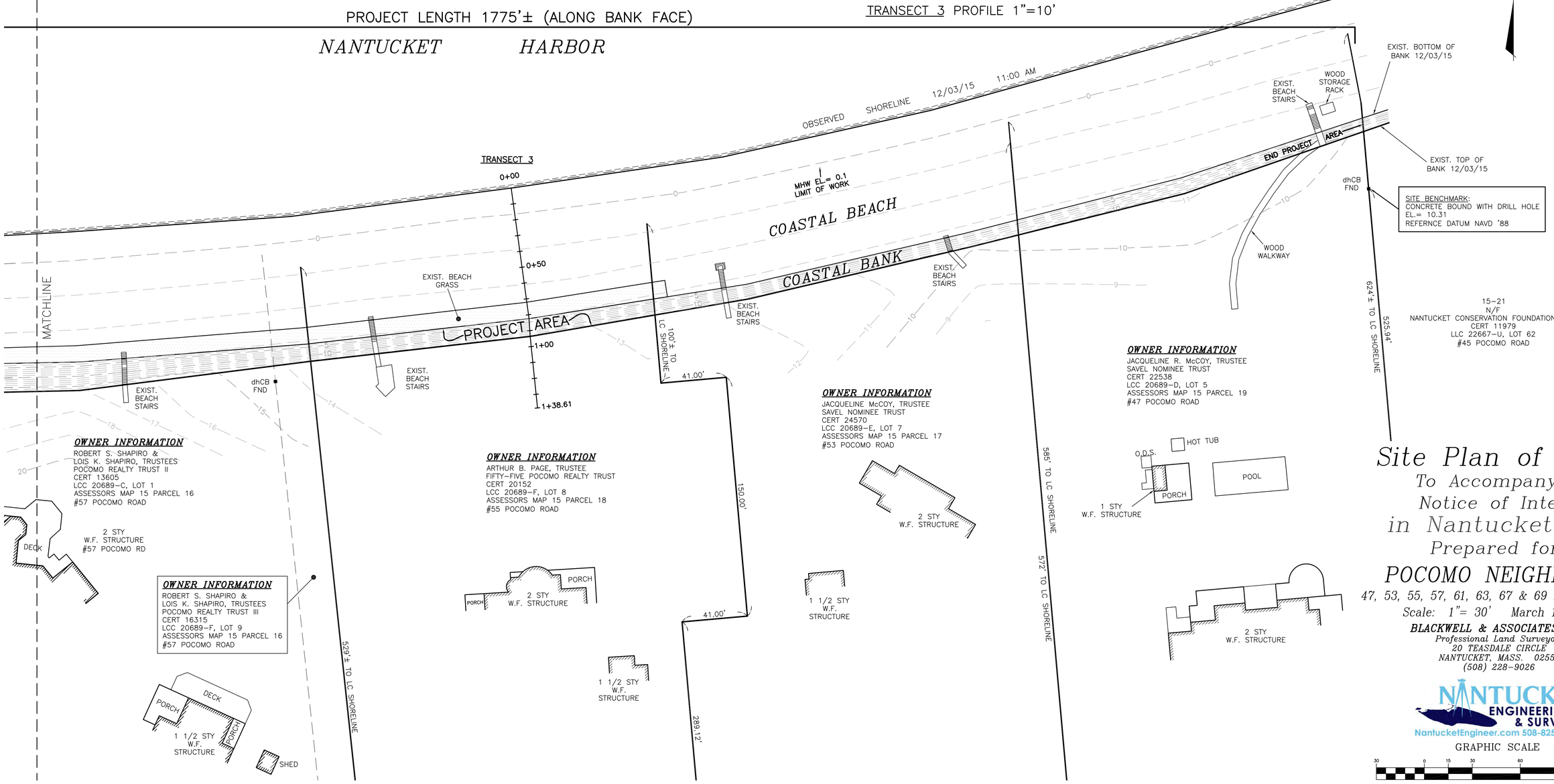
6. UPON COMPLETION OF RESTORATION, AND PRIOR TO DEMOBILIZATION OF EQUIPMENT, THE CONTRACTOR SHALL ARRANGE FOR A POST-CONSTRUCTION MEETING WITH THE ENGINEER. SHORT COMINGS AND DEFICIENCIES WILL BE OUTLINED TO THE CONTRACTOR AT THIS MEETING, THAT MUST BE CORRECTED PRIOR TO DEMOBILIZATION AND FINAL PAYMENTS FOR THE WORK.



TRANSECT 3 PROFILE 1"=10'

LEGEND

dhCB ■	DENOTES CONCRETE BOUND WITH DRILLHOLE FOUND
dhCB ⊡	DENOTES CONCRETE BOUND WITH DRILLHOLE FOUND
—□—□—	DENOTES EXIST. WOOD w/WIRE FARM FENCE
25 — — —	DENOTES EXIST. GRADE CONTOUR
x24.3	DENOTES EXIST. GRADE SPOT ELEVATION



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GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.

WHG Project # 2015-0168

April 21, 2016

Mr. Ernest Steinauer, Chairman
c/o Mr. Jeff Carlson
Natural Resource Coordinator
2 Bathing Beach Road
Nantucket, MA 02554

Transmitted via electronic mail: jcarlson@nantucket-ma.gov

Re: Site Assessment at 47, 53, 55, 57, 61, 63, 67, & 69 Pocomo Road, Nantucket, MA

Dear Mr. Steinauer:

During the Conservation Commission meeting a question was asked about date of the storms and the water levels contained in this report. I reviewed the text and found an error in the text. However, the figures and tables in the original report were correct and have not been changed. Please accept this revised report that contians several text changes.

The Woods Hole Group was asked to perform a site assessment and make recommendations on the most appropriate method to stabilize the coastal bank located at 47, 53, 55, 57, 61, 63, 67, & 69 Pocomo Road, on Nantucket. The purpose of the assessment was to examine the conditions on the beach, quantify the coastal processes at the site, determine the rate of change on the coastal beach and coastal bank, and to assess the impacts of sea level rise on the project. The results of my assessment are described in the following paragraphs.

The following letter presents the winds, water levels, and shoreline change at the property, makes recommendations on the best method to protect the coastal bank, and discusses if the project provides adequate sediment to replace sediment that would have been provided by erosion of the coastal bank. Additionally, the letter explains how this project is permittable under both the Massachusetts Wetland Protection Act and the Nantucket Wetlands Bylaws.

Project Setting

The proposed project is located within Nantucket Harbor on a north facing shoreline (Figures 1 & 2). The shoreline is generally oriented in the east-west (Figure 2). The coastal beach is protected from waves generated in Nantucket Sound by the barrier beach that encloses Nantucket Harbor, known as Coatue. The beach is oriented predominately to the east and west, however,

Figure 1. Project location within Nantucket Harbor.

Figure 2. This figure shows the project location, shoreline orientation and fetch lengths in the project boundaries.

there is a slight arcuate shape to the beach. The two apexes of the beach are located at the east and west ends while the middle of the project is slightly curved to the south (Figure 2).

The coastal resources located on the beach front are land subject to coastal storm flowage, land under the ocean, coastal beach, and coastal bank. At the time of the writing of this letter report there was no coastal dune present on the property. The proposed project will provide stabilization to the toe of the coastal bank for eight (8) properties and encompasses approximately 1,800 ft of shoreline.

The average width of the beach varies as you move through the project area. The average width of the beach from Mean Low Water to base of the coastal bank is approximately 80 ft while the average width of the high tide beach measured from the Mean Tide Level to the toe of the coastal bank is approximately 30 ft wide. The height of the coastal bank (measured from the toe of the bank to the crest) above the beach varies along the project length from a high of about 18 ft to a low of approximately 6 ft.

Because the beach is isolated from Nantucket Sound by the Coatue barrier beach the beach is exposed only to waves that are locally generated within Nantucket Harbor. The fetch lengths (the continuous distance over water that the wind can blow) for the project area are shown in Figure 2. The fetch lengths are 1.0, 2.1, and 1.9 miles from the northwest, north, and northeast respectively as shown in Figure 2. The relatively short fetch lengths will generate fetch-limited waves that in combination with storm surge will erode and destabilize the face of the coastal bank.

Site Visit

A site visit was performed on January 13, 2016. During the site visit, I had the opportunity to observe the project site, the costal beach, and coastal bank. The project encompasses approximately 1,800 ft of beach within Nantucket Harbor. The beach is generally oriented from the east to the west and is slightly arcuate. The width of the low tide beach varies as you travel from the east to the west. In general, the widest low tide beaches are located at the eastern and western ends of the project (approximately 80 ft in width). The narrowest beaches are located in the center of the project area which is in the center of the arc. The high tide beach is relatively narrow and is approximately 30 ft wide in the project area.

I began the site visit by walking the beach from the west to the east. Figure 3 was taken at the western end of the project and is looking to the east and shows the eroded coastal bank which is vertical and has a pronounced undercut at the top of the bank. This is clearly seen by the stranded roots hanging down the face of the bank. Figure 3 also shows the remnants of a sand fence. The fence has been destroyed over the years by waves and storm surge from winter and spring storms. Figure 4 also was taken from the western side of the project and is looking to the east. This figure shows an almost continuous line of sand fence that is mostly not functional. The bank is slightly undercut (not as pronounced as shown in Figure 3) and is unstable. The bank is composed of glacial till and while it is mostly sand it does have a large fraction of gravel and some small cobble. Figure 5 is again looking to the east and shows the relatively wide low tide beach that is composed of sand. Figure 6 looking to the east and shows the near vertical

bank and the vegetation that has slumped down the face of the bank. Evidence of bank slumping is apparent along the entire bank face throughout the entire project area. This figure also shows the stranded sand fence.

Figure 3. A view looking to the east from the western project terminus.

Figure 4. A view to the east showing the eroded coastal bank and dilapidated sand fence.

Figure 5. A view showing the shallow and flat inter-tidal beach.

Figure 6. A view of the dilapidated sand fence, vegetation slumps on the bank face, and the undercut top of bank.

Figure 7 is a view taken from the eastern boundary of the project looking back to the west. This figure shows that the coastal bank is lower in elevation and is eroding. The vegetation has eroded from the top of the bank and has slumped down the bank face to the toe of the bank. The intertidal beach is wide along this section of beach. However, the high tide beach remains relatively narrow. There are no stranded sand fences or other debris on this section of beach. This figure also shows the arcuate shape of the beach extending to the east.

Figure 7. A view from the western project terminus looking to the east showing the eroded bank and inter-tidal beach.

Figure 8 was taken along the same section of beach looking to the east and shows the relatively wide and flat intertidal beach which is characteristic of the project area.

Storms Impacting Nantucket Harbor's Shoreline

As previously stated, the shoreline is generally oriented in east and west directions. The longest fetches are from the northeast clockwise through the north-northeast (Figure 2). Therefore, storms that generate winds from the northwest through the north-northeast produce waves which will impact the project shoreline.

Anecdotal observations and meteorologists have suggested that there have been more storms over the past several years and the frequency and intensity of these storms will continue to increase over the next several years and into the future. However, we have observed over the years that storm frequency and intensity tends to be cyclic. In order to determine if this was true, we analyzed the number of storms that occurred between 1980 and 2015 during the storm

season. We defined the storm season to be between September and May of two successive years. The 2015 storm season contained storm data only through mid February 2016. Therefore, wind data was parsed between the fall of one year and the spring of the next. The sustained wind data was binned first by direction, then by events that had sustained wind gusts with velocities equal to or greater than 25 miles per hour, and then finally if the event had a duration of 3 hours or greater. This means a storm was accepted for the analysis if it approached the Nantucket Harbor shore, had sustained wind gusts that exceeded 25 mph, and lasted at least 3 hours.

Figure 8. A view of the inter-tidal beach from the west end of the project.

Figure 9 shows the data for sustained winds with sustained gust velocities of 25 knots or greater and a duration of at least 3 hours or longer for the years 1980 through 2015. This figure shows that in general there as a steady increase of storms between 1982 and 1989. There was a decrease in the number of storms that occurred during the period between 1989 and 1993. In general, there is a 2 to 4 year cycle of increasing and decreasing frequency of storms. The last cycle shown on the graph shows a decrease in storm frequency between 2000 and 2001. While the cyclic nature of the storm frequency is clearly shown in Figure 9, the long-term average number of storms has been increasing since 1992[1].

The winds for the January 22-25, 2016 storm are shown in Figure 10. This figure shows the winds beginning out of the northeast early on January 23. The steady wind velocities increase to over 25 knots with sustained wind of over 30 knots with wind gusts over 40 knots. The sustained wind speeds lasting for over 24 hours. The storm surge produced by the January 22-

[1] Note that the 2015 data contained wind data only through mid February 2016.

25, 2016 storm is shown in Figure 11. This figure shows that at the height of the storm, the elevation of the storm surge exceeded MHW for four consecutive tidal cycles (Figure 11).

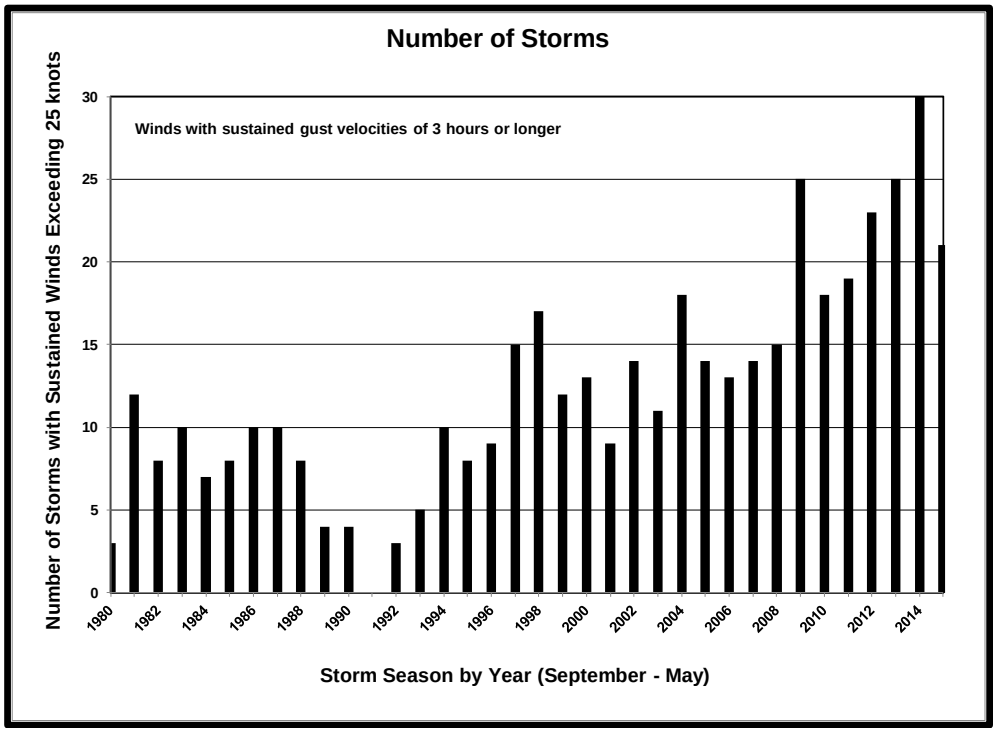

Figure 9. Number of storms occurring for each storm season from 1980 through 2014. The 2015 storm season has data only through February 16, 2016.

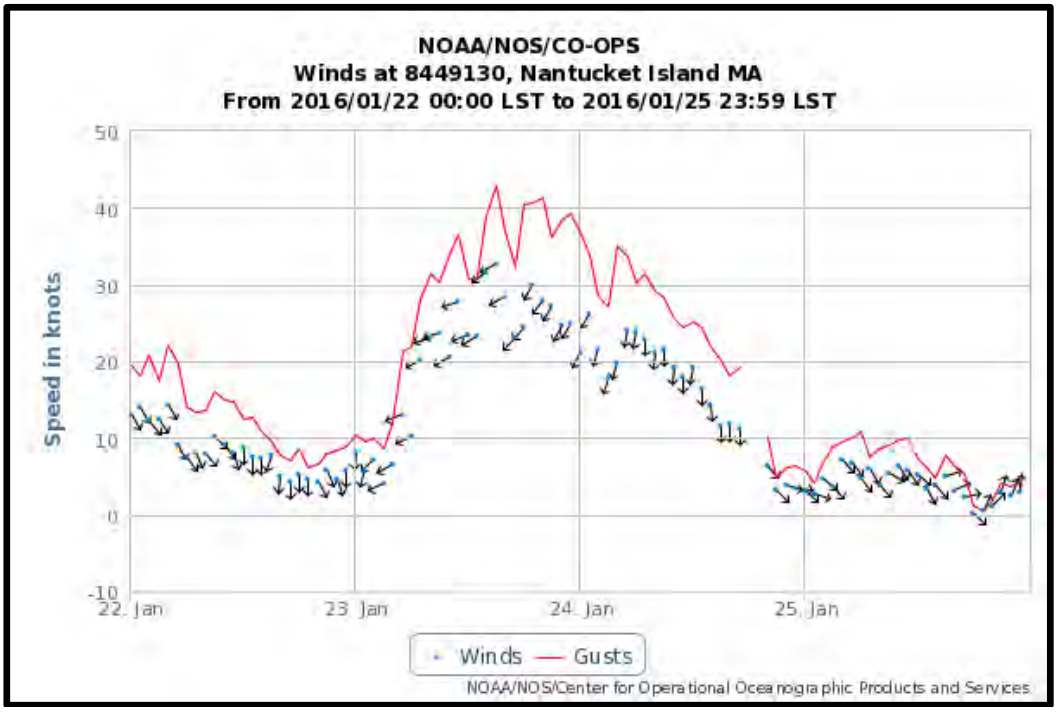

Figure 10. Figure showing a typical storm event that met the threshold criteria with winds out of the north & northeast, velocities greater than 25 knots, and lasing over 3 hours.

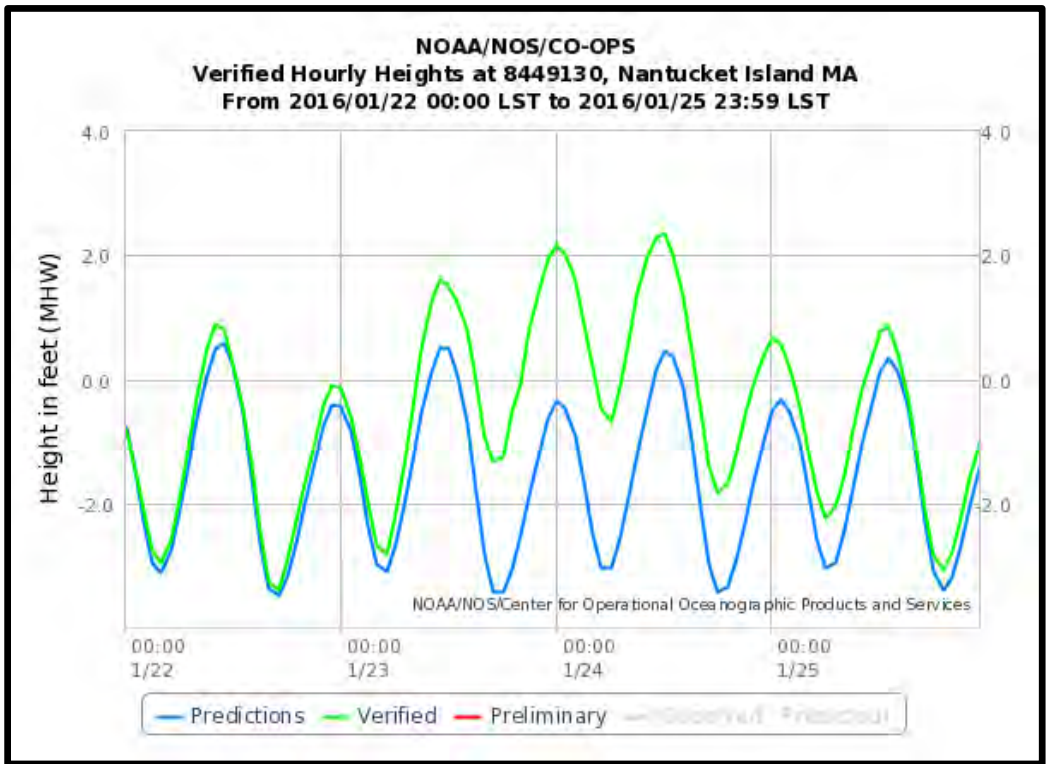

Figure 11. Water levels produced by the January 24, 2016 storm winds shown in Figure 10.

At the height of the storm, the water level was over 2.2 ft above MHW. All the while, the wind and waves were battering the shoreline and the toe of the coastal bank. Figure 12 shows the effect of this storm on the beach and the coastal bank at the site. Figure 12A shows the beach looking to the east along the shoreline and Figure 12B shows looking to the west along the beach. Both Figures show that the storm surge has completely inundated the high tide beach and that the waves and run-up are attacking the toe of the coastal bank.

Another disturbing trend was observed in the wind and wave data. The increase in storms has produced an increase in the number of storm surge events that have impacted the shoreline. While examining the data many smaller storms were noted that did not exceed the threshold criteria but produced water levels that were above MHW for one or more tidal cycles. This means that with the increased frequency of storm events, the toe of the coastal bank is being inundated and attacked on a more frequent basis.

Waves at the Site

Storm surge increases the depth of water in the nearshore and allows waves to break on the beach or directly at the base of the coastal bank. Therefore, an analysis was completed to calculate the maximum wave height that would be produced during a storm. Waves generated offshore can break either offshore in the nearshore zone or on the beach and at the base of the coastal bank. The waves breaking offshore of the beach are important because they are responsible for eroding the beach and transporting sediment downdrift of the breaking waves.

The second breaker line will occur high on the beach and at the base of the coastal bank if the storm surge is high enough and will result in erosion of the toe of the bank.

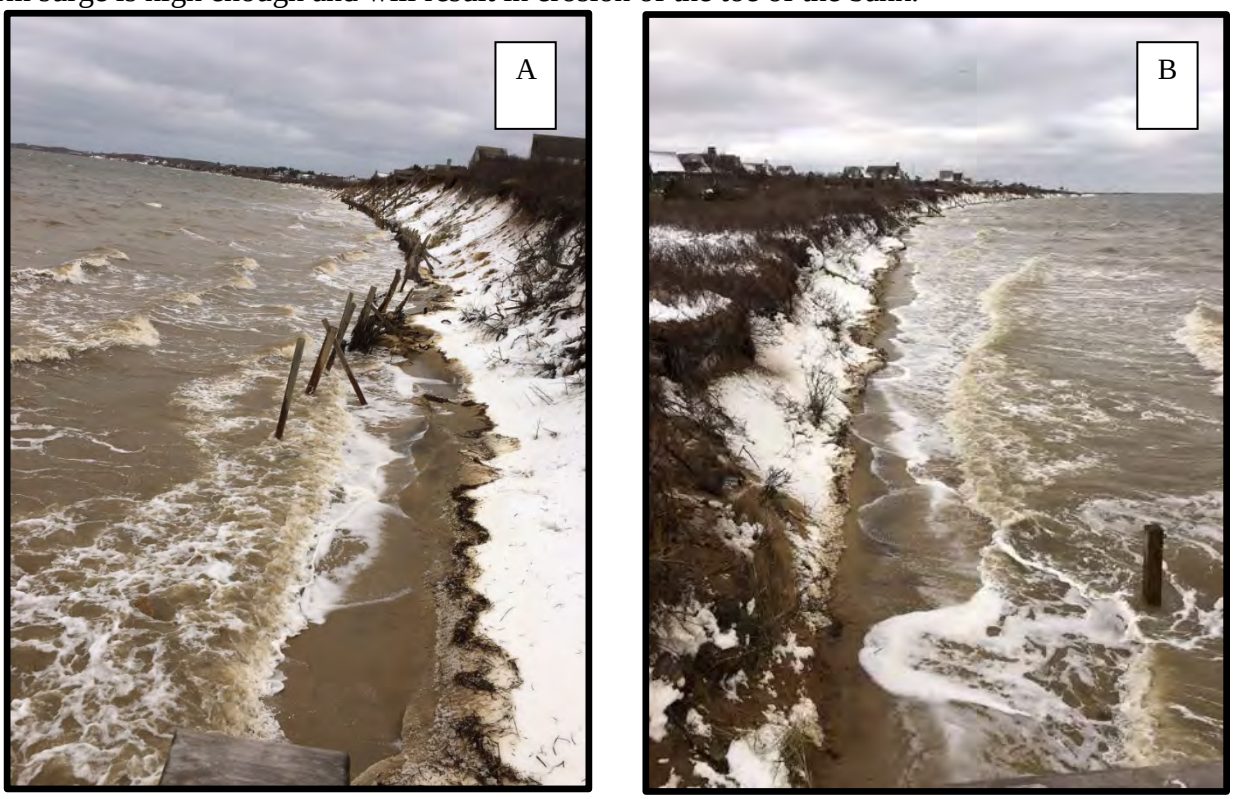

Figure 12. View of the project looking to the east (A) and from the west (B) during the storm shown in Figure 11.

As a result, waves were calculated using two methods. The first method utilized the US Army Corps of Engineers (USACE) Automated Coastal Engineering System (ACES) models. This group of computer programs was developed by the USACE Coastal Engineering Research Center[2] at the Waterways Experiment Station. The second technique used linear wave theory to calculate the maximum wave height that can be supported for a given water depth on the beach.

The ACES analysis calculates the maximum wave height that can be generated in Nantucket Harbor for a given wind speed and direction. A general storm (average) storm condition was synthesized using a wind speed of 40 miles per hour was used with a duration of 4 hours. We also ran the computer model for two storms conditions that occurred on Nantucket. The first was Nemo, a nor'easter that occurred on January 26, 2015 and the second unnamed nor'easter that occurred on January 24, 2016. Table 1 shows the results obtained from the ACES wave model for wind directions from the northwest clockwise through the north-northeast for these storms. These are the maximum wave heights that will be generated offshore of the beach during these storms. A larger storm will increase the water level, last longer, and will produce larger waves. Table 1 also shows the waves generated for the conditions shown in Figure 10 and 13A.

[2] Now the USACE Coastal and Hydraulic Laboratory.

Table 1. Wave heights in the harbor calculated from ACES.

Direction (deg)	Wave Height (ft) Winds ~40 mph 3 hr	Wave Height (ft) Nemo 1-26-15	Wave Height Nor'Easter (ft) 1-24-16
340	1.9	1.9	1.7
0	2.1	2.7	2.3
20	2.1	2.6	2.2

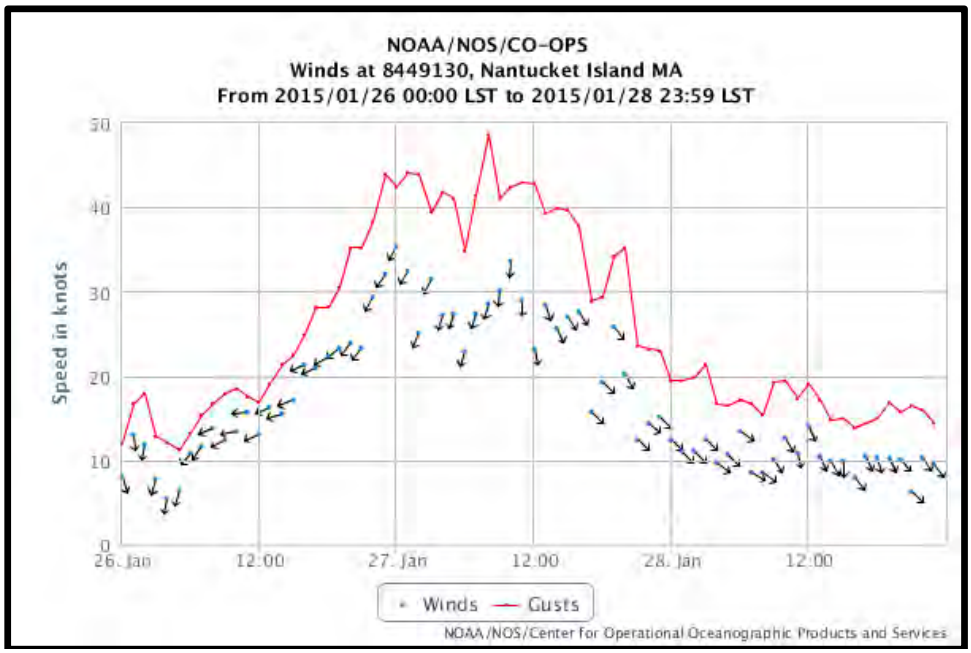

Figure 13A. Winds generated during the nor'easter Nemo January 2015.

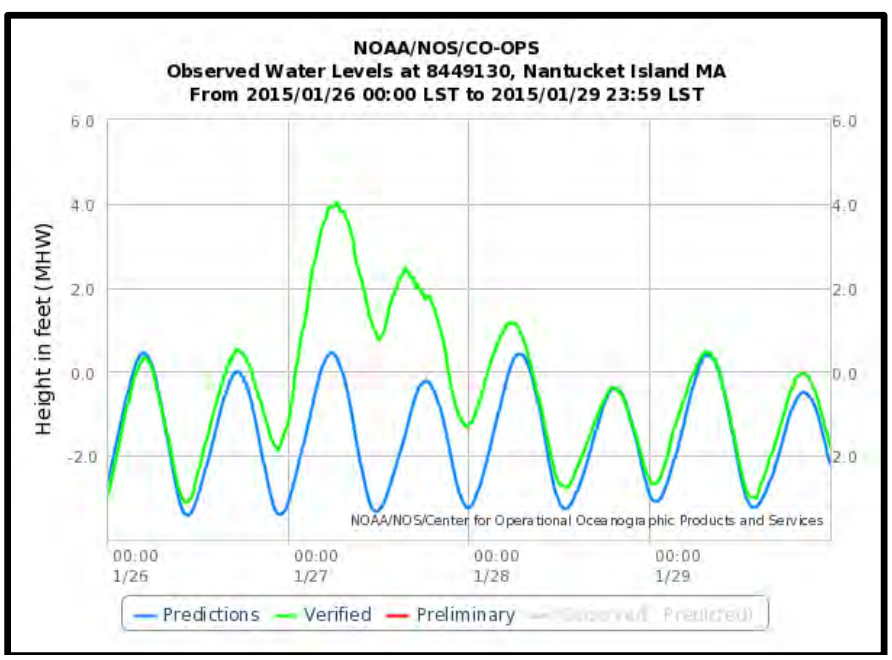

Figure 13B. Water levels that occurred during the nor'easter Nemo January 2015.

The waves calculated clearly show that the frequently occurring storms produce waves that will erode the beach and water levels that will inundate the entire beach.

The ACES model calculated wave heights in Nantucket Harbor. However, it is instructive to calculate the height of the wave that will break on the toe of the coastal bank. A height of a wave that approaches the beach and breaks on or at the toe of the bank will be dependent only on the depth of water at the toe of the coastal bank. Table 3 shows the depth of the water during the peak of the storm and the maximum height if the wave that will break at the toe of the coastal bank for the average, Nemo, and the January 24, 2016 storms. The water level during the peak of the storm shown in Figure 12 resulted in a water depth of approximately 0.5 – 0.75 ft at the base of the bank and produced a braking wave heights of 0.6 ft at the toe of the coastal bank. Nemo and the January 24.2016 nor'easter produced breaking wave heights of 4.0 and 2.7 ft respectively. These conditions allowed waves to not only break at the toe of the bank but also run up the face of the bank. The result is that during normal storm conditions the storm surge reaches the base of the bank allowing waves to break on the lower 1 ft of the bank. These conditions ensure that the bank face will remain vertical and will not have a chance to reach an angle of repose and to naturally vegetate.

Table 3. Water depths at the toe of the coastal bank.

Date of Storm	Depth of water at the base of bank (ft)	Wave at Base of Bank (ft)
1/24/2016	0.8	0.6
Nemo 1/26/2015	5.1	4.0

Flood Zone Elevations at the Project Site

The Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRMs), dated June 9, 2014. The flood zone data for the project are is shown on Map Panel #25019C00884G. The flood insurance map shows that at the beach there is a Zone VE (EL10) (Figure 14) while just to the east the VE zone drops to a Zone VE (EL9). The Flood Insurance Study ("Brown Book") shows that the 10- and 50-year still water flood zone elevations are 3.6[3] and 5.1 ft respectively. This indicates that during a storm with a 10-year return period the toe of the bank will be attacked by storm surge and waves.

Shoreline Change Analysis

A shoreline change analysis was conducted to evaluate long- and short-term shoreline response of the coastline along the subject properties. There are several techniques that can be used to calculate shoreline change. The most accurate is to compare topographic surveys of the property that have been obtained over the years. However, most properties do not have a back-log of topographic surveys and if they did, the surveys would most likely be confined to the property of interest and not include adjacent properties. Therefore, an aerial photographic analysis is

[3] FEMA flood zone elevations are in NAVD88.

commonly used to calculate shoreline change. The method analyses successive aerial photographs and calculates the change in position of the shoreline or the top of the coastal bank. This allows the investigator to calculate rates of change for the beach or top of bank.

The Massachusetts Coastal Zone Management (CZM) has completed a shoreline change analysis for most of Massachusetts. The results of the CZM shoreline change analysis is reported in their Massachusetts Ocean Resource Information System (MORIS). CZM analyzed shorelines from 1844 through 2009 and calculated the shoreline change rates along equally spaced transects throughout Massachusetts. There are ten transects (Figure 14) that fall within the project boundaries (MORIS Transects N-1600 thru N-1610). The MORIS results in Table 2 show that the shoreline change is erosive along this section of shoreline.

Figure 14. Location of he CZM MORS shoreline change transects.

MORIS long-term erosion rates were calculated using the entire 150-year data set. The short-term rates of change were calculated using data spanning the most recent 30-year data set.

Table 2 shows that the long-term shoreline change is -0.6 ft/yr. The short-term rate of shoreline change is -1.7 ft/yr. The short-term shoreline change rate is usually used when determining how the shoreline will respond in the next 10 years because the short-term shoreline change rate includes the most recent storms but the data set spans a sufficiently long period so that the analysis is not biased by any one large erosion or accretion event.

Table 2. CZM MORIS long- and short-term erosion rates.

MORIS Transect Number	CZM Morris Long-Term Rate (ft/yr)	CZM Morris Short-Term Rate (ft/yr)
N-1600	-0.7	-1.7
N-1601	-0.7	-1.9
N-1602	-0.6	-1.9
N-1603	-0.5	-1.4
N-1604	-0.5	-1.6
N-1605	-0.7	-1.4
N-1606	-0.7	-1.7
N-1607	-0.6	-1.6
N-1608	-0.6	-1.7
N-1609	-0.5	-1.8
N-1610	-0.6	-1.7
Averge Change	-0.6	-1.7

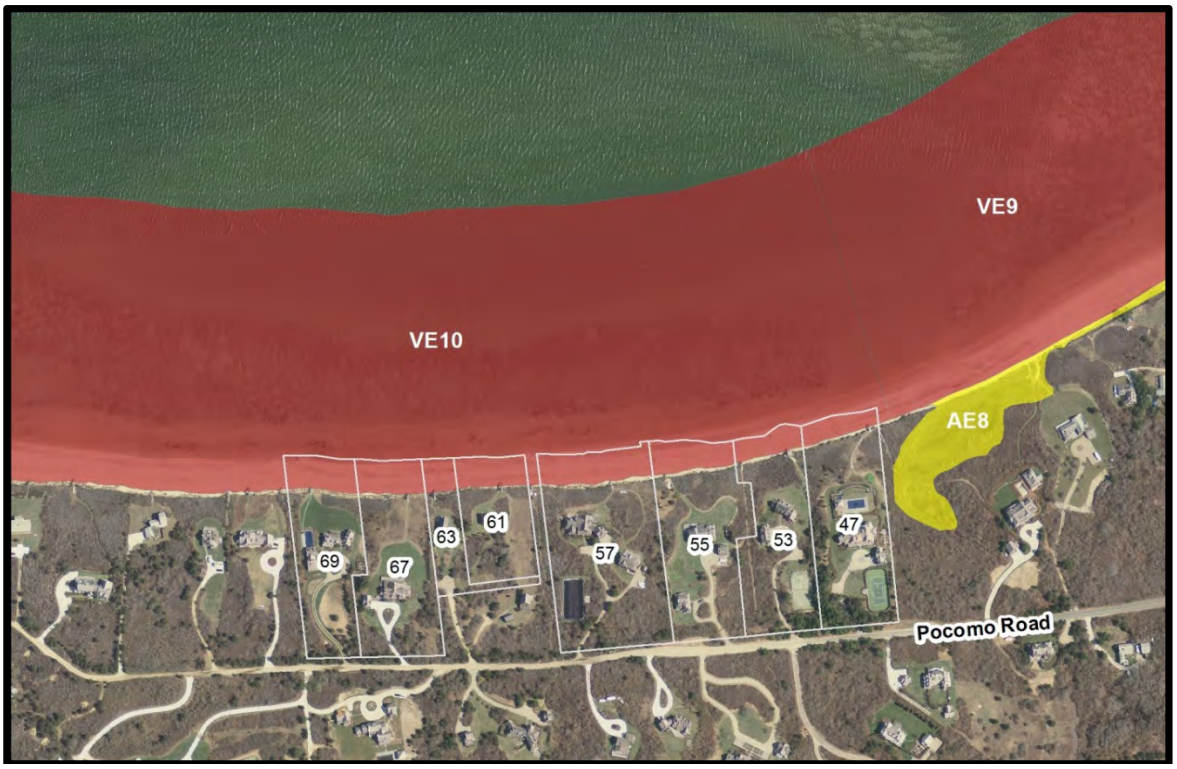

Figure 14. FEMA Flood Zones along the northern shore of Pocomo Road, Nantucket.

The MORIS data set only includes shoreline data up to 2009. Additionally, we have occasionally found some discrepancies in the shoreline change rates that have been reported in MORIS. Therefore, the Woods Hole Group performed its own shoreline change analysis to ensure there were no errors in the MORIS data and to bring the shoreline change analysis forward to include data from 2012, 2014, and 2015.

A computer-based shoreline mapping methodology within a Geographic Information System (GIS) framework was used to compile and analyze changes in historical shoreline positions for the properties along the north shore of Pocomo Road, and the adjacent area. The purpose of this task was to quantify the spatial and temporal changes in shoreline position using the most accurate data sources and compilation procedures available, and to evaluate the long-term and recent rates of change. Assuming that the trends continue at the same rate into the future, the information from the shoreline change analysis can also be used to predict patterns of shoreline erosion over the next several decades.

Woods Hole Group compiled and analyzed data from Google Earth imagery, MassGIS orthophotography, Massachusetts Coastal Zone Management (CZM) shoreline change study data and single-frame historical aerial photographs. Data covering thirteen (13) time periods were evaluated spanning the 128-year period from 1887 to 2015 (Table 3).

Table 3. Data Sources for Shoreline Change Analysis

Year	Source
2015	Google Earth
2014	MassGIS
2012	Google Earth
2009	MassGIS
2003	MassGIS
1999	Col-East, Inc.
1994	MassGIS
1990	Col-East, Inc.
1978	Mass CZM Shoreline
1971	Col-East, Inc.
1963	Col-East, Inc.
1955	Mass CZM Shoreline
1887	Mass CZM Shoreline

Woods Hole Group acquired the photos from MassGIS as georeferenced orthoimagery and the vector shorelines from Mass CZM. However, the aerial photographs from Col-East, Inc. and those extracted from Google Earth required georeferencing. Georeferencing was accomplished by identifying a series of evenly spaced control points on the images for which real world x, y coordinates were known. The 2014 MassGIS orthoimagery was utilized as the base image from which the ground control was obtained for all georeferencing.

Once the additional photographs were geo-referenced, and all data sources were brought to a common coordinate system, the locations of the mean high water line (MHW) and the top of bank (where identifiable) were located and digitized from each of the thirteen (13) data sources. Once these data were compiled, spatial and temporal changes in the data were computed. This was accomplished by identifying a series of shore normal transects along the coastline where discrete measurements of change could be made through time, and where rates of change could be determined. To analyze the shoreline change rates, a total of 95 shore normal transects were established at 50 foot evenly-spaced intervals along the coastline from the western end of Pocomo Road to Lauretta Lane to the west. At each transect, the magnitude of shoreline and

bank movement was calculated, and annual rates of change were determined using the various time intervals between the data sources. Rates of change were calculated using the linear regression method. In this method, an average rate of change is based on a best-fit line to a series of points representing the shoreline/bank position over time. The linear regression method is most accurate when looking at long-term averages and is most often used for planning purposes and management decisions.

The digitized locations of the shorelines, as well as the transect locations across the entire study area, are shown in Figure 15. Shoreline change rates were analyzed for the entire time period (1887 to 2015) (Figure 16), as well as two more recent sub-periods; the last 45 years (1971 to 2015) and the last 13 years (2003 to 2015) (Figures 17 & 18). The linear regression rates of shoreline change from these time periods are presented in the graph in Figure 19.

In general, all time periods analyzed show a trend of erosion across the entire study area for both the shoreline and the top of bank, with the rates of shoreline erosion generally greater than the rates of bank erosion. The average shoreline erosion rates for the entire study area were -0.6 ft/yr (1887 to 2015), -1.0 ft/yr (1971 to 2015), and -0.9 ft/yr (2003-2015). The average shoreline erosion rates immediately in front of the subject properties (transects 27 to 62) followed this trend, but with slightly higher rates of -0.8 ft/yr, -1.1 ft/yr and -1.2 ft/yr respectively. Average rates of shoreline change were also computed from the transects on each individual property and are listed in Table 4.

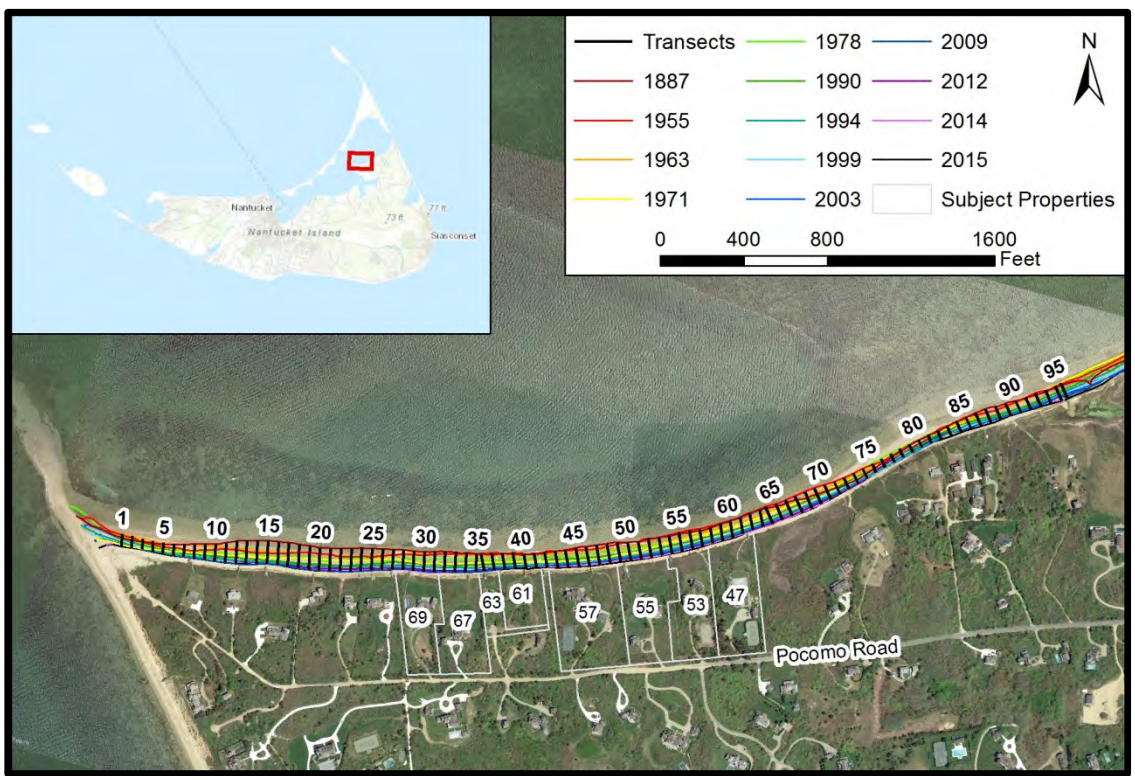

Figure 15. Historical shoreline positions and locations of analysis transects. Background is from 2015 GoogleEarth imagery. Pocomo Road subject properties are identified by their parcel boundaries and street address numbers.

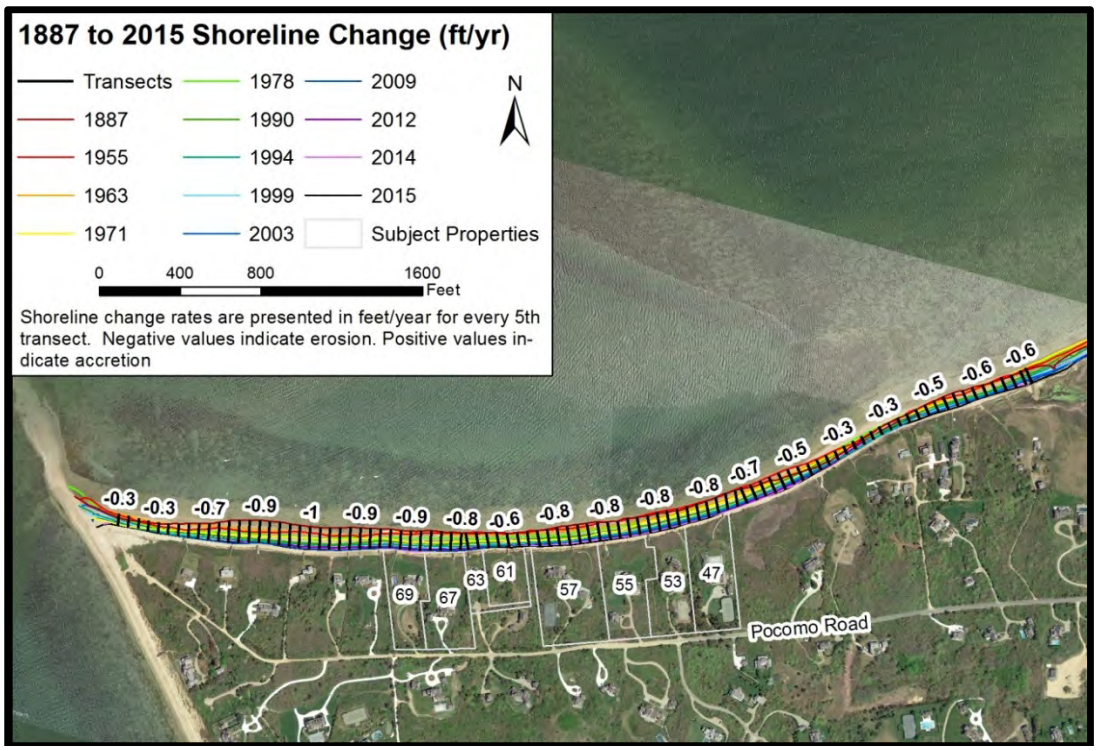

Figure 16. Long-term (1887-2015) rates of shoreline change (feet/year). Background is from 2015 GoogleEarth imagery.

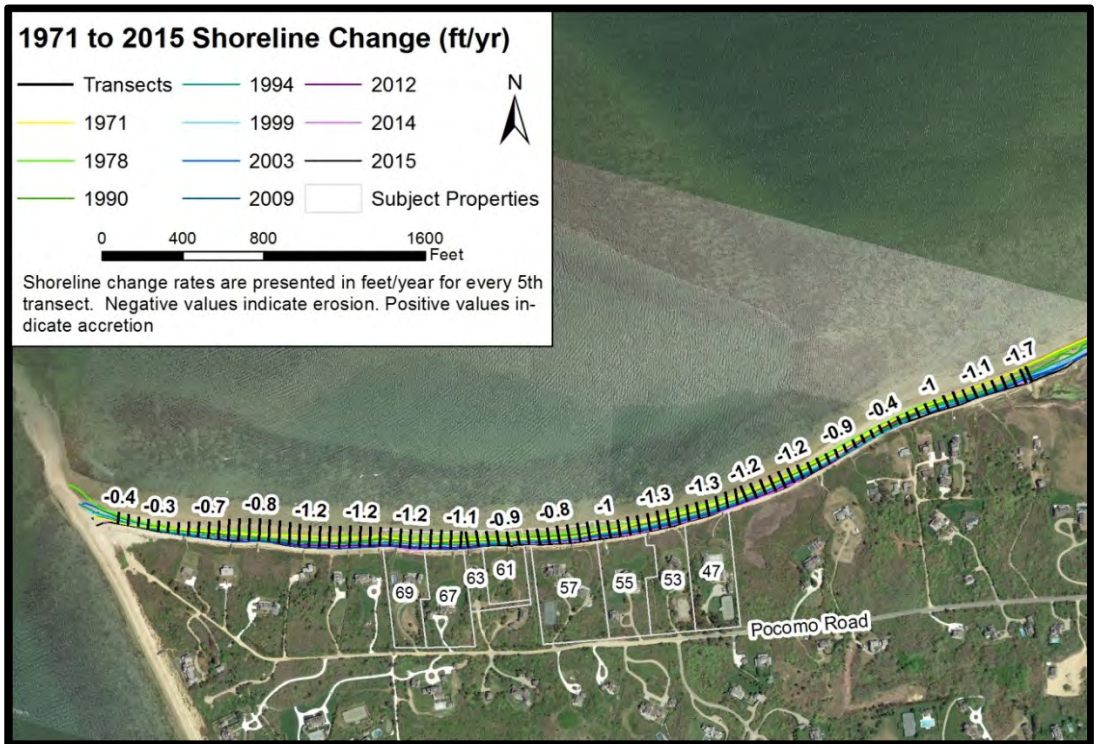

Figure 17. Recent (1971-2015) rates of shoreline change (feet/year). Background is from 2015 GoogleEarth imagery.

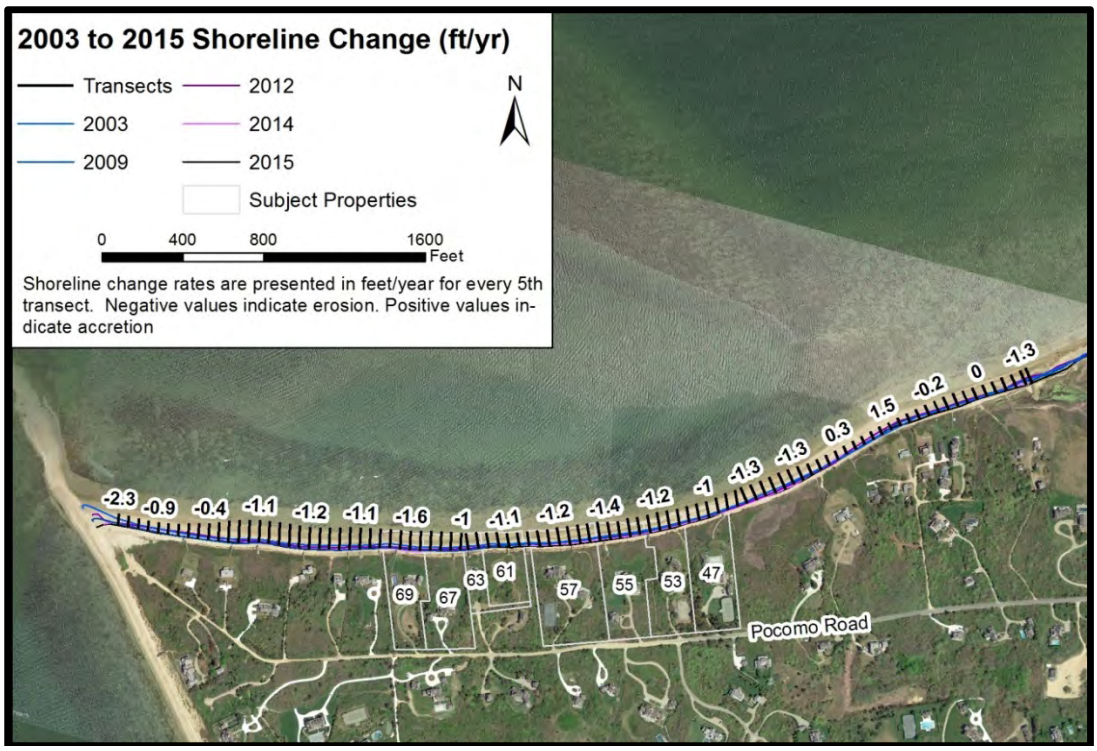

Figure 18. Short-term (2003-2015) rates of shoreline change (feet/year). Background is from 2015 GoogleEarth imagery.

Table 4. Average rate of shoreline and bank change along each subject property's coastline.

		Linear regression Shoreline		
Property	Transects	1887-2015	2003-2015	1971-2015
69 Pocomo Road	27 to 31	-0.8	-1.5	-1.2
67 Pocomo Road	32 to 35	-0.9	-1.1	-1.2
63 Pocomo Road	36 to 37	-0.8	-1.0	-1.0
61 Pocomo Road	38 to 41	-0.6	-1.1	-0.9
57 Pocomo Road	42 to 48	-0.7	-1.3	-0.9
55 Pocomo Road	49 to 53	-0.8	-1.5	-1.1
53 Pocomo Road	54 to 57	-0.8	-1.2	-1.3
47 Pocomo Road	58 to 62	-0.7	-0.9	-1.3
Average	**27 to 62**	**-0.8**	**-1.2**	**-1.1**

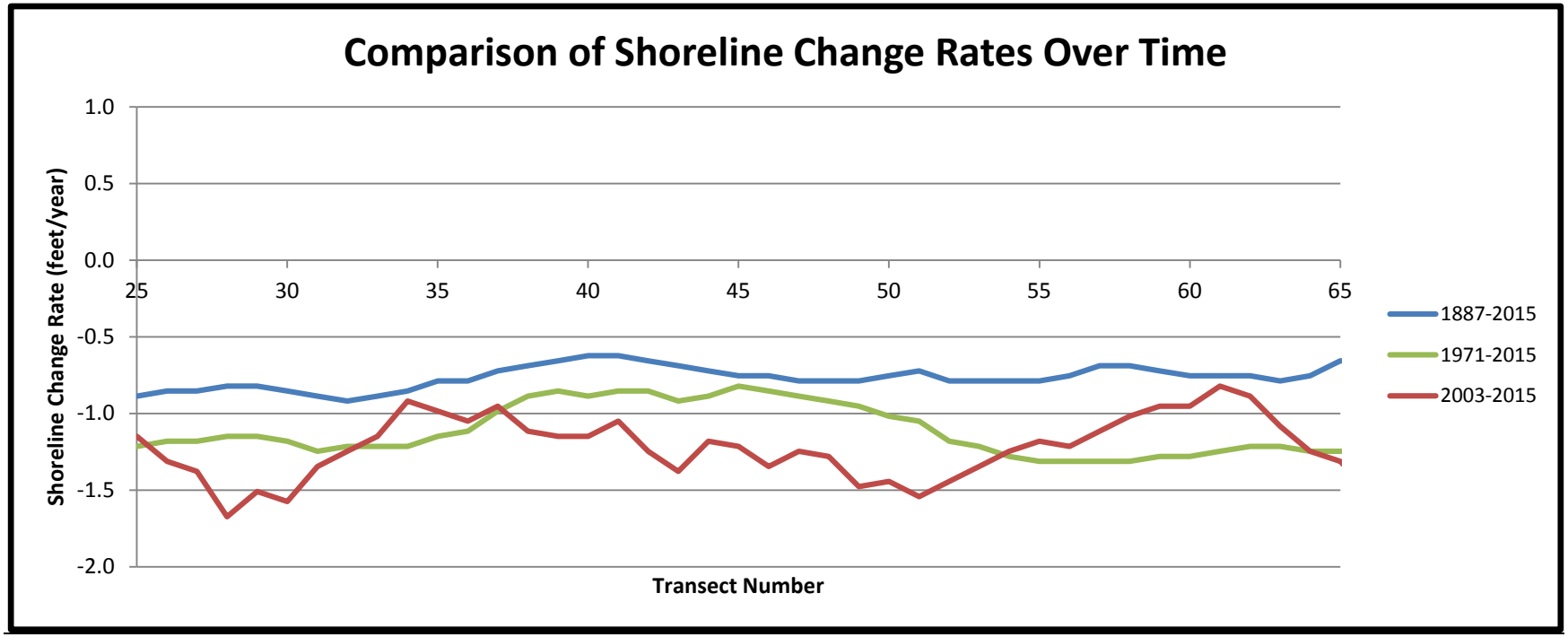

Figure 19. Rates of historical shoreline change for the entire study period (1887-2015), as well as two recent time periods (1971-2015 and 2003-2015) for the transects fronting the subject properties.

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Sediment Contribution from the Coastal Bank

Erosion of the bank provides sediment to the littoral system and helps mitigate erosion that occurs downdrift of the property. The bank erodes under the influence of the storm surge and waves produced by coastal storms that have been described above. Therefore, it is important to quantify the shoreline change rates along this section of coast in order to determine how much sand is provided to the beach from coastal bank erosion. The average of the short-term erosion rates calculated from MORIS and from the Woods Hole Group analysis are shown in Table 5.

Table 5. Sediment contribution by the coastal bank calculated from MORIS and the Woods Hole Group rates.

MORIS Short-Term Erosion Rate (ft/yr)	MORIS Annual Bank Contribution (cu yd)	WHG Short-Term Erosion Rate (ft/yr)	WHG Annual Bank Contribution (cu yd)
-1.7	1,253	-1.2	885

The annual sediment contribution calculated using the MORIS shoreline erosion rate of -1/7 ft/yr is 1,253 cu yd/yr and the sediment contribution calculated using the Woods Hole Group short-term erosion rate is 885 cud yd/yr.

Sea Level Rise

Beach nourishment is one of the most effective methods to maintain beaches and minimize the effects of sea level rise. This is because sea level rise is small compared to the effects of storm surge and the design life of a beach nourishment project. A beach nourishment project will need maintenance and will need to periodically be replaced as storms attack the coast and erode the project. However, that is how beach nourishment is intended to work. The beach nourishment is designed to absorb the impact of the waves and erode thus providing sediment to the littoral system while providing protection to the back-beach and toe of the bank.

Sea level rise is on the order of 1.4 millimeters/year in the Barnstable area (Figure 12). This estimate was derived from an examination of tide gauges along the East Coast. A more recent study published by NOAA[4] showed that the sea level rise for the Boston area is 2.63 millimeters/year. In order to put this in perspective; 2.6 millimeters (Figure 13) is about the thickness of two nickels placed on top of each other. Therefore, a project would require a design life of 30 or 40 years before sea level rise would even become a design factor.

The beach nourishment portion of the project will help mitigate the effects of sea level rise by providing a long-term sediment source to the beach and littoral system. Additionally, the design life of the revetment is effectively 20 to 30 years. Using the information provided above, the water level can be expected to increase between 1.3 and 2.0 inches over the design life of the structure. As a result, the proposed design will not be impacted by sea level rise.

[4] http://tidesandcurrents.noaa.gov/sltrends/sltrends_station.shtml?stnid=8443970

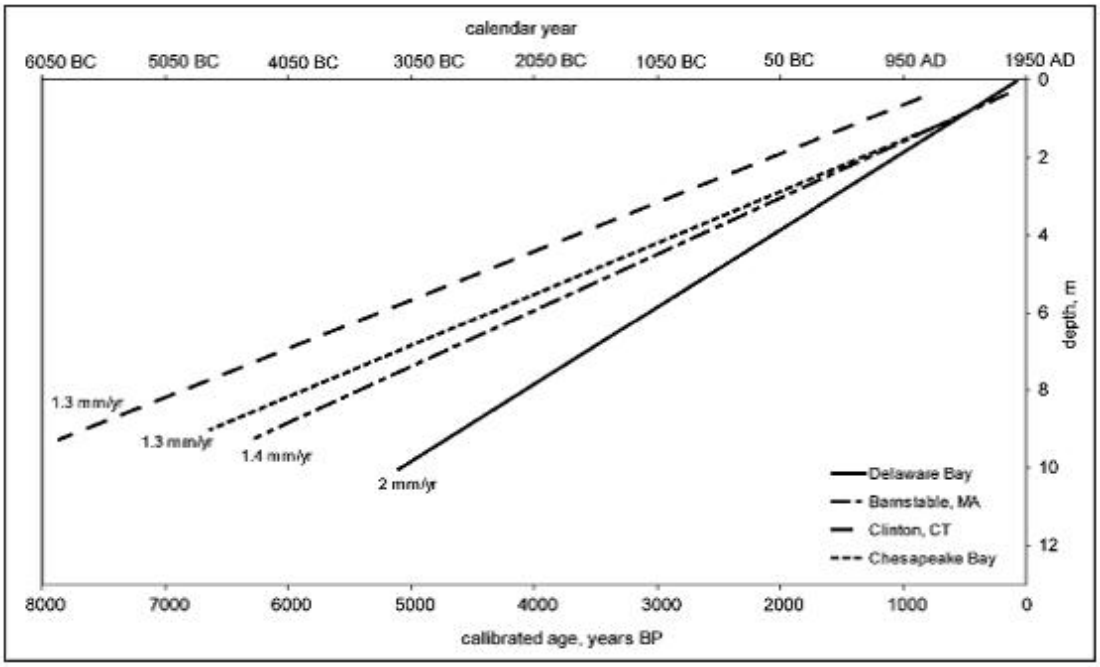

Figure 12. Showing the estimated long-term sea level rise for Barnstable Massachusetts[5].

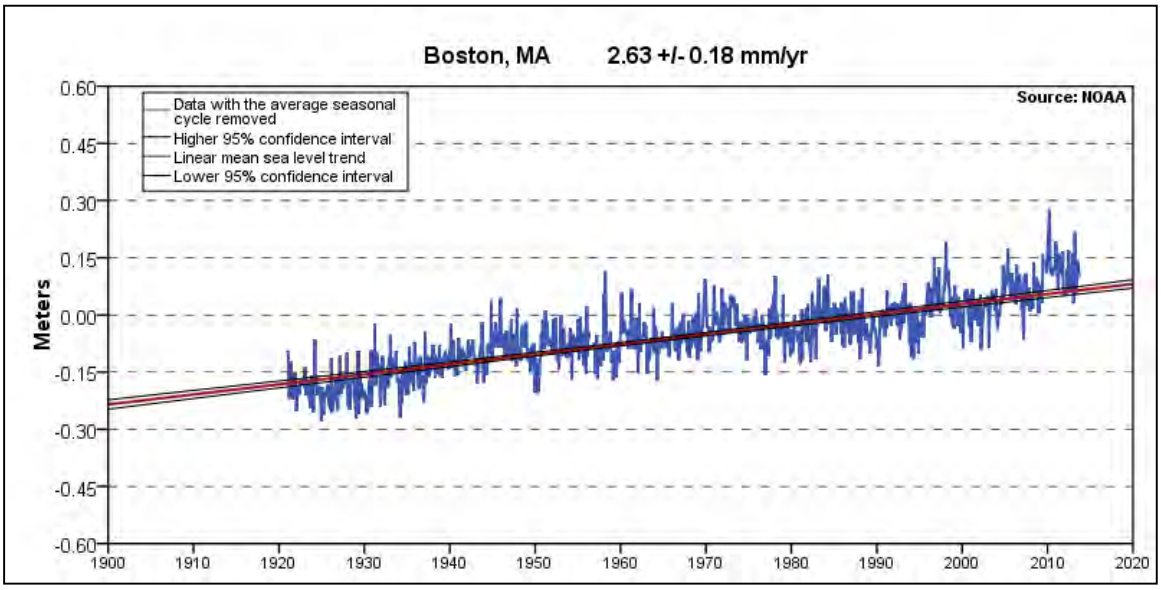

Figure 13. Sea Level Rise graph obtained from the NOAA COOPs web site.

[5] Relative long-term sea-level trends for Delaware Bay; Clinton, Connecticut; Barnstable, Massachusetts; and Chesapeake Bay (from Larsen and Clark, 2006. A search for scale in sea-level studies. *Journal of Coastal Research*, ***22(4)*** ,788–800).

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Proposed Project

The proposed project is located with Nantucket Harbor and is approximately 1,800 ft long. The applicant is proposing to install an anchored fiber roll array with reinforced soil lifts. The project will include a series of timber posts to help support and protect the fiber roll array from sliding. The project also includes approximately 1,000 cy of clean beach quality sand to replace sediment that would have been contributed by the coastal bank and to cover the lifts and fiber rolls. The face of the coastal bank will be planted with beach grass.

Performance Standards & Compliance Assessment

Wetland resource areas within one hundred feet seaward of the Project and protected by the Act and Bylaw include Coastal Beach, Coastal Bank and Land Subject to Coastal Storm Flowage. Due to the design of the project and proposed mitigation, the project will not have an adverse affect on any of these resources areas.

Nantucket Wetland Regulations, Section 2.01B: Land Under The Ocean

Land under the ocean provides feeding areas, spawning and nursery grounds, and shelter for manycoastal organisms related to marine fisheries and wildlife. Destruction of eelgrass beds (Zostera marina) will harm scallop production. Nearshore areas, and in some cases offshore areas, of land under the ocean help reduce storm damage, erosion, and flooding by diminishing and buffering the high energy effects of storms. Submerged sand bars dissipate wave energy. Such areas provide a source of sediment for seasonal rebuilding of coastal beaches and dunes. The bottom topography and sediment type of nearshore areas of land under the ocean is critical to erosion control, storm damage protection, and flood control. Water circulation and flushing rates, distribution of grain size, water quality (including but not limited to turbidity, temperature, nutrients, pollutants, salinity, and dissolved oxygen), and the habitat of wildlife, finfish, and shellfish are all factors critical to the protection of significant wildlife habitat and marine fin and shell fisheries. Land under the ocean in an unobstructed state is important to recreational swimming, fishing, and shellfishing, to recreational boating and sailing, to commercial fishing and shellfishing, and to wetland scenic views.

In view of the foregoing, whenever a proposed project involves removing, filling, dredging, altering or building upon land under the ocean, the Commission shall find that such land is significant to the protection of the following interests: flood control, erosion control, storm damage prevention, fisheries, shellfish, wildlife, significant wildlife habitat, recreation, and wetland scenic views. These findings may be overcome only upon a clear showing that the Land Under the Ocean does not play a role in protecting any of the interests given above and only upon a specific written determination to that effect by the Commission.

> *8. Water dependent projects shall be designed and performed so as to cause no adverse effects on wildlife, erosion control, marine fisheries, shellfish beds, storm damage prevention, flood control, recreation, and aquatic vegetation.*

This project does not involve removing, filling, dredging, altering, or building on land under the ocean. has been specifically designed to not have an impact on land under the ocean. The project is at the toe of the bank and will not encroach below the Mean High Water Line.

Additionally, the quantity of sediment that will be placed on the face of the bank has been carefully calculated to ensure that only the quantity of sand that would naturally reach the beach and nearshore system will be available during storms. Therefore, no adverse impacts will occur to wildlife, erosion control, marine fisheries, shellfish beds, storm damage prevention, flood control, recreation, and aquatic vegetation will occur.

Coastal Beach

The proposed sacrificial sand cover to be placed at the base of the coastal bank, covering the reinforced soil lifts and the coir fiber roles at the base of the bank where it intersects the coastal beach resource area. The soil lifts and coir fiber rolls will be covered with beach quality sand which will be available to the beach during storms. The coastal beach resource areas are important because they assist in storm damage prevention, erosion and flood control by allowing absorbing wave energy thus aiding in the protection of the toe of the bank and provide sediment to feed the adjacent coastal beach. The cover material will be composed of beach compatible sand and will therefore serve as a source of sediment for downdrift coastal resource areas. The cover material will not reduce the ability of the coastal beach to perform as a protector for the coastal bank and as a source of sediment, and meets all of the following performance standards of a coastal beach found at 310 CMR 10.27 and NWR Section 2.02B:

Wetland Protection Act Regulations, 310 CMR 10.27 – Coastal Beach

Pursuant to 310 CMR 10.27, coastal beaches are significant to storm damage prevention, flood control and the protection of wildlife habitat as they dissipate wave energy by their gentle slope, their permeability and their granular nature, which permit changes in beach form in response to changes in wave conditions. Furthermore, coastal beaches serve as a sediment source for dunes and subtidal areas, and also serve as a sediment source for downdrift coastal areas.

Coastal beaches serve the purposes of storm damage prevention and flood control by dissipating wave energy, by reducing the height of storm waves, and by providing sediment to supply other coastal features. Additionally, wildlife (birds) may nest in the coastal berm, between the toe of a dune and the high tide line.

While the project involves limited work on the coastal beach, the presumption that the coastal beach is significant to storm damage prevention, flood control and the protection of wildlife habitat, is overcome. The coastal beach at this locus is deprived of sediment buildup due to erosion and thus currently cannot function effectively due to its location. Recent storms have left the beach depressed in elevation, thus allowing an abnormal amount of direct wave attack to the base of the bank. The frequent wave attacks have caused instability at the base of the coastal bank causing it to erode and slump. Hence, the coastal beach is starved of beach building sediment and is unable to perform its intended functions which are to break waves and protect the base of the coastal bank.

The Regulations provide that when a coastal beach is determined to be significant to storm damage prevention, flood control, or protection of wildlife habitat, the following performance standards apply (310 CMR 10.27(3) to (7)):

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3. 310 CMR 10.27(3). Any project on a coastal beach, except any project permitted under 310 CMR 10.30(3)(a) shall not have an adverse effect by increasing erosion, decreasing the volume or changing the form of any such coastal beach or an adjacent or downdrift coastal beach.

The sand cover over the fiber roll array will aid in storm damage prevention, erosion and flood control by dissipating wave energy before the waves severely erode the base of coastal bank which serves as the foundation associated with coastal bank stabilization. The proposed project will continue to provide for the replenishment of the volume of the beach and therefore decrease the rate of erosion. Therefore, the project meets the performance standard found in 310 CMR 10.27(3).

4. Any groin, jetty, solid pier, or other such solid fill structure which will interfere with littoral drift, in addition to complying with 310 CMR 10.27(3), shall be constructed as follows:

(a) It shall be the minimum length and height demonstrated to be necessary to maintain beach form and volume. In evaluating necessity, coastal engineering, physical oceanographic and/or coastal geologic information shall be considered.

(b) Immediately after construction any groin shall be filled to entrapment capacity in height and length with sediment of grain size compatible with that of the adjacent beach.

(c) Jetties trapping littoral drift material shall contain a sand by-pass system to transfer sediments to the downdrift side of the inlet or shall be periodically redredged to provide beach nourishment to ensure that downdrift or adjacent beaches are not starved of sediments.

This performance standard does not apply as the project does not include the construction of a groin, jetty, solid pier, or other such solid fill structure which will interfere with littoral drift.

5. Notwithstanding 310 CMR 10.27(3), beach nourishment with clean sediment of a grain size compatible with that on the existing beach may be permitted.

The cover material over the fiber rolls will provide for sand contribution to the beach and system as waves reach the base of the bank in storm events. The cover material consisting of the placement of clean supplemental material of similar grain size will be replaced at a minimum of once a year if it is eroded during a severe storm. The erosion of this supplemental material provides compatible material to the nearshore and the adjacent beaches and by removal of the sand cover during storm events, sand will be provided to the littoral system that normally would be available from a functioning coastal bank during a severe storm. This material will provide sacrificial sand along the toe of the coastal bank and will replace sand that would naturally be eroded from the foundation base of the coastal bank.

6. In addition to complying with the requirements of 310 CMR 10.27(3) and 10.27(4), a project on a tidal flat shall if water-dependent be designed and constructed, using best available measures, so as to minimize adverse effects, and if non-water-dependent, have no adverse effects, on marine fisheries and wildlife habitat caused by:

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(a) alterations in water circulation,
(b) alterations in the distribution of sediment grain size, and
(c) changes in water quality, including, but not limited to, other than natural fluctuations in the levels of dissolved oxygen, temperature or turbidity, or the addition of pollutants.

This performance standard does not apply as the project is not proposed on a tidal flat.

7. Notwithstanding the provisions of 310 CMR 10.27(3) through 10.27(6), no project may be permitted which will have any adverse effect on specified habitat sites or rare vertebrate or invertebrate species, as identified by procedures established under 310 CMR 10.37.

The existing conditions at the locus, caused by the lack of sediment buildup, do not allow for natural buildup of the beach elevation or creation of a natural dune at the base of the bank. The proposed project is not anticipated to remedy this situation. However, the project proposes to provide sediment at the base of the back along the beach as sacrificial material to feed the beach.

Nantucket Wetland Regulations, Section 2.02B: Coastal Beaches

1. The provisions of Section 2.01B (1-8) (Land Under the Ocean) shall apply to coastal beaches and tidal flats.

The project meets the performance standards found at NWR §2.01B (1-5) (Land Under the Ocean) as the project does not involve any dredging activity (NWR §2.01B(1)) and does not involve an aquacultural project or the construction, maintenance or repair of any pier (NWR §§2.01B(2 - 5)).

The project also satisfies the performance standard found at NWR §§2.01B(7) as it will cause no adverse effects on wildlife, erosion control, marine fisheries, shellfish beds, storm damage prevention, flood control and recreation. The existing coastal bank and coastal beach have been eroded by storms and the main purpose of the project is to prevent or slow down erosion at the property thereby increasing storm damage prevention and flood control resulting in a stabilized coastal bank that is significant to the interest of flood control, erosion control and storm damage prevention. With regard to wildlife, the project is located within an area of existing development and the coastal beach is currently used as a recreational beach. The proposed base stabilized coastal bank will be planted with vegetation, resulting in the project protecting the interest of wildlife and certainly presenting no greater effect on wildlife than those that may presently exist.

The project is a water dependent use and therefore does not require a waiver. We make this statement because the Nantucket Regulations define water dependent as follows:

Water Dependent Projects or Uses - projects which require direct wetlands access for their intended use and therefore cannot be located out of the Area Subject to Protection Under the Bylaw. ***Examples include but are not limited to****: docks, piers, boat landings,*

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boathouses, marinas, stairs to beaches, and boardwalks over wetland vegetation. Projects which benefit from wetlands access but which do not require it are not water dependent uses. Examples include: restaurants, dwellings, and commercial enterprises servicing marine-related uses such as fish markets, repair facilities, ships' chandleries, and general use recreational trails.

Our project is water dependent because it requires direct access to the wetland access and cannot be located outside the area subject to projections. The definition defines seven example projects. However, the regulations state that the examples include, but are not limited to, the examples stated.

2. No new bulkheads or coastal engineering structures shall be permitted to protect structures constructed, or substantially improved, after 8/78. Bulkheads may be rebuilt only if the Commission determines there is no environmentally better way to control an erosion problem, including in appropriate cases the moving of the threatened building. Other coastal engineering structures may be permitted only upon a clear showing that no other alternative exists to protect a structure built prior to 9/78, and not substantially improved, from imminent danger.

We are not proposing a coastal engineering structure such as a bulkhead, pier, or groin.

3. Dredging projects in flats must be done in accordance with such procedures as the Commission determines would disturb the absolute minimum amount of habitat possible.

This performance standard does not apply as the project does not include any dredging in flats.

4. Clean fill of similar grain size may be used on a Coastal Beach but not on a Tidal Flat, only if the Commission authorizes its use, and only if such fill is to be used for a beach or dune nourishment project. All possible mitigation measures shall be taken, as determined by the Commission, to limit the adverse effects of the fill.

The Applicant is proposing to use clean fill of similar grain size as sacrificial material for the coastal beach. No work is proposed on a tidal flat.

5. No part of any septic system shall be placed in shifting sands or on a coastal beach. The septic leach facility shall be at least 100 feet from the spring high tide line.

This performance standard does not apply as the project does not include the installation or repair of a septic system.

6. All work on projects which are not water dependent shall maintain at least a 25-foot natural undisturbed area adjacent to a coastal beach. All structures which are not water dependent shall be at least 50 feet from a coastal beach.

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This performance standard does not apply as the project requires direct resource area access for its intended use and consists of the installation of coir rolls and the placement of a sand cover over the rolls at the toe of the coast bank.

> *7. In areas of eroding shoreline, the distance from all buildings to the coastal beach shall be at least 20 times the average annual shoreline erosion or 100 feet, whichever is the lesser. The average annual shoreline erosion rate shall be determined by averaging the annual erosion rate over a 150 year period ending the date the NNOI was filed, or if no NNOI was filed, the date construction began. If erosion data is not available for the 150-year period, the Commission shall determine the average annual erosion rate from such lesser time period for which erosion data is available. In cases where documentation can be provided to show that the use of the 150-year period is inappropriate to existing shoreline characteristics and trends, alternate shoreline change rates may be used when based on a preponderance of credible evidence.*

This performance standard does not apply as the project does not include the construction of any buildings.

> *8. Vehicular access for existing houses or for recreational use shall be as unpaved ways and shall be done in accordance with such procedures as the Commission determines will minimize any adverse effect on the beach and the Interests of the Bylaw.*

This performance standard does not apply as the project does not include the installation, maintenance or repair of vehicular access.

E.2 <u>Coastal Bank</u>

The coastal bank is unable to properly sustain vegetation as a result of the slope becoming over-steepened due to erosion and slumping caused by the toe of the bank being eroded. Therefore, the existing coastal bank is not able to provide wildlife habitat to rare, endangered, and otherwise significant wildlife. The project seeks to improve the current condition of the coastal bank by stabilizing the foundation toe and lower face of the coastal bank using rows of anchored sand filled tubes along the base of the bank upward and the placement of sand cover over the face of the tubes. Additionally, the area of the scarped upper bank will be restored by adding fill and re-grading to a sustainable slope. The face of the upper bank will then be re-vegetated with beach grass. The project meets all of the following performance standards of a Coastal Bank found at 310 CMR 10.30 and NWR §2.05B:

<u>Wetland Protection Act Regulations, 310 CMR 10.30: Coastal Banks</u>

Pursuant to 310 CMR 10.30, coastal banks are likely to be significant to storm damage prevention and flood control by supplying sediment to coastal beaches, coastal dunes and barrier beaches and, due to their height, provide a buffer to upland areas from storm waters.

Coastal banks, because of their height and stability, may act as a buffer or natural wall, which protects upland areas from storm damage and flooding. Bank vegetation tends to stabilize the bank and reduce the rate of erosion due to wind and rain runoff. However, here, the coastal

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bank's ability to provide storm damage protection has been severely degraded as the bank is actively eroding.

The project recognizes that the coastal bank is significant to both storm damage prevention and flood control because it supplies sediment to coastal beaches, coastal dunes or barrier beaches and acts as a protective barrier. Therefore, the project is designed to allow the cover over the soil lifts to erode in response to wave action and supply material to downdrift coastal areas. The coastal bank is also significant to storm damage prevention and flood control as it serves as a vertical buffer to storm waters and therefore the project was also designed to stabilize the bank.

The Regulations provide that when a coastal bank is determined to be significant to storm damage prevention or flood control because it supplies sediment to coastal beaches, coastal dunes or barrier beaches and serves as a vertical buffer to storm waters, the following performance standards apply (310 CMR 10.30(3) to (8)):

> *3. No new bulkhead, revetment, seawall, groin or other coastal engineering structure shall be permitted on such a coastal bank except that such a coastal engineering structure shall be permitted when required to prevent storm damage to buildings constructed prior to the effective date of 310 CMR 10.21 through 10.37 or constructed pursuant to a Notice of Intent filed prior to the effective date of 310 CMR 10.21 through 10.37 (August 10, 1978), including reconstructions of such buildings subsequent to the effective date of 310 CMR 10.21 through 10.37, provided that the following requirements are met:*
>
> > *(a) a coastal engineering structure or a modification thereto shall be designed and constructed so as to minimize, using best available measures, adverse effects on adjacent or nearby coastal beaches due to changes in wave action, and*
> > *(b) the applicant demonstrates that no method of protecting the building other than the proposed coastal engineering structure is feasible.*
> > *(c) protective planting designed to reduce erosion may be permitted.*

This regulation does not apply as we are not proposing to construct a coastal engineering structure. Additionally, the project is designed to avoid, or at least mitigate, potential adverse effects on adjacent or nearby coastal beaches due to changes in wave action. The project is designed to stabilize the toe of the coastal bank with a soft engineering solution that is not a coastal engineering structure.

> *4. Any project on a coastal bank or within 100 feet landward of the top of a coastal bank, other than a structure permitted by 310 CMR 10.30(3), shall not have an adverse effect due to wave action on the movement of sediment from the coastal bank to coastal beaches or land subject to tidal action.*

Since the project is permitable pursuant to 310 CMR 10.30(3), this performance is not applicable. However, the project will improve the condition of the coastal beach and coastal bank. This performance standard is clearly met as the project proposes to stabilize the coastal bank while concurrently providing sediment to downdrift areas.

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5. The Order of Conditions and the Certificate of Compliance for any new building within 100 feet landward of the top of a coastal bank permitted by the issuing authority under M.G.L. c. 131, § 40 shall contain the specific condition: 310 CMR 10.30(3), promulgated under M.G.L. c. 131, § 40, requires that no coastal engineering structure, such as a bulkhead, revetment, or seawall shall be permitted on an eroding bank at any time in the future to protect the project allowed by this Order of Conditions.

This performance standard does not apply as the project is not proposing any new buildings.

6. Any project on such a coastal bank or within 100 feet landward of the top of such coastal bank shall have no adverse effects on the stability of the coastal bank.

The project meets this performance standard as the project will not adversely affect the stability of the coastal bank but actually seeks to improve the stability of the costal bank by stabilizing the foundation toe and lower face of the coastal bank. This sand cover will be replenished on a regular basis as it is removed by wave activity. The base of the bank would therefore continue to function as a sediment supply source.

7. Bulkheads, revetments, seawalls, groins or other coastal engineering structures may be permitted on such a coastal bank except when such bank is significant to storm damage prevention or flood control because it supplies sediment to coastal beaches, coastal dunes, and barrier beaches.

While the coastal bank is significant to both storm damage prevention and flood control in part by supplying sediment to coastal beaches, coastal dunes, and barrier beaches, it is permitable under 310CMR 10.30 because it is not coastal engineering structure. However, the project will result in a stabilized coastal bank which, along with sand cover will increase the stability of the coastal bank and improve its capability to provide storm damage protection as a vertical buffer. Additionally, the proposed project will provide sediment to downdrift areas.

8. Notwithstanding the provisions of 310 CMR 10.30(3) through (7), no project may be permitted which will have any adverse effect on specified habitat sites of rare vertebrate or invertebrate species, as identified by procedures established under 310 CMR 10.37.

The proposed project will not occur within the estimated habitat however, there is mapped potential habitat offshore of the beach and is presumed to be a feeding area for birds. According to previous letters from the Division of Fisheries & Wildlife, Natural Heritage & Endangered Species Program ("NHESP"), if work is prohibited between April 1 and August 31 of any year, "the project will not result in an adverse impact to the resource area habitats of state-listed wildlife species." If the Commission thinks it is appropriate, we will adhere to the time of year restrictions to avoid any potential conflict. Additionally, the proposed project is located within an area of existing development and the coastal beach is currently used as a recreational beach. The proposed improved coastal bank will be replanted with vegetation, resulting in the proposed project protecting the interest of wildlife and certainly presenting no greater effect on wildlife than those that may presently exist.

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Nantucket Wetland Regulations, Section 2.05B: Coastal Bank

> *1. No new bulkheads, coastal revetments, groin, or other coastal engineering structures shall be permitted to protect structures constructed, or substantially improved, after 8/78 except for public infrastructures. Bulkheads and groins may be rebuilt only if the Commission determines there is no environmentally better way to control an erosion problem, including in appropriate cases the moving of the threatened buildings and/or public infrastructure. Other coastal engineering structures may be permitted only upon a clear showing that no other alternative exists to protect a structure that has not been substantially improved or public infrastructure built prior to 9/78, from imminent danger.*

This project employs soft engineering components and is not a coastal engineering structure.

> *2. Piers shall be constructed in compliance with the Town of Nantucket Zoning Bylaws (e.g. Section 136-22B 6/30/00) using procedures determined by the Commission to be the best available measures to minimize adverse effects on Interests Protected by the Bylaw.*

This performance standard does not apply as the project does not include the construction of a pier.

> *3. All projects shall be restricted to activity as determined by the Commission to have no adverse effect on bank height, bank stability, wildlife habitat, vegetation, wetland scenic view, or the use of a bank as a sediment source.*

The proposed project will not have any such adverse effects and will increase bank stability. The bank height will not be altered and the project proposes to stabilize the bank. Additionally, vegetation can act as habitat for endangered species. As the project proposes to stabilize the bank along with sand cover replenishment, it will vastly improve the bank's function as a sediment source without jeopardizing the foundation of the toe of the coastal bank. The project will replace the sand that would normally be eroded from the bank during storms however, since the Commission has required a waiver request for this paragraph for previous projects, we will submit a waiver request for this paragraph in the Notice of Intent.

> *4. Elevated walkways designed not to affect bank vegetation shall be required for pedestrian passage over a bank.*

There are presently stairs over the bank to the beach at both of the properties. The stairs provide elevated access to the beach and prevent people from traversing the face of the coastal bank. We are asking to rebuild and to maintain these existing stairs as appropriate.

> *5. All projects which are not water dependent shall maintain at least a 25-foot natural undisturbed area adjacent to a coastal bank. All structures which are not water dependent shall be at least 50 feet from a coastal bank.*

As stated above, this performance standard does not apply as the project is not proposing a structure and requires direct wetland access for its intended use. Additionally, the project seeks to protect a pre-existing structure, restore an eroding coastal bank, supply a source of sediment for downdrift coastal resource areas, and provide a safe access to the recreational beach.

> *6. The septic leach facility of a septic system shall be at least 100 feet from the top of the coastal bank and shall not be located within the face of the coastal bank.*

This performance standard does not apply as the project does not include the installation or repair of a septic system.

> *7. In areas of eroding shoreline, the distance from all buildings to the coastal bank shall be at least 20 times the average annual shoreline erosion or 100 feet, whichever is the lesser. The average annual shoreline erosion rate shall be determined by averaging the annual erosion over 150-year period ending the date the NOI was filed, or if no NOI was filed, the date construction began. If erosion data is not available for the 150-year period, the Commission shall determine the average annual erosion rate from such lesser time for which erosion data is available. In cases where documentation can be provided to show that use of the 150-year period is inappropriate to existing coastal shoreline characteristics and trends, alternate shoreline change rates may be used when based on a preponderance of credible evidence.*

This performance standard does not apply as the project does not include the construction of any buildings.

> *8. All permits issued for the construction of buildings under the Bylaw within 100 feet landward of the top of a coastal bank shall contain the specific condition that no coastal engineering structure of any kind shall be permitted on an eroding bank in the future to protect the project allowed by this permit, except those coastal engineering structures allowed by a waiver issued pursuant to Section 1.03F of these regulations.*

As stated above, this performance standard does not apply as the project does not include the construction of any buildings. However, due to the rapid erosion of the coastal bank the project seeks to protect the existing structure and the coastal bank from additional failure and seeks to protect the existing structure as the distance from the existing structure to the coastal beach is diminishing. Therefore, the project is necessary to maintain an adequate distance between the existing structure and the coastal beach in order to allow the coastal beach to properly function.

E.3 <u>Land Subject to Coastal Storm Flowage</u>
<u>Nantucket Wetland Regulations, Section 2.10B:</u>

> *1. The work shall not reduce the ability of the land to absorb and contain flood waters, or to buffer inland areas from flooding and wave damage.*

The proposed project will not reduce the ability of the land to absorb and contain flood waters and will not buffer inland areas from flooding and/or wave damage.

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2. Projects shall not cause ground, surface, or salt water pollution triggered by coastal storm flowage. All septic tanks shall be outside the 100-year floodplain.

The proposed project will not cause ground, surface, or salt water pollution triggered by coastal storm flowage and a septic system is not being proposed.

3. All private underground fuel tanks shall be outside the 100-year floodplain. Commercial tanks shall be outside the 100-year floodplain, or if the Commission determines this is not practicable, the commercial tanks shall be secured so that they cannot float loose.

This performance standard does not apply as the project does not include underground fuel tanks.

4. Building upon areas subject to coastal storm flowage in locations where such structure would be subject to storm damage may not be permitted. If permitted, all construction must be in compliance with state and local building code regulations for flood hazard areas.

This performance standard does not apply as the project does not propose a structure subject to state and local building codes regulations.

Conclusion

The proposed project will increase the ability of the coastal bank to act as a barrier to flood waters by stabilizing the toe of the bank. Additionally, the proposed project will provide sacrificial sediment that will be available during storm events to provide sediment to the beach and adjacent beaches. The proposed project complies with the regulations, bylaws, and performance standards of both Massachusetts and Nantucket. Therefore, it is permitable under both the Wetlands Protection Act and the Nantucket Wetland Protection bylaws.

Sincerely,

Lee L Weishar

Lee Weishar, PhD; PWS
Senior Scientist

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April 29, 2016

Mr. Ernest Steinauer, Chair
Nantucket Conservation Commission
2 Bathing Beach Road
Nantucket, MA 02554

Re: Notice of Intent Application
47, 53, 55, 57, 61, 63, 67, 69 Pocomo Road
DEP File No. SE48-2874
NHESP Tracking No. 16-35464

Dear Mr. Steinauer:

The purpose of this letter is to provide supplemental information in response to questions and comments at the first public hearing, as well as from Natural Heritage & Endangered Species Program of the Massachusetts Division of Fisheries & Wildlife (Division), on the referenced application.

Attached is an updated site plan and sieve analysis results from soil samples taken from the coastal bank. The revised site plan includes details of the terminal ends of the proposed project. The westerly end of the project terminates to a permitted sand drift fence. The easterly end has been moved back from the property line common with Nantucket Conservation Foundation by ten feet. Additional sand nourishment will be placed in this area with each maintenance activity. The purpose is to offset any localized terminal effects, which are expected to be minor in scope, if any. The updated site plan includes additional monitoring transects, located approximately every 300-feet, for a total of seven.

In response to specific questions and comments,

<u>From the Division</u>:

1. Provide information relative to the maintenance of the proposed structure.

   a. How will the applicants ensure a sand cover of 4-6 inches overtop the coir; are benchmarks proposed?

      Four to six-inches of sand is the proposed cover for the top three vegetated coir rolls; there will be more over the lower rolls as a result of the slope (please see attached cross sectional drawing). The twice-per-year survey will determine the elevation of the sand cover, which can be compared to the known elevation of the top of the coir rolls.

   b. How will the applicants "assess the need for maintenance"; what constitutes the need for maintenance?

      The project condition will be inspected at least twice per year, as well as following any storm event when the wind exceeds forty miles per hour for six consecutive hours. Maintenance will be performed if there is any visible damage to the system.

c. Does the project propose to monitor the beach elevation in front of the structure?

Yes, additional survey transects have been added to the plan, which will be measured twice per year and reported to the Commission in plan format.

2. Provide information relative to the project design.

a. Will the 4”x 4” posts be connected by any other horizontal or vertical framework (e.g. stringers or pickets)?

No. The posts will be free-standing, with a top elevation that has been reduced, and will be slightly above or just below the sand when the system is in equilibrium.

b. According to the plan, the proposed sand cover ends ± 2-3 feet above the beach elevation, what will keep this material in place?

The plan detail has been clarified to depict the bank slope extending to the beach level. Sediment at this slope is within the angle of repose, and will not require any structural reinforcement.

c. Will the ends of the structure taper into the existing Coastal Bank?

Yes, at 45-degrees, as shown on the updated site plan.

3. Provide clarification regarding to the following items.

a. The amount of nourishment proposed: will a specific amount occur annually or is it proposed only if needed as cover for the structure?

Nourishment will be added as needed to maintain the cover and/or the slope shown on the plans. The applicant will monitor, and supply only the required amount of sand such that it is not over nourishing.

b. The plantings and density. The Project Description, Waiver Request, and Wilkinson Report all contain conflicting information.

The plantings and density will be per the Wilkinson Report. The plantings will be monitored and reported to the Commission as a condition of the Order. Any discrepancies have been rectified.

<u>From the Commission</u>:

Will the sand nourishment be overly transported by the wind, and will it have adverse impact on the eelgrass beds?

It will not, as the provided sediment will have similar characteristics of sand in the bank as demonstrated by the provided sieve analysis results from the bank and supply pit (Reis). This is further supported by the filed correspondence from Woods Hole Group. The applicant will monitor, and supply only the required amount of sand such that it is not over nourishing; therefore, the project will replicate what the bank would naturally supply.

Request for a meiofauna study.

The Applicant agrees to take a summer sample of the invertebrate life within the beach from three locations in the project area, and two from the beach north, and two from the beach south, of the project area. The locations of all samples shall be provided to the Commission.

Provide historic photos of the bank

Attached are a series of aerial photos that depict varying amounts of vegetation on the face of the bank. The proposed project and plantings will improve the existing bare bank by meeting the interest described in the Regulations, Section 2.05.A.1 – "Vegetation tends to stabilize a coastal bank and reduce the rate of erosion due to wind and rain runoff. Vegetated banks are critical to reducing wind and rain erosion and for providing important habitat and biodiversity."

Is the coastal bank used by birds (swallows) for nesting?

There are no nesting holes apparent in the coastal bank for the length of the project area.

Is there groundwater seeping out of the coastal bank in the project area?

There is no evidence of exposed clay layers and/or weeping groundwater apparent from the bank for the length of the project area.

How will we monitor the cobble content of the beach?

The beach composition is highly dynamic as shown in the report photos where there is no evidence of cobbles. The Applicant will monitor and provide photos of the beach composition at each transect location. Additionally, we will only be replacing sand that has been lost to the system naturally. Therefore, the dynamic nature of the beach and nearshore area will continue to occur naturally.

What phase of the tide did the January 24, 2016 storm occur?

The storm occurred during the lunar high.

What is the failure criteria for the project?

Damage that requires replacement of greater than 50% of the project materials over two consecutive years. Should this occur, the Applicant will apply for an Amended Order of Conditions to modify the project based on review and approval of the Commission.

Need more monitoring transects.

We have added a transect every 300-feet, for a total of seven transects.

Will the nourishment be matching the sediment naturally contributed by the bank?

Yes, the sand nourishment will have similar characteristics of sand in the bank as demonstrated by the provided sieve analysis results from the bank and supply pit (Reis).

Is this a sustainable project, will Nantucket run out of available sediment from inland sources?

The applicant will maintain a volume and not a set amount of sand each year. There are large volumes of sand available for excavation at both the Holdgate and Reis Pits. Sand could also be brought over on a barge as gravel currently is delivered.

How is success of this project determined?

Through the monitoring requirements the Applicant will demonstrate that the coastal bank will become partially colonized with vegetation within the first growing season, and at least 75% of the disturbed coastal bank above the fiber roll array will be well-vegetated within 3 years.

How long until it is likely to be deemed "successful"?

Within three-years we expect at least 75% of the bank to be covered with established vegetation, as described above.

How does each end terminate? Will there be end scour?

The revised site plan includes details of the terminal ends of the proposed project. The westerly end of the project terminates to a permitted coastal stabilization project, SE48-2305. The easterly end has been moved back from the property line common with Nantucket Conservation Foundation by ten feet. Additional sand nourishment will be placed in this area with each maintenance activity. The purpose is to offset any localized terminal effects, which are expected to be minor in scope, if any.

Is there a single entity that would be responsible for the multiple properties?

The project is a collective effort per a Memorandum of Understanding executed by all of the property owners.

What happens if an individual property owner is not willing to continue to abide by imposed permit conditions?

The Order of Conditions will be recorded in the chain of title for each property. The right of enforcement will run against each individual owner. The owners are working cooperatively through a memorandum of understanding.

<u>From Nantucket Land Council:</u>

Would like more detail concerning the mesh encompassing the fiber rolls.

> *The proposed fiber rolls are the same as those approved and recently installed at 48 Shimmo Pond Road. Additional detail has been added to the attached site plan.*

Define the trigger that will result in re-nourishment

> *Through monitoring, we will determine when sand lost from the original template needs to be replaced so as to maintain the sand cover and slope of the bank.*

Define the parameters of a significant storm that will require reporting.

> *The Commission has set the parameters for other projects, which should remain consistent. Specifically, per Additional Condition 17, SE48-2789, "…storm events being defined as period of sustained winds in excess of 40 mph for a period of 6 hours…" The bi-annual monitoring will cover the effects of any intermediate storms.*

Require project representative to appear before the Commission on a regular basis to present the on-going reports.

> *The annual reports will be presented to the Commission by a project representative.*

How will the elevation of the beach and location of mean high water (MHW) be monitored?

> *The survey transects plotted over each other will show the position of MHW as it moves through space and time at each transect location. Further, the location of MHW will be shown on the site plan for each survey.*

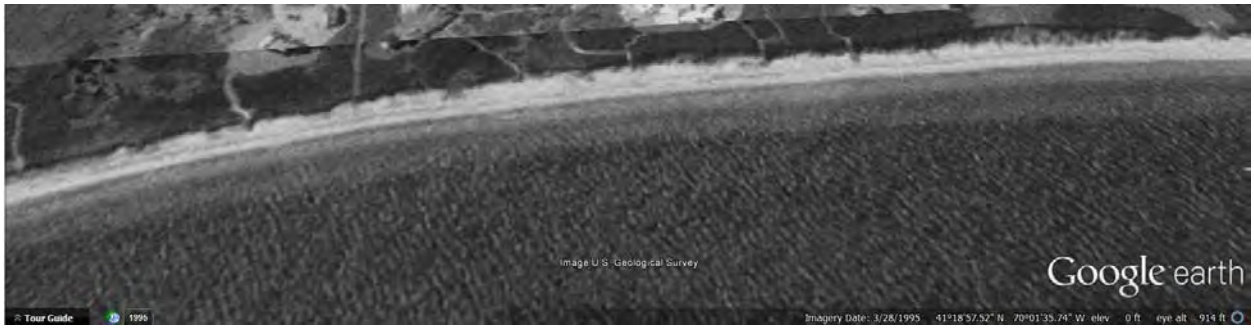
The requested project is justified, and will result in an improvement to the existing site conditions by creating a stable vegetated coastal bank, which meets and promotes the interests protected by the Commission. I plan to attend your next meeting to review this information, and address any additional questions or comments.

Sincerely,

Nantucket Engineering & Survey, P.C.
By: Arthur D. Gasbarro, PE, PLS, LEED AP

Cc: MassDEP – S.E.R.O.
Massachusetts Division of Fisheries & Wildlife - NHESP
Pocomo Neighbors (Applicants/Owners)
Arthur I. Reade, Jr., Reade, Gullickson, Hanley & Gifford, LLP
Glenn Wood, Rubin & Rudman, LLP
Lee Weishar, Ph.D., Woods Hole Group
Seth Wilkinson, Wilkinson Ecological Design, Inc.

1995:



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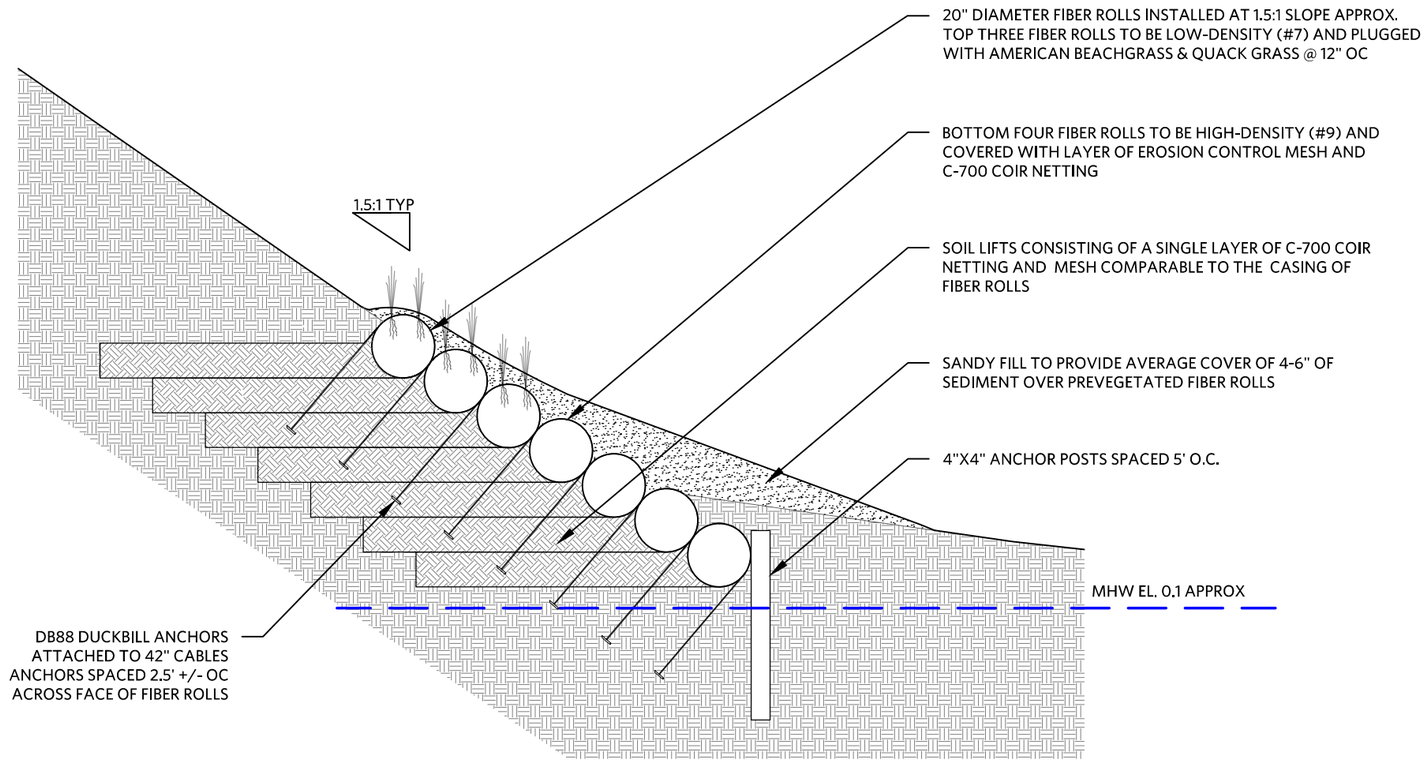

1 REINFORCED FIBER ENCASED SAND LIFT SECTION, TYPICAL

Scale: 1/4"=1'-0"

WILKINSON
ECOLOGICAL DESIGN

28 Lots Hollow Rd., Orleans, MA 02653
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WWW.WILKINSONECOLOGICAL.COM

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SURVEY PROVIDED BY:

BLACKWELL & ASSOCIATES, INC.
20 TEASDALE CIRCLE
NANTUCKET, MA 02554
(508) 228-9026

NOTES:

LEGEND:

REV	DATE	DESCRIPTION

POCOMO NEIGHBORS

47, 53, 55, 57, 61, 63, 67, & 69
POCOMO ROAD
NANTUCKET, MA

DATE: 04/2/2016	SCALE: 1/4" = 1'-0"
DRAWN BY: TtB	CHECKED BY: SW

FOR PERMITTING PURPOSES ONLY
THIS DRAWING IS NOT INTENDED FOR CONSTRUCTION

TYPICAL SECTION

SIEVE ANALYSIS RESULTS
OF COASTAL BANK SEDIMENT SAMPLES

By

BRIGGS ENGINEERING & TESTING

Prepared For

POCOMO NEIGHBORS

20 Mary Ann Drive • Nantucket, MA 02554
508-825-5053 • www.NantucketEngineer.com

Briggs Engineering & Testing
A Division of PK Associates, Inc.

Nantucket Engineering & Survey
20 Mary Ann Drive
Nantucket, MA 02554
Attn: Mr. Arthur Gasbarro

Report Date: 4/28/16

Project: **Coastal Bank-Nantucket Engr.**
Briggs #: 28878

Tested: 4/27/16
Received: 4/20/16

1	Sample No.	Description	Source of Material
	M-27132	Existing Material	Sample #1

2. Sieve Analysis {ASTM C 136, and ASTM C 117}

Sieve Size		Results	Specifications
Standard	Alternate	{% Passing by Wt.}	
100 mm	4"	100	
75 mm	3"	100	
63 mm	2-1/2"	100	
50 mm	2"	100	
37.5 mm	1-1/2"	100	
25 mm	1"	100	
19 mm	3/4"	99	
12.5 mm	1/2"	99	
9.5 mm	3/8"	99	
4.75 mm	#4	98	
2.36 mm	#8	95	
1.18 mm	#16	91	
0.600 mm	#30	69	
0.300 mm	#50	26	
0.150 mm	#100	12	
0.075 mm	#200	8.3	

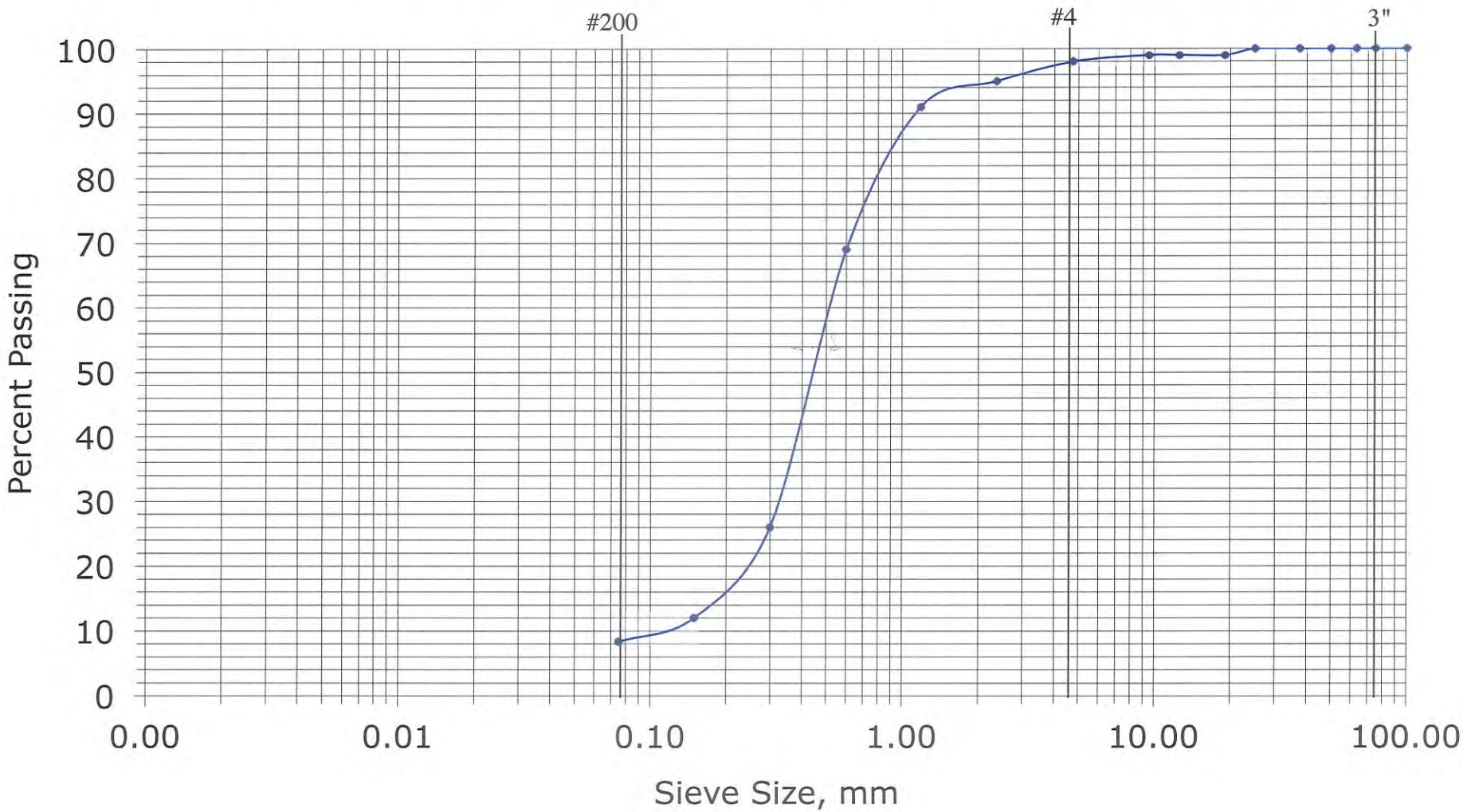
BRIGGS ENGINEERING & TESTING
A Division of PK Associates, Inc.

Sean Skorohod
Director of Testing Services
Construction Technology Division

Briggs Engineering & Testing
A Division of PK Associates, Inc.

Project:	Coastal Bank-Nantucket Engr.
Date Tested:	4/27/16
Lab Ref. No.:	M-27132

Sieve Analysis



Briggs Engineering & Testing
A Division of PK Associates, Inc.

Nantucket Engineering & Survey
20 Mary Ann Drive
Nantucket, MA 02554
Attn: Mr. Arthur Gasbarro

Report Date: 4/28/16

Project: **Coastal Bank-Nantucket Engr.**
Briggs #: 28878

Tested: 4/27/16
Received: 4/20/16

1	Sample No.	Description	Source of Material
	M-27133	Existing Material	Sample #2

2. Sieve Analysis {ASTM C 136, and ASTM C 117}

Sieve Size		Results	Specifications
Standard	Alternate	{% Passing by Wt.}	
100 mm	4"	100	
75 mm	3"	100	
63 mm	2-1/2"	100	
50 mm	2"	100	
37.5 mm	1-1/2"	100	
25 mm	1"	100	
19 mm	3/4"	100	
12.5 mm	1/2"	100	
9.5 mm	3/8"	100	
4.75 mm	#4	99	
2.36 mm	#8	98	
1.18 mm	#16	94	
0.600 mm	#30	74	
0.300 mm	#50	34	
0.150 mm	#100	11	
0.075 mm	#200	7.5	

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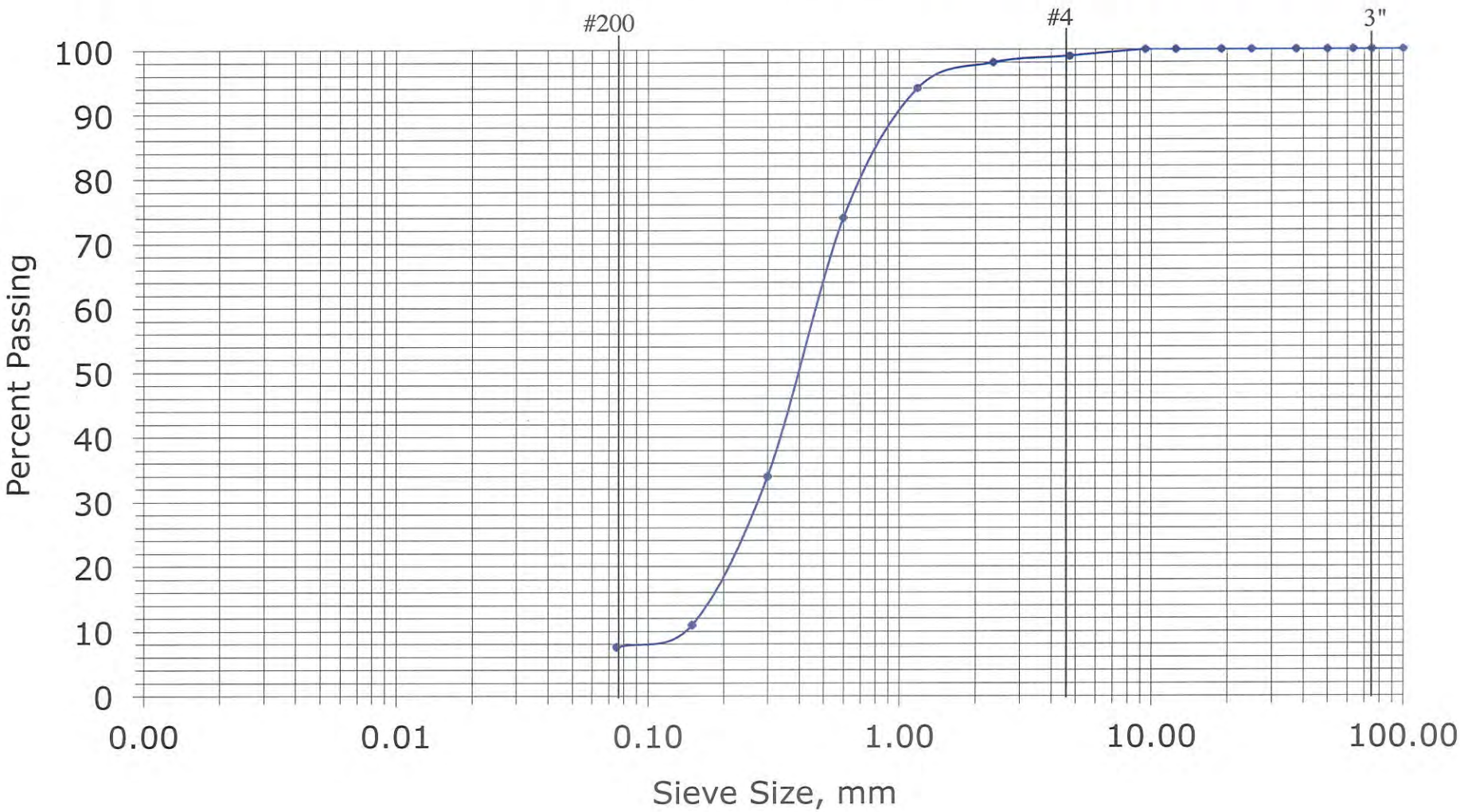
Project:	Coastal Bank-Nantucket Engr.
Date Tested:	4/27/16
Lab Ref. No.:	M-27133

Sieve Analysis



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Nantucket Engineering & Survey
20 Mary Ann Drive
Nantucket, MA 02554
Attn: Mr. Arthur Gasbarro

Report Date: 4/28/16

Project: **Coastal Bank-Nantucket Engr.**
Briggs #: 28878

Tested: 4/27/16
Received: 4/20/16

1	Sample No.	Description	Source of Material
	M-27134	Existing Material	Sample #3

2. Sieve Analysis {ASTM C 136, and ASTM C 117}

Sieve Size		Results	Specifications
Standard	Alternate	{% Passing by Wt.}	
100 mm	4"	100	
75 mm	3"	100	
63 mm	2-1/2"	100	
50 mm	2"	100	
37.5 mm	1-1/2"	100	
25 mm	1"	100	
19 mm	3/4"	100	
12.5 mm	1/2"	100	
9.5 mm	3/8"	100	
4.75 mm	#4	99	
2.36 mm	#8	96	
1.18 mm	#16	91	
0.600 mm	#30	69	
0.300 mm	#50	33	
0.150 mm	#100	13	
0.075 mm	#200	8.4	

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Sean Skorohod
Director of Testing Services
Construction Technology Division

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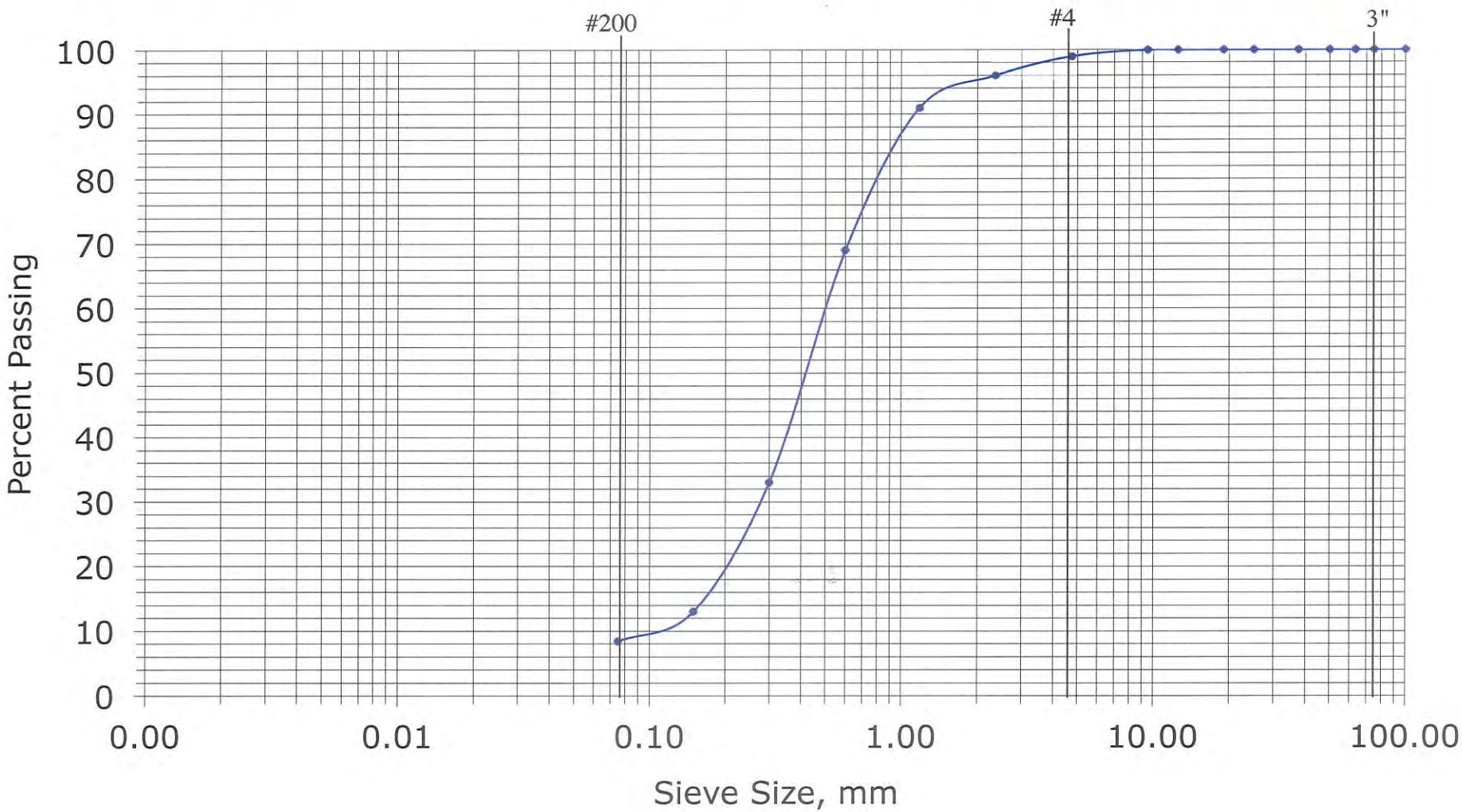
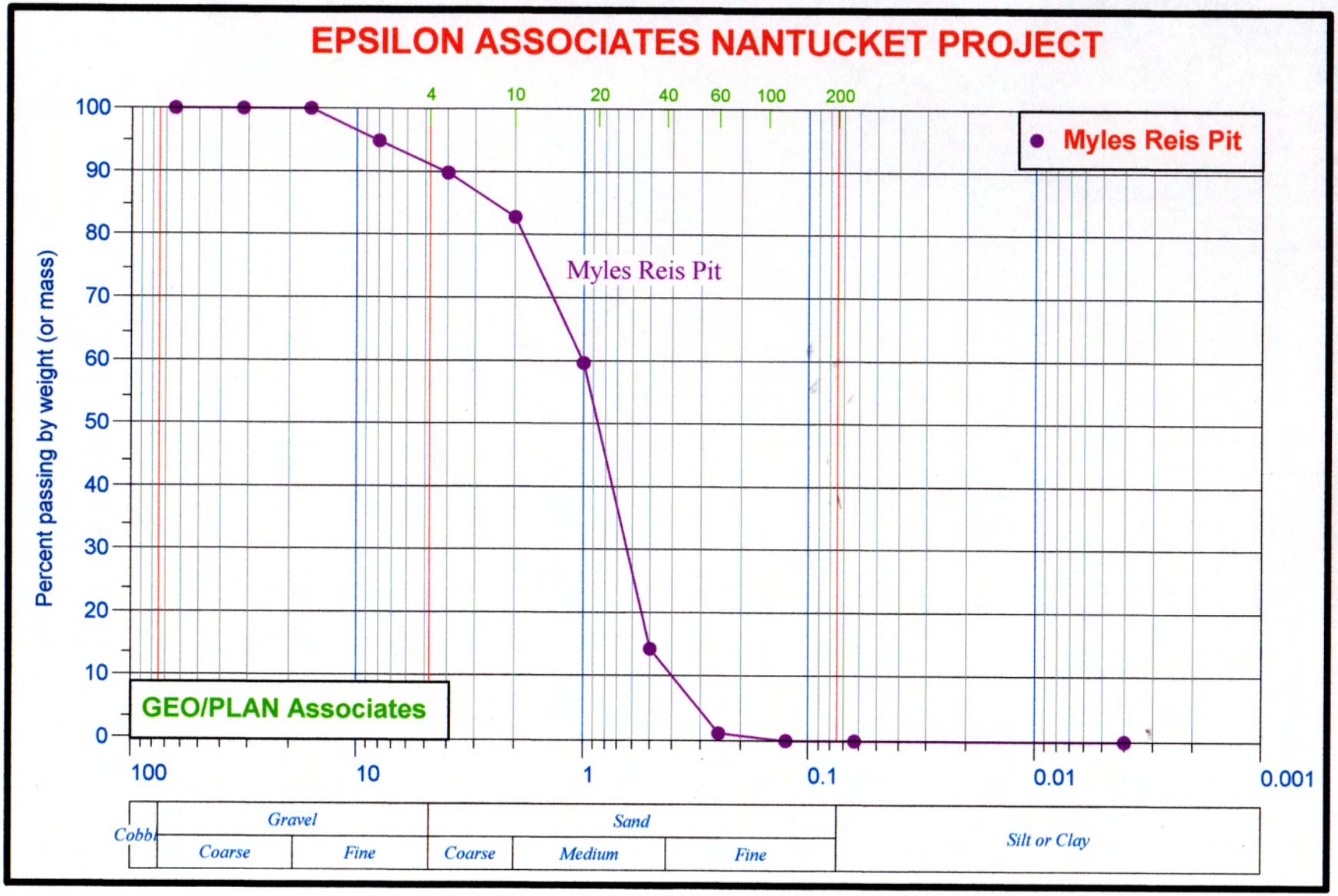
Project:	Coastal Bank-Nantucket Engr.
Date Tested:	4/27/16
Lab Ref. No.:	M-27134

Sieve Analysis



Reis Sand Pit
Sediment Analysis From
Record Files



GEO/PLAN Associates
Sediment Grain Size Analysis
Client:Epsilon Associates
Project: Nantucket, MA
Project Location: Nantucket, MA
Project No.
Date: October 2011

Sample: **Myles Reis Pit**

Phi	Cum Wt	Total Wt	% Wt	Cum %	Sand Only % Wt	Sand Only Cum %
>-5	0.00	0.00	0.00	0.00	0.00	0.00
-4	0.00	0.00	0.00	0.00	0.00	0.00
-3	5.91	5.91	5.05	5.05	5.05	5.05
-2	12.01	6.11	5.22	10.27	5.22	10.27
-1	20.16	8.15	6.97	17.24	6.97	17.24
0	47.07	26.92	23.02	40.25	23.02	40.25
1	100.01	52.94	45.27	85.53	45.27	85.53
2	115.54	15.53	13.28	98.81	13.28	98.81
3	116.91	1.37	1.17	99.98	1.17	99.98
4	116.93	0.03	0.02	100.00	0.02	100.00

Phi	Total Wt	Bkr Wt	Corr. Wt	Wt Frac	% Wt	Bk No.
Silt	0.0000	0.0000	0.0000	0.0000	0.0000	--
Clay	0.0000	0.0000	0.0000	0.0000	0.0000	--
		Disp. Wt	0.0000			

Wt. Coarse	116.9300
Wt Fine	0.0000
Total Wt	116.9300

Phi	Wt %	Phi Mid Pt	Wt % Mid Pt	Mid pt - Mean (=X)	X sq	X sq Wt %
>-5	0.00	-5.50	0.00	-5.43	29.47	0.00
-4	0.00	-4.50	0.00	-4.43	19.61	0.00
-3	5.05	-3.50	-17.68	-3.43	11.76	59.37
-2	5.22	-2.50	-13.05	-2.43	5.90	30.80
-1	6.97	-1.50	-10.45	-1.43	2.04	14.22
0	23.02	-0.50	-11.51	-0.43	0.18	4.23
1	45.27	0.50	22.64	0.57	0.33	14.78
2	13.28	1.50	19.92	1.57	2.47	32.78
3	1.17	2.50	2.93	2.57	6.61	7.75
4	0.02	3.50	0.07	3.57	12.75	0.27
Silt	0.00	6.00	0.00	6.07	36.86	0.00
Clay	0.00	9.00	0.00	9.07	82.29	0.00
TOTAL	100.00		-7.13			164.19

Total Sample		Mean =	-0.07	Variance = 1.64
				Sample SD = 1.28
Coarse Only	100.00		-7.13	164.19
		Mean =	-0.07	Variance = 1.64
				Sample SD = 1.28

Gravel	Sand	Silt	Clay	Total
17.2	82.8	0.0	0.0	100.0

Sand	Silt	Clay	Total
100.0	0.0	0.0	100.0

April 29, 2016

Mr. Ernest Steinauer, Chair
Nantucket Conservation Commission
2 Bathing Beach Road
Nantucket, MA 02554

Re: Notice of Intent Application
47, 53, 55, 57, 61, 63, 67, 69 Pocomo Road
DEP File No. SE48-2874
NHESP Tracking No. 16-35464

Dear Mr. Steinauer:

The purpose of this letter is to provide supplemental information in response to questions and comments at the first public hearing, as well as from Natural Heritage & Endangered Species Program of the Massachusetts Division of Fisheries & Wildlife (Division), on the referenced application.

Attached is an updated site plan and sieve analysis results from soil samples taken from the coastal bank. The revised site plan includes details of the terminal ends of the proposed project. The westerly end of the project terminates to a permitted sand drift fence. The easterly end has been moved back from the property line common with Nantucket Conservation Foundation by ten feet. Additional sand nourishment will be placed in this area with each maintenance activity. The purpose is to offset any localized terminal effects, which are expected to be minor in scope, if any. The updated site plan includes additional monitoring transects, located approximately every 300-feet, for a total of seven.

In response to specific questions and comments,

<u>From the Division</u>:

1. Provide information relative to the maintenance of the proposed structure.

   a. How will the applicants ensure a sand cover of 4-6 inches overtop the coir; are benchmarks proposed?

      Four to six-inches of sand is the proposed cover for the top three vegetated coir rolls; there will be more over the lower rolls as a result of the slope (please see attached cross sectional drawing). The twice-per-year survey will determine the elevation of the sand cover, which can be compared to the known elevation of the top of the coir rolls.

   b. How will the applicants "assess the need for maintenance"; what constitutes the need for maintenance?

      The project condition will be inspected at least twice per year, as well as following any storm event when the wind exceeds forty miles per hour for six consecutive hours. Maintenance will be performed if there is any visible damage to the system.

c. Does the project propose to monitor the beach elevation in front of the structure?

Yes, additional survey transects have been added to the plan, which will be measured twice per year and reported to the Commission in plan format.

2. Provide information relative to the project design.

a. Will the 4”x 4” posts be connected by any other horizontal or vertical framework (e.g. stringers or pickets)?

No. The posts will be free-standing, with a top elevation that has been reduced, and will be slightly above or just below the sand when the system is in equilibrium.

b. According to the plan, the proposed sand cover ends ± 2-3 feet above the beach elevation, what will keep this material in place?

The plan detail has been clarified to depict the bank slope extending to the beach level. Sediment at this slope is within the angle of repose, and will not require any structural reinforcement.

c. Will the ends of the structure taper into the existing Coastal Bank?

Yes, at 45-degrees, as shown on the updated site plan.

3. Provide clarification regarding to the following items.

a. The amount of nourishment proposed: will a specific amount occur annually or is it proposed only if needed as cover for the structure?

Nourishment will be added as needed to maintain the cover and/or the slope shown on the plans. The applicant will monitor, and supply only the required amount of sand such that it is not over nourishing.

b. The plantings and density. The Project Description, Waiver Request, and Wilkinson Report all contain conflicting information.

The plantings and density will be per the Wilkinson Report. The plantings will be monitored and reported to the Commission as a condition of the Order. Any discrepancies have been rectified.

<u>From the Commission</u>:

Will the sand nourishment be overly transported by the wind, and will it have adverse impact on the eelgrass beds?

It will not, as the provided sediment will have similar characteristics of sand in the bank as demonstrated by the provided sieve analysis results from the bank and supply pit (Reis). This is further supported by the filed correspondence from Woods Hole Group. The applicant will monitor, and supply only the required amount of sand such that it is not over nourishing; therefore, the project will replicate what the bank would naturally supply.

Request for a meiofauna study.

The Applicant agrees to take a summer sample of the invertebrate life within the beach from three locations in the project area, and two from the beach north, and two from the beach south, of the project area. The locations of all samples shall be provided to the Commission.

Provide historic photos of the bank

Attached are a series of aerial photos that depict varying amounts of vegetation on the face of the bank. The proposed project and plantings will improve the existing bare bank by meeting the interest described in the Regulations, Section 2.05.A.1 – "Vegetation tends to stabilize a coastal bank and reduce the rate of erosion due to wind and rain runoff. Vegetated banks are critical to reducing wind and rain erosion and for providing important habitat and biodiversity."

Is the coastal bank used by birds (swallows) for nesting?

There are no nesting holes apparent in the coastal bank for the length of the project area.

Is there groundwater seeping out of the coastal bank in the project area?

There is no evidence of exposed clay layers and/or weeping groundwater apparent from the bank for the length of the project area.

How will we monitor the cobble content of the beach?

The beach composition is highly dynamic as shown in the report photos where there is no evidence of cobbles. The Applicant will monitor and provide photos of the beach composition at each transect location. Additionally, we will only be replacing sand that has been lost to the system naturally. Therefore, the dynamic nature of the beach and nearshore area will continue to occur naturally.

What phase of the tide did the January 24, 2016 storm occur?

The storm occurred during the lunar high.

What is the failure criteria for the project?

Damage that requires replacement of greater than 50% of the project materials over two consecutive years. Should this occur, the Applicant will apply for an Amended Order of Conditions to modify the project based on review and approval of the Commission.

Need more monitoring transects.

We have added a transect every 300-feet, for a total of seven transects.

Will the nourishment be matching the sediment naturally contributed by the bank?

Yes, the sand nourishment will have similar characteristics of sand in the bank as demonstrated by the provided sieve analysis results from the bank and supply pit (Reis).

Is this a sustainable project, will Nantucket run out of available sediment from inland sources?

The applicant will maintain a volume and not a set amount of sand each year. There are large volumes of sand available for excavation at both the Holdgate and Reis Pits. Sand could also be brought over on a barge as gravel currently is delivered.

How is success of this project determined?

Through the monitoring requirements the Applicant will demonstrate that the coastal bank will become partially colonized with vegetation within the first growing season, and at least 75% of the disturbed coastal bank above the fiber roll array will be well-vegetated within 3 years.

How long until it is likely to be deemed "successful"?

Within three-years we expect at least 75% of the bank to be covered with established vegetation, as described above.

How does each end terminate? Will there be end scour?

The revised site plan includes details of the terminal ends of the proposed project. The westerly end of the project terminates to a permitted coastal stabilization project, SE48-2305. The easterly end has been moved back from the property line common with Nantucket Conservation Foundation by ten feet. Additional sand nourishment will be placed in this area with each maintenance activity. The purpose is to offset any localized terminal effects, which are expected to be minor in scope, if any.

Is there a single entity that would be responsible for the multiple properties?

The project is a collective effort per a Memorandum of Understanding executed by all of the property owners.

What happens if an individual property owner is not willing to continue to abide by imposed permit conditions?

The Order of Conditions will be recorded in the chain of title for each property. The right of enforcement will run against each individual owner. The owners are working cooperatively through a memorandum of understanding.

<u>From Nantucket Land Council:</u>

Would like more detail concerning the mesh encompassing the fiber rolls.

> *The proposed fiber rolls are the same as those approved and recently installed at 48 Shimmo Pond Road. Additional detail has been added to the attached site plan.*

Define the trigger that will result in re-nourishment

> *Through monitoring, we will determine when sand lost from the original template needs to be replaced so as to maintain the sand cover and slope of the bank.*

Define the parameters of a significant storm that will require reporting.

> *The Commission has set the parameters for other projects, which should remain consistent. Specifically, per Additional Condition 17, SE48-2789, "…storm events being defined as period of sustained winds in excess of 40 mph for a period of 6 hours…" The bi-annual monitoring will cover the effects of any intermediate storms.*

Require project representative to appear before the Commission on a regular basis to present the on-going reports.

> *The annual reports will be presented to the Commission by a project representative.*

How will the elevation of the beach and location of mean high water (MHW) be monitored?

> *The survey transects plotted over each other will show the position of MHW as it moves through space and time at each transect location. Further, the location of MHW will be shown on the site plan for each survey.*

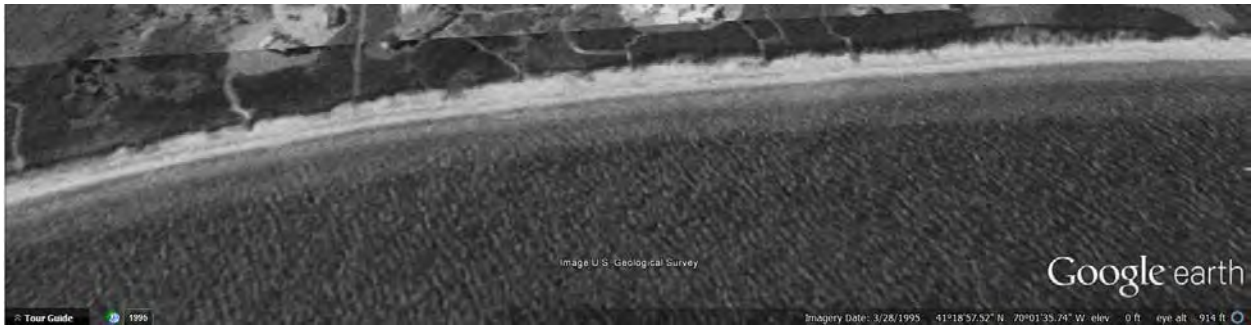
The requested project is justified, and will result in an improvement to the existing site conditions by creating a stable vegetated coastal bank, which meets and promotes the interests protected by the Commission. I plan to attend your next meeting to review this information, and address any additional questions or comments.

Sincerely,

Nantucket Engineering & Survey, P.C.
By: Arthur D. Gasbarro, PE, PLS, LEED AP

Cc: MassDEP – S.E.R.O.
Massachusetts Division of Fisheries & Wildlife - NHESP
Pocomo Neighbors (Applicants/Owners)
Arthur I. Reade, Jr., Reade, Gullickson, Hanley & Gifford, LLP
Glenn Wood, Rubin & Rudman, LLP
Lee Weishar, Ph.D., Woods Hole Group
Seth Wilkinson, Wilkinson Ecological Design, Inc.

1995:

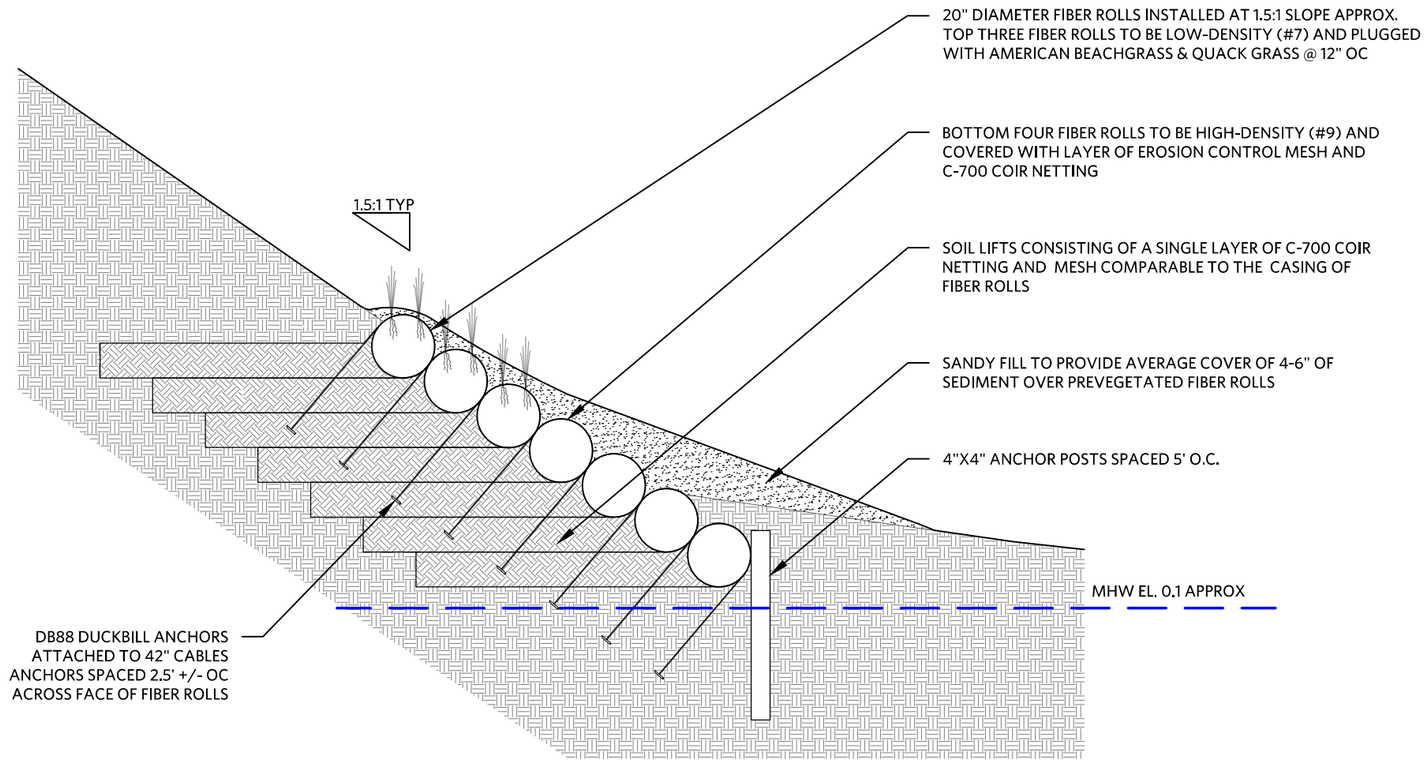


2000:

2005:

2010:

2015:



1 REINFORCED FIBER ENCASED SAND LIFT SECTION, TYPICAL

Scale: 1/4"=1'-0"

WILKINSON
ECOLOGICAL DESIGN

28 Lots Hollow Rd., Orleans, MA 02653
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NOTES:

LEGEND:

REV	DATE	DESCRIPTION

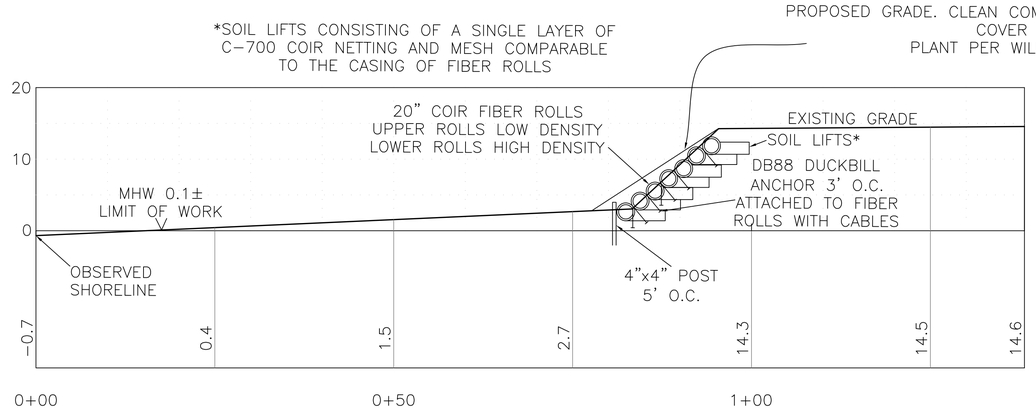
POCOMO NEIGHBORS

47, 53, 55, 57, 61, 63, 67, & 69
POCOMO ROAD
NANTUCKET, MA

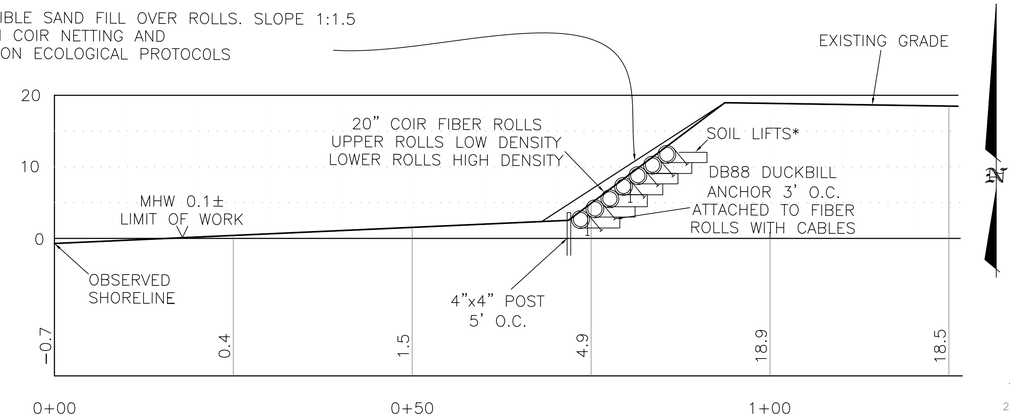
DATE: 04/2/2016	SCALE: 1/4" = 1'-0"
DRAWN BY: TtB	CHECKED BY: SW

FOR PERMITTING PURPOSES ONLY
THIS DRAWING IS NOT INTENDED FOR CONSTRUCTION

TYPICAL SECTION

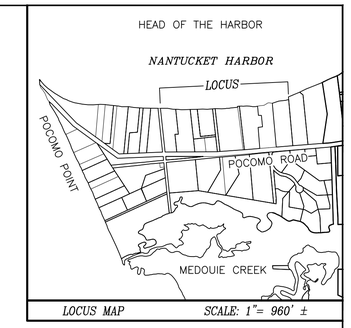


TRANSECT 1 PROFILE 1"=10'



TRANSECT 2 PROFILE 1"=10'

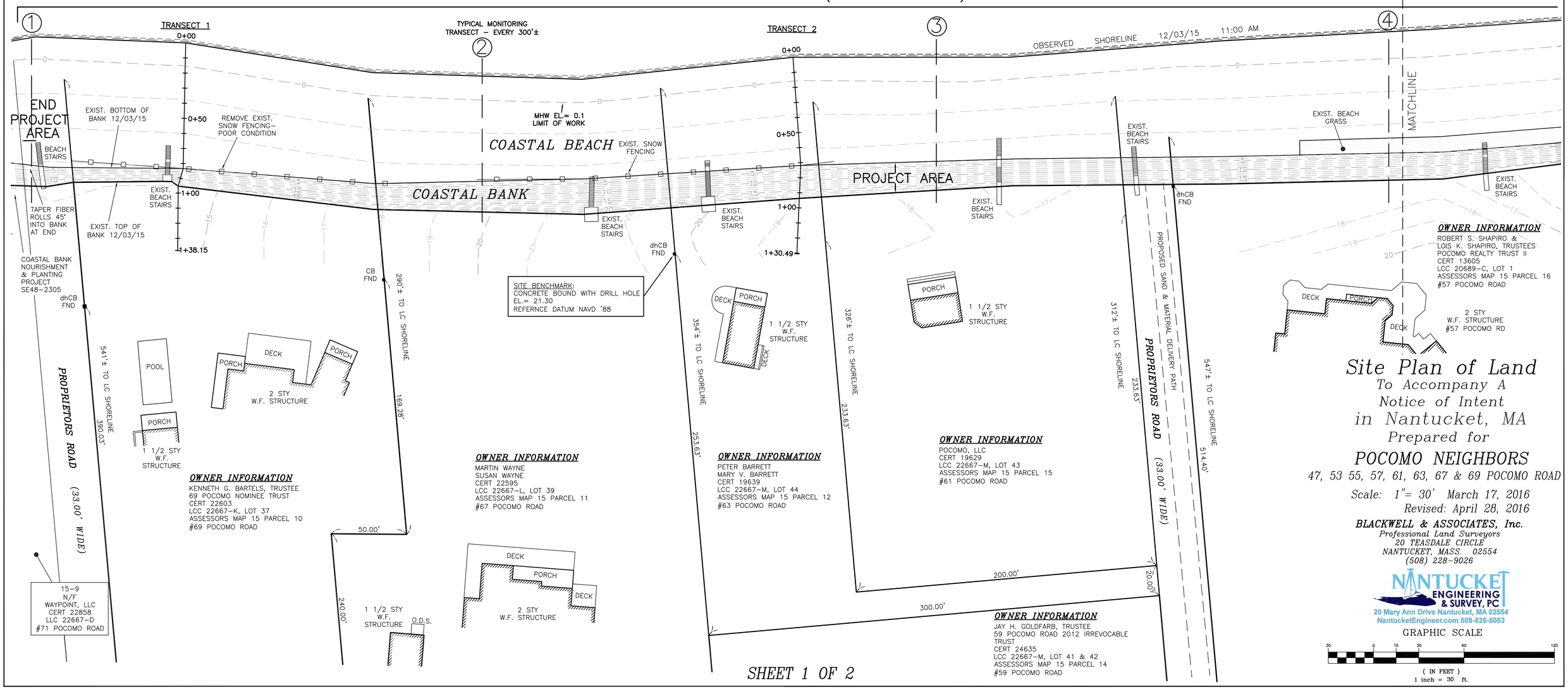
NANTUCKET HARBOR



LEGEND

dhCB ■	DENOTES CONCRETE BOUND WITH DRILLHOLE FOUND
dhCB ⊡	DENOTES CONCRETE BOUND WITH DRILLHOLE FOUND
—o—o—	DENOTES EXIST. WOOD w/WIRE FARM FENCE
25— — —	DENOTES EXIST. GRADE CONTOUR
x24.3	DENOTES EXIST. GRADE SPOT ELEVATION

PROJECT LENGTH 1775'± (ALONG BANK FACE)



Site Plan of Land

To Accompany A
Notice of Intent
in Nantucket, MA
Prepared for

POCOMO NEIGHBORS

47, 53 55, 57, 61, 63, 67 & 69 POCOMO ROAD

Scale: 1"= 30' March 17, 2016
Revised: April 28, 2016

BLACKWELL & ASSOCIATES, Inc.
Professional Land Surveyors
20 TEASDALE CIRCLE
NANTUCKET, MASS. 02554
(508) 228-9026

NANTUCKET ENGINEERING & SURVEY, PC
20 Mary Ann Drive Nantucket, MA 02554
NantucketEngineer.com 508-825-5053

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.

SHEET 1 OF 2

GENERAL NOTES:

1. THE CONTRACTOR SHALL PROVIDE ALL MATERIAL, LABOR AND EQUIPMENT TO PERFORM THE WORK DESCRIBED ON THESE PLANS, AND AS APPROVED BY THE NANTUCKET CONSERVATION COMMISSION.

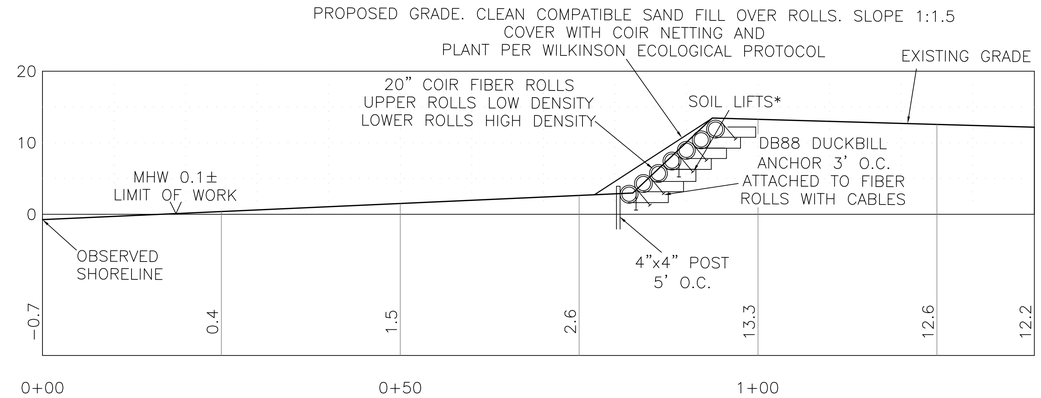
2. WORK SHALL BE IN COMPLIANCE WITH THE PLANS, SPECIFICATION AND THE ORDER OF CONDITIONS ISSUED BY THE NANTUCKET CONSERVATION COMMISSION.

3. THE CONTRACTOR SHALL ATTEND A PRE-CONSTRUCTION ON-SITE MEETING WHICH WILL BE ATTENDED BY THE ENGINEER, WITH NOTIFICATION TO A REPRESENTATIVE OF THE NANTUCKET CONSERVATION COMMISSION. THE CONTRACTOR WILL PRESENT THE PROPOSED METHODS AND MEANS TO CONSTRUCT THE PROPOSED IMPROVEMENTS.

4. THE CONTRACTOR SHALL NOT VARY FROM THE PLANS, SPECIFICATION, ORDER OF CONDITIONS OR INSTRUCTIONS PROVIDED AT THE PRE-CONSTRUCTION MEETING, WITHOUT FIRST OBTAINING APPROVAL OF THE CONSERVATION COMMISSION REPRESENTATIVE AND THE ENGINEER.

5. ONLY CLEAN COMPATIBLE FILL SHALL BE USED FOR FILL AND COVER FOR THIS PROJEFCT. THE CONTRACTOR AGREES TO OBTAIN SEDIMENT GRAIN SIZE DISTRIBUTION ANALYSIS, FROM A QUALIFIED LABORATORY, IF REQUESTED BY THE CONSERVATION COMMISSION REPRESENTATIVE.

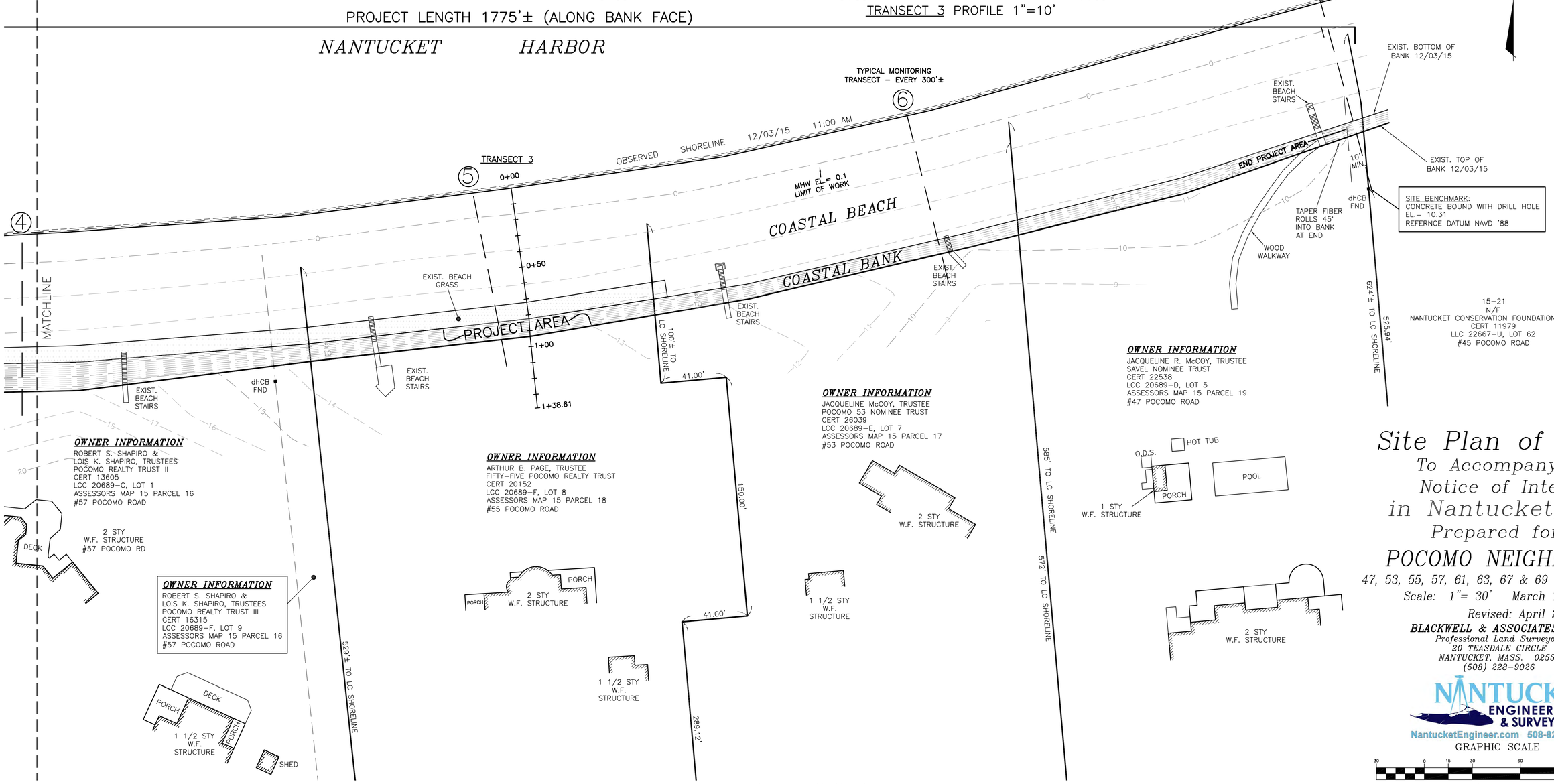
6. UPON COMPLETION OF RESTORATION, AND PRIOR TO DEMOBILIZATION OF EQUIPMENT, THE CONTRACTOR SHALL ARRANGE FOR A POST-CONSTRUCTION MEETING WITH THE ENGINEER. SHORTCOMINGS AND DEFICIENCIES WILL BE OUTLINED TO THE CONTRACTOR AT THIS MEETING, THAT MUST BE CORRECTED PRIOR TO DEMOBILIZATION AND FINAL PAYMENTS FOR THE WORK.



TRANSECT 3 PROFILE 1"=10'

LEGEND

dhCB ■	DENOTES CONCRETE BOUND WITH DRILLHOLE FOUND
dhCB ⊡	DENOTES CONCRETE BOUND WITH DRILLHOLE FOUND
—□—□—	DENOTES EXIST. WOOD w/WIRE FARM FENCE
25 — — —	DENOTES EXIST. GRADE CONTOUR
x24.3	DENOTES EXIST. GRADE SPOT ELEVATION



Site Plan of Land

To Accompany A
Notice of Intent
in Nantucket, MA
Prepared for

POCOMO NEIGHBORS

47, 53, 55, 57, 61, 63, 67 & 69 POCOMO ROAD

Scale: 1"= 30' March 17, 2016

Revised: April 28, 2016

BLACKWELL & ASSOCIATES, Inc.
Professional Land Surveyors
20 TEASDALE CIRCLE
NANTUCKET, MASS. 02554
(508) 228-9026

NANTUCKET ENGINEERING & SURVEY, PC
NantucketEngineer.com 508-825-5053

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.

B8207

SIEVE ANALYSIS RESULTS
OF COASTAL BANK SEDIMENT SAMPLES

By

BRIGGS ENGINEERING & TESTING

Prepared For

POCOMO NEIGHBORS

20 Mary Ann Drive • Nantucket, MA 02554
508-825-5053 • www.NantucketEngineer.com

Briggs Engineering & Testing
A Division of PK Associates, Inc.

Nantucket Engineering & Survey
20 Mary Ann Drive
Nantucket, MA 02554
Attn: Mr. Arthur Gasbarro

Report Date: 4/28/16

Project: **Coastal Bank-Nantucket Engr.**
Briggs #: 28878

Tested: 4/27/16
Received: 4/20/16

1	Sample No.	Description	Source of Material
	M-27132	Existing Material	Sample #1

2. Sieve Analysis {ASTM C 136, and ASTM C 117}

Sieve Size		Results	Specifications
Standard	Alternate	{% Passing by Wt.}	
100 mm	4"	100	
75 mm	3"	100	
63 mm	2-1/2"	100	
50 mm	2"	100	
37.5 mm	1-1/2"	100	
25 mm	1"	100	
19 mm	3/4"	99	
12.5 mm	1/2"	99	
9.5 mm	3/8"	99	
4.75 mm	#4	98	
2.36 mm	#8	95	
1.18 mm	#16	91	
0.600 mm	#30	69	
0.300 mm	#50	26	
0.150 mm	#100	12	
0.075 mm	#200	8.3	

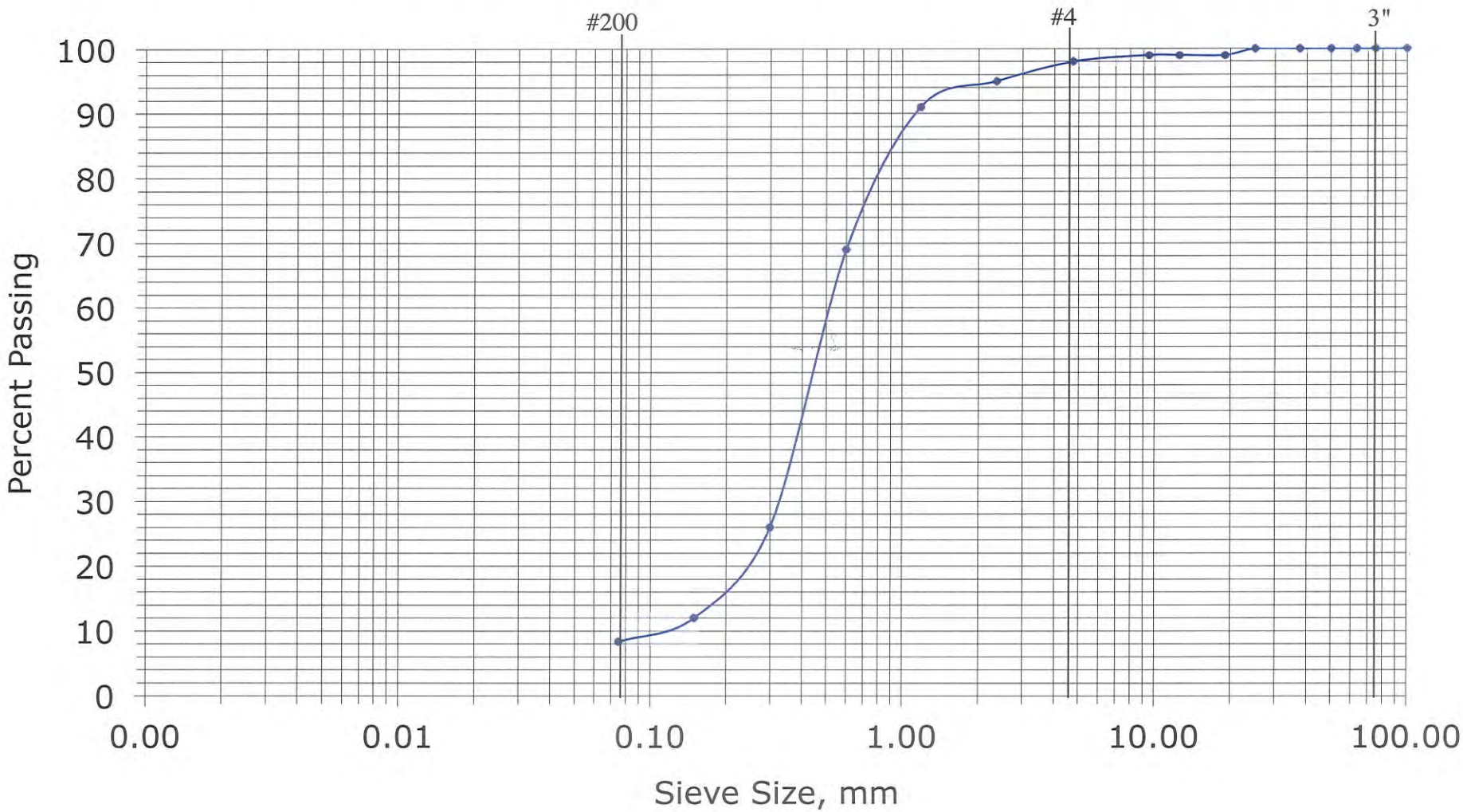
BRIGGS ENGINEERING & TESTING
A Division of PK Associates, Inc.

Sean Skorohod
Director of Testing Services
Construction Technology Division

Briggs Engineering & Testing
A Division of PK Associates, Inc.

Project:	Coastal Bank-Nantucket Engr.
Date Tested:	4/27/16
Lab Ref. No.:	M-27132

Sieve Analysis



Briggs Engineering & Testing
A Division of PK Associates, Inc.

Nantucket Engineering & Survey
20 Mary Ann Drive
Nantucket, MA 02554
Attn: Mr. Arthur Gasbarro

Report Date: 4/28/16

Project: **Coastal Bank-Nantucket Engr.**
Briggs #: 28878

Tested: 4/27/16
Received: 4/20/16

1	Sample No.	Description	Source of Material
	M-27133	Existing Material	Sample #2

2. Sieve Analysis {ASTM C 136, and ASTM C 117}

Sieve Size		Results	Specifications
Standard	Alternate	{% Passing by Wt.}	
100 mm	4"	100	
75 mm	3"	100	
63 mm	2-1/2"	100	
50 mm	2"	100	
37.5 mm	1-1/2"	100	
25 mm	1"	100	
19 mm	3/4"	100	
12.5 mm	1/2"	100	
9.5 mm	3/8"	100	
4.75 mm	#4	99	
2.36 mm	#8	98	
1.18 mm	#16	94	
0.600 mm	#30	74	
0.300 mm	#50	34	
0.150 mm	#100	11	
0.075 mm	#200	7.5	

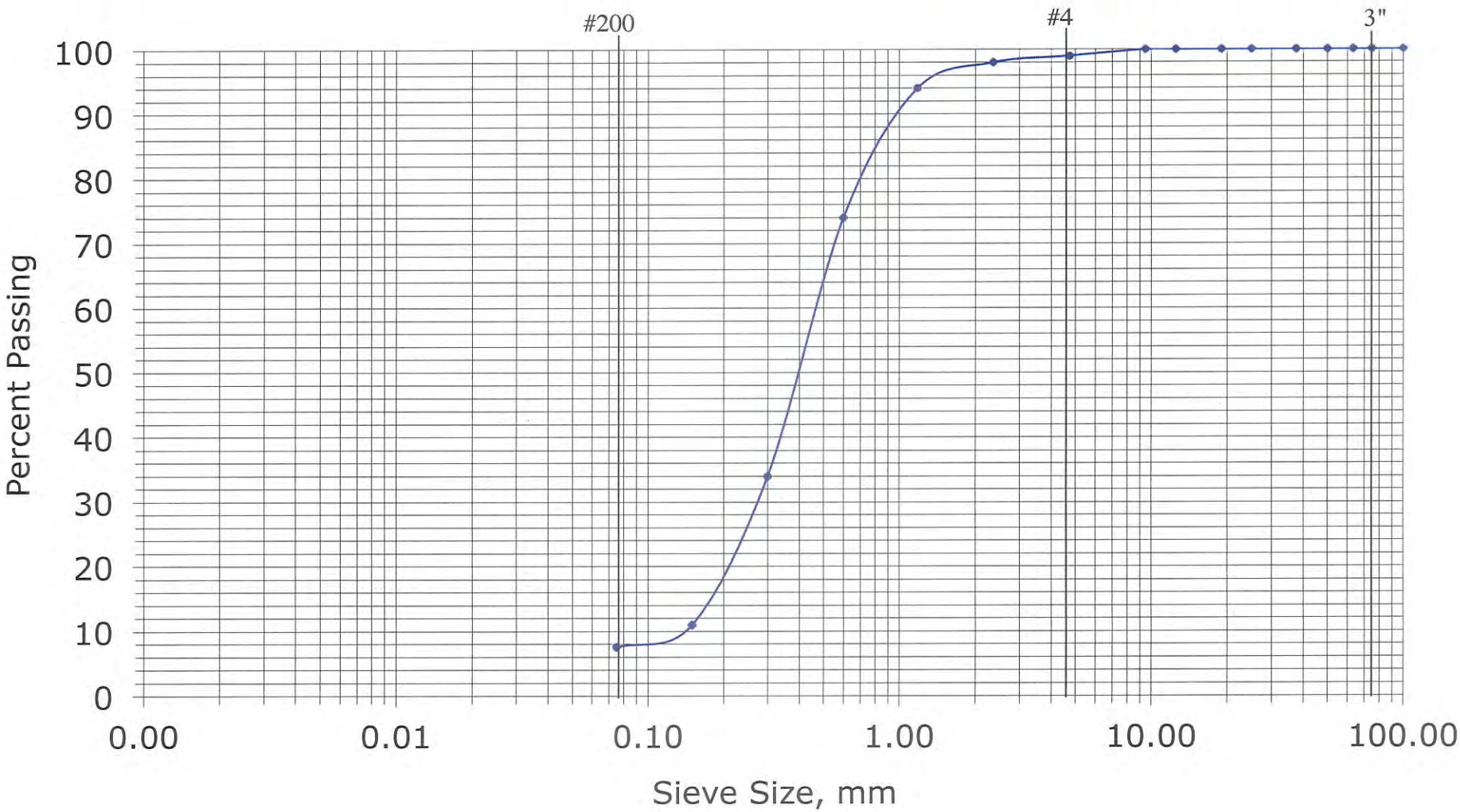
BRIGGS ENGINEERING & TESTING
A Division of PK Associates, Inc.

Sean Skorohod
Director of Testing Services
Construction Technology Division

Briggs Engineering & Testing
A Division of PK Associates, Inc.

Project:	Coastal Bank-Nantucket Engr.
Date Tested:	4/27/16
Lab Ref. No.:	M-27133

Sieve Analysis



Briggs Engineering & Testing
A Division of PK Associates, Inc.

Nantucket Engineering & Survey
20 Mary Ann Drive
Nantucket, MA 02554
Attn: Mr. Arthur Gasbarro

Report Date: 4/28/16

Project: **Coastal Bank-Nantucket Engr.**
Briggs #: 28878

Tested: 4/27/16
Received: 4/20/16

1	Sample No.	Description	Source of Material
	M-27134	Existing Material	Sample #3

2. Sieve Analysis {ASTM C 136, and ASTM C 117}

Sieve Size		Results	Specifications
Standard	Alternate	{% Passing by Wt.}	
100 mm	4"	100	
75 mm	3"	100	
63 mm	2-1/2"	100	
50 mm	2"	100	
37.5 mm	1-1/2"	100	
25 mm	1"	100	
19 mm	3/4"	100	
12.5 mm	1/2"	100	
9.5 mm	3/8"	100	
4.75 mm	#4	99	
2.36 mm	#8	96	
1.18 mm	#16	91	
0.600 mm	#30	69	
0.300 mm	#50	33	
0.150 mm	#100	13	
0.075 mm	#200	8.4	

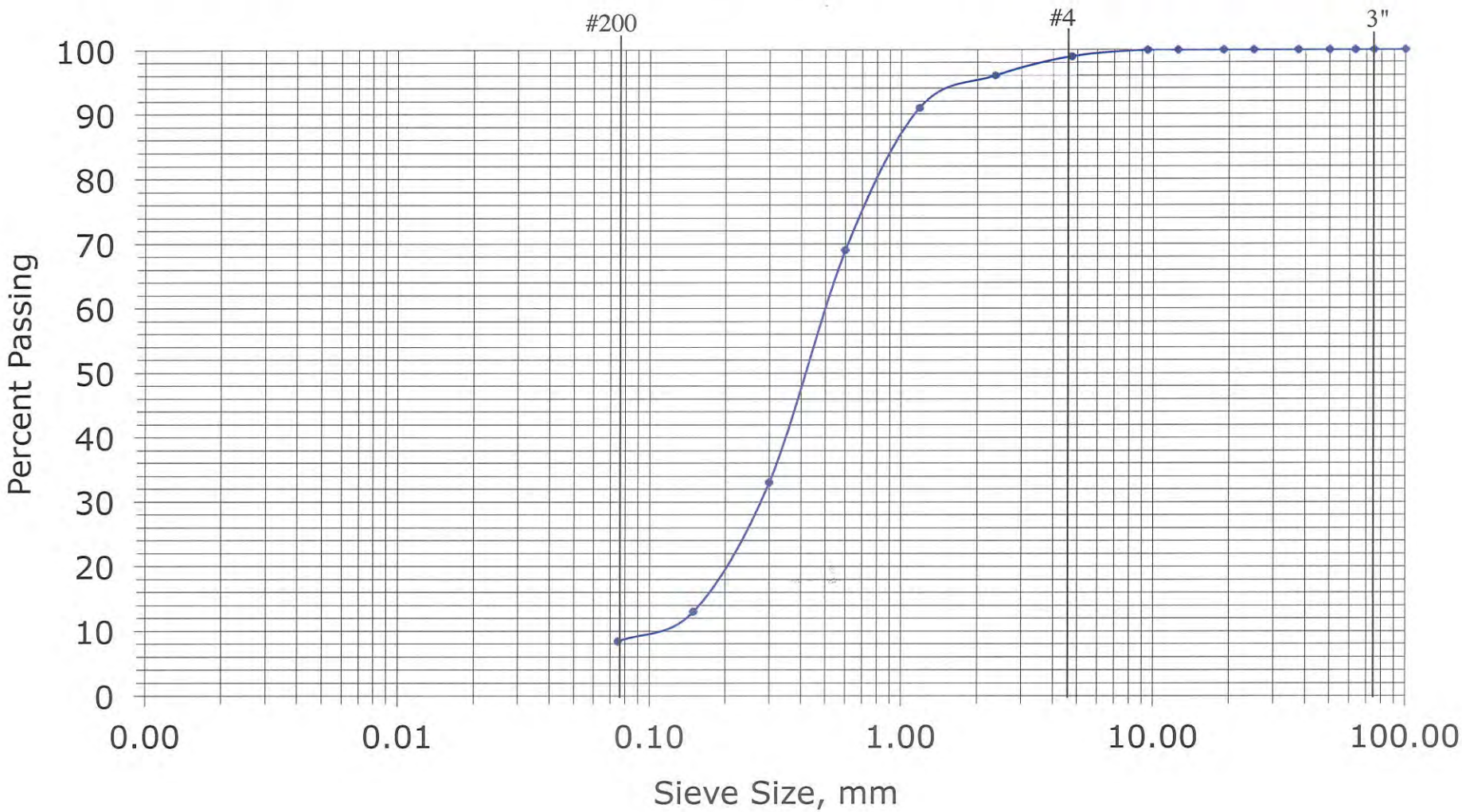
BRIGGS ENGINEERING & TESTING
A Division of PK Associates, Inc.

Sean Skorohod
Director of Testing Services
Construction Technology Division

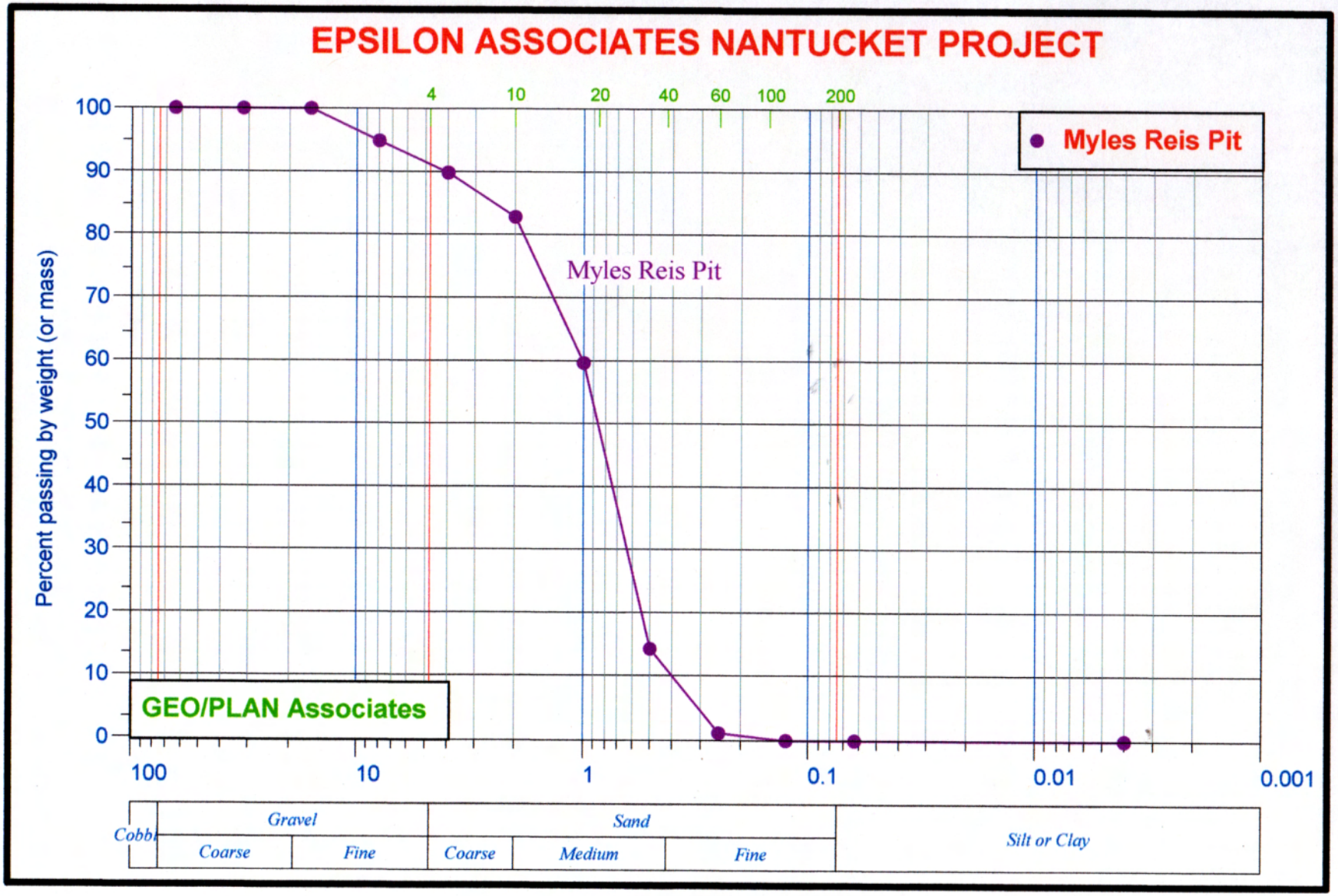
Briggs Engineering & Testing
A Division of PK Associates, Inc.

Project:	Coastal Bank-Nantucket Engr.
Date Tested:	4/27/16
Lab Ref. No.:	M-27134

Sieve Analysis



Reis Sand Pit
Sediment Analysis From
Record Files



GEO/PLAN Associates
Sediment Grain Size Analysis
Client:Epsilon Associates
Project: Nantucket, MA
Project Location: Nantucket, MA
Project No.
Date: October 2011

Sample: **Myles Reis Pit**

Phi	Cum Wt	Total Wt	% Wt	Cum %	Sand Only % Wt	Sand Only Cum %
>-5	0.00	0.00	0.00	0.00	0.00	0.00
-4	0.00	0.00	0.00	0.00	0.00	0.00
-3	5.91	5.91	5.05	5.05	5.05	5.05
-2	12.01	6.11	5.22	10.27	5.22	10.27
-1	20.16	8.15	6.97	17.24	6.97	17.24
0	47.07	26.92	23.02	40.25	23.02	40.25
1	100.01	52.94	45.27	85.53	45.27	85.53
2	115.54	15.53	13.28	98.81	13.28	98.81
3	116.91	1.37	1.17	99.98	1.17	99.98
4	116.93	0.03	0.02	100.00	0.02	100.00

Phi	Total Wt	Bkr Wt	Corr. Wt	Wt Frac	% Wt	Bk No.
Silt	0.0000	0.0000	0.0000	0.0000	0.0000	--
Clay	0.0000	0.0000	0.0000	0.0000	0.0000	--
		Disp. Wt	0.0000			

Wt. Coarse	116.9300
Wt Fine	0.0000
Total Wt	116.9300

Phi	Wt %	Phi Mid Pt	Wt % Mid Pt	Mid pt - Mean (=X)	X sq	X sq Wt %
>-5	0.00	-5.50	0.00	-5.43	29.47	0.00
-4	0.00	-4.50	0.00	-4.43	19.61	0.00
-3	5.05	-3.50	-17.68	-3.43	11.76	59.37
-2	5.22	-2.50	-13.05	-2.43	5.90	30.80
-1	6.97	-1.50	-10.45	-1.43	2.04	14.22
0	23.02	-0.50	-11.51	-0.43	0.18	4.23
1	45.27	0.50	22.64	0.57	0.33	14.78
2	13.28	1.50	19.92	1.57	2.47	32.78
3	1.17	2.50	2.93	2.57	6.61	7.75
4	0.02	3.50	0.07	3.57	12.75	0.27
Silt	0.00	6.00	0.00	6.07	36.86	0.00
Clay	0.00	9.00	0.00	9.07	82.29	0.00
TOTAL	100.00		-7.13			164.19

Total Sample		Mean =	-0.07	Variance = 1.64
				Sample SD = 1.28
Coarse Only	100.00		-7.13	164.19
		Mean =	-0.07	Variance = 1.64
				Sample SD = 1.28

Gravel	Sand	Silt	Clay	Total
17.2	82.8	0.0	0.0	100.0

Sand	Silt	Clay	Total
100.0	0.0	0.0	100.0

NEW INFORMATION FOR CURRENT HEARING

The Trustees of Reservations

Costaka Coatue Wildlife Refuge and Great Point

(7-1.7)

the trustees of reservations

Conserving the Massachusetts Landscape Since 1891
572 Essex Street, Beverly, Massachusetts 01915-1530

CITIZENS BANK
BOSTON, MA 02109
5-7017/2110

Shield

212773

CHECK DATE	CHECK NO.
4/7/2016	212773

CHECK AMOUNT

$** 25.00

PAY **Twenty five and 00/100 Dollars**

TO THE ORDER OF

TOWN OF NANTUCKET
188 MADAKET ROAD
NANTUCKET, MA 02554

MP

MP

MUST BE COUNTERSIGNED IF OVER $5000

HEAT SENSITIVE

Details on Back. Security Features Included

⑈212773⑈ ⑆211070175⑆ 1107854234⑈

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WPA Form 3 – Notice of Intent

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Provided by MassDEP:

MassDEP File Number

Document Transaction Number

Nantucket
City/Town

Important: When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.

tab

return

Note: Before completing this form consult your local Conservation Commission regarding any municipal bylaw or ordinance.

A. General Information

1. Project Location (**Note:** electronic filers will click on button to locate project site):

Coskata Coatue Wildlife Refuge and Great Point — a. Street Address
Nantucket — b. City/Town
02554 — c. Zip Code

Latitude and Longitude:
various — d. Latitude
various — e. Longitude

7 — f. Assessors Map/Plat Number
1.7 — g. Parcel /Lot Number

2. Applicant:

Christopher — a. First Name
Kennedy — b. Last Name
The Trustees of Resevations — c. Organization
23 Pocha Rd Ext — d. Street Address
Edgartown — e. City/Town
Massachusetts — f. State
02568 — g. Zip Code
508-693-7689 — h. Phone Number
508.693.7717 — i. Fax Number
kennedy@thetrustees.org — j. Email Address

3. Property owner (required if different from applicant): ☒ Check if more than one owner

a. First Name
b. Last Name
The Trustees of Reservations — c. Organization
572 Essex St — d. Street Address
Beverly — e. City/Town
MA — f. State
01915 — g. Zip Code
978.921.1944 — h. Phone Number
978.921.1948 — i. Fax Number
information@thetrustees.org — j. Email address

4. Representative (if any):

A. General Information (continued)

6. General Project Description:

Shorebird and Dune conservation plan and Re-authorization of pre 1972 OSV trail use. The Trustees of Reservations owns Coskata Coatue Wildlife Refuge and manages the Nantucket National Wildlife Refuge under and agreement with the US Fish and Wildlife Service. Both Properties are accessed by ORV's and contain critical habitat for endangered shorebirds.

7a. Project Type Checklist:

1. ☐ Single Family Home
2. ☐ Residential Subdivision
3. ☐ Limited Project Driveway Crossing
4. ☐ Commercial/Industrial
5. ☐ Dock/Pier
6. ☐ Utilities
7. ☐ Coastal Engineering Structure
8. ☐ Agriculture (e.g., cranberries, forestry)
9. ☐ Transportation
10. ☒ Other

7b. Is any portion of the proposed activity eligible to be treated as a limited project subject to 310 CMR 10.24 (coastal) or 310 CMR 10.53 (inland)?

1. ☐ Yes ☒ No If yes, describe which limited project applies to this project:

2. Limited Project

8. Property recorded at the Registry of Deeds for:

Nantucket	
a. County	b. Certificate # (if registered land)
148, 208	192, 194, 262
c. Book	d. Page Number

B. Buffer Zone & Resource Area Impacts (temporary & permanent)

1. ☐ Buffer Zone Only – Check if the project is located only in the Buffer Zone of a Bordering Vegetated Wetland, Inland Bank, or Coastal Resource Area.
2. ☐ Inland Resource Areas (see 310 CMR 10.54-10.58; if not applicable, go to Section B.3, Coastal Resource Areas).

Check all that apply below. Attach narrative and any supporting documentation describing how the project will meet all performance standards for each of the resource areas altered, including standards requiring consideration of alternative project design or location.

For all projects affecting other Resource Areas, please attach a narrative explaining how the resource area was delineated.

Resource Area	Size of Proposed Alteration	Proposed Replacement (if any)
a. ☐ Bank	1. linear feet	2. linear feet
b. ☐ Bordering Vegetated Wetland	1. square feet	2. square feet
c. ☐ Land Under Waterbodies and Waterways	1. square feet 3. cubic yards dredged	2. square feet

B. Buffer Zone & Resource Area Impacts (temporary & permanent) (cont'd)

Resource Area	Size of Proposed Alteration	Proposed Replacement (if any)
d. ☐ Bordering Land Subject to Flooding	1. square feet	2. square feet
	3. cubic feet of flood storage lost	4. cubic feet replaced
e. ☐ Isolated Land Subject to Flooding	1. square feet	
	2. cubic feet of flood storage lost	3. cubic feet replaced
f. ☐ Riverfront Area	1. Name of Waterway (if available)	

2. Width of Riverfront Area (check one):

☐ 25 ft. - Designated Densely Developed Areas only

☐ 100 ft. - New agricultural projects only

☐ 200 ft. - All other projects

3. Total area of Riverfront Area on the site of the proposed project: _____ square feet

4. Proposed alteration of the Riverfront Area:

a. total square feet _____ b. square feet within 100 ft. _____ c. square feet between 100 ft. and 200 ft. _____

5. Has an alternatives analysis been done and is it attached to this NOI? ☐ Yes ☐ No

6. Was the lot where the activity is proposed created prior to August 1, 1996? ☐ Yes ☐ No

3. ☒ Coastal Resource Areas: (See 310 CMR 10.25-10.35)

Check all that apply below. Attach narrative and supporting documentation describing how the project will meet all performance standards for each of the resource areas altered, including standards requiring consideration of alternative project design or location.

Online Users: Include your document transaction number (provided on your receipt page) with all supplementary information you submit to the Department.

Resource Area	Size of Proposed Alteration	Proposed Replacement (if any)
a. ☐ Designated Port Areas	Indicate size under Land Under the Ocean, below	
b. ☐ Land Under the Ocean	0 1. square feet	
	0 2. cubic yards dredged	
c. ☒ Barrier Beach	Indicate size under Coastal Beaches and/or Coastal Dunes below	
d. ☐ Coastal Beaches	0 1. square feet	0 2. cubic yards beach nourishment
e. ☐ Coastal Dunes	0 1. square feet	0 2. cubic yards dune nourishment

B. Buffer Zone & Resource Area Impacts (temporary & permanent) (cont'd)

	Size of Proposed Alteration	Proposed Replacement (if any)
f. ☐ Coastal Banks	1. linear feet	
g. ☐ Rocky Intertidal Shores	1. square feet	
h. ☐ Salt Marshes	1. square feet	2. sq ft restoration, rehab., creation
i. ☐ Land Under Salt Ponds	1. square feet 2. cubic yards dredged	
j. ☐ Land Containing Shellfish	1. square feet	
k. ☐ Fish Runs	Indicate size under Coastal Banks, inland Bank, Land Under the Ocean, and/or inland Land Under Waterbodies and Waterways, above 1. cubic yards dredged	
l. ☐ Land Subject to Coastal Storm Flowage	1. square feet	

4. ☐ Restoration/Enhancement
If the project is for the purpose of restoring or enhancing a wetland resource area in addition to the square footage that has been entered in Section B.2.b or B.3.h above, please enter the additional amount here.

a. square feet of BVW b. square feet of Salt Marsh

C. Other Applicable Standards and Requirements

Streamlined Massachusetts Endangered Species Act/Wetlands Protection Act Review

1. Is any portion of the proposed project located in **Estimated Habitat of Rare Wildlife** as indicated on the most recent Estimated Habitat Map of State-Listed Rare Wetland Wildlife published by the Natural Heritage and Endangered Species Program (NHESP)? To view habitat maps, see the *Massachusetts Natural Heritage Atlas* or go to http://www.mass.gov/dfwele/dfw/nhesp/nhregmap.htm.

a. ☒ Yes ☐ No **If yes, include proof of mailing or hand delivery of NOI to:**

Natural Heritage and Endangered Species Program
Division of Fisheries and Wildlife
Route 135, North Drive
Westborough, MA 01581

2008
b. Date of map

If *yes*, the project is also subject to Massachusetts Endangered Species Act (MESA) review (321 CMR 10.18). To qualify for a streamlined, 30-day, MESA/Wetlands Protection Act review, please complete Section C.1.C, and include requested materials with this Notice of Intent (NOI); *OR* complete Section C.1.d, if applicable. *If MESA supplemental information is not included with the NOI, by completing Section 1 of this form, the NHESP will require a separate MESA filing which may take up to 90 days to review (unless noted exceptions in Section 2 apply, see below).*

C. Other Applicable Standards and Requirements (cont'd)

1. c. Submit Supplemental Information for Endangered Species Review *

   1. ☐ Percentage/acreage of property to be altered:

      (a) within wetland Resource Area — 0 percentage/acreage

      (b) outside Resource Area — 0 percentage/acreage

   2. ☒ Assessor's Map or right-of-way plan of site

   3. ☐ Project plans for entire project site, including wetland resource areas and areas outside of wetlands jurisdiction, showing existing and proposed conditions, existing and proposed tree/vegetation clearing line, and clearly demarcated limits of work **

      (a) ☒ Project description (including description of impacts outside of wetland resource area & buffer zone)

      (b) ☒ Photographs representative of the site

      (c) ☒ MESA filing fee (fee information available at: http://www.mass.gov/dfwele/dfw/nhesp/nhenvmesa.htm)
      Make check payable to "Natural Heritage & Endangered Species Fund" and ***mail to NHESP*** at above address

      *Projects altering **10 or more acres** of land, also submit:*

      (d) ☐ Vegetation cover type map of site

      (e) ☐ Project plans showing Priority & Estimated Habitat boundaries

   d. OR Check One of the Following

      1. ☐ Project is exempt from MESA review.
      Attach applicant letter indicating which MESA exemption applies. (See 321 CMR 10.14, http://www.mass.gov/dfwele/dfw/nhesp/nhenvexemptions.htm; the NOI must still be sent to NHESP if the project is within estimated habitat pursuant to 310 CMR 10.37 and 10.59.)

      2. ☐ Separate MESA review ongoing.

      a. NHESP Tracking Number _____ b. Date submitted to NHESP _____

      3. ☐ Separate MESA review completed.
      Include copy of NHESP "no Take" determination or valid Conservation & Management Permit with approved plan.

* Some projects **not** in Estimated Habitat may be located in Priority Habitat, and require NHESP review (see www.nhesp.org regulatory review tab). Priority Habitat includes habitat for state-listed plants and strictly upland species not protected by the Wetlands Protection Act.

** MESA projects may not be segmented (321 CMR 10.16). The applicant must disclose full development plans even if such plans are not required as part of the Notice of Intent process.

C. Other Applicable Standards and Requirements (cont'd)

2. For coastal projects only, is any portion of the proposed project located below the mean high water line or in a fish run?

   a. ☐ Not applicable – project is in inland resource area only

   b. ☐ Yes ☒ No If yes, include proof of mailing or hand delivery of NOI to either:

   South Shore - Cohasset to Rhode Island, and the Cape & Islands:

   Division of Marine Fisheries - Southeast Marine Fisheries Station
   Attn: Environmental Reviewer
   838 South Rodney French Blvd.
   New Bedford, MA 02744

   North Shore - Hull to New Hampshire:

   Division of Marine Fisheries - North Shore Office
   Attn: Environmental Reviewer
   30 Emerson Avenue
   Gloucester, MA 01930

   Also if yes, the project may require a Chapter 91 license. For coastal towns in the Northeast Region, please contact MassDEP's Boston Office. For coastal towns in the Southeast Region, please contact MassDEP's Southeast Regional Office.

3. Is any portion of the proposed project within an Area of Critical Environmental Concern (ACEC)?

   a. ☐ Yes ☒ No If yes, provide name of ACEC (see instructions to WPA Form 3 or MassDEP Website for ACEC locations). **Note:** electronic filers click on Website.

   b. ACEC

Online Users: Include your document transaction number (provided on your receipt page) with all supplementary information you submit to the Department.

4. Is any portion of the proposed project within an area designated as an Outstanding Resource Water (ORW) as designated in the Massachusetts Surface Water Quality Standards, 314 CMR 4.00?

   a. ☐ Yes ☒ No

5. Is any portion of the site subject to a Wetlands Restriction Order under the Inland Wetlands Restriction Act (M.G.L. c. 131, § 40A) or the Coastal Wetlands Restriction Act (M.G.L. c. 130, § 105)?

   a. ☐ Yes ☒ No

6. Is this project subject to provisions of the MassDEP Stormwater Management Standards?

   a. ☐ Yes. Attach a copy of the Stormwater Report as required by the Stormwater Management Standards per 310 CMR 10.05(6)(k)-(q) and check if:

      1. ☐ Applying for Low Impact Development (LID) site design credits (as described in Stormwater Management Handbook Vol. 2, Chapter 3)

      2. ☐ A portion of the site constitutes redevelopment

      3. ☐ Proprietary BMPs are included in the Stormwater Management System.

   b. ☐ No. Check why the project is exempt:

      1. ☐ Single-family house

      2. ☐ Emergency road repair

      3. ☐ Small Residential Subdivision (less than or equal to 4 single-family houses or less than or equal to 4 units in multi-family housing project) with no discharge to Critical Areas.

D. Additional Information

Applicants must include the following with this Notice of Intent (NOI). See instructions for details.

Online Users: Attach the document transaction number (provided on your receipt page) for any of the following information you submit to the Department.

1. ☐ USGS or other map of the area (along with a narrative description, if necessary) containing sufficient information for the Conservation Commission and the Department to locate the site. (Electronic filers may omit this item.)

2. ☐ Plans identifying the location of proposed activities (including activities proposed to serve as a Bordering Vegetated Wetland [BVW] replication area or other mitigating measure) relative to the boundaries of each affected resource area.

3. ☐ Identify the method for BVW and other resource area boundary delineations (MassDEP BVW Field Data Form(s), Determination of Applicability, Order of Resource Area Delineation, etc.), and attach documentation of the methodology.

4. ☐ List the titles and dates for all plans and other materials submitted with this NOI.

a. Plan Title

b. Prepared By | c. Signed and Stamped by

d. Final Revision Date | e. Scale

f. Additional Plan or Document Title | g. Date

5. ☐ If there is more than one property owner, please attach a list of these property owners not listed on this form.

6. ☒ Attach proof of mailing for Natural Heritage and Endangered Species Program, if needed.

7. ☐ Attach proof of mailing for Massachusetts Division of Marine Fisheries, if needed.

8. ☒ Attach NOI Wetland Fee Transmittal Form

9. ☐ Attach Stormwater Report, if needed.

E. Fees

1. ☐ Fee Exempt: No filing fee shall be assessed for projects of any city, town, county, or district of the Commonwealth, federally recognized Indian tribe housing authority, municipal housing authority, or the Massachusetts Bay Transportation Authority.

Applicants must submit the following information (in addition to pages 1 and 2 of the NOI Wetland Fee Transmittal Form) to confirm fee payment:

212587
2. Municipal Check Number

3/31/2016
3. Check date

212502
4. State Check Number

3/31/2016
5. Check date

The trustees of reservations
6. Payor name on check: First Name

7. Payor name on check: Last Name

Provided by MassDEP:

MassDEP File Number

Document Transaction Number

Nantucket
City/Town

F. Signatures and Submittal Requirements

I hereby certify under the penalties of perjury that the foregoing Notice of Intent and accompanying plans, documents, and supporting data are true and complete to the best of my knowledge. I understand that the Conservation Commission will place notification of this Notice in a local newspaper at the expense of the applicant in accordance with the wetlands regulations, 310 CMR 10.05(5)(a).

I further certify under penalties of perjury that all abutters were notified of this application, pursuant to the requirements of M.G.L. c. 131, § 40. Notice must be made by Certificate of Mailing or in writing by hand delivery or certified mail (return receipt requested) to all abutters within 100 feet of the property line of the project location.

1. Signature of Applicant	2. Date 4/12/2016
3. Signature of Property Owner (if different)	4. Date
5. Signature of Representative (if any)	6. Date

For Conservation Commission:
Two copies of the completed Notice of Intent (Form 3), including supporting plans and documents, two copies of the NOI Wetland Fee Transmittal Form, and the city/town fee payment, to the Conservation Commission by certified mail or hand delivery.

For MassDEP:
One copy of the completed Notice of Intent (Form 3), including supporting plans and documents, one copy of the NOI Wetland Fee Transmittal Form, and a **copy** of the state fee payment to the MassDEP Regional Office (see Instructions) by certified mail or hand delivery.

Other:
If the applicant has checked the "yes" box in any part of Section C, Item 3, above, refer to that section and the Instructions for additional submittal requirements.

The original and copies must be sent simultaneously. Failure by the applicant to send copies in a timely manner may result in dismissal of the Notice of Intent.

Commonwealth of Massachusetts

Division of Fisheries & Wildlife

MassWildlife

Jack Buckley, *Director*

May 11, 2016

Nantucket Conservation Commission
37 Washington Street
Nantucket, MA 02554

RE: Shorebird Management Plan and Oversand Vehicle Use
Coskata Coatue Wildlife Refuge and Great Point
NHESP File No. 16-35450

Dear Commissioners:

The Natural Heritage & Endangered Species Program of the Massachusetts Division of Fisheries & Wildlife ("Division") has reviewed the Notice of Intent ("NOI") associated with the Shorebird Management Plan and Oversand Vehicle Use ("OSV"), Coskata Coatue Wildlife Refuge and Great Point, for compliance with the rare wildlife provisions of the Massachusetts Wetland Protection Act ("WPA"; 321 CMR 10.37) and the Massachusetts Endangered Species Act (MGL c. 131A; 321 CMR 10.00). In 1993, the Division published Guidelines for Managing Recreational Use of Beaches to Protect Piping Plovers, Terns, and Their Habitats in Massachusetts ("State Guidelines"; Attachment 1). The State Guidelines contain recommended procedures for managing recreational activities, including but not limited to ORV use, to ensure compliance with the Massachusetts Endangered Species Act ("MESA"; MGL c. 131A, 321 CMR 10.00) and the rare species provisions of the WPA. The U.S. Fish & Wildlife Service published similar guidelines in 1994, and issued an amendment in 2015 ("Federal Guidelines"). The NOI contains management protocols intended to ensure that beach management is consistent with these State and Federal Guidelines. However, as noted in the section entitled, "Timing of Vehicle Restrictions in Chick Habitat," as part of the Commonwealth's Piping Plover Habitat Conservation Plan ("HCP") (http://www.mass.gov/eea/agencies/dfg/dfw/natural-heritage/species-information-and-conservation/rare-birds/piping-plover-hcp.html), the applicant may request from the Division a Certificate of Inclusion and MESA permit that would allow limited deviations from management in accordance with State and Federal Guidelines.

Based on a review of the information that has been provided and the information contained in the Natural Heritage database, the Division has determined that the proposed activity will occur within the actual Resource Area Habitat of the following state and federally listed species:

Common Name	Scientific Name	MESA Status	ESA Status
Piping Plover	*Charadrius melodus*	Threatened	Threatened
Least Tern	*Sternula antillarum*	Special Concern	-

Roseate Tern	*Sterna dougallii*	Endangered	Endangered
Common Tern	*Sterna hirundo*	Special Concern	-
Arctic Tern	*Sterna paradisaea*	Special Concern	-
Red Knot	*Calidris canuta rufa*	Threatened	Threatened

Coskata Coatue Wildlife Refuge and Great Point provides important breeding, foraging, migratory, and sheltering habitat for the Piping Plover and Least Tern, and important migratory (staging), foraging, and sheltering habitat for the remaining listed species.

The Division has determined that the activity, as currently proposed, will not adversely affect the actual Resource Area Habitat of state-listed species or result in a prohibited Take of state-listed species provided that the following conditions are met, and included in the final Order of Conditions:

1. All management activities must be carried out in accordance with State and Federal Guidelines and in accordance with "The Trustees of Reservations Nantucket Shorebird and Dune Management Plan, Nantucket National Wildlife, Nantucket Island ("Management Plan", dated 3/17/16; subject to the amendments requested below), unless expressly approved in writing in advance by the Division.[1]
2. The Management Plan shall be amended to specify a maximum width for the OSV corridor, and that the corridor shall be sited so as to minimize impacts to beach wrack. We note that the maximum width for a vehicle corridor specified in the Draft HCP is 15 feet.

Massachusetts Endangered Species Act Compliance

In addition to measures necessary to avoid adverse effects to Resource Area habitat, the Management Plan contains provisions to avoid the direct Take of Plovers and Terns through harm, harassment, injury or mortality that could result from OSVs or other recreational activities (e.g. additional OSV closures when chicks are present, restrictions on pets).[2]

Implementation of the Management Plan, as currently proposed, will not result in a Take of state-listed species. We note that a decision by The Trustees of Reservations (TTOR) to apply for a Certificate of Inclusion (COI) in the Statewide Piping Plover Habitat Conservation Plan (HCP) to allow *limited* escorted OSV use in the vicinity of unfledged Piping Plover chicks would not alter our no adverse effect finding pursuant to the WPA because the intent of the timing restriction on use of the OSV travel corridor when unfledged plover and tern chicks are present is to avoid direct Take (a MESA issue), not to prevent adverse effects to Resource Area rare species habitat. However, if the TTOR were to apply for a COI, and the Division approved the application, the Division would need to issue a Take determination and Conservation & Management Permit, pursuant to MESA, as part of the COI approval process.

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[1] For example, if the TTOR applies for a Certificate of Inclusion (COI) and MESA Conservation & Management Permit (CMP) associated with the Statewide Habitat Conservation Plan (HCP) for the Piping Plover, the Division could approve deviations from the Guidelines and from the Beach Management Plan.

[2] Although some measures such as symbolic fencing may be necessary to avoid both a Take and adverse effects to the Resource Area habitat, other measures are only necessary to avoid direct Take; for example restrictions on dogs and timing restrictions on use of a limited ORV travel corridor through an area with unfledged plover or least tern chicks.

Please contact Jon Regosin, Ph.D., with any questions about this letter at (508) 389-6376 (jonathan.regosin@state.ma.us).

Sincerely,

Thomas W. French, Ph.D.
Assistant Director

cc: Christopher Kennedy, The Trustees of Reservations
Susi von Oettingen, U.S. Fish and Wildlife Service
Daniel Gilmore, DEP Southeast Regional Office, Wetlands Program

Nantucket Islands Land Bank

17 Commercial Wharf & Unnumbered Lot New Whale St (42.2.4- 7 & 8)

NOTICE OF INTENT APPLICATION

For the Redevelopment of a Solid Fill Pier
Including a Floating Dock System & Dredging

At

"Petrel Landing"
17 Commercial Wharf

Nantucket, MA

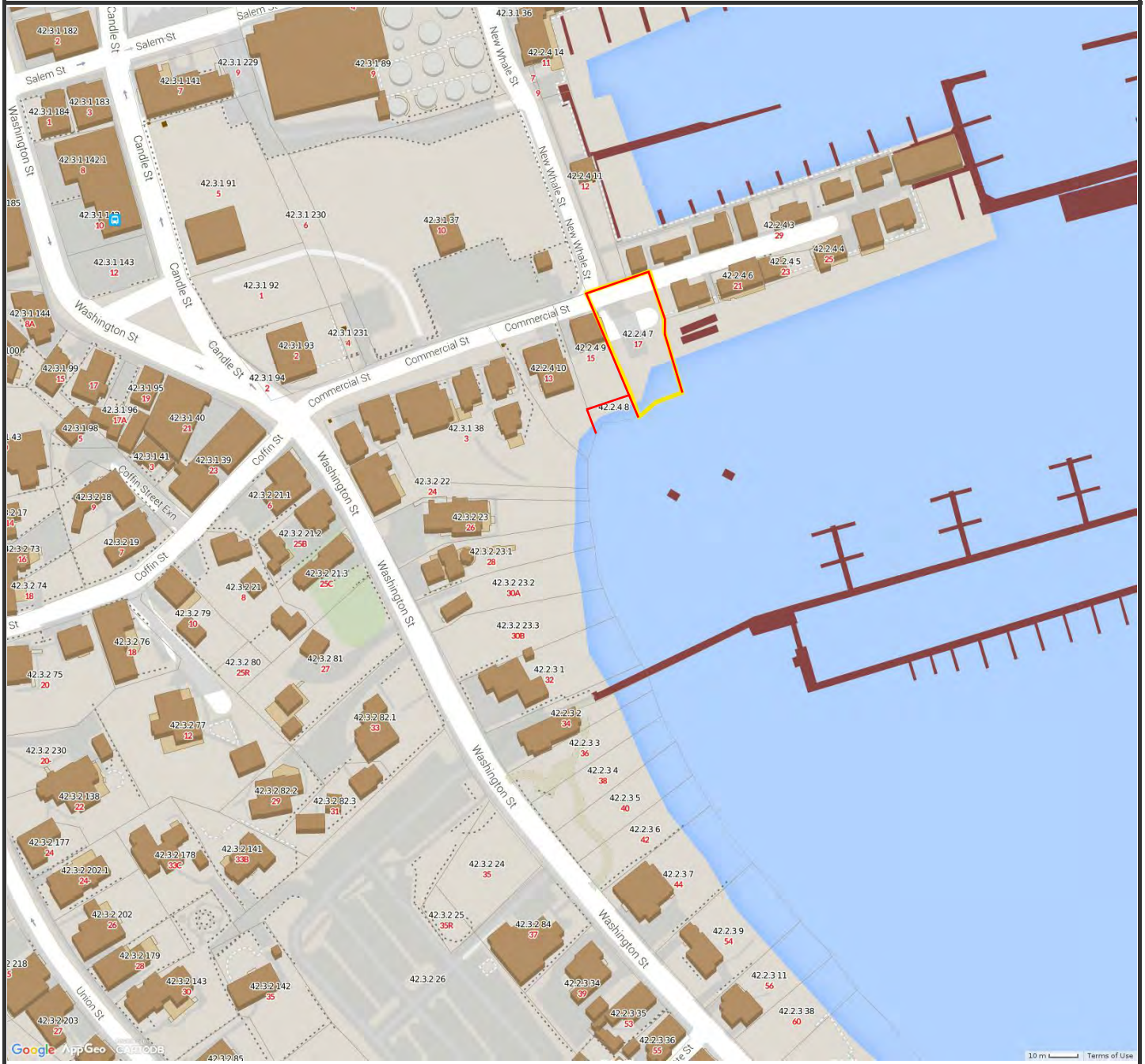
April 2016

Prepared For

NANTUCKET ISLANDS
LAND BANK

20 Mary Ann Drive • Nantucket, MA 02554
508-825-5053 • www.NantucketEngineer.com

Locus Map - NILB Petrel Landing Project



Property Information

Property ID	42.2.4 7
Location	17 COMMERCIAL WF
Owner	NANTUCKET ISLANDS LAND BANK

Property ID 42.2.4 8

Location NEW WHALE STRET
Owner NANTUCKET ISLANDS LAND BANK

MAP FOR REFERENCE ONLY
NOT A LEGAL DOCUMENT

Town and County of Nantucket, MA makes no claims and no warranties, expressed or implied, concerning the validity or accuracy of the GIS data presented on this map.

Parcels updated December, 2014
Properties updated January, 2015

April 15, 2016

Mr. Ernest Steinauer, Chair
Nantucket Conservation Commission
2 Bathing Beach Road
Nantucket, MA 02554

Re: Notice of Intent for Petrel Landing
17 Commercial Wharf
Map 42.2.4 Parcels 7 & 8

Dear Mr. Steinauer:

On behalf of the Nantucket Islands Land Bank, Nantucket Engineering & Survey, P.C. is submitting this Notice of Intent (NOI) to the Nantucket Conservation Commission for proposed site redevelopment activities at the above referenced property (the "Site"). The application is submitted per the Massachusetts Wetlands Protection Act (WPA) and the Wetland Protection Regulations for Administering the Town of Nantucket By-law Chapter 136.

Proposed activities at the Site include the installation of a new steel sheet bulkhead around the perimeter of the existing rip-rap revetment. A floating pier system is proposed which will be held in place by driven pilings. The area behind the sheet bulkhead will be filled level using dredge spoils covered with topsoil, landscaped with a driveway, perimeter boardwalk, benches and plantings. Dredging is proposed to facilitate navigation within the waterway for access to the pier and floating dock system. A siltation curtain will be installed around the work perimeter. Resource areas at the Site include Coastal Bank, Coastal Beach, Land Subject to Coastal Storm Flowage, Land Containing Shellfish, and Land Under the Ocean. Attached are permit drawings, including plans showing a site locus, existing conditions and proposed construction areas.

A completed WPA Form 3 – Notice of Intent is attached along with a check for $266.90 to the Inquirer & Mirror for publication of the notice of the public hearing. Notification of this NOI filing was provided to all abutting property owners by certified mail. This property owner listing was obtained from the Town of Nantucket Assessor's office. Documentation of the notification is provided including a copy of the notification letter, the property owner listing and certified mail receipts.

Please refer to the attached Site Assessment Report prepared by Pam Neubert, Ph.D. of Stantec for additional supporting information.

Site Description

The Properties at the Site known as Petrel Landing, 17 Commercial Wharf are listed as Map 42.2.4, Parcels 7 & 8 by the Town of Nantucket Assessor's Office, and referred to as Lot 5 on Land Court Case 10752-E and Lot 2 on 10726-A, respectively. The combined property area is approximately 8,700 square-feet, located in the area of Nantucket Island considered "downtown". The properties are bounded by Nantucket Harbor and by developed commercial and residential properties.

The property has been historically used for loading/unloading of vessels, including the Petrel, a steam-powered fishing vessel. In the more recent past there was a pile supported float and ramp system, which will be replaced by the current proposal. The Site has a record Federal permit, NEDOD-R -3-75-210, MA-NANT-76-509 for the pilings, ramp and solid fill pier.

Using Mean Low Water as a reference datum (MLW = 0.0), the Mean High Water (MHW) and Annual High Tide (HTL) elevations are +3.04 feet and +4.10 feet, respectively.

Resource Areas on the Site subject to regulation consist of Coastal Bank and Coastal Beach and associated buffer zones, Land Subject to Coastal Storm Flowage, Land Containing Shellfish and Land under the Ocean (Nantucket Harbor).

The Coastal Beach is located between the Land Under the Ocean and the existing Coastal Bank (stone revetment).

The Coastal Bank is the existing stone revetment.

Land Subject to Coastal Storm Flowage encompasses the entire Site to the 100-year flood elevation of 11 (NAVD88), Zone VE, as delineated on FIRM Community Map Numbers 25019C0086G, effective date 06/09/2014.

Land under the Ocean is located seaward of the Coastal Beach.

Land Containing Shellfish is land under that ocean, when such land contains shellfish. The following factors have been taken into account and documented: the density of shellfish, the size of the area and the historical and current importance of the area to recreational or commercial shellfishing.

The project area is not located within areas mapped by the National Heritage and Endangered Species Program (NHESP) as Priority Habitats of Rare Species or Estimated Habitats of Rare Wildlife.

Project Description

The Nantucket Islands Land Bank will retain an experienced contractor to perform the proposed Coastal Bank stabilization through the public procurement process (MGL Ch.30B). The plans show the proposed construction details, including finish conditions and planting details. Proposed activities include the installation of a new steel sheet bulkhead around the perimeter of the existing rip-rap revetment. A floating pier system is proposed which will be held in place by driven pilings. The area behind the sheet bulkhead will be filled level using dredge spoils covered with topsoil, landscaped with a driveway, perimeter boardwalk, benches and plantings. Dredging is proposed to facilitate navigation within the waterway for access to the pier and floating dock system.

In addition to the NOI review the following permits/approvals are anticipated to be required for the proposed project:

- MEPA Environmental Notification Form (ENF) Certificate
- Combined MA DEP 401 Water Quality Certification/Chapter 91 Waterways Permit
- U.S. Army Corps of Engineers (USACE) Individual Permit
- MA Office of Coastal Zone Management (CZM) Federal Consistency

Construction Methodology & Protection of Resource Areas

The applicant proposes to install the steel sheet bulkhead from the existing solid fill pier, along the base of the existing stone revetment. The work will be done by a track excavator with a vibratory head attachment. The contractor will be required to utilize specialized equipment and procedures so as to prevent damage from the effect of pile driving induced vibrations on nearby structures. Monitoring points will be installed in the surrounding area and tracked throughout the process to record any changes in the project vicinity.

The construction access for the project will be from the Commercial Street to the existing solid fill pier. Materials for the project will be staged off-site and delivered to the site as for installation. The pile installation and dredging will be performed by a machine on a barge. The spoils will be used behind the installed the sheet bulkhead. Any excess material will be properly disposed of at an off-site facility.

Dredging will be performed using mechanical methods, consisting of barge-mounted excavator or crane with a closed bucket. The dredging will improve the access channel to a depth of approximately -5.0 feet Mean Low Water (MLW) with 5H:1V sideslopes. Less steep sideslopes of 5H instead of 3H have been as an extra precaution for improved stability of the seafloor. Further, the edge of a majority of the dredging has been maintained at least 25-feet from the portion of the stone revetment that supports the structures on Commercial Wharf. The dredge footprint and side slopes are shown on the accompanying site plan. The proposed maintenance dredging is anticipated to impact a total area of 39,000+/- SF (including 5H:1V sideslopes) and remove an estimated total volume of 3,200+/- CY of sediment (including 5H:1V sideslopes and a 1-foot allowable over dredge).

The proposed dredge plan has been developed to avoid/minimize impacts to existing eelgrass areas that have been located/confirmed by survey and are in close proximity to/or within the limits of the project. All dredging activities will be performed during the Time of Year (TOY) established by MA DMF. Moorings in the project area will be relocated nearby in conjunction with the Nantucket Harbormaster.

A siltation curtain will be maintained around the project perimeter during dredge operations. No significant long-term adverse effects are expected to finfish given the protective measures and short-term activity. The dredging will improve tidal flow and water circulation. The proposed dredging project is not expected to have any long-term negative effects on the overall hydrological and/or littoral processes in the vicinity of proposed dredging areas.

Further, dredging will not significantly alter the sediment or water quality in the project area. Given the limited duration of the proposed project, turbidity and the resuspension of solids are anticipated to be minimal and temporary. Water quality is anticipated to improve following the completion of dredging since it will also help reduce turbidity over the long term by minimizing the potential for vessel groundings and propeller wash (or scouring).

The area of proposed dredging is sheltered by Commercial Wharf, the Nantucket Boat Basin and the Town Pier. Given this location the increased depth will not result in measurable height and velocity of waves hitting the shore, or cause localized changes in circulation patterns or in a sediment transport.

As described above, the dredging plan is based on best available measures so as to minimize adverse effects caused by changes in bottom topography.

The area behind the bulkhead will be landscaped as shown on the accompanying site plan. The area will include a driveway for access to the edge of the bulkhead, a perimeter board walk, benches and plantings. These areas will be regularly maintained by the Land Bank.

Conclusion

The work as proposed will result in a significant benefit to the public by activating the waterfront for recreational-use and enjoyment of wetland scenic views. The project will not result in an adverse impact on the areas or the interests protected by the Commission including flood control, erosion control, storm damage prevention, prevention of pollution, wildlife, and scenic views.

Sincerely,

Arthur D. Gasbarro, PE, PLS, LEED AP

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WPA Form 3 – Notice of Intent

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40
And the Town of Nantucket Wetlands Bylaw Chapter 136

Provided by MassDEP:
MassDEP File Number
Document Transaction Number
NANTUCKET
City/Town

A. General Information

1. Project Location (**Note:** electronic filers will click on button to locate project site):

17 Commercial Wharf &
Lot without street number - New Whale Street
a. Street Address

Nantucket
b. City/Town

02554
c. Zip Code

Latitude and Longitude:

41d 16' 57" N
d. Latitude

70d 05' 42" W
e. Longitude

42.2.4
f. Assessors Map/Plat Number

7 & 8 (New Whale St. Lot)
g. Parcel /Lot Number

2. Applicant:

a. First Name
b. Last Name
Nantucket Islands Land Bank
c. Organization
22 Broad Street
d. Street Address
Nantucket
e. City/Town
MA
f. State
02554
g. Zip Code
h. Phone Number
i. Fax Number
j. Email Address

3. Property owner (required if different from applicant): ☐ Check if more than one owner

a. First Name
b. Last Name
c. Organization
d. Street Address
e. City/Town
f. State
g. Zip Code
h. Phone Number
i. Fax Number
j. Email address

4. Representative (if any):

Arthur D.
a. First Name
Gasbarro, PE, PLS, LEED AP
b. Last Name
Nantucket Engineering & Survey, P.C.
c. Company
20 Mary Ann Drive
d. Street Address
Nantucket
e. City/Town
MA
f. State
02554
g. Zip Code
508-825-5053
h. Phone Number
i. Fax Number
art@nantucketengineer.com
j. Email address

5. Total WPA Fee Paid (from NOI Wetland Fee Transmittal Form):

Exempt
a. Total Fee Paid
b. State Fee Paid
c. City/Town Fee Paid

A. General Information (continued)

6. General Project Description:

The Applicant proposes to redevelop the existing solid fill pier, ramp and float system for public recreational use and open space. A new steel sheet bulkhead will be installed around the perimeter of the existing rip-rap revetment. The pier will be filled level, landscaped with a driveway, perimeter boardwalk, benches and plantings. Dredging is proposed to facilitate navigation within the waterway for access to the pier and floating dock system. A siltation curtain will be installed around the work perimeter. Please refer to the attached Project Narrative and Site Plan for additional information.

7a. Project Type Checklist:

1. ☐ Single Family Home
2. ☐ Residential Subdivision
3. ☐ Limited Project Driveway Crossing
4. ☐ Commercial/Industrial
5. ☒ Dock/Pier
6. ☐ Utilities
7. ☒ Coastal Engineering Structure
8. ☐ Agriculture (e.g., cranberries, forestry)
9. ☐ Transportation
10. ☐ Other

7b. Is any portion of the proposed activity eligible to be treated as a limited project subject to 310 CMR 10.24 (coastal) or 310 CMR 10.53 (inland)?

1. ☐ Yes ☒ No If yes, describe which limited project applies to this project:

2. Limited Project

8. Property recorded at the Registry of Deeds for:

NANTUCKET	21,454
a. County	b. Certificate # (if registered land)
c. Book	d. Page Number

B. Buffer Zone & Resource Area Impacts (temporary & permanent)

1. ☐ Buffer Zone Only – Check if the project is located only in the Buffer Zone of a Bordering Vegetated Wetland, Inland Bank, or Coastal Resource Area.
2. ☐ Inland Resource Areas (see 310 CMR 10.54-10.58; if not applicable, go to Section B.3, Coastal Resource Areas).

Check all that apply below. Attach narrative and any supporting documentation describing how the project will meet all performance standards for each of the resource areas altered, including standards requiring consideration of alternative project design or location.

For all projects affecting other Resource Areas, please attach a narrative explaining how the resource area was delineated.

Resource Area	Size of Proposed Alteration	Proposed Replacement (if any)
a. ☐ Bank	1. linear feet	2. linear feet
b. ☐ Bordering Vegetated Wetland	1. square feet	2. square feet
c. ☐ Land Under Waterbodies and Waterways	1. square feet 3. cubic yards dredged	2. square feet

B. Buffer Zone & Resource Area Impacts (temporary & permanent) (cont'd)

Resource Area	Size of Proposed Alteration	Proposed Replacement (if any)
d. ☐ Bordering Land Subject to Flooding	1. square feet	2. square feet
	3. cubic feet of flood storage lost	4. cubic feet replaced
e. ☐ Isolated Land Subject to Flooding	1. square feet	
	2. cubic feet of flood storage lost	3. cubic feet replaced
f. ☐ Riverfront Area	1. Name of Waterway (if available)	

2. Width of Riverfront Area (check one):

☐ 25 ft. - Designated Densely Developed Areas only

☐ 100 ft. - New agricultural projects only

☐ 200 ft. - All other projects

3. Total area of Riverfront Area on the site of the proposed project: _____ square feet

4. Proposed alteration of the Riverfront Area:

a. total square feet	b. square feet within 100 ft.	c. square feet between 100 ft. and 200 ft.

5. Has an alternatives analysis been done and is it attached to this NOI? ☐ Yes ☐ No

6. Was the lot where the activity is proposed created prior to August 1, 1996? ☐ Yes ☐ No

3. ☒ Coastal Resource Areas: (See 310 CMR 10.25-10.35)

Check all that apply below. Attach narrative and supporting documentation describing how the project will meet all performance standards for each of the resource areas altered, including standards requiring consideration of alternative project design or location.

Online Users: Include your document transaction number (provided on your receipt page) with all supplementary information you submit to the Department.

Resource Area	Size of Proposed Alteration	Proposed Replacement (if any)
a. ☐ Designated Port Areas	Indicate size under Land Under the Ocean, below	
b. ☒ Land Under the Ocean	39,000 +/- 1. square feet	
	3,200 +/- 2. cubic yards dredged	
c. ☐ Barrier Beach	Indicate size under Coastal Beaches and/or Coastal Dunes below	
d. ☐ Coastal Beaches	1. square feet	2. cubic yards beach nourishment
e. ☐ Coastal Dunes	1. square feet	2. cubic yards dune nourishment

B. Buffer Zone & Resource Area Impacts (temporary & permanent) (cont'd)

	Size of Proposed Alteration	Proposed Replacement (if any)
f. ☒ Coastal Banks	170' (1. linear feet)	
g. ☐ Rocky Intertidal Shores	(1. square feet)	
h. ☐ Salt Marshes	(1. square feet)	(2. sq ft restoration, rehab., creation)
i. ☐ Land Under Salt Ponds	(1. square feet)	
	(2. cubic yards dredged)	
j. ☒ Land Containing Shellfish	39,000 +/- (1. square feet)	
k. ☐ Fish Runs	Indicate size under Coastal Banks, inland Bank, Land Under the Ocean, and/or inland Land Under Waterbodies and Waterways, above	
	(1. cubic yards dredged)	
l. ☒ Land Subject to Coastal Storm Flowage	7,700 +/- (1. square feet)	

4. ☐ Restoration/Enhancement
If the project is for the purpose of restoring or enhancing a wetland resource area in addition to the square footage that has been entered in Section B.2.b or B.3.h above, please enter the additional amount here.

a. square feet of BVW _____ b. square feet of Salt Marsh _____

5. ☐ Project Involves Stream Crossings

a. number of new stream crossings _____ b. number of replacement stream crossings _____

C. Other Applicable Standards and Requirements

Streamlined Massachusetts Endangered Species Act/Wetlands Protection Act Review

1. Is any portion of the proposed project located in **Estimated Habitat of Rare Wildlife** as indicated on the most recent Estimated Habitat Map of State-Listed Rare Wetland Wildlife published by the Natural Heritage and Endangered Species Program (NHESP)? To view habitat maps, see the *Massachusetts Natural Heritage Atlas* or go to http://www.mass.gov/dfwele/dfw/nhesp/regulatory_review/priority_habitat/online_viewer.htm.

a. ☐ Yes ☒ No **If yes, include proof of mailing or hand delivery of NOI to:**

Natural Heritage and Endangered Species Program
Division of Fisheries and Wildlife
Route 135, North Drive
Westborough, MA 01581

10/1/08
b. Date of map

C. Other Applicable Standards and Requirements (cont'd)

If *yes*, the project is also subject to Massachusetts Endangered Species Act (MESA) review (321 CMR 10.18). To qualify for a streamlined, 30-day, MESA/Wetlands Protection Act review, please complete Section C.1.C, and include requested materials with this Notice of Intent (NOI); *OR* complete Section C.1.d, if applicable. *If MESA supplemental information is not included with the NOI, by completing Section 1 of this form, the NHESP will require a separate MESA filing which may take up to 90 days to review (unless noted exceptions in Section 2 apply, see below).*

1. c. Submit Supplemental Information for Endangered Species Review*

   1. ☐ Percentage/acreage of property to be altered:

      (a) within wetland Resource Area _____ percentage/acreage

      (b) outside Resource Area _____ percentage/acreage

   2. ☐ Assessor's Map or right-of-way plan of site

   3. ☐ Project plans for entire project site, including wetland resource areas and areas outside of wetlands jurisdiction, showing existing and proposed conditions, existing and proposed tree/vegetation clearing line, and clearly demarcated limits of work ********

      (a) ☐ Project description (including description of impacts outside of wetland resource area & buffer zone)

      (b) ☐ Photographs representative of the site

      (c) ☐ MESA filing fee (fee information available at: http://www.mass.gov/dfwele/dfw/nhesp/regulatory_review/mesa/mesa_fee_schedule.htm). Make check payable to "Commonwealth of Massachusetts - NHESP" and ***mail to NHESP*** at above address

      *Projects altering **10 or more acres** of land, also submit:*

      (d) ☐ Vegetation cover type map of site

      (e) ☐ Project plans showing Priority & Estimated Habitat boundaries

   d. OR Check One of the Following

      1. ☐ Project is exempt from MESA review.
         Attach applicant letter indicating which MESA exemption applies. (See 321 CMR 10.14, http://www.mass.gov/dfwele/dfw/nhesp/regulatory_review/mesa/mesa_exemptions.htm; the NOI must still be sent to NHESP if the project is within estimated habitat pursuant to 310 CMR 10.37 and 10.59.)

      2. ☐ Separate MESA review ongoing. _____ a. NHESP Tracking # _____ b. Date submitted to NHESP

* Some projects **not** in Estimated Habitat may be located in Priority Habitat, and require NHESP review (see http://www.mass.gov/dfwele/dfw/nhesp/nhesp.htm, regulatory review tab). Priority Habitat includes habitat for state-listed plants and strictly upland species not protected by the Wetlands Protection Act.

** MESA projects may not be segmented (321 CMR 10.16). The applicant must disclose full development plans even if such plans are not required as part of the Notice of Intent process.

C. Other Applicable Standards and Requirements (cont'd)

3. ☐ Separate MESA review completed.
Include copy of NHESP "no Take" determination or valid Conservation & Management Permit with approved plan.

2. For coastal projects only, is any portion of the proposed project located below the mean high water line or in a fish run?

a. ☐ Not applicable – project is in inland resource area only

b. ☒ Yes ☐ No If yes, include proof of mailing or hand delivery of NOI to either:

South Shore - Cohasset to Rhode Island, and the Cape & Islands:

Division of Marine Fisheries -
Southeast Marine Fisheries Station
Attn: Environmental Reviewer
1213 Purchase Street – 3rd Floor
New Bedford, MA 02740-6694

North Shore - Hull to New Hampshire:

Division of Marine Fisheries -
North Shore Office
Attn: Environmental Reviewer
30 Emerson Avenue
Gloucester, MA 01930

Also if yes, the project may require a Chapter 91 license. For coastal towns in the Northeast Region, please contact MassDEP's Boston Office. For coastal towns in the Southeast Region, please contact MassDEP's Southeast Regional Office.

3. Is any portion of the proposed project within an Area of Critical Environmental Concern (ACEC)?

a. ☐ Yes ☒ No If yes, provide name of ACEC (see instructions to WPA Form 3 or MassDEP Website for ACEC locations). **Note:** electronic filers click on Website.

b. ACEC

Online Users: Include your document transaction number (provided on your receipt page) with all supplementary information you submit to the Department.

4. Is any portion of the proposed project within an area designated as an Outstanding Resource Water (ORW) as designated in the Massachusetts Surface Water Quality Standards, 314 CMR 4.00?

a. ☐ Yes ☒ No

5. Is any portion of the site subject to a Wetlands Restriction Order under the Inland Wetlands Restriction Act (M.G.L. c. 131, § 40A) or the Coastal Wetlands Restriction Act (M.G.L. c. 130, § 105)?

a. ☐ Yes ☒ No

6. Is this project subject to provisions of the MassDEP Stormwater Management Standards?

a. ☒ Yes. Attach a copy of the Stormwater Report as required by the Stormwater Management Standards per 310 CMR 10.05(6)(k)-(q) and check if:

1. ☐ Applying for Low Impact Development (LID) site design credits (as described in Stormwater Management Handbook Vol. 2, Chapter 3)

2. ☒ A portion of the site constitutes redevelopment

3. ☐ Proprietary BMPs are included in the Stormwater Management System.

b. ☐ No. Check why the project is exempt:

1. ☐ Single-family house

C. Other Applicable Standards and Requirements (cont'd)

2. ☐ Emergency road repair

3. ☐ Small Residential Subdivision (less than or equal to 4 single-family houses or less than or equal to 4 units in multi-family housing project) with no discharge to Critical Areas.

D. Additional Information

Applicants must include the following with this Notice of Intent (NOI). See instructions for details.

Online Users: Attach the document transaction number (provided on your receipt page) for any of the following information you submit to the Department.

1. ☒ USGS or other map of the area (along with a narrative description, if necessary) containing sufficient information for the Conservation Commission and the Department to locate the site. (Electronic filers may omit this item.)

2. ☒ Plans identifying the location of proposed activities (including activities proposed to serve as a Bordering Vegetated Wetland [BVW] replication area or other mitigating measure) relative to the boundaries of each affected resource area.

3. ☒ Identify the method for BVW and other resource area boundary delineations (MassDEP BVW Field Data Form(s), Determination of Applicability, Order of Resource Area Delineation, etc.), and attach documentation of the methodology.

4. ☒ List the titles and dates for all plans and other materials submitted with this NOI.

Site Plan of Land to Accompany A Notice of Intent
a. Plan Title

Nantucket Engineering & Survey, P.C.
b. Prepared By

Arthur Gasbarro, PE, PLS
c. Signed and Stamped by

4/14/16
d. Final Revision Date

1"=20'
e. Scale

Landscape Conceptual Plan by Ahern, LLC
f. Additional Plan or Document Title

9/30/15
g. Date

5. ☐ If there is more than one property owner, please attach a list of these property owners not listed on this form.

6. ☐ Attach proof of mailing for Natural Heritage and Endangered Species Program, if needed.

7. ☒ Attach proof of mailing for Massachusetts Division of Marine Fisheries, if needed.

8. ☒ Attach NOI Wetland Fee Transmittal Form

9. ☒ Attach Stormwater Report, if needed.

E. Fees

1. ☒ Fee Exempt: No filing fee shall be assessed for projects of any city, town, county, or district of the Commonwealth, federally recognized Indian tribe housing authority, municipal housing authority, or the Massachusetts Bay Transportation Authority.

Applicants must submit the following information (in addition to pages 1 and 2 of the NOI Wetland Fee Transmittal Form) to confirm fee payment:

2. Municipal Check Number	3. Check date
4. State Check Number	5. Check date
6. Payor name on check: First Name	7. Payor name on check: Last Name

F. Signatures and Submittal Requirements

I hereby certify under the penalties of perjury that the foregoing Notice of Intent and accompanying plans, documents, and supporting data are true and complete to the best of my knowledge. I understand that the Conservation Commission will place notification of this Notice in a local newspaper at the expense of the applicant in accordance with the wetlands regulations, 310 CMR 10.05(5)(a).

I further certify under penalties of perjury that all abutters were notified of this application, pursuant to the requirements of M.G.L. c. 131, § 40. Notice must be made by Certificate of Mailing or in writing by hand delivery or certified mail (return receipt requested) to all abutters within 100 feet of the property line of the project location.

AGENT 1. Signature of Applicant	4/15/16 2. Date
3. Signature of Property Owner (if different)	4. Date
5. Signature of Representative (if any)	4/15/16 6. Date

For Conservation Commission:
Two copies of the completed Notice of Intent (Form 3), including supporting plans and documents, two copies of the NOI Wetland Fee Transmittal Form, and the city/town fee payment, to the Conservation Commission by certified mail or hand delivery.

For MassDEP:
One copy of the completed Notice of Intent (Form 3), including supporting plans and documents, one copy of the NOI Wetland Fee Transmittal Form, and a **copy** of the state fee payment to the MassDEP Regional Office (see Instructions) by certified mail or hand delivery.

Other:
If the applicant has checked the "yes" box in any part of Section C, Item 3, above, refer to that section and the Instructions for additional submittal requirements.

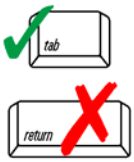
The original and copies must be sent simultaneously. Failure by the applicant to send copies in a timely manner may result in dismissal of the Notice of Intent.

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

NOI Wetland Fee Transmittal Form

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Important: When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



A. Applicant Information

1. Applicant:

Exempt

a. First Name | b. Last Name

c. Organization

d. Mailing Address

e. City/Town | f. State | g. Zip Code

h. Phone Number | i. Fax Number | j. Email Address

2. Property Owner (if different):

a. First Name | b. Last Name

c. Organization

d. Mailing Address

e. City/Town | f. State | g. Zip Code

h. Phone Number | i. Fax Number | j. Email Address

3. Project Location:

a. Street Address | b. City/Town

To calculate filing fees, refer to the category fee list and examples in the instructions for filling out WPA Form 3 (Notice of Intent).

B. Fees

The fee should be calculated using the following six-step process and worksheet. **Please see Instructions before filling out worksheet.**

Step 1/Type of Activity: Describe each type of activity that will occur in wetland resource area and buffer zone.

Step 2/Number of Activities: Identify the number of each type of activity.

Step 3/Individual Activity Fee: Identify each activity fee from the six project categories listed in the instructions.

Step 4/Subtotal Activity Fee: Multiply the number of activities (identified in Step 2) times the fee per category (identified in Step 3) to reach a subtotal fee amount. Note: If any of these activities are in a Riverfront Area in addition to another Resource Area or the Buffer Zone, the fee per activity should be multiplied by 1.5 and then added to the subtotal amount.

Step 5/Total Project Fee: Determine the total project fee by adding the subtotal amounts from Step 4.

Step 6/Fee Payments: To calculate the state share of the fee, divide the total fee in half and subtract $12.50. To calculate the city/town share of the fee, divide the total fee in half and add $12.50.

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

NOI Wetland Fee Transmittal Form

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

B. Fees (continued)

Step 1/Type of Activity	Step 2/Number of Activities	Step 3/Individual Activity Fee	Step 4/Subtotal Activity Fee
Nantucket Wetland By-law Fee			
Nantucket Expert Review Fee			

Step 5/Total Project Fee: _____

Step 6/Fee Payments:

Total Project Fee:	a. Total Fee from Step 5
State share of filing Fee:	b. 1/2 Total Fee **less $**12.50
City/Town share of filling Fee:	c. 1/2 Total Fee **plus** $12.50

C. Submittal Requirements

a.) Complete pages 1 and 2 and send with a check or money order for the state share of the fee, payable to the Commonwealth of Massachusetts.

Department of Environmental Protection
Box 4062
Boston, MA 02211

b.) **To the Conservation Commission:** Send the Notice of Intent or Abbreviated Notice of Intent; a **copy** of this form; and the city/town fee payment.

To MassDEP Regional Office (see Instructions): Send a copy of the Notice of Intent or Abbreviated Notice of Intent; a **copy** of this form; and a **copy** of the state fee payment. (E-filers of Notices of Intent may submit these electronically.)

Supporting Documentation
&
Project Plans

TRANSFER CERTIFICATE OF TITLE

Cert. No. 21454
Docu. No. 109234

From TRANSFER Certificate Nos. 6586 & 8362 Originally Registered
August 16, 1972 in Registration Book 33 Page 186 & August 8, 1978 in Registration Book 42 Page 162 respectively,
for the Registry District of Nantucket County.

THIS IS TO CERTIFY that NANTUCKET ISLANDS LAND BANK, a body politic and corporate, of 22 Broad Street, Nantucket in the County of Nantucket and Commonwealth of Massachusetts 02554

is the owner in fee simple

of that land situated in NANTUCKET
in the County of Nantucket and Commonwealth of Massachusetts, bounded and described as follows:

PARCEL 1:

WESTERLY	about twenty (20.+-) feet,
NORTHERLY	forty-five (45.00) feet, and
EASTERLY	about thirty (30.+-) feet, by land now or formerly of Grace David Barnes; and
SOUTHERLY	by low water mark in Nantucket Harbor.

All of said boundaries, except the water lines, are determined by the Court to be located as shown on a Plan numbered 10726-A, drawn by Josiah S. Barrett, Engineer, dated August 12, 1955, as modified and approved by the Court, filed in the Land Registration Office, a copy of a portion of which is filed with Certificate of Title No. 4330. Said land is shown thereon as Lot 2.

The land hereby registered is subject to License No. 1823 to maintain Commercial Wharf granted by The Commonwealth of Massachusetts to Landon Barnes et al, dated October 27, 1936, duly recorded in Book 108, Page 203.

PARCEL 2:

NORTHERLY	by Lots 7 and 8 on plan hereinafter mentioned, sixty-three and 91/100 (63.91) feet;
EASTERLY	by Lot 6 on said plan, about twenty-seven (27.+-) feet, and by Nantucket Harbor;
SOUTHERLY	by Nantucket Harbor; and
WESTERLY	by land now or formerly of Reuben C. Small and by Lot 2 as shown on said plan, one hundred twenty-one and 52/100 (121.52) feet.

All of said boundaries, except the water lines, are determined by the Court to be located as shown upon plan numbered 10752-E, drawn by Shugrue & Hart, Inc., Surveyors, dated April 28, 1978, and filed with Certificate of Title No. 8362 at the Registry District of Nantucket County. Said land is shown thereon as Lot 5.

The land hereby registered is subject to easements and provisions as set forth in a deed signed by Grace Davis Barnes et al, dated January 26, 1912, duly recorded in Book 95, Page 249.

So much of Commercial Wharf as lies west of a point two hundred seventy-two and 9/10 (272.9) feet easterly from Whale Street is subject to rights of way for all purposes in favor of the land registered in Case No. 8580, in common with others entitled thereto.

There is appurtenant to the land hereby registered rights as set forth in a license granted by the Commonwealth of Massachusetts to Landon Barnes et al, dated October 27, 1936, duly recorded in Book 108, Page 203.

000351 109234

DEED

I, David Brooks Walker a/k/a David B. Walker, of North Dartmouth, Massachusetts, for consideration paid in the amount of $4,100,000.00, grant to NANTUCKET ISLANDS LAND BANK, a body politic and corporate organized and existing pursuant to Acts of 1983, Chapter 669, as amended, having its usual place of business at 22 Broad Street, Nantucket, Massachusetts 02554, with QUITCLAIM COVENANTS,

Those certain parcels of land situated in Nantucket, Nantucket County, Massachusetts, together with the buildings located thereon, now known and numbered as 17 Commercial Wharf, bounded and described as follows:

Parcel One

WESTERLY	about twenty (20.±) feet,
NORTHERLY	forty-five (45.00) feet, and
EASTERLY	about thirty (30.±) feet, by land now or formerly of Grace David Barnes; and
SOUTHERLY	by low water mark in Nantucket Harbor.

All of said boundaries, except the water lines, are determined by the Land Court to be located as shown on Land Court Plan 10726-A, drawn by Josiah S. Barrett, Engineer, dated August 12, 1955, as modified and approved by the Court, filed in the Land Registration Office, a copy of a portion of which is filed with Certificate of Title No. 4330 at Nantucket Registry District. Said land is shown thereon as Lot 2.

Parcel Two

NORTHERLY	by Lots 7 and 8 on plan hereinafter mentioned, sixty-three and 91/100 (63.91) feet;
EASTERLY	by Lot 6 on said plan, about twenty-seven (27.±) feet, and by Nantucket Harbor;

000352

109234

SOUTHERLY by Nantucket Harbor; and

WESTERLY by land now or formerly of Reuben C. Small and by Lot 2 as shown on said plan, one hundred twenty-one and 52/100 (121.52) feet.

All of said boundaries, except the water lines, are determined by the Land Court to be located as shown on Land Court Plan No. 10752-E, drawn by Shugrue & Hart, Inc., Surveyors, dated April 28, 1978, and filed with Certificate of Title No. 8362 at the Registry District of Nantucket County. Said land is shown thereon as Lot 5.

There is appurtenant to said land rights as set forth in a license granted by the Commonwealth of Massachusetts to Landon Barnes et al, dated October 27, 1936, duly recorded in Book 108, Page 203.

There is also appurtenant to said land rights over Commercial Street to Washington Street as shown on plan 10752-A in common with others entitled thereto.

Said land is conveyed subject to the following matters:

(a) License No. 1823 to maintain Commercial Wharf granted by the Commonwealth of Massachusetts to Landon Barnes et al, dated October 27, 1936, duly recorded in Book 108, Page 203. (Parcel One only)

(b) Any and all public rights existing in and over the portions of the land hereby conveyed lying same below mean high water mark in Nantucket Harbor.

(c) Easements and provisions as set forth in a deed signed by Grace Davis Barnes et al, dated Janaury 26, 1912, duly recorded in Book 95, Page 249. (Parcel Two only)

(d) Rights of way in so much of Commercial Wharf as lies west of a point two hundred twenty-two and 9/10 (272.9) feet easterly from Whale Street for all purposes in favor of the land registered in Case No. 8580, in common with others entitled thereto. (Parcel Two only)

000352

109234

(e) Restrictions set forth on the face of Certificate of Title No. 8362 to the extent in force and applicable. (Parcel Two only)

(f) Easement in favor of the Wannacomet Water Company dated April 26, 1951, registered with Nantucket Registry District as Document No. 5414 as affected by Assignment to the Town of Nantucket dated March 31, 1988, registered with Nantucket Registry District as Document No. 43988. (Parcel Two only)

(g) Permit issued by the Department of Army Corps. Of Engineers dated October 13, 1976, registered with Nantucket Registry District as Document No. 17563. (Parcel Two only)

(h) Right of First Refusal in favor of Sherburne Associates dated August 8, 1978, registered with Nantucket Registry District as Document No. 19781 as affected by an Assignment dated April 1, 2004 to Nantucket Boat Basin, LLC, registered as Document No. 107406 and as further affected by a Waiver dated September 17, 2004, filed for record herewith. (Parcel Two only)

(i) Order of Conditions issued by the Nantucket Conservation Commission dated July 2, 1992, registered with Nantucket Registry District as Document No. 57231. (Parcel Two only).

(j) Real estate taxes assessed by the Town of Nantucket for the fiscal year 2005, commencing on July 1, 2004.

The premises hereby conveyed shall be subject to the following permanent restriction on use:

(i) There shall be no use of the premises for human habitation, whether as one or more permanent residences or as a hotel or other short-term habitation;

(ii) The entire premises, including any tidal waters accessible from the premises, shall be accessible to the public and maintained free of any exclusive easement or other encumbrance on public access; and

(iii) No commercial vehicle parking shall be permitted on the premises. "Commercial parking" shall consist of (i) vehicle

000354 **109234**

parking for a fee, or (ii) vehicle parking in connection with uses or activities which occur outside the premises.

For title, see Certificates of Title Nos. 6586 and 8362 at Nantucket Registry District.

Executed and sealed on Oct 4, 2004.

David Brooks Walker a/k/a
David B. Walker

COMMONWEALTH OF MASSACHUSETTS

Bristol, ss. Oct 4, 2004

On this 4th day of October, 2004, before me, the undersigned notary public, personally appeared David Brooks Walker, proved to me through satisfactory evidence of identification, which was Known to me, to be the person whose name is signed on the preceding or attached document, and acknowledged to me that he signed voluntarily for its stated purpose.

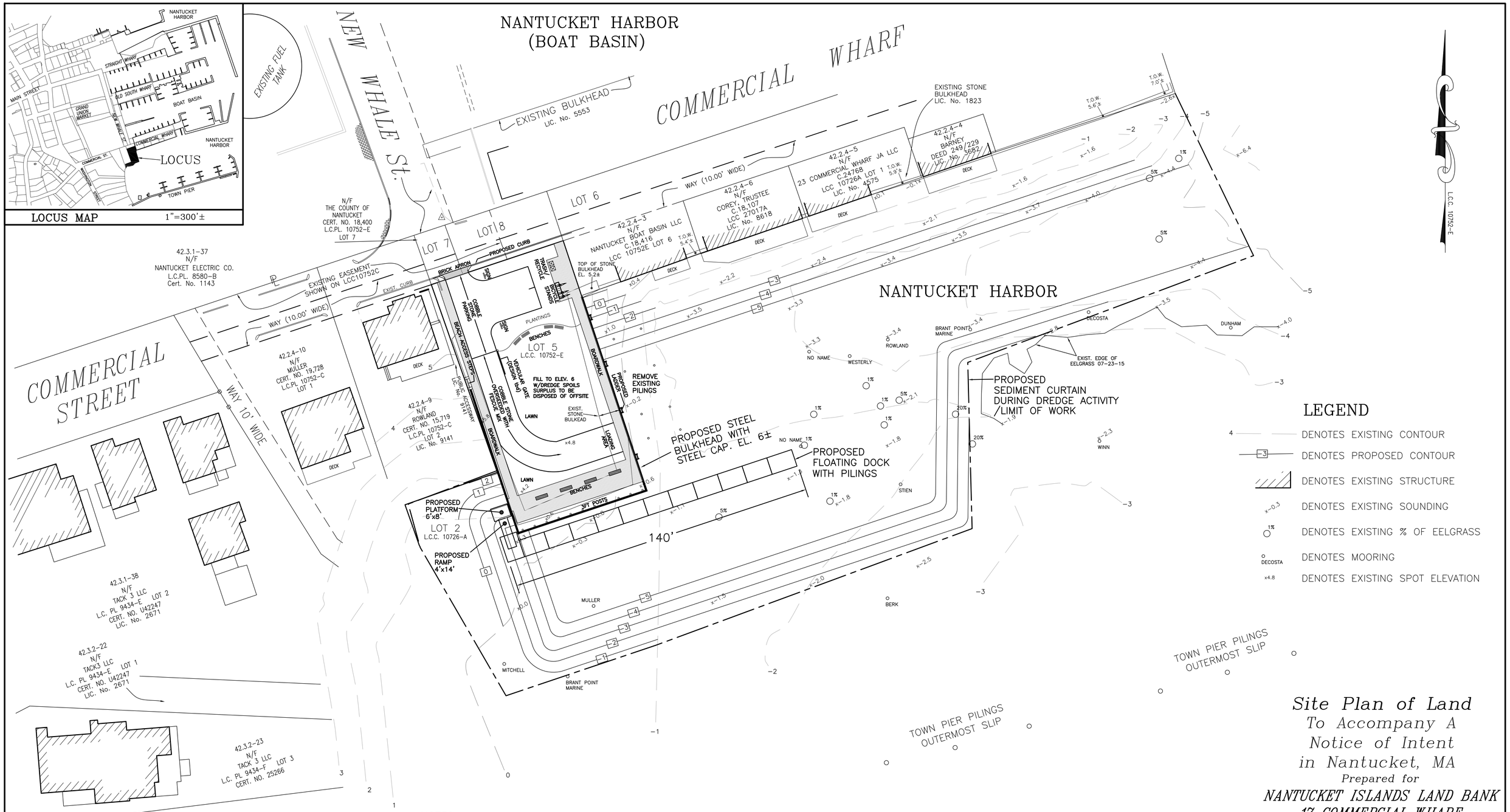
Beverly Ann Wallace
Notary Public

Printed name: BEVERLY ANN WALLACE
My commission expires: 9-11-09

F:\WpU-Z\Walker\David\landbank.ded.doc

NANTUCKET LAND BANK CERTIFICATE
☐ Paid $
☒ Exempt A
☐ Non-applicable
24893 10/5/04
No. Date
Authorization

Zone AE
(EL 9 Feet)
PANEL
25019C0086G
eff. 6/9/2014
Zone VE
(EL 11 Feet)
Coastal Barrier Resources System
Portion of Flood Map
FIRM Panel



LEGEND

- 4 — DENOTES EXISTING CONTOUR
- -3 — DENOTES PROPOSED CONTOUR
- DENOTES EXISTING STRUCTURE
- x-0.3 — DENOTES EXISTING SOUNDING
- 1% — DENOTES EXISTING % OF EELGRASS
- DECOSTA — DENOTES MOORING
- x4.8 — DENOTES EXISTING SPOT ELEVATION

NOTES:

DATUM = MEAN LOW WATER

LOCUS LIES WITHIN ZONE VE11 EL. 11
NAVD88 DATUM – F.E.M.A.–F.I.R.M.
COMMUNITY PANEL 25019C0086G

ELEVATIONS REFER TO USC&GS
BENCHMARK DISK #22

REF. D.P.W. LICENSE No. 1823 ISSUED 10/27/38

STRUCTURE LOCATIONS SHOWN ON LOTS OTHER THAN LOCUS ARE APPROXIMATE BASED UPON AVAILABLE RECORD FILES. NOT FROM FIELD SURVEY.

NOTE:
THIS PLAN WAS PREPARED FOR PERMITTING PURPOSES ONLY.
NOT FOR CONSTRUCTION
TOPOGRAPHIC, HYDORGRAPHIC & MOORING LOCATIONS SHOWN HEREON BASED UPON FIELD SURVEY CONDUCTED JULY 23, 2015 BY BLACKWELL & ASSOCIATES, INC.

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.

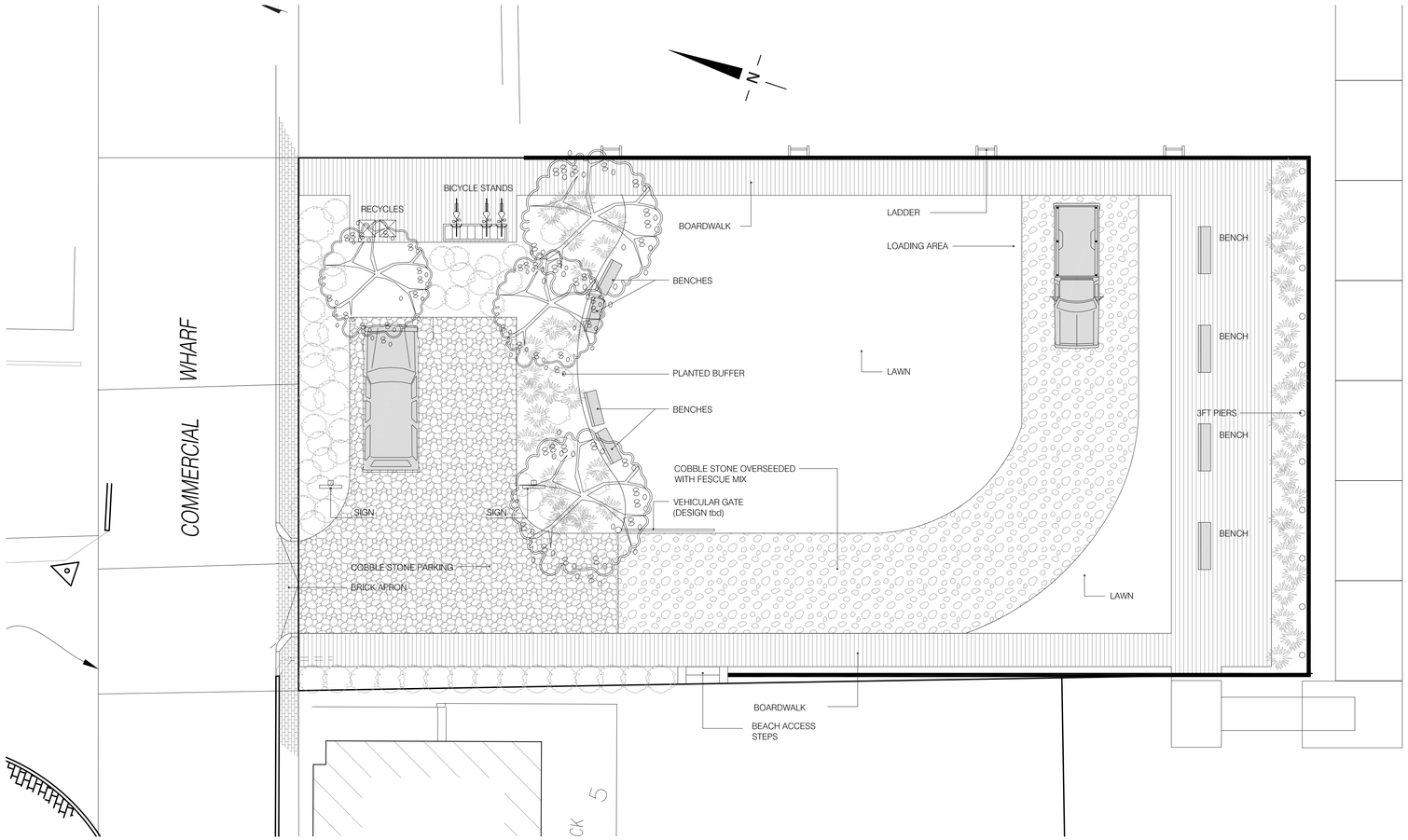
BASE MAPPING BY:
BLACKWELL & ASSOCIATES, Inc.
Professional Land Surveyors
20 TEASDALE CIRCLE
NANTUCKET, MASS. 02554
(508) 228-9026

Site Plan of Land
To Accompany A
Notice of Intent
in Nantucket, MA
Prepared for
NANTUCKET ISLANDS LAND BANK
17 COMMERCIAL WHARF

CERT. 21454 *LCC 10726-A, LOT 2*
LCC 10752-E, LOT 5

ASSESSOR'S MAP 42.2.4, PARCEL 7 & 8
Scale: 1"= 20' *April 14, 2016*

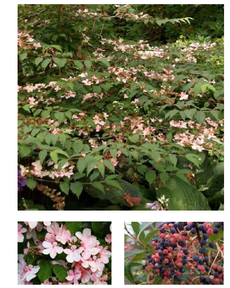
NANTUCKET ENGINEERING & SURVEY, PC
20 Mary Ann Drive Nantucket, MA 02554
NantucketEngineer.com 508-825-5053



1 CONCEPTUAL SITE PLAN Scale 1/8" = 1'-0"

GLEDITSIA TR. var. INERMIS
THORNLESS HONEYLOCUST
30'-50' size
shade tree
drought resistant
salt tolerant

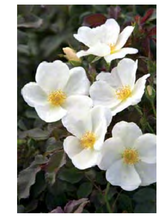
ILEX VERTICILLATA
WINTERBERRY
5'-10' size
fall fruit season
red color
drought resistant, salt tolerant



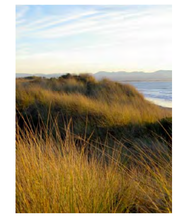
VIBURNUM PL. F. T.'PINK BEAUTY'
DOUBLEFILE VIBURNUM
5'-10' size
spring flower season
deep pink color
bird food, disease & insect resistent

CLETHRA ALNIFOLIA
SUMMERSWEET CLETHRA
5'-10' size
summer flower season
white color
fragrant

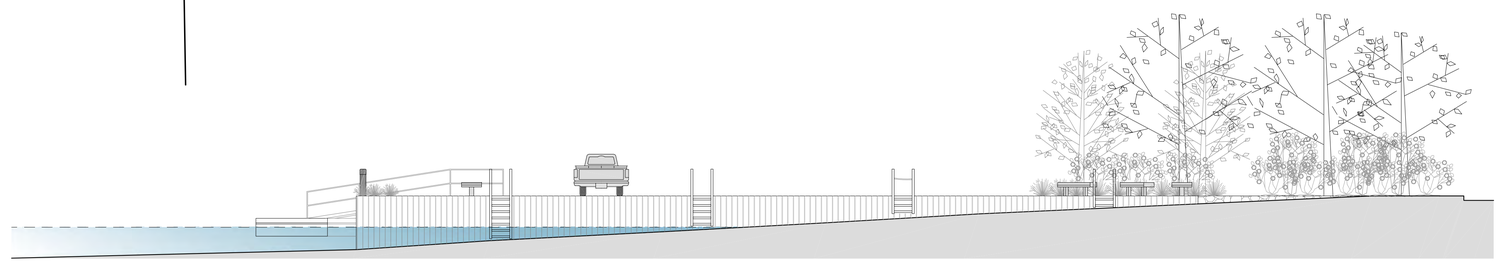
ILEX GLABRA
INKBERRY
5'-10' size
rounded habit
spring flower season
greenlsh white color



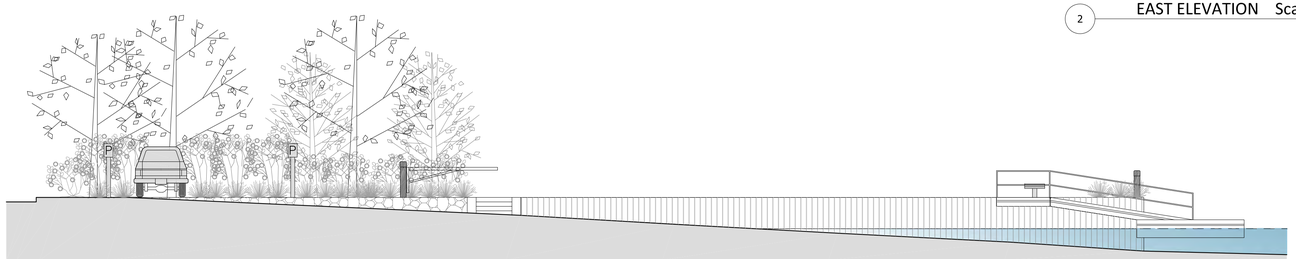
ROSA 'WHITE OUT'
WHITE KNOCKOUT ROSE
0'-4' size
long flower season white color
drought resistant
disease & insect resistent



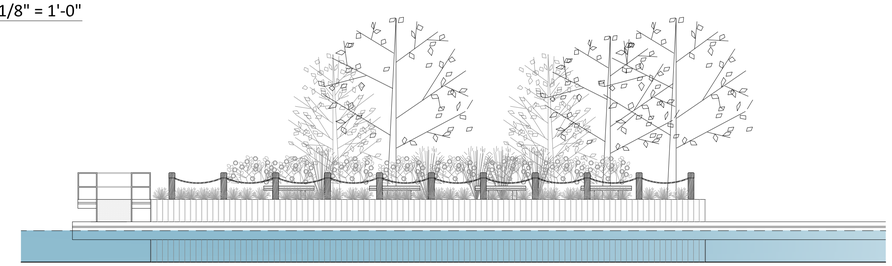
AMMOPHILA BREVILIGULATA
AMERICAN BEACHGRASS
20"-40" size
dense growth habit
salt tolerant



2 EAST ELEVATION Scale 1/8" = 1'-0"



3 WEST ELEVATION Scale 1/8" = 1'-0"



4 SOUTH ELEVATION Scale 1/8" = 1'-0"

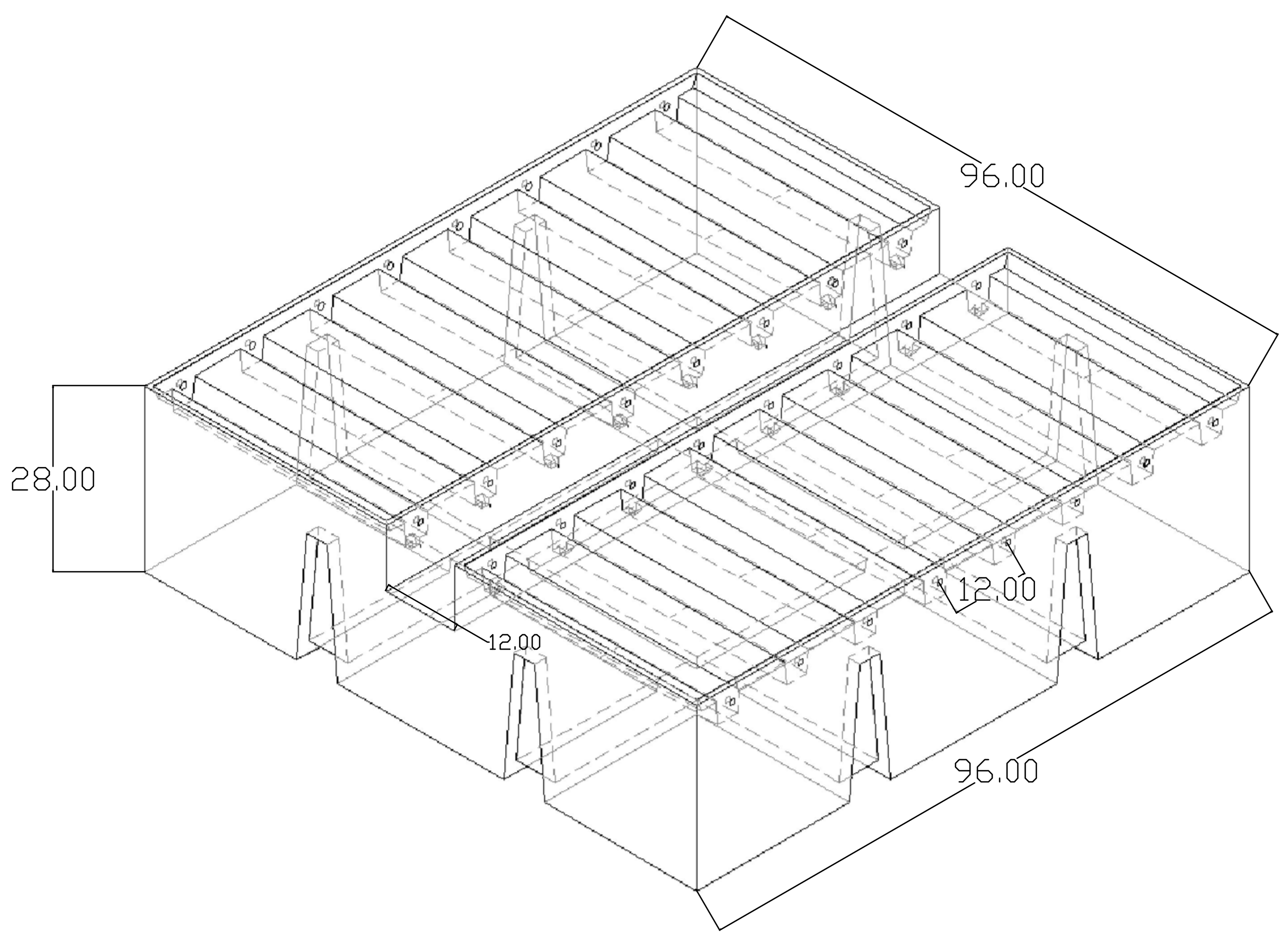
AHERN LLC
t: (508) 333 5138
f: (508) 325 4616
design@ahernllc.com
PB 2213 Nantucket MA 02584

LANDCSAPE CONCEPTUAL PLAN

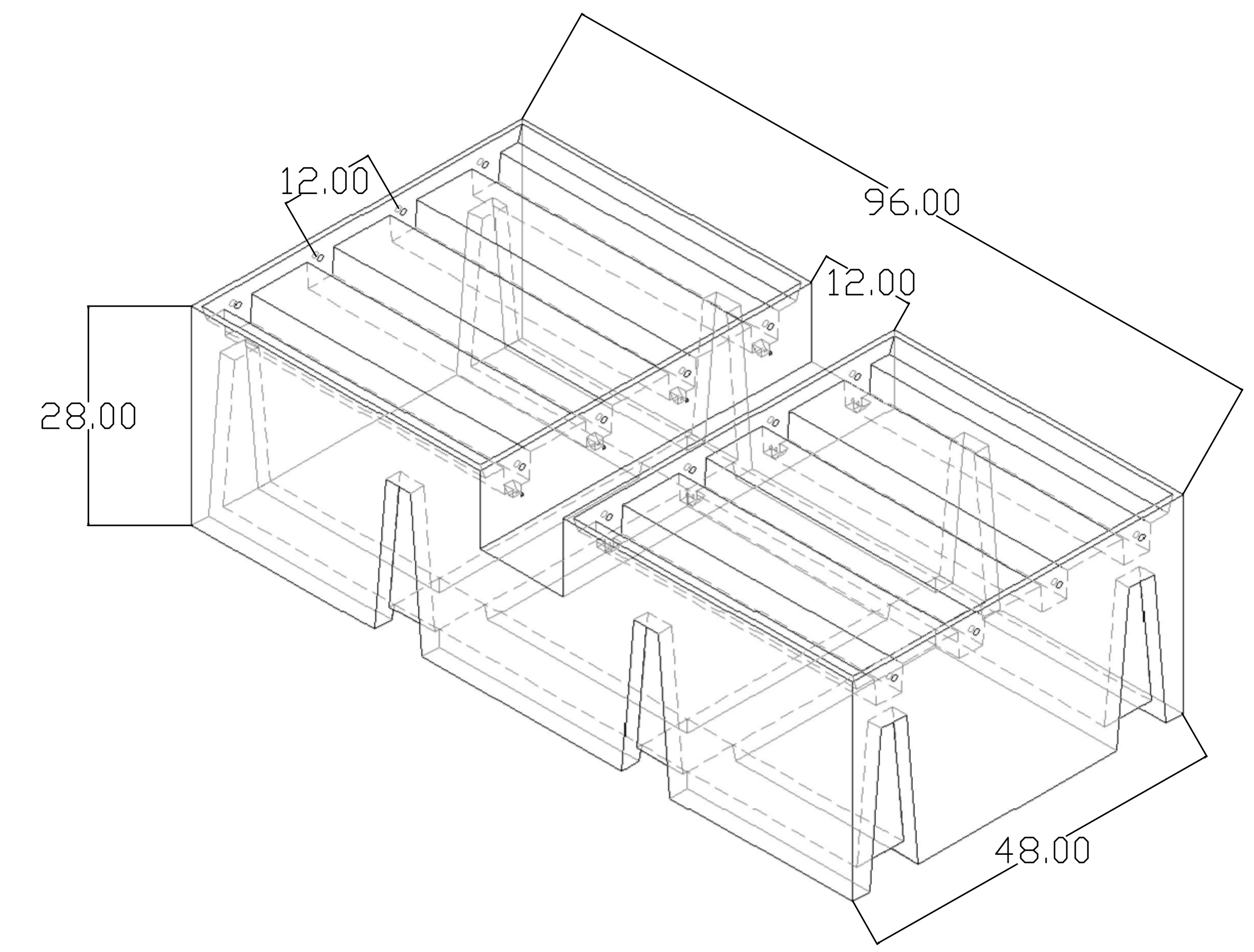
SEPTEMBER 30 2015 / REVISED Scale 1/8" = 1'-0"

PETREL LANDING

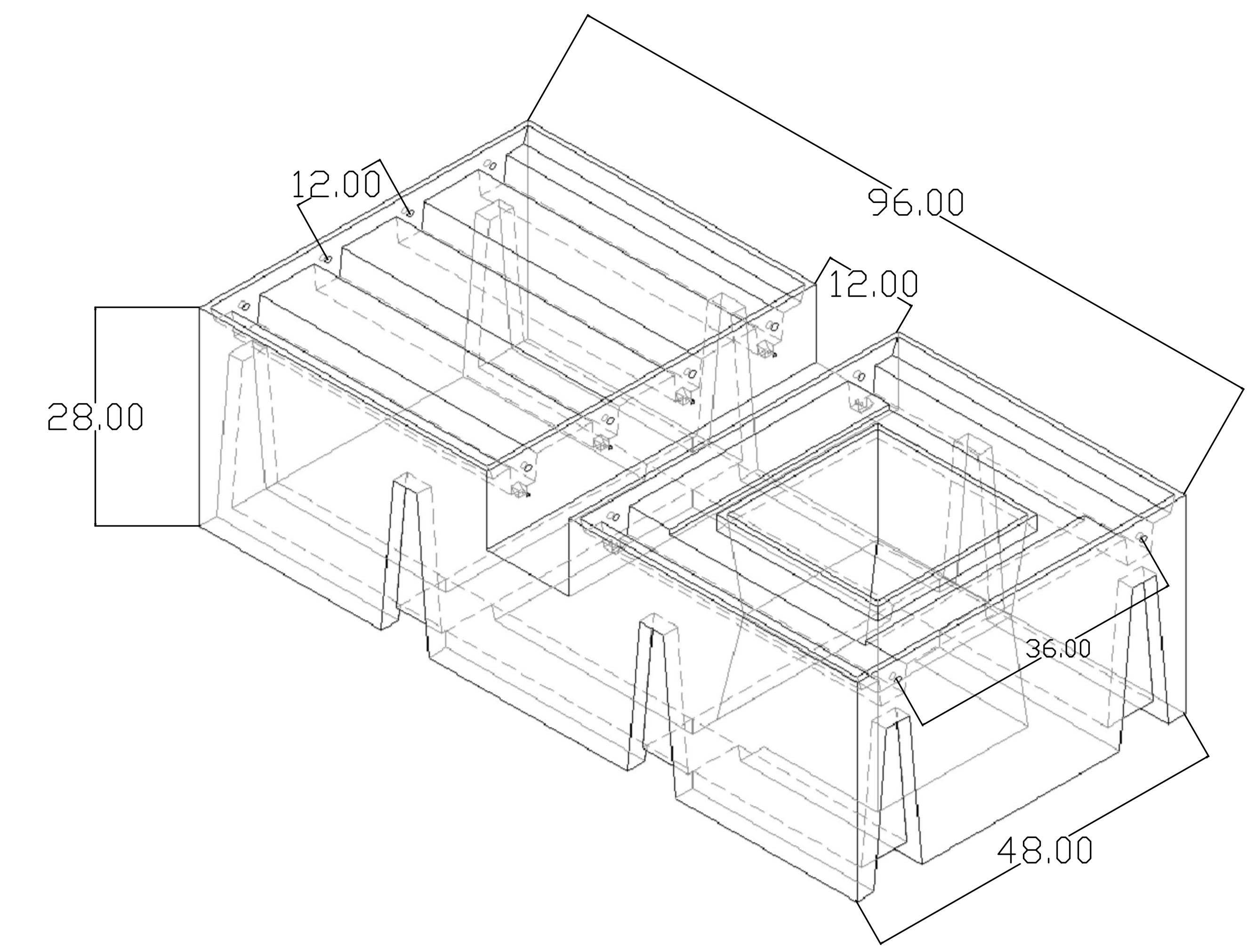
COMMERCIAL WHARF, NANTUCKET MA 02554



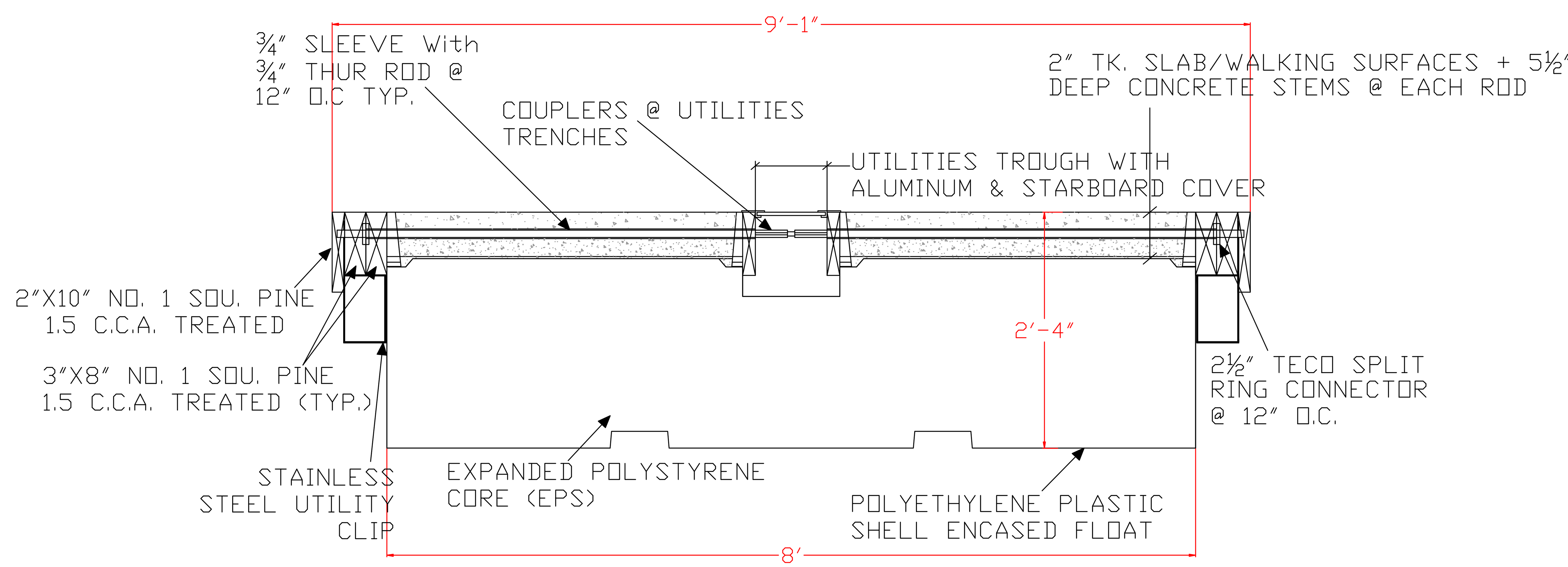
W1 View



W2 View



WP View



(PROFLOAT MODULE W1)

SINGLE WIDE MAIN WALKWAY

THRU-RODS PROVIDED WITH NUTS & WASHER OR COUPLERS
NUTS TIGHTEN TO 65 FT. LBS. MIN TORQUE.

- ☐ APPROVED NO EXCEPTION TAKEN
- ☐ APPROVED AS NOTED
- ☐ REVISE AND RESUBMIT
- ☐ REJECTED
- ☐ SUBMIT SPECIFIED ITEM

By ________ Date ________

PROFLOAT dock system

EASTERN FLOATATION SYSTEMS, INC.

1200 South Newkirk Street
Baltimore, Maryland 21224

1-800-408-6896
www.profloat.com

SHEET 1 OF 1

NANTUCKET DOCK

NEW FLOATING DOCK PLAN

DRAWN BY: KIONA PRITCHETT

CHECK BY: BRYAN MILLER

APPD BY: BRYAN AMBROSE

DATE: 10-6-15

THIS DRAWING AND ALL PREVIOUS ISSUES ARE THE SOLE PROPERTY OF EASTERN FLOATATIONS SYSTEMS, INC OF BALTIMORE, MARYLAND. NEITHER RECEIPT OF SAID DRAWING NOR POSSESSION THEREOF IMPLIES OR TRANSFERS ANY RIGHTS OR LICENSE TO USE THE DRAWINGS, OR THE SUBJECT MATTER, DESIGN OR TECHNICAL INFORMATION SHOWN THEREON, OR ANY RIGHT TO COPY OR OTHERWISE REPRODUCE THIS DRAWING OR ANY PART THEREOF. NEITHER THIS DRAWING NOR ANY INFOMATION CONTAINED THEREIN MAY BE COPIED. REPRODUCED OR OTHERWISE USED WITHOUT FIRST OBTAINING THE WRITTEN AUTHORIZATION OF EASTERN FLOATATION SYSTEMS INC. PRINTS ARE LOANED SUBJECT TO RETURN UPON DEMAND, AND THE EXPRESS CONDITION THAT THEY WILL NOT BE USED IN ANY WAY DETRIMENTALTO EASTERN FLOATATION SYSTEMS, INC.
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SEAL

REVISION

Eelgrass and Shellfish Habitat Assessment Report

Petrel Landing, Nantucket Island Land Bank

A summary of eelgrass and shellfish survey results performed to meet permitting requirements for proposed Petrel Landing Project

Prepared for:
Nantucket Island Land Bank

Prepared by:
Stantec Consulting, Inc.
1 Trowbridge Place, Suite 108
Bourne, MA 02532

October 10, 2015

Insert revision record

Table of Contents

1.0 INTRODUCTION 1

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3.0 METHODOLOGY 6

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5.0 REFERENCES CITED 10

1.0 INTRODUCTION

On behalf of the Nantucket Islands Land Bank Commission, Stantec Consulting Services, Inc. (Stantec) performed a habitat assessment for eelgrass (*Zostera marina*) and commercial important shellfish within the proposed Petrel Landing project area in the western portion of Nantucket Harbor, Nantucket, MA (**Figure 1**). This work was conducted to determine potential impacts to meet permitting requirements that delineate areas where eelgrass and shellfish may be found within the area that will be created for public use, including dock and pier construction with associated dredging. Dr. Pamela Neubert led the field survey in 2015 as well as surveys performed at this same location in 2012 and 2007. Methodology used for the 2015 survey was the same as that used in 2012 and 2007 providing scientific consistency and repeatability. The Stantec field team consisted of Dr. Neubert and two Stantec dive staff, who are also marine biologists. All team members are familiar with the marine flora and fauna of New England, in particular Cape Cod, Martha's Vineyard, and Nantucket.

2.0 GENERAL SITE DESCRIPTION

The proposed project is adjacent to Commercial Street/New Whale Street (**Figures 1-3**), Nantucket, Massachusetts. The area is in the vicinity of the Nantucket Boat Basin and the Town of Nantucket maintained wharves and piers for recreational and commercial vessels (**Figure 1**). Fuel docks and pump out facilities are also located nearby. Proposed work involves the repair of the riprap wall, which will also include the installation of sheet piling, to rehabilitate the abandoned land and create a picnic/park area, and the construction of a dinghy dock and small boat pier to be used by recreational boaters (**Figure 4**). The pier and slips associated with the proposed project will help reduce the overwhelming number of rafted dinghies that occur at the Town of Nantucket public pier during the summer season, will aesthetically improve the existing conditions, and will provide public access and promote water dependent public use within the downtown Nantucket area.

Nantucket Island Land Bank **Shellfish and Eelgrass Habitat Assessment** **Stantec**	**Site Locus** Nantucket Harbor Nantucket, Massachusetts Nantucket Harbor, Nantucket, MA MassGIS Orthophoto	**Figure 1** Proposed Project Location

Stantec

Nantucket Island Land Bank **Shellfish and Eelgrass Habitat Assessment** **EcoAnalysts, Inc.**	**Site Locus** Nantucket Harbor Nantucket, Massachusetts Nantucket Harbor, Nantucket, MA	**Figure 2** Looking toward proposed float location from Petrel Landing park.

Stantec

Nantucket Island Land Bank **Shellfish and Eelgrass Habitat Assessment** **Stantec**	**Site Locus** Nantucket Harbor Nantucket, Massachusetts Nantucket Harbor, Nantucket, MA	**Figure 3** View from the northwest corner of the surveyed footprint and proposed park area

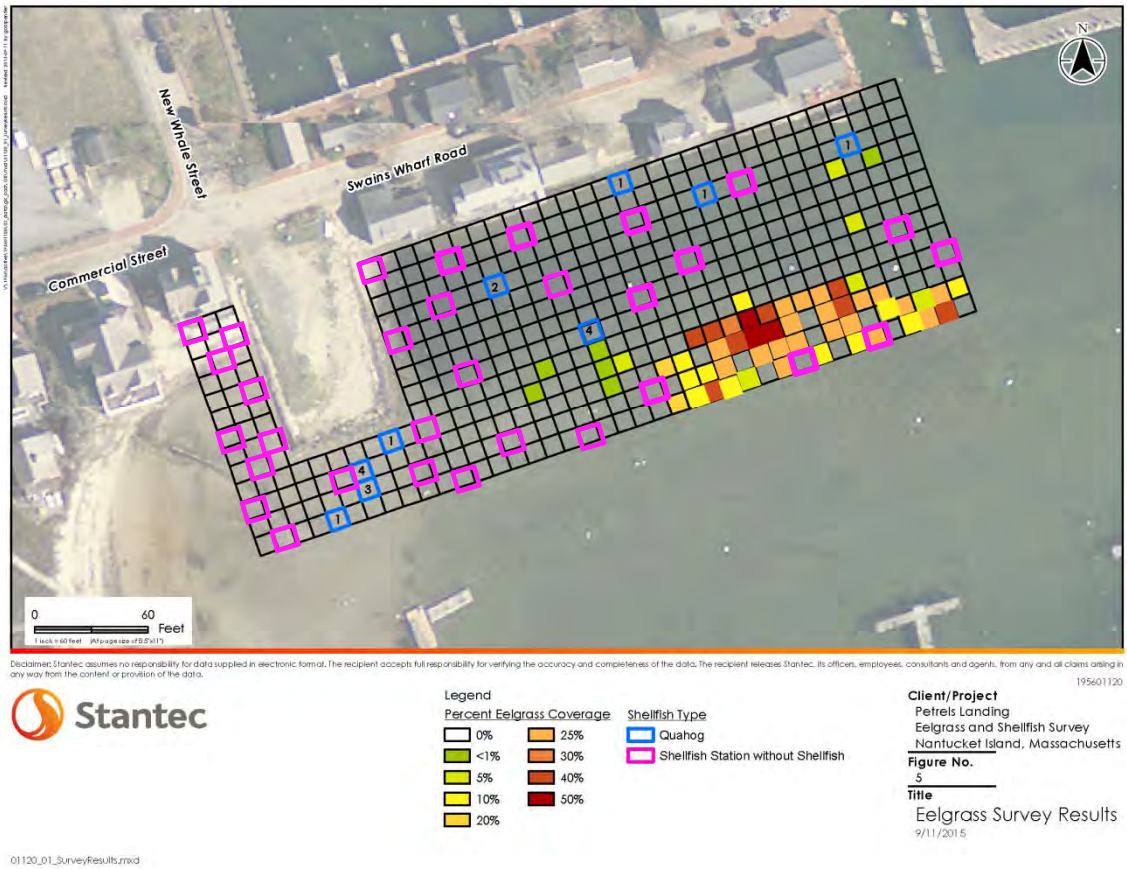
Nantucket Island Land Bank **Shellfish and Eelgrass Habitat Assessment** **Stantec**	**Proposed Pier** Nantucket Harbor Nantucket, Massachusetts	**Figure 4** A. Looking a former site of runoff pipe which is shown below. This pipe was removed during the shellfish and eelgrass survey work on July 23, 2015

3.0 METHODOLOGY

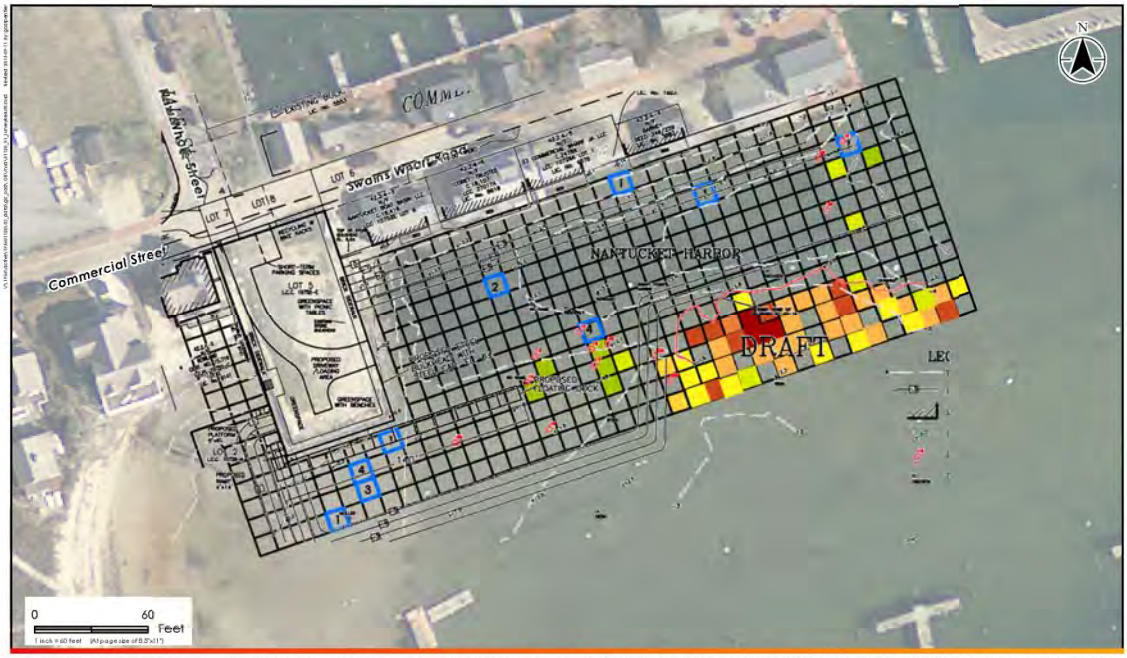
Stantec performed an eelgrass and shellfish habitat assessment on July 27, 2015. For the eelgrass assessment, transects were established parallel and perpendicular to the orientation of the existing pier/park area. Transects were set every 10-ft. from each other to form a grid within the surveyed area shown in **Figure 5**. All transect lines were assessed for presence or absence of eelgrass and commercially important species of shellfish (quahogs, bay scallops, American oysters, and soft shell clams). In areas where eelgrass was found to be present, an assessment of percent coverage was determined and entered into electronic field datasheets and a siting was taken on the location. Eelgrass percent coverage estimates were made by two divers utilizing a hand-held 0.25 m^2 quadrat and was placed at the transect center crossing point adjacent to each other four times to equal an area of $1m^2$. Estimates were conservative and final assessment values were rounded up to the nearest factor of 5 except for values below 5% cover. Dr. Pamela Neubert recorded the reported values on an electronic ArcMap GIS graphical figure representing the area, same area assessed in 2012 and 2007. A total of 41 transects running approximately in the north/south direction and 14 transects running approximately in the east/west direction were assessed within the proposed project area. The north/south transects varied from 40 feet in length in front of the existing pier to 140 feet in length to the east and west of the existing pier. Only percent coverage of living, rooted eelgrass was recorded. Because much of the area had no eelgrass present in 2007 and 2012 the divers visually assessed between transects to determine if eelgrass was present in areas that were not aligned with established transect lines in 2015 and, thus, the entire survey area was assessed by divers for the presence of eelgrass. The area assessed for eelgrass is indicated within **Figure 5**. Boat traffic was minimal at the time of the survey; however, many of the moorings were occupied.

For the shellfish habitat assessment, random sampling of forty (40) stations within the proposed project area searched for eelgrass were sampled (**Figure 6**). A long handled rake specially fitted with extra-long tines with a basket lined with one-quarter inch mesh screen was used to sample for shellfish and allow for capture of juvenile stages as well as other benthic species. An approximate volume of substrate equal to 1-ft^3 was processed through the rake basket at each of the forty (40) station locations. If the area was too deep to use the long handled rake divers collected sediment from the seafloor from an area of 1-ft^3 and this sample was processed through a specially made sieving basket with 0.25 inch mesh to obtain the same volume and type of sample as collected with the rake The numbers of target shellfish species along with size measurements were recorded into project field datasheets. Notes on other fauna and flora were also recorded.

Upon completion of the survey, the eelgrass and shellfish data were entered into a georeferenced project specific Geographic Information System (GIS) software package for representation and interpretation (ArcMap version 10.0).



Nantucket Island Land Bank **Shellfish and Eelgrass Habitat Assessment** **Stantec**	**2015 Petrel Landing Eelgrass Survey** Nantucket Harbor Nantucket, Massachusetts September 2015	**Figure 5** Eelgrass percent coverage within surveyed area. Proposed project is represented by grey lines.



Disclaimer: Stantec assumes no responsibility for data supplied in electronic format. The recipient accepts full responsibility for verifying the accuracy and completeness of the data. The recipient releases Stantec, its officers, employees, consultants and agents, from any and all claims arising in any way from the content or provision of the data.

195601120

Stantec

1 Trobridge Place
Bourne, MA USA 02532
Phone (617) 366-9032

Prepared by GAC on 2015-08-14
Review by PN on 2015-08-28

01120_01_SurveyResults.mxd

Legend

Percent Eelgrass Coverage: 0%, <1%, 5%, 10%, 20%, 25%, 30%, 40%, 50%

Shellfish Type: Quahog; Shellfish Station without Shellfish

Client/Project
Petrels Landing
Eelgrass and Shellfish Survey
Nantucket Island, Massachusetts

Figure No.
5

Title
Eelgrass Survey Results
9/11/2015

Nantucket Island Land Bank **Shellfish and Eelgrass Habitat Assessment** **Stantec, Inc.**	**2015 Proposed Project and Eelgrass Assessment** Nantucket Harbor Nantucket, Massachusetts July 2015	**Figure 6** Updated project plan for Petrel Landing with Eelgrass Habitat Results and Stations with Shellfish Present Red line around eelgrass patch represents 2012 delineation

Results

Results of the eelgrass and shellfish habitat assessments are shown in **Figures 5**. Only living, rooted eelgrass was assessed for percent coverage. The results of the survey indicated that eelgrass was not present within the majority of the proposed project location and was only found in a patchy area of the southeast corner on the edge of the proposed dredging footprint. The proposed pier area has been designed to be located to avoid the area where this larger eelgrass patch was present. The location of eelgrass in 2015 was similar in location when compared to the 2012 surveyed area (Figure 6), which was similar to the 2007 results. The survey area in 2015 was the same footprint assessed in 2012 and larger than what was surveyed in 2007. The larger patch of eelgrass identified in 2015 had eelgrass percent coverage ranging between 1% (2-3 blades) to greater than 50% within the 1-m^2 area surveyed at each location within this patch. The majority of the proposed project area was devoid of eelgrass and consisted of black, organically enriched silt and sand with the northwest corner having the softest sediment with a strong sulfur dioxide odor, which is indicative of seafloor hypoxia or anoxia. The entire area west of the existing structure is devoid of eelgrass. This area had a run-off pipe that drained from the street directly into the harbor but was removed while the survey was being performed. In previous years, it was observed that silty sediment was diffusing from this run-off pipe (**Figure 4**). Several species of benthic macroalgae were identified throughout the surveyed area during both the eelgrass and shellfish investigations. *Polysiphonia harveyi* and *Gracellaria* sp. were commonly found on the seafloor and mixed within the eelgrass habitat. *Codium fragile* patches were observed attached to rocks. *Ulva intestinalis* and *Fucus* sp. were found attached to the run-off pipe and in intertidal areas along the shoreline.

Forty (40) stations were assessed for shellfish density. Survey efforts sampled a total of eighteen (18) quahogs (*Mercenaria mercenaria*) from these 40 stations (**Figure 5**), with a mean density of 0.45 quahogs per 1-ft^3. No other commercially or recreationally important shellfish were found. It should be noted that during the survey a community member confessed to releasing fifteen quahogs that were residing in his refrigerator that he did not want to eat but did not want to kill. He said he released these quahogs in the exact location where Stantec's shellfish team found 12 quahogs at the terminal end of the existing structure. It is highly likely that the quahogs found by Stantec are the same quahogs that were released by the homeowner who addressed us while performing this survey.

4.0 CONCLUSIONS

Based on Stantec's observations and the data collected, the majority of the proposed project area is devoid of eelgrass habitat. There is an area of eelgrass in the southeastern corner of the proposed project that was observed in 2007, 2012 and 2015. The area of Nantucket Harbor is heavily utilized by commercial and recreational boaters. The presence of eelgrass over the past 9 years in the same location indicates that boating and eelgrass habitat can coexist. The proposed dredging has been designed to avoid dense patches of eelgrass. Removal of organically enriched sediment, such as found within the proposed project footprint, will benefit overall water quality and eelgrass recovery within Nantucket Harbor. Poor water quality has been attributed to eelgrass decline within the northeast

(Short et al. 1995; Short and Wyllie-Echeverria 1996; Short and Burdick 1996). The proposed project will provide improved usage of the waterfront area and will benefit the public with enhanced shoreline access. Construction and post construction monitoring of eelgrass habitat, use of silt curtains, dredging during the fall season to avoid time of year restrictions to avoid impact to spawning winter flounder, in lieu fee payment for lost eelgrass as determined with post-construction monitoring, and shellfish reseeding could be employed to mitigate for any potential eelgrass habitat loss. The overall benefits of the proposed project through enhanced public access and improved water quality as a consequence of removal of nutrient loaded sediment will benefit the Town of Nantucket and the natural resources found within Nantucket Harbor.

5.0 REFERENCES CITED

Short, F.T., Burdick, D.M. and J.E. Kaldy III. 1995. Mesocosm experiments quantify the effects of eutrophication on eelgrass, Zostera marina. Limnology and Oceanography. 40(4): 740-749.

Short, F.T. and D.M. Burdick. 1996. Quantifying eelgrass habitat loss in relation to housing development and nitrogen loading in Waquoit Bay, Massachusetts. Estuaries and Coasts. 19(3): 730-739.

Short, F.T. and S. Wyllie-Echeverria. 1996. Natural and human-induced disturbance of seagrasses. Environmental Conservation. 23(1): 17-27.

017563

DEPARTMENT OF THE ARMY
NEW ENGLAND DIVISION, CORPS OF ENGINEERS
424 TRAPELO ROAD
WALTHAM, MASSACHUSETTS 02154

REPLY TO
ATTENTION OF:

NEDOD-R -3-75-210
MA-NANT-76-509

13 October 1976

Sherburne Associates
Zero Main Street
Nantucket, MA 02554

Gentlemen:

Inclosed is a Federal permit authorizing the work stated therein. Please acquaint yourself with all the terms and conditions of the permit and particularly to those conditions which are binding upon you as the permittee.

If any material changes in the plans are found necessary, revised plans should be submitted to this office. These revised plans must receive the approval required by law before the work is begun.

Please note the special permit condition that a license from the Massachusetts Department of Environmental Quality Engineering is required before this permit is valid.

Sincerely yours,

William J. Rudess
for MORGAN R. REES
Chief, Regulatory Branch
Operations Division

Incl
Permit

017563

Application No. 3-75-210 Permit No. MA-NANT-76-509

Name of Applicant Sherburne Associates

Effective Date 13 October 1976

Expiration date (if applicable)

DEPARTMENT OF THE ARMY

PERMIT

Referring to written request dated 17 June 1975 for a permit to:
(X) Perform work in or affecting navigable waters of the United States, upon the recommendation of the Chief of Engineers, pursuant to Section 10 of the Rivers and Harbors Act of March 3, 1899 (33 U.S.C. 403);

( ) Discharge dredged or fill material into navigable waters upon the issuance of a permit from the Secretary of the Army acting through the Chief of Engineers pursuant to Section 404 of the Federal Water Pollution Control Act (86 Stat. 816, P.L. 92-500);

( ) Transport dredged material for the purpose of dumping it into ocean waters upon the issuance of a permit from the Secretary of the Army acting through the Chief of Engineers pursuant to Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972 (86 Stat. 1052; P.L. 92-532);

Sherburne Associates
Zero Main Street
Nantucket, MA 02554

is hereby authorized by the Secretary of the Army to: maintain an existing 8-pile ~~float arrangement~~ 52' x 14' and ramp 22' x 4'.

in Nantucket Harbor

at Nantucket, Massachusetts

in accordance with the plans and drawings attached hereto which are incorporated in and made a part of this permit, entitled: "Plan to Accompany Petition of Sherburne Associates to Maintain Ramp and Floats and Moorings Piles and Bulkhead in Nantucket Harbor, Nantucket, Mass", in one sheet, dated, "May 28, 1975".

Subject to the following conditions:

I. General Conditions:

a. That all activities identified and authorized herein shall be consistent with the terms and conditions of this permit; and that any activities not specifically identified and authorized herein shall constitute a violation of the terms and conditions of this permit which may result in the modification, suspension or revocation of this permit, in whole or in part, as set forth more specifically in General Conditions j or k hereto, and in the institution of such legal proceedings as the United States Government may consider appropriate, whether or not this permit has been previously modified, suspended or revoked in whole or in part.

b. That all activities authorized herein shall, if they involve a discharge or deposit into navigable waters or ocean waters, be at all times consistent with applicable water quality standards, effluent limitations and standards of performance, prohibitions, and pretreatment standards established pursuant to Sections 301, 302, 306, and 307 of the Federal Water Pollution Control Act of 1972 (P.L. 92-500; 86 Stat. 816), or pursuant to applicable State and local law.

c. That when the activity authorized herein involves a discharge or deposit of dredged or fill material into navigable waters, the authorized activity shall, if applicable water quality standards are revised or modified during the term of this permit, be modified, if necessary, to conform with such revised or modified water quality standards within 6 months of the effective date of any revision or modification of water quality standards, or as directed by an implementation plan contained in such revised or modified standards, or within such longer period of time as the Division Engineer, in consultation with the Regional Administrator of the Environmental Protection Agency, may determine to be reasonable under the circumstances.

d. That the permittee agrees to make every reasonable effort to prosecute the construction or work authorized herein in a manner so as to minimize any adverse impact of the construction or work on fish, wildlife, and natural environmental values.

e. That the permittee agrees that it will prosecute the construction or work authorized herein in a manner so as to minimize any degradation of water quality.

f. That the permittee shall permit the Division Engineer or his authorized representative (s) or designee (s) to make periodic inspections at any time deemed necessary in order to assure that the activity being performed under authority of this permit is in accordance with the terms and conditions prescribed herein.

g. That the permittee shall maintain the structure or work authorized herein in good condition and in accordance with the plans and drawings attached hereto.

h. That this permit does not convey any property rights, either in real estate or material, or any exclusive privileges, and that it does not authorize ~~any injury~~ to property or invasion of rights or any infringement of Federal, State or local laws or regulations, nor does it obviate the requirement to obtain State or local assent required by law for the activity authorized herein.

i. That this permit does not authorize the interference with any existing or proposed Federal project and that the permittee shall not be entitled to compensation for damage or injury to the structures or work authorized herein which may be caused by or result from existing or future operations undertaken by the United States in the public interest.

j. That this permit may be summarily suspended, in whole or in part, upon a finding by the Division Engineer that immediate suspension of the activity authorized herein would be in the general public interest. Such suspension shall be effective upon receipt by the permittee of a written notice thereof which shall indicate (1) the extent of the suspension, (2) the reasons for this action, and (3) any corrective or preventative measures to be taken by the permittee which are deemed necessary by the Division Engineer to abate imminent hazards to the general public interest. The permittee shall take immediate action to comply with the provisions of this notice. Within ten days following receipt of this notice of suspension, the permittee may request a hearing in order to present information relevant to a decision as to whether his permit should be reinstated, modified or revoked. If a hearing is requested, it shall be conducted pursuant to procedures prescribed by the Chief of Engineers. After completion of the hearing, or within a reasonable time after issuance of the suspension notice to the permittee if no hearing is requested, the permit will either be reinstated, modified, or revoked.

k. That this permit may be either modified, suspended or revoked in whole or in part if the Secretary of the Army or his authorized representative determines that there has been a violation of any of the terms or conditions of this permit or that such action would otherwise be in the public interest. Any such modification, suspension, or revocation shall become effective 30 days after receipt by the permittee of written notice of such action which shall specify the facts or conduct warranting same unless (1) within the 30-day period the permittee is able to satisfactorily demonstrate that (a) the alleged violation of the terms and the conditions of this permit did not, in fact, occur, or (b) the alleged violation was accidental, and the permittee has been operating in

compliance with the terms and conditions of the permit and is able to provide satisfactory assurances that future operations shall be in full compliance with the terms and conditions of this permit; or (2) within the aforesaid 30-day period, the permittee requests that a public hearing be held to present oral and written evidence concerning the proposed modification, suspension, or revocation. The conduct of this hearing and the procedures for making a final decision either to modify, suspend, or revoke this permit in whole or in part shall be pursuant to procedures prescribed by the Chief of Engineers.

l. That in issuing this permit, the Government has relied on the information and data which the permittee has provided in connection with his permit application. If subsequent to the issuance of this permit, such information and data prove to be false, incomplete or inaccurate, this permit may be modified, suspended or revoked, in whole or in part, and/or the Government may, in addition, institute appropriate legal proceedings.

m. That any modification, suspension, or revocation of this permit shall not be the basis for any claim for damages against the United States.

n. That the permittee shall notify the Division Engineer at what time the activity authorized herein will be commenced, as far in advance of the time of commencement as the Division Engineer may specify, and of any suspension of work, if for a period of more than one week, resumption of work and its completion.

o. That if the activity authorized herein is not started on or before _____ day of _____, 19 _____, and is not completed on or before _____ day of _____, 19 _____, this permit, if not previously revoked or specifically extended, shall automatically expire.

p. That no attempt shall be made by the permittee to prevent the full and free use by the public of all navigable waters at or adjacent to the activity authorized by this permit.

q. That if the display of lights and signals on any structure or work authorized herein is not otherwise provided for by law, such lights and signals as may be prescribed by the United States Coast Guard shall be installed and maintained by and at the expense of the permittee.

r. That this permit does not authorize or approve the construction of particular structures, the authorization or approval of which may require authorization by the Congress or other agencies of the Federal Government.

s. That if and when the permittee desires to abandon the activity authorized herein, unless such abandonment is part of a transfer procedure by which the permittee is transferring his interests herein to a third party pursuant to General Condition "v" hereof, he must restore the area to a condition satisfactory to the Division Engineer.

t. That if the recording of this permit is possible under applicable State or local law, the permittee shall take such action as may be necessary to record this permit with the Register of Deeds or other appropriate official charged with the responsibility for maintaining records of title to and interests in real property.

u. That there shall be no unreasonable interference with navigation by the existence or use of the activity authorized herein.

v. That this permit may not be transferred to a third party without prior written notice to the Division Engineer, either by the transferee's written agreement to comply with all terms and conditions of this permit or by the transferee subscribing to this permit in the space provided below and thereby agreeing to comply with all terms and conditions of this permit. In addition, if the permittee transfers the interests authorized herein by conveyance of realty, the deed shall reference this permit and the terms and conditions specified herein and this permit shall be recorded along with the deed with the Register of Deeds or other appropriate official.

II. Special Conditions:

That the permittee, upon receipt of a notice of revocation of this permit or upon its expiration before completion of the authorized structure or work, shall, without expense to the United States and in such time and manner as the Secretary of the Army or his authorized representative may direct, restore the waterway to its former conditions. If the permittee fails to comply with the direction of the Secretary of the Army or his authorized representative, the Secretary or his designee may restore the waterway to its former condition, by contract or otherwise, and recover the cost thereof from the permittee.

That this permit will not be valid until and unless the Massachusetts Department of Environmental Quality Engineering, Division of Waterways, issues the required State License.

This permit shall become effective on the date of the Division Engineer's signature.

Permittee hereby accepts and agrees to comply with the terms and conditions of this permit

SHERBURNE ASSOCIATES

By: R A Suaer

PERMITTEE — 10/7/76 DATE

R. A. Suaer, Partner

BY AUTHORITY OF THE SECRETARY OF THE ARMY:

Jacob G. Bowen Lt Col CE — 13 October 1976

for DIVISION ENGINEER — DATE

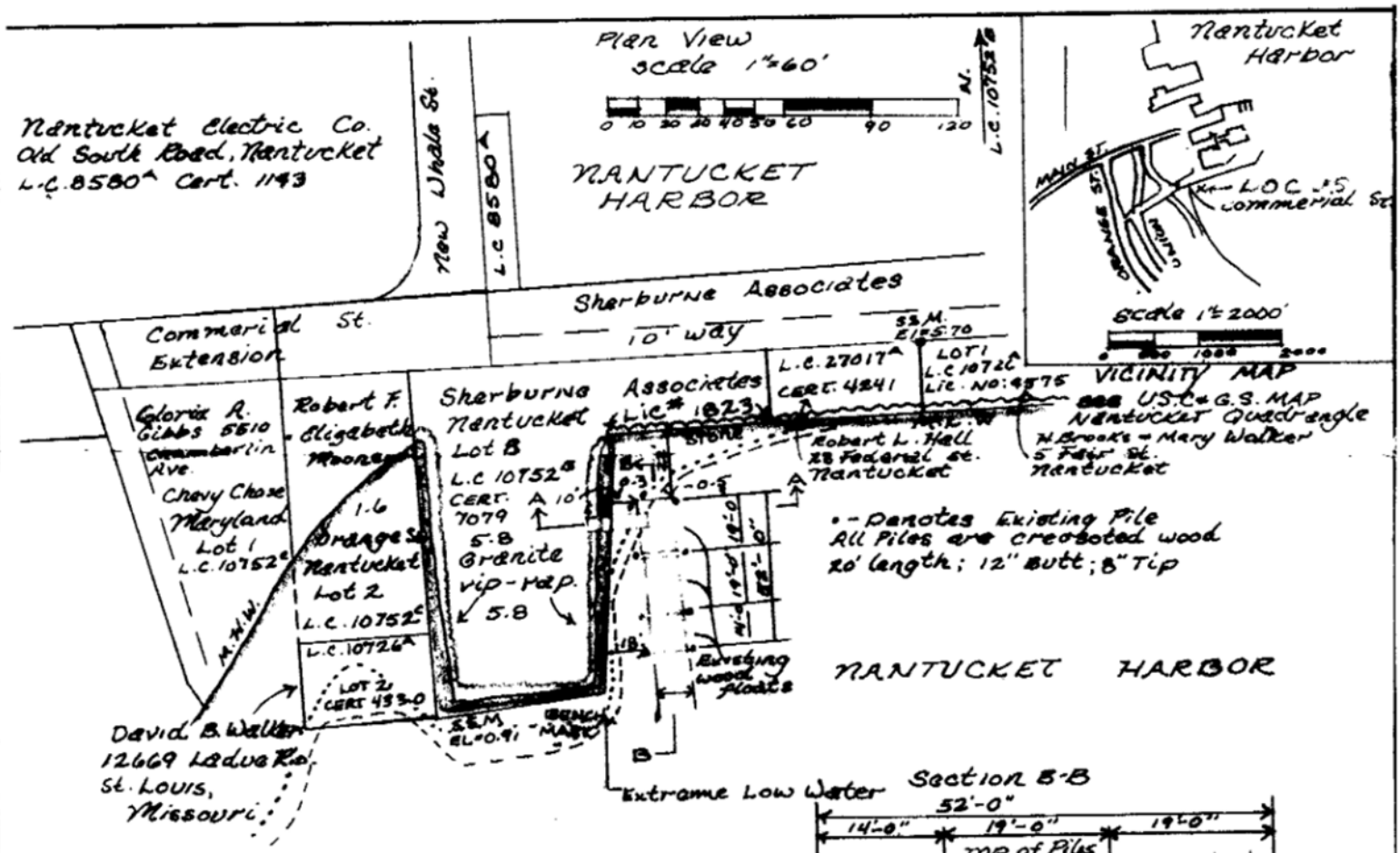
JOHN P. CHANDLER

Colonel, Corps of Engineers

Transferee hereby agrees to comply with the terms and conditions of this permit.

TRANSFEREE — DATE

017563



Plan to accompany petition of
SHERBURNE ASSOCIATES
to maintain ramp and floats
and moorings piles and bulkhead
in
NANTUCKET HARBOR
NANTUCKET, MASS.
Scale as noted May 28 1975
Shugrue - Hart, Inc. P.E.
148 Water St; Nantucket, Mass.

note:
elevations refer to
Mean Low Water as
established from U.S.C.&G.S
B.M. 22 EL. = 9.18 Above
Mean Low Water

Sheet 1 of 1

#14

STORMWATER REPORT

PROJECT: **PETREL LANDING**
17 COMMERCIAL WHARF
NANTUCKET, MA 02554

APPLICANT: **NANTUCKET ISLANDS LAND BANK**

INTRODUCTION

The Applicant proposes to modify the existing site to provide for access and recreational use. The proposed project does not disturb any area that is not currently the site of existing uses and/or alterations of land. Please refer to the Notice of Intent application materials, and the attached Stormwater Checklist for more information.

STORMWATER STANDARDS

STANDARD 1: NO UNTREATED DISCHARGES OR EROSION TO WETLAND

Stormwater Discharge Velocity: The maximum discharge velocity based on runoff from the 2-year 24-hour storm is less than 2 ft/sec to a grade of less than 0.02 ft/ft and a flow length less than 100-feet.

Ability of Ground Surface to Resist Erosion: The ground surface will be either grass, boardwalk, or cobblestone. The low velocity of the runoff due to the flatness of the site does not provide the water with sufficient energy to cause erosion to this ground surface.

STANDARD 2: PEAK RATE ATTENUATION

Redevelopment project – Standard 2 waiver requested because the project is located in land subject to coastal storm flowage and stormwater discharge is to a wetland subject to coastal flooding.

STANDARD 3: STORMWATER RECHARGE

Redevelopment project – Compliance to the Maximum Extent Practicable: TSS is reduced to the maximum extent practicable though regular maintenance. Attached is an Operation and Maintenance Plan.

STANDARD 4: WATER QUALITY

Redevelopment project – Compliance to the Maximum Extent Practicable: Water Quality is improved though the use of a staked silt fence to be maintained on a regular basis during construction activity. The attached Operation and Maintenance Plan, and Source Control and Long-term Pollution Prevention Plan also contribute to meet this standard.

STANDARD 5: LAND USES WITH HIGHER POTENTIAL POLLUTANT LOADS

Redevelopment project – Compliance to the Maximum Extent Practicable: Vehicles currently utilize the entire surrounding area and a portion of the site. The proposed project will not significantly alter the existing use. The attached Source Control and Long-term Pollution Prevention Plan also contribute to meet standard 5.

STANDARD 6: CRITICAL AREAS

Mix of New and Redevelopment project – Compliance to the Maximum Extent Practicable: TSS is reduced to the maximum extent practicable though the use of lawn areas and sweeping.

STANDARD 7: REDEVELOPMENT

- Refer to attached Source Control and Pollution Prevention Plan
- Refer to attached Construction Period Pollution Prevention and Erosion and Sedimentation Control Plan
- Refer to attached Operation and Maintenance Plan
- Refer to attached Illicit Discharge Compliance Statement
- Refer to Standard 1 that demonstrates that there are no new discharges that cause or contribute to erosion of wetlands or waters of the Commonwealth

STANDARD 8: CONSTRUCTION PERIOD CONTROLS

Refer to attached Construction Period Pollution Prevention and Erosion and Sedimentation Control Plan

STANDARD 9: OPERATION AND MAINTENANCE PLAN: Refer to attachment

STANDARD 10: ILLICIT DISCHARGES TO DRAINAGE SYSTEM

Refer to attached Source Control and Pollution Prevention Plan & Illicit Discharge Compliance Statement

Construction Period Pollution Prevention and Erosion and Sedimentation Control Plan

- Narrative: The Plan will be implemented as a contract requirement as part of the public procurement process (MGL Ch. 30B)
- Construction Period O&M: Silt controls including a staked siltation fence around the project perimeter, which will be installed as shown on the site plan, and maintained in good condition throughout the duration of the construction project.
- Responsible for Plan Compliance: Eric Savetsky, Director of Nantucket Islands Land Bank, or his designee
- Construction Period Pollution Prevention Measures: Any accumulated sediment against the fence will be regularly removed from the site and disposed off-site.
- Erosion and Sedimentation Control Plan & Specifications: Refer to site plan filed with the Notice of Intent Application.
- Vegetation Planning: Refer to Landscape Plan by Ahern, LLC
- Site Development Plan: Refer to site plan filed with the Notice of Intent Application.
- Construction Sequencing Plan: Refer to narrative filed with the Notice of Intent Application.
- Erosion & Sedimentation Control Sequencing: Siltation fencing shall be installed prior to the start of construction, and maintained in good order until the vegetation on the site is established and viable.
- Operation and Maintenance of Erosion & Sedimentation Control: Regular inspections will be required, and any necessary repairs made immediately.
- Inspection Schedule: Weekly, as a contract condition.
- Maintenance Schedule: Weekly, as a contract condition.
- Inspection and Maintenance Log Form: Refer to attachment

Source Control and Long-term Pollution Prevention Plan

- The collected sediment will be removed from the site and disposed of at a properly licensed facility.
- No vehicle washing, fueling or maintenance activities will be permitted on-site.
- No outdoor storage of hazardous materials will be permitted. Waste and recycling containers with secure lids will be provided and be removed from the property on a regular basis.
- There will be no sanding or salting of the parking area.
- A separate budget for plan implementation is not provided as the work will be done by Land Bank employees whose primary function is property maintenance.
- Emergency Contact: Nantucket Police Department, 508-228-1212
  Nantucket Islands Land Bank, 508-228-7240

PETREL LANDING

STORMWATER MANAGEMENT
OPERATION AND MAINTENANCE PLAN

- The proposed stormwater management system will be owned by the owner/applicant, Nantucket Islands Land Bank, who will be responsible for the operation and maintenance of the system.
- The cobblestone area will be swept by hand twice per year.
- The routine tasks to be undertaken are regular inspection and cleaning as described above. The non-routine tasks would include any necessary repairs to the area that may be discovered during the annual inspection. The property owner will be responsible for both routine and non-routine tasks associated with the stormwater management system.
- The owner will maintain records of performed maintenance activities.
- Inspect planted areas on a semi-annual basis and remove any litter.
- Maintain planted areas adjacent to the cobblestones to prevent soil washout.
- Immediately clean any soil deposited on cobblestones
- Re-seed bare areas; install appropriate erosion control measures when native soil is exposed or erosion channels are forming.

ILLICIT DISCHARGE COMPLIANCE STATEMENT

The Illicit Discharge Compliance Statement for the Petrel Landing Project is as follows:

Per the requirements of Standard 10 of the Massachusetts Stormwater Management Standards it shall be stated there will be No Illicit Discharges constructed under the scope of this project, Petrel Landing.

STORM WATER MANAGEMENT SYSTEM

OPERATIONS AND MAINTENANCE MANUAL

PARKING LOT SWEEPING

PETREL LANDING

Name of Inspector: _____Title of Inspector: _____

Inspector's Signature: _____

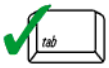
Inspection Date	Satisfactory			Location	Maintenance Needed and Description	Implementation Date of Maintenance
	Yes	No	N/A			

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands Program

Checklist for Stormwater Report

A. Introduction

Important: When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



A Stormwater Report must be submitted with the Notice of Intent permit application to document compliance with the Stormwater Management Standards. The following checklist is NOT a substitute for the Stormwater Report (which should provide more substantive and detailed information) but is offered here as a tool to help the applicant organize their Stormwater Management documentation for their Report and for the reviewer to assess this information in a consistent format. As noted in the Checklist, the Stormwater Report must contain the engineering computations and supporting information set forth in Volume 3 of the Massachusetts Stormwater Handbook. The Stormwater Report must be prepared and certified by a Registered Professional Engineer (RPE) licensed in the Commonwealth.

The Stormwater Report must include:

- The Stormwater Checklist completed and stamped by a Registered Professional Engineer (see page 2) that certifies that the Stormwater Report contains all required submittals.[1] This Checklist is to be used as the cover for the completed Stormwater Report.
- Applicant/Project Name
- Project Address
- Name of Firm and Registered Professional Engineer that prepared the Report
- Long-Term Pollution Prevention Plan required by Standards 4-6
- Construction Period Pollution Prevention and Erosion and Sedimentation Control Plan required by Standard 8[2]
- Operation and Maintenance Plan required by Standard 9

In addition to all plans and supporting information, the Stormwater Report must include a brief narrative describing stormwater management practices, including environmentally sensitive site design and LID techniques, along with a diagram depicting runoff through the proposed BMP treatment train. Plans are required to show existing and proposed conditions, identify all wetland resource areas, NRCS soil types, critical areas, Land Uses with Higher Potential Pollutant Loads (LUHPPL), and any areas on the site where infiltration rate is greater than 2.4 inches per hour. The Plans shall identify the drainage areas for both existing and proposed conditions at a scale that enables verification of supporting calculations.

As noted in the Checklist, the Stormwater Management Report shall document compliance with each of the Stormwater Management Standards as provided in the Massachusetts Stormwater Handbook. The soils evaluation and calculations shall be done using the methodologies set forth in Volume 3 of the Massachusetts Stormwater Handbook.

To ensure that the Stormwater Report is complete, applicants are required to fill in the Stormwater Report Checklist by checking the box to indicate that the specified information has been included in the Stormwater Report. If any of the information specified in the checklist has not been submitted, the applicant must provide an explanation. The completed Stormwater Report Checklist and Certification must be submitted with the Stormwater Report.

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[1] The Stormwater Report may also include the Illicit Discharge Compliance Statement required by Standard 10. If not included in the Stormwater Report, the Illicit Discharge Compliance Statement must be submitted prior to the discharge of stormwater runoff to the post-construction best management practices.

[2] For some complex projects, it may not be possible to include the Construction Period Erosion and Sedimentation Control Plan in the Stormwater Report. In that event, the issuing authority has the discretion to issue an Order of Conditions that approves the project and includes a condition requiring the proponent to submit the Construction Period Erosion and Sedimentation Control Plan before commencing any land disturbance activity on the site.

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands Program

Checklist for Stormwater Report

B. Stormwater Checklist and Certification

The following checklist is intended to serve as a guide for applicants as to the elements that ordinarily need to be addressed in a complete Stormwater Report. The checklist is also intended to provide conservation commissions and other reviewing authorities with a summary of the components necessary for a comprehensive Stormwater Report that addresses the ten Stormwater Standards.

Note: Because stormwater requirements vary from project to project, it is possible that a complete Stormwater Report may not include information on some of the subjects specified in the Checklist. If it is determined that a specific item does not apply to the project under review, please note that the item is not applicable (N.A.) and provide the reasons for that determination.

A complete checklist must include the Certification set forth below signed by the Registered Professional Engineer who prepared the Stormwater Report.

Registered Professional Engineer's Certification

I have reviewed the Stormwater Report, including the soil evaluation, computations, Long-term Pollution Prevention Plan, the Construction Period Erosion and Sedimentation Control Plan (if included), the Long-term Post-Construction Operation and Maintenance Plan, the Illicit Discharge Compliance Statement (if included) and the plans showing the stormwater management system, and have determined that they have been prepared in accordance with the requirements of the Stormwater Management Standards as further elaborated by the Massachusetts Stormwater Handbook. I have also determined that the information presented in the Stormwater Checklist is accurate and that the information presented in the Stormwater Report accurately reflects conditions at the site as of the date of this permit application.

Registered Professional Engineer Block and Signature

COMMONWEALTH OF MASSACHUSETTS
ARTHUR D. GASBARRO
CIVIL
No. 45951
REGISTERED PROFESSIONAL ENGINEER
4/15/14

4/15/14
Signature and Date

Checklist

Project Type: Is the application for new development, redevelopment, or a mix of new and redevelopment?

☐ New development

☒ Redevelopment

☐ Mix of New Development and Redevelopment

Checklist for Stormwater Report

Checklist (continued)

LID Measures: Stormwater Standards require LID measures to be considered. Document what environmentally sensitive design and LID Techniques were considered during the planning and design of the project:

- ☐ No disturbance to any Wetland Resource Areas
- ☐ Site Design Practices (e.g. clustered development, reduced frontage setbacks)
- ☒ Reduced Impervious Area (Redevelopment Only)
- ☐ Minimizing disturbance to existing trees and shrubs
- ☐ LID Site Design Credit Requested:
  - ☐ Credit 1
  - ☐ Credit 2
  - ☐ Credit 3
- ☒ Use of "country drainage" versus curb and gutter conveyance and pipe
- ☐ Bioretention Cells (includes Rain Gardens)
- ☐ Constructed Stormwater Wetlands (includes Gravel Wetlands designs)
- ☐ Treebox Filter
- ☐ Water Quality Swale
- ☐ Grass Channel
- ☐ Green Roof
- ☐ Other (describe): _____

Standard 1: No New Untreated Discharges

- ☒ No new untreated discharges
- ☐ Outlets have been designed so there is no erosion or scour to wetlands and waters of the Commonwealth
- ☐ Supporting calculations specified in Volume 3 of the Massachusetts Stormwater Handbook included.

Checklist for Stormwater Report

Checklist (continued)

Standard 2: Peak Rate Attenuation

☒ Standard 2 waiver requested because the project is located in land subject to coastal storm flowage and stormwater discharge is to a wetland subject to coastal flooding.

☐ Evaluation provided to determine whether off-site flooding increases during the 100-year 24-hour storm.

☐ Calculations provided to show that post-development peak discharge rates do not exceed pre-development rates for the 2-year and 10-year 24-hour storms. If evaluation shows that off-site flooding increases during the 100-year 24-hour storm, calculations are also provided to show that post-development peak discharge rates do not exceed pre-development rates for the 100-year 24-hour storm.

Standard 3: Recharge

☐ Soil Analysis provided.

☐ Required Recharge Volume calculation provided.

☐ Required Recharge volume reduced through use of the LID site Design Credits.

☐ Sizing the infiltration, BMPs is based on the following method: Check the method used.

☐ Static ☐ Simple Dynamic ☐ Dynamic Field[1]

☐ Runoff from all impervious areas at the site discharging to the infiltration BMP.

☐ Runoff from all impervious areas at the site is *not* discharging to the infiltration BMP and calculations are provided showing that the drainage area contributing runoff to the infiltration BMPs is sufficient to generate the required recharge volume.

☐ Recharge BMPs have been sized to infiltrate the Required Recharge Volume.

☒ Recharge BMPs have been sized to infiltrate the Required Recharge Volume *only* to the maximum extent practicable for the following reason:

- ☐ Site is comprised solely of C and D soils and/or bedrock at the land surface
- ☐ M.G.L. c. 21E sites pursuant to 310 CMR 40.0000
- ☐ Solid Waste Landfill pursuant to 310 CMR 19.000
- ☒ Project is otherwise subject to Stormwater Management Standards only to the maximum extent practicable.

☐ Calculations showing that the infiltration BMPs will drain in 72 hours are provided.

☐ Property includes a M.G.L. c. 21E site or a solid waste landfill and a mounding analysis is included.

[1] 80% TSS removal is required prior to discharge to infiltration BMP if Dynamic Field method is used.

Checklist for Stormwater Report

Checklist (continued)

Standard 3: Recharge (continued)

☐ The infiltration BMP is used to attenuate peak flows during storms greater than or equal to the 10-year 24-hour storm and separation to seasonal high groundwater is less than 4 feet and a mounding analysis is provided.

☐ Documentation is provided showing that infiltration BMPs do not adversely impact nearby wetland resource areas.

Standard 4: Water Quality

The Long-Term Pollution Prevention Plan typically includes the following:

- Good housekeeping practices;
- Provisions for storing materials and waste products inside or under cover;
- Vehicle washing controls;
- Requirements for routine inspections and maintenance of stormwater BMPs;
- Spill prevention and response plans;
- Provisions for maintenance of lawns, gardens, and other landscaped areas;
- Requirements for storage and use of fertilizers, herbicides, and pesticides;
- Pet waste management provisions;
- Provisions for operation and management of septic systems;
- Provisions for solid waste management;
- Snow disposal and plowing plans relative to Wetland Resource Areas;
- Winter Road Salt and/or Sand Use and Storage restrictions;
- Street sweeping schedules;
- Provisions for prevention of illicit discharges to the stormwater management system;
- Documentation that Stormwater BMPs are designed to provide for shutdown and containment in the event of a spill or discharges to or near critical areas or from LUHPPL;
- Training for staff or personnel involved with implementing Long-Term Pollution Prevention Plan;
- List of Emergency contacts for implementing Long-Term Pollution Prevention Plan.

☒ A Long-Term Pollution Prevention Plan is attached to Stormwater Report and is included as an attachment to the Wetlands Notice of Intent.

☐ Treatment BMPs subject to the 44% TSS removal pretreatment requirement and the one inch rule for calculating the water quality volume are included, and discharge:

- ☐ is within the Zone II or Interim Wellhead Protection Area
- ☐ is near or to other critical areas
- ☐ is within soils with a rapid infiltration rate (greater than 2.4 inches per hour)
- ☐ involves runoff from land uses with higher potential pollutant loads.

☐ The Required Water Quality Volume is reduced through use of the LID site Design Credits.

☐ Calculations documenting that the treatment train meets the 80% TSS removal requirement and, if applicable, the 44% TSS removal pretreatment requirement, are provided.

Checklist for Stormwater Report

Checklist (continued)

Standard 4: Water Quality (continued)

☐ The BMP is sized (and calculations provided) based on:

- ☐ The ½" or 1" Water Quality Volume or
- ☐ The equivalent flow rate associated with the Water Quality Volume and documentation is provided showing that the BMP treats the required water quality volume.

☐ The applicant proposes to use proprietary BMPs, and documentation supporting use of proprietary BMP and proposed TSS removal rate is provided. This documentation may be in the form of the propriety BMP checklist found in Volume 2, Chapter 4 of the Massachusetts Stormwater Handbook and submitting copies of the TARP Report, STEP Report, and/or other third party studies verifying performance of the proprietary BMPs.

☐ A TMDL exists that indicates a need to reduce pollutants other than TSS and documentation showing that the BMPs selected are consistent with the TMDL is provided.

Standard 5: Land Uses With Higher Potential Pollutant Loads (LUHPPLs)

☐ The NPDES Multi-Sector General Permit covers the land use and the Stormwater Pollution Prevention Plan (SWPPP) has been included with the Stormwater Report.

☐ The NPDES Multi-Sector General Permit covers the land use and the SWPPP will be submitted ***prior to*** the discharge of stormwater to the post-construction stormwater BMPs.

☐ The NPDES Multi-Sector General Permit does ***not*** cover the land use.

☐ LUHPPLs are located at the site and industry specific source control and pollution prevention measures have been proposed to reduce or eliminate the exposure of LUHPPLs to rain, snow, snow melt and runoff, and been included in the long term Pollution Prevention Plan.

☐ All exposure has been eliminated.

☐ All exposure has ***not*** been eliminated and all BMPs selected are on MassDEP LUHPPL list.

☐ The LUHPPL has the potential to generate runoff with moderate to higher concentrations of oil and grease (e.g. all parking lots with >1000 vehicle trips per day) and the treatment train includes an oil grit separator, a filtering bioretention area, a sand filter or equivalent.

Standard 6: Critical Areas

☐ The discharge is near or to a critical area and the treatment train includes only BMPs that MassDEP has approved for stormwater discharges to or near that particular class of critical area.

☐ Critical areas and BMPs are identified in the Stormwater Report.

Checklist for Stormwater Report

Checklist (continued)

Standard 7: Redevelopments and Other Projects Subject to the Standards only to the maximum extent practicable

☒ The project is subject to the Stormwater Management Standards only to the maximum Extent Practicable as a:

- ☐ Limited Project
- ☐ Small Residential Projects: 5-9 single family houses or 5-9 units in a multi-family development provided there is no discharge that may potentially affect a critical area.
- ☐ Small Residential Projects: 2-4 single family houses or 2-4 units in a multi-family development with a discharge to a critical area
- ☐ Marina and/or boatyard provided the hull painting, service and maintenance areas are protected from exposure to rain, snow, snow melt and runoff
- ☐ Bike Path and/or Foot Path
- ☒ Redevelopment Project
- ☐ Redevelopment portion of mix of new and redevelopment.

☒ Certain standards are not fully met (Standard No. 1, 8, 9, and 10 must always be fully met) and an explanation of why these standards are not met is contained in the Stormwater Report.

☐ The project involves redevelopment and a description of all measures that have been taken to improve existing conditions is provided in the Stormwater Report. The redevelopment checklist found in Volume 2 Chapter 3 of the Massachusetts Stormwater Handbook may be used to document that the proposed stormwater management system (a) complies with Standards 2, 3 and the pretreatment and structural BMP requirements of Standards 4-6 to the maximum extent practicable and (b) improves existing conditions.

Standard 8: Construction Period Pollution Prevention and Erosion and Sedimentation Control

A Construction Period Pollution Prevention and Erosion and Sedimentation Control Plan must include the following information:

- Narrative;
- Construction Period Operation and Maintenance Plan;
- Names of Persons or Entity Responsible for Plan Compliance;
- Construction Period Pollution Prevention Measures;
- Erosion and Sedimentation Control Plan Drawings;
- Detail drawings and specifications for erosion control BMPs, including sizing calculations;
- Vegetation Planning;
- Site Development Plan;
- Construction Sequencing Plan;
- Sequencing of Erosion and Sedimentation Controls;
- Operation and Maintenance of Erosion and Sedimentation Controls;
- Inspection Schedule;
- Maintenance Schedule;
- Inspection and Maintenance Log Form.

☒ A Construction Period Pollution Prevention and Erosion and Sedimentation Control Plan containing the information set forth above has been included in the Stormwater Report.

Checklist for Stormwater Report

Checklist (continued)

Standard 8: Construction Period Pollution Prevention and Erosion and Sedimentation Control (continued)

☐ The project is highly complex and information is included in the Stormwater Report that explains why it is not possible to submit the Construction Period Pollution Prevention and Erosion and Sedimentation Control Plan with the application. A Construction Period Pollution Prevention and Erosion and Sedimentation Control has ***not*** been included in the Stormwater Report but will be submitted ***before*** land disturbance begins.

☐ The project is ***not*** covered by a NPDES Construction General Permit.

☐ The project is covered by a NPDES Construction General Permit and a copy of the SWPPP is in the Stormwater Report.

☐ The project is covered by a NPDES Construction General Permit but no SWPPP been submitted. The SWPPP will be submitted BEFORE land disturbance begins.

Standard 9: Operation and Maintenance Plan

☒ The Post Construction Operation and Maintenance Plan is included in the Stormwater Report and includes the following information:

- ☒ Name of the stormwater management system owners;
- ☒ Party responsible for operation and maintenance;
- ☒ Schedule for implementation of routine and non-routine maintenance tasks;
- ☒ Plan showing the location of all stormwater BMPs maintenance access areas;
- ☒ Description and delineation of public safety features;
- ☒ Estimated operation and maintenance budget; and
- ☒ Operation and Maintenance Log Form.

☐ The responsible party is ***not*** the owner of the parcel where the BMP is located and the Stormwater Report includes the following submissions:

- ☐ A copy of the legal instrument (deed, homeowner's association, utility trust or other legal entity) that establishes the terms of and legal responsibility for the operation and maintenance of the project site stormwater BMPs;
- ☐ A plan and easement deed that allows site access for the legal entity to operate and maintain BMP functions.

Standard 10: Prohibition of Illicit Discharges

☒ The Long-Term Pollution Prevention Plan includes measures to prevent illicit discharges;

☒ An Illicit Discharge Compliance Statement is attached;

☐ NO Illicit Discharge Compliance Statement is attached but will be submitted ***prior to*** the discharge of any stormwater to post-construction BMPs.

2222 Rockingham Dr.
Troy, Ohio 45373

Nantucket Conservation Commission

2 Bathing Beach Road
Nantucket, MA 02554

Dear Nantucket Conservation Commission members,

This letter is in regard to the Land Bank's Petrel Landing project proposal that will soon be under review by the Conservation Commission.

As neighboring homeowners of the proposed project, we have several concerns. These are listed below, and summarized in more depth in the narrative that follows:

- Dinghy dock size, noise, and traffic; destruction of natural open space and residents' privacy
- Provides visiting yachts with access to land, instead of giving the general public access to the water
- Difficulty of enforcing use of the dock
- Lack of assessment of potential for storm damage risks to neighbors
- Dredging risks to adjacent residential structures and to the stone pier of Commercial Wharf
- Loss of moorings held by neighbors
- Size of boats using new dock uncertain
- Loss of historic landscape
- Conflict with the Land Bank's mission (due to alteration of the natural, scenic and open condition of the waterfront)
- Lack of compromise/consideration of property owners by the Land Bank
- Possible conflict with the Conservation Commission's mission of "public and private erosion control and storm damage prevention"

Background:

We own the residence at 25 Commercial Wharf, which has been in our family since it was built approximately one hundred and twenty years ago. Our home is occupied by our immediate family during the spring, summer and fall months. We love the small and surprisingly quiet residential neighborhood of the wharf. Just a few blocks from the crowds and bustle of Main Street and Straight Wharf, we enjoy an expansive view of the harbor, including the town dock, Great Harbor Yacht Club, the creeks area, and Monomoy. The evenings and nights are quiet and peaceful, with the possible exception of Figawi Weekend and July 4. On many nights during the summer, Petrel Landing is frequented by snowy egrets and night herons perching on the old pilings, and osprey hunt there regularly. Bait fish, stripers, crabs and eelgrass are abundant in front of our house and around our nearby mooring. We know the other

homeowners on the wharf, and we all respect one another's privacy and interests. Over the years, Nantucket Island Resorts and the Nantucket Boat Basin have been good neighbors to us as well. In case you are not familiar with the area on the South Side of Commercial Street, here is a quick overview: the base of the street (Opposite the Lobster Trap Restaurant) consists of the Harborview Condominiums which is a transient residential/rental area; and moving east down Commercial Street, there are a several private residences: Mueller Residence, Rowland (professional office and residence upstairs), an NIR transient residential cottage, Corey Residence, Apteker Residence (formerly the Walker Residence), and Barney residence (our home). Beyond our home, there are two more NIR wharf cottages.

In the July 23, 2015 Inquirer and Mirror article titled "Petrel Landing Development Underway", there was a statement that the Land Bank is "working out issues with abutters, some of whom have expressed concern about the use of the property and the disturbance to the residential area." While the Land Bank has (by law) allowed the abutters including the Coreys, Rowlands, and Muellers, and us (as neighborhood residents, not technically abutters), to come to open meetings and speak of our concerns, there truly has not been any effort to "work out" or compromise on behalf of the Land Bank regarding the residents' concerns. It should also be noted that the Land Bank has now owned Petrel Landing for over ten years. In that time, the only amenity provided by the Land Bank for the public enjoyment and access to the waterfront has been a single wooden picnic table. Last summer (2015), there was not even a trash can at the landing. Fortunately, those who use the spot do a good job of keeping it clean in spite of this. And in spite of the few amenities, the public does enjoy this little-known pocket of beautiful open space. It serves as an unofficial dog park for many of the yachts visiting the boat basin; a lunch, coffee, and impromptu picnic dinner spot for visitors to the small picnic table; and a place to watch the sunrise and the sunset. Teens often gather quietly at the landing after dark. On any given summer day, children play on the rocks, families take photos, and plein air painters work on their easels. This open space is a lovely oasis in the midst of the downtown bustle. We are very supportive of the idea of creating a more functional park at Petrel Landing, a place where the general public can enjoy the open view over the harbor. The Land Bank director is quoted in the July 23 article as claiming that the rocky revetment is "slumping" and slowly eroding. Because very little has been done over the past ten years to preserve or maintain the landing, that is not surprising. We recently received a copy of the public hearing notice of the Application for Redevelopment of a Solid Fill Pier Including a Floating Dock System and Dredging. We note that the Land Band Application's Eelgrass and Shellfish Assessment Report of October 2015 describes Petrel Landing project as a rehabilitation of "abandoned land." Adding park amenities and landscaping would greatly enhance the beauty of this open space; indeed, it seems wasteful that such simple items like benches, tables, and general upkeep of the large rocks have not been provided during the past ten years.

As neighbors of Petrel Landing, we have several major concerns about this development by the Land Bank:

1. Dinghy Dock

We object to the plan for a 140-foot floating dinghy dock that the Land Bank proposes to place along the south side of the landing, extending east into the harbor immediately in front of several existing dwellings. This dock will obstruct the views from these cottages, essentially being located in the "front yard" of the residences and eliminating the natural open space that is now the main feature of the landscape for these homeowners. It is our understanding that under Massachusetts law, a private resident

may not even consider building a dock of any sort; so it is difficult to understand how the Land Bank might be able to consider a proposed 140-foot dock due to its potential for negative impact on neighboring properties, aesthetics of the area including noise, and the ecology of this small harbor area. This hardly seems within the purview of the "open space" goals for which the Land Bank was established. We have watched the decline in cleanliness, habitat, and water quality of the harbor in the past, and have applauded its more recent renewal. To propose that dozens, or perhaps hundreds, of dinghies would be allowed to dock in an essentially residential area is extremely short-sighted and destructive of the environment.

The floating dock's appearance, size and location will be objectionable to the abutting homeowners. In place of the lovely and calm open space, the Land Bank's plan will result in a crowded mass of dinghies and inflatables tied up, and the buzz of boat engines continually dropping off and picking up passengers. The noise from these will be the worst element of the situation, particularly in the evenings and nights after the restaurants and bars close. In spite of the claim in the Project Application that the new dock system will improve the general public's access to water, the proposed large floating dock is mainly designed to serve the "transient yachts" visiting the island, offering these boating visitors easier, faster access to the land. Transients currently use the Town Pier, which already provides two adequate dingy dock systems with extensions on both the north and south sides of the dock. The town docks are serviced by showers, water, restrooms, trash/recycling options, and parking; all in a more appropriate, non-residential location. While the proposed project will undoubtedly make life and work easier for the Harbormaster, the impact of this change will be shifted onto our relatively quiet neighborhood. The closer-to-town location of Petrel Landing and the extreme size of the proposed Land Bank dock (140 feet) will draw much of this traffic away from the Town Dock, placing the noise, trash, traffic, and night-time disturbances of the transient boaters right in the middle of our residential area. We, along with other neighboring homeowners, have attended and spoken at Land Bank meetings and have requested a compromise on the size of the dock space in order to minimize noise, eliminate larger yachts coming in, and reduce night time tie ups. Although members of the Land Bank board have appeared to listen politely, there has never been any discussion of a compromise or modification on any level.

According to the I & M article of July 23, the project was described as a "transient drop off, pick up type of dock where people come and drop off, meet people, pick up people, get water perhaps….not necessarily a place to tie up overnight." Our worry there was that it would be very difficult to eliminate longer stays than "drop offs." The enforcement of that drop-off rule would be difficult. It does not seem a practical or logical function of the Land Bank or the Nantucket Police to ticket violators of the no tie-up rule. In a meeting we attended in August 2015, we asked whether the Land bank had given consideration to enforcement of the drop-off/pick up only rule-- e.g., signage notifying of 15-minute drop off only; with boats tied up overnight or longer than 15 minutes subject to removal. Even if these actions would be taken, we expressed concern about who would enforce and remove the boats.

There is a new aspect of the April 2016 Application that presents a major concern. The Application's Eelgrass and Shellfish habitat Assessment Report describes the project to include *"the construction of a dingy dock and small boat pier to be used by recreational boaters. The PIER AND SLIPS associated with the proposed project will help reduce the overwhelming number of rafted dinghies that occur at the Town of Nantucket public pier."* Not only does the current application lack any consideration of the previous neighbor and abutter requests, it also now includes "slips" that would be located directly in front of

existing homes. There is no description of the location and number of these slips or how they would be assigned. (*Would you want a boat slip put into your "front yard" a mere few yards from your deck and your living room, destroying your family's privacy and enjoyment of what has been open space since the day you purchased your home? That is what the Land Bank is proposing to construct and how it will impact some of our neighbors.)*

We have owned our home for the past 30 years, and during this time we have observed significant summer and winter storms, including Hurricanes and Nor'easters. During this time period, our cottage has been severely damaged on several occasions. Each time, the damage has been caused by floating docks, parts of planking from the town pier, and other decking elements that have torn free. The current Land Bank Plan proposes a floating 140 foot dock, the approximate length of one-half of a football field. The entire nature of the neighborhood will be changed.

2. Dredging of the Harbor Area and Steel Bulkhead

As nearby homeowners, we are extremely concerned on several levels about the Land Bank's proposed dredging plan for the approach to Petrel Landing. First, we have a concern that the deeper water combined with the steel bulkhead structure in the Land Bank's plan might cause an intensification of wave action during major storms, as waves bounce off the bulkhead instead of dissipating on the stone revetment. We fear that the combination of the two (i.e. deeper water and steel bulkhead) will have a significant adverse effect upon the potential for future storm damage to our properties. Additionally, we are also concerned that there may be some scouring in other areas of the beach due to the introduction of the bulkhead. There has been no study of these risks, from what we have been able to determine. In light of harborfront damage from recent storms, we feel that it would be irresponsible to proceed on this project without researching the issue of its possible wave action/flooding implications.

We also have significant concern about how any dredging might affect the foundations of our homes. This will impact property values and may cause actual loss of physical property. Will the Land Bank cover damages? Or will the Conservation Commission, or the Town of Nantucket, accept liability for damage to our foundations and our homes if their decision to dredge in front of our cottages has a poor outcome?

According to the Conservation Commission Wetland Protection Regulations, the proposed dredging will violate the Performance Standards of Part II, 2.01, Land Under the Ocean, which states that "2. All dredging shall use best available measures to minimize adverse effects caused by changes in bottom topography resulting in an increase in height and velocity of waves hitting the shore, localized changes in circulation patterns or in changes in sediment transport which affect natural replenishment of beaches or maintenance of channels." With the present concern about loss of eel grass and scallop beds, how will the eel grass be affected by this dredging? The area in question is very shallow. Boats routinely run aground.

Finally, will our mooring spaces be lost due to the dredging so that larger boats may use the approach to the landing? One of the nicest aspects of our residential location is the ability to moor our boats in front of our homes. Many of us have maintained moorings for 20 or 30 years.

None of these issues has been addressed by the Land Bank in connection with its proposal, and we have yet to see any engineering studies that provide evidence that our properties will not be at risk. The Land Bank's Notice of Intent (WPA FORM 3 page 4 of 8) notes that the impacts will include alteration of land under the ocean, coastal banks, land containing shellfish, and land subject to coastal storm flowage. Yet we have seen no documentation that the damages and impacts that we are concerned about have been studied for risk assessment. The Stormwater Report provided by Nantucket Engineering and Survey, PC does not address the increased wave action likely to result from the bulkhead or the greater water depth. In fact, page 1 of the Stormwater Report requests a "waiver (of peak rate attenuation because) the project is located in land subject to coastal storm flowage and stormwater discharge is to a wetland subject to coastal flooding." We interpret this to mean that the Land Bank realizes that the project may make the coastal flooding in the area even worse; but they want to have any responsibility for that issue waived. We homeowners, on the other hand, believe that this is an important negative risk to our properties that might result from the Land Bank project.

3. Commercial Fishing Use

It is unclear, from the plans that have been shared with us to date by the Land Bank, what the parameters of boating and commercial use of Petrel Landing would be under their proposal. As abutters, we have no problem with seasonal use of a small dock by scallop boats, or by small-boat recreational fishermen dropping off their catch. This would support the local small waterfront and shellfishing businesses. However, since the Land Bank has stated their intention to dredge the "fairway" of the harbor area in front of our homes, does this mean that they are designing Petrel Landing for use by the large charter boats, sport fishing yachts, and the bigger commercial fishing boats—i.e., the boats we typically see at the end of the Town Pier? If so, this brings noise in the early hours of the morning to our doorsteps. And it certainly limits the ability of the "average" person (tourist or local) to enjoy the waterfront access. Rather, this part of the plan seems to favor the special interests of large yacht owners and commercial vessels, which are already well served by the Boat Basin and the Town Pier. Larger boats coming into Petrel Landing would represent a complete change in use of the landing and a major negative impact to the property values and the enjoyment of the existing homeowners, as well as the general public due to noise, proximity to homes, and loss of privacy. Since we do not know the details of the Land Bank's plan—i.e. the depth of the channel they propose and the limits in size of the boats that might use the floating docks, the number of boat slips and how they will be assigned, it is difficult to assess whether this aspect of the plan really provides waterfront access to the public, or to just a few special interests.

4. Historical Value of Petrel Landing

Commercial Wharf's south side is the last piece of stone wharf remaining on Nantucket. The stone portion of the wharf extends from the boat basin docks, west to the rocks on Petrel Landing. The Landing's stone revetment is virtually the same as it was a century or more ago, when compared with photos from the early 1900s in the NHA archives. We believe that the landing is an important part of the island's history. Many Nantucket residents and visitors have no idea that all of our wharves were once constructed of stone, as the south side of Commercial Wharf still is. Should this change go through the Historic District Commission or the Massachusetts Historical Society for review? It certainly would change the look of our island's last historic pier.

And, as stated in the section numbered 2 above, replacing the historic stone barrier with a steel bulkhead will likely increase wave action in the area of the Town Pier during storms. In contrast, the existing revetment functions more like a beach, absorbing and diminishing the waves and storm surge. During winter storm Juno, we learned that the area around Washington Street is highly vulnerable to damage, and the Land Bank's proposed plan could certainly worsen the prospects for future problems.

5. Conflict with the Land Bank's Original Mission

On many levels the plan for Petrel Landing seems to violate the mission of the Nantucket Land Bank, and also indirectly of the Conservation Commission. The Nantucket Island Land Bank Act states in section 6 that "The commission shall retain any real property interest relating to land and water areas acquired pursuant to this act predominantly in it natural, scenic or open condition …" and that the Land Bank Commission shall not allow "excavation, dredging", or "surface use except for purposes permitting the land or water area to remain predominantly in its natural condition, " or " activities detrimental to drainage, flood control, water conservation, erosion control, or soil conservation, or other acts or uses detrimental to such retention of land or water areas. " The Conservation Commission is empowered to protect the interests of public and private erosion control and storm damage prevention. Both agencies would seem to be acting in conflict with their original charters if this plan is approved.

In Summary: The proposed Petrel Landing project alters the natural, scenic and open condition of the waterfront property. It subjects the harbor area in front of the Landing to dredging that could be harmful to the abutting residences as well as to the environment under the ocean. The introduction of the bulkhead alters the natural condition of the area and would be detrimental to flood control in the immediate area. The floating dock plan will increase noise and traffic in an otherwise quiet downtown residential area. We respectfully ask the Conservation Commission to deny the permission for development and the dredging associated with this project. We respectfully once again ask that the Land Bank be required to produce a more suitable plan that does not duplicate services that are already provided, that is enforceable, and that preserves both open space AND the property values of homeowners in the Petrel Landing neighborhood while providing access to the waterfront to the public.

Thank you for your consideration,

Ruth and Bill Barney

RECEIVED
APR 29 2016
By

2222 Rockingham Dr.
Troy, Ohio 45373

Nantucket Conservation Commission

2 Bathing Beach Road
Nantucket, MA 02554

Dear Nantucket Conservation Commission members,

This letter is in regard to the Land Bank's Petrel Landing project proposal that will soon be under review by the Conservation Commission.

As neighboring homeowners of the proposed project, we have several concerns. These are listed below, and summarized in more depth in the narrative that follows:

- Dinghy dock size, noise, and traffic; destruction of natural open space and residents' privacy
- Provides visiting yachts with access to land, instead of giving the general public access to the water
- Difficulty of enforcing use of the dock
- Lack of assessment of potential for storm damage risks to neighbors
- Dredging risks to adjacent residential structures and to the stone pier of Commercial Wharf
- Loss of moorings held by neighbors
- Size of boats using new dock uncertain
- Loss of historic landscape
- Conflict with the Land Bank's mission (due to alteration of the natural, scenic and open condition of the waterfront)
- Lack of compromise/consideration of property owners by the Land Bank
- Possible conflict with the Conservation Commission's mission of "public and private erosion control and storm damage prevention"

Background:

We own the residence at 25 Commercial Wharf, which has been in our family since it was built approximately one hundred and twenty years ago. Our home is occupied by our immediate family during the spring, summer and fall months. We love the small and surprisingly quiet residential neighborhood of the wharf. Just a few blocks from the crowds and bustle of Main Street and Straight Wharf, we enjoy an expansive view of the harbor, including the town dock, Great Harbor Yacht Club, the creeks area, and Monomoy. The evenings and nights are quiet and peaceful, with the possible exception of Figawi Weekend and July 4. On many nights during the summer, Petrel Landing is frequented by snowy egrets and night herons perching on the old pilings, and osprey hunt there regularly. Bait fish, stripers, crabs and eelgrass are abundant in front of our house and around our nearby mooring. We know the other

homeowners on the wharf, and we all respect one another's privacy and interests. Over the years, Nantucket Island Resorts and the Nantucket Boat Basin have been good neighbors to us as well. In case you are not familiar with the area on the South Side of Commercial Street, here is a quick overview: the base of the street (Opposite the Lobster Trap Restaurant) consists of the Harborview Condominiums which is a transient residential/rental area; and moving east down Commercial Street, there are a several private residences: Mueller Residence, Rowland (professional office and residence upstairs), an NIR transient residential cottage, Corey Residence, Apteker Residence (formerly the Walker Residence), and Barney residence (our home). Beyond our home, there are two more NIR wharf cottages.

In the July 23, 2015 Inquirer and Mirror article titled "Petrel Landing Development Underway", there was a statement that the Land Bank is "working out issues with abutters, some of whom have expressed concern about the use of the property and the disturbance to the residential area." While the Land Bank has (by law) allowed the abutters including the Coreys, Rowlands, and Muellers, and us (as neighborhood residents, not technically abutters), to come to open meetings and speak of our concerns, there truly has not been any effort to "work out" or compromise on behalf of the Land Bank regarding the residents' concerns. It should also be noted that the Land Bank has now owned Petrel Landing for over ten years. In that time, the only amenity provided by the Land Bank for the public enjoyment and access to the waterfront has been a single wooden picnic table. Last summer (2015), there was not even a trash can at the landing. Fortunately, those who use the spot do a good job of keeping it clean in spite of this. And in spite of the few amenities, the public does enjoy this little-known pocket of beautiful open space. It serves as an unofficial dog park for many of the yachts visiting the boat basin; a lunch, coffee, and impromptu picnic dinner spot for visitors to the small picnic table; and a place to watch the sunrise and the sunset. Teens often gather quietly at the landing after dark. On any given summer day, children play on the rocks, families take photos, and plein air painters work on their easels. This open space is a lovely oasis in the midst of the downtown bustle. We are very supportive of the idea of creating a more functional park at Petrel Landing, a place where the general public can enjoy the open view over the harbor. The Land Bank director is quoted in the July 23 article as claiming that the rocky revetment is "slumping" and slowly eroding. Because very little has been done over the past ten years to preserve or maintain the landing, that is not surprising. We recently received a copy of the public hearing notice of the Application for Redevelopment of a Solid Fill Pier Including a Floating Dock System and Dredging. We note that the Land Band Application's Eelgrass and Shellfish Assessment Report of October 2015 describes Petrel Landing project as a rehabilitation of "abandoned land." Adding park amenities and landscaping would greatly enhance the beauty of this open space; indeed, it seems wasteful that such simple items like benches, tables, and general upkeep of the large rocks have not been provided during the past ten years.

As neighbors of Petrel Landing, we have several major concerns about this development by the Land Bank:

1. Dinghy Dock

We object to the plan for a 140-foot floating dinghy dock that the Land Bank proposes to place along the south side of the landing, extending east into the harbor immediately in front of several existing dwellings. This dock will obstruct the views from these cottages, essentially being located in the "front yard" of the residences and eliminating the natural open space that is now the main feature of the landscape for these homeowners. It is our understanding that under Massachusetts law, a private resident

may not even consider building a dock of any sort; so it is difficult to understand how the Land Bank might be able to consider a proposed 140-foot dock due to its potential for negative impact on neighboring properties, aesthetics of the area including noise, and the ecology of this small harbor area. This hardly seems within the purview of the "open space" goals for which the Land Bank was established. We have watched the decline in cleanliness, habitat, and water quality of the harbor in the past, and have applauded its more recent renewal. To propose that dozens, or perhaps hundreds, of dinghies would be allowed to dock in an essentially residential area is extremely short-sighted and destructive of the environment.

The floating dock's appearance, size and location will be objectionable to the abutting homeowners. In place of the lovely and calm open space, the Land Bank's plan will result in a crowded mass of dinghies and inflatables tied up, and the buzz of boat engines continually dropping off and picking up passengers. The noise from these will be the worst element of the situation, particularly in the evenings and nights after the restaurants and bars close. In spite of the claim in the Project Application that the new dock system will improve the general public's access to water, the proposed large floating dock is mainly designed to serve the "transient yachts" visiting the island, offering these boating visitors easier, faster access to the land. Transients currently use the Town Pier, which already provides two adequate dingy dock systems with extensions on both the north and south sides of the dock. The town docks are serviced by showers, water, restrooms, trash/recycling options, and parking; all in a more appropriate, non-residential location. While the proposed project will undoubtedly make life and work easier for the Harbormaster, the impact of this change will be shifted onto our relatively quiet neighborhood. The closer-to-town location of Petrel Landing and the extreme size of the proposed Land Bank dock (140 feet) will draw much of this traffic away from the Town Dock, placing the noise, trash, traffic, and night-time disturbances of the transient boaters right in the middle of our residential area. We, along with other neighboring homeowners, have attended and spoken at Land Bank meetings and have requested a compromise on the size of the dock space in order to minimize noise, eliminate larger yachts coming in, and reduce night time tie ups. Although members of the Land Bank board have appeared to listen politely, there has never been any discussion of a compromise or modification on any level.

According to the I & M article of July 23, the project was described as a "transient drop off, pick up type of dock where people come and drop off, meet people, pick up people, get water perhaps....not necessarily a place to tie up overnight." Our worry there was that it would be very difficult to eliminate longer stays than "drop offs." The enforcement of that drop-off rule would be difficult. It does not seem a practical or logical function of the Land Bank or the Nantucket Police to ticket violators of the no tie-up rule. In a meeting we attended in August 2015, we asked whether the Land bank had given consideration to enforcement of the drop-off/pick up only rule-- e.g., signage notifying of 15-minute drop off only; with boats tied up overnight or longer than 15 minutes subject to removal. Even if these actions would be taken, we expressed concern about who would enforce and remove the boats.

There is a new aspect of the April 2016 Application that presents a major concern. The Application's Eelgrass and Shellfish habitat Assessment Report describes the project to include *"the construction of a dingy dock and small boat pier to be used by recreational boaters. The PIER AND SLIPS associated with the proposed project will help reduce the overwhelming number of rafted dinghies that occur at the Town of Nantucket public pier."* Not only does the current application lack any consideration of the previous neighbor and abutter requests, it also now includes "slips" that would be located directly in front of

existing homes. There is no description of the location and number of these slips or how they would be assigned. (*Would you want a boat slip put into your "front yard" a mere few yards from your deck and your living room, destroying your family's privacy and enjoyment of what has been open space since the day you purchased your home? That is what the Land Bank is proposing to construct and how it will impact some of our neighbors.)*

We have owned our home for the past 30 years, and during this time we have observed significant summer and winter storms, including Hurricanes and Nor'easters. During this time period, our cottage has been severely damaged on several occasions. Each time, the damage has been caused by floating docks, parts of planking from the town pier, and other decking elements that have torn free. The current Land Bank Plan proposes a floating 140 foot dock, the approximate length of one-half of a football field. The entire nature of the neighborhood will be changed.

2. Dredging of the Harbor Area and Steel Bulkhead

As nearby homeowners, we are extremely concerned on several levels about the Land Bank's proposed dredging plan for the approach to Petrel Landing. First, we have a concern that the deeper water combined with the steel bulkhead structure in the Land Bank's plan might cause an intensification of wave action during major storms, as waves bounce off the bulkhead instead of dissipating on the stone revetment. We fear that the combination of the two (i.e. deeper water and steel bulkhead) will have a significant adverse effect upon the potential for future storm damage to our properties. Additionally, we are also concerned that there may be some scouring in other areas of the beach due to the introduction of the bulkhead. There has been no study of these risks, from what we have been able to determine. In light of harborfront damage from recent storms, we feel that it would be irresponsible to proceed on this project without researching the issue of its possible wave action/flooding implications.

We also have significant concern about how any dredging might affect the foundations of our homes. This will impact property values and may cause actual loss of physical property. Will the Land Bank cover damages? Or will the Conservation Commission, or the Town of Nantucket, accept liability for damage to our foundations and our homes if their decision to dredge in front of our cottages has a poor outcome?

According to the Conservation Commission Wetland Protection Regulations, the proposed dredging will violate the Performance Standards of Part II, 2.01, Land Under the Ocean, which states that "2. All dredging shall use best available measures to minimize adverse effects caused by changes in bottom topography resulting in an increase in height and velocity of waves hitting the shore, localized changes in circulation patterns or in changes in sediment transport which affect natural replenishment of beaches or maintenance of channels." With the present concern about loss of eel grass and scallop beds, how will the eel grass be affected by this dredging? The area in question is very shallow. Boats routinely run aground.

Finally, will our mooring spaces be lost due to the dredging so that larger boats may use the approach to the landing? One of the nicest aspects of our residential location is the ability to moor our boats in front of our homes. Many of us have maintained moorings for 20 or 30 years.

None of these issues has been addressed by the Land Bank in connection with its proposal, and we have yet to see any engineering studies that provide evidence that our properties will not be at risk. The Land Bank's Notice of Intent (WPA FORM 3 page 4 of 8) notes that the impacts will include alteration of land under the ocean, coastal banks, land containing shellfish, and land subject to coastal storm flowage. Yet we have seen no documentation that the damages and impacts that we are concerned about have been studied for risk assessment. The Stormwater Report provided by Nantucket Engineering and Survey, PC does not address the increased wave action likely to result from the bulkhead or the greater water depth. In fact, page 1 of the Stormwater Report requests a "waiver (of peak rate attenuation because) the project is located in land subject to coastal storm flowage and stormwater discharge is to a wetland subject to coastal flooding." We interpret this to mean that the Land Bank realizes that the project may make the coastal flooding in the area even worse; but they want to have any responsibility for that issue waived. We homeowners, on the other hand, believe that this is an important negative risk to our properties that might result from the Land Bank project.

3. Commercial Fishing Use

It is unclear, from the plans that have been shared with us to date by the Land Bank, what the parameters of boating and commercial use of Petrel Landing would be under their proposal. As abutters, we have no problem with seasonal use of a small dock by scallop boats, or by small-boat recreational fishermen dropping off their catch. This would support the local small waterfront and shellfishing businesses. However, since the Land Bank has stated their intention to dredge the "fairway" of the harbor area in front of our homes, does this mean that they are designing Petrel Landing for use by the large charter boats, sport fishing yachts, and the bigger commercial fishing boats—i.e., the boats we typically see at the end of the Town Pier? If so, this brings noise in the early hours of the morning to our doorsteps. And it certainly limits the ability of the "average" person (tourist or local) to enjoy the waterfront access. Rather, this part of the plan seems to favor the special interests of large yacht owners and commercial vessels, which are already well served by the Boat Basin and the Town Pier. Larger boats coming into Petrel Landing would represent a complete change in use of the landing and a major negative impact to the property values and the enjoyment of the existing homeowners, as well as the general public due to noise, proximity to homes, and loss of privacy. Since we do not know the details of the Land Bank's plan—i.e. the depth of the channel they propose and the limits in size of the boats that might use the floating docks, the number of boat slips and how they will be assigned, it is difficult to assess whether this aspect of the plan really provides waterfront access to the public, or to just a few special interests.

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Commercial Wharf's south side is the last piece of stone wharf remaining on Nantucket. The stone portion of the wharf extends from the boat basin docks, west to the rocks on Petrel Landing. The Landing's stone revetment is virtually the same as it was a century or more ago, when compared with photos from the early 1900s in the NHA archives. We believe that the landing is an important part of the island's history. Many Nantucket residents and visitors have no idea that all of our wharves were once constructed of stone, as the south side of Commercial Wharf still is. Should this change go through the Historic District Commission or the Massachusetts Historical Society for review? It certainly would change the look of our island's last historic pier.

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5. Conflict with the Land Bank's Original Mission

On many levels the plan for Petrel Landing seems to violate the mission of the Nantucket Land Bank, and also indirectly of the Conservation Commission. The Nantucket Island Land Bank Act states in section 6 that "The commission shall retain any real property interest relating to land and water areas acquired pursuant to this act predominantly in it natural, scenic or open condition ..." and that the Land Bank Commission shall not allow "excavation, dredging", or "surface use except for purposes permitting the land or water area to remain predominantly in its natural condition, " or " activities detrimental to drainage, flood control, water conservation, erosion control, or soil conservation, or other acts or uses detrimental to such retention of land or water areas. " The Conservation Commission is empowered to protect the interests of public and private erosion control and storm damage prevention. Both agencies would seem to be acting in conflict with their original charters if this plan is approved.

In Summary: The proposed Petrel Landing project alters the natural, scenic and open condition of the waterfront property. It subjects the harbor area in front of the Landing to dredging that could be harmful to the abutting residences as well as to the environment under the ocean. The introduction of the bulkhead alters the natural condition of the area and would be detrimental to flood control in the immediate area. The floating dock plan will increase noise and traffic in an otherwise quiet downtown residential area. We respectfully ask the Conservation Commission to deny the permission for development and the dredging associated with this project. We respectfully once again ask that the Land Bank be required to produce a more suitable plan that does not duplicate services that are already provided, that is enforceable, and that preserves both open space AND the property values of homeowners in the Petrel Landing neighborhood while providing access to the waterfront to the public.

Thank you for your consideration,

Ruth and Bill Barney

Ruth M. Barney
William H. Barney Jr

Rec. @ 5/4/16 hearing

Nutter

Sarah A. Turano-Flores
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May 4, 2016
0111778-00001

Mr. Ernest Steinauer, Chair
Nantucket Conservation Commission
2 Bathing Beach Road
Nantucket MA 02554

Re: Notice of Intent for Petrel Landing; 17 Commercial Wharf
Map 42.2.4, Parcels 7 & 8

Dear Mr. Stenauer and Commission Members:

This office represents Dr. David Muller, an abutter to the Nantucket Land Bank (the "Land Bank") property located at 17 Commercial Wharf in Nantucket, Massachusetts, commonly referred to as Petrel Landing (the "Landing"). In the above-referenced filing, the Land Bank proposes to redevelop the Landing by installing a new steel sheet bulkhead around the perimeter of an existing rock revetment, back filling the area behind the bulkhead, creating a driveway and parking lot in the newly backfilled area, dredging approximately 39,000 s.f. of sediment from within Nantucket Harbor, and installing a 140' long, floating pier system, supported by driven pilings (the "Project").

Having only received Notice of the public hearing on Friday of last week, our client's experts have not had sufficient time to conduct a full assessment of the potential environmental impacts caused by this Project. Our preliminary review triggers the concerns described below. In light of these significant concerns, we respectfully request that the Commission continue the hearing to allow adequate time for a full environmental review and for the submission of further expert reports on anticipated environmental impacts.

Although the ultimate Project objective is not described within the NOI materials, it is clear that the Project constitutes an extremely intensive use of this already congested, environmentally sensitive area. The NOI materials gamely classify this aspect of the project as a "coastal bank stabilization project," yet it should be classified as what it truly is: the conversion of a currently undeveloped, open space parcel into a commercial wharf area, with vehicular access and parking, and an extensive pier which will be able to accommodate large, motorized vessels (in light of the proposed dredge depth of -5.0'). As explained further below, the Project does not meet the performance standards set forth within the Nantucket Wetlands Protection Bylaw and the state Wetlands Protection Act. In addition, the Project violates the provisions of

Article 97 of the Amendments to the Massachusetts Constitution and the enabling legislation of the Nantucket Land Bank[1].

A. Wetlands Performance Standards

The Land Bank's NOI materials for this Project are devoid of any discussion of performance standards under either the state Wetlands Protection Act or the local Wetlands Protection Regulations. Once these provisions are reviewed, it is plain the Project's many components fail to meet several of the state and local performance standards.

1. Land Under the Ocean. As noted in the Preamble Section of the Wetlands Protection Regulations governing Land Under the Ocean set forth at 310 CMR 10.25(1), and as noted in Nantucket's Wetland Regulations, Section 2.01, Land Under the Ocean serves the important functions of storm damage prevention, flood control and erosion control by buffering impacts caused by high energy during storms and providing a source of sediment for adjacent coastal beaches and banks. Land Under the Ocean also provides feeding areas, spawning, shelter and nursery grounds for many coastal organisms related to marine fisheries and wildlife. Eelgrass beds in particular are vital to the protection of these interests. Pursuant to 310 CMR 10.25(1) and Nantucket Wetlands Protection Regulations 2.01(A)(2), therefore, Land Under the Ocean ***shall*** be presumed significant to storm damage prevention, flood control, erosion control, fisheries, shellfish, wildlife, significant wildlife habitat, recreation and wetland scenic views.

The NOI materials contain no modeling data, no erosion rates, and no other credible evidence to support a finding that the Project will not adversely impact the ability of the Land Under the Ocean to perform its storm damage prevention, flood control and erosion control functions. The Project involves excavation and removal of approximately 3,200 c.y. of sediment from approximately 39,000 s.f. of Land Under the Ocean. This sediment will no longer be available to buffer storm energy and protect the adjacent private residences and other structures which are located barely above sea level elevation along Commercial Wharf. By starving this area of its naturally occurring sediment, the land will not be able to provide its storm damage prevention, flood control and erosion control functions. The Project, therefore, fails to meet the performance standards contained in the Wetlands Protection Regulations at 310 CMR 10.25(3) and (5), and the Nantucket Wetlands Protection Regulations, Section 2.01(B)(2), which require that dredging avoid changes in bottom topography resulting in an increase in height and velocity of waves hitting the shore, localized changes in circulation and changes in sediment transport.

The dredge area is also located within and directly adjacent to areas confirmed to contain eelgrass beds. The Project has been designed to avoid the one area densely populated with eelgrass, but the NOI ignores the fact that the eelgrass grows throughout the proposed dredge

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[1] The Project also requires approval under Section 139-11 of the Nantucket Zoning Bylaw and is, therefore, premature at this time. *See*, G.L. c. 131, §40, requiring applicants to obtain or apply for all local variances or approvals before seeking wetlands approval.

footprint and the maintenance dredging will necessarily prevent its spread to this area that is obviously conducive to its future growth. The NOI further fails to address the shading impacts caused by the 1,260 s.f (140' x 9') floating pier system, and the installation of the pilings intended to support the pier. These project components will adversely impact this important eelgrass habitat. The Project, therefore, fails to meet the performance standards contained in Wetlands Protection Regulations, 310 CMR 10.25(4) and (6), and Nantucket Wetlands Protection Regulations Section 2.02(B)(1) and (4) which require that dredging and pier projects avoid changes in marine productivity caused by changes in or the destruction of habitat or nutrient source areas.

Finally, the Project also includes installation of a new, 6' vertical steel bulkhead behind the existing rock revetment, which currently serves to stabilize this section of shoreline. Storm energy will now reflect against a vertical wall, instead of being absorbed by the reclined, lower rock wall. Under Section 2.01(B)(7) of the Nantucket Wetlands Regulations, ***no new coastal engineering structures*** shall be permitted except "upon a clear showing that no other alternative exists to protect a structure built prior to 9/78, but not substantially improved, from imminent danger." There is no structure on the Land Bank property and, therefore, the bulkhead portion of the Project is outright prohibited by Section (B)(7).

2. Coastal Beaches. Like Land Under the Ocean, coastal beaches and tidal flats are presumed significant to storm damage prevention, erosion control and flood control under 310 CMR 10.27(1) and Nantucket Wetlands Regulations 2.02(A). Tidal flats and Coastal Beaches dissipate storm energy and serve as a sediment source to adjacent resource areas. Tidal flats are also significant to marine fisheries, and both flats and beaches provide significant wildlife habitat value. Thus, Coastal Beaches are presumed significant to these wetland interests under both the state Wetlands Protection Act and the Nantucket Wetlands Protection Bylaw, and projects within 100' of Coastal Beaches are subject to the same performance standards as those applicable to Land Under the Ocean. *See,* Nantucket Wetlands Protection Bylaw, Section 2.02(B)(1).

Accordingly, for the reasons articulated above, this Project also fails to satisfy the performance standards related to Coastal Beaches, including the outright prohibition, contained in Nantucket Wetlands Protection Regulations Section 2.01(B)(7) and reiterated in 2.02(B)(2), against new bulkheads. The Project also fails to satisfy Section 2.02(B)(8), which requires vehicular access to be constructed of unpaved ways. Here, the driveway and parking areas are proposed to be constructed of impervious cobble pavers.

The Project also fails to meet the state performance standards set forth in 310 CMR 10.27(3), which require that projects not have adverse impacts by increasing erosion, decreasing the volume or changing the form of any adjacent or downdrift coastal beach. Here, waves will reflect off the higher vertical wall of the bulkhead, causing scouring of the adjacent beach in front of the Muller property, changing its form and volume. The Project, therefore, does not comport with the provisions in the state regulations governing projects on Coastal Beaches.

3. Coastal Banks. The state and local regulations both recognize that, due to their height and stability, coastal banks serve as buffers to protect upland areas from storm damage, erosion and flooding. Coastal banks also provide important habitat for wildlife. Under the state and local regulations, therefore, Coastal Banks are significant to flood control, erosion control, storm damage prevention, and wildlife habitat. *See,* 310 CMR 10.30(1) and Section 2.05 of the Nantucket Wetlands Protection Bylaw. Section 2.05(A)(1) of the local regulations also identify coastal banks as being significant to wetland scenic views. In particular, the local regulations under Section 2.05(A)(1) provide that coastal banks are critical to wetland scenic views due to their bank form, slope, elevation, proportion and scale in relationship to other landforms.

In light of the significance of Coastal Banks to these important wetland interests, the local regulations provide: "No new bulkheads... or other coastal engineering structures shall be permitted to protect structures constructed or substantially improved after 8/78 except for public infrastructures. Bulkheads and groins may be rebuilt only if the Commission determines there is no environmentally better way to control an erosion problem, or upon a clear showing that it is necessary to protect a building or public infrastructure built prior to 1978 from imminent danger." *See,* Nantucket Wetlands Protection Regulations, Section 2.05(B)(1).

Here, the property is completely undeveloped. There is no pre-1978 structure or public infrastructure on the site. While the NOI materials classify the Project as a "coastal bank stabilization project," the existing coastal bank consists of a stable, non-eroding, rock revetment in no need of any stabilization. The landform is clearly not eroding and there is no pre-1978 building or public infrastructure currently threatened by erosion. Thus, the Project is prohibited by Section 2.05(B)(1).

The Project will also adversely impact the wetland scenic view on site. The existing rock revetment will be obliterated by the 6' high sheet piling and backfill. The open space area will be developed with a cobble paver driveway and parking area. The view from the water will be substantially impacted by these changes. Where once there was a low, reclined rock wall, with open space above; there will now be the vertical face of a steel sheet pile structure, with cars parked above. The Project, therefore, does not comport with the performance standards contained in Section 2.05(B)(3).

4. Land Subject to Coastal Storm Flowage. Pursuant to the Nantucket Wetlands Protection Regulations set forth in Section 2.10, Land Subject to Coastal Storm Flowage serves to protect adjacent upland areas from severe storms. The Project includes backfilling the Property behind the bulkhead in order to raise the lot elevation to meet the new 6' high seawall[2]. The Project, therefore, will adversely impact the ability of the land to absorb and contain flood

[2] The NOI materials do not contain any details or cross-sections related to the steel bulkhead or the backfill portion of the Project and, therefore, it is not possible to ascertain exactly how much fill is being proposed within Land Subject to Coastal Storm Flowage.

waters and to buffer inland areas from flooding and wave damage, in contravention of Nantucket Wetlands Protection Regulation 2.10(B)(1).

B. Land Bank Act

The Land Bank's authorizing legislation, the so-called "Land Bank Act", st. 1983, c. 669 (the "Act"), provides in Section 5 that land acquired under the Act shall be situated in Nantucket and be comprised of the following types of land: "(-a-) ocean, harbor and pond frontage in the form of beaches, dunes and adjoining backlands; (-b-) barrier beaches; (-c-) fresh and salt water marshes, estuaries and adjoining uplands; (-d-) heathland and moors; (-e-) land providing access to ocean, harbor and pond frontage and land for bicycle paths; (-f-) land for future public recreational facilities and use; (-g-) recreation land to protect existing and future wellfields and aquifer recharge areas; and (-h-) land used or to be used for agricultural purposes."

In Section 6, the Act further provides that the Land Bank Commission "***shall*** retain any real property" acquired under the Act "predominantly ***in its natural, scenic or open condition***," except where approved by the Secretary of the Executive Office of Energy and Environmental Affairs (EEOA) and, where appropriate, the general laws, special laws and constitution of Massachusetts. *Id.* (Emphasis supplied). Specifically, Section 6 states that the Land Bank shall not undertake the following activities without approval by the Secretary:

> (-a-) construction or placing of ... roads...or other structures... on or above the surface, (-b-) dumping or placing of soil... (-d-) excavation, dredging, or removal ...in such manner as to affect the surface, (-e-) surface use except for purposes permitting the land or water area to remain predominantly in its natural condition, (-f-) activities detrimental to drainage, flood control, water conservation, erosion control, or soil conservation, or (-g-) other acts or uses detrimental to such retention of land or water areas.

The Project triggers virtually all of these requirements for approval. Consequently, the Land Bank cannot move forward with the Project until such time as this required review is completed.

C. Article 97 of the Amendments to the Massachusetts Constitution

As noted above, the Land Bank Act authorizes the Land Bank Commission to acquire real property interests in coastal and inland water bodies and land adjoining them, land for future public recreational facilities and use, land to protect existing and future watersheds, and land for agricultural purposes. Land acquired for these purposes is protected to Article 97 to the Massachusetts Constitution.

Specifically, Amendment Article 97 amended Article 49, and was added to the state Constitution in 1972. It provides:

> "The people shall have the right to clean air and water, freedom from excessive and unnecessary noise, and the natural scenic, historic, and esthetic qualities of their environment; and the protection of the people in their right to the conservation, development and utilization of the agricultural, mineral, forest, water, air, and other natural resources is hereby declared to be a public purpose.
> ...
> **Lands ...acquired for such purposes shall not be used for other purposes or otherwise disposed of except by laws enacted by a two thirds vote, taken by yeas and nays, of each branch of the general court.**" (Emphasis supplied.)

The term "used for other purposes" has been defined to include a "change of use" and such a change will trigger the requirements of Article 97. *45 Op. Atty. Gen. 142* (1973). *Id.* The doctrine of "prior public use" is applied to determine whether a "change of use" has occurred in connection with a change in use of public lands. The doctrine of holds that: "public lands devoted to one public use cannot be devoted to another inconsistent public use without plain and explicit legislation authorizing the diversion." *Robbins v. Department of Public Works*, 355 Mass. 328, 330.

To ascertain if a the project will trigger a "change of use" under Article 97, the Secretary of the EEOA has developed the Article 97 Land Disposition Policy which is intended to "ensure no net loss of Article 97 lands under the ownership and control of the Commonwealth and its political subdivisions." Under the Land Disposition Policy, the EOEA and its agencies will not support an Article 97 land diversion unless several conditions are met, including an examination as to whether any feasible and substantial equivalent options exist; whether the change will destroy or threaten a unique or significant resource; whether the change involves the minimum acreage necessary for the proposed use; and whether the land's resources continue to be protected.

As a creature of special legislation, the Nantucket Land Bank is a political subdivision of the Commonwealth, subject to Article 97 requirements. Its Project here will trigger the change of use provisions of Article 97 inasmuch as land located in an environmentally sensitive area, currently consisting of undeveloped, open space will be converted to into a commercial wharf area, with vehicular access and parking, and an extensive commercial sized pier, able to accommodate large, motorized vessels. A change of use of this magnitude will trigger Article 97 requirements which include a two-thirds vote of both houses of the Massachusetts state legislature. Consequently, the project should not proceed until this approval is obtained – if it can be obtained.

D. Additional Considerations

While not strictly within its jurisdiction, the Commission should be aware that the Project will require a Chapter 91 Waterways License and a Section 404 Army Corps of Engineering Individual Permit. The copy of the existing 404 Permit included with the NOI materials reflects

that it is clearly limited to a smaller, less intensive project. The Chapter 91 approval process will be needed for both construction of the pier, as well as, the dredging portion of the project. In addition, a 401 Water Quality Certification and a consistency review by the MA Office of Coastal Zone Management will also have to be completed before the project can proceed. Until the information needed to conduct those reviews is compiled and analyzed, review under the Wetlands Protection Act and local Wetlands Bylaw is premature.

Finally, it should be noted that the Assessor's Certificate for this NOI filing is almost 6 months old, having issued in November of 2015. Consequently, it is possible that current abutters were not notified of this public hearing.

E. Conclusion

The Project's adverse impacts on the wetland resource areas contained within the locus property as well as on neighboring properties cannot be understated. The higher, vertical bulkhead structure will reflect storm waves onto the adjacent beaches located immediately to the East. Storm energy will be intensified due to the increased depths within this velocity zone caused by the dredging project. Waves will now be reflected by the vertical face of the bulkhead, causing potential for increased scour to adjacent beaches, and lowering the beach elevation of those beaches. The Project will exacerbate erosion on those beaches and will adversely impact the ability of adjacent resource areas to perform storm damage prevention, flood control and erosion control functions. The dredging and pier portions of the Project will adversely impact areas of Land Under the Ocean which provide feeding, spawning and nursery grounds for many coastal organisms related to marine fisheries and wildlife, including the eelgrass which grows in this area. The Project cannot be conditioned to satisfy the performance standards under either the state or local wetlands regulations and, therefore, must be denied.

As noted previously, our experts have not had sufficient time to conduct a full assessment of the potential environmental impacts caused by this Project. We are hopeful, therefore, that at the very least the Commission will vote to continue the hearing to allow adequate time for a full environmental review. In the meantime, thank you for your time and considered review of these important concerns.

Very truly yours,

Sarah A. Turano-Flores

Sarah A. Turano-Flores

cc: Arthur Gasbarro, Nantucket Engineering & Survey, Inc.

NEW INFORMATION FOR CURRENT HEARING

PIERCE ATWOOD LLP

May 27, 2016

By Electronic Mail

Dr. Ernie Steinauer, Chairman
Nantucket Conservation Commission
2 Bathing Beach Road
Nantucket, MA 02554

Re: Petrel Landing NOI
17 Commercial Wharf
DEP # 48-2885

Dear Chairman Steinauer:

This firm represents Richard Corey, Trustee of the 21 Commercial Wharf Realty Trust ("Corey"). Mr. Corey owns a cottage at 21 Commercial Wharf, directly abutting the proposed Petrel Landing development ("Project"). I am writing to express Mr. Corey's vehement opposition to this Project, which will have a significant negative impact on the use and enjoyment of his property.

A. The Project Does Not Include the Minimum Amount of Information Necessary for the Commission to Issue an Order of Conditions

I am surprised that the Commission is even considering this Notice of Intent ("NOI"). The supporting materials in the NOI are remarkably thin:

- No wetland resource areas or buffer zones are delineated;
- Some wetland resources areas (coastal beach, tidal flat) are not mentioned at all, even though a large steel bulkhead is going to be placed on these areas;
- The amount of beach and tidal flat to be affected is not stated, as required by the NOI form;
- There is no description of how the proposed work will satisfy the performance standards of the State Wetlands Protection Act ("State Act") and the Nantucket Wetlands Bylaw ("Nantucket Bylaw") and Regulations ("Nantucket Regulations"); and
- There is no description of how the work will be done – this is a major construction project IN Nantucket Harbor, in close proximity to eelgrass beds.

This Commission routinely requires careful delineations, detailed work plans, engineering analyses, drawings and construction management plans for projects of this magnitude. None of this information is provided.

B. The Project Does Not and Can Not Meet the Commission's Performance Standards

The Project plainly does not comply with certain performance standards in the Nantucket Regulations. Sections 2.01B.7 and 2.02.B.2 of the Nantucket Regulations apply to work proposed on land under the ocean, coastal beaches and tidal flats, and states:

> No new bulkhead or coastal engineering structures shall be permitted to protect structures constructed, or substantially improved, after 8/78. Bulkheads may be rebuilt only if the Commission determines there is no environmentally better way to control an erosion problem, including in appropriate cases the moving of the threatened building. Other coastal engineering structures may be permitted only upon a clear showing that no other alternative exists to protect a structure built prior to 8/78, but not substantially improved, from imminent danger.

This performance standard has traditionally been applied to protect buildings constructed prior to 1978. Here, there is no building on the site, so no new bulkhead is permitted. The existing rip rap wall could be reconstructed, but the Commission would have to find that there is no better way to control erosion.

The analysis does not change if the existing degraded solid fill wharf is considered a "structure."[1] The Commission would have to find that the new bulkhead is not being constructed to protect a structure that has been substantially improved after 1978. The Project includes an entirely new steel bulkhead, which is being constructed <u>to support and make possible</u> substantial improvements to the wharf, including a driveway and parking areas. The NOI states:

> A new steel sheet bulkhead will be installed around the perimeter of the exiting rip rap revetment. The pier will be level filled, landscaped with a driveway, perimeter boardwalk, benches and plantings.

Clearly the Project involves the substantial improvement of the existing solid fill pier structure. As such it does not meet the performance standard at 2.02.B.2. and cannot be approved by the Commission.

The Project also fails to meet performance standards applicable to land under the ocean. The NOI does not include any information – no modeling data, no wave study, no erosion rate study – to explain why 3,200 cubic yards of dredging of land under the ocean will not have an adverse effect on surrounding properties. In fact, it seems obvious that dredging will cause an adverse effect on properties that are already very susceptible to any change in flooding or wave action. Nantucket Regulation 2.01.B.2 provides:

> All dredging shall use best available measures to minimize adverse effects caused by changes in bottom topography, resulting in an increase in height and velocity of waves hitting the shore,

---

[1] If the wharf is considered a structure, then of course all wharfs on the island are structures and any wharf constructed prior to 1978 can be rebuilt, whether it is protecting a building or not. The Commission should consider whether it wants to establish this precedent.

localized changes in circulation patterns or in changes in sediment transport which affect natural replenishment of beaches or maintenance of channels.

The NOI does not include any information regarding the effect of dredging, and thus the Applicant has not made the necessary showing that the Project will use best available measures to minimize the adverse effect of dredging.

C. **The NOI Provides no Engineering Details**

As noted above, the NOI is painfully thin on details of the proposed work. It simply states that a new steel sheet bulkhead will be installed around the perimeter of the exiting rip rap revetment, and that the pier will then be level filled and landscaped.

Construction of a steel bulkhead is a major task and needs to be carefully regulated to assure that there are no adverse impacts to wetlands resources. The steel sheet piles are driven into the ground in front of the existing rip rap. This requires large machinery that typically works in the water. The sheet piling may then require tie backs to assure structural integrity. The NOI does not say where the sheet piles will be located relative to the existing rip rap. Are the sheet piles going to be driven immediately in front of the rip rap? Several feet out from the rip rap? Behind the rip rap?

When First Winthrop reconstructed the bulkheads in the Boat Basin in the late 1990s/early 2000s it conducted a very detailed and extensive engineering study to assure that the new steel bulkheads would be structurally sound. I did that permitting for First Winthrop, which owned the Boat Basin at the time, and our NOI applications included substantial engineering detail, including boring information, depth of steel piling, tie back information, and other details. In order to assure that the proposed work, which again is IN a wetland resource area, does not adversely affect wetlands resources, the Commission should insist that that steel bulkhead meet some level of design and engineering prior to issuance of any Order of Condition.

Sincerely yours,

Dan Bailey

Daniel J. Bailey III

Cc: Richard Corey
Arthur Reade, Esq.
George Pucci, Esq.

Nutter

Sarah A. Turano-Flores
Direct Line: (508) 790-5477
Fax: (508) 771-8079
E-mail: sturano-flores@nutter.com

May 27, 2016
0111778-00001

Mr. Ernest Steinauer, Chair
Nantucket Conservation Commission
2 Bathing Beach Road
Nantucket MA 02554

Re: Notice of Intent for Petrel Landing; 17 Commercial Wharf
Map 42.2.4, Parcels 7 & 8

Dear Mr. Steinauer and Commission Members:

As you might recall, this office represents Dr. David Muller, an abutter to the Nantucket Land Bank (the "Land Bank") property located at 17 Commercial Wharf in Nantucket, Massachusetts, commonly referred to as Petrel Landing. At the last hearing, I submitted a letter outlining Dr. Muller's concerns regarding the above-referenced NOI application. In response, I understood the Applicant's representative to say that the Applicant would reach out to abutters and provide additional details in response to the concerns identified in my letter. As of today, neither my client nor I have heard from the Applicant or his representatives. Nor have we received any communication addressing the concerns we've raised regarding the proposed project described in the NOI application ("the Project").

In light of the lack of this important data needed to properly analyze the Project, our experts have been unable to fully assess the potential environmental impacts it might cause. Nonetheless, we did ask the Woods Hole Group to conduct an initial review and, enclosed herewith is a copy of a letter prepared by Coastal Geologist Leslie Fields containing some preliminary comments regarding the Project. Unless and until the Project proponent submits the modeling and analysis described by Ms. Fields and needed to ascertain the full scope and extent of this Project, the Nantucket Conservation Commission cannot meaningfully deliberate on the application.

Most importantly, however, unless amended to eliminate the proposed bulkhead, the Project ***cannot*** be conditioned to satisfy the performance standards under the wetlands regulations and, therefore, must be denied. In particular, Sections 2.01(B)(7), 2.02(B)(2), and 2.05(B)(1) of the Nantucket Wetland Regulations all contain an outright prohibition against new coastal engineering structures, unless necessary to protect a pre-1978 structure. As Petrel Landing is undeveloped open space maintained by the Nantucket Land Bank, and contains no pre-1978 structure, the Project cannot be lawfully approved.

Thank you for your continued time and thoughtful consideration of these important concerns.

Very truly yours,

Sarah A. Turano-Flores

Sarah A. Turano-Flores

cc: Arthur Gasbarro, Nantucket Engineering & Survey, Inc.

Woods Hole Group 81 Technology Park Drive E. Falmouth, MA 02536 USA | Telephone: 508.540.8080 | Fax: 508.540.1001 | www.woodsholegroup.com

May 26, 2016

Sarah Turano-Flores
Nutter McClennen & Fish LLP
1471 Iyannough Road
P.O. Box 1630
Hyannis, MA 02601

Sent Via Email: STurano-Flores@nutter.com

RE: Review of Notice of Intent for Petrel Landing, Nantucket, MA

Dear Sarah,

Woods Hole Group, Inc. has completed its preliminary evaluation of the Petrel Landing project that is currently before the Nantucket Conservation Commission. The evaluation included review of the following information:

- Notice of Intent (NOI) application package prepared by Nantucket Engineering & Survey, PC dated April 2016
- Town of Nantucket Wetland Regulations, Section 2.0
- Massachusetts Wetlands Protection Regulations, 310 CMR 10.00
- Google Earth aerial imagery

As described, the project proposes to redevelop Petrel Landing by installation of a new steel sheet bulkhead around the perimeter of the existing stone revetment, backfilling the landing area behind the bulkhead, constructing a driveway and parking lot on the landing, installing a 140 ft long floating pier system held in place by driven pilings, and dredging 3,200 cubic yards of material to allow navigation to the new facility.

Based on review of the above referenced information, Woods Hole Group has the following comments.

1. The NOI package is lacking important information needed to evaluate the project, assess the environmental impacts, and determine compliance with the local and state regulations. The Site Plan does not identify locations of the wetland resources and the application package does not address how the project meets the performance standards for the affected resource areas. The dredging portion of the project is purported to improve tidal flow and water circulation; however there is no analysis of tidal or water circulation data, or modeling to support this claim.

Similarly, claims that the project will not result in adverse impacts to flood control, erosion control, storm damage prevention, prevention of pollution, wildlife and scenic views are unsupported by any data or analyses. It is not possible for the Commission to review potential impacts without this important information.

2. A sampling and analysis program to evaluate characteristics of the material proposed for dredging is missing from the NOI application package. This information is critical to determining the physical and chemical characteristics of the dredge material, for evaluating whether it is suitable for removal in the first instance, and also for evaluating the suitability of the landing as the proposed placement site.

3. The Stantec eelgrass and shellfish habitat assessment report mentions post construction monitoring to assess impacts of the project on eelgrass resources; however, a monitoring plan is not included in the NOI materials. The Stantec report also suggests that mitigation for impacts to resources could be provided in the form of in lieu fees or shellfish reseeding; however, specifics are not provided on how the monitoring data would be used to assess impacts, when mitigation would be triggered, and what level of mitigation is proposed. A more detailed presentation of this information is needed to ensure protection of the resources.

4. Finally, the project as proposed does not comply with the following sections of the Nantucket Wetland Regulations:

    a. 2.01(B)(7) – This section states that no new coastal engineering structures shall be permitted in Land Under the Ocean except upon a clear showing that no other alternative exists to protect a structure built prior to 8/78, but not substantially improved, from imminent danger. The subject parcel does not contain a structure.
    b. 2.02(B)(2) – This section states that no new bulkheads or coastal engineering structures shall be permitted on Coastal Beaches except upon a clear showing that no other alternative exists to protect a structure built prior to 8/78, but not substantially improved, from imminent danger. The subject parcel does not contain a structure.
    c. 2.05(B)(1) and – This section states that no new bulkheads, coastal revetments, groins, or other coastal engineering structures shall be permitted to protect structures constructed, or substantially improved, after 8/78 except for public infrastructures. Bulkheads and groins may be rebuilt only if it is determined there is no environmentally better way to control erosion, or upon a clear showing that the work is necessary to protect a building or public infrastructure built prior to 1978 from imminent danger. The applicants have not demonstrated a problem of erosion and the site does not contain a building or public infrastructure.

For the reasons given above, we feel the NOI application does not provide enough information to adequately describe the site conditions, assess the environmental impacts, or demonstrate compliance with the local and state regulations. Additionally, as proposed, the project does not comply with Nantucket Wetland Regulations sections 2.01(B)(7), 2.02(B)(2), and 2.05(B)(1).

Woods Hole Group 81 Technology Park Drive E. Falmouth, MA 02536 USA | TELEPHONE 508.540.8080 | FAX 508.540.1001 | www.woodsholegroup.com

Feel free to contact me directly at (508) 495-6225 with any questions.

Sincerely,

Leslie Fields

Leslie Fields
Coastal Geologist

Woods Hole Group 81 Technology Park Drive E. Falmouth, MA 02536 USA TELEPHONE: 508.540.8080 FAX: 508.540.1001 www.woodsholegroup.com

Lindsay

15 Pippins Way

(43-94.3)

SE48-2888

NOTICE OF INTENT APPLICATION

For

The construction of a main house, cottage and garage.

At

15 Pippen's Way

Nantucket, MA

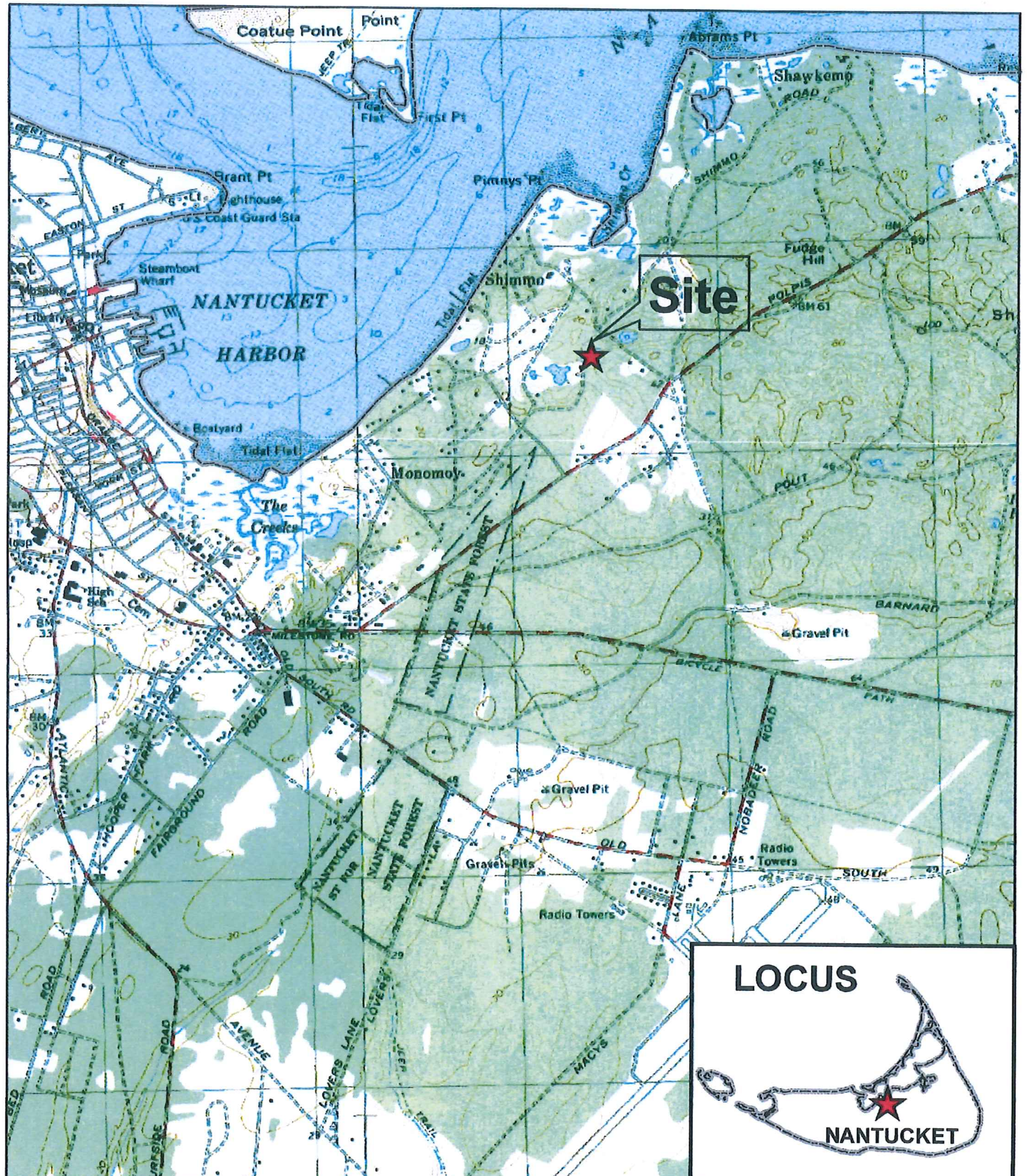
April 2015

Prepared For

Ronald M. & Nancy S. Lindsay

By

BLACKWELL & ASSOCIATES, Inc.
Professional Civil Engineers & Land Surveyors
20 Teasdale Circle
Nantucket, MA 02554
508-228-9026


Site
Coatue Point
Abrams Pt
Shawkemo
First Pt
Brant Pt
Lighthouse
US Coast Guard Sta
Pimneys Pt
Shimmo
Fudge Hill
Steamboat Wharf
NANTUCKET
HARBOR
Boatyard
Tidal Flat
Monomoy
The Creeks
Gravel Pit
BARNARD
BICYCLE PATH
NANTUCKET STATE FOREST
Radio Towers
Gravel Pits
SOUTH
OLD
FAIRGROUND
LOVERS LANE
MACYS
LOCUS
NANTUCKET

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WPA Form 3 – Notice of Intent

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40
And the Town of Nantucket Wetlands Bylaw Chapter 136

Provided by MassDEP:

MassDEP File Number

Document Transaction Number

NANTUCKET
City/Town

A. General Information

1. Project Location (**Note:** electronic filers will click on button to locate project site):

15 Pippin's Way	Nantucket	02554
a. Street Address	b. City/Town	c. Zip Code
Latitude and Longitude:	41d 16' 54.44"	70d 04' 12.81"
	d. Latitude	e. Longitude
43	94.3	
f. Assessors Map/Plat Number	g. Parcel /Lot Number	

2. Applicant:

Ronald M. and Nancy S.	Lindsay	
a. First Name	b. Last Name	
c. Organization		
d. Street Address		
1041 Old Marlboro Rd. Concord	MA	01742
e. City/Town	f. State	g. Zip Code
508-246-2836		nanslin@comcast.net
h. Phone Number	i. Fax Number	j. Email Address

3. Property owner (required if different from applicant): ☐ Check if more than one owner

a. First Name	b. Last Name	
c. Organization		
d. Street Address		
e. City/Town	f. State	g. Zip Code
h. Phone Number	i. Fax Number	j. Email address

4. Representative (if any):

Jeffrey L.	Blackwell, PLS	
a. First Name	b. Last Name	
Blackwell & Associates, Inc.		
c. Company		
20 Teasdale Circle		
d. Street Address		
Nantucket	MA	02554
e. City/Town	f. State	g. Zip Code
508-228-9026 x13	508-228-5292	jeff@blackwellsurvey.com
h. Phone Number	i. Fax Number	j. Email address

5. Total WPA Fee Paid (from NOI Wetland Fee Transmittal Form):

$1,110 + $25 + $200	$537.50	$787.50
a. Total Fee Paid	b. State Fee Paid	c. City/Town Fee Paid

A. General Information (continued)

6. General Project Description: Construction of a single family dwelling, cottage and garage.
The Applicant proposes to build the structures referenced above and to install landscaping.

Please refer to the attached Project Narrative and Site Plan for additional information.

7a. Project Type Checklist:

1. ☒ Single Family Home
2. ☐ Residential Subdivision
3. ☐ Limited Project Driveway Crossing
4. ☐ Commercial/Industrial
5. ☐ Dock/Pier
6. ☐ Utilities
7. ☐ Coastal Engineering Structure
8. ☐ Agriculture (e.g., cranberries, forestry)
9. ☐ Transportation
10. ☐ Other

7b. Is any portion of the proposed activity eligible to be treated as a limited project subject to 310 CMR 10.24 (coastal) or 310 CMR 10.53 (inland)?

1. ☐ Yes ☒ No If yes, describe which limited project applies to this project:

2. Limited Project

8. Property recorded at the Registry of Deeds for:

NANTUCKET	25496
a. County	b. Certificate # (if registered land)
c. Book	d. Page Number

B. Buffer Zone & Resource Area Impacts (temporary & permanent)

1. ☒ Buffer Zone Only – Check if the project is located only in the Buffer Zone of a Bordering Vegetated Wetland, Inland Bank, or Coastal Resource Area.
2. ☐ Inland Resource Areas (see 310 CMR 10.54-10.58; if not applicable, go to Section B.3, Coastal Resource Areas).

Check all that apply below. Attach narrative and any supporting documentation describing how the project will meet all performance standards for each of the resource areas altered, including standards requiring consideration of alternative project design or location.

For all projects affecting other Resource Areas, please attach a narrative explaining how the resource area was delineated.

Resource Area	Size of Proposed Alteration	Proposed Replacement (if any)
a. ☐ Bank	1. linear feet	2. linear feet
b. ☐ Bordering Vegetated Wetland	1. square feet	2. square feet
c. ☐ Land Under Waterbodies and Waterways	1. square feet 3. cubic yards dredged	2. square feet

Provided by MassDEP:
MassDEP File Number
Document Transaction Number
NANTUCKET
City/Town

B. Buffer Zone & Resource Area Impacts (temporary & permanent) (cont'd)

Resource Area	Size of Proposed Alteration	Proposed Replacement (if any)
d. ☐ Bordering Land Subject to Flooding	1. square feet	2. square feet
	3. cubic feet of flood storage lost	4. cubic feet replaced
e. ☐ Isolated Land Subject to Flooding	1. square feet	
	2. cubic feet of flood storage lost	3. cubic feet replaced
f. ☐ Riverfront Area	1. Name of Waterway (if available)	

2. Width of Riverfront Area (check one):

☐ 25 ft. - Designated Densely Developed Areas only

☐ 100 ft. - New agricultural projects only

☐ 200 ft. - All other projects

3. Total area of Riverfront Area on the site of the proposed project: _____ square feet

4. Proposed alteration of the Riverfront Area:

a. total square feet _____ b. square feet within 100 ft. _____ c. square feet between 100 ft. and 200 ft. _____

5. Has an alternatives analysis been done and is it attached to this NOI? ☐ Yes ☐ No

6. Was the lot where the activity is proposed created prior to August 1, 1996? ☐ Yes ☐ No

3. ☐ Coastal Resource Areas: (See 310 CMR 10.25-10.35)

Check all that apply below. Attach narrative and supporting documentation describing how the project will meet all performance standards for each of the resource areas altered, including standards requiring consideration of alternative project design or location.

Online Users: Include your document transaction number (provided on your receipt page) with all supplementary information you submit to the Department.

Resource Area	Size of Proposed Alteration	Proposed Replacement (if any)
a. ☐ Designated Port Areas	Indicate size under Land Under the Ocean, below	
b. ☐ Land Under the Ocean	1. square feet	
	2. cubic yards dredged	
c. ☐ Barrier Beach	Indicate size under Coastal Beaches and/or Coastal Dunes below	
d. ☐ Coastal Beaches	1. square feet	2. cubic yards beach nourishment
e. ☐ Coastal Dunes	1. square feet	2. cubic yards dune nourishment

B. Buffer Zone & Resource Area Impacts (temporary & permanent) (cont'd)

	Size of Proposed Alteration	Proposed Replacement (if any)
f. ☐ Coastal Banks	1. linear feet	
g. ☐ Rocky Intertidal Shores	1. square feet	
h. ☐ Salt Marshes	1. square feet	2. sq ft restoration, rehab., creation
i. ☐ Land Under Salt Ponds	1. square feet 2. cubic yards dredged	
j. ☐ Land Containing Shellfish	1. square feet	
k. ☐ Fish Runs	Indicate size under Coastal Banks, inland Bank, Land Under the Ocean, and/or inland Land Under Waterbodies and Waterways, above 1. cubic yards dredged	
l. ☐ Land Subject to Coastal Storm Flowage	1. square feet	

4. ☐ Restoration/Enhancement
If the project is for the purpose of restoring or enhancing a wetland resource area in addition to the square footage that has been entered in Section B.2.b or B.3.h above, please enter the additional amount here.

a. square feet of BVW _____ b. square feet of Salt Marsh _____

5. ☐ Project Involves Stream Crossings

a. number of new stream crossings _____ b. number of replacement stream crossings _____

C. Other Applicable Standards and Requirements

Streamlined Massachusetts Endangered Species Act/Wetlands Protection Act Review

1. Is any portion of the proposed project located in **Estimated Habitat of Rare Wildlife** as indicated on the most recent Estimated Habitat Map of State-Listed Rare Wetland Wildlife published by the Natural Heritage and Endangered Species Program (NHESP)? To view habitat maps, see the *Massachusetts Natural Heritage Atlas* or go to http://www.mass.gov/dfwele/dfw/nhesp/regulatory_review/priority_habitat/online_viewer.htm.

a. ☒ Yes ☐ No **If yes, include proof of mailing or hand delivery of NOI to:**

Natural Heritage and Endangered Species Program
Division of Fisheries and Wildlife
Route 135, North Drive
Westborough, MA 01581

2008
b. Date of map

C. Other Applicable Standards and Requirements (cont'd)

If *yes*, the project is also subject to Massachusetts Endangered Species Act (MESA) review (321 CMR 10.18). To qualify for a streamlined, 30-day, MESA/Wetlands Protection Act review, please complete Section C.1.C, and include requested materials with this Notice of Intent (NOI); *OR* complete Section C.1.d, if applicable. *If MESA supplemental information is not included with the NOI, by completing Section 1 of this form, the NHESP will require a separate MESA filing which may take up to 90 days to review (unless noted exceptions in Section 2 apply, see below).*

1. c. Submit Supplemental Information for Endangered Species Review*

   1. ☐ Percentage/acreage of property to be altered:

      (a) within wetland Resource Area _____ percentage/acreage

      (b) outside Resource Area _____ percentage/acreage

   2. ☐ Assessor's Map or right-of-way plan of site

   3. ☐ Project plans for entire project site, including wetland resource areas and areas outside of wetlands jurisdiction, showing existing and proposed conditions, existing and proposed tree/vegetation clearing line, and clearly demarcated limits of work ****

      (a) ☐ Project description (including description of impacts outside of wetland resource area & buffer zone)

      (b) ☐ Photographs representative of the site

      (c) ☐ MESA filing fee (fee information available at: http://www.mass.gov/dfwele/dfw/nhesp/regulatory_review/mesa/mesa_fee_schedule.htm). Make check payable to "Commonwealth of Massachusetts - NHESP" and ***mail to NHESP*** at above address

      *Projects altering **10 or more acres** of land, also submit:*

      (d) ☐ Vegetation cover type map of site

      (e) ☐ Project plans showing Priority & Estimated Habitat boundaries

d. OR Check One of the Following

   1. ☐ Project is exempt from MESA review.
      Attach applicant letter indicating which MESA exemption applies. (See 321 CMR 10.14, http://www.mass.gov/dfwele/dfw/nhesp/regulatory_review/mesa/mesa_exemptions.htm; the NOI must still be sent to NHESP if the project is within estimated habitat pursuant to 310 CMR 10.37 and 10.59.)

   2. ☐ Separate MESA review ongoing. _____ a. NHESP Tracking # _____ b. Date submitted to NHESP

---

* Some projects **not** in Estimated Habitat may be located in Priority Habitat, and require NHESP review (see http://www.mass.gov/dfwele/dfw/nhesp/nhesp.htm, regulatory review tab). Priority Habitat includes habitat for state-listed plants and strictly upland species not protected by the Wetlands Protection Act.

** MESA projects may not be segmented (321 CMR 10.16). The applicant must disclose full development plans even if such plans are not required as part of the Notice of Intent process.

C. Other Applicable Standards and Requirements (cont'd)

3. ☒ Separate MESA review completed.
Include copy of NHESP "no Take" determination or valid Conservation & Management Permit with approved plan.

2. For coastal projects only, is any portion of the proposed project located below the mean high water line or in a fish run?

a. ☐ Not applicable – project is in inland resource area only

b. ☐ Yes ☐ No If yes, include proof of mailing or hand delivery of NOI to either:

South Shore - Cohasset to Rhode Island, and the Cape & Islands:

Division of Marine Fisheries -
Southeast Marine Fisheries Station
Attn: Environmental Reviewer
1213 Purchase Street – 3rd Floor
New Bedford, MA 02740-6694

North Shore - Hull to New Hampshire:

Division of Marine Fisheries -
North Shore Office
Attn: Environmental Reviewer
30 Emerson Avenue
Gloucester, MA 01930

Also if yes, the project may require a Chapter 91 license. For coastal towns in the Northeast Region, please contact MassDEP's Boston Office. For coastal towns in the Southeast Region, please contact MassDEP's Southeast Regional Office.

3. Is any portion of the proposed project within an Area of Critical Environmental Concern (ACEC)?

a. ☐ Yes ☒ No If yes, provide name of ACEC (see instructions to WPA Form 3 or MassDEP Website for ACEC locations). **Note:** electronic filers click on Website.

b. ACEC

Online Users: Include your document transaction number (provided on your receipt page) with all supplementary information you submit to the Department.

4. Is any portion of the proposed project within an area designated as an Outstanding Resource Water (ORW) as designated in the Massachusetts Surface Water Quality Standards, 314 CMR 4.00?

a. ☐ Yes ☒ No

5. Is any portion of the site subject to a Wetlands Restriction Order under the Inland Wetlands Restriction Act (M.G.L. c. 131, § 40A) or the Coastal Wetlands Restriction Act (M.G.L. c. 130, § 105)?

a. ☐ Yes ☒ No

6. Is this project subject to provisions of the MassDEP Stormwater Management Standards?

a. ☐ Yes. Attach a copy of the Stormwater Report as required by the Stormwater Management Standards per 310 CMR 10.05(6)(k)-(q) and check if:

1. ☐ Applying for Low Impact Development (LID) site design credits (as described in Stormwater Management Handbook Vol. 2, Chapter 3)

2. ☐ A portion of the site constitutes redevelopment

3. ☐ Proprietary BMPs are included in the Stormwater Management System.

b. ☒ No. Check why the project is exempt:

1. ☒ Single-family house

C. Other Applicable Standards and Requirements (cont'd)

2. ☐ Emergency road repair

3. ☐ Small Residential Subdivision (less than or equal to 4 single-family houses or less than or equal to 4 units in multi-family housing project) with no discharge to Critical Areas.

D. Additional Information

Applicants must include the following with this Notice of Intent (NOI). See instructions for details.

Online Users: Attach the document transaction number (provided on your receipt page) for any of the following information you submit to the Department.

1. ☒ USGS or other map of the area (along with a narrative description, if necessary) containing sufficient information for the Conservation Commission and the Department to locate the site. (Electronic filers may omit this item.)

2. ☒ Plans identifying the location of proposed activities (including activities proposed to serve as a Bordering Vegetated Wetland [BVW] replication area or other mitigating measure) relative to the boundaries of each affected resource area.

3. ☒ Identify the method for BVW and other resource area boundary delineations (MassDEP BVW Field Data Form(s), Determination of Applicability, Order of Resource Area Delineation, etc.), and attach documentation of the methodology.

4. ☒ List the titles and dates for all plans and other materials submitted with this NOI.

Site Plan To Accompany A Notice of Intent
a. Plan Title

Blackwell & Associates, Inc.
b. Prepared By

Jeffrey L. Blackwell
c. Signed and Stamped by

4/15/2016
d. Final Revision Date

1'=20"
e. Scale

Lindsay Residence Landscape Plan by Edgewater Landscape Design
f. Additional Plan or Document Title

4/13/2016
g. Date

5. ☐ If there is more than one property owner, please attach a list of these property owners not listed on this form.

6. ☐ Attach proof of mailing for Natural Heritage and Endangered Species Program, if needed.

7. ☐ Attach proof of mailing for Massachusetts Division of Marine Fisheries, if needed.

8. ☒ Attach NOI Wetland Fee Transmittal Form

9. ☐ Attach Stormwater Report, if needed.

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WPA Form 3 – Notice of Intent

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40
And the Town of Nantucket Wetlands Bylaw Chapter 136

Provided by MassDEP:

MassDEP File Number

Document Transaction Number

NANTUCKET
City/Town

E. Fees

1. ☐ Fee Exempt: No filing fee shall be assessed for projects of any city, town, county, or district of the Commonwealth, federally recognized Indian tribe housing authority, municipal housing authority, or the Massachusetts Bay Transportation Authority.

Applicants must submit the following information (in addition to pages 1 and 2 of the NOI Wetland Fee Transmittal Form) to confirm fee payment:

22379	4/27/2016
2. Municipal Check Number	3. Check date
22378	4/27/2016
4. State Check Number	5. Check date
Blackwell & Assoc.,Inc.	
6. Payor name on check: First Name	7. Payor name on check: Last Name

F. Signatures and Submittal Requirements

I hereby certify under the penalties of perjury that the foregoing Notice of Intent and accompanying plans, documents, and supporting data are true and complete to the best of my knowledge. I understand that the Conservation Commission will place notification of this Notice in a local newspaper at the expense of the applicant in accordance with the wetlands regulations, 310 CMR 10.05(5)(a).

I further certify under penalties of perjury that all abutters were notified of this application, pursuant to the requirements of M.G.L. c. 131, § 40. Notice must be made by Certificate of Mailing or in writing by hand delivery or certified mail (return receipt requested) to all abutters within 100 feet of the property line of the project location.

Agent	4/15/2016
1. Signature of Applicant	2. Date
3. Signature of Property Owner (if different)	4. Date
	4/15/2016
5. Signature of Representative (if any)	6. Date

For Conservation Commission:
Two copies of the completed Notice of Intent (Form 3), including supporting plans and documents, two copies of the NOI Wetland Fee Transmittal Form, and the city/town fee payment, to the Conservation Commission by certified mail or hand delivery.

For MassDEP:
One copy of the completed Notice of Intent (Form 3), including supporting plans and documents, one copy of the NOI Wetland Fee Transmittal Form, and a **copy** of the state fee payment to the MassDEP Regional Office (see Instructions) by certified mail or hand delivery.

Other:
If the applicant has checked the "yes" box in any part of Section C, Item 3, above, refer to that section and the Instructions for additional submittal requirements.

The original and copies must be sent simultaneously. Failure by the applicant to send copies in a timely manner may result in dismissal of the Notice of Intent.

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

NOI Wetland Fee Transmittal Form

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Important: When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.

A. Applicant Information

1. Applicant:

Ronald M. and Nancy S.	Lindsay
a. First Name	b. Last Name

c. Organization

1041 Old Marlboro Rd
d. Mailing Address

Concord	MA	01742
e. City/Town	f. State	g. Zip Code

508-246-2836		nanslin@comcast.net
h. Phone Number	i. Fax Number	j. Email Address

2. Property Owner (if different):

a. First Name	b. Last Name

c. Organization

d. Mailing Address

e. City/Town	f. State	g. Zip Code

h. Phone Number	i. Fax Number	j. Email Address

3. Project Location:

15 Pippen's Way	Nantucket
a. Street Address	b. City/Town

B. Fees

To calculate filing fees, refer to the category fee list and examples in the instructions for filling out WPA Form 3 (Notice of Intent).

The fee should be calculated using the following six-step process and worksheet. **Please see Instructions before filling out worksheet.**

Step 1/Type of Activity: Describe each type of activity that will occur in wetland resource area and buffer zone.

Step 2/Number of Activities: Identify the number of each type of activity.

Step 3/Individual Activity Fee: Identify each activity fee from the six project categories listed in the instructions.

Step 4/Subtotal Activity Fee: Multiply the number of activities (identified in Step 2) times the fee per category (identified in Step 3) to reach a subtotal fee amount. Note: If any of these activities are in a Riverfront Area in addition to another Resource Area or the Buffer Zone, the fee per activity should be multiplied by 1.5 and then added to the subtotal amount.

Step 5/Total Project Fee: Determine the total project fee by adding the subtotal amounts from Step 4.

Step 6/Fee Payments: To calculate the state share of the fee, divide the total fee in half and subtract $12.50. To calculate the city/town share of the fee, divide the total fee in half and add $12.50.

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

NOI Wetland Fee Transmittal Form

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

B. Fees (continued)

Step 1/Type of Activity	Step 2/Number of Activities	Step 3/Individual Activity Fee	Step 4/Subtotal Activity Fee
Cat 1	1	$110	$110
Cat 2	2	$500	$1,000
Nantucket Wetland By-law Fee			$25
Nantucket Expert Review Fee			$200

Step 5/Total Project Fee: $1,110 + $25 + $200

Step 6/Fee Payments:

Total Project Fee:	$1,110 + $25 + $200 a. Total Fee from Step 5
State share of filing Fee:	$542.50 b. 1/2 Total Fee **less** $12.50
City/Town share of filling Fee:	$567.50 c. 1/2 Total Fee **plus** $12.50

C. Submittal Requirements

a.) Complete pages 1 and 2 and send with a check or money order for the state share of the fee, payable to the Commonwealth of Massachusetts.

Department of Environmental Protection
Box 4062
Boston, MA 02211

b.) **To the Conservation Commission:** Send the Notice of Intent or Abbreviated Notice of Intent; a **copy** of this form; and the city/town fee payment.

To MassDEP Regional Office (see Instructions): Send a copy of the Notice of Intent or Abbreviated Notice of Intent; a **copy** of this form; and a **copy** of the state fee payment. (E-filers of Notices of Intent may submit these electronically.)

BLACKWELL & ASSOCIATES, INC.
Professional Land Surveyors

INTRODUCTION

The proposed work at 15 Pippin's Way in Nantucket, Massachusetts involves construction of a single family dwelling, cottage, and garage within the Buffer Zone to a Vegetated Wetland Resource Area. Landscaping is proposed to restore the site. The existing path to an existing small dock will be maintained. A waiver is required from the Wetland Protection Regulations for Administering the Town of Nantucket By-law Chapter 136, to allow the footings within two-feet vertically of estimated seasonal high groundwater. A request for the waiver is included herewith.

SITE DESCRIPTION

The subject property is approximately 3.59 acres in size and is located in the Shimmo area of Nantucket Island. The property is bounded on the west and south by existing residential-use properties. The easterly boundary is Pippen's Way. The dwelling will be served by an on-site well and septic system, which is more than 100 feet from the resource area. The defined resource areas on-site are a Buffer Zone to a Bordering Vegetated Wetland and pond. Donald Schall of ENSR delineated the resource area boundary. A report and forms are included. The property and associated subdivision has been reviewed by Massachusetts Natural Heritage and Endangered Species Program (NHESP), file # 07-21275. The property is subject to a Conservation Restrict and a Defined Limit of Work which is shown on the attached site plan.

WORK DESCRIPTION

Prior to the start of work, a silt fence will be placed at the limit of work as shown on the site plan. The fence will be maintained throughout the project. If temporary dewatering is required, a temporary infiltration will be created outside the Buffer Zone. After construction is completed, all disturbed areas will be covered with a minimum of 6" of topsoil and planted with Cape Cod Premium grass seed mix.

20 TEASDALE CIRCLE - NANTUCKET, MA 02554
(508) 228-9026 - (508) 228-5292 FAX

BLACKWELL & ASSOCIATES, INC.
Professional Land Surveyors

CONCLUSION

The proposed construction and landscaping will not affect the Bordering Vegetated Wetland or pond. The project will not result in an adverse impact on the interests protected by the Commission including flood control, erosion control, storm damage prevention, prevention of pollution, wildlife, and wetland scenic views.

20 TEASDALE CIRCLE - NANTUCKET, MA 02554
(508) 228-9026 - (508) 228-5292 FAX

BLACKWELL & ASSOCIATES, INC.
Professional Land Surveyors & Civil Engineers

B8062

April 14, 2016

Nantucket Conservation Commission
2 Bathing Beach Road
Nantucket, MA 02554

RE: Waiver Request for 15 Pippin's Way

Dear Commission Members:

The purpose of this letter is to request and justify a waiver from the Wetland Protection Regulations for Administering the Town of Nantucket By-law Chapter 136 to allow footings within two-feet vertically of estimated seasonal high groundwater. Specifically a waiver is required from Section 3.02.B.1 to allow the footings within two-feet vertically of estimated seasonal high groundwater. If required, any dewatering activity will be temporary. Disturbed areas will be covered with topsoil and then be planted with Cape Cod Premium Grass Seed Mix.

The proposed project will not have any adverse impact to the interests protected in the resource area by the Commission.

Sincerely,
Blackwell & Associates, Inc.
By: Jeffery L. Blackwell, PLS

20 TEASDALE CIRCLE • NANTUCKET, MA 02554
PHONE (508)-228-9026 • FAX (508)-228-5292

D.E.P. Bordering Vegetated Wetland

Delineation Field Data Forms

By:

Donald Schall

APPENDIX G
DEP Bordering Vegetated Wetland (310 CMR 10.55) Delineation Field Data Form

Applicant: BLACKwell & Associates, Inc.	Transect No. One (Wet)
Project location: 15 Pippen's Way, Nantucket	DEP File No:
Prepared By: Don Schall	Date of Delineation: 4.27.2016

Check all that apply:

- ☐ Vegetation alone presumed adequate to delineate BVW: fill out Section I only
- ☒ Vegetation and other indicators of hydrology used to delineate BVW boundary: fill out Sections I and II
- ☐ Method other than dominance test used (attach additional information)

Section I. Vegetation

Strata	Plant Species	Scientific Name	Percent Cover	Percent Dominance	Dominant Plant?	Wetland Indictor Category*
Tree	Absent					
Sapl.	Absent					
SHRUB	Arrow-wood	Viburnum dentatum	6-15%	28%	YES	FAC
	Carolina rose	Rosa carolina	1-5%	8%	no	FAC
	Elderberry	Sambucus nigra	1-5%	8%	no	FACW
	Blackberry	Rubus sp.	16-25%	55%	YES	–
VINE	Poison ivy	Toxicodendron radicans	6-15%	100%	Yes	FAC
HERB	NL Cat-tail	Typha angustifolia	6-15%	25%	yes	OBL
	Rough Goldenrod	Solidago rugosa	6-15%	25%	yes	FAC
	Grass.	Poaceae Family	16-25%	49%	yes	–

* *Use an asterisk to mark wetland indicator plants: plant species listed in the Wetlands Protection Act (MGL c.131, s.40); plants in the genus Sphagnum; plants listed as FAC, FAC+, FACW-, FACW, FACW+, or OBL; or plants with physiological or morphological adaptations. If any plants are identified as wetland indicator plants due to physiological or morphological adaptations, describe the adaptation next to the asterisk.*

Vegetation Conclusion

Number of dominant wetland indicator plants: 4	Number of dominant non-wetland indicator plants: 0
Is the number of dominant wetland plants equal to or greater than the number of dominant non-wetland plants? YES	
Percent of dominant wetland plants vs. non-wetland plants: 100%	

Transect No One (wet. plot)

APPENDIX G
DEP Bordering Vegetated Wetland (310 CMR 10.55) Delineation Field Data Form

Section II. Indicators of Hydrology Transect one

Soil Survey Wetland Soil PIOT

Is there a published soil survey for this site? 1993

Title/date: Soil Survey of Nantucket County

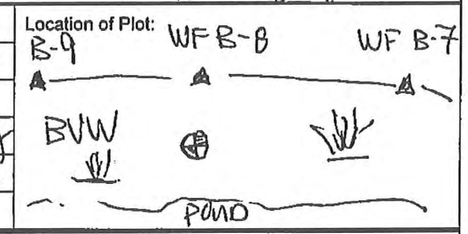
Map number: Sheet 4 and NRCS WEB Soil

Soil type mapped: EVCS Boro Sand Surrey

Hydric soil inclusions: Freetown + Swansea mucks,

Are field observations consistent with soil survey? YES.

Location of Plot:



Soil Profile Description

Soil Horizon	Depth - Inches	Color	Soil Texture	Soil Mottling	Comments
O	½" - 0	loose leaf litter + organic material			
A	0 - 11"	10YR 2.1	loamy sand, numerous roots		
B_1	11" - 13"	10YR 2.2	sand		
B_2	13" - 20"	7.5YR 3.2	sand		Free Water at 14"

Remarks: slight evidence of disturbance in A horizon

Other Indicators of Hydrology: check all that apply and describe

- ☐ Site inundated:
- ☒ Depth to free water in observation hole: 14"
- ☒ Depth to soil saturation in observation hole: 11"
- ☐ Water marks:
- ☐ Drift lines:
- ☐ Sediment deposits:
- ☐ Drainage patterns in BVW:
- ☐ Oxidized rhizospheres:
- ☐ Water-stained leaves:
- ☐ Recorded data (stream, lake or tidal gauge; aerial photo; other):
- ☐ Other: low chroma color

Vegetation and Hydrology Conclusion

Number of wetland indicator plants ≥ number of non-wetland indicator plants?	yes	☒	no	☐
Hydric soil present?	yes	☒	no	☐
Other indicators of hydrology present?	yes	☒	no	☐
Sample location is in a BVW?	yes	☒	no	☐

Transect No one (wet plot)

APPENDIX G
DEP Bordering Vegetated Wetland (310 CMR 10.55) Delineation Field Data Form

Applicant: BLACKWELL & ASSOCIATES, INC	Transect No. One (upland)
Project location: 15 PIPPIN'S WAY, NANTUCKET	DEP File No:
Prepared By: DON SCHALL	Date of Delineation: 4.27.2016

Check all that apply:

- ☐ Vegetation alone presumed adequate to delineate BVW: fill out Section I only
- ☒ Vegetation and other indicators of hydrology used to delineate BVW boundary: fill out Sections I and II
- ☐ Method other than dominance test used (attach additional information)

Section I. Vegetation

Strata	Plant Species	Scientific Name	Percent Cover	Percent Dominance	Dominant Plant?	Wetland Indictor Category*
Tree	BLACK LOCUST	Robinia pseudoacacia	16-25%	87%	YES	FACU
	Red Cedar	Juniperus virginiana	1-5%	13%	no	
Sapl	BLACK cherry	Prunus serotina	6-15%	100%	yes	FACU
SHRUB	Bayberry	Morella pensylvanica	1-5%	9%	no	
	Morrow's Honeysuckle	Lonicera morrowii	6-15%	30%	yes	FACU
	Carolina rose	Rosa carolina	6-15%	30%	yes	FACU
	BLACKberry	Rubus sp.	6-15%	30%	yes	–
Vines	Virginia creeper	P. quinquefolia	1-5%	50%	yes	FACU
	Poison ivy	Toxicodendron radicans	1-5%	50%	yes	FAC
HERB.	Celandine	Chelidonium MAJUS	6-15%	28%	yes	UPL
	Rough goldenrod	Solidago rugosa	1-5%	9%	no	
	goldenrod	Solidago sp.	1-5%	8%	no	
	Grass	Poaceae family	16-25%	55%	yes	–

* *Use an asterisk to mark wetland indicator plants. plant species listed in the Wetlands Protection Act (MGL c.131, s.40); plants in the genus Sphagnum; plants listed as FAC, FAC+, FACW-, FACW, FACW+, or OBL; or plants with physiological or morphological adaptations. If any plants are identified as wetland indicator plants due to physiological or morphological adaptations, describe the adaptation next to the asterisk.*

Vegetation Conclusion

Number of dominant wetland indicator plants: 1	Number of dominant non-wetland indicator plants: 6

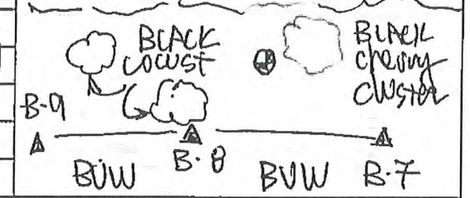
Is the number of dominant wetland plants equal to or greater than the number of dominant non-wetland plants? no.

Percent of dominant wetland plants vs. non-wetland plants: 1/7 = 14%

Transect No One (upland) plot

APPENDIX G
DEP Bordering Vegetated Wetland (310 CMR 10.55) Delineation Field Data Form

Section II. Indicators of Hydrology	transect One
Soil Survey	Upland Soil Plot
Is there a published soil survey for this site? Yes	Location of Plot: Lawn Area
Title/date: Soil Survey of Nantucket County	
Map number: Sheet 4 and NRCS Web Soil	
Soil type mapped: Evesboro Sand Survey	
Hydric soil inclusions: Freetown + Swansea mucks	
Are field observations consistent with soil survey? YES	



Soil Profile Description

Soil Horizon	Depth - Inches	Color	Soil Texture	Soil Mottling	Comments
O_1	½" - 0	loose leaf litter and organic material			
A	0 - 3"	10YR2.1	Sandy loam		
B	3" - 18"	10YR3.3	Sandy loam	None	
B_2'	18" - 20"	7.5YR3.3	Sandy loam	None	

Remarks: Both ≐ 22"

Other Indicators of Hydrology: check all that apply and describe

- ☐ Site inundated:
- ☐ Depth to free water in observation hole: none
- ☐ Depth to soil saturation in observation hole: none
- ☐ Water marks:
- ☐ Drift lines:
- ☐ Sediment deposits:
- ☐ Drainage patterns in BVW:
- ☐ Oxidized rhizospheres:
- ☐ Water-stained leaves:
- ☐ Recorded data (stream, lake or tidal gauge; aerial photo; other):
- ☐ Other:

Vegetation and Hydrology Conclusion

Number of wetland indicator plants ≥ number of non-wetland indicator plants?	yes	☐	no	☒
Hydric soil present?	yes	☐	no	☒
Other indicators of hydrology present?	yes	☐	no	☒
Sample location is in a BVW?	yes	☐	no	☒

Transect No One (upland plot)

Attachment A

PHOTOGRAPHIC LOG

Client: Blackwell & Associates, Inc.	**Site Location:** 15 Pippen's Way, Nantucket, MA	**Project No.** 4-27-16

Photo No. 1	**Date:** 4-27-16

Direction Photo Taken:

View Northerly

Description:

View of the herbaceous and shrub community in the BVW present along the margin of the pond.

WF B-8 is seen in the center of the photo with a pink flag marking the location of the wetland soil pit in the left corner of the photo.

Photo No. 2	**Date:** 4-27-16

Direction Photo Taken:

View Westerly

Description:

View of the wetland moderately dense woody community bordering the pond in the vicinity of WF B-8.

A band of narrow-leaf cat-tail is seen along the upper margin of the pond. The pink flag marks the location of the wetland soil pit.

Attachment A

PHOTOGRAPHIC LOG

Client: Blackwell & Associates, Inc.	**Site Location:** 15 Pippen's Way, Nantucket, MA	**Project No.** 4-27-16

Photo No. 3	**Date:** 4-27-16

Direction Photo Taken:

View Southerly

Description:

View of the vegetative community established at the upland soil pit in the vicinity of WF B-8.

Pink flag marks the location of the upland soil pit.

Photo No. 4	**Date:** 4-27-16

Direction Photo Taken:

View Southeasterly

Description:

View of the vegetative community established at the upland soil pit.

Woody species in the vegetative community included black cherry, black locust, Morrow's bush honeysuckle, bayberry, blackberry, and Carolina rose.

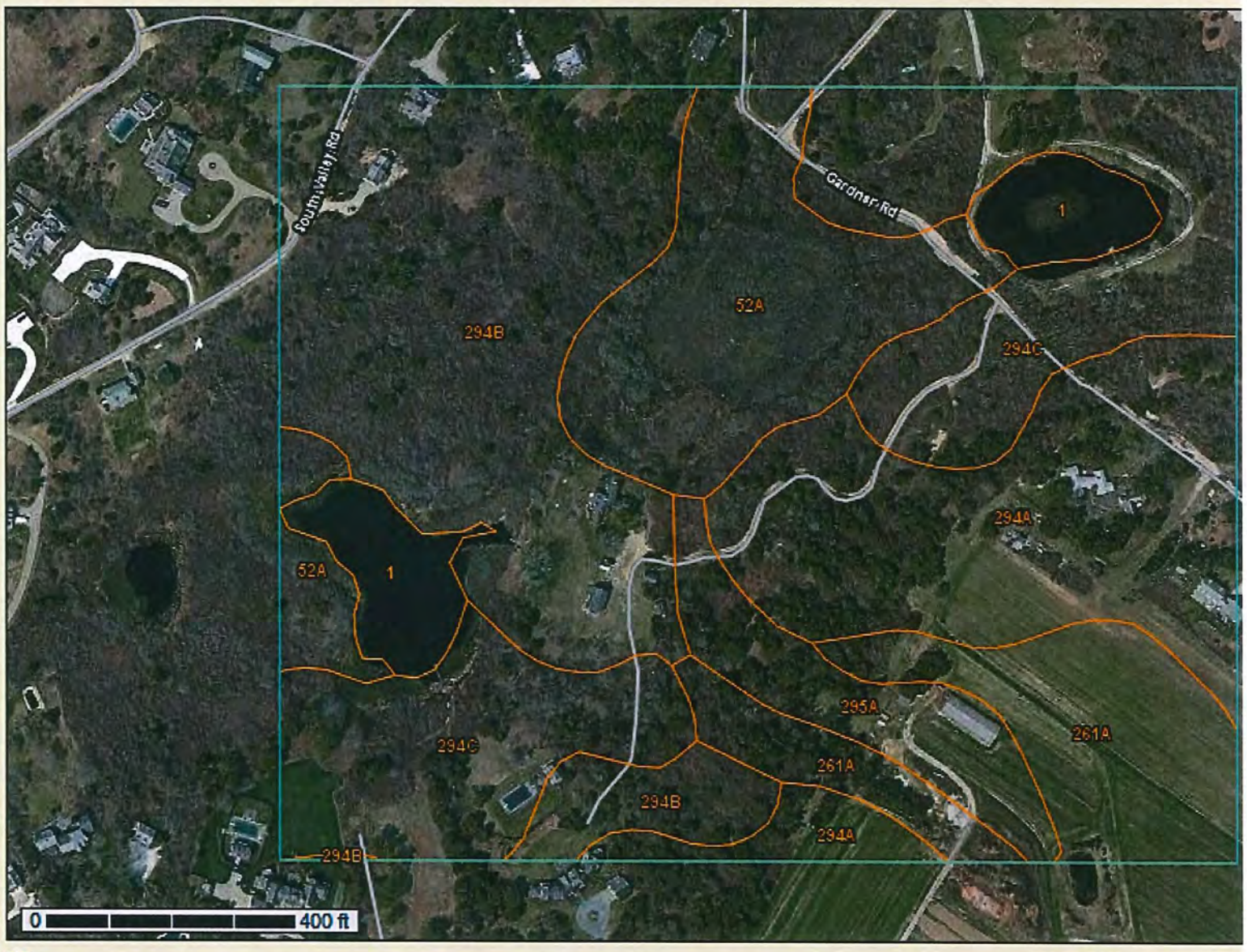
ssachusetts (MA019)

Name	Acres in AOI	Percent of AOI
	2.1	4.8%
ansea wland, 0 to	6.2	14.1%
sandy loam, pes	4.4	10.0%
to 3 percent	8.0	18.1%
to 8 percent	11.6	26.3%
to 15	9.6	21.8%
soils, 0 to 3	2.2	5.0%
st	44.2	100.0%

Legend

Soil Map

Scale (not to scale)



Warning: Soil Map may not be valid at this scale.

You have zoomed in beyond the scale at which the soil map for this area is intended to be used. M done at a particular scale. The soil surveys that comprise your AOI were mapped at 1:20,000. The and the level of detail shown in the resulting soil map are dependent on that map scale.

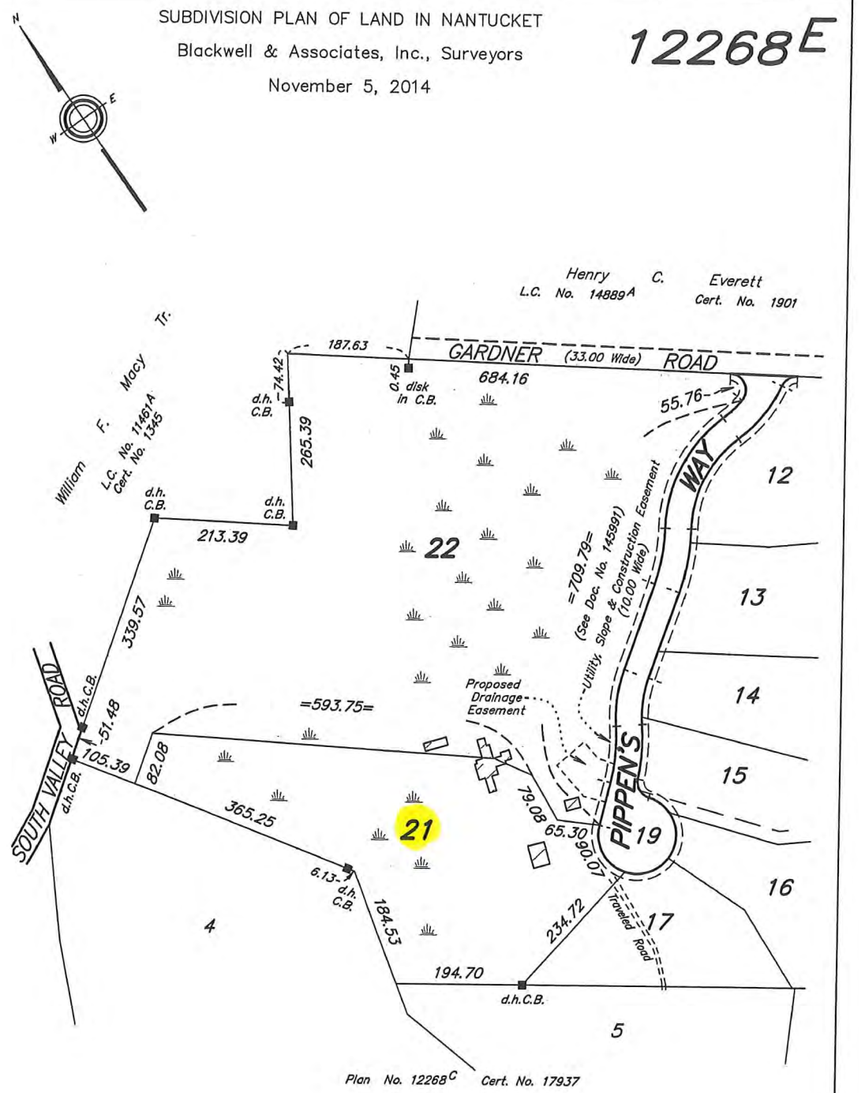
Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of ma

SUBDIVISION PLAN OF LAND IN NANTUCKET

Blackwell & Associates, Inc., Surveyors

November 5, 2014

12268E



Plan No. 12268C Cert. No. 17937

Subdivision of Lots 18 and 20
Shown on Plan 12268–D
Filed with Cert. of Title No. 21215
Registry District of Nantucket County

Separate certificates of title may be issued for land shown hereon as Lots 21 and 22 By the Court.

Deborah J. Patterson
Recorder

DEC. 4, 2014

JMF–0B9J

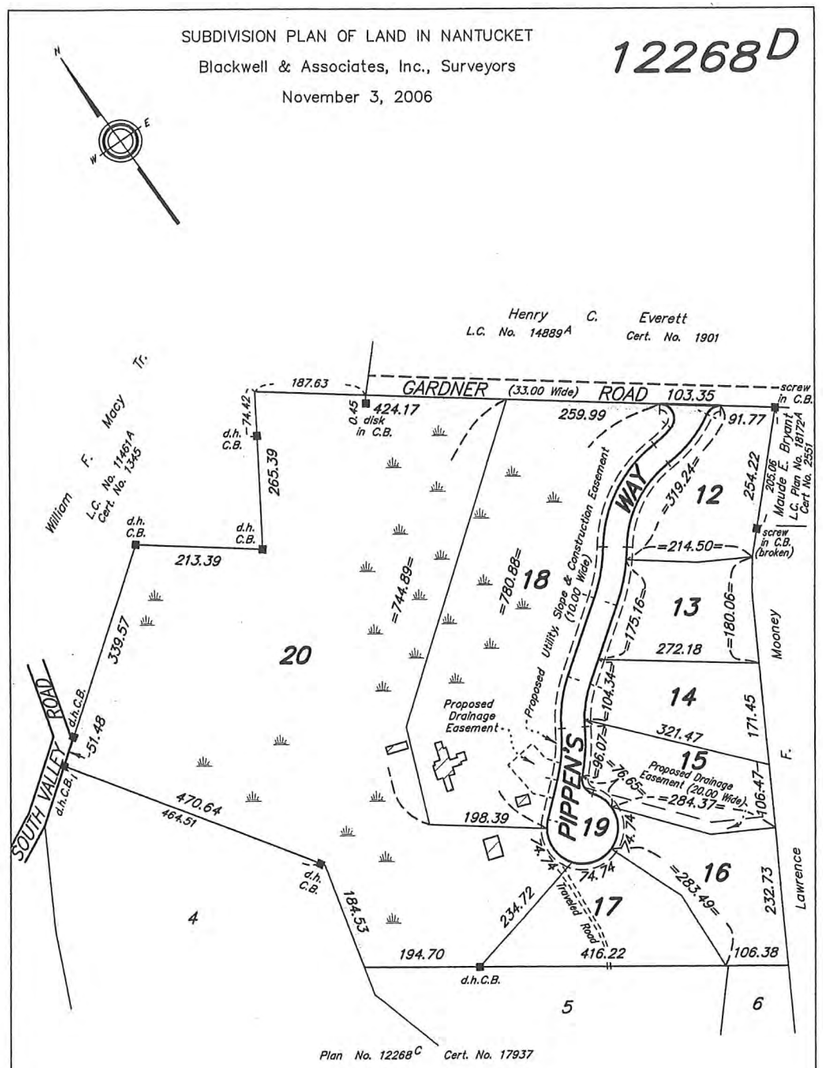
Copy of part of plan filed in
LAND REGISTRATION OFFICE
DEC. 4, 2014
Scale of this plan 160 feet to an inch
T.C. Pontbriand, Engineer for Court

SUBDIVISION PLAN OF LAND IN NANTUCKET

Blackwell & Associates, Inc., Surveyors

November 3, 2006

12268D



Plan No. 12268C Cert. No. 17937

Subdivision of Lot 2
Shown on Plan 12268-B
Filed with Cert. of Title No. 2104
Registry District of Nantucket County

Separate certificates of title may be issued for land shown hereon as Lots 12 through 20
By the Court.

Deborah J. Patterson...
Recorder

April 3, 2014

JMF-OAHL

Abutters are shown as on original decree plan.

Copy of part of plan filed in
LAND REGISTRATION OFFICE
April 3, 2014
Scale of this plan 160 feet to an inch
T.C. Pontbriand, Engineer for Court

THIS PLAN FILED WITH CERTIFICATE NO. 31215

Commonwealth of Massachusetts

Division of Fisheries & Wildlife

MassWildlife

Wayne F. MacCallum, *Director*

December 16, 2010

Diane Halm
Terrier Farms Trust
11809 Piney Meetinghouse Road
Potomac MD 20854

RE: Project Location: 12 Gardner Road
Project Description: Pippen's Way Subdivision
NHESP File No.: 07-21275

Dear Applicant:

The Natural Heritage and Endangered Species Program (NHESP) of the MA Division of Fisheries & Wildlife received the information packet, submitted by Rackemann Strategic Consulting, Inc., dated November 22, 2010, for review pursuant to the Massachusetts Endangered Species Act (MESA) (MGL c.131A) and its implementing regulations (321 CMR 10.00).

Based on a review of the information that was provided and the information that is currently contained in our database, the NHESP has determined that this project, as currently proposed, **will not result in a prohibited "take"** of state-listed rare species. This determination is a final decision of the Division of Fisheries & Wildlife pursuant to 321 CMR 10.18. Any changes to the proposed project or any additional work beyond that shown on the site plans may require an additional filing with the NHESP pursuant to the MESA. This project may be subject to further review if no physical work is commenced within five years from the date of issuance of this determination, or if there is a change to the project.

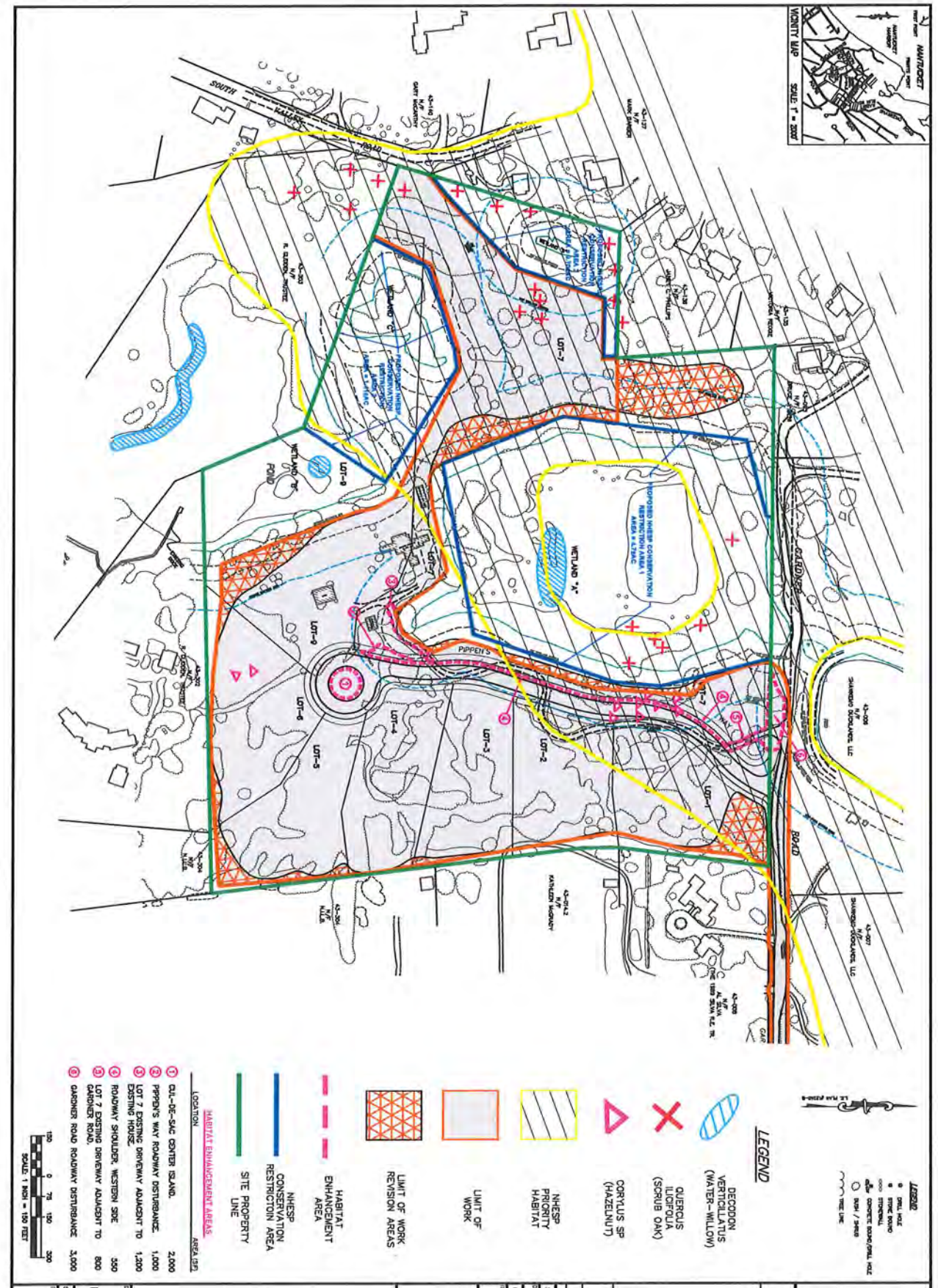
Please note that this determination addresses only the matter of state-listed species and their habitats. If you have any questions regarding this letter please contact Amy Coman, Endangered Species Review Assistant, at (508) 389-6364.

Sincerely,

Thomas W. French

Thomas W. French, Ph.D.
Assistant Director

cc: Steven Davis, Rackemann Strategic Consulting, Inc.
Nantucket Conservation Commission


VICINITY MAP
SCALE: 1" = 2000'
NANTUCKET
NANTUCKET HARBOR
SOUTH
ROAD
GARDNER
PIPPEN'S
WAY
WETLAND "A"
WETLAND "B"
WETLAND "C"
PROPOSED SHARED ACCESS DRIVEWAY
RESTRICTED AREA 1
AREA = 0.7 AC.
PROPOSED CONSERVATION RESTRICTION AREA 2
AREA = 1.7 AC.
PROPOSED CONSERVATION RESTRICTION AREA 3
AREA = 0.7 AC.
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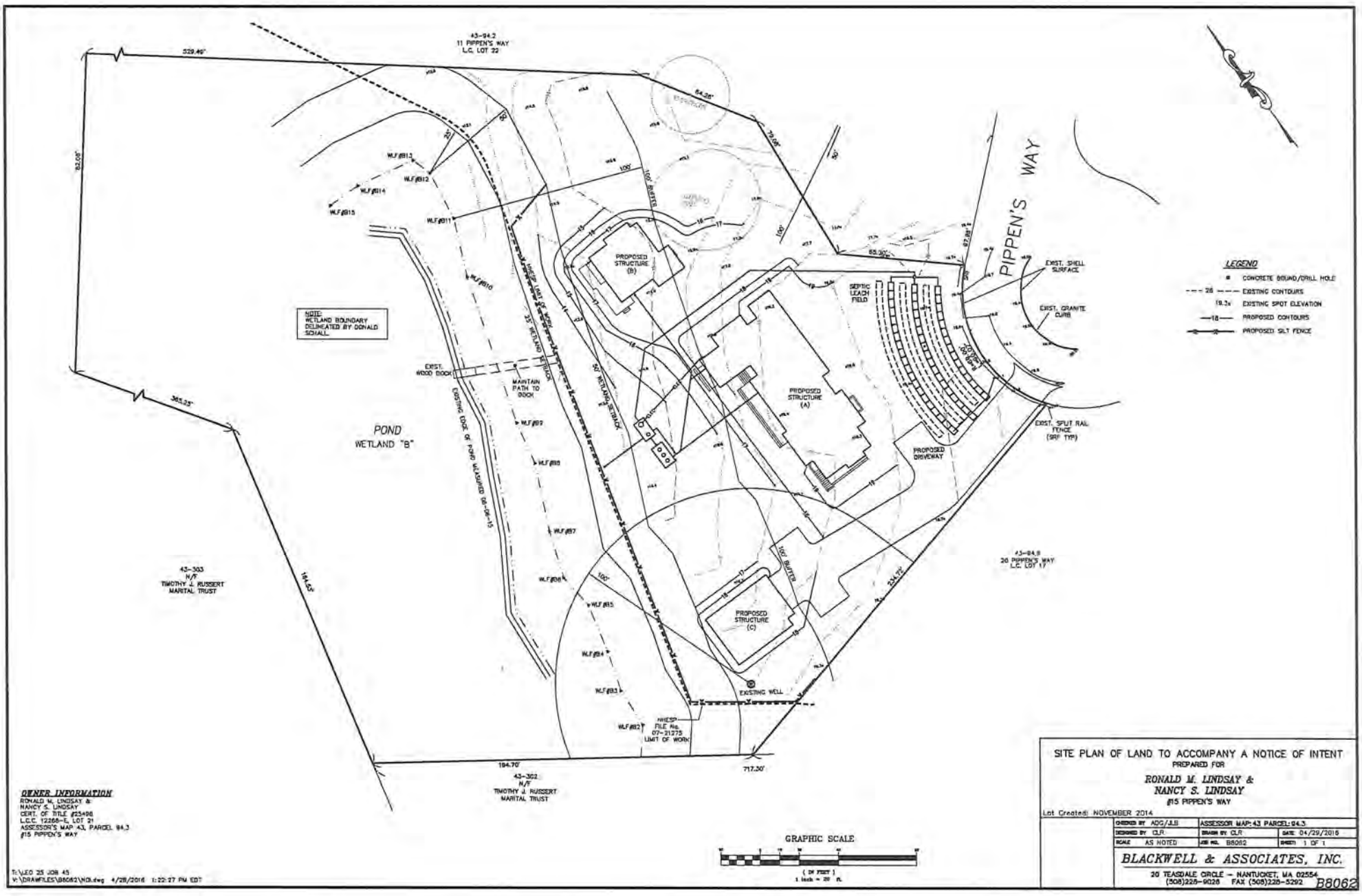
NEW / PAVED
NEW / PAVED
TREE LINE
TREE LINE
LEGEND
DECODON VERTICILLATUS (WATER-WILLOW)
QUERCUS ILICIFOLIA (SCRUB OAK)
CORYLUS SP. (HAZELNUT)
NHESP PRIORITY HABITAT
LIMIT OF WORK
LIMIT OF WORK REVISION AREAS
HABITAT ENHANCEMENT AREA
NHESP CONSERVATION RESTRICTION AREA
SITE PROPERTY LINE
HABITAT ENHANCEMENT AREAS
LOCATION
AREA (SF)
① CUL-DE-SAC CENTER ISLAND. 2,000
② PIPPEN'S WAY ROADWAY DISTURBANCE. 1,000
③ LOT 7 EXISTING DRIVEWAY ADJACENT TO EXISTING HOUSE. 1,200
④ ROADWAY SHOULDER, WESTERN SIDE 550
⑤ LOT 7 EXISTING DRIVEWAY ADJACENT TO GARDNER ROAD. 800
⑥ GARDNER ROAD ROADWAY DISTURBANCE 3,000
120 0 75 150 300
SCALE: 1 INCH = 150 FEET
SITE DESIGN ENGINEERING, LLC.
11 CHANDLER STREET
MIDDLEBORO, MA 02346
T: 508-947-0423 F: 508-947-0424
WWW.SITEDESIGNENGINEERING.COM
PLAN REVISIONS
1 3/21/14 REVISED LIMIT OF WORK LINE DCM
NO DATE DESCRIPTION APPROVED
DATE: NOVEMBER 2, 2010
DRAWN BY: ARTOCKA
DESIGN BY: ARTOCKA
CHECK BY: DCM
PROJECT NO: 6001
ISSUED FOR: CLIENT REVIEW
PIPPEN'S WAY SUBDIVISION
12 GARDNER ROAD, NANTUCKET, MA
BEING A SUBDIVISION OF LOT 2
SHOWN ON LAND COURT PLAN 12268-B
TAX MAP 43, PARCEL 94.2
PREPARED FOR SEE TERRIER FARMS TRUST
DRAWING TITLE
PROPOSED CONSERVATION RESTRICTION & HABITAT ENHANCEMENT PLAN
SCALE: 1" = 150'
SHEET NO.
1 OF 1



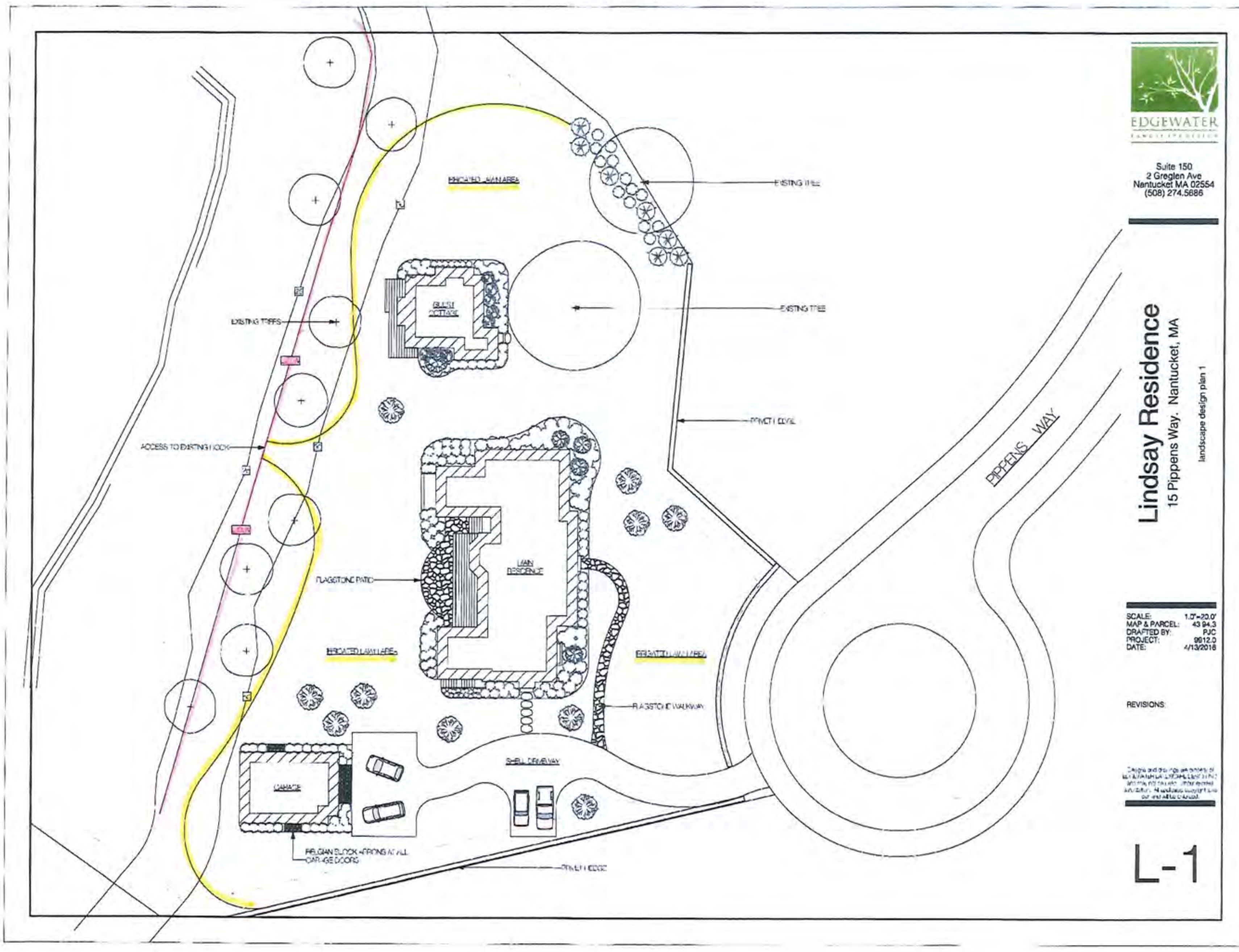
OWNER INFORMATION
RONALD M. LINDSAY &
NANCY S. LINDSAY
CERT. OF TITLE #25498
L.C.C. 12268-E, LOT 21
ASSESSOR'S MAP 43, PARCEL 94.3
#15 PIPPEN'S WAY

T:\LEO 25 JOB 45
V:\DRAWFILES\B8062\NOI.dwg 4/28/2016 1:22:27 PM EDT

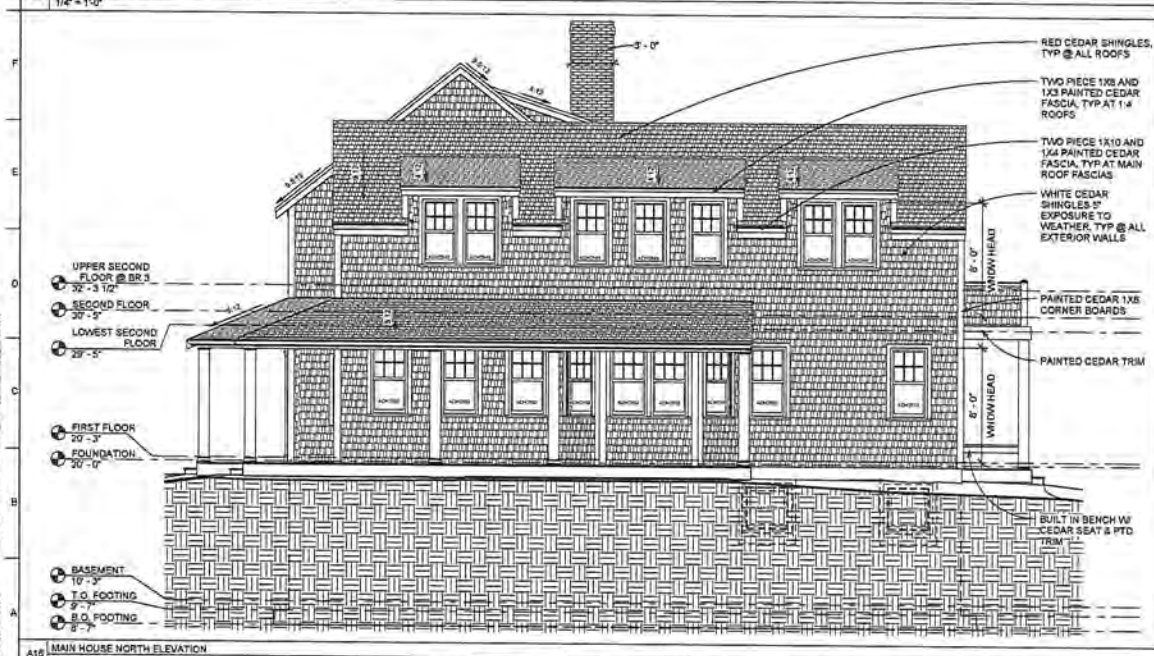
SITE PLAN OF LAND TO ACCOMPANY A NOTICE OF INTENT
PREPARED FOR
RONALD M. LINDSAY &
NANCY S. LINDSAY
#15 PIPPEN'S WAY
Lot Created: NOVEMBER 2014

CHECKED BY ADG/JJS	ASSESSOR MAP: 43 PARCEL: 94.3	
DESIGNED BY CLR	DRAWN BY CLR	DATE 04/29/2016
SCALE AS NOTED	JOB NO. B8062	SHEET 1 OF 1

BLACKWELL & ASSOCIATES, INC.
20 TEASDALE CIRCLE – NANTUCKET, MA 02554
(508)228-9028 FAX (508)228-5292
B8062


EDGEWATER
Suite 150
2 Greglen Ave
Nantucket MA 02554
(508) 274.5686
Lindsay Residence
15 Pippens Way. Nantucket, MA
landscape design plan 1
SCALE: 1.0"=20.0'
MAP & PARCEL: 43 94.3
DRAFTED BY: PJC
PROJECT: 9912.0
DATE: 4/13/2016
REVISIONS:
PIPPENS WAY
L-1

G16 MAIN HOUSE WEST ELEVATION
1/4" = 1'-0"



A16 MAIN HOUSE NORTH ELEVATION
1/4" = 1'-0"

WINDOW SCHEDULE MAIN HOUSE

Designation	Rough Width	Rough Height	Model
AAN3030	3' - 0"	3' - 0"	A-Series Awning
ADH2440	2' - 4"	4' - 0"	A-Series Double Hung
ADH2648	2' - 6"	4' - 8"	A-Series Double Hung
ADH2850	2' - 8"	5' - 0"	A-Series Double Hung
ADH3054	3' - 0"	5' - 4"	A-Series Double Hung
APW2828	2' - 8"	2' - 8"	A-Series Picture Window

EXT ANDERSEN PATIO INSWING DOOR SCHEDULE - MAIN HOUSE

Door Number	Height	Width	Model	Comments
1	7' - 6"	3' - 0"	A-Series	Custom Door
3	6' - 11"	5' - 8"	A-Series	
4	6' - 11"	5' - 8"	A-Series	
5	6' - 11"	3' - 0"	A-Series	
6	6' - 11"	3' - 0"	A-Series	

ALL WINDOWS TO BE ANDERSEN A SERIES PLATINMUM GREY CLAD WINDOWS W/ SIMULATED DIVIDED LITES, UNO. ALL TRIM TO BE PLATINUM GREY.

1X4 CEDAR CASING AT ALL WINDOWS & DOORS OR UNLESS SHOWN AS CONTINUOUS BETWEEN OPENINGS

SEE ELEVATIONS FOR MUNTIN LAYOUTS

CONTRACTOR TO FABRICATE REMOVABLE PLYWD STORM PANELS AS REQUIRED BY LOCAL OFFICIALS AT ALL WINDOWS

ALL EXTERIOR DOORS TO BE ANDERSEN PATIO INSWING DOORS, UNO. DOUBLE DOORS TO HAVE ASTRAGAL ATTACHED TO DOOR LEAF

LINEA 5, inc.

LINDSAY RESIDENCE

#15 PIPPEN'S WAY

MAIN HOUSE ELEVATIONS 2

#	ISSUE	DATE
1	HDC RESUBMISSION	11.30.15
2	HDC RESUBMISSION 2	12.02.15
3	HDC RESUBMISSION 3	02.02.16
4	HDC RESUBMISSION 4	02.10.16
5	HDC RESUBMISSION 5	02.26.16

JMS No 11026

DRAWN BY LC | CHECKED BY HD

DATE 02.29.16 | SCALE 1/4" = 1'-0"

SHEET No A2.2

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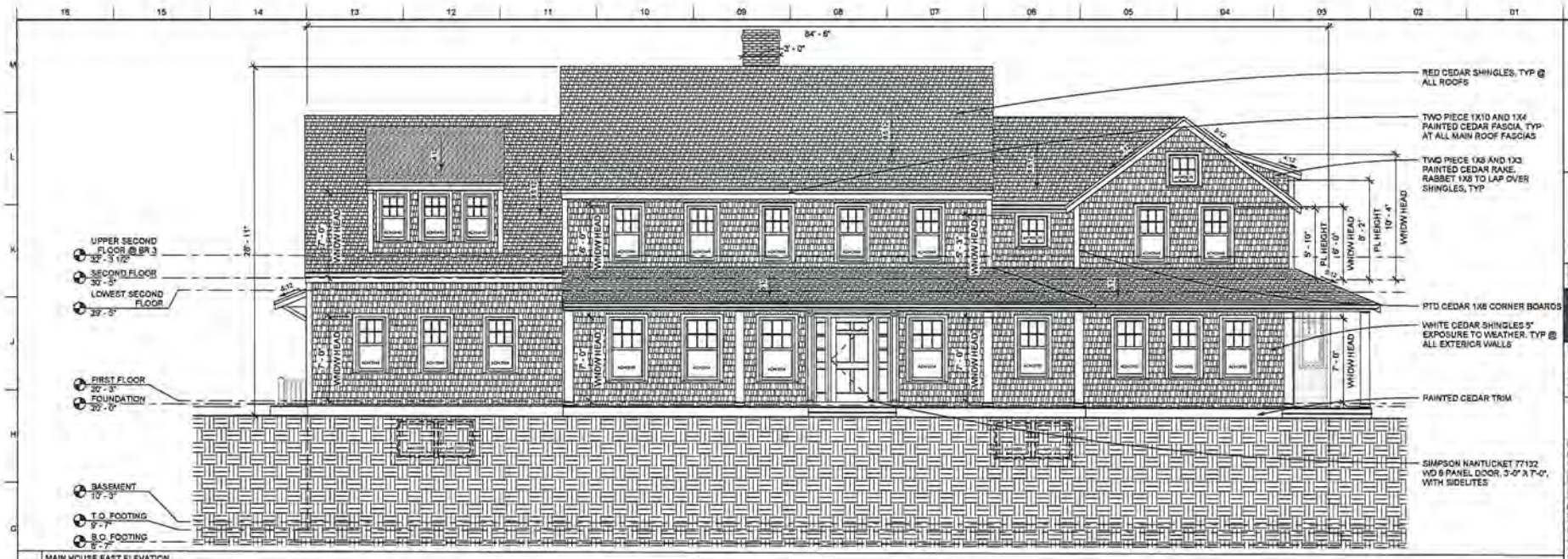
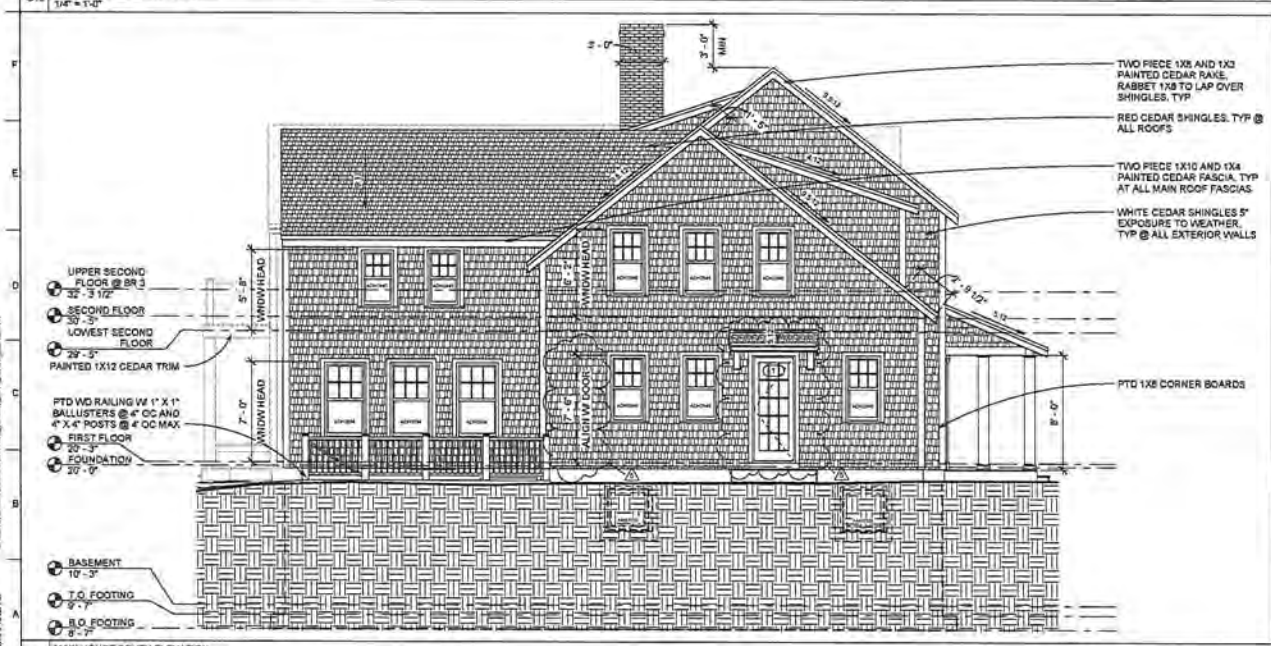


G15 MAIN HOUSE EAST ELEVATION
1/4" = 1'-0"



A16 MAIN HOUSE SOUTH ELEVATION
1/4" = 1'-0"

WINDOW SCHEDULE MAIN HOUSE			
Designation	Rough Width	Rough Height	Model
AAN3030	3' - 0"	3' - 0"	A-Series Awning
ADH2440	2' - 4"	4' - 0"	A-Series Double Hung
ADH2648	2' - 6"	4' - 8"	A-Series Double Hung
ADH2850	2' - 8"	5' - 0"	A-Series Double Hung
ADH3054	3' - 0"	5' - 4"	A-Series Double Hung
APW2628	2' - 6"	2' - 8"	A-Series Picture Window

EXT ANDERSEN PATIO INSWING DOOR SCHEDULE - MAIN HOUSE				
Door Number	Height	Width	Model	Comments
1	7' - 6"	3' - 0"	A-Series	Custom Door
2	6' - 11"	5' - 8"	A-Series	
4	6' - 11"	5' - 8"	A-Series	
5	6' - 11"	3' - 0"	A-Series	
6	6' - 11"	3' - 0"	A-Series	

ALL WINDOWS TO BE ANDERSEN A SERIES PLATINMUM GREY CLAD WINDOWS W/ SIMULATED DIVIDED LITES, UNO. ALL TRIM TO BE PLATINUM GREY.

1X4 CEDAR CASING AT ALL WINDOWS & DOORS OR UNLESS SHOWN AS CONTINUOUS BETWEEN OPENINGS

SEE ELEVATIONS FOR MUNTIN LAYOUTS

CONTRACTOR TO FABRICATE REMOVABLE PLYWD STORM PANELS AS REQUIRED BY LOCAL OFFICIALS AT ALL WINDOWS

ALL EXTERIOR DOORS TO BE ANDERSEN PATIO INSWING DOORS, UNO. DOUBLE DOORS TO HAVE ASTRAGAL ATTACHED TO DOOR LEAF

LINEA 5, inc.

LINDSAY RESIDENCE

#15 PIPPEN'S WAY

MAIN HOUSE ELEVATIONS 1

#	ISSUE	DATE
1	HDC RESUBMISSION	11.20.15
2	HDC RESUBMISSION 2	12.22.15
3	HDC RESUBMISSION 3	02.02.16
4	HDC RESUBMISSION 4	02.10.16
5	HDC RESUBMISSION 5	02.26.16

Job No. 1152B

DRAWN BY	CHECKED BY
LC	HD
DATE	SCALE
02.26.16	1/4" = 1'-0"

SHEET No

A2.1

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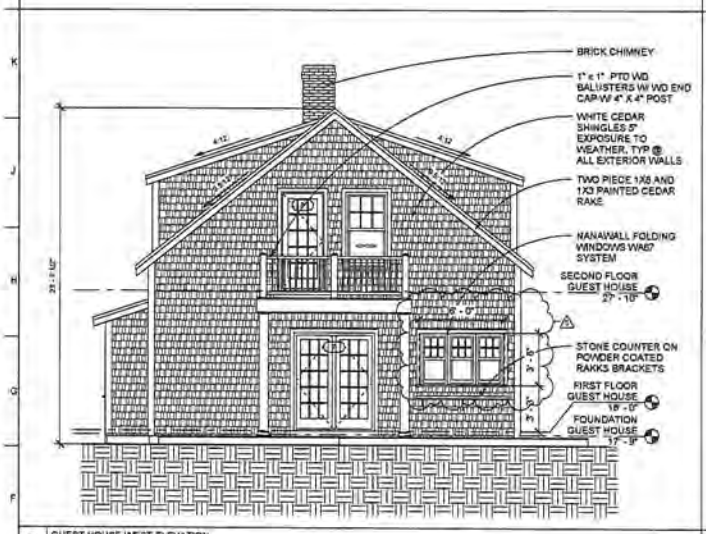
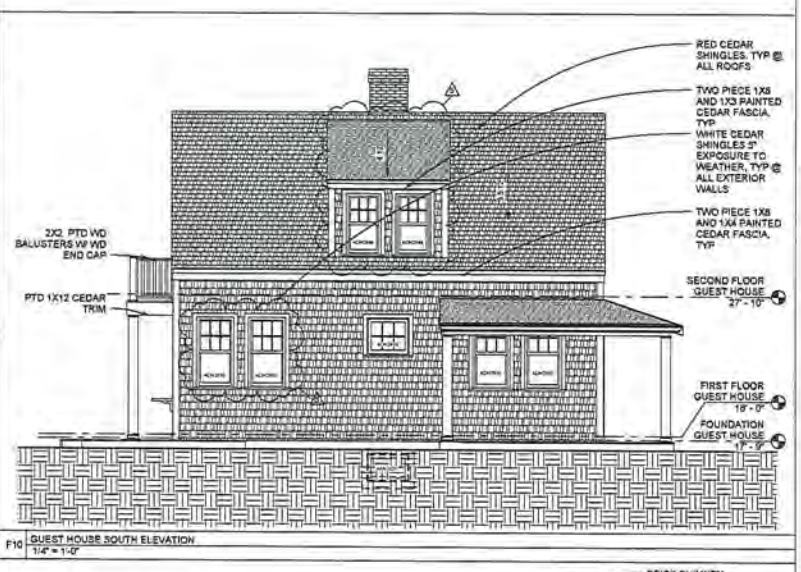
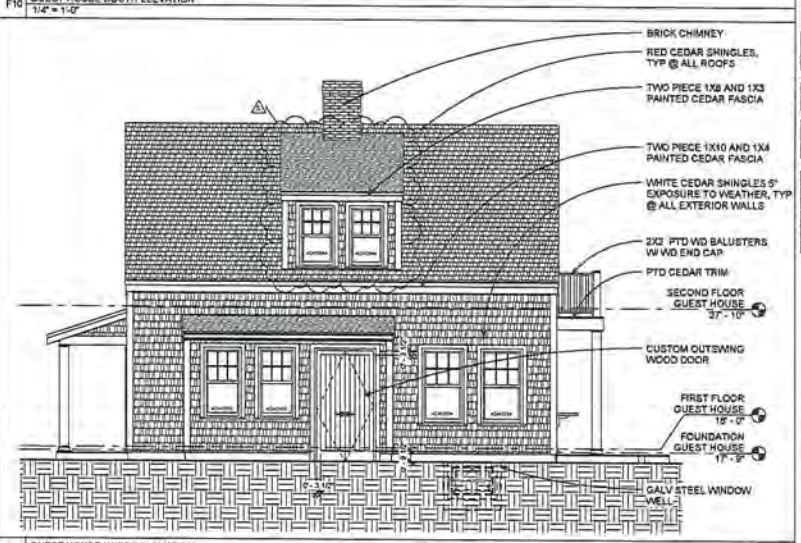


F16 GUEST HOUSE WEST ELEVATION
1/4" = 1'-0"



F10 GUEST HOUSE SOUTH ELEVATION
1/4" = 1'-0"

A16 GUEST HOUSE EAST ELEVATION
1/4" = 1'-0"



A10 GUEST HOUSE NORTH ELEVATION
1/4" = 1'-0"

EXT ANDERSEN PATIO INSWING DOOR SCHEDULE - GUEST HOUSE

Door Number	Height	Width	Model
7	6' - 11"	5' - 6"	A-Series
8	6' - 11"	3' - 0"	A-Series

WINDOW SCHEDULE GUEST HOUSE

Designation	Rough Width	Rough Height	Model
AAN3020	3' - 0"	2' - 0"	A-Series Awning
ADH2644	2' - 6"	4' - 4"	A-Series Double Hung
ADH2648	2' - 6"	4' - 8"	A-Series Double Hung
ADH2850	2' - 8"	5' - 0"	A-Series Double Hung
ADH3054	3' - 0"	5' - 4"	A-Series Double Hung
APW3028	3' - 0"	2' - 8"	A-Series Picture Window

ALL WINDOWS TO BE ANDERSEN A SERIES PLATINMUM GREY CLAD WINDOWS W SIMULATED DIVIDED LITES, UNO. ALL TRIM TO BE PLATINUM GREY.

1X4 CEDAR CASING AT ALL WINDOWS & DOORS OR UNLESS SHOWN AS CONTINUOUS BETWEEN OPENINGS

SEE ELEVATIONS FOR MUNTIN LAYOUTS

CONTRACTOR TO FABRICATE REMOVABLE PLYWD STORM PANELS AS REQUIRED BY LOCAL OFFICIALS AT ALL WINDOWS

ALL EXTERIOR DOORS TO BE ANDERSEN PATIO INSWING DOORS, UNO. DOUBLE DOORS TO HAVE ASTRAGAL ATTACHED TO DOOR LEAF

LINEA 5, inc.

LINDSAY RESIDENCE

#15 PIPPEN'S WAY

GUEST HOUSE ELEVATIONS

#	ISSUE	DATE
1	HDC RESUBMISSION	11.20.15
2	HDC RESUBMISSION 2	12.22.15
4	HDC RESUBMISSION 4	02.10.16
5	HDC RESUBMISSION 5	02.26.16

JOB No. 11026

DRAWN BY	CHECKED BY
LC	HD

DATE	SCALE
02.26.16	1/4" = 1'-0"

SHEET No

A2.4

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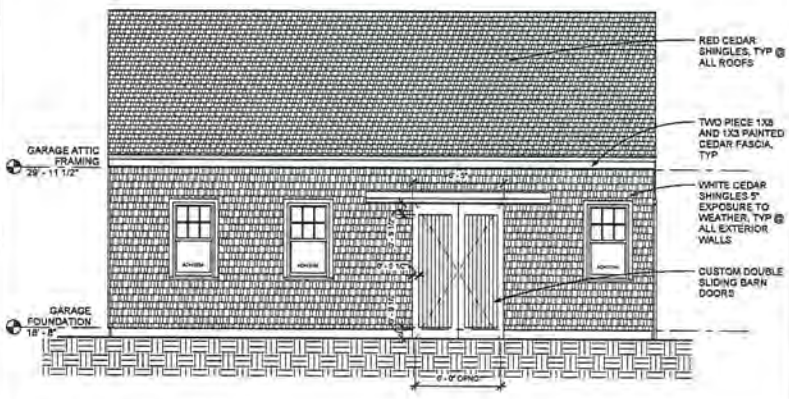
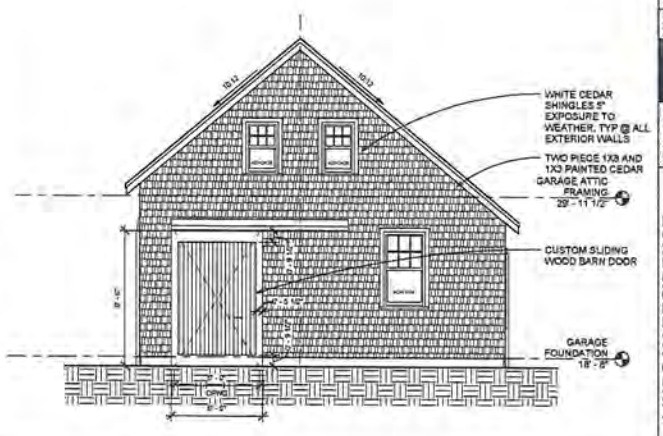


F13 GARAGE ELEVATION - NORTH
1/4" = 1'-0"



F06 GARAGE ELEVATION -WEST
1/4" = 1'-0"

WINDOW SCHEDULE - GARAGE			
Designation	Rough Width	Rough Height	Model
ADH2435	2' - 4"	3' - 8"	A-Series Double Hung
ADH3054	3' - 0"	5' - 4"	A-Series Double Hung

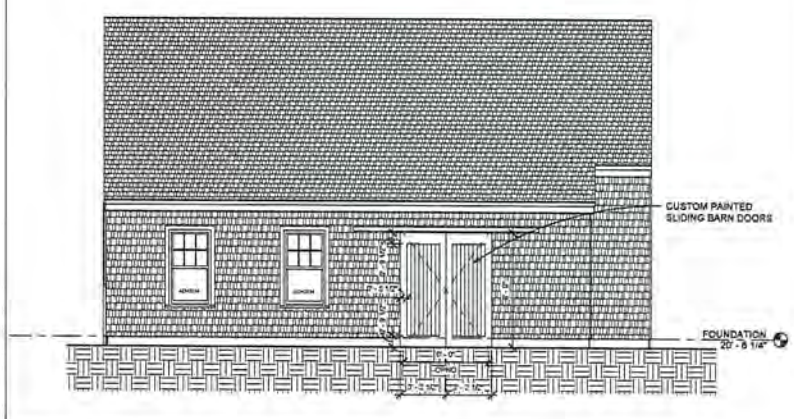
ALL WINDOWS TO BE ANDERSEN A SERIES PLATINMUM GREY CLAD WINDOWS W/ SIMULATED DIVIDED LITES, UNO. ALL TRIM TO BE PLATINUM GREY.

1X4 CEDAR CASING AT ALL WINDOWS & DOORS OR UNLESS SHOWN AS CONTINUOUS BETWEEN OPENINGS

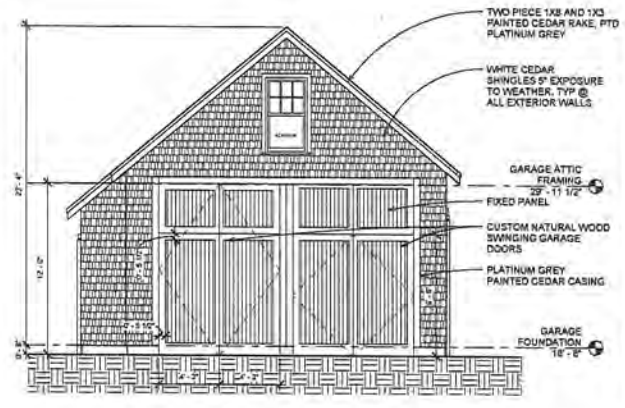
SEE ELEVATIONS FOR MUNTIN LAYOUTS

CONTRACTOR TO FABRICATE REMOVABLE PLYWD STORM PANELS AS REQUIRED BY LOCAL OFFICIALS AT ALL WINDOWS

ALL EXTERIOR DOORS TO BE ANDERSEN PATIO INSWING DOORS, UNO. DOUBLE DOORS TO HAVE ASTRAGAL ATTACHED TO DOOR LEAF



A13 GARAGE ELEVATION -SOUTH
1/4" = 1'-0"



A06 GARAGE ELEVATION - EAST
1/4" = 1'-0"

LINEA 5, inc.

LINDSAY RESIDENCE

#15 PIPPEN'S WAY

GARAGE ELEVATIONS

#	ISSUE	DATE
4	HDC RESUBMISSION 4	02.12.16

Job No	11528
DRAWN BY	CHECKED BY
LC	HD
DATE	SCALE
02.23.16	1/4" = 1'-0"

SHEET No

A2.3

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43–94.2
11 PIPPEN'S WAY
L.C. LOT 22

529.49'
82.08'
365.25'
184.53'
194.70'
717.30'
234.72'
64.26'
79.06'
65.30'
67.96'
50'
25'
100'
PIPPEN'S WAY
EVERGREEN
MAPLE TREE
100' BUFFER
NHESP LIMIT OF WORK
25' WETLAND SETBACK
50' WETLAND SETBACK
PROPOSED STRUCTURE (B)
PROPOSED STRUCTURE (A)
PROPOSED STRUCTURE (C)
SEPTIC LEACH FIELD
PROPOSED DRIVEWAY
EXIST. SHELL SURFACE
EXIST. GRANITE CURB
EXIST. SPLIT RAIL FENCE (SRF TYP)
EXIST. WOOD DOCK
MAINTAIN PATH TO DOCK
EXISTING EDGE OF POND MEASURED 08-06-15
POND
WETLAND "B"
EXISTING WELL
NHESP FILE No. 07-21275 LIMIT OF WORK
WLF#B2
WLF#B3
WLF#B4
WLF#B5
WLF#B6
WLF#B7
WLF#B8
WLF#B9
WLF#B10
WLF#B11
WLF#B12
WLF#B13
WLF#B14
WLF#B15

NOTE:
WETLAND BOUNDARY DELINEATED BY DONALD SCHALL.

43–303
N/F
TIMOTHY J. RUSSERT
MARITAL TRUST

43–302
N/F
TIMOTHY J. RUSSERT
MARITAL TRUST

43–94.9
20 PIPPEN'S WAY
L.C. LOT 17

LEGEND

- CONCRETE BOUND/DRILL HOLE
- 28 EXISTING CONTOURS
- 19.3x EXISTING SPOT ELEVATION
- 18 PROPOSED CONTOURS
- PROPOSED SILT FENCE

OWNER INFORMATION
RONALD M. LINDSAY &
NANCY S. LINDSAY
CERT. OF TITLE #25496
L.C.C. 12268–E, LOT 21
ASSESSOR'S MAP 43, PARCEL 94.3
#15 PIPPEN'S WAY

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.

SITE PLAN OF LAND TO ACCOMPANY A NOTICE OF INTENT
PREPARED FOR
RONALD M. LINDSAY &
NANCY S. LINDSAY
#15 PIPPEN'S WAY

Lot Created: NOVEMBER 2014

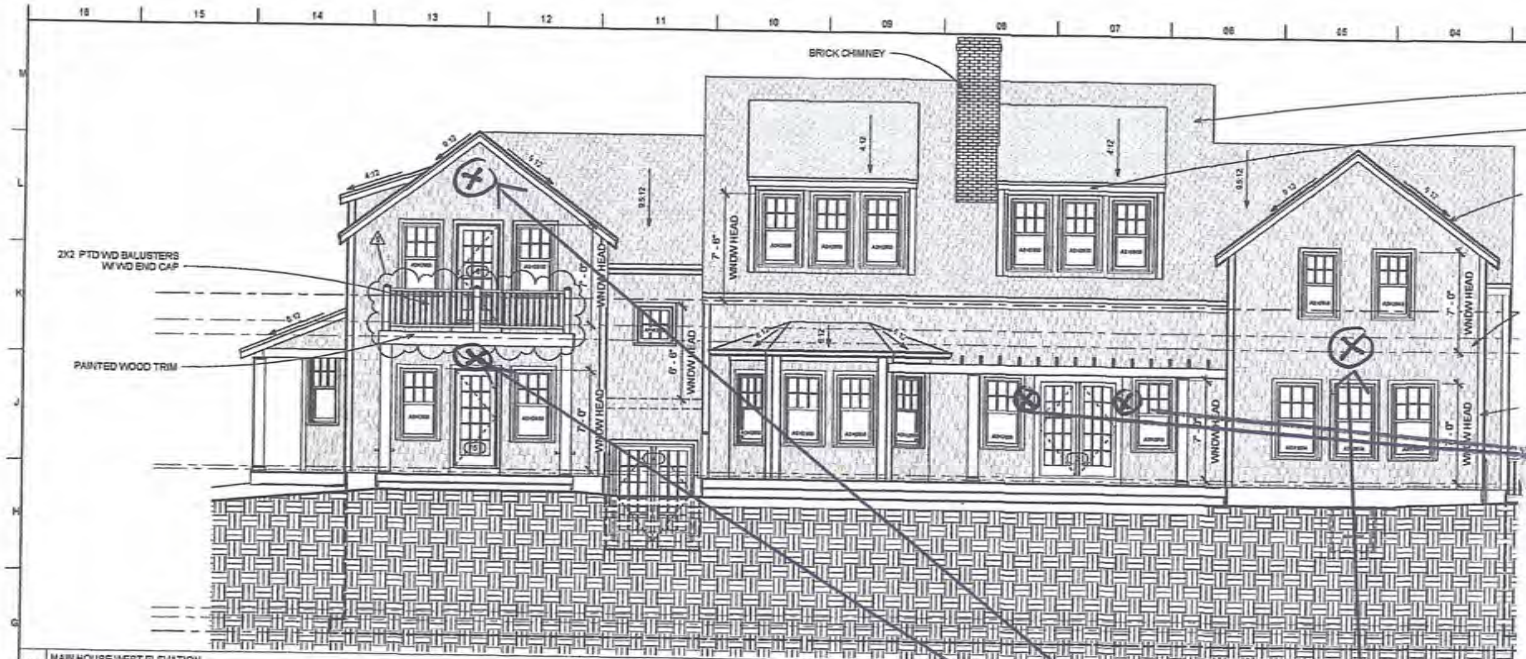
CHECKED BY ADG/JLB	ASSESSOR MAP: 43 PARCEL: 94.3	
DESIGNED BY CLR	DRAWN BY CLR	DATE 04/29/2016
SCALE AS NOTED	JOB NO. B8062	SHEET: 1 OF 1

BLACKWELL & ASSOCIATES, INC.
20 TEASDALE CIRCLE – NANTUCKET, MA 02554
(508)228–9026 FAX (508)228–5292

B8062

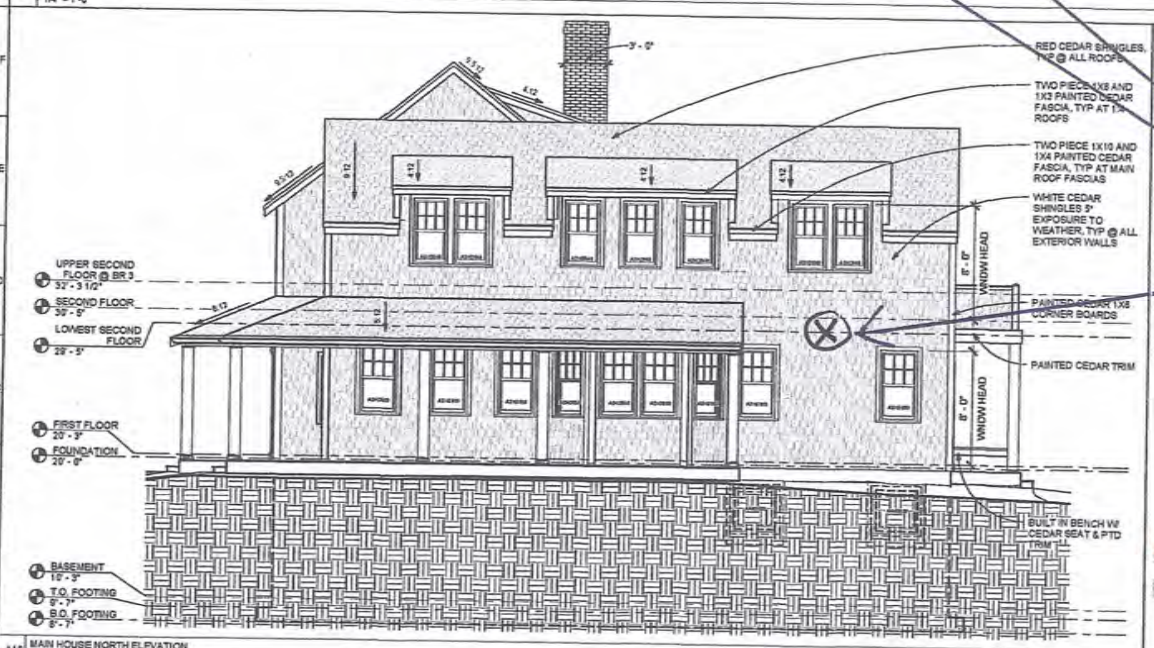
T:\LEO 25 JOB 45
V:\DRAWFILES\B8062\NOI.dwg 4/28/2016 1:22:27 PM EDT

NEW INFORMATION FOR CURRENT HEARING



Kichler 9023

Seaside Single Light 14" Tall Outdoor Wall Sconce



WINDOW SCHEDULE MAIN HOUSE			
Designation	Rough Width	Rough Height	Model
AAN6030	3' - 0"	3' - 0"	A-Series Awning
ADH2436	2' - 4"	4' - 0"	A-Series Double Hung
ADH2648	2' - 6"	4' - 8"	A-Series Double Hung

Acclaim Lighting LFL2

Dual Head LED Flood Light with Clear Glass

LIN #1

MAIN HOUSE ELEVATIONS 2

#	ISSUE	DATE
1	HDC RESUBMISSION	11.20.15
2	HDC RESUBMISSION 2	12.22.15
3	HDC RESUBMISSION 3	02.02.16
4	HDC RESUBMISSION 4	02.12.16
5	HDC RESUBMISSION 5	02.26.16

Job No 11526

DRAWN BY LC | CHECKED BY HD

DATE 02.26.16 | SCALE 1/4" = 1'-0"

SHEET No **A2.2**

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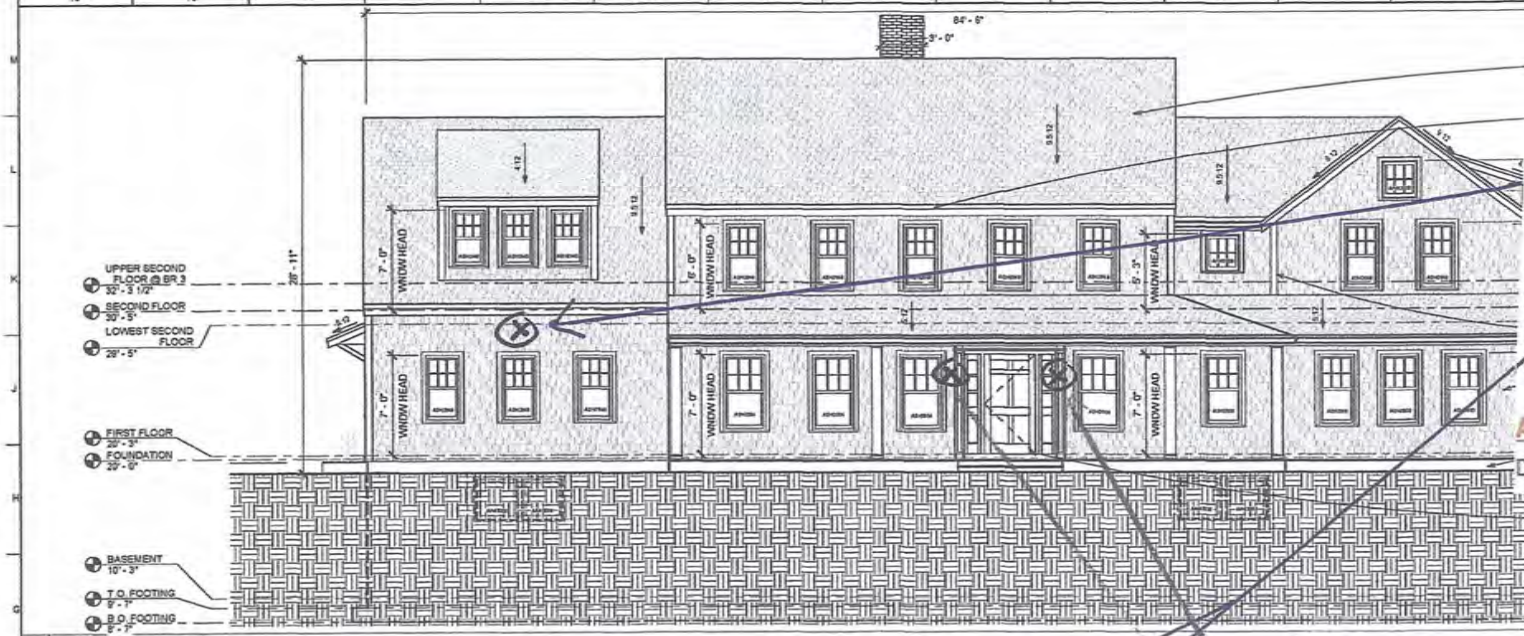
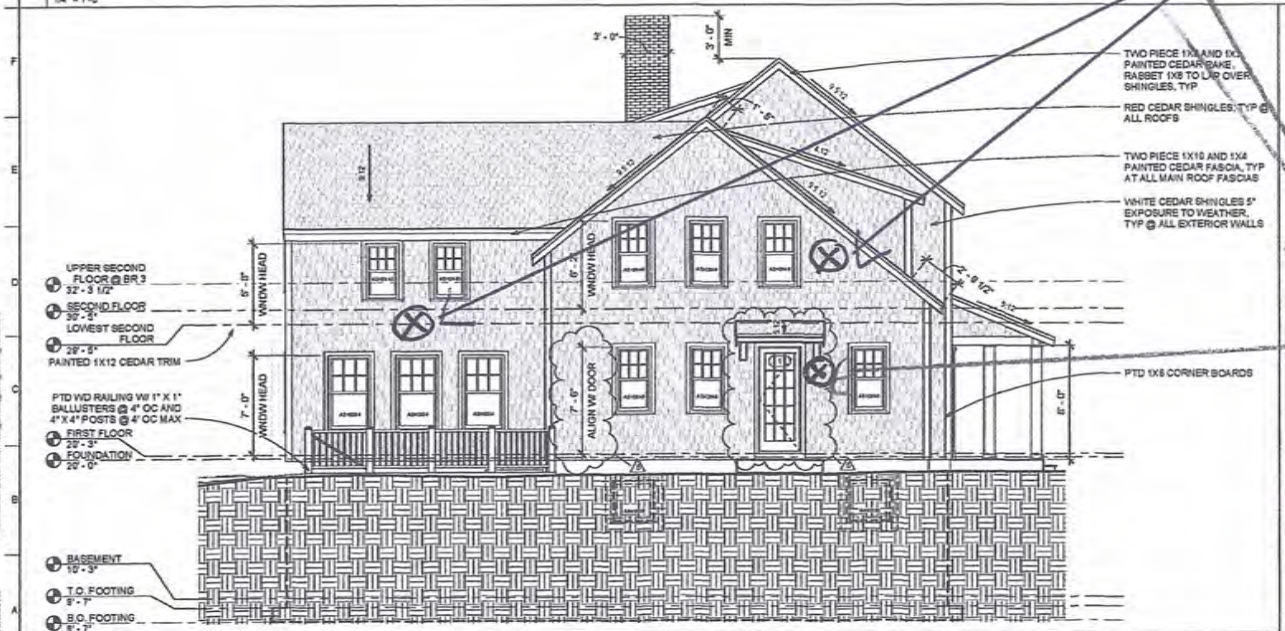
2/26/2016 2:16:11 PM



G16 MAIN HOUSE EAST ELEVATION
1/8" = 1'-0"

Acclaim Lighting LFL2

Dual Head LED Flood Light with Clear Glass



A16 MAIN HOUSE SOUTH ELEVATION
1/4" = 1'-0"

WINDOW SCHEDULE MAIN HOUSE

Kichler 9023

Seaside Single Light 14" Tall Outdoor Wall Sconce

Our Price: $82.00 - $94.00

LINDSAY RESIDENCE

#15 PIPPEN'S WAY

MAIN HOUSE ELEVATIONS 1

#	ISSUE	DATE
1	HDC RESUBMISSION	11.20.15
2	HDC RESUBMISSION 2	12.22.15
3	HDC RESUBMISSION 3	02.02.16
4	HDC RESUBMISSION 4	02.16.16
5	HDC RESUBMISSION 5	02.25.16

Job No 11526

DRAWN BY LC | CHECKED BY HD

DATE 02.25.16 | SCALE 1/4" = 1'-0"

SHEET No **A2.1**

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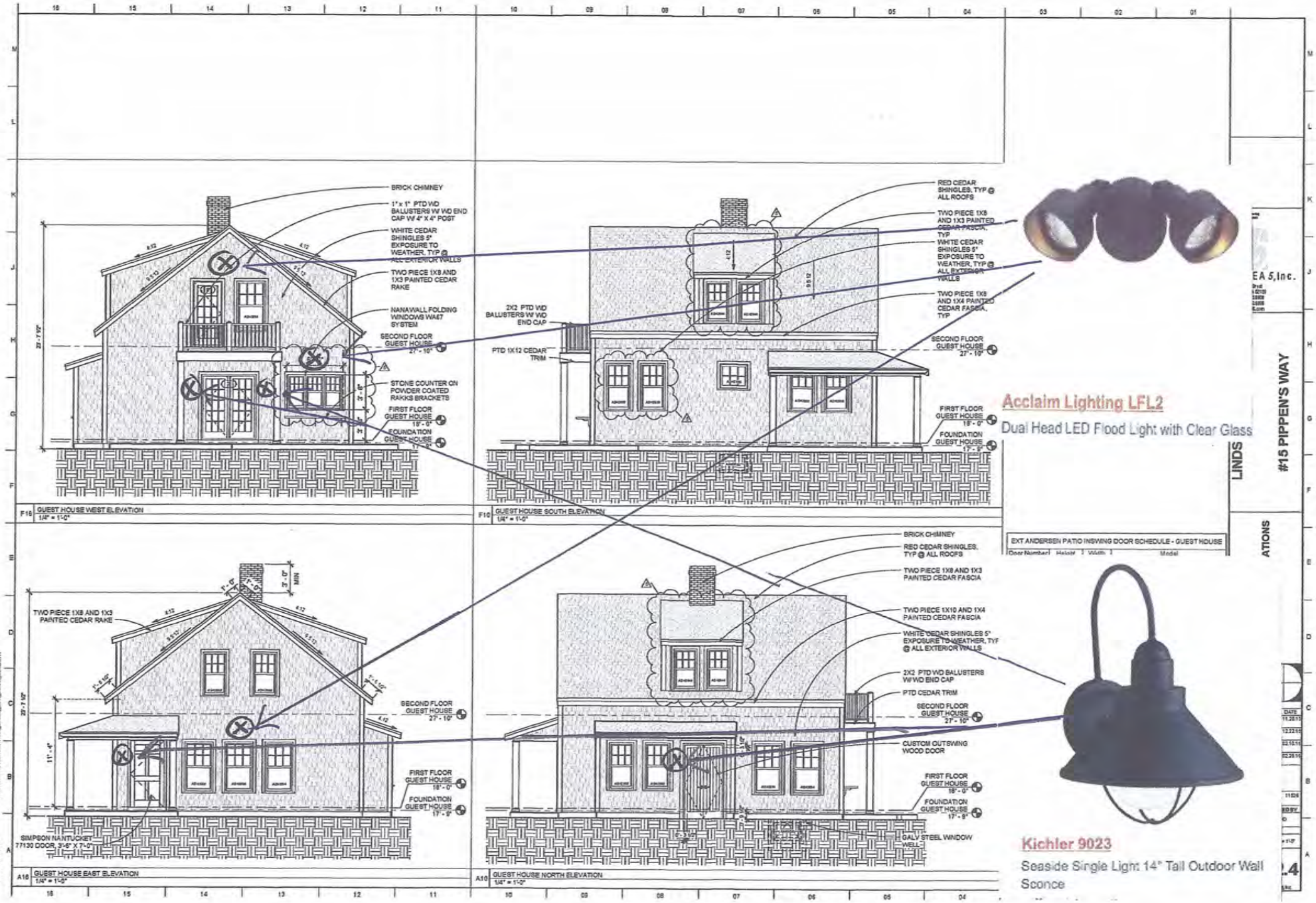

BRICK CHIMNEY
1" x 1" PTD WD BALUSTERS W/ WD END CAP W/ 4" X 4" POST
WHITE CEDAR SHINGLES 5" EXPOSURE TO WEATHER, TYP @ ALL EXTERIOR WALLS
TWO PIECE 1X8 AND 1X3 PAINTED CEDAR RAKE
NANAWALL FOLDING WINDOWS WA67 SYSTEM
SECOND FLOOR GUEST HOUSE 27' - 10"
STONE COUNTER ON POWDER COATED RAKKS BRACKETS
FIRST FLOOR GUEST HOUSE 18' - 0"
FOUNDATION GUEST HOUSE 17' - 9"
23' - 7 1/2"
F16 GUEST HOUSE WEST ELEVATION 1/4" = 1'-0"
RED CEDAR SHINGLES, TYP @ ALL ROOFS
TWO PIECE 1X8 AND 1X3 PAINTED CEDAR FASCIA, TYP
WHITE CEDAR SHINGLES 5" EXPOSURE TO WEATHER, TYP @ ALL EXTERIOR WALLS
TWO PIECE 1X8 AND 1X4 PAINTED CEDAR FASCIA, TYP
2X2 PTD WD BALUSTERS W/ WD END CAP
PTD 1X12 CEDAR TRIM
SECOND FLOOR GUEST HOUSE 27' - 10"
FIRST FLOOR GUEST HOUSE 18' - 0"
FOUNDATION GUEST HOUSE 17' - 9"
F10 GUEST HOUSE SOUTH ELEVATION 1/4" = 1'-0"
TWO PIECE 1X8 AND 1X3 PAINTED CEDAR RAKE
2' - 0"
2' - 0"
27' - 0" MIN
SECOND FLOOR GUEST HOUSE 27' - 10"
FIRST FLOOR GUEST HOUSE 18' - 0"
FOUNDATION GUEST HOUSE 17' - 9"
SIMPSON NANTUCKET 77130 DOOR, 3'-6" X 7'-0"
A16 GUEST HOUSE EAST ELEVATION 1/4" = 1'-0"
BRICK CHIMNEY
RED CEDAR SHINGLES, TYP @ ALL ROOFS
TWO PIECE 1X8 AND 1X3 PAINTED CEDAR FASCIA
TWO PIECE 1X10 AND 1X4 PAINTED CEDAR FASCIA
WHITE CEDAR SHINGLES 5" EXPOSURE TO WEATHER, TYP @ ALL EXTERIOR WALLS
2X2 PTD WD BALUSTERS W/ WD END CAP
PTD CEDAR TRIM
SECOND FLOOR GUEST HOUSE 27' - 10"
CUSTOM OUTSWING WOOD DOOR
FIRST FLOOR GUEST HOUSE 18' - 0"
FOUNDATION GUEST HOUSE 17' - 9"
GALV STEEL WINDOW WELL
A10 GUEST HOUSE NORTH ELEVATION 1/4" = 1'-0"
Acclaim Lighting LFL2
Dual Head LED Flood Light with Clear Glass
EXT ANDERSEN PATIO INSWING DOOR SCHEDULE - GUEST HOUSE
Door Number | Height | Width | Model
Kichler 9023
Seaside Single Light 14" Tall Outdoor Wall Sconce
#15 PIPPEN'S WAY
LINDS
ATIONS
EA 5, Inc.

Millennium Lighting RWHS14-RGN22

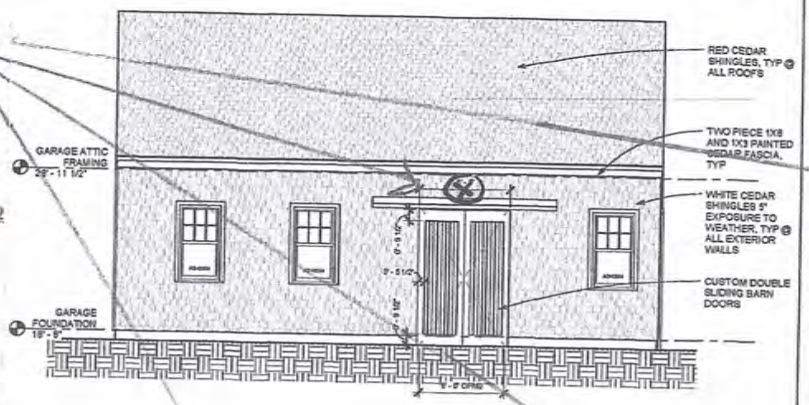
R Series 1 Light Outdoor Wall Sconce with Dark Sky Compliant 14" Warehouse Shade and 21.5" Gooseneck Stem

Our Price: $115.80

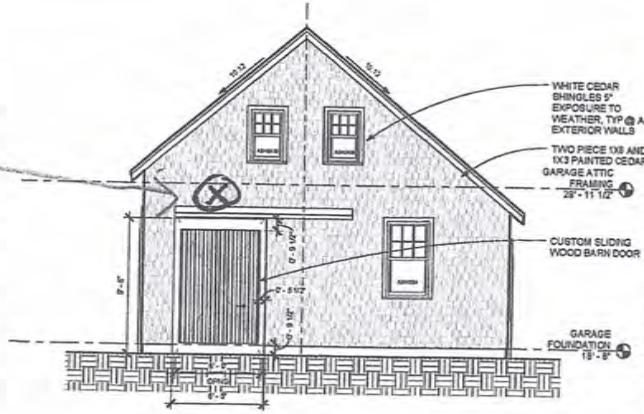
You Save: 31%

» R Series Collection

» Available in 6 Finishes

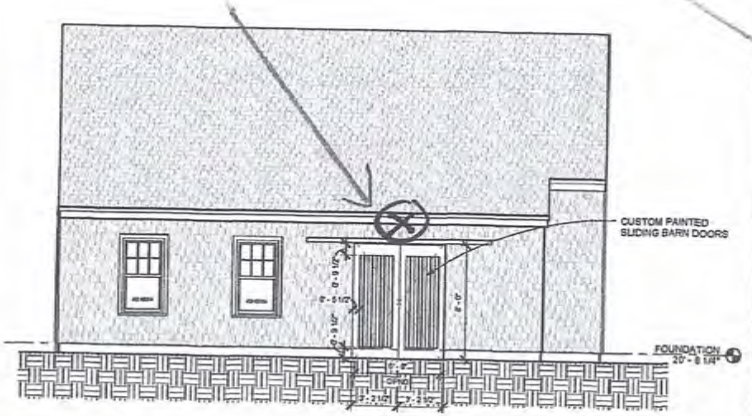


F13 GARAGE ELEVATION - NORTH
1/4" = 1'-0"

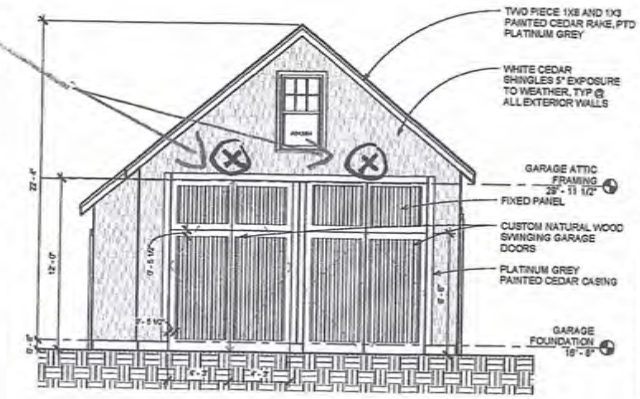


F06 GARAGE ELEVATION -WEST
1/4" = 1'-0"

WINDOW SCHEDULE - GARAGE			
Designation	Rough Width	Rough Height	Model
ADH2438	2' - 4"	3' - 8"	A-Series Double Hung
ADH3054	3' - 0"	5' - 4"	A-Series Double Hung



A13 GARAGE ELEVATION -SOUTH
1/4" = 1'-0"



A06 GARAGE ELEVATION - EAST
1/4" = 1'-0"

ALL WINDOWS TO BE ANDERSEN A SERIES PLATINMUM GREY CLAD WINDOWS W/ SIMULATED DIVIDED LITES, UNO. ALL TRIM TO BE PLATINUM GREY.

1X4 CEDAR CASING AT ALL WINDOWS & DOORS OR UNLESS SHOWN AS CONTINUOUS BETWEEN OPENINGS

SEE ELEVATIONS FOR MUNTIN LAYOUTS

CONTRACTOR TO FABRICATE REMOVABLE PLYWD STORM PANELS AS REQUIRED BY LOCAL OFFICIALS AT ALL WINDOWS

ALL EXTERIOR DOORS TO BE ANDERSEN PATIO INSWING DOORS, UNO. DOUBLE DOORS TO HAVE ASTRAGAL ATTACHED TO DOOR LEAF

LINEA 5, Inc.

LINDSAY RESIDENCE

#15 PIPPEN'S WAY

GARAGE ELEVATIONS

#	ISSUE	DATE
4	HDC RESUBMISSION 4	02.12.10

Job No	11026
DRAWN BY: LC	CHECKED BY: HD
DATE: 02.29.10	SCALE: 1/4" = 1'-0"

SHEET No A2.3

Copyright © 2010 Linea 5 Inc

2/22/2010 2:10:18 PM C:\Users\owner\Documents\11026_Lindsay_2010_revised_kohlsen.rvt

INFILTRATOR®
water technologies

Quick4™ PLUS
CHAMBER SYSTEMS

The Quick4® Plus Equalizer 36 Low Profile (LP) Chamber

Quick4 Plus™ Series

The Quick4 Plus Equalizer 36 Low Profile (LP) offers maximum strength through its two center structural columns. This chamber can be installed in a 24-inch-wide trench. It is 4 inches shorter in height than other Equalizer 36 model chambers, allowing for shallower installation. Like the original line of Quick4 chambers, it offers advanced contouring capability with its Contour Swivel Connection™, which permits turns up to 15°, right or left. The Quick4 Plus All-in-One 8 and Quick4 Plus Endcaps provide increased flexibility in system design and configurations.

Maximum Strength

Quick4 Plus Equalizer 36 LP Chamber Specifications

Size 22”W x 53”L x 8”H (559 mm x 1346 mm x 203 mm)
Effective Length 48” (1219 mm)
Louver Height 6.3” (160 mm)
Storage Capacity 20 gal (76 L)
Invert Height 3.3” (84 mm), 9.6” (244 mm)

Quick4 Plus Equalizer 36 Low Profile (LP) Chamber Benefits:

- Low profile design makes this chamber ideal for shallow applications
- Reduces imported fill needed for cap and fill systems
- Two center structural columns offer superior strength
- Advanced contouring connections
- Latching mechanism allows for quick installation
- Four-foot chamber lengths are easy to handle and install
- Supports wheel loads of 16,000 lbs/axle with 12” of cover

Quick4 Plus All-in-One Periscope Benefits:

- Allows for raised invert installations
- 180° directional inletting
- 12” raised invert is ideal for serial applications

Quick4 Plus All-in-One 8 Endcap Benefits:

- May be used at the end of chamber row for an inlet/outlet or can be installed mid-trench
- Mid-trench connection feature allows center feed inletting of chamber rows
- Center-feed connection allows for easy installation of serial distribution systems
- Variable pipe connection options allow for side, end or top inletting
- Piping drill points are set for gravity or pressure pipe

Quick4 Plus Endcap Benefits:

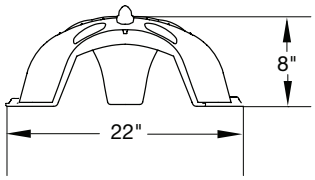
- Simple, flat design
- Allows installation of a pipe from the end only
- Piping drill points are set for gravity or pressure pipe

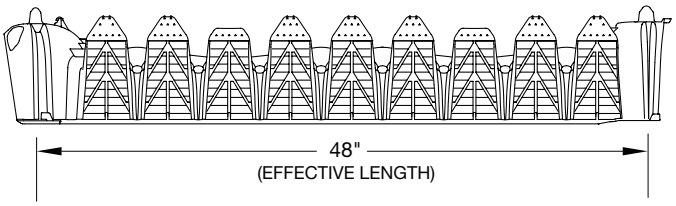
Certified by the International Association of Plumbing and Mechanical Officials (IAPMO)

IAPMO R&T

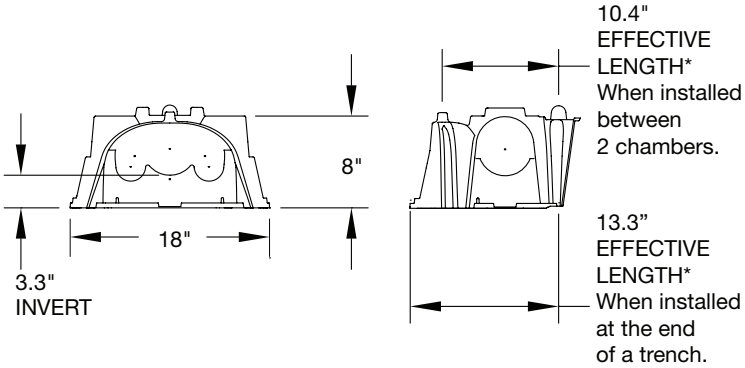
APPROVED in _____

Quick4 Plus Equalizer 36 Low Profile Chamber

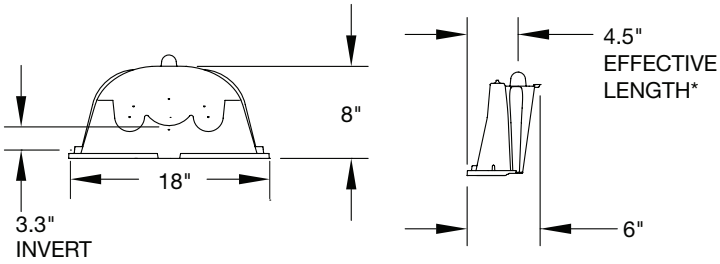




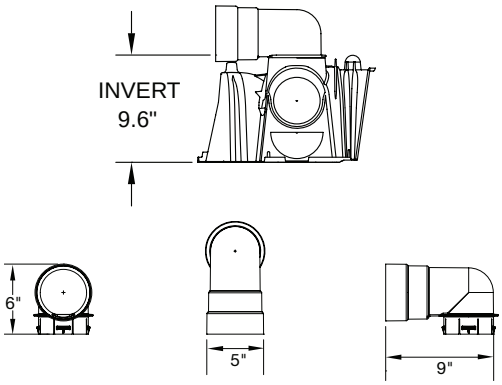
Quick4 Plus All-in-One 8 Endcap



Quick4 Plus Endcap



Quick4 Plus All-in-One Periscope



INFILTRATOR WATER TECHNOLOGIES STANDARD LIMITED WARRANTY

(a) The structural integrity of each chamber, endcap and other accessory manufactured by Infiltrator ("Units"), when installed and operated in a leachfield of an onsite septic system in accordance with Infiltrator's instructions, is warranted to the original purchaser ("Holder") against defective materials and workmanship for one year from the date that the septic permit is issued for the septic system containing the Units; provided, however, that if a septic permit is not required by applicable law, the warranty period will begin upon the date that installation of the septic system commences. To exercise its warranty rights, Holder must notify Infiltrator in writing at its Corporate Headquarters in Old Saybrook, Connecticut within fifteen (15) days of the alleged defect. Infiltrator will supply replacement Units for Units determined by Infiltrator to be covered by this Limited Warranty. Infiltrator's liability specifically excludes the cost of removal and/or installation of the Units.

(b) THE LIMITED WARRANTY AND REMEDIES IN SUBPARAGRAPH (a) ARE EXCLUSIVE. THERE ARE NO OTHER WARRANTIES WITH RESPECT TO THE UNITS, INCLUDING NO IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE

(c) This Limited Warranty shall be void if any part of the chamber system is manufactured by anyone other than Infiltrator. The Limited Warranty does not extend to incidental, consequential, special or indirect damages. Infiltrator shall not be liable for penalties or liquidated damages, including loss of production and profits, labor and materials, overhead costs, or other losses or expenses incurred by the Holder or any third party. Specifically excluded from Limited Warranty coverage are damage to the Units due to ordinary wear and tear, alteration, accident, misuse, abuse or neglect of the Units; the Units being subjected to vehicle traffic or other conditions which are not permitted by the installation instructions; failure to maintain the minimum ground covers set forth in the installation instructions; the placement of improper materials into the system containing the Units; failure of the Units or the septic system due to improper siting or improper sizing, excessive water usage, improper grease disposal, or improper operation; or any other event not caused by Infiltrator. This Limited Warranty shall be void if the Holder fails to comply with all of the terms set forth in this Limited Warranty. Further, in no event shall Infiltrator be responsible for any loss or damage to the Holder, the Units, or any third party resulting from installation or shipment, or from any product liability claims of Holder or any third party. For this Limited Warranty to apply, the Units must be installed in accordance with all site conditions required by state and local codes; all other applicable laws; and Infiltrator's installation instructions.

(d) No representative of Infiltrator has the authority to change or extend this Limited Warranty. No warranty applies to any party other than the original Holder.

The above represents the Standard Limited Warranty offered by Infiltrator. A limited number of states and counties have different warranty requirements. Any purchaser of Units should contact Infiltrator's Corporate Headquarters in Old Saybrook, Connecticut, prior to such purchase, to obtain a copy of the applicable warranty, and should carefully read that warranty prior to the purchase of Units.

INFILTRATOR® water technologies

4 Business Park Road
P.O. Box 768
Old Saybrook, CT 06475
860-577-7000 • Fax 860-577-7001
1-800-221-4436
www.infiltratorwater.com

U.S. Patents: 4,759,661; 5,017,041; 5,156,488; 5,336,017; 5,401,116; 5,401,459; 5,511,903; 5,716,163; 5,588,778; 5,839,844 Canadian Patents: 1,329,959; 2,004,564 Other patents pending.
Infiltrator, Equalizer, Quick4, and SideWinder are registered trademarks of Infiltrator Water Technologies. Infiltrator is a registered trademark in France. Infiltrator Water Technologies is a registered trademark in Mexico.
Contour, MicroLeaching, PolyTuff, ChamberSpacer, MultiPort, PosiLock, QuickCut, QuickPlay, SnapLock and StraightLock are trademarks of Infiltrator Water Technologies.
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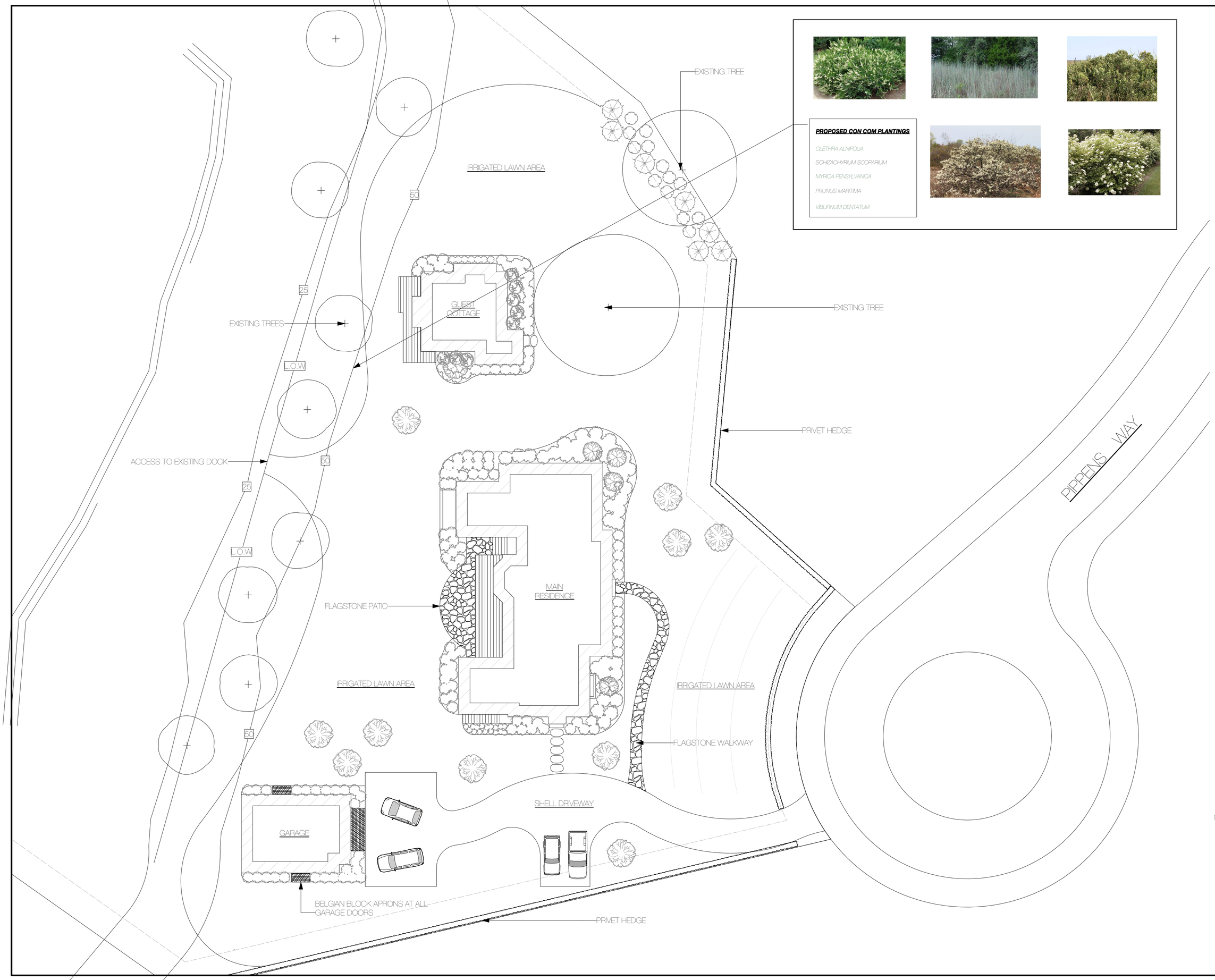


PROPOSED CON COM PLANTINGS

CLETHRA ALNIFOLIA
SCHIZACHYRIUM SCOPARIUM
MYRICA PENSYLVANICA
PRUNUS MARITIMA
VIBURNUM DENTATUM

EDGEWATER
LANDSCAPE DESIGN

Suite 150
2 Greglen Ave
Nantucket MA 02554
(508) 274.5686

Lindsay Residence

15 Pippens Way. Nantucket, MA

landscape design plan 1

SCALE:	1.0"=20.0'
MAP & PARCEL:	43 94.3
DRAFTED BY:	PJC
PROJECT:	9912.0
DATE:	4/13/2016

REVISIONS:

Designs and drawings are property of EDGEWATER LANDSCAPE DESIGN INC. and may not be used without express autorization. All applicable copyright laws can and will be enforced.

L-1

43–94.2
11 PIPPEN'S WAY
L.C. LOT 22

529.49'

82.08'

365.25'

184.53'

194.70'

717.30'

234.72'

64.26'

79.05'

65.30'

67.96'

50'

25'

100'

100' BUFFER

EVERGREEN

MAPLE TREE

PIPPEN'S WAY

EXIST. SHELL SURFACE

EXIST. GRANITE CURB

SRF

R=80.00'

PROPOSED STRUCTURE (B)

PROPOSED STRUCTURE (A)

PROPOSED STRUCTURE (C)

SEPTIC LEACH FIELD

PROPOSED DRIVEWAY

EXIST. SPLIT RAIL FENCE (SRF TYP)

NHESP LIMIT OF WORK

25' WETLAND SETBACK

50' WETLAND SETBACK

EXISTING EDGE OF POND MEASURED 08-06-15

EXIST. WOOD DOCK

MAINTAIN PATH TO DOCK

POND
WETLAND "B"

WLF#B2
WLF#B3
WLF#B4
WLF#B5
WLF#B6
WLF#B7
WLF#B8
WLF#B9
WLF#B10
WLF#B11
WLF#B12
WLF#B13
WLF#B14
WLF#B15

NOTE:
WETLAND BOUNDARY DELINEATED BY DONALD SCHALL.

EXISTING WELL

NHESP FILE No. 07–21275 LIMIT OF WORK

43–303
N/F
TIMOTHY J. RUSSERT
MARITAL TRUST

43–302
N/F
TIMOTHY J. RUSSERT
MARITAL TRUST

43–94.9
20 PIPPEN'S WAY
L.C. LOT 17

LEGEND

- CONCRETE BOUND/DRILL HOLE
- 28 — EXISTING CONTOURS
- 19.3x EXISTING SPOT ELEVATION
- 18 — PROPOSED CONTOURS
- PROPOSED SILT FENCE

NOTE:
ALL STRUCTURES WILL BE EQUIPPED WITH ROOF GUTTERS AND DOWNSPOUTS. DOWNSPOUTS WILL BE CONNECTED TO SUBSURFACE INFILTRATION CHAMBERS.

OWNER INFORMATION

RONALD M. LINDSAY &
NANCY S. LINDSAY
CERT. OF TITLE #25496
L.C.C. 12268–E, LOT 21
ASSESSOR'S MAP 43, PARCEL 94.3
#15 PIPPEN'S WAY

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

SITE PLAN OF LAND TO ACCOMPANY A NOTICE OF INTENT

PREPARED FOR

RONALD M. LINDSAY &
NANCY S. LINDSAY
#15 PIPPEN'S WAY

Lot Created: NOVEMBER 2014

CHECKED BY ADG/JLB	ASSESSOR MAP: 43 PARCEL: 94.3	
DESIGNED BY CLR	DRAWN BY CLR	DATE 04/29/2016
SCALE AS NOTED	JOB NO. B8062	REVISED: 05/26/2016

BLACKWELL & ASSOCIATES, INC.
20 TEASDALE CIRCLE – NANTUCKET, MA 02554
(508)228–9026 FAX (508)228–5292

B8062

T:\LEO 25 JOB 45
V:\DRAWFILES\B8062\NOI.dwg 5/26/2016 3:25:59 PM EDT

Knight

12 E Lincoln Ave

(42.4.1-47)

SE48-2889

NOTICE OF INTENT APPLICATION

For

Construction of a

Single-Family Home

At

12 EAST LINCOLN AVENUE

Nantucket, MA

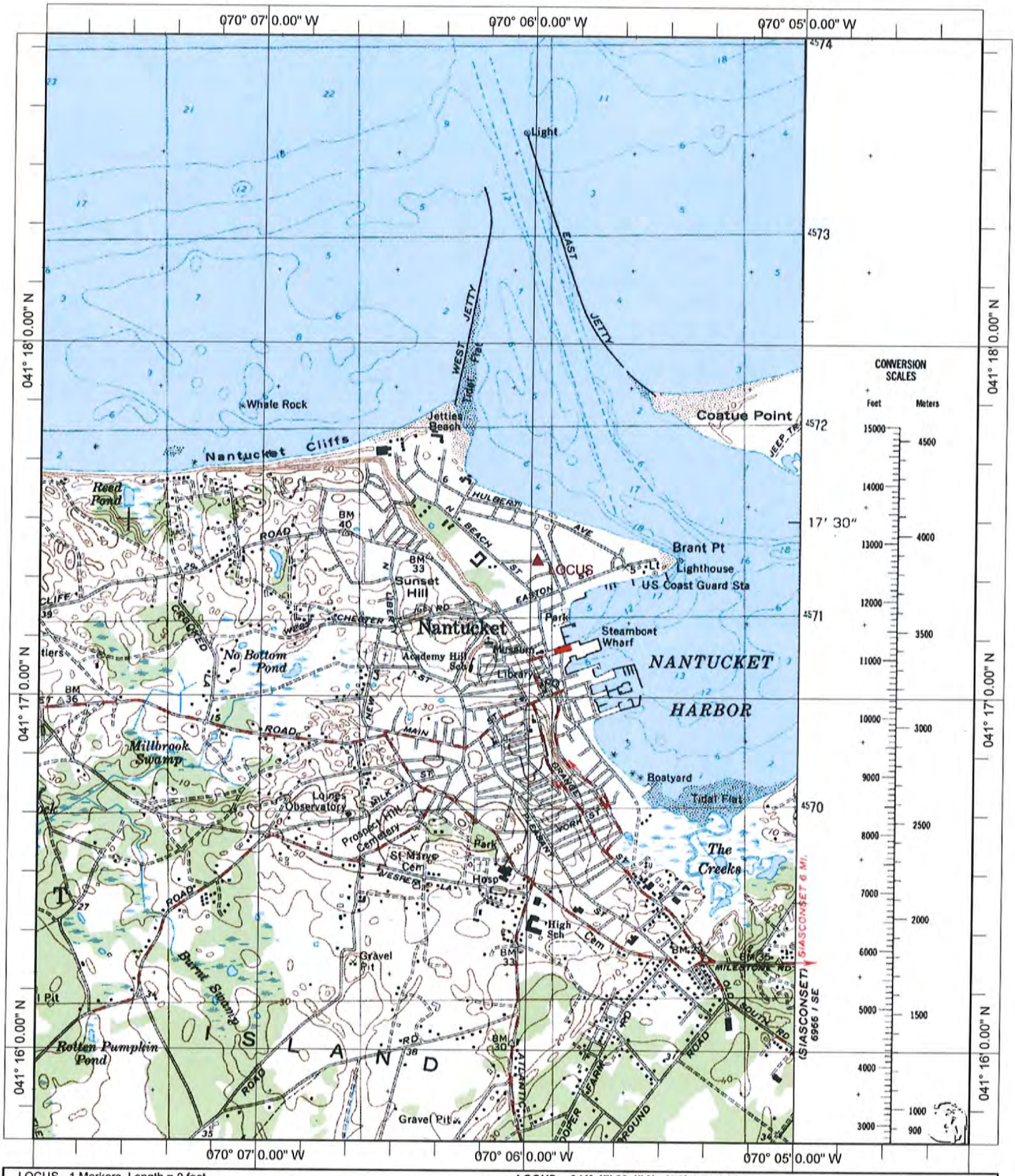
APRIL 2016

Prepared For

ROBERT A. KNIGHT

By

BLACKWELL & ASSOCIATES, Inc.
Professional Civil Engineers & Land Surveyors
20 Teasdale Circle
Nantucket, MA 02554
508-228-9026



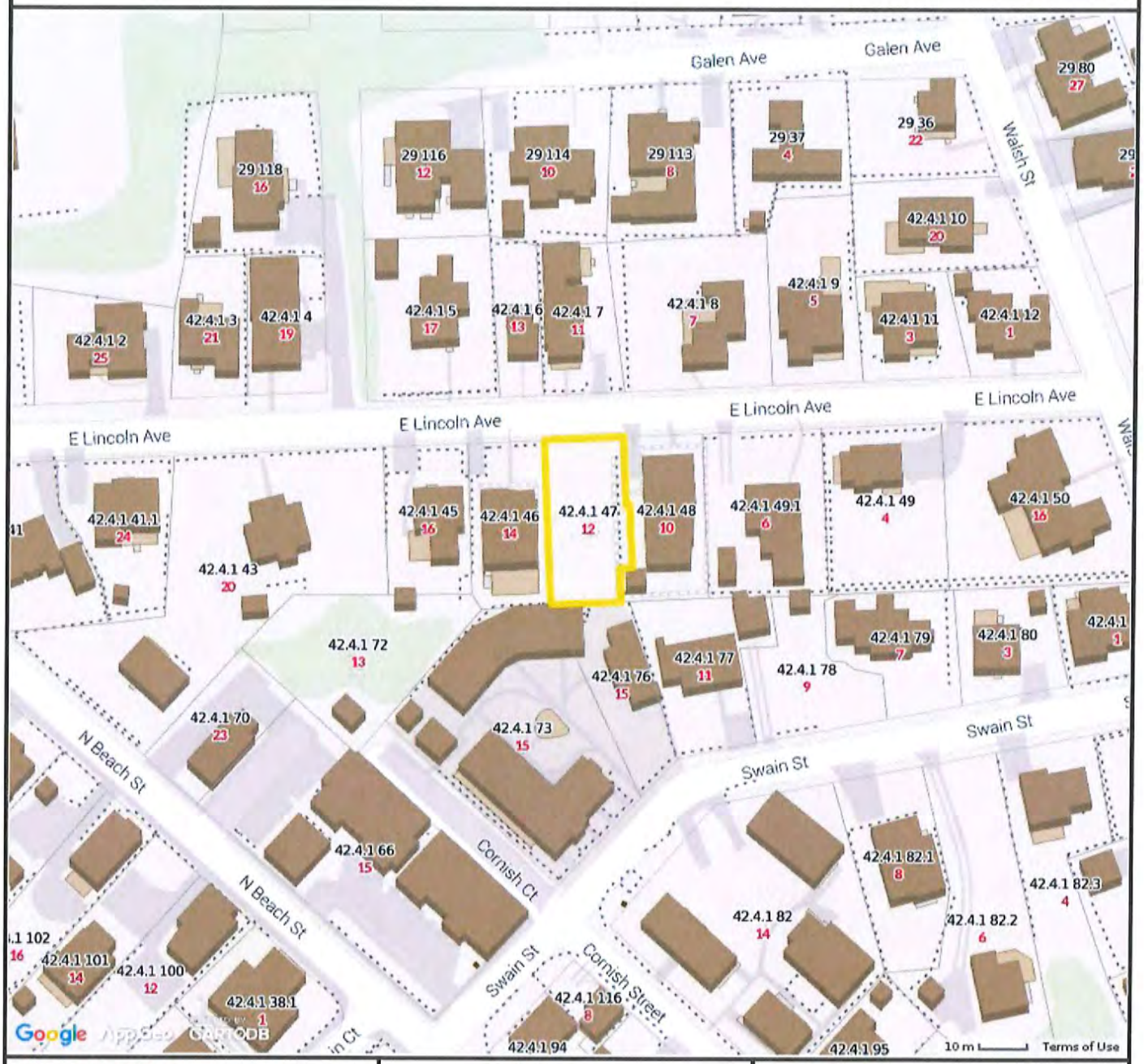
LOCUS - 1 Markers, Length = 0 feet

LOCUS - 041° 17' 23.1" N, 070° 05' 58.4" W

Name: NANTUCKET
Date: 4/28/116
Scale: 1 inch equals 2000 feet

Location: 041° 17' 18.4" N 070° 06' 05.0" W
Caption: #12 East Lincoln Ave.

Copyright (C) 1997, Maptech, Inc.



Property Information

Property ID	42.4.1 47
Location	12 E LINCOLN AV
Owner	KNIGHT ROBERT A ETAL TRUSTEES

MAP FOR REFERENCE ONLY
NOT A LEGAL DOCUMENT

Town and County of Nantucket, MA makes no claims and no warranties, expressed or implied, concerning the validity or accuracy of the GIS data presented on this map.

Parcels updated December, 2014
Properties updated January, 2015

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WPA Form 3 – Notice of Intent

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40
And the Town of Nantucket Wetlands Bylaw Chapter 136

Provided by MassDEP:

MassDEP File Number

Document Transaction Number

NANTUCKET
City/Town

A. General Information

1. Project Location (**Note:** electronic filers will click on button to locate project site):

12 E. Lincoln Avenue
a. Street Address

Nantucket
b. City/Town

02554
c. Zip Code

Latitude and Longitude:

41d 17' 22.93"
d. Latitude

70d 05' 58.33"
e. Longitude

42.4.1
f. Assessors Map/Plat Number

47
g. Parcel /Lot Number

2. Applicant:

Robert
a. First Name

Knight, Trustee of Knight Realty Trust
b. Last Name

c. Organization

63 Bay State Rd
d. Street Address

Boston
e. City/Town

MA
f. State

02115
g. Zip Code

781-254-0144
h. Phone Number

i. Fax Number

Rknight2@gmail.com
j. Email Address

3. Property owner (required if different from applicant): ☐ Check if more than one owner

a. First Name

b. Last Name

c. Organization

d. Street Address

e. City/Town

f. State

g. Zip Code

h. Phone Number

i. Fax Number

j. Email address

4. Representative (if any):

Jeffrey L.
a. First Name

Blackwell, PLS
b. Last Name

Blackwell & Associates, Inc.
c. Company

20 Teasdale Circle
d. Street Address

Nantucket
e. City/Town

MA
f. State

02554
g. Zip Code

508-228-9026 x11
h. Phone Number

508-228-5292
i. Fax Number

Jeff@blackwellsurvey.com
j. Email address

5. Total WPA Fee Paid (from NOI Wetland Fee Transmittal Form):

$500 + $25 + $200
a. Total Fee Paid

$237.50
b. State Fee Paid

$262.50 + $25 + $200
c. City/Town Fee Paid

A. General Information (continued)

6. General Project Description: Construction of a single family home.

   The Applicant proposes to build a home on a vacant lot, including associated landscaping.

   Please refer to the attached Project Narrative and Site Plan for additional information.

7a. Project Type Checklist:

1. ☒ Single Family Home
2. ☐ Residential Subdivision
3. ☐ Limited Project Driveway Crossing
4. ☐ Commercial/Industrial
5. ☐ Dock/Pier
6. ☐ Utilities
7. ☐ Coastal Engineering Structure
8. ☐ Agriculture (e.g., cranberries, forestry)
9. ☐ Transportation
10. ☐ Other

7b. Is any portion of the proposed activity eligible to be treated as a limited project subject to 310 CMR 10.24 (coastal) or 310 CMR 10.53 (inland)?

1. ☐ Yes ☒ No If yes, describe which limited project applies to this project:

2. Limited Project

8. Property recorded at the Registry of Deeds for:

NANTUCKET	
a. County	b. Certificate # (if registered land)
642	01
c. Book	d. Page Number

B. Buffer Zone & Resource Area Impacts (temporary & permanent)

1. ☐ Buffer Zone Only – Check if the project is located only in the Buffer Zone of a Bordering Vegetated Wetland, Inland Bank, or Coastal Resource Area.
2. ☐ Inland Resource Areas (see 310 CMR 10.54-10.58; if not applicable, go to Section B.3, Coastal Resource Areas).

   Check all that apply below. Attach narrative and any supporting documentation describing how the project will meet all performance standards for each of the resource areas altered, including standards requiring consideration of alternative project design or location.

For all projects affecting other Resource Areas, please attach a narrative explaining how the resource area was delineated.

Resource Area	Size of Proposed Alteration	Proposed Replacement (if any)
a. ☐ Bank	1. linear feet	2. linear feet
b. ☐ Bordering Vegetated Wetland	1. square feet	2. square feet
c. ☐ Land Under Waterbodies and Waterways	1. square feet 3. cubic yards dredged	2. square feet

B. Buffer Zone & Resource Area Impacts (temporary & permanent) (cont'd)

Resource Area	Size of Proposed Alteration	Proposed Replacement (if any)
d. ☐ Bordering Land Subject to Flooding	1. square feet	2. square feet
	3. cubic feet of flood storage lost	4. cubic feet replaced
e. ☐ Isolated Land Subject to Flooding	1. square feet	
	2. cubic feet of flood storage lost	3. cubic feet replaced
f. ☐ Riverfront Area	1. Name of Waterway (if available)	

2. Width of Riverfront Area (check one):

☐ 25 ft. - Designated Densely Developed Areas only

☐ 100 ft. - New agricultural projects only

☐ 200 ft. - All other projects

3. Total area of Riverfront Area on the site of the proposed project: _____ square feet

4. Proposed alteration of the Riverfront Area:

a. total square feet _____ b. square feet within 100 ft. _____ c. square feet between 100 ft. and 200 ft. _____

5. Has an alternatives analysis been done and is it attached to this NOI? ☐ Yes ☐ No

6. Was the lot where the activity is proposed created prior to August 1, 1996? ☐ Yes ☐ No

3. ☒ Coastal Resource Areas: (See 310 CMR 10.25-10.35)

Check all that apply below. Attach narrative and supporting documentation describing how the project will meet all performance standards for each of the resource areas altered, including standards requiring consideration of alternative project design or location.

Online Users: Include your document transaction number (provided on your receipt page) with all supplementary information you submit to the Department.

Resource Area	Size of Proposed Alteration	Proposed Replacement (if any)
a. ☐ Designated Port Areas	Indicate size under Land Under the Ocean, below	
b. ☐ Land Under the Ocean	1. square feet	
	2. cubic yards dredged	
c. ☐ Barrier Beach	Indicate size under Coastal Beaches and/or Coastal Dunes below	
d. ☐ Coastal Beaches	1. square feet	2. cubic yards beach nourishment
e. ☐ Coastal Dunes	1. square feet	2. cubic yards dune nourishment

B. Buffer Zone & Resource Area Impacts (temporary & permanent) (cont'd)

		Size of Proposed Alteration	Proposed Replacement (if any)
f. ☐	Coastal Banks	1. linear feet	
g. ☐	Rocky Intertidal Shores	1. square feet	
h. ☐	Salt Marshes	1. square feet	2. sq ft restoration, rehab., creation
i. ☐	Land Under Salt Ponds	1. square feet 2. cubic yards dredged	
j. ☐	Land Containing Shellfish	1. square feet	
k. ☐	Fish Runs	Indicate size under Coastal Banks, inland Bank, Land Under the Ocean, and/or inland Land Under Waterbodies and Waterways, above 1. cubic yards dredged	
l. ☒	Land Subject to Coastal Storm Flowage	1,496 1. square feet	

4. ☐ Restoration/Enhancement
If the project is for the purpose of restoring or enhancing a wetland resource area in addition to the square footage that has been entered in Section B.2.b or B.3.h above, please enter the additional amount here.

a. square feet of BVW | b. square feet of Salt Marsh

5. ☐ Project Involves Stream Crossings

a. number of new stream crossings | b. number of replacement stream crossings

C. Other Applicable Standards and Requirements

Streamlined Massachusetts Endangered Species Act/Wetlands Protection Act Review

1. Is any portion of the proposed project located in **Estimated Habitat of Rare Wildlife** as indicated on the most recent Estimated Habitat Map of State-Listed Rare Wetland Wildlife published by the Natural Heritage and Endangered Species Program (NHESP)? To view habitat maps, see the *Massachusetts Natural Heritage Atlas* or go to http://www.mass.gov/dfwele/dfw/nhesp/regulatory_review/priority_habitat/online_viewer.htm.

a. ☐ Yes ☒ No **If yes, include proof of mailing or hand delivery of NOI to:**

Natural Heritage and Endangered Species Program
Division of Fisheries and Wildlife
Route 135, North Drive
Westborough, MA 01581

2008
b. Date of map

C. Other Applicable Standards and Requirements (cont'd)

If *yes*, the project is also subject to Massachusetts Endangered Species Act (MESA) review (321 CMR 10.18). To qualify for a streamlined, 30-day, MESA/Wetlands Protection Act review, please complete Section C.1.C, and include requested materials with this Notice of Intent (NOI); *OR* complete Section C.1.d, if applicable. *If MESA supplemental information is not included with the NOI, by completing Section 1 of this form, the NHESP will require a separate MESA filing which may take up to 90 days to review (unless noted exceptions in Section 2 apply, see below).*

1. c. Submit Supplemental Information for Endangered Species Review*

   1. ☐ Percentage/acreage of property to be altered:

      (a) within wetland Resource Area _____ percentage/acreage

      (b) outside Resource Area _____ percentage/acreage

   2. ☐ Assessor's Map or right-of-way plan of site

   3. ☐ Project plans for entire project site, including wetland resource areas and areas outside of wetlands jurisdiction, showing existing and proposed conditions, existing and proposed tree/vegetation clearing line, and clearly demarcated limits of work ****

      (a) ☐ Project description (including description of impacts outside of wetland resource area & buffer zone)

      (b) ☐ Photographs representative of the site

      (c) ☐ MESA filing fee (fee information available at: http://www.mass.gov/dfwele/dfw/nhesp/regulatory_review/mesa/mesa_fee_schedule.htm). Make check payable to "Commonwealth of Massachusetts - NHESP" and ***mail to NHESP*** at above address

      *Projects altering **10 or more acres** of land, also submit:*

      (d) ☐ Vegetation cover type map of site

      (e) ☐ Project plans showing Priority & Estimated Habitat boundaries

   d. OR Check One of the Following

      1. ☐ Project is exempt from MESA review.
         Attach applicant letter indicating which MESA exemption applies. (See 321 CMR 10.14, http://www.mass.gov/dfwele/dfw/nhesp/regulatory_review/mesa/mesa_exemptions.htm; the NOI must still be sent to NHESP if the project is within estimated habitat pursuant to 310 CMR 10.37 and 10.59.)

      2. ☐ Separate MESA review ongoing. _____ a. NHESP Tracking # _____ b. Date submitted to NHESP

---

* Some projects **not** in Estimated Habitat may be located in Priority Habitat, and require NHESP review (see http://www.mass.gov/dfwele/dfw/nhesp/nhesp.htm, regulatory review tab). Priority Habitat includes habitat for state-listed plants and strictly upland species not protected by the Wetlands Protection Act.

** MESA projects may not be segmented (321 CMR 10.16). The applicant must disclose full development plans even if such plans are not required as part of the Notice of Intent process.

C. Other Applicable Standards and Requirements (cont'd)

3. ☐ Separate MESA review completed.
Include copy of NHESP "no Take" determination or valid Conservation & Management Permit with approved plan.

2. For coastal projects only, is any portion of the proposed project located below the mean high water line or in a fish run?

a. ☒ Not applicable – project is in inland resource area only

b. ☐ Yes ☐ No If yes, include proof of mailing or hand delivery of NOI to either:

South Shore - Cohasset to Rhode Island, and the Cape & Islands:

Division of Marine Fisheries -
Southeast Marine Fisheries Station
Attn: Environmental Reviewer
1213 Purchase Street – 3rd Floor
New Bedford, MA 02740-6694

North Shore - Hull to New Hampshire:

Division of Marine Fisheries -
North Shore Office
Attn: Environmental Reviewer
30 Emerson Avenue
Gloucester, MA 01930

Also if yes, the project may require a Chapter 91 license. For coastal towns in the Northeast Region, please contact MassDEP's Boston Office. For coastal towns in the Southeast Region, please contact MassDEP's Southeast Regional Office.

3. Is any portion of the proposed project within an Area of Critical Environmental Concern (ACEC)?

a. ☐ Yes ☒ No If yes, provide name of ACEC (see instructions to WPA Form 3 or MassDEP Website for ACEC locations). **Note:** electronic filers click on Website.

b. ACEC

Online Users: Include your document transaction number (provided on your receipt page) with all supplementary information you submit to the Department.

4. Is any portion of the proposed project within an area designated as an Outstanding Resource Water (ORW) as designated in the Massachusetts Surface Water Quality Standards, 314 CMR 4.00?

a. ☐ Yes ☒ No

5. Is any portion of the site subject to a Wetlands Restriction Order under the Inland Wetlands Restriction Act (M.G.L. c. 131, § 40A) or the Coastal Wetlands Restriction Act (M.G.L. c. 130, § 105)?

a. ☐ Yes ☒ No

6. Is this project subject to provisions of the MassDEP Stormwater Management Standards?

a. ☐ Yes. Attach a copy of the Stormwater Report as required by the Stormwater Management Standards per 310 CMR 10.05(6)(k)-(q) and check if:

1. ☐ Applying for Low Impact Development (LID) site design credits (as described in Stormwater Management Handbook Vol. 2, Chapter 3)

2. ☐ A portion of the site constitutes redevelopment

3. ☐ Proprietary BMPs are included in the Stormwater Management System.

b. ☒ No. Check why the project is exempt:

1. ☒ Single-family house

C. Other Applicable Standards and Requirements (cont'd)

2. ☐ Emergency road repair

3. ☐ Small Residential Subdivision (less than or equal to 4 single-family houses or less than or equal to 4 units in multi-family housing project) with no discharge to Critical Areas.

D. Additional Information

Applicants must include the following with this Notice of Intent (NOI). See instructions for details.

Online Users: Attach the document transaction number (provided on your receipt page) for any of the following information you submit to the Department.

1. ☒ USGS or other map of the area (along with a narrative description, if necessary) containing sufficient information for the Conservation Commission and the Department to locate the site. (Electronic filers may omit this item.)

2. ☒ Plans identifying the location of proposed activities (including activities proposed to serve as a Bordering Vegetated Wetland [BVW] replication area or other mitigating measure) relative to the boundaries of each affected resource area.

3. ☒ Identify the method for BVW and other resource area boundary delineations (MassDEP BVW Field Data Form(s), Determination of Applicability, Order of Resource Area Delineation, etc.), and attach documentation of the methodology.

4. ☒ List the titles and dates for all plans and other materials submitted with this NOI.

Site Plan To Accompany Notice of Intent a. Plan Title	
Blackwell & Associates, Inc. b. Prepared By	Jeffrey L. Blackwell, PLS c. Signed and Stamped by
April 28, 2016 d. Final Revision Date	1"=10' e. Scale
Knight Residence by Emeritus Development Ltd. f. Additional Plan or Document Title	4/07/16 g. Date

5. ☐ If there is more than one property owner, please attach a list of these property owners not listed on this form.

6. ☐ Attach proof of mailing for Natural Heritage and Endangered Species Program, if needed.

7. ☐ Attach proof of mailing for Massachusetts Division of Marine Fisheries, if needed.

8. ☒ Attach NOI Wetland Fee Transmittal Form

9. ☐ Attach Stormwater Report, if needed.

E. Fees

1. ☐ Fee Exempt: No filing fee shall be assessed for projects of any city, town, county, or district of the Commonwealth, federally recognized Indian tribe housing authority, municipal housing authority, or the Massachusetts Bay Transportation Authority.

Applicants must submit the following information (in addition to pages 1 and 2 of the NOI Wetland Fee Transmittal Form) to confirm fee payment:

22383	04/28/2016
2. Municipal Check Number	3. Check date
22384	04/28/2016
4. State Check Number	5. Check date
Blackwell & Assoc., Inc.	
6. Payor name on check: First Name	7. Payor name on check: Last Name

F. Signatures and Submittal Requirements

I hereby certify under the penalties of perjury that the foregoing Notice of Intent and accompanying plans, documents, and supporting data are true and complete to the best of my knowledge. I understand that the Conservation Commission will place notification of this Notice in a local newspaper at the expense of the applicant in accordance with the wetlands regulations, 310 CMR 10.05(5)(a).

I further certify under penalties of perjury that all abutters were notified of this application, pursuant to the requirements of M.G.L. c. 131, § 40. Notice must be made by Certificate of Mailing or in writing by hand delivery or certified mail (return receipt requested) to all abutters within 100 feet of the property line of the project location.

Jeffrey L. Rhodes, Agent	04/29/2016
1. Signature of Applicant	2. Date
3. Signature of Property Owner (if different)	4. Date
Jeffrey L. Rhodes	04/29/2016
5. Signature of Representative (if any)	6. Date

For Conservation Commission:
Two copies of the completed Notice of Intent (Form 3), including supporting plans and documents, two copies of the NOI Wetland Fee Transmittal Form, and the city/town fee payment, to the Conservation Commission by certified mail or hand delivery.

For MassDEP:
One copy of the completed Notice of Intent (Form 3), including supporting plans and documents, one copy of the NOI Wetland Fee Transmittal Form, and a **copy** of the state fee payment to the MassDEP Regional Office (see Instructions) by certified mail or hand delivery.

Other:
If the applicant has checked the "yes" box in any part of Section C, Item 3, above, refer to that section and the Instructions for additional submittal requirements.

The original and copies must be sent simultaneously. Failure by the applicant to send copies in a timely manner may result in dismissal of the Notice of Intent.

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

NOI Wetland Fee Transmittal Form

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Important: When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.

A. Applicant Information

1. Applicant:

Robert A.	Knight, Trustee of Knight Realty Trust
a. First Name	b. Last Name

c. Organization

63 Bay State Road
d. Mailing Address

Boston	MA	02115
e. City/Town	f. State	g. Zip Code

781-254-0144		Rknight2@gmail.com
h. Phone Number	i. Fax Number	j. Email Address

2. Property Owner (if different):

a. First Name	b. Last Name

c. Organization

d. Mailing Address

e. City/Town	f. State	g. Zip Code

h. Phone Number	i. Fax Number	j. Email Address

3. Project Location:

12 East Lincoln Ave.1	Nantucket
a. Street Address	b. City/Town

B. Fees

To calculate filing fees, refer to the category fee list and examples in the instructions for filling out WPA Form 3 (Notice of Intent).

The fee should be calculated using the following six-step process and worksheet. **Please see Instructions before filling out worksheet.**

Step 1/Type of Activity: Describe each type of activity that will occur in wetland resource area and buffer zone.

Step 2/Number of Activities: Identify the number of each type of activity.

Step 3/Individual Activity Fee: Identify each activity fee from the six project categories listed in the instructions.

Step 4/Subtotal Activity Fee: Multiply the number of activities (identified in Step 2) times the fee per category (identified in Step 3) to reach a subtotal fee amount. Note: If any of these activities are in a Riverfront Area in addition to another Resource Area or the Buffer Zone, the fee per activity should be multiplied by 1.5 and then added to the subtotal amount.

Step 5/Total Project Fee: Determine the total project fee by adding the subtotal amounts from Step 4.

Step 6/Fee Payments: To calculate the state share of the fee, divide the total fee in half and subtract $12.50. To calculate the city/town share of the fee, divide the total fee in half and add $12.50.

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

NOI Wetland Fee Transmittal Form

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

B. Fees (continued)

Step 1/Type of Activity	Step 2/Number of Activities	Step 3/Individual Activity Fee	Step 4/Subtotal Activity Fee
2	1	500	500
Nantucket Wetland By-law Fee			$25
Nantucket Expert Review Fee			$200

Step 5/Total Project Fee: $500 + $25 + $575

Step 6/Fee Payments:

Total Project Fee:	$ + $25 + $575 a. Total Fee from Step 5
State share of filing Fee:	$237.50 b. 1/2 Total Fee **less** $12.50
City/Town share of filling Fee:	$267.50+$25+$200 c. 1/2 Total Fee **plus** $12.50

C. Submittal Requirements

a.) Complete pages 1 and 2 and send with a check or money order for the state share of the fee, payable to the Commonwealth of Massachusetts.

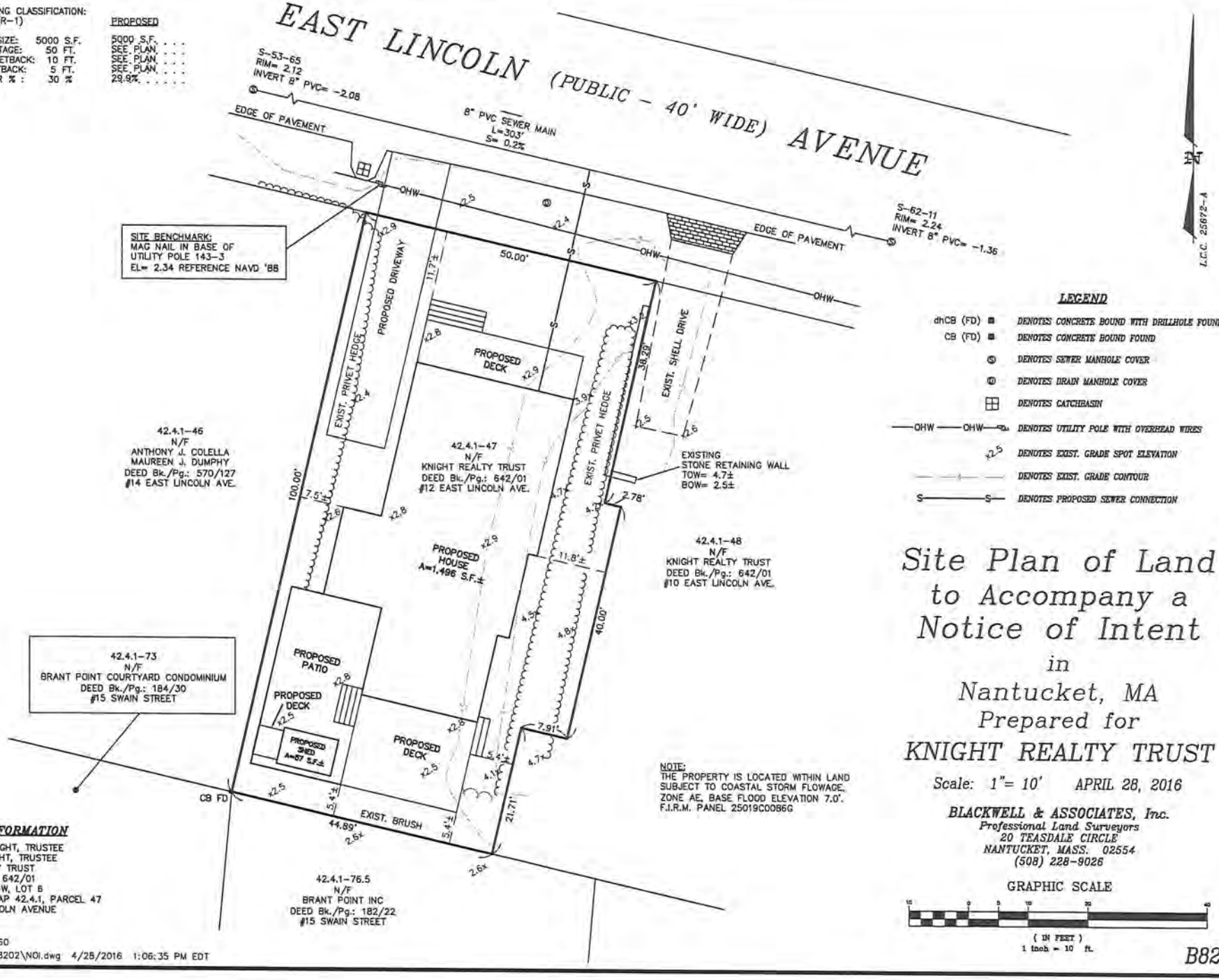
Department of Environmental Protection
Box 4062
Boston, MA 02211

b.) **To the Conservation Commission:** Send the Notice of Intent or Abbreviated Notice of Intent; a **copy** of this form; and the city/town fee payment.

To MassDEP Regional Office (see Instructions): Send a copy of the Notice of Intent or Abbreviated Notice of Intent; a **copy** of this form; and a **copy** of the state fee payment. (E-filers of Notices of Intent may submit these electronically.)

CURRENT ZONING CLASSIFICATION:
Residential 1 (R-1)

		PROPOSED
MINIMUM LOT SIZE:	5000 S.F.	5000 S.F. . . .
MINIMUM FRONTAGE:	50 FT.	SEE PLAN. . . .
FRONT YARD SETBACK:	10 FT.	SEE PLAN. . . .
REAR/SIDE SETBACK:	5 FT.	SEE PLAN. . . .
GROUND COVER % :	30 %	29.9%. . . . .



NOTE:
THE PROPERTY IS LOCATED WITHIN LAND SUBJECT TO COASTAL STORM FLOWAGE, ZONE AE, BASE FLOOD ELEVATION 7.0'. F.I.R.M. PANEL 25019C0086G

OWNER INFORMATION

ROBERT A. KNIGHT, TRUSTEE
N. SCOTT KNIGHT, TRUSTEE
KNIGHT REALTY TRUST
DEED Bk./Pg.: 642/01
PLAN FILE 55-W, LOT 6
ASSESSOR'S MAP 42.4.1, PARCEL 47
#12 EAST LINCOLN AVENUE

LEGEND

dhCB (FD)	DENOTES CONCRETE BOUND WITH DRILLHOLE FOUND
CB (FD)	DENOTES CONCRETE BOUND FOUND
	DENOTES SEWER MANHOLE COVER
	DENOTES DRAIN MANHOLE COVER
	DENOTES CATCHBASIN
—OHW— —OHW—	DENOTES UTILITY POLE WITH OVERHEAD WIRES
2.5	DENOTES EXIST. GRADE SPOT ELEVATION
	DENOTES EXIST. GRADE CONTOUR
S—S	DENOTES PROPOSED SEWER CONNECTION

L.C.C. 25672-A

Site Plan of Land to Accompany a Notice of Intent in Nantucket, MA Prepared for KNIGHT REALTY TRUST

Scale: 1"= 10' APRIL 28, 2016

BLACKWELL & ASSOCIATES, Inc.
Professional Land Surveyors
20 TEASDALE CIRCLE
NANTUCKET, MASS. 02554
(508) 228-9026

GRAPHIC SCALE

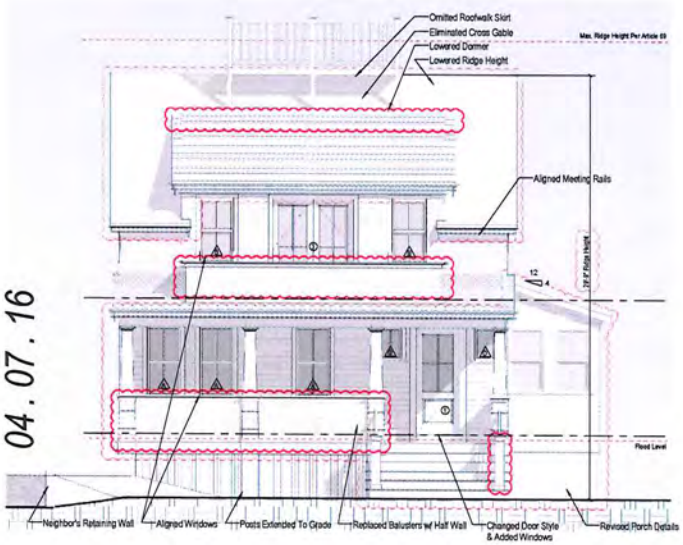
(IN FEET)
1 inch = 10 ft.

B8202

T:\PAJE 2 JOB 60
V:\DRAWFILES\B8202\NOI.dwg 4/28/2016 1:06:35 PM EDT

04 . 07 . 16

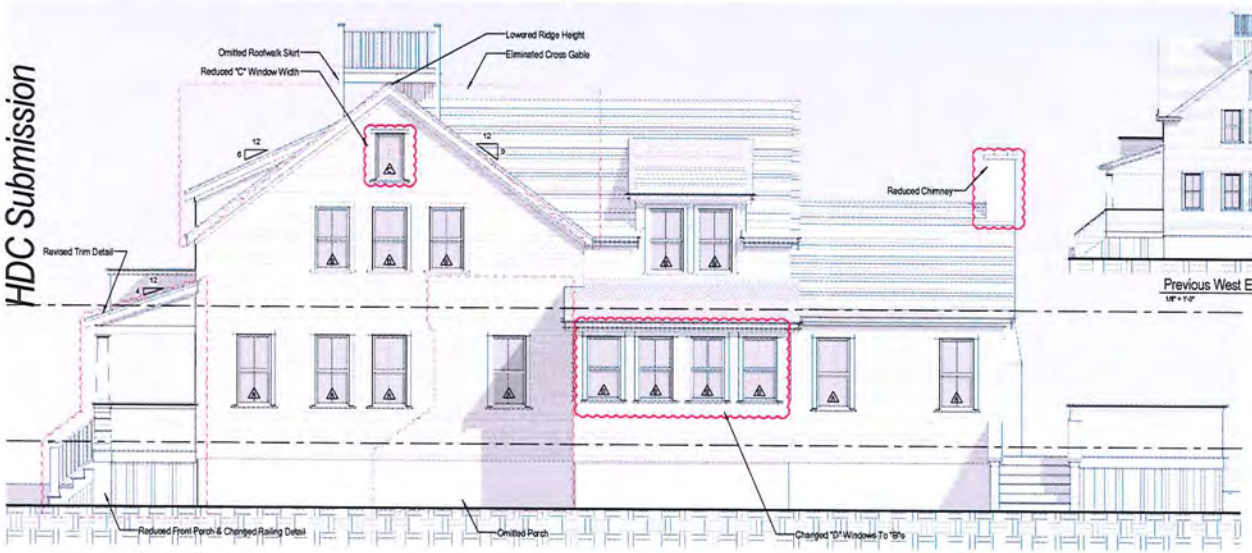
HDC Submission



1 Proposed North Elevation
1/4" = 1'-0"

Previous North Elevation
1/8" = 1'-0"

3 North West Perspective



2 Proposed West Elevation
1/4" = 1'-0"

Previous West Elevation
1/8" = 1'-0"

1528

Knight Residence

12 East Lincoln
Nantucket, MA 02554

cmcristua Development LLC
9 Williams Lane Nantucket, MA 02554
P 508.228.4840
F 508.228.4840
www.cmcristuadevelopment.com

Elevations

Site Information

Map & Parcel:	42.4.1 / 47
Current Zoning:	R1
Minimum Frontage:	50'
Front Setback:	10'
Side/Rear Setback:	5'
Lot Size:	5,000 S.F.
Min. Lot Size:	5,000 S.F.
Allowable G.C.:	1,500 S.F.
Proposed G.C.:	1,450 S.F.

Information for this site plan was taken from the Nantucket G.I.S. This drawing does not constitute a registered survey. All site work should be verified by a Registered Land Surveyor prior to and during construction.

SHEET INDEX

A.3.2 Facade Elevation Study
E.1.1 Electrical Plan
E.1.2 Unnamed
G.1.1 Site Plan, Locus Map
A.1.1 First Floor Plan
A.2.1 Elevations
A.2.2 Elevations

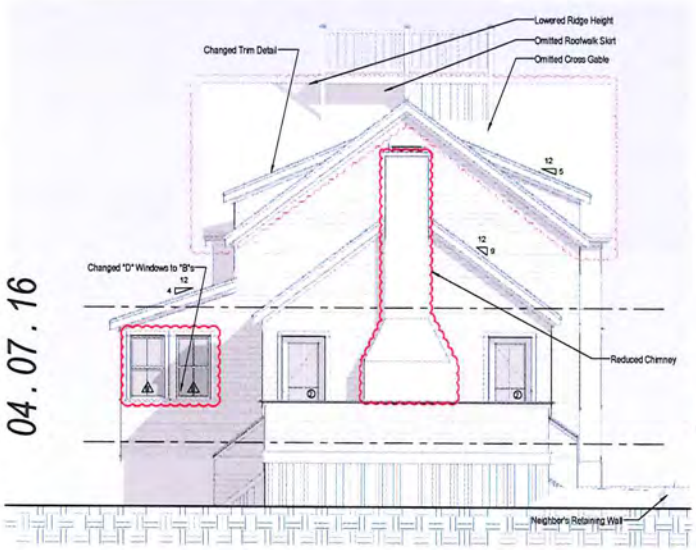
Revisions

THE DESIGNS ON THIS DRAWING ARE THE PROPERTY OF THE ARCHITECT AND MUST BE RETURNED UPON REQUEST. REPRODUCTION OF THESE DESIGNS IN WHOLE OR IN PART IS PROHIBITED WITHOUT WRITTEN PERMISSION OF THE ARCHITECT. ©2016 ALL RIGHTS RESERVED

A.2.1

1528

04 . 07 . 16



1 Proposed South Elevation
1/8" = 1'-0"

Previous South Elevation
1/8" = 1'-0"

2 South East Perspective

HDC Submission

3 Proposed East Elevation
1/8" = 1'-0"

Previous East Elevation
1/8" = 1'-0"

1528

Knight Residence

12 East Lincoln
Nantucket, MA 02554

cmcristua Development LLC

Elevations

Site Information

Map & Parcel:	42.4.1 / 47
Current Zoning:	R1
Minimum Frontage:	50'
Front Setback:	10'
Side/Rear Setback:	5'
Lot Size:	5,000 S.F.
Min. Lot Size:	5,000 S.F.
Allowable G.C.:	1,500 S.F.
Proposed G.C.:	1,450 S.F.

Information for this site plan was taken from the Nantucket G.I.S. This drawing does not constitute a registered survey. All site work should be verified by a Registered Land Surveyor prior to and during construction.

Revisions

A.2.2

1528

BLACKWELL & ASSOCIATES, INC.
Professional Land Surveyors

INTRODUCTION

The proposed work at 12 E. Lincoln Ave. in the Brant Point area of Nantucket, Massachusetts involves construction of a single family dwelling and associated landscaping within the Land Subject To Coastal Storm Flowage Resource Area. No change in the existing site grade is proposed. A waiver is required from the Wetland Protection Regulations for Administering the Town of Nantucket By-law Chapter 136, to allow the footings within two-feet vertically of estimated seasonal high groundwater. A request for the waiver is included herewith.

SITE DESCRIPTION

The subject property is 5,000 SF in size and is located in the Brant Point area of Nantucket Island. The property is surrounded by existing residential-use properties. The proposed dwelling will be connected to Town sewer and water services. The defined resource area on-site is Land Subject To Coastal Storm Flowage, LSCSF.

WORK DESCRIPTION

Prior to the start of work, a silt fence will be placed at the limit of work as shown on the site plan. The fence will be maintained throughout the project. If temporary dewatering is required, flows will be directed to the Town storm drain system. After construction is completed, all disturbed areas will be covered with a minimum of 6" of topsoil and planted with Cape Cod Premium grass seed mix.

CONCLUSION

The proposed construction and landscaping will not affect the LSCSF or result in an adverse impact on the interests protected by the Commission including flood control, erosion control, storm damage prevention, prevention of pollution and wildlife.

20 TEASDALE CIRCLE - NANTUCKET, MA 02554
(508) 228-9026 - (508) 228-5292 FAX

BLACKWELL & ASSOCIATES, INC.
Professional Land Surveyors & Civil Engineers

B8202 April 29, 2016

Nantucket Conservation Commission
2 Bathing Beach Road
Nantucket, MA 02554

RE: Waiver Request for 12 East Lincoln Ave., Robert A. Knight

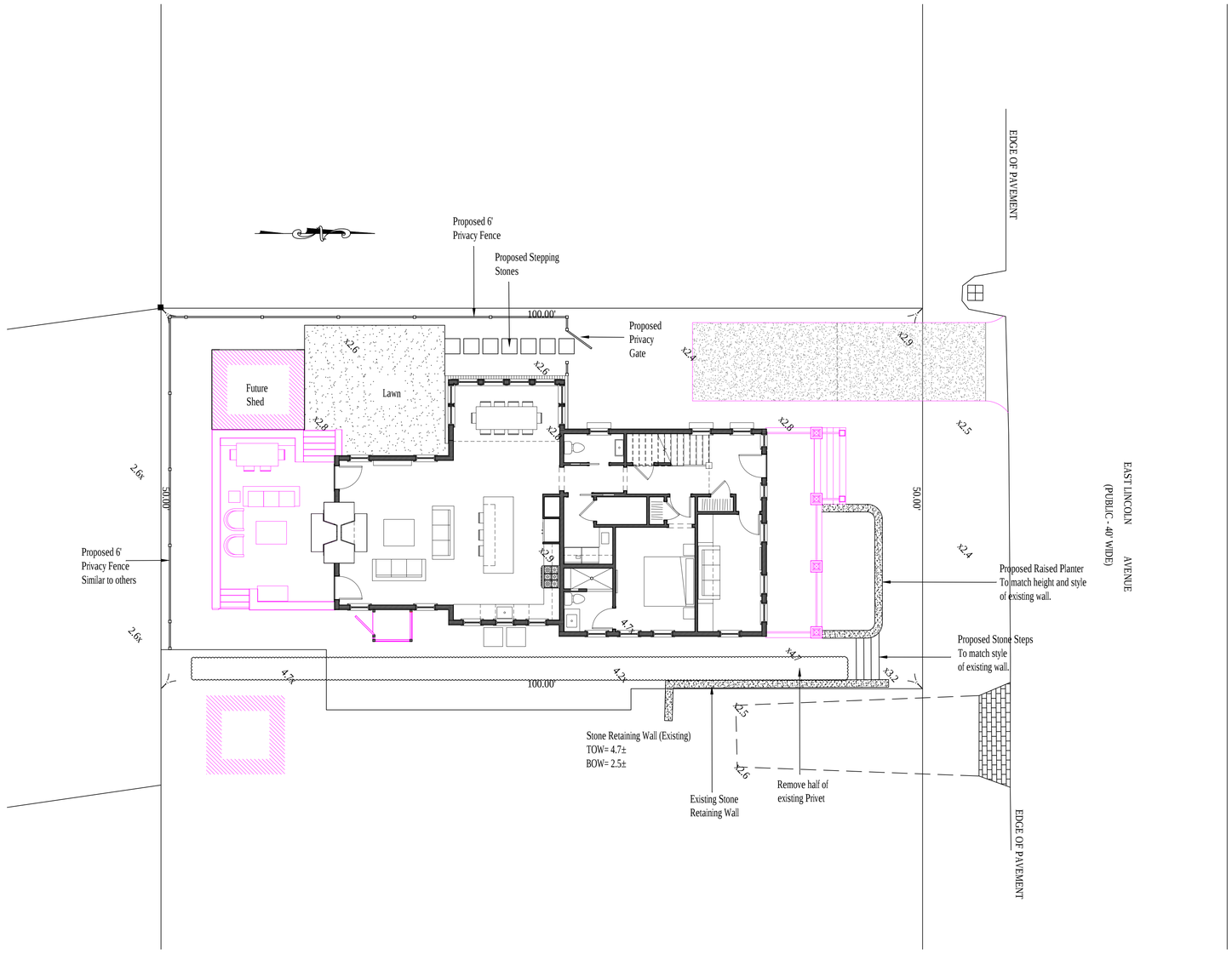
Dear Commission Members:

The purpose of this letter is to request and justify a waiver from the Wetland Protection Regulations for Administering the Town of Nantucket By-law Chapter 136 to allow footings within two-feet vertically of estimated seasonal high groundwater. Specifically a waiver is required from Section 3.02.B.1 to allow the footings within two-feet vertically of estimated seasonal high groundwater. If required, any dewatering activities will be temporary and flows will be directed to the municipal storm drain system in East Lincoln Ave. Disturbed areas will be covered with topsoil and then be planted with Cape Cod Premium Grass Seed Mix.

The proposed project will not have an adverse impact on the Land Subject To Coastal Storm Flowage resource area.

Sincerely,
Blackwell & Associates, Inc.
By: Jeffery L. Blackwell, PLS

20 TEASDALE CIRCLE • NANTUCKET, MA 02554
PHONE (508)-228-9026 • FAX (508)-228-5292



wingworks
LANDSCAPE
andrewwing

PROPOSED LANDSCAPE ENHANCEMENTS

REV.	DATE	BY	DESCRIPTION
#1			
#2			

DATE: 04.28.16
DRAWN: tbh
CHECKED: tbh
SCALE: 1"=8'

L1
DRAWING NO.

2137

NEW INFORMATION FOR CURRENT HEARING

INFILTRATOR®
water technologies

Quick4™ PLUS
CHAMBER SYSTEMS

The Quick4® Plus Equalizer 36 Low Profile (LP) Chamber

Quick4 Plus™ Series

The Quick4 Plus Equalizer 36 Low Profile (LP) offers maximum strength through its two center structural columns. This chamber can be installed in a 24-inch-wide trench. It is 4 inches shorter in height than other Equalizer 36 model chambers, allowing for shallower installation. Like the original line of Quick4 chambers, it offers advanced contouring capability with its Contour Swivel Connection™, which permits turns up to 15°, right or left. The Quick4 Plus All-in-One 8 and Quick4 Plus Endcaps provide increased flexibility in system design and configurations.

Maximum Strength

Quick4 Plus Equalizer 36 LP Chamber Specifications

Size 22”W x 53”L x 8”H (559 mm x 1346 mm x 203 mm)
Effective Length 48” (1219 mm)
Louver Height 6.3” (160 mm)
Storage Capacity 20 gal (76 L)
Invert Height 3.3” (84 mm), 9.6” (244 mm)

Quick4 Plus Equalizer 36 Low Profile (LP) Chamber Benefits:

- Low profile design makes this chamber ideal for shallow applications
- Reduces imported fill needed for cap and fill systems
- Two center structural columns offer superior strength
- Advanced contouring connections
- Latching mechanism allows for quick installation
- Four-foot chamber lengths are easy to handle and install
- Supports wheel loads of 16,000 lbs/axle with 12” of cover

Quick4 Plus All-in-One Periscope Benefits:

- Allows for raised invert installations
- 180° directional inletting
- 12” raised invert is ideal for serial applications

Quick4 Plus All-in-One 8 Endcap Benefits:

- May be used at the end of chamber row for an inlet/outlet or can be installed mid-trench
- Mid-trench connection feature allows center feed inletting of chamber rows
- Center-feed connection allows for easy installation of serial distribution systems
- Variable pipe connection options allow for side, end or top inletting
- Piping drill points are set for gravity or pressure pipe

Quick4 Plus Endcap Benefits:

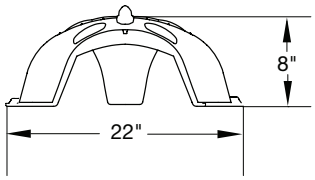
- Simple, flat design
- Allows installation of a pipe from the end only
- Piping drill points are set for gravity or pressure pipe

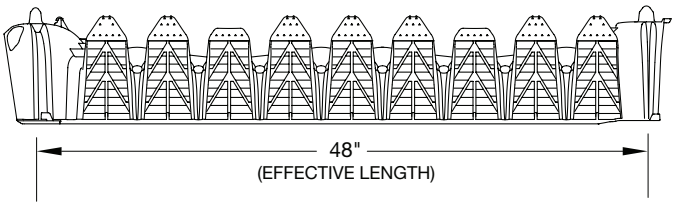
Certified by the International Association of Plumbing and Mechanical Officials (IAPMO)

IAPMO R&T

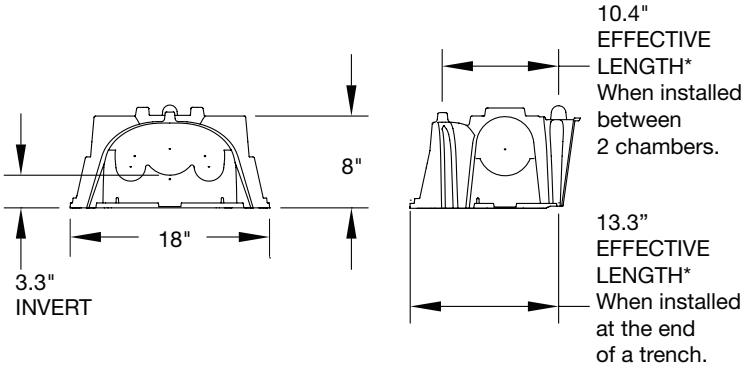
APPROVED in _____

Quick4 Plus Equalizer 36 Low Profile Chamber

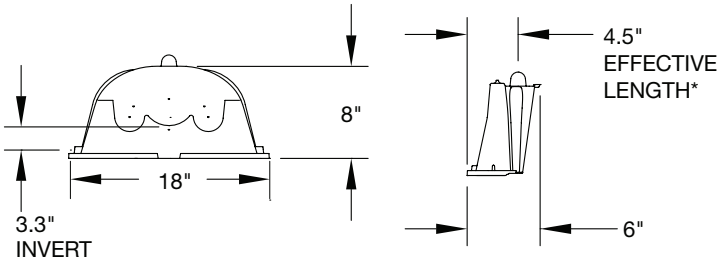




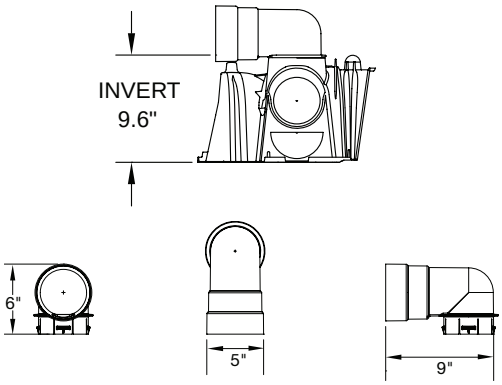
Quick4 Plus All-in-One 8 Endcap



Quick4 Plus Endcap



Quick4 Plus All-in-One Periscope



INFILTRATOR WATER TECHNOLOGIES STANDARD LIMITED WARRANTY

(a) The structural integrity of each chamber, endcap and other accessory manufactured by Infiltrator ("Units"), when installed and operated in a leachfield of an onsite septic system in accordance with Infiltrator's instructions, is warranted to the original purchaser ("Holder") against defective materials and workmanship for one year from the date that the septic permit is issued for the septic system containing the Units; provided, however, that if a septic permit is not required by applicable law, the warranty period will begin upon the date that installation of the septic system commences. To exercise its warranty rights, Holder must notify Infiltrator in writing at its Corporate Headquarters in Old Saybrook, Connecticut within fifteen (15) days of the alleged defect. Infiltrator will supply replacement Units for Units determined by Infiltrator to be covered by this Limited Warranty. Infiltrator's liability specifically excludes the cost of removal and/or installation of the Units.

(b) THE LIMITED WARRANTY AND REMEDIES IN SUBPARAGRAPH (a) ARE EXCLUSIVE. THERE ARE NO OTHER WARRANTIES WITH RESPECT TO THE UNITS, INCLUDING NO IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE

(c) This Limited Warranty shall be void if any part of the chamber system is manufactured by anyone other than Infiltrator. The Limited Warranty does not extend to incidental, consequential, special or indirect damages. Infiltrator shall not be liable for penalties or liquidated damages, including loss of production and profits, labor and materials, overhead costs, or other losses or expenses incurred by the Holder or any third party. Specifically excluded from Limited Warranty coverage are damage to the Units due to ordinary wear and tear, alteration, accident, misuse, abuse or neglect of the Units; the Units being subjected to vehicle traffic or other conditions which are not permitted by the installation instructions; failure to maintain the minimum ground covers set forth in the installation instructions; the placement of improper materials into the system containing the Units; failure of the Units or the septic system due to improper siting or improper sizing, excessive water usage, improper grease disposal, or improper operation; or any other event not caused by Infiltrator. This Limited Warranty shall be void if the Holder fails to comply with all of the terms set forth in this Limited Warranty. Further, in no event shall Infiltrator be responsible for any loss or damage to the Holder, the Units, or any third party resulting from installation or shipment, or from any product liability claims of Holder or any third party. For this Limited Warranty to apply, the Units must be installed in accordance with all site conditions required by state and local codes; all other applicable laws; and Infiltrator's installation instructions.

(d) No representative of Infiltrator has the authority to change or extend this Limited Warranty. No warranty applies to any party other than the original Holder.

The above represents the Standard Limited Warranty offered by Infiltrator. A limited number of states and counties have different warranty requirements. Any purchaser of Units should contact Infiltrator's Corporate Headquarters in Old Saybrook, Connecticut, prior to such purchase, to obtain a copy of the applicable warranty, and should carefully read that warranty prior to the purchase of Units.

INFILTRATOR® water technologies

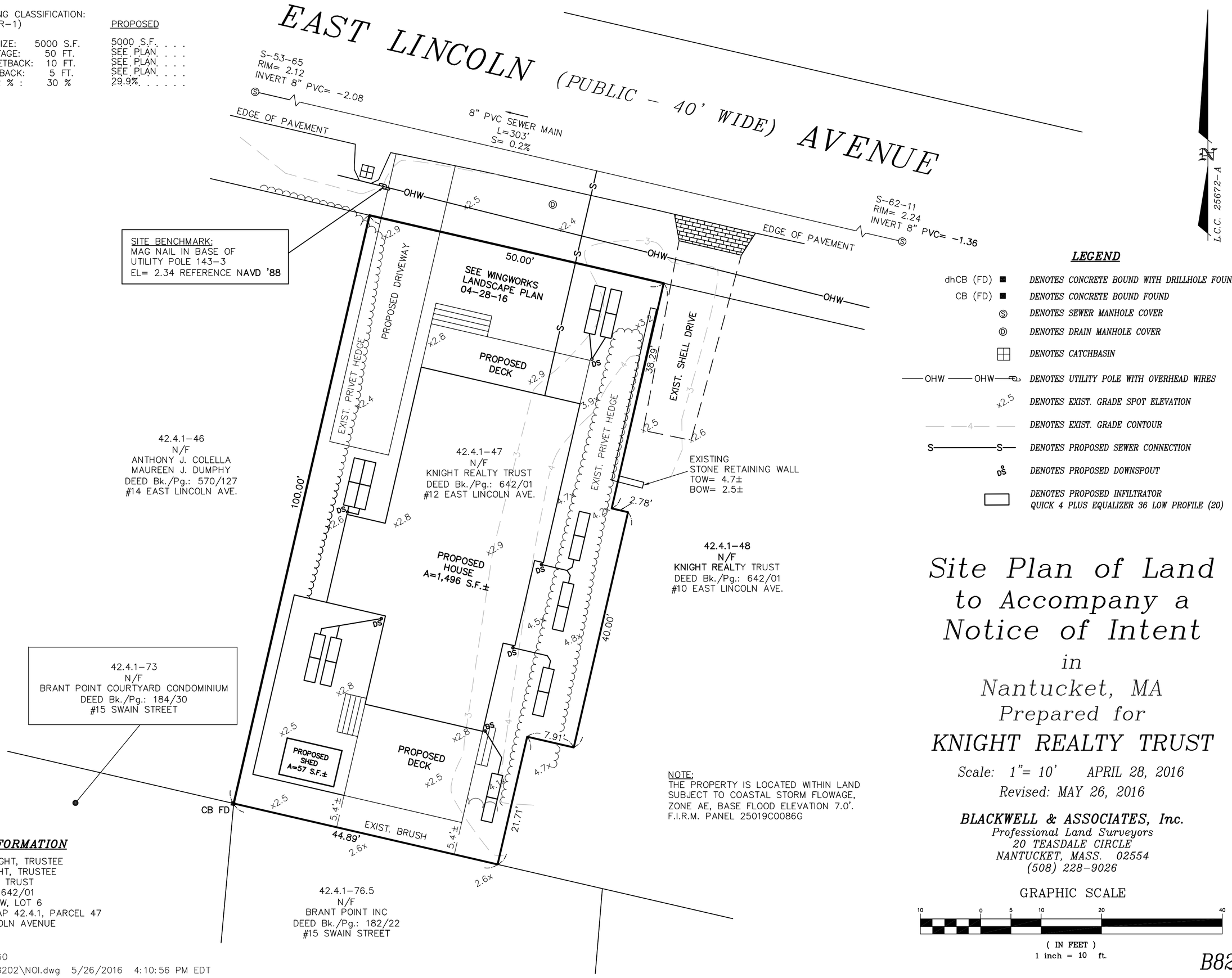
4 Business Park Road
P.O. Box 768
Old Saybrook, CT 06475
860-577-7000 • Fax 860-577-7001
1-800-221-4436
www.infiltratorwater.com

U.S. Patents: 4,759,661; 5,017,041; 5,156,488; 5,336,017; 5,401,116; 5,401,459; 5,511,903; 5,716,163; 5,588,778; 5,839,844 Canadian Patents: 1,329,959; 2,004,564 Other patents pending.
Infiltrator, Equalizer, Quick4, and SideWinder are registered trademarks of Infiltrator Water Technologies. Infiltrator is a registered trademark in France. Infiltrator Water Technologies is a registered trademark in Mexico.
Contour, MicroLeaching, PolyTuff, ChamberSpacer, MultiPort, PosiLock, QuickCut, QuickPlay, SnapLock and StraightLock are trademarks of Infiltrator Water Technologies.
PolyLok is a trademark of PolyLok, Inc. TUF-TITE is a registered trademark of TUF-TITE, INC. Ultra-Rib is a trademark of IPEX Inc.
© 2013 Infiltrator Water Technologies, LLC. All rights reserved. Printed in U.S.A.

PLUS06 0713

CURRENT ZONING CLASSIFICATION:
Residential 1 (R-1)

		PROPOSED
MINIMUM LOT SIZE:	5000 S.F.	5000 S.F.
MINIMUM FRONTAGE:	50 FT.	SEE PLAN
FRONT YARD SETBACK:	10 FT.	SEE PLAN
REAR/SIDE SETBACK:	5 FT.	SEE PLAN
GROUND COVER % :	30 %	29.9%



LEGEND

dhCB (FD) ■	DENOTES CONCRETE BOUND WITH DRILLHOLE FOUND
CB (FD) ■	DENOTES CONCRETE BOUND FOUND
Ⓢ	DENOTES SEWER MANHOLE COVER
Ⓓ	DENOTES DRAIN MANHOLE COVER
⊞	DENOTES CATCHBASIN
—OHW—OHW—	DENOTES UTILITY POLE WITH OVERHEAD WIRES
x2.5	DENOTES EXIST. GRADE SPOT ELEVATION
4	DENOTES EXIST. GRADE CONTOUR
S——S	DENOTES PROPOSED SEWER CONNECTION
DS	DENOTES PROPOSED DOWNSPOUT
▭	DENOTES PROPOSED INFILTRATOR QUICK 4 PLUS EQUALIZER 36 LOW PROFILE (20)

NOTE:
THE PROPERTY IS LOCATED WITHIN LAND SUBJECT TO COASTAL STORM FLOWAGE, ZONE AE, BASE FLOOD ELEVATION 7.0'. F.I.R.M. PANEL 25019C0086G

Site Plan of Land to Accompany a Notice of Intent

in

Nantucket, MA

Prepared for

KNIGHT REALTY TRUST

Scale: 1"= 10' APRIL 28, 2016

Revised: MAY 26, 2016

BLACKWELL & ASSOCIATES, Inc.
Professional Land Surveyors
20 TEASDALE CIRCLE
NANTUCKET, MASS. 02554
(508) 228-9026

GRAPHIC SCALE

10 0 5 10 20 40

(IN FEET)
1 inch = 10 ft.

OWNER INFORMATION

ROBERT A. KNIGHT, TRUSTEE
N. SCOTT KNIGHT, TRUSTEE
KNIGHT REALTY TRUST
DEED Bk./Pg.: 642/01
PLAN FILE 55-W, LOT 6
ASSESSOR'S MAP 42.4.1, PARCEL 47
#12 EAST LINCOLN AVENUE

T:\PAJE 2 JOB 60
V:\DRAWFILES\B8202\NOI.dwg 5/26/2016 4:10:56 PM EDT

B8202

Haulover

165 Wauwinet Road

(7-1.1)

NOTICE OF INTENT APPLICATION

For

Construction of a Balcony and Access Ramps To A Deck and Catwalk

At

165 Wauwinet Road

Nantucket, MA

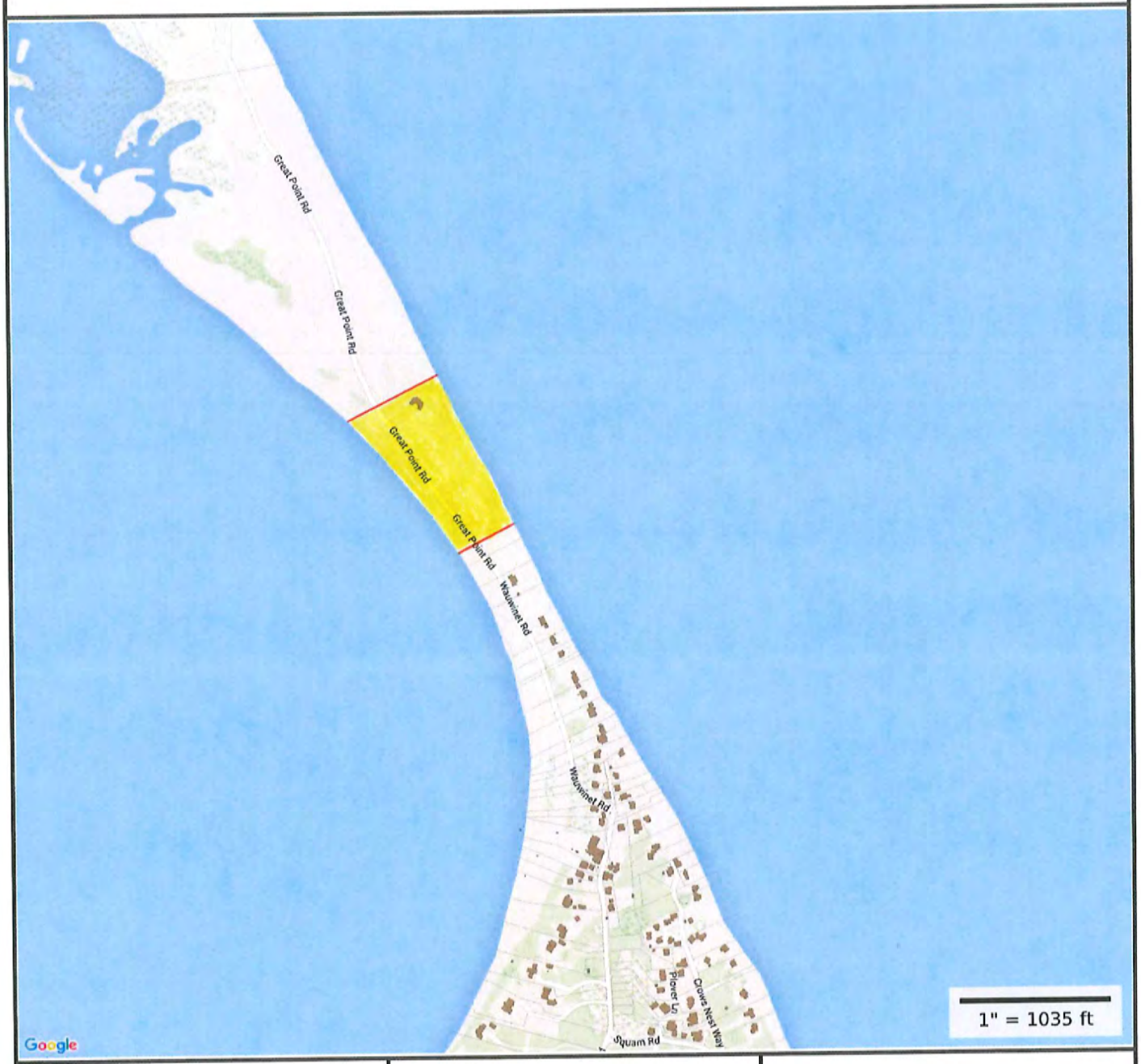
May 2016

Prepared For

Haulover LLC

By

BLACKWELL & ASSOCIATES, Inc.
Professional Civil Engineers & Land Surveyors
20 Teasdale Circle
Nantucket, MA 02554
508-228-9026



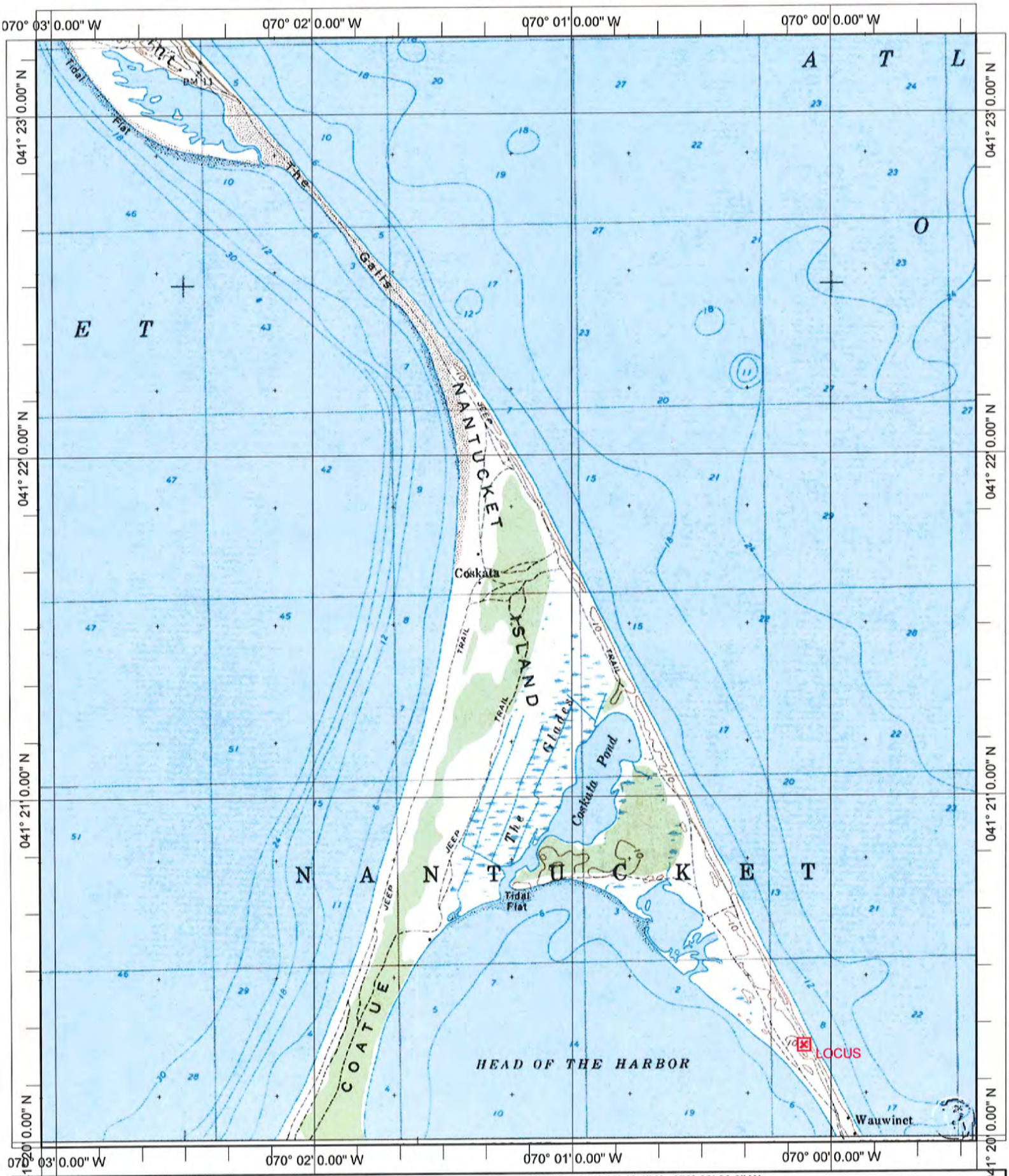
Property Information

Property ID	1.1
Location	165 WAUWINET RD
Owner	HAULOVER LLC

MAP FOR REFERENCE ONLY
NOT A LEGAL DOCUMENT

Town and County of Nantucket, MA makes no claims and no warranties, expressed or implied, concerning the validity or accuracy of the GIS data presented on this map.

Parcels updated December, 2014
Properties updated January, 2015



LOCUS - 1 Markers, Length = 0 feet

LOCUS - 041° 20' 16.1" N, 070° 00' 06.0" W

Name: GREAT POINT
Date: 5/9/116
Scale: 1 inch equals 2000 feet

Location: 041° 21' 36.3" N 070° 01' 14.8" W
Caption: #165 WAUWINET ROAD

Copyright (C) 1997, Maptech, Inc.

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WPA Form 3 – Notice of Intent

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40
And the Town of Nantucket Wetlands Bylaw Chapter 136

Provided by MassDEP:

MassDEP File Number

Document Transaction Number

NANTUCKET
City/Town

A. General Information

1. Project Location (**Note:** electronic filers will click on button to locate project site):

165 Wauwinet Rd
a. Street Address

Nantucket
b. City/Town

02554
c. Zip Code

Latitude and Longitude:

41d 20' 16.21"
d. Latitude

70d 00' 06.08"
e. Longitude

7
f. Assessors Map/Plat Number

1.1
g. Parcel /Lot Number

2. Applicant:

Haulover LLC
a. First Name

b. Last Name

c/o Vaughan Dale Hunter and Beaudette P.O. Box 659 Nantucket, MA 02554
c. Organization

1010 Wisconsin Ave NW
d. Street Address

Washington
e. City/Town

DC
f. State

20007
g. Zip Code

508-228-4455
h. Phone Number

i. Fax Number

j. Email Address

3. Property owner (required if different from applicant): ☐ Check if more than one owner

a. First Name

b. Last Name

c. Organization

d. Street Address

e. City/Town

f. State

g. Zip Code

h. Phone Number

i. Fax Number

j. Email address

4. Representative (if any):

Jeffrey L.
a. First Name

Blackwell, PLS
b. Last Name

Blackwell & Associates, Inc.
c. Company

20 Teasdale Circle
d. Street Address

Nantucket
e. City/Town

MA
f. State

02554
g. Zip Code

508-228-9026 x11
h. Phone Number

508-228-5292
i. Fax Number

jeff@blackwellsurvey.com
j. Email address

5. Total WPA Fee Paid (from NOI Wetland Fee Transmittal Form):

$110 + $25 + $200
a. Total Fee Paid

$42.50
b. State Fee Paid

$57.50 + $25 + $200
c. City/Town Fee Paid

A. General Information (continued)

6. General Project Description: Application for ramps to a catwalk and deck and second story balcony. The Applicant proposes to maintain the existing ramps and balcony.

   Please refer to the attached Project Narrative and Site Plan for additional information.

7a. Project Type Checklist:

1. ☒ Single Family Home
2. ☐ Residential Subdivision
3. ☐ Limited Project Driveway Crossing
4. ☐ Commercial/Industrial
5. ☐ Dock/Pier
6. ☐ Utilities
7. ☐ Coastal Engineering Structure
8. ☐ Agriculture (e.g., cranberries, forestry)
9. ☐ Transportation
10. ☐ Other

7b. Is any portion of the proposed activity eligible to be treated as a limited project subject to 310 CMR 10.24 (coastal) or 310 CMR 10.53 (inland)?

1. ☐ Yes ☒ No If yes, describe which limited project applies to this project:

2. Limited Project

8. Property recorded at the Registry of Deeds for:

NANTUCKET	24394
a. County	b. Certificate # (if registered land)
c. Book	d. Page Number

B. Buffer Zone & Resource Area Impacts (temporary & permanent)

1. ☐ Buffer Zone Only – Check if the project is located only in the Buffer Zone of a Bordering Vegetated Wetland, Inland Bank, or Coastal Resource Area.
2. ☐ Inland Resource Areas (see 310 CMR 10.54-10.58; if not applicable, go to Section B.3, Coastal Resource Areas).

   Check all that apply below. Attach narrative and any supporting documentation describing how the project will meet all performance standards for each of the resource areas altered, including standards requiring consideration of alternative project design or location.

For all projects affecting other Resource Areas, please attach a narrative explaining how the resource area was delineated.

Resource Area	Size of Proposed Alteration	Proposed Replacement (if any)
a. ☐ Bank	1. linear feet	2. linear feet
b. ☐ Bordering Vegetated Wetland	1. square feet	2. square feet
c. ☐ Land Under Waterbodies and Waterways	1. square feet 3. cubic yards dredged	2. square feet

B. Buffer Zone & Resource Area Impacts (temporary & permanent) (cont'd)

Resource Area	Size of Proposed Alteration	Proposed Replacement (if any)
d. ☐ Bordering Land Subject to Flooding	1. square feet	2. square feet
	3. cubic feet of flood storage lost	4. cubic feet replaced
e. ☐ Isolated Land Subject to Flooding	1. square feet	
	2. cubic feet of flood storage lost	3. cubic feet replaced
f. ☐ Riverfront Area	1. Name of Waterway (if available)	

2. Width of Riverfront Area (check one):

☐ 25 ft. - Designated Densely Developed Areas only

☐ 100 ft. - New agricultural projects only

☐ 200 ft. - All other projects

3. Total area of Riverfront Area on the site of the proposed project: _____ square feet

4. Proposed alteration of the Riverfront Area:

a. total square feet _____ b. square feet within 100 ft. _____ c. square feet between 100 ft. and 200 ft. _____

5. Has an alternatives analysis been done and is it attached to this NOI? ☐ Yes ☐ No

6. Was the lot where the activity is proposed created prior to August 1, 1996? ☐ Yes ☐ No

3. ☐ Coastal Resource Areas: (See 310 CMR 10.25-10.35)

Check all that apply below. Attach narrative and supporting documentation describing how the project will meet all performance standards for each of the resource areas altered, including standards requiring consideration of alternative project design or location.

Online Users: Include your document transaction number (provided on your receipt page) with all supplementary information you submit to the Department.

Resource Area	Size of Proposed Alteration	Proposed Replacement (if any)
a. ☐ Designated Port Areas	Indicate size under Land Under the Ocean, below	
b. ☐ Land Under the Ocean	1. square feet	
	2. cubic yards dredged	
c. ☒ Barrier Beach	Indicate size under Coastal Beaches and/or Coastal Dunes below	
d. ☐ Coastal Beaches	1. square feet	2. cubic yards beach nourishment
e. ☒ Coastal Dunes	279 1. square feet	0 2. cubic yards dune nourishment

B. Buffer Zone & Resource Area Impacts (temporary & permanent) (cont'd)

		Size of Proposed Alteration	Proposed Replacement (if any)
f. ☐	Coastal Banks	1. linear feet	
g. ☐	Rocky Intertidal Shores	1. square feet	
h. ☐	Salt Marshes	1. square feet	2. sq ft restoration, rehab., creation
i. ☐	Land Under Salt Ponds	1. square feet 2. cubic yards dredged	
j. ☐	Land Containing Shellfish	1. square feet	
k. ☐	Fish Runs	Indicate size under Coastal Banks, inland Bank, Land Under the Ocean, and/or inland Land Under Waterbodies and Waterways, above 1. cubic yards dredged	
l. ☐	Land Subject to Coastal Storm Flowage	1. square feet	

4. ☐ Restoration/Enhancement
If the project is for the purpose of restoring or enhancing a wetland resource area in addition to the square footage that has been entered in Section B.2.b or B.3.h above, please enter the additional amount here.

a. square feet of BVW _____ b. square feet of Salt Marsh _____

5. ☐ Project Involves Stream Crossings

a. number of new stream crossings _____ b. number of replacement stream crossings _____

C. Other Applicable Standards and Requirements

Streamlined Massachusetts Endangered Species Act/Wetlands Protection Act Review

1. Is any portion of the proposed project located in **Estimated Habitat of Rare Wildlife** as indicated on the most recent Estimated Habitat Map of State-Listed Rare Wetland Wildlife published by the Natural Heritage and Endangered Species Program (NHESP)? To view habitat maps, see the *Massachusetts Natural Heritage Atlas* or go to http://www.mass.gov/dfwele/dfw/nhesp/regulatory_review/priority_habitat/online_viewer.htm.

a. ☒ Yes ☐ No **If yes, include proof of mailing or hand delivery of NOI to:**

Natural Heritage and Endangered Species Program
Division of Fisheries and Wildlife
Route 135, North Drive
Westborough, MA 01581

10/2008
b. Date of map

C. Other Applicable Standards and Requirements (cont'd)

If *yes*, the project is also subject to Massachusetts Endangered Species Act (MESA) review (321 CMR 10.18). To qualify for a streamlined, 30-day, MESA/Wetlands Protection Act review, please complete Section C.1.C, and include requested materials with this Notice of Intent (NOI); *OR* complete Section C.1.d, if applicable. *If MESA supplemental information is not included with the NOI, by completing Section 1 of this form, the NHESP will require a separate MESA filing which may take up to 90 days to review (unless noted exceptions in Section 2 apply, see below).*

1. c. Submit Supplemental Information for Endangered Species Review*

   1. ☒ Percentage/acreage of property to be altered:

      (a) within wetland Resource Area — 0.0004 % (percentage/acreage)

      (b) outside Resource Area — _____ (percentage/acreage)

   2. ☒ Assessor's Map or right-of-way plan of site

   3. ☒ Project plans for entire project site, including wetland resource areas and areas outside of wetlands jurisdiction, showing existing and proposed conditions, existing and proposed tree/vegetation clearing line, and clearly demarcated limits of work ****

      (a) ☒ Project description (including description of impacts outside of wetland resource area & buffer zone)

      (b) ☒ Photographs representative of the site

      (c) ☒ MESA filing fee (fee information available at: http://www.mass.gov/dfwele/dfw/nhesp/regulatory_review/mesa/mesa_fee_schedule.htm). Make check payable to "Commonwealth of Massachusetts - NHESP" and ***mail to NHESP*** at above address

      *Projects altering **10 or more acres** of land, also submit:*

      (d) ☐ Vegetation cover type map of site

      (e) ☐ Project plans showing Priority & Estimated Habitat boundaries

   d. OR Check One of the Following

      1. ☐ Project is exempt from MESA review.
         Attach applicant letter indicating which MESA exemption applies. (See 321 CMR 10.14, http://www.mass.gov/dfwele/dfw/nhesp/regulatory_review/mesa/mesa_exemptions.htm; the NOI must still be sent to NHESP if the project is within estimated habitat pursuant to 310 CMR 10.37 and 10.59.)

      2. ☐ Separate MESA review ongoing. — a. NHESP Tracking # _____ — b. Date submitted to NHESP _____

* Some projects **not** in Estimated Habitat may be located in Priority Habitat, and require NHESP review (see http://www.mass.gov/dfwele/dfw/nhesp/nhesp.htm, regulatory review tab). Priority Habitat includes habitat for state-listed plants and strictly upland species not protected by the Wetlands Protection Act.

** MESA projects may not be segmented (321 CMR 10.16). The applicant must disclose full development plans even if such plans are not required as part of the Notice of Intent process.

C. Other Applicable Standards and Requirements (cont'd)

3. ☐ Separate MESA review completed.
Include copy of NHESP "no Take" determination or valid Conservation & Management Permit with approved plan.

2. For coastal projects only, is any portion of the proposed project located below the mean high water line or in a fish run?

a. ☐ Not applicable – project is in inland resource area only

b. ☐ Yes ☒ No If yes, include proof of mailing or hand delivery of NOI to either:

South Shore - Cohasset to Rhode Island, and the Cape & Islands:

Division of Marine Fisheries - Southeast Marine Fisheries Station
Attn: Environmental Reviewer
1213 Purchase Street – 3rd Floor
New Bedford, MA 02740-6694

North Shore - Hull to New Hampshire:

Division of Marine Fisheries - North Shore Office
Attn: Environmental Reviewer
30 Emerson Avenue
Gloucester, MA 01930

Also if yes, the project may require a Chapter 91 license. For coastal towns in the Northeast Region, please contact MassDEP's Boston Office. For coastal towns in the Southeast Region, please contact MassDEP's Southeast Regional Office.

3. Is any portion of the proposed project within an Area of Critical Environmental Concern (ACEC)?

a. ☐ Yes ☒ No If yes, provide name of ACEC (see instructions to WPA Form 3 or MassDEP Website for ACEC locations). **Note:** electronic filers click on Website.

b. ACEC

Online Users: Include your document transaction number (provided on your receipt page) with all supplementary information you submit to the Department.

4. Is any portion of the proposed project within an area designated as an Outstanding Resource Water (ORW) as designated in the Massachusetts Surface Water Quality Standards, 314 CMR 4.00?

a. ☐ Yes ☒ No

5. Is any portion of the site subject to a Wetlands Restriction Order under the Inland Wetlands Restriction Act (M.G.L. c. 131, § 40A) or the Coastal Wetlands Restriction Act (M.G.L. c. 130, § 105)?

a. ☒ Yes ☐ No

6. Is this project subject to provisions of the MassDEP Stormwater Management Standards?

a. ☐ Yes. Attach a copy of the Stormwater Report as required by the Stormwater Management Standards per 310 CMR 10.05(6)(k)-(q) and check if:

1. ☐ Applying for Low Impact Development (LID) site design credits (as described in Stormwater Management Handbook Vol. 2, Chapter 3)

2. ☐ A portion of the site constitutes redevelopment

3. ☐ Proprietary BMPs are included in the Stormwater Management System.

b. ☒ No. Check why the project is exempt:

1. ☒ Single-family house

C. Other Applicable Standards and Requirements (cont'd)

2. ☐ Emergency road repair

3. ☐ Small Residential Subdivision (less than or equal to 4 single-family houses or less than or equal to 4 units in multi-family housing project) with no discharge to Critical Areas.

D. Additional Information

Applicants must include the following with this Notice of Intent (NOI). See instructions for details.

Online Users: Attach the document transaction number (provided on your receipt page) for any of the following information you submit to the Department.

1. ☒ USGS or other map of the area (along with a narrative description, if necessary) containing sufficient information for the Conservation Commission and the Department to locate the site. (Electronic filers may omit this item.)

2. ☒ Plans identifying the location of proposed activities (including activities proposed to serve as a Bordering Vegetated Wetland [BVW] replication area or other mitigating measure) relative to the boundaries of each affected resource area.

3. ☒ Identify the method for BVW and other resource area boundary delineations (MassDEP BVW Field Data Form(s), Determination of Applicability, Order of Resource Area Delineation, etc.), and attach documentation of the methodology.

4. ☒ List the titles and dates for all plans and other materials submitted with this NOI.

Site Plan To Accompany A Notice of Intent Application
a. Plan Title

Blackwell & Associates, Inc.
b. Prepared By

Jeffrey L. Blackwell, PLS
c. Signed and Stamped by

1"=40'
e. Scale

May 12, 2016

f. Additional Plan or Document Title

g. Date

5. ☐ If there is more than one property owner, please attach a list of these property owners not listed on this form.

6. ☒ Attach proof of mailing for Natural Heritage and Endangered Species Program, if needed.

7. ☐ Attach proof of mailing for Massachusetts Division of Marine Fisheries, if needed.

8. ☒ Attach NOI Wetland Fee Transmittal Form

9. ☐ Attach Stormwater Report, if needed.

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WPA Form 3 – Notice of Intent

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40
And the Town of Nantucket Wetlands Bylaw Chapter 136

Provided by MassDEP:

MassDEP File Number

Document Transaction Number

NANTUCKET
City/Town

E. Fees

1. ☐ Fee Exempt: No filing fee shall be assessed for projects of any city, town, county, or district of the Commonwealth, federally recognized Indian tribe housing authority, municipal housing authority, or the Massachusetts Bay Transportation Authority.

Applicants must submit the following information (in addition to pages 1 and 2 of the NOI Wetland Fee Transmittal Form) to confirm fee payment:

22422	May 12, 2016
2. Municipal Check Number	3. Check date
22417	May 12, 2016
4. State Check Number	5. Check date
Blackwell & Assoc.,Inc.	
6. Payor name on check: First Name	7. Payor name on check: Last Name

F. Signatures and Submittal Requirements

I hereby certify under the penalties of perjury that the foregoing Notice of Intent and accompanying plans, documents, and supporting data are true and complete to the best of my knowledge. I understand that the Conservation Commission will place notification of this Notice in a local newspaper at the expense of the applicant in accordance with the wetlands regulations, 310 CMR 10.05(5)(a).

I further certify under penalties of perjury that all abutters were notified of this application, pursuant to the requirements of M.G.L. c. 131, § 40. Notice must be made by Certificate of Mailing or in writing by hand delivery or certified mail (return receipt requested) to all abutters within 100 feet of the property line of the project location.

Jeffrey Rheaume, Agent	May 12, 2016
1. Signature of Applicant	2. Date
3. Signature of Property Owner (if different)	4. Date
Jeffrey Rheaume	May 12, 2016
5. Signature of Representative (if any)	6. Date

For Conservation Commission:
Two copies of the completed Notice of Intent (Form 3), including supporting plans and documents, two copies of the NOI Wetland Fee Transmittal Form, and the city/town fee payment, to the Conservation Commission by certified mail or hand delivery.

For MassDEP:
One copy of the completed Notice of Intent (Form 3), including supporting plans and documents, one copy of the NOI Wetland Fee Transmittal Form, and a **copy** of the state fee payment to the MassDEP Regional Office (see Instructions) by certified mail or hand delivery.

Other:
If the applicant has checked the "yes" box in any part of Section C, Item 3, above, refer to that section and the Instructions for additional submittal requirements.

The original and copies must be sent simultaneously. Failure by the applicant to send copies in a timely manner may result in dismissal of the Notice of Intent.

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

NOI Wetland Fee Transmittal Form

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Important: When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.

A. Applicant Information

1. Applicant:

Haulover LLC
a. First Name | b. Last Name

c. Organization

1010 Wisconsin Avenue. NW
d. Mailing Address

Washington | DC | 20007
e. City/Town | f. State | g. Zip Code

h. Phone Number | i. Fax Number | j. Email Address

2. Property Owner (if different):

a. First Name | b. Last Name

c. Organization

d. Mailing Address

e. City/Town | f. State | g. Zip Code

h. Phone Number | i. Fax Number | j. Email Address

3. Project Location:

165 Wauwinet Rd | Nantucket
a. Street Address | b. City/Town

To calculate filing fees, refer to the category fee list and examples in the instructions for filling out WPA Form 3 (Notice of Intent).

B. Fees

The fee should be calculated using the following six-step process and worksheet. **Please see Instructions before filling out worksheet.**

Step 1/Type of Activity: Describe each type of activity that will occur in wetland resource area and buffer zone.

Step 2/Number of Activities: Identify the number of each type of activity.

Step 3/Individual Activity Fee: Identify each activity fee from the six project categories listed in the instructions.

Step 4/Subtotal Activity Fee: Multiply the number of activities (identified in Step 2) times the fee per category (identified in Step 3) to reach a subtotal fee amount. Note: If any of these activities are in a Riverfront Area in addition to another Resource Area or the Buffer Zone, the fee per activity should be multiplied by 1.5 and then added to the subtotal amount.

Step 5/Total Project Fee: Determine the total project fee by adding the subtotal amounts from Step 4.

Step 6/Fee Payments: To calculate the state share of the fee, divide the total fee in half and subtract $12.50. To calculate the city/town share of the fee, divide the total fee in half and add $12.50.

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

NOI Wetland Fee Transmittal Form

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

B. Fees (continued)

Step 1/Type of Activity	Step 2/Number of Activities	Step 3/Individual Activity Fee	Step 4/Subtotal Activity Fee
Cat. 1 – Work on a single family home.	1	$110	$110
Nantucket Wetland By-law Fee			$25
Nantucket Expert Review Fee			$200

Step 5/Total Project Fee: $110 + $25 + $200

Step 6/Fee Payments:

Total Project Fee:	$200 + $25 + $200 a. Total Fee from Step 5
State share of filing Fee:	$42.50 b. 1/2 Total Fee **less** $12.50
City/Town share of filling Fee:	$67.50+ $25+ $200 c. 1/2 Total Fee **plus** $12.50

C. Submittal Requirements

a.) Complete pages 1 and 2 and send with a check or money order for the state share of the fee, payable to the Commonwealth of Massachusetts.

Department of Environmental Protection
Box 4062
Boston, MA 02211

b.) **To the Conservation Commission:** Send the Notice of Intent or Abbreviated Notice of Intent; a **copy** of this form; and the city/town fee payment.

To MassDEP Regional Office (see Instructions): Send a copy of the Notice of Intent or Abbreviated Notice of Intent; a **copy** of this form; and a **copy** of the state fee payment. (E-filers of Notices of Intent may submit these electronically.)

MESA PROJECT REVIEW CHECKLIST

Massachusetts Endangered Species Act M.G.L. c. 131A and Regulations (321 CMR 10.00)

Massachusetts Division of Fisheries & Wildlife
Natural Heritage & Endangered Species Program

~~~~ CONTACT INFORMATION ~~~~

If you already completed your Notice of Intent- Form 3, you can send page 1 of the NOI in place of questions 1 through 4 in this section

1. **Project Location:**

165 Wauwinet Rd	Nantucket	02554
Street Address/Location	City/Town	Zip Code
7 / 1.1	Lots 44 through 49	
Assessors Map/Plat Number / Parcel	/Lot Number	

2. **Applicant:**

Haulover LLC	c/o E. Foley Vaughan	Vaughan Dale Hunter & Beaudette
First Name Last	Name	Company
1010 Wisconsin Ave. NW		
Mailing Address		
Washington	DC	20007
City/Town	State	Zip Code
508-228-4455		foley@vdhlaw.com
Phone Number	Fax Number	Email address

3. **Property owner (if different from applicant):**

First Name Last	Name	Company
Mailing Address		
City/Town	State	Zip Code
Phone Number	Fax Number	Email address

4. **Representative (if any):**

Blackwell & Assoc., Inc.		
Company		
Jeffrey	Blackwell	
Contact Person First Name	Contact Person Last Name	
20 Teasdale Circle		
Mailing Address		
Nantucket	MA	02554
City/Town	State	Zip Code
508-228-9026		jeff@blackwellsurvey.com
Phone Number	Fax Number	Email address

~~~~ADDITIONAL INFORMATION ~~~~

1. Will this project require a filing with the Conservation Commission and/or DEP? ☐ No ☑ Yes
2. Will this project meet any threshold for a MA Environmental Policy Act (MEPA) filing (excluding rare species, 301 CMR 11.03 (2))? ☑ No ☐ Yes
3. Has this project previously been issued a NHESP Tracking Number (either by previous NOI Submittal or MESA Information Request Form)? ☐ No ☑ Yes

If Yes - Tracking No. 97-2127

~~~~PROJECT DESCRIPTION (attach separate sheet, as needed) ~~~~

Please note, certain projects or activities are exempt from review, see 321 CMR 10.14. The MESA does not allow project segmentation. Your filing must reflect all anticipated work associated with the proposed project (CMR 321 10.16).

Application to obtain after the fact permission for a ramp to a deck, ramp to catwalk and second story balcony.

The ramps allow easier access to the house and catwalk for the elderly owner.

~~~~INCLUDE THE FOLLOWING INFORMATION ~~~~

The NHESP will notify the applicant within 30 days if the materials submitted do not satisfy requirements for a filing and request submission of any missing materials (321 CMR 10.18(1)).

ALL Applicants must submit:

- ☑ USGS map (1:24,000 or 1:25,000) with property boundary clearly outlined
- ☑ Project plans for entire site (including wetland Resource Areas, showing existing and proposed conditions, existing and proposed tree/vegetation clearing line, and clearly demarcated limits of work)
- ☑ Assessor's map or right-of-way plan of site
- ☑ Project description
- ☑ Statement/proof that applicant is the Record Owner or that applicant is a person authorized in writing by the record owner to submit this filing
- ☑ Photographs representative of the site

Projects altering* 10 or more acres, must also submit:

- ☐ A vegetation cover type map of the site
- ☐ Project plans showing Priority Habitat boundaries

The NHESP may request additional information, such as, but not limited to, species and habitat surveys, wetland reports, soil map and reports, and stormwater management reports (321 CMR 10.16).

*Alteration: Any physical alteration of land, soils, drainage or destruction of plant life, see "Project or Activity" (321 CMR 10.02).

~~~~ FILING FEES ~~~~

See Fee Schedule below

a. Total MESA Fee Paid $300.00 b. Acreage of Disturbance* 279 sq. ft. c. Total Site Acreage 16.0 Acres

~~~~ REQUIRED SIGNATURES ~~~~

I hereby certify under the penalties of perjury that the foregoing MESA filing and accompanying plans, documents, and supporting data are true and complete to the best of my knowledge.

Jeff Rhoades, Agent — May 11, 2016

Signature of Property Owner/Record Owner of Property — Date

Jeff Rhoades Agent — May 11, 2016

Signature of Applicant (required, if different from Owner) — Date

Please send form, required information, and filing fee (payable to "Comm. of MA - NHESP") to:

Regulatory Review
Natural Heritage & Endangered Species Program
1 Rabbit Hill Road
Westborough, MA 01581

Natural Heritage & Endangered Species Program
Massachusetts Division of Fisheries & Wildlife

Questions regarding this form should be directed according to the county that the property is located:

Berkshire, Essex, Franklin, Hampshire, Hampden, Middlesex & Worcester Counties call: 508-389-6361
Barnstable, Bristol, Dukes, Nantucket, Norfolk, Plymouth & Suffolk Counties call: 508-389-6385

PROJECT REVIEWS 321 CMR 10.18			
Project Definition	**Project Criteria**	**Fee**	**Response Time**
Simple	Less than 5 acres of disturbance*	$ 300.00	60 days from determination of complete filing
Intermediate *(Moderate)*	5 to 20 acres of disturbance*	$ 1800.00	60 days from determination of complete filing
Complex	More than 20 acres of disturbance* or project requires wetlands variance	$ 4000.00	60 days from determination of complete filing
Linear	Projects greater than 1 mile in length.	$ 4000.00 per Priority Habitat intersected	60 days from determination of complete filing

* Disturbance means direct physical disturbance of the land surface or waterbody, soil and/or vegetation, if only a portion of the project site is located within Priority Habitat, indicate total area of disturbance for site as a whole.

Transfer Certificate of Title

Cert No:24394
Doc No:138250

From Transfer
Certificate No. 10943 Originally Registered January 18, 1984 at the Registry District of Nantucket County

This is to Certify that

HAULOVER LLC, a Delaware Limited Liability Corporation

of 1010 Wisconsin Avenue NW, Washington in the District of Columbia 20007 is the owner, in fee simple, of that land situated in Nantucket, in the County of Nantucket and Commonwealth of Massachusetts, bounded and described as follows:

NORTHWESTERLY	by land now or formerly of Harriet W. Backus, measuring on the upland, about seven hundred sixteen (716+) feet;
NORTHEASTERLY	by the Atlantic Ocean;
SOUTHEASTERLY	by Lot 24 as shown on plan hereinafter mentioned, measuring on the upland, about three hundred eighty-three (383+) feet; and
SOUTHWESTERLY	by Nantucket Harbor.

All of said boundaries, except the water lines, are determined by the Court to be located as shown upon plan numbered 10990-S, drawn by Schofield Brothers, Inc., Surveyors, dated May 27, 1975, and filed with Certificate of Title No. 10,943, at the Registry District of Nantucket County. Said land is shown thereon as Lots 44, 45, 46, 47, 48 and 49.

Said land is subject to the rights of owners of land north of the premises to use the easement 40 feet wide shown on said plan for access on foot and in four wheel drive vehicles and for the installation of underground utilities.

Said land is subject to an appurtenant easement over the granted premises for the benefit of the land retained by the grantor (David M. Roby, Tr., Document No. 28749) to the north, being the remainder of Lot C-1 shown on Plan No. 10990-C, to connect to the utility lines located in the 40 foot wide "Easement" on Lot 49 as shown on said Plan No. 10990-S. Any such connection or extension of utility lines over the granted premises to land of the grantor northerly thereof shall be at the grantor's sole expense.

Said Lot 49 is subject to the restriction imposed for the benefit of the land retained by the Grantor adjoining to the north that no buildings shall be constructed on Lot 49 except for the single family house with appurtenant unattached structures, such as duck walks, boardwalks, boat landings, piers, well and pump house, and one wind generator (if none is erected south of Lot 49 on other land of the Grantee), and the following appurtenant structures provided they are attached to said house: solar flat plate collectors, photo-voltaic cells, water catchment and storage facilities or potable water storage facilities, all such structures to serve only the single family house on Lot 49, substantially in accordance with the Superseding Order of Conditions registered as Document No. 28750.

There is appurtenant to said land an easement of access 30 feet wide from the premises southerly to Wauwinet Road (a town road) on foot and in vehicles and for utilities, including, but not limited to, water, electric and telephone lines.

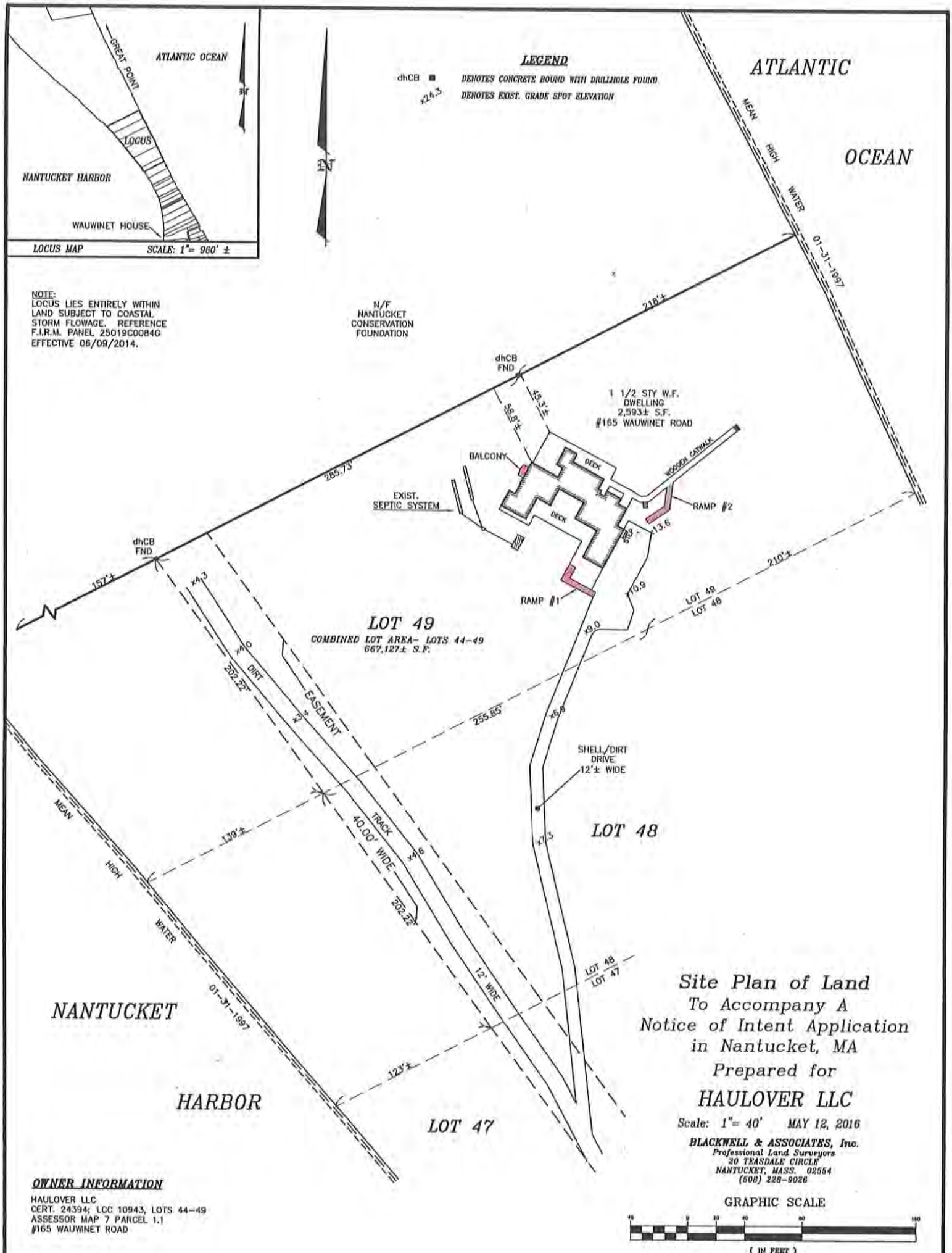
There is appurtenant to said land easements for utilities as set forth in Document Nos. 27928, 27601, 27961, 28743, 28744, 28585 and 4196.

Said land has the benefit of an agreement between Wauwinet House, Inc. and the Grantor, registered as Document No. 27960, with regard to supplying water to the premises.

And it is further certified that said land is under the operation and provisions of Chapter 185 of the General Laws, and that the title of said

HAULOVER LLC

to said land is registered under said Chapter subject, however, to any of the encumbrances mentioned in section forty-six of said chapter, which may be subsisting, and subject also as aforesaid; and to any and all public rights legally existing in and over the same below mean high water mark in the Atlantic Ocean and Nantucket Harbor.


LOCUS MAP
SCALE: 1"= 960' ±
GREAT POINT
ATLANTIC OCEAN
LOCUS
NANTUCKET HARBOR
WAUWINET HOUSE
LEGEND
dhCB DENOTES CONCRETE BOUND WITH DRILLHOLE FOUND
x24.3 DENOTES EXIST. GRADE SPOT ELEVATION
ATLANTIC
OCEAN
MEAN HIGH WATER 01-31-1997
NOTE:
LOCUS LIES ENTIRELY WITHIN LAND SUBJECT TO COASTAL STORM FLOWAGE. REFERENCE F.I.R.M. PANEL 25019C0084G EFFECTIVE 06/09/2014.
N/F NANTUCKET CONSERVATION FOUNDATION
218'±
dhCB FND
45.3'±
58.8'±
1 1/2 STY W.F. DWELLING 2,593± S.F. #165 WAUWINET ROAD
BALCONY
DECK
WOODEN CATWALK
285.73'
EXIST. SEPTIC SYSTEM
RAMP #2
13.6
dhCB FND
157'±
210'±
RAMP #1
10.9
LOT 49
LOT 48
LOT 49
COMBINED LOT AREA- LOTS 44-49
667,127± S.F.
x9.0
x4.3
x4.0
DIRT
202.72'
EASEMENT
x3.4
255.85'
x6.8
SHELL/DIRT DRIVE 12'± WIDE
LOT 48
MEAN HIGH WATER 01-31-1997
139'±
TRACK 40.00' WIDE
x4.6
x7.3
202.72'
12' WIDE
LOT 48
LOT 47
NANTUCKET
HARBOR
123'±
LOT 47
Site Plan of Land
To Accompany A
Notice of Intent Application
in Nantucket, MA
Prepared for
HAULOVER LLC
Scale: 1"= 40' MAY 12, 2016
BLACKWELL & ASSOCIATES, Inc.
Professional Land Surveyors
20 TEASDALE CIRCLE
NANTUCKET, MASS. 02554
(508) 228-9026
GRAPHIC SCALE
(IN FEET)
1 inch = 40 ft.
OWNER INFORMATION
HAULOVER LLC
CERT. 24394; LCC 10943, LOTS 44-49
ASSESSOR MAP 7 PARCEL 1.1
#165 WAUWINET ROAD

BLACKWELL & ASSOCIATES, INC.
Professional Land Surveyors & Civil Engineers

B4719

May 12, 2016

INTRODUCTION

The application at 165 Wauwinet Road in Nantucket, Massachusetts involves permitting of previously constructed deck ramp, catwalk ramp and second story balcony. The work will occur in an area which is currently altered. The work as proposed will not impact the ability of the resource areas to function as they currently do. Due to the proximity of the resource areas, the work requires a waiver from the Nantucket Wetlands By-laws.

SITE DESCRIPTION

The site consists of a property located on the east side of Wauwinet Road in the Coskata section of Nantucket. The total area of the site is 15.31 acres. The site is open, undisturbed land with the exception of the area immediately around the existing house.

The entire site is under jurisdiction of the Massachusetts Wetlands Protection Act (MGL 131 Sec. 40), its Regulations (310 CMR 10.00), and the Nantucket Wetlands By-law (Ch. 136-7). The resource areas include Land under the Ocean, Coastal Beach, Coastal Dune, Barrier Beach, Coastal Bank, Land Subject to Coastal Storm Flowage, and the 100-foot Buffer Zone (10.02) to these areas.

The resource area "Land Under the Ocean" is that portion of the site seaward of the mean low water line. No work is proposed in the resource area.

The Coastal Beach is defined as the unconsolidated sediments between the mean low water line and the lowest of either the dune line or the coastal bank line. No work is proposed in this resource area.

The Coastal Dune on the site consists of the hill of sand in front of the house. The boundary of the dune is the limit of the migrating sand. The proposed work will not affect the ability of the resource area to function as it currently does.

The resource area Barrier Beach extends across the property. The Barrier Beach has been identified as part of the "Barrier Beach Inventory Project," conducted by the Massachusetts Coastal Zone Management Program under Executive Order 181. The beach is shown as NT-23 on the Great Point Quadrangle United States Geological Survey (USGS) map. The work as proposed will not affect the ability of the resource area to function as it currently does.

Coastal Bank is landward of Coastal Beach. The bottom edge of the Bank is the toe of the slope. The upper boundary of the Coastal Bank varies depending on the degree of slope. Where the slope is steeper than 4:1, the first break in slope above the 100-year flood level is the uppermost boundary of the Bank. Where the slope is between 4:1 and 10:1, the uppermost boundary is the 100-year flood elevation. Where the slope is greater than 10:1, no Coastal Bank is present. No work is proposed in the resource area.

Land Subject to Coastal Storm Flowage consists of the area shown on the Federal Emergency Management Act (FEMA) floodplain maps (Zone VE); this includes the entire site. The work will not alter the ability of the resource area to function as it currently does.

The 100-foot Buffer Zone to the resource area extends across the entire site.

A review of the 2008 "Massachusetts Natural Heritage Atlas," prepared by the Massachusetts Natural Heritage and Endangered Species Program, indicates that the site is located within the known range of a state-listed rare wetlands wildlife species. A copy of the Notice of Intent and MESA Project Review has been submitted to the Program for review.

WORK DESCRIPTION

The proposed work involves permitting of previously constructed balcony and ramps to a deck and catwalk. The work extends over an area which is devoid of vegetation and has been altered due to the proximity to the house.

The ramps reduce activity in the resource areas by redirecting some of the foot traffic from the existing paths to entering the house directly from the driveway. The work will not increase the use of the house through addition of bedrooms or floor space.

The ramps were constructed to allow for wind and sand migration. The balcony is on the second story and does not affect the resource areas.

CONCLUSION

The ramps and balcony do not impact the ability of the resource areas to function.

BLACKWELL & ASSOCIATES, INC.
Professional Land Surveyors & Civil Engineers

B4719

May 12, 2016

Nantucket Conservation Commission
2 Bathing Beach Road
Nantucket, MA 02554

Re: Waiver Request for Haulover, LLC. Filing, 165 Wauwinet Road

Dear Commission Members:

This letter is to request a waiver from the Nantucket Wetlands By-law (2.03) for permitting a previously constructed second story balcony, ramp to deck and ramp to old catwalk on a Barrier Beach and within 50 feet of a Coastal Dune.

The request is justified for the following reasons:

1. The work as proposed will not impact the ability of the resource area to function as it currently does.
2. The ramps reduce current impacts to the resource areas by redirecting some of the foot traffic from the paths through resource areas to directly accessing the house.
3. The ramps are over an already disturbed area. No new areas will be disturbed.
4. All ramps are on pilings to allow for wind and sand migration. The balcony is attached to the second story of the structure.
5. The ramps are located in the least environmentally sensitive area of the site and allow the elderly owner access to the house and shore.
6. There is no other reasonable alternative.

If you have any questions, please call.

Regards,

Blackwell & Associates, Inc.
By Jeffrey L. Blackwell, P.L.S.

JLB/dmm

12/11/2015 15:59

12/11/2015 15:58

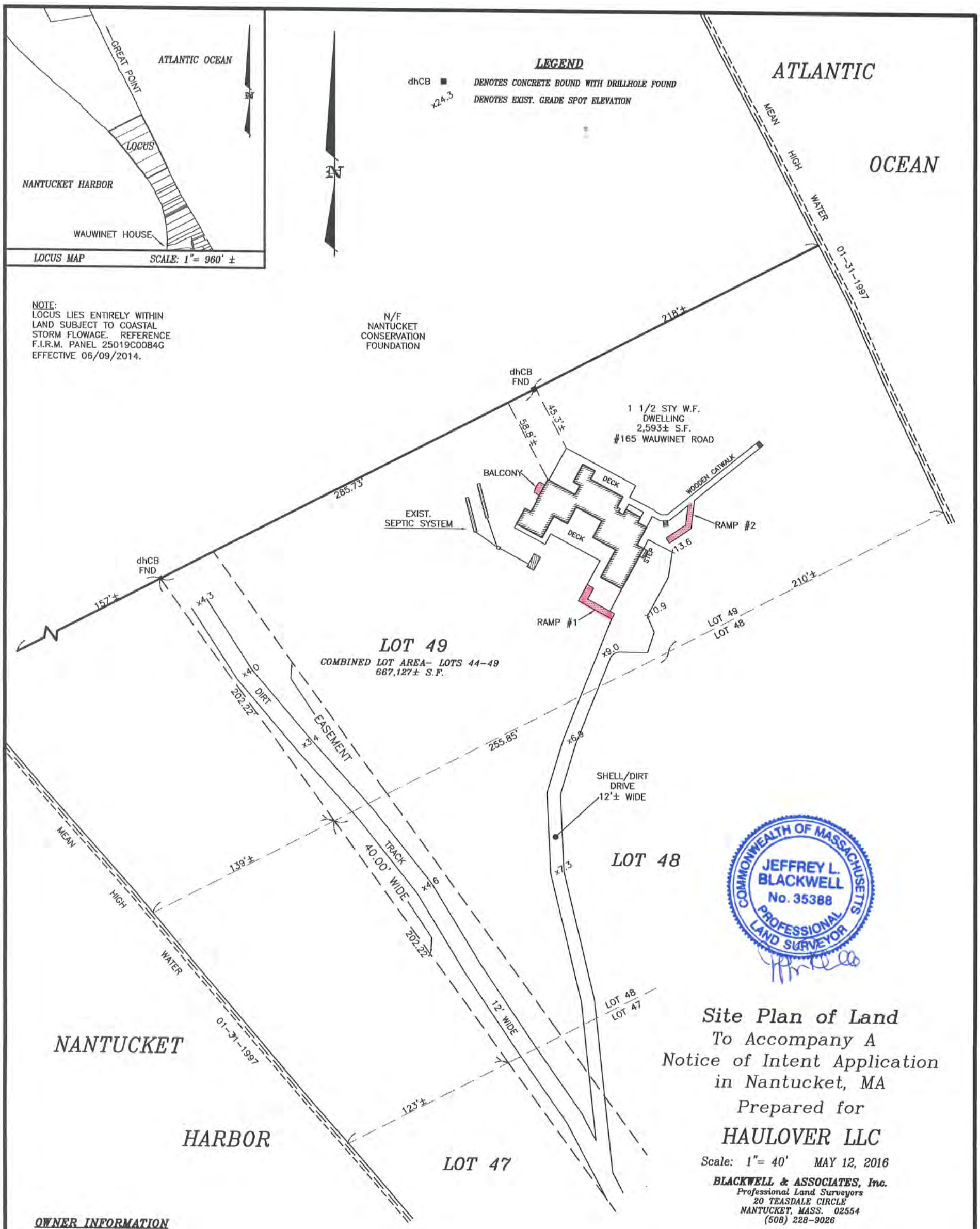
12/11/2015 16:00

12/11/2015 15:51

12/11/2015 15:57

12/11/2015 15:51

12/11/2015 15:51


GREAT POINT
ATLANTIC OCEAN
LOCUS
NANTUCKET HARBOR
WAUWINET HOUSE
LOCUS MAP
SCALE: 1"= 960' ±
LEGEND
dhCB DENOTES CONCRETE BOUND WITH DRILLHOLE FOUND
x24.3 DENOTES EXIST. GRADE SPOT ELEVATION
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OCEAN
MEAN HIGH WATER
01-31-1997
NOTE:
LOCUS LIES ENTIRELY WITHIN LAND SUBJECT TO COASTAL STORM FLOWAGE. REFERENCE F.I.R.M. PANEL 25019C0084G EFFECTIVE 06/09/2014.
N/F
NANTUCKET CONSERVATION FOUNDATION
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dhCB FND
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DECK
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285.73'
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RAMP #2
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210'±
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LOT 49
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COMBINED LOT AREA- LOTS 44-49
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x4.6
x7.3
202.22'
12' WIDE
LOT 48
LOT 47
NANTUCKET
HARBOR
123'±
LOT 47
COMMONWEALTH OF MASSACHUSETTS
JEFFREY L. BLACKWELL
No. 35388
PROFESSIONAL LAND SURVEYOR
Site Plan of Land
To Accompany A
Notice of Intent Application
in Nantucket, MA
Prepared for
HAULOVER LLC
Scale: 1"= 40' MAY 12, 2016
BLACKWELL & ASSOCIATES, Inc.
Professional Land Surveyors
20 TEASDALE CIRCLE
NANTUCKET, MASS. 02554
(508) 228-9026
GRAPHIC SCALE
40 0 20 40 80 160
(IN FEET)
1 inch = 40 ft.
OWNER INFORMATION
HAULOVER LLC
CERT. 24394; LCC 10943, LOTS 44-49
ASSESSOR MAP 7 PARCEL 1.1
#165 WAUWINET ROAD
T:\JEFF 25 JOB 77
V:\DRAWFILES\B4719\CON COM AB.dwg 5/11/2016 7:16:51 AM EDT
B4719

Edel & Alderson

8 High Brush Path

(56-370)

Notice of Intent Application

May 13, 2016

Subject Property
8 High Brush Path
Map 56, Parcel 370
Nantucket, Massachusetts

Applicants/Property Owners
Gregg R. Edell & Richard L. Alderson
34 Addison Drive
Short Hills, NJ 07076-1808

LEC Environmental Consultants, Inc.

12 Resnik Road, Suite 1
Plymouth, MA 02360
508-746-9491
508-746-9492 fax

www.lecenvironmental.com

May 13, 2016

Hand Delivery

Nantucket Conservation Commission
2 Bathing Beach Road
Nantucket, MA 02554

Re: Notice of Intent Application [LEC File #: BrEI\14-326.01]
8 High Brush Path
Map 56, Parcel 370
Nantucket, Massachusetts

Dear Members of the Commission:

On behalf of the Applicants, Gregg R. Edell & Richard L. Alderson, LEC Environmental Consultants, Inc., (LEC) is submitting this Notice of Intent (NOI) Application for a proposed addition and new front porch onto the existing single-family dwelling; set of stairs and outdoor shower onto the detached garage/studio; pool, patio, and pool fence; reconfiguration of the pervious driveway; and septic upgrade and appurtenances with landscaping and minimal regrading on the above-referenced subject parcel. Proposed work activities occur within the 100-foot Buffer Zone to Bordering Vegetated Wetlands (BVW)/Vegetated Wetlands protected under the *Massachusetts Wetlands Protection Act* (M.G.L., c. 131, s. 40), its implementing *Regulations* (310 CMR 10.00), and/or the *Town of Nantucket Bylaw* (Chapter 136) and *Wetlands Protection Regulations* (*Bylaw*). Details of the proposed project are depicted on the *Proposed Site Plan* prepared by Bracken Engineering, Inc., dated May 11, 2016.

Enclosed please find three checks made payable to the Town of Nantucket: Two Hundred and Sixty-Two Dollars and Fifty Cents ($262.50) for the town portion of the WPA filing fee; Two Hundred Dollars ($200.00) for the Town Consultant fee; and Twenty-Five Dollars ($25.00) for the *Bylaw* fee. A check made payable to the *Inquirer and Mirror* ($266.90) has also been submitted for the legal advertising fee. The state portion of the WPA filing fee ($237.50) has been forwarded to the DEP Lockbox.

Thank you for your consideration of this Application. We look forward to meeting with you at the June 1, 2016 Public Hearing to discuss the project further. Should you have any questions or require additional information, please do not hesitate to contact me at 508-746-9491 or bmadden@lecenvironmental.com.

Sincerely,

LEC Environmental Consultants, Inc.

Brian T. Madden
Wildlife Scientist

cc: DEP SERO; Gregg R. Edell & Richard L. Alderson; Bracken Engineering, Inc.

i. WPA Form 3 – Notice of Intent
ii. Wetland Fee Transmittal Form
iii. Copy of Filing Fees
iv. Affidavit of Service
v. Letter to Abutters
vi. Abutter Notification Form
vii. Certified List of Abutters

Wetland Resource Area Analysis and Report

1. Introduction 1

2. General Site Description 1
2.1 Floodplain Designation 2
2.2 Natural Heritage and Endangered Species Program Designation 2

3. Wetland Boundary Determination Methodology 2

4. Wetland Resource Area Descriptions 3
4.1 Bordering Vegetated Wetland/Vegetated Wetlands 3

5. Proposed Project 3

6. Waiver Request 5

7. Summary 5

Literature Referenced

Appendices

Appendix A

Locus Maps
Figure 1: USGS Topographic Map
Figure 2: Aerial Orthophoto
Figure 3: FEMA Flood Insurance Rate Map
Figure 4: NHESP Map

Appendix B
Photographs

Appendix C
Field Data Forms

Appendix D
Proposed Site Plan, prepared by Bracken Engineering, Inc., dated May 11, 2016

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WPA Form 3 – Notice of Intent

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40
and The Town of Nantucket Wetlands Bylaw Chapter 136

Provided by MassDEP:

MassDEP File Number

Document Transaction Number

Nantucket
City/Town

Important: When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.

Note: Before completing this form consult your local Conservation Commission regarding any municipal bylaw

A. General Information

1. Project Location (**Note:** electronic filers will click on button to locate project site):

8 High Brush Path — a. Street Address
Nantucket — b. City/Town
02554 — c. Zip Code

Latitude and Longitude:
N 41.26961 — d. Latitude
W 70.12034 — e. Longitude

Map 56 — f. Assessors Map/Plat Number
Parcel 370 — g. Parcel /Lot Number

2. Applicant:

Gregg R. Edell & — a. First Name
Richard L. Alderson — b. Last Name
c. Organization
34 Addison Drive — d. Street Address
Short Hills — e. City/Town
NJ — f. State
07076-1808 — g. Zip Code
h. Phone Number
i. Fax Number
j. Email Address

3. Property owner (required if different from applicant): ☐ Check if more than one owner

a. First Name
b. Last Name
c. Organization
d. Street Address
e. City/Town
f. State
g. Zip Code
h. Phone Number
i. Fax Number
j. Email address

4. Representative (if any):

Brian T. — a. First Name
Madden — b. Last Name
LEC Environmental Consultants, Inc. — c. Company
12 Resnik Road, Suite 1 — d. Street Address
Plymouth — e. City/Town
MA — f. State
02360 — g. Zip Code
508-746-9491 — h. Phone Number
508-746-9492 — i. Fax Number
bmadden@lecenvironmental.com — j. Email address

5. Total WPA Fee Paid (from NOI Wetland Fee Transmittal Form):

$500.00 — a. Total Fee Paid
$262.50 — b. State Fee Paid
$237.50 — c. City/Town Fee Paid

A. General Information (continued)

6. General Project Description:

The proposed project involves the redevelopment of single-family residential property, including an addition/front porch, pool/ patio/fence, garage/studio stairs, outdoor shower, septic upgrade, driveway reconfiguration, min. regrading, and landscaping.

7a. Project Type Checklist: (Limited Project Types see Section A. 7b.)

1. ☒ Single Family Home
2. ☐ Residential Subdivision
3. ☐ Commercial/Industrial
4. ☐ Dock/Pier
5. ☐ Utilities
6. ☐ Coastal engineering Structure
7. ☐ Agriculture (e.g., cranberries, forestry)
8. ☐ Transportation
9. ☐ Other

7b. Is any portion of the proposed activity eligible to be treated as a limited project (including Ecological Restoration Limited Project) subject to 310 CMR 10.24 (coastal) or 310 CMR 10.53 (inland)?

1. ☐ Yes ☒ No

If yes, describe which limited project applies to this project. (See 310 CMR 10.24 and 10.53 for a complete list and description of limited project types)

2. Limited Project Type

If the proposed activity is eligible to be treated as an Ecological Restoration Limited Project (310 CMR10.24(8), 310 CMR 10.53(4)), complete and attach Appendix A: Ecological Restoration Limited Project Checklist and Signed Certification.

8. Property recorded at the Registry of Deeds for:

Nantucket	
a. County	b. Certificate # (if registered land)
1504	188
c. Book	d. Page Number

B. Buffer Zone & Resource Area Impacts (temporary & permanent)

1. ☒ Buffer Zone Only – Check if the project is located only in the Buffer Zone of a Bordering Vegetated Wetland, Inland Bank, or Coastal Resource Area.
2. ☐ Inland Resource Areas (see 310 CMR 10.54-10.58; if not applicable, go to Section B.3, Coastal Resource Areas).

Check all that apply below. Attach narrative and any supporting documentation describing how the project will meet all performance standards for each of the resource areas altered, including standards requiring consideration of alternative project design or location.

B. Buffer Zone & Resource Area Impacts (temporary & permanent) (cont'd)

For all projects affecting other Resource Areas, please attach a narrative explaining how the resource area was delineated.

Resource Area	Size of Proposed Alteration	Proposed Replacement (if any)
a. ☐ Bank	1. linear feet	2. linear feet
b. ☐ Bordering Vegetated Wetland	1. square feet	2. square feet
c. ☐ Land Under Waterbodies and Waterways	1. square feet 3. cubic yards dredged	2. square feet

Resource Area	Size of Proposed Alteration	Proposed Replacement (if any)
d. ☐ Bordering Land Subject to Flooding	1. square feet 3. cubic feet of flood storage lost	2. square feet 4. cubic feet replaced
e. ☐ Isolated Land Subject to Flooding	1. square feet 2. cubic feet of flood storage lost	3. cubic feet replaced

f. ☐ Riverfront Area

1. Name of Waterway (if available) - **specify coastal or inland**

2. Width of Riverfront Area (check one):

☐ 25 ft. - Designated Densely Developed Areas only

☐ 100 ft. - New agricultural projects only

☐ 200 ft. - All other projects

3. Total area of Riverfront Area on the site of the proposed project: _____ square feet

4. Proposed alteration of the Riverfront Area:

a. total square feet _____ b. square feet within 100 ft. _____ c. square feet between 100 ft. and 200 ft. _____

5. Has an alternatives analysis been done and is it attached to this NOI? ☐ Yes ☐ No

6. Was the lot where the activity is proposed created prior to August 1, 1996? ☐ Yes ☐ No

3. ☐ Coastal Resource Areas: (See 310 CMR 10.25-10.35)

Note: for coastal riverfront areas, please complete **Section B.2.f**. above.

B. Buffer Zone & Resource Area Impacts (temporary & permanent) (cont'd)

Check all that apply below. Attach narrative and supporting documentation describing how the project will meet all performance standards for each of the resource areas altered, including standards requiring consideration of alternative project design or location.

Online Users: Include your document transaction number (provided on your receipt page) with all supplementary information you submit to the Department.

Resource Area	Size of Proposed Alteration	Proposed Replacement (if any)
a. ☐ Designated Port Areas	Indicate size under Land Under the Ocean, below	
b. ☐ Land Under the Ocean	1. square feet 2. cubic yards dredged	
c. ☐ Barrier Beach	Indicate size under Coastal Beaches and/or Coastal Dunes below	
d. ☐ Coastal Beaches	1. square feet	2. cubic yards beach nourishment
e. ☐ Coastal Dunes	1. square feet	2. cubic yards dune nourishment

	Size of Proposed Alteration	Proposed Replacement (if any)
f. ☐ Coastal Banks	1. linear feet	
g. ☐ Rocky Intertidal Shores	1. square feet	
h. ☐ Salt Marshes	1. square feet	2. sq ft restoration, rehab., creation
i. ☐ Land Under Salt Ponds	1. square feet 2. cubic yards dredged	
j. ☐ Land Containing Shellfish	1. square feet	
k. ☐ Fish Runs	Indicate size under Coastal Banks, inland Bank, Land Under the Ocean, and/or inland Land Under Waterbodies and Waterways, above 1. cubic yards dredged	
l. ☐ Land Subject to Coastal Storm Flowage	1. square feet	

4. ☐ Restoration/Enhancement
If the project is for the purpose of restoring or enhancing a wetland resource area in addition to the square footage that has been entered in Section B.2.b or B.3.h above, please enter the additional amount here.

a. square feet of BVW | b. square feet of Salt Marsh

5. ☐ Project Involves Stream Crossings

a. number of new stream crossings | b. number of replacement stream crossings

C. Other Applicable Standards and Requirements

☐ This is a proposal for an Ecological Restoration Limited Project. Skip Section C and complete Appendix A: Ecological Restoration Notice of Intent – Required Actions (310 CMR 10.11).

Streamlined Massachusetts Endangered Species Act/Wetlands Protection Act Review

1. Is any portion of the proposed project located in **Estimated Habitat of Rare Wildlife** as indicated on the most recent Estimated Habitat Map of State-Listed Rare Wetland Wildlife published by the Natural Heritage and Endangered Species Program (NHESP)? To view habitat maps, see the *Massachusetts Natural Heritage Atlas* or go to http://maps.massgis.state.ma.us/PRI_EST_HAB/viewer.htm.

   a. ☐ Yes ☒ No

   If yes, include proof of mailing or hand delivery of NOI to:

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

   10/1/08
   b. Date of map

   If *yes*, the project is also subject to Massachusetts Endangered Species Act (MESA) review (321 CMR 10.18). To qualify for a streamlined, 30-day, MESA/Wetlands Protection Act review, please complete Section C.1.c, and include requested materials with this Notice of Intent (NOI); *OR* complete Section C.2.f, if applicable. *If MESA supplemental information is not included with the NOI, by completing Section 1 of this form, the NHESP will require a separate MESA filing which may take up to 90 days to review (unless noted exceptions in Section 2 apply, see below).*

   c. Submit Supplemental Information for Endangered Species Review*

   1. ☐ Percentage/acreage of property to be altered:

      (a) within wetland Resource Area _____ percentage/acreage

      (b) outside Resource Area _____ percentage/acreage

   2. ☐ Assessor's Map or right-of-way plan of site

2. ☐ Project plans for entire project site, including wetland resource areas and areas outside of wetlands jurisdiction, showing existing and proposed conditions, existing and proposed tree/vegetation clearing line, and clearly demarcated limits of work **

   (a) ☐ Project description (including description of impacts outside of wetland resource area & buffer zone)

   (b) ☐ Photographs representative of the site

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* Some projects **not** in Estimated Habitat may be located in Priority Habitat, and require NHESP review (see http://www.mass.gov/eea/agencies/dfg/dfw/natural-heritage/regulatory-review/). Priority Habitat includes habitat for state-listed plants and strictly upland species not protected by the Wetlands Protection Act.

** MESA projects may not be segmented (321 CMR 10.16). The applicant must disclose full development plans even if such plans are not required as part of the Notice of Intent process.

C. Other Applicable Standards and Requirements (cont'd)

(c) ☐ MESA filing fee (fee information available at http://www.mass.gov/dfwele/dfw/nhesp/regulatory_review/mesa/mesa_fee_schedule.htm). Make check payable to "Commonwealth of Massachusetts - NHESP" and ***mail to NHESP*** at above address

*Projects altering **10 or more acres** of land, also submit:*

(d) ☐ Vegetation cover type map of site

(e) ☐ Project plans showing Priority & Estimated Habitat boundaries

(f) OR Check One of the Following

1. ☐ Project is exempt from MESA review.
Attach applicant letter indicating which MESA exemption applies. (See 321 CMR 10.14, http://www.mass.gov/dfwele/dfw/nhesp/regulatory_review/mesa/mesa_exemptions.htm; the NOI must still be sent to NHESP if the project is within estimated habitat pursuant to 310 CMR 10.37 and 10.59.)

2. ☐ Separate MESA review ongoing. a. NHESP Tracking # _____ b. Date submitted to NHESP _____

3. ☐ Separate MESA review completed.
Include copy of NHESP "no Take" determination or valid Conservation & Management Permit with approved plan.

3. For coastal projects only, is any portion of the proposed project located below the mean high water line or in a fish run?

a. ☒ Not applicable – project is in inland resource area only b. ☐ Yes ☐ No

If yes, include proof of mailing, hand delivery, or electronic delivery of NOI to either:

South Shore - Cohasset to Rhode Island border, and the Cape & Islands:

Division of Marine Fisheries -
Southeast Marine Fisheries Station
Attn: Environmental Reviewer
1213 Purchase Street – 3rd Floor
New Bedford, MA 02740-6694
Email: DMF.EnvReview-South@state.ma.us

North Shore - Hull to New Hampshire border:

Division of Marine Fisheries -
North Shore Office
Attn: Environmental Reviewer
30 Emerson Avenue
Gloucester, MA 01930
Email: DMF.EnvReview-North@state.ma.us

Also if yes, the project may require a Chapter 91 license. For coastal towns in the Northeast Region, please contact MassDEP's Boston Office. For coastal towns in the Southeast Region, please contact MassDEP's Southeast Regional Office.

C. Other Applicable Standards and Requirements (cont'd)

Online Users: Include your document transaction number (provided on your receipt page) with all supplementary information you submit to the Department.

4. Is any portion of the proposed project within an Area of Critical Environmental Concern (ACEC)?

   a. ☐ Yes ☒ No If yes, provide name of ACEC (see instructions to WPA Form 3 or MassDEP Website for ACEC locations). **Note:** electronic filers click on Website.

   b. ACEC

5. Is any portion of the proposed project within an area designated as an Outstanding Resource Water (ORW) as designated in the Massachusetts Surface Water Quality Standards, 314 CMR 4.00?

   a. ☐ Yes ☒ No

6. Is any portion of the site subject to a Wetlands Restriction Order under the Inland Wetlands Restriction Act (M.G.L. c. 131, § 40A) or the Coastal Wetlands Restriction Act (M.G.L. c. 130, § 105)?

   a. ☐ Yes ☒ No

7. Is this project subject to provisions of the MassDEP Stormwater Management Standards?

   a. ☐ Yes. Attach a copy of the Stormwater Report as required by the Stormwater Management Standards per 310 CMR 10.05(6)(k)-(q) and check if:

      1. ☐ Applying for Low Impact Development (LID) site design credits (as described in Stormwater Management Handbook Vol. 2, Chapter 3)

      2. ☐ A portion of the site constitutes redevelopment

      3. ☐ Proprietary BMPs are included in the Stormwater Management System.

   b. ☒ No. Check why the project is exempt:

      1. ☒ Single-family house

      2. ☐ Emergency road repair

      3. ☐ Small Residential Subdivision (less than or equal to 4 single-family houses or less than or equal to 4 units in multi-family housing project) with no discharge to Critical Areas.

D. Additional Information

☐ This is a proposal for an Ecological Restoration Limited Project. Skip Section D and complete Appendix A: Ecological Restoration Notice of Intent – Minimum Required Documents (310 CMR 10.12).

Applicants must include the following with this Notice of Intent (NOI). See instructions for details.

Online Users: Attach the document transaction number (provided on your receipt page) for any of the following information you submit to the Department.

1. ☒ USGS or other map of the area (along with a narrative description, if necessary) containing sufficient information for the Conservation Commission and the Department to locate the site. (Electronic filers may omit this item.)

2. ☒ Plans identifying the location of proposed activities (including activities proposed to serve as a Bordering Vegetated Wetland [BVW] replication area or other mitigating measure) relative to the boundaries of each affected resource area.

D. Additional Information (cont'd)

3. ☒ Identify the method for BVW and other resource area boundary delineations (MassDEP BVW Field Data Form(s), Determination of Applicability, Order of Resource Area Delineation, etc.), and attach documentation of the methodology.

4. ☒ List the titles and dates for all plans and other materials submitted with this NOI.

Proposed Site Plan
a. Plan Title

Bracken Engineering, Inc.
b. Prepared By

Alan M. Grady
c. Signed and Stamped by

5/11/16
d. Final Revision Date

1:20
e. Scale

f. Additional Plan or Document Title

g. Date

5. ☐ If there is more than one property owner, please attach a list of these property owners not listed on this form.

6. ☐ Attach proof of mailing for Natural Heritage and Endangered Species Program, if needed.

7. ☐ Attach proof of mailing for Massachusetts Division of Marine Fisheries, if needed.

8. ☒ Attach NOI Wetland Fee Transmittal Form

9. ☐ Attach Stormwater Report, if needed.

E. Fees

1. ☐ Fee Exempt: No filing fee shall be assessed for projects of any city, town, county, or district of the Commonwealth, federally recognized Indian tribe housing authority, municipal housing authority, or the Massachusetts Bay Transportation Authority.

Applicants must submit the following information (in addition to pages 1 and 2 of the NOI Wetland Fee Transmittal Form) to confirm fee payment:

11245
2. Municipal Check Number

5/6/2016
3. Check date

11246
4. State Check Number

5/6/2016
5. Check date

Bracken Engineering, Inc.
6. Payor name on check: First Name

7. Payor name on check: Last Name

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WPA Form 3 – Notice of Intent

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40
and The Town of Nantucket Wetlands Bylaw Chapter 136

Provided by MassDEP:

MassDEP File Number

Document Transaction Number

Nantucket
City/Town

F. Signatures and Submittal Requirements

I hereby certify under the penalties of perjury that the foregoing Notice of Intent and accompanying plans, documents, and supporting data are true and complete to the best of my knowledge. I understand that the Conservation Commission will place notification of this Notice in a local newspaper at the expense of the applicant in accordance with the wetlands regulations, 310 CMR 10.05(5)(a).

I further certify under penalties of perjury that all abutters were notified of this application, pursuant to the requirements of M.G.L. c. 131, § 40. Notice must be made by Certificate of Mailing or in writing by hand delivery or certified mail (return receipt requested) to all abutters within 100 feet of the property line of the project location.

1. Signature of Applicant — 2. Date: 5/11/16

3. Signature of Property Owner (if different) — 4. Date

5. Signature of Representative (if any) — 6. Date: 5/12/16

For Conservation Commission:
Two copies of the completed Notice of Intent (Form 3), including supporting plans and documents, two copies of the NOI Wetland Fee Transmittal Form, and the city/town fee payment, to the Conservation Commission by certified mail or hand delivery.

For MassDEP:
One copy of the completed Notice of Intent (Form 3), including supporting plans and documents, one copy of the NOI Wetland Fee Transmittal Form, and a **copy** of the state fee payment to the MassDEP Regional Office (see Instructions) by certified mail or hand delivery.

Other:
If the applicant has checked the "yes" box in any part of Section C, Item 3, above, refer to that section and the Instructions for additional submittal requirements.

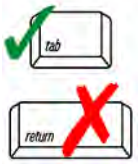
The original and copies must be sent simultaneously. Failure by the applicant to send copies in a timely manner may result in dismissal of the Notice of Intent.

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

NOI Wetland Fee Transmittal Form

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Important: When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



A. Applicant Information

1. Location of Project:

8 High Brush Path	Nantucket
a. Street Address	b. City/Town
11246	$237.50
c. Check number	d. Fee amount

2. Applicant Mailing Address:

Gregg R. Edell &	Richard L. Alderson
a. First Name	b. Last Name

c. Organization

34 Addison Drive
d. Mailing Address

Short Hills	NJ	07076-1808
e. City/Town	f. State	g. Zip Code

h. Phone Number	i. Fax Number	j. Email Address

3. Property Owner (if different):

a. First Name	b. Last Name

c. Organization

d. Mailing Address

e. City/Town	f. State	g. Zip Code

h. Phone Number	i. Fax Number	j. Email Address

To calculate filing fees, refer to the category fee list and examples in the instructions for filling out WPA Form 3 (Notice of Intent).

B. Fees

Fee should be calculated using the following process & worksheet. ***Please see Instructions before filling out worksheet.***

Step 1/Type of Activity: Describe each type of activity that will occur in wetland resource area and buffer zone.

Step 2/Number of Activities: Identify the number of each type of activity.

Step 3/Individual Activity Fee: Identify each activity fee from the six project categories listed in the instructions.

Step 4/Subtotal Activity Fee: Multiply the number of activities (identified in Step 2) times the fee per category (identified in Step 3) to reach a subtotal fee amount. Note: If any of these activities are in a Riverfront Area in addition to another Resource Area or the Buffer Zone, the fee per activity should be multiplied by 1.5 and then added to the subtotal amount.

Step 5/Total Project Fee: Determine the total project fee by adding the subtotal amounts from Step 4.

Step 6/Fee Payments: To calculate the state share of the fee, divide the total fee in half and subtract $12.50. To calculate the city/town share of the fee, divide the total fee in half and add $12.50.

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

NOI Wetland Fee Transmittal Form

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

B. Fees (continued)

Step 1/Type of Activity	Step 2/Number of Activities	Step 3/Individual Activity Fee	Step 4/Subtotal Activity Fee
Cat 2: single-family	1	$500.00	$500.00

Step 5/Total Project Fee: $500.00

Step 6/Fee Payments:

Total Project Fee:	$500.00 a. Total Fee from Step 5
State share of filing Fee:	$237.50 b. 1/2 Total Fee **less $**12.50
City/Town share of filling Fee:	$262.50 c. 1/2 Total Fee **plus** $12.50

C. Submittal Requirements

a.) Complete pages 1 and 2 and send with a check or money order for the state share of the fee, payable to the Commonwealth of Massachusetts.

Department of Environmental Protection
Box 4062
Boston, MA 02211

b.) **To the Conservation Commission:** Send the Notice of Intent or Abbreviated Notice of Intent; a **copy** of this form; and the city/town fee payment.

To MassDEP Regional Office (see Instructions): Send a copy of the Notice of Intent or Abbreviated Notice of Intent; a **copy** of this form; and a **copy** of the state fee payment. (E-filers of Notices of Intent may submit these electronically.)

May 13, 2016

CERTIFIED MAIL

«Certified_Receipt_»

«Name»
«Name2»
«Address»
«City», «State» «Zip»

Re: Notice of Intent Application [LEC File #BrEI\14-326.01]
8 High Brush Path
Map 56, Parcel 370
Nantucket, Massachusetts

Dear Abutter:

On behalf of the Applicants, Gregg R. Edell & Richard L. Alderson, LEC Environmental Consultants, Inc., (LEC) is submitting a Notice of Intent (NOI) Application for a proposed addition and new front porch onto the existing single-family dwelling; set of stairs and outdoor shower onto the detached garage/studio; pool, patio, and pool fence; reconfiguration of the pervious driveway; and septic upgrade and appurtenances with landscaping and minimal regrading on the above-referenced subject parcel. Proposed work activities occur within the 100-foot Buffer Zone to Bordering Vegetated Wetlands (BVW)/Vegetated Wetlands protected under the *Massachusetts Wetlands Protection Act* (M.G.L., c. 131, s. 40), its implementing *Regulations* (310 CMR 10.00), and/or the *Town of Nantucket Bylaw* (Chapter 136) and *Wetlands Protection Regulations* (*Bylaw*).

The NOI Application, supplemental report, and accompanying site plan are available for review by the public at the Nantucket Conservation Commission office located at 2 Bathing Beach Road in Nantucket, Massachusetts. A Public Hearing has been scheduled for June 1, 2016, with the Nantucket Conservation Commission. Public Hearings with the Nantucket Conservation Commission commence at 4:00 pm at the Public Safety Facility, 4 Fairgrounds Road. Further information regarding the Public Hearing will appear in the *Inquirer and Mirror* at least five (5) days prior to the hearing date.

Please do not hesitate to review the materials at the Conservation Commission office, attend the Public Hearing(s), and/or contact LEC should you have any questions or concerns about the Notice of Intent.

Sincerely,

LEC Environmental Consultants, Inc.

Brian T. Madden
Wildlife Scientist

Enclosure

Notification to Abutters Under the

Massachusetts Wetlands Protection Act Regulations (310 CMR 10.00)
and the
Town of Nantucket *Bylaw* (Chapter 136) and *Wetlands Protection Regulations*

In accordance with the second paragraph of Massachusetts General Laws Chapter 131, Section 40, the *Massachusetts Wetlands Protection Act Regulations* (310 CMR 10.00) and the Town of Nantucket Bylaw (Chapter 136) and *Wetlands Protection Regulations*, you are hereby notified of the following:

A. The names of the Applicants are Gregg R. Edell & Richard L. Alderson, 34 Addison Drive, Short Hills, NJ 07076-1808.

B. The Applicants have filed a Notice of Intent with the Conservation Commission for the municipality of Nantucket, Massachusetts for a proposed addition and new front porch onto the existing single-family dwelling; set of stairs and outdoor shower onto the detached garage/studio; pool, patio, and pool fence; reconfiguration of the pervious driveway; and septic upgrade and appurtenances with landscaping and minimal regrading. Proposed work activities occur within the 100-foot Buffer Zone to Bordering Vegetated Wetlands (BVW)/Vegetated Wetlands protected under the *Massachusetts Wetlands Protection Act* (M.G.L., c. 131, s. 40), its implementing *Regulations* (310 CMR 10.00), and/or the *Town of Nantucket Bylaw* (Chapter 136) and *Wetlands Protection Regulations* (*Bylaw*).

C. The address where the activity is located is 8 High Brush Path, (Map 56, Parcel 370), Nantucket, Massachusetts.

D. Copies of the Notice of Intent may be examined at the Nantucket Conservation Commission office located at 2 Bathing Beach Road or by contacting the Commission at 508-228-7230.

E. Copies of the Notice of Intent may be obtained from LEC Environmental Consultants, Inc. (the applicant's representative) by calling 508-746-9491 between the hours of 8:00 A.M. and 5:00 P.M., Monday through Friday. A fee may be charged for each copy requested.

F. Information regarding the public hearing may be obtained from the Nantucket Conservation Commission (the regulatory agency) by calling 508-228-7230.

NOTE: Notice of the Public Hearing, including its date, time, and place, will be published at least five (5) days in advance in the Inquirer and Mirror.

NOTE: You also may contact the nearest Department of Environmental Protection Regional Office for more information about this application or the Wetlands Protection Act. To contact DEP, call:

Southeast Region: 508-946-2700

1. Introduction

On behalf of the Applicants, Gregg R. Edell & Richard L. Alderson, LEC Environmental Consultants, Inc., (LEC) is submitting this Notice of Intent (NOI) Application for a proposed addition and new front porch onto the existing single-family dwelling; set of stairs and outdoor shower onto the detached garage/studio; pool, patio, and pool fence; reconfiguration of the pervious driveway; and septic upgrade and appurtenances with landscaping and minimal regrading at 8 High Brush Path on Nantucket. Proposed work activities occur within the 100-foot Buffer Zone to Bordering Vegetated Wetlands (BVW)/Vegetated Wetlands protected under the *Massachusetts Wetlands Protection Act* (M.G.L., c. 131, s. 40), its implementing *Regulations* (310 CMR 10.00), and/or the *Town of Nantucket Bylaw* (Chapter 136) and *Wetlands Protection Regulations* (*Bylaw*). A Waiver is concurrently requested from the 2-foot separation of high groundwater to the bottom of the pool.

The following NOI Application provides a description of the existing site conditions, Wetland Resource Areas, and proposed project designed to protect the interests and values of the Wetland Resource Areas enumerated within the above-referenced statutes. Details of the proposed project are depicted on the *Proposed Site Plan* prepared by Bracken Engineering, Inc., dated May 11, 2016 (Appendix D).

2. General Site Description

The 2.24± acre subject parcel is located along the north side of High Brush Path within a moderately dense residential neighborhood (Appendix A, Figures 1 and 2). The site is currently improved by an existing single-family dwelling and detached garage/studio accessed via a gravel driveway. Areas immediately surrounding the dwelling and garage/studio are occupied by lawn and landscaping. BVW/Vegetated Wetlands associated with Burnt Swamp dominate the northern and eastern portions of the property. Existing dwellings occur to west (Austin Farm Drive and New Hummock Circle) and south across High Brush Path. Undeveloped land abuts to the east.

Dominant upland vegetation primarily consists of scattered black cherry (*Prunus serotina*) trees and saplings; bush honeysuckle (*Lonicera* spp.) and arrowwood (*Viburnum dentatum*) shrubs; and dense stands of Japanese knotweed (*Fallopia japonica*).

2.1 Floodplain Designation

According to the June 9, 2014, Federal Emergency Management Agency Flood Insurance Rate Map for the Town of Nantucket (25019C0088G), the project site is located within Zone X (unshaded), areas determined to be outside the 0.2% annual chance flood (Appendix A, Figure 3).

2.2 Natural Heritage and Endangered Species Program Designation

According to the 13th edition of the Massachusetts *Natural Heritage Atlas* (effective October 1, 2008) published by the Natural Heritage & Endangered Species Program (NHESP), the subject parcel does not occur within an Estimated Habitat of Rare Wildlife or Priority Habitat of Rare Species. No Certified or Potential Vernal Pools are mapped within the vicinity of the property (Appendix A, Figure 4).

3. Wetland Boundary Determination Methodology

LEC originally conducted a site evaluation on October 4, 2014, to identify and characterize existing protectable Wetland Resource Areas located within or immediately abutting the site. The BVW/Vegetated boundary was determined through observations of the existing plant communities, using the "fifty percent criteria" to determine dominance of wetland/upland vegetation, the interpretation of soil characteristics, and other indicators of hydrology, in accordance with the principals of DEP's handbook, *Delineating Bordering Vegetated Wetlands under the Massachusetts Wetlands Protection Act* (March 1995), the *Field Indicators for Identifying Hydric Soils in New England* (April 2004), and the criteria set forth in 310 CMR 10.55(2) and the *Bylaw*, specifically analyzing the depth of high groundwater within 18 inches of the ground surface.

Based on these methods, the boundaries of BVW/Vegetated Wetlands (#'s 1-9) were demarcated with sequentially numbered blaze orange surveyor's tape with the words "LEC Resource Area Boundary" embossed in bold, black print. As survey-located by Bracken Engineering, Inc., the wetland flagging locations are depicted on the *Proposed Site Plan* (Appendix D). Field Data Forms have been included to support the wetland delineation (Appendix C). A follow-up site evaluation was conducted on July 27, 2015 and May 11, 2016, to reconfirm the delineation.

4. Wetland Resource Area Descriptions

On-site Wetland Resource Areas include Bordering Vegetated Wetland (BVW)/ Vegetated (Freshwater) Wetlands as described below.

4.1 Bordering Vegetated Wetland / Vegetated (Freshwater) Wetland

Bordering Vegetated Wetlands (BVW) are defined in 310 CMR 10.55(2) as *freshwater wetlands which border on creeks, rivers, streams, ponds, and lakes. In these areas soils are saturated and/or inundated such that they support a predominance of wetland indicator plants. The boundary of BVW is the line within which 50% or more of the vegetational community consists of wetland indicator plants and saturated or inundated conditions exist.*

A vegetated Freshwater Wetland is defined within Section 1.02 of the Nantucket *Wetlands Protection Regulations* as a *wet meadow, freshwater marsh, swamp, bog, pond, lake, creek, or stream; an area of low topography where ground water, flowing water, standing surface water, or ice provides a significant part of the supporting substrate for a plant community for at least five months a year; characterized by emergent and submergent plant communities in inland waters; and/or where depth to high groundwater is within 18 inches of the ground surface, and/or exhibits hydric soil characteristics and includes that portion of any inland bank which touches any inland waters. Freshwater wetlands are not defined to include drainage facilities constructed to include wetland vegetation as treatment for stormwater runoff.*

Portions of the BVW/Vegetated Wetlands abutting developed conditions are largely dominated by Japanese knotweed. The interior of the wetland system is occupied by winterberry (*Ilex verticillata*), arrowwood, bush honeysuckle, bayberry (*Myrica pensylvanica*), and highbush blueberry (*Vaccinium corymbosum*) shrubs along with cinnamon fern (*Osmunda cinnamomea*), sphagnum moss (*Sphagnum* spp.), and miscellaneous sedges (*Carex* spp.) scattered within the groundcover.

5. Proposed Project

The Applicants are proposing an addition and new front porch onto the existing single-family dwelling; set of stairs and outdoor shower onto the detached garage/studio; pool,

patio, and pool fence; reconfiguration of the pervious driveway; and septic upgrade and appurtenances with landscaping and minimal regrading.

The proposed 1,028± sf addition will be sited on the western and southern (front) portion of the existing dwelling, partially replacing the front porch. As such, a new front porch on posts (sono tubes) will be constructed. The proposed addition will be located on a crawlspace foundation. The Applicants are also proposing to remove a covered entrance (stoop/deck) on the eastern portion of the dwelling. The existing deck will remain. A new fieldstone-lined walking path will connect the front porch to the easterly side entrance/deck. A small half-moon-shaped dry laid stone patio is proposed directly to the north of the easterly side entrance, connected to the northerly wooden deck via fieldstones, replacing an existing brick patio/walkway.

A set of stairs will be installed on the northern portion of the garage/studio to access the second floor. An outdoor shower is proposed in between the set of stairs and an existing bump-out to garage/studio.

A proposed 8-foot deep pool and dry laid stone patio is proposed within the existing lawn area between the dwelling and garage/studio to be surrounded by a 4-foot tall pool fence. Minimal regrading and landscaping beds will abut these features. A small portion of the dwelling's northern deck will be removed in order to accommodate a small fieldstone-lined walking path.

The Applicants are proposing to upgrade the existing septic system. The proposed 5-bedroom Soil Absorption System (SAS) will occur just southeast of the existing septic system to be abandoned in accordance with Title V requirements. The proposed SAS is located greater than 100-feet from the BVW/Vegetated Wetlands and 100-feet from on and off-site wells. A new proposed sewer force main will extend from the garage/studio's existing septic/pump tanks to the proposed SAS. Temporarily disturbed areas will be restored to pre-existing conditions.

The existing loop gravel driveway will be abandoned and the extension to the garage/studio will be converted to lawn accessible for vehicles. The gravel driveway will be shortened to accommodate parking southeast of the dwelling.

Erosion control barriers will be installed as depicted on the *Proposed Site Plan* to contain all work activities and prevent erosion/sedimentation to downgradient Resource Areas.

6. Waiver Request

As stated within the *Bylaw*, *Vegetated Wetlands or Land within 100 feet of Vegetated Wetlands shall be presumed significant to the Interests Protected by the Bylaw*. Furthermore, *proposed projects which are not water dependent shall maintain at least a 25-foot natural undisturbed area adjacent to vegetated wetlands. All structures which are not water dependent shall be at least 50 feet from a vegetated wetland, and all structures shall maintain an undisturbed two-foot separation to high groundwater. Fifty percent (50%) of the area between the 25-foot buffer and the 50-foot buffer shall not be altered.*

No work is proposed within the 25-foot Buffer Zone and no structures are proposed within the 50-foot Buffer Zone to the downgradient BVW/Vegetated Wetlands. The proposed SAS is located greater than 100 feet from the BVW/Vegetated Wetlands. The proposed redevelopment will not alter greater than 50% of the area between the 25 and 50-foot buffers.

While the proposed addition will maintain a 2-foot separation to high groundwater, the proposed 8-foot deep pool will not. The Applicants are therefore respectfully requesting a Waiver under Section 1.03 F.3.(a) of the Nantucket *Wetlands Protection Regulations*. The proposed pool will not adversely affect groundwater discharge and recharge or flood control and storage. While dewatering is not anticipated, excess water will be pumped to areas outside the 100-foot Buffer Zone, if necessary.

7. Summary

On behalf of the Applicants, Gregg R. Edell & Richard L. Alderson, LEC is submitting this NOI Application for a proposed addition and new front porch onto the existing single-family dwelling; set of stairs and outdoor shower onto the detached garage/studio; pool, patio, and pool fence; reconfiguration of the pervious driveway; and septic upgrade and appurtenances with landscaping and minimal regrading.. Proposed work activities occur within the 100-foot Buffer Zone to Bordering Vegetated Wetlands (BVW)/Vegetated Wetlands. The proposed project largely complies with the *Bylaw*'s performance standards for work within the Buffer Zone. A Waiver is concurrently requested from the 2-foot separation of high groundwater to the bottom of the pool.

Literature Referenced

Federal Emergency Management Agency Flood Insurance Rate Map, Town of Nantucket (25019C0088G) effective June 9, 2014.

Massachusetts Natural Heritage Atlas, 13th Edition. Natural Heritage & Endangered Species Program, Massachusetts Division of Fisheries and Wildlife, Route 135, Westborough, MA 01581, http://maps.massgis.state.ma.us/PRI_EST_HAB/viewer.htm..

Massachusetts Wetlands Protection Act (M.G.L. c. 131, §. 40) and its implementing *Regulations* (310 CMR 10.00), www.state.ma.us/dep.

Sorrie, B. and Dunwiddie, P. 1996. *The Vascular and Non-Vascular Flora of Nantucket, Tuckernuck, and Muskeget Islands*. Massachusetts Audubon Society, Massachusetts Natural Heritage and Endangered Species Program, Nantucket Maria Mitchell Association, and The Natural Conservancy.

Town of Nantucket Bylaw (Chapter 136) and *Wetlands Protection Regulations*.

United States Department of Agriculture, Soil Conservation Service, in cooperation with Massachusetts Agricultural Experiment Station, Soil Survey for Nantucket County, Massachusetts, issued June 1979.

Appendix A

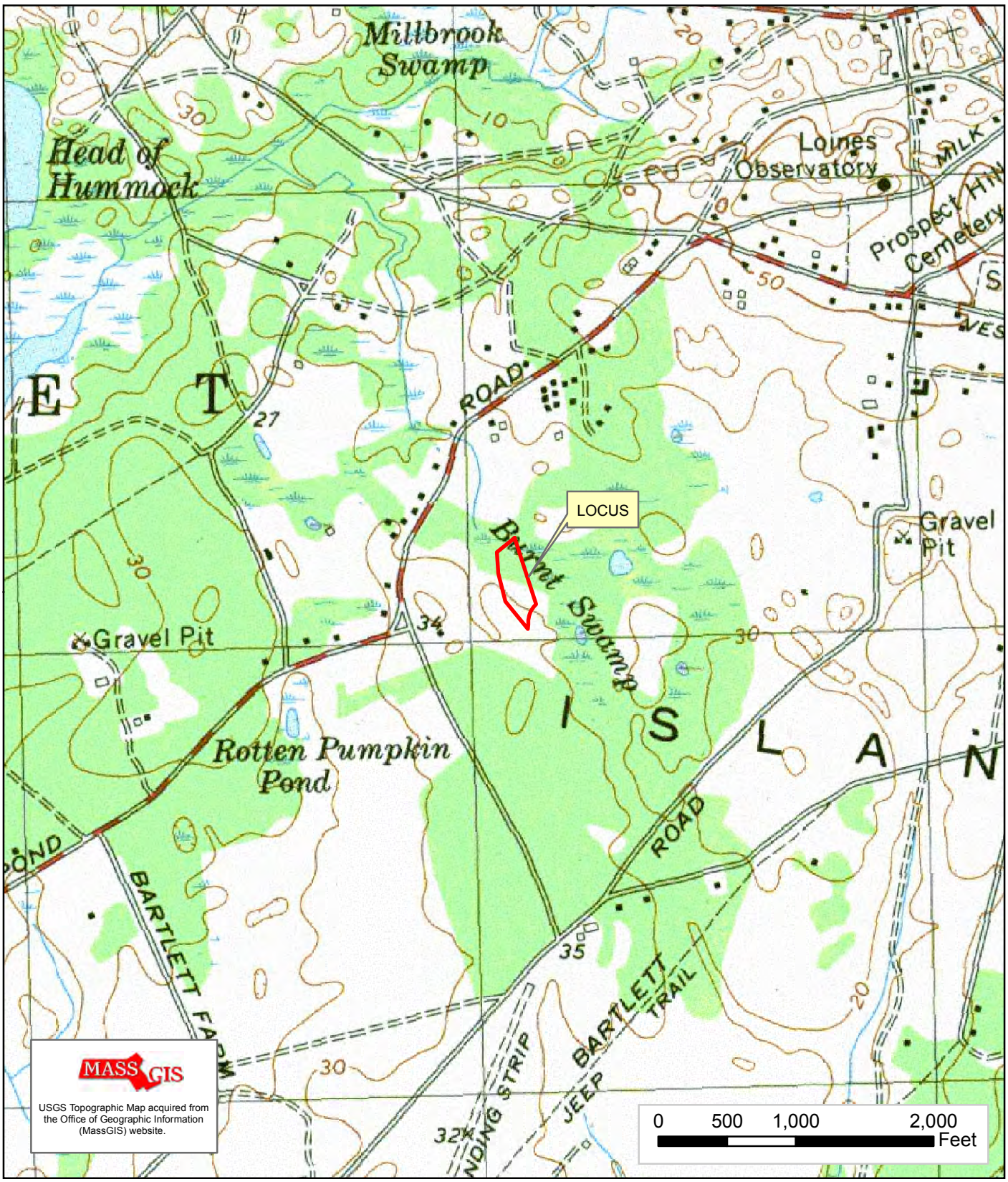
Locus Maps

Figure 1: USGS Topographic Map

Figure 2: Aerial Orthophoto

Figure 3: FEMA Flood Insurance Rate Map

Figure 4: NHESP Map



LEC Environmental Consultants, Inc.

Plymouth, MA
508.746.9491
www.lecenvironmental.com

Figure 1: USGS Topographic Map

8 High Bush Path
Map 56, Parcel 370
Nantucket, Massachusetts

N

May 13, 2016

LEC Environmental Consultants, Inc.

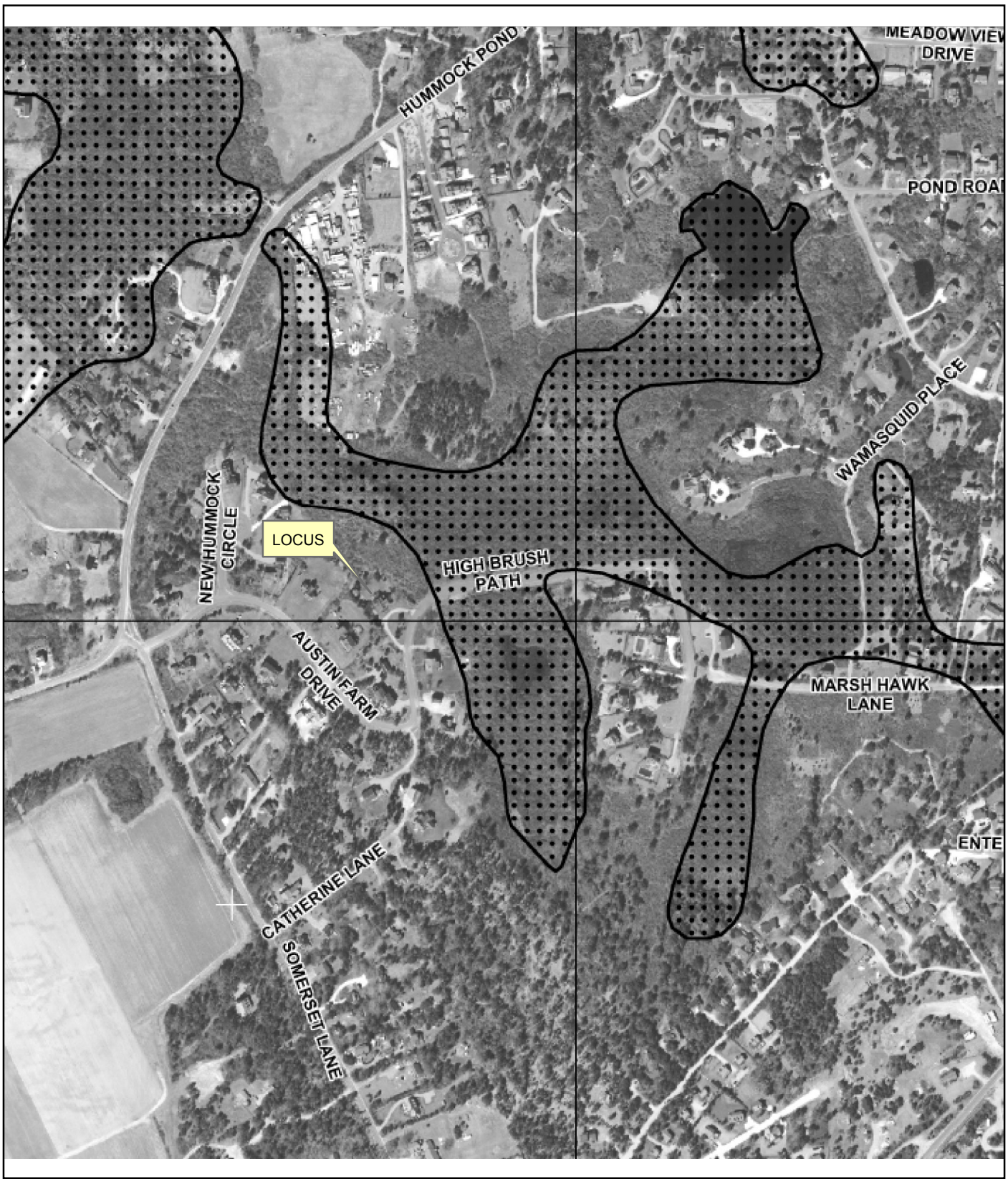
Plymouth, MA
508.746.9491
www.lecenvironmental.com

Figure 2: Aerial Orthophoto

8 High Bush Path
Map 56, Parcel 370
Nantucket, Massachusetts

N

May 13, 2016



LEC Environmental Consultants, Inc.

Plymouth, MA
508.746.9491
www.lecenvironmental.com

Figure 3: FEMA Flood Insurance Rate Map #25019C0088G

8 High Bush Path
Nantucket, Massachusetts

N

Effective Date:
June 9, 2014

LEC Environmental Consultants, Inc.

Plymouth, MA
508.746.9491
www.lecenvironmental.com

Figure 4: NHESP Map

8 High Bush Path
Map 56, Parcel 370
Nantucket, Massachusetts

N

May 13, 2016

Appendix B

Photographs

Photograph 1: Northwesterly view of single-family dwelling (7/27/15).

Photograph 2: Southerly view of single-family dwelling and proposed pool within lawn area (7/27/15).

Photograph 3: Existing detached garage (7/27/15).

Photograph 4: Southeasterly view of driveway (to be minimally shifted) towards new proposed Soil Absorption System (10/4/14).

Appendix C

Field Data Forms

DEP Bordering Vegetated Wetland (310 CMR 10.55) Delineation Field Data Form

Applicant: Edell & Alderson Prepared by: LEC Environmental Project location: 8 High Brush Path Nantucket DEP File #: _____

Check all that apply:

- ☐ Vegetation alone presumed adequate to delineate BVW boundary: fill out Section I only
- ☐ Vegetation and other indicators of hydrology used to delineate BVW boundary: fill out Sections I and II
- ☐ Method other than dominance test used (attach additional information)

Section I. Vegetation Observation Plot Number: _____ Transect Number: _____ Date of Delineation: _____

A. Sample Layer and Plant Species (by common/scientific name)	B. Percent Cover (or basal area)	C. Percent Dominance	D. Dominant Plant (yes or no)	E. Wetland Indicator Category*
Ground				
Japanese knotweed (Fallopia japonica)	10.5	77.8 %	Y	FACU-
Bush honeysuckle (Lonicera sp)	3.0	22.2	Y	NI
Shrub				
Bush honeysuckle	63.0	100%	Y	NI

* Use an asterisk to mark wetland indicator plants: plant species listed in the Wetlands Protection Act (MGL c.131, s.40); plants in the genus *Sphagnum*; plants listed as FAC, FAC+, FACW-, FACW, FACW+, or OBL; or plants with physiological or morphological adaptations. If any plants are identified as wetland indicator plants due to physiological or morphological adaptations, describe the adaptation next to the asterisk.

Vegetation conclusion:

Number of dominant wetland indicator plants: 0 **Number of dominant non-wetland indicator plants:** 3

Is the number of dominant wetland plants equal to or greater than the number of dominant non-wetland plants? yes (no)

If vegetation alone is presumed adequate to delineate the BVW boundary, submit this form with the Request for Determination of Applicability or Notice of Intent.

MA DEP; 3/95

Section II. Indicators of Hydrology

Hydric Soil Interpretation

1. Soil Survey

Is there a published soil survey for this site? (yes) no

title/date: Soil Survey of Nantucket County, June 1979

map number: 7

soil type mapped: EVB

hydric soil inclusions: Be

Are field observations consistent with soil survey? (yes) no

Remarks: Generally

2. Soil Description

Horizon	Depth	Matrix Color		Mottles Color
O	2-0"			
A	0-13"	10YR 2/1	Sandy loam	10YR 5/6
B	13-24"	10YR 5/6	Sandy loam	10YR 2/1

Remarks: Plot taken w/ hand-held auger downgradient of wf #3

3. Other:

Conclusion: Is soil hydric? (yes) no

Under Bylaw

T1, P1

Other Indicators of Hydrology: (check all that apply and describe)

- ☐ Site inundated: _____
- ☐ Depth to free water in observation hole: _____
- ☐ Depth to soil saturation in observation hole: _____
- ☑ Water marks: wetland interior
- ☐ Drift lines: _____
- ☐ Sediment deposits: _____
- ☐ Drainage patterns in BVW: _____
- ☑ Oxidized rhizospheres: _____
- ☑ Water-stained leaves: Wetland Interior
- ☐ Recorded data (stream, lake, or tidal gauge; aerial photo; other): _____
- ☐ Other: _____

Vegetation and Hydrology Conclusion

	yes	no
Number of wetland indicator plants ≥ number of non-wetland indicator plants	☐	☑
Wetland hydrology present:		
hydric soil present	☑	☐
other indicators of hydrology present	☑	☐
Sample location is in a BVW	☑	☐

Submit this form with the Request for Determination of Applicability or Notice of Intent.

DEP Bordering Vegetated Wetland (310 CMR 10.55) Delineation Field Data Form

Applicant: Edell & Alderson Prepared by: LEC Environmental Project location: 8 High Brush Path Nantucket DEP File #: _____

Check all that apply:

- ☐ Vegetation alone presumed adequate to delineate BVW boundary: fill out Section I only
- ☐ Vegetation and other indicators of hydrology used to delineate BVW boundary: fill out Sections I and II
- ☐ Method other than dominance test used (attach additional information)

Section I. Vegetation Observation Plot Number: 2 Transect Number: 1 Date of Delineation: 10/4/14 8 7/27/15

A. Sample Layer and Plant Species (by common/scientific name)	B. Percent Cover (or basal area)	C. Percent Dominance	D. Dominant Plant (yes or no)	E. Wetland Indicator Category*
Ground				
Blackberry (Rubus allegheniensis)	38.0	61.3	Y	FACU-
Bush honeysuckle (Lonicera sp)	10.5	16.9	N	—
Misc grasses	10.5	16.9	N	—
Japanese knotweed (Fallopia japonica)	3.0	4.8	N	
Shrub				
Bush honeysuckle	63.0	85.7	Y	NI
Bayberry (Morella pensylvanica)	10.5	14.3	N	—
Sapling				
Black cherry (Prunus serotina)	20.5	100%	Y	FACU

* Use an asterisk to mark wetland indicator plants: plant species listed in the Wetlands Protection Act (MGL c.131, s.40); plants in the genus *Sphagnum*; plants listed as FAC, FAC+, FACW-, FACW, FACW+, or OBL; or plants with physiological or morphological adaptations. If any plants are identified as wetland indicator plants due to physiological or morphological adaptations, describe the adaptation next to the asterisk.

Vegetation conclusion:

Number of dominant wetland indicator plants: 0 **Number of dominant non-wetland indicator plants:** 3

Is the number of dominant wetland plants equal to or greater than the number of dominant non-wetland plants? yes (no)

If vegetation alone is presumed adequate to delineate the BVW boundary, submit this form with the Request for Determination of Applicability or Notice of Intent.

Section II. Indicators of Hydrology

Hydric Soil Interpretation

1. Soil Survey

Is there a published soil survey for this site? (yes) no

title/date: Soil Survey of Nantucket County, June 1979

map number: 7

soil type mapped: EvB

hydric soil inclusions: Be

Are field observations consistent with soil survey? (yes) no

Remarks: Generally

2. Soil Description

Horizon	Depth	Matrix Color		Mottles Color
O	3-0"			
A	0-10"	10YR 2/1	sandy loam	N/A
B	10-20"	10YR 5/6	sandy loam	N/A

Remarks: Plot taken w/ hand-held auger upgradient of wetland flag #3

3. Other:

Conclusion: Is soil hydric? yes (no)

N/A T1, P2

Other Indicators of Hydrology: (check all that apply and describe)

- ☐ Site inundated: _____
- ☐ Depth to free water in observation hole: _____
- ☐ Depth to soil saturation in observation hole: _____
- ☐ Water marks: _____
- ☐ Drift lines: _____
- ☐ Sediment deposits: _____
- ☐ Drainage patterns in BVW: _____
- ☐ Oxidized rhizospheres: _____
- ☐ Water-stained leaves: _____
- ☐ Recorded data (stream, lake, or tidal gauge; aerial photo; other) : _____
- ☐ Other: _____

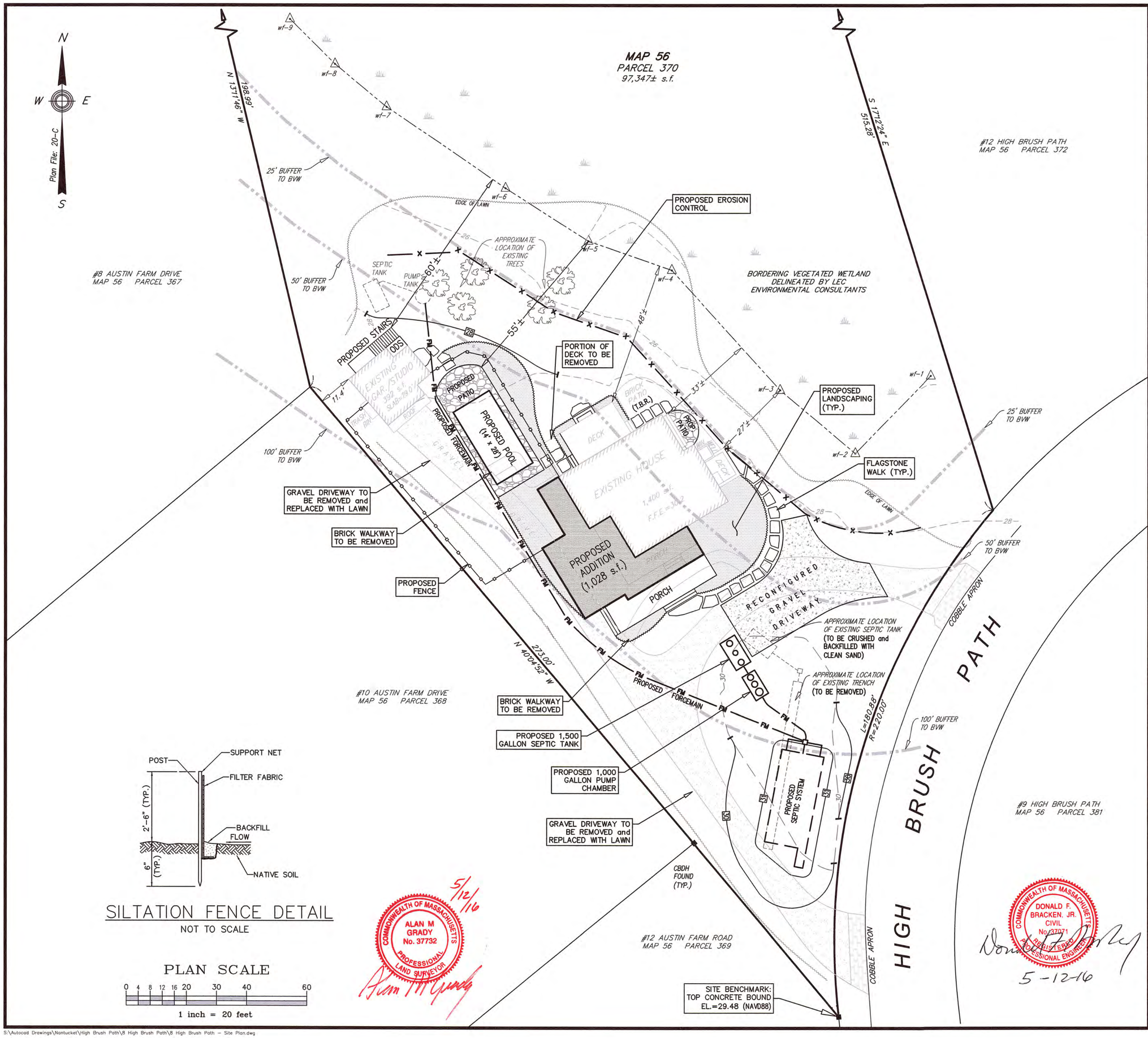
Vegetation and Hydrology Conclusion

	yes	no
Number of wetland indicator plants ≥ number of non-wetland indicator plants	☐	☑
Wetland hydrology present:		
hydric soil present	☐	☑
other indicators of hydrology present	☐	☑
Sample location is in a BVW	☐	☑

Submit this form with the Request for Determination of Applicability or Notice of Intent.

Appendix D

Proposed Site Plan, prepared by Bracken Engineering, Inc., dated May 11, 2016



SILTATION FENCE DETAIL

NOT TO SCALE

PLAN SCALE

0 4 8 12 16 20 30 40 60

1 inch = 20 feet

5/12/16

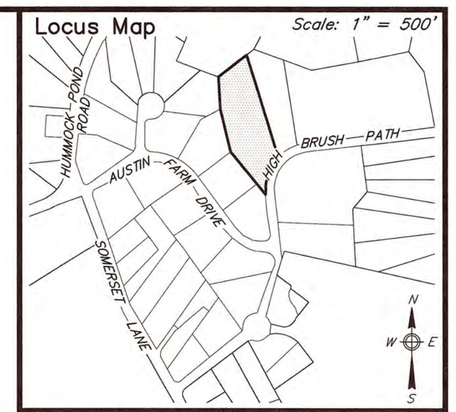
COMMONWEALTH OF MASSACHUSETTS
ALAN M GRADY
No. 37732
PROFESSIONAL LAND SURVEYOR

COMMONWEALTH OF MASSACHUSETTS
DONALD F. BRACKEN, JR.
CIVIL
No. 37071
REGISTERED PROFESSIONAL ENGINEER

5-12-16

Locus Map

Scale: 1" = 500'



Notes

1. LOCUS: #8 HIGH BRUSH PATH
   MAP 56 PARCEL 370
2. OWNERS: GREGG R. EDELL and RICHARD L. ALDERSON
   34 ADDISON DRIVE
   SHORT HILLS, NJ 07078
3. DEED REF: Bk:1504 Pg:188
4. PLAN REF: Plan File: 20-C (LOTS 29 & 30)
5. LOCUS DOES NOT FALL WITHIN A SPECIAL FLOOD HAZARD ZONE AS SHOWN ON FEMA FLOOD INSURANCE RATE MAP No. 25019C-0088-G dated 06/09/2014.
6. LOCUS DOES NOT FALL WITHIN THE NATURAL HERITAGE and ENDANGERED SPECIES PROGRAM (NHESP) AREAS OF ESTIMATED HABITATS OF RARE WILDLIFE and PRIORITY HABITATS OF RARE SPECIES.
7. ALL EXISTING SEPTIC COMPONENTS SHOWN ARE APPROXIMATE IN LOCATION AND ARE TAKEN FROM PLANS ON FILE AT THE BOARD OF HEALTH OFFICE.

Prepared By:

BRACKEN ENGINEERING, INC.

49 HERRING POND ROAD
BUZZARDS BAY, MA 02532
(tel) 508.833.0070
(fax) 508.833.2282

19 OLD SOUTH ROAD
NANTUCKET, MA 02554
(tel) 508.325.0044
www.brackeneng.com

PROPOSED SITE PLAN
IN NANTUCKET, MASSACHUSETTS

Prepared For:

GREGG R. EDELL and
RICHARD L. ALDERSON

#8 HIGH BRUSH PATH
MAP 56 PARCEL 370

No.	Date	Revision Description	By
-	-	-	-

Date:	Drawn:	Checked:	Sheet:
MAY 11, 2016	RMM/ERC/DLH	DFB/AMG	1 of 1

S:\Autocad Drawings\Nantucket\High Brush Path\8 High Brush Path\8 High Brush Path - Site Plan.dwg

Beach Nut LLC

1A Crow’s Nest Way

(12-24)

Nantucket SURVEYORS LLC

P.O. Box 3627, Nantucket, Massachusetts 02584-3627
Tel. (508) 228-0240 Fax (508) 228-9856
www.nantucketsurveyors.com
nsllcinfo@nantucketsurveyors.com

N-10498

May 13, 2016

COPY

Nantucket Conservation Commission
2 Bathing Beach Road
Nantucket, Massachusetts 02554

Re: Notice of Intent
Applicant: Beach Nut LLC
1A Crows Nest Way Map: 12 Parcel: 24
Nantucket, MA 02554

RECEIVED
MAY 13 2016
By

Dear Commission Members,

Enclosed please find the following:

- Two (2) copies of a Notice of Intent for the above-referenced project;
- One (1) Filing Fee to the Town of Nantucket - $25.00 (bylaw);
- One (1) Filing Fee to the Town of Nantucket - $200.00 (Consultant review fee);
- One (1) Check to the Inquirer & Mirror - $266.90 (publishing of the Public Notice).
- One (1) Check to the Town of Nantucket - $262.50 (WPA Fee)
- One (1) Check to the Commonwealth of MA – $237.50 (WPA Fee) Copy
- One (1) Check to Commonwealth of MA-NHESP - $300.00 (MESA Filing Fee) Copy

This application is for the proposed razing of an existing dwelling and construction of a new dwelling, guest house, garage, pool, pool house and septic system as well as relocation of the existing driveway and associated grading and landscaping, portions of which are within the buffer zone to Coastal Bank, Coastal Dune, and Bordering Vegetated Wetland. Resource areas are as depicted and approved on plans filed with Order of Conditions DEP File No. SE 48-2502 issued on January 9, 2013. The proposed work is shown on the included plan, "Site Plan to Accompany a Notice of Intent #1A Crows Nest Way", Nantucket, MA prepared by Nantucket Surveyors, LLC dated May 13, 2016.

Thank you for your attention to this matter. If you have any questions, please do not hesitate to call our office.

Respectfully,
Nantucket Surveyors, LLC

Paul J. Santos, PLS

Enclosures
cc: DEP Southeast Regional Office
Beach Nut LLC

Notice of Intent

Map 12 Parcel 24
1A Crows Nest Way
Nantucket, Massachusetts

Prepared for: **Beach Nut LLC**
P.O. Box 659
Nantucket, MA 02554

Prepared by: **Nantucket Surveyors, LLC**
5 Windy Way, PO Box 3627
Nantucket, MA 02584

May 13, 2016

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WPA Form 3 – Notice of Intent

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Provided by MassDEP:

MassDEP File Number

Document Transaction Number

City/Town

Important: When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.

Note: Before completing this form consult your local Conservation Commission regarding any municipal bylaw or ordinance.

A. General Information

1. Project Location (**Note:** electronic filers will click on button to locate project site):

1A Crows Nest Way — a. Street Address
Nantucket — b. City/Town
02554 — c. Zip Code

Latitude and Longitude:
41.326172 — d. Latitude
-69.993104 — e. Longitude
12 — f. Assessors Map/Plat Number
24 — g. Parcel /Lot Number

2. Applicant:

a. First Name
b. Last Name
Beach Nut LLC — c. Organization
P.O. Box 659 — d. Street Address
Nantucket — e. City/Town
MA — f. State
02554 — g. Zip Code
802-862-4053 — h. Phone Number
i. Fax Number
grahamg1947@gmail.com — j. Email Address

3. Property owner (required if different from applicant): ☐ Check if more than one owner

a. First Name
b. Last Name
c. Organization
d. Street Address
e. City/Town
f. State
g. Zip Code
h. Phone Number
i. Fax Number
j. Email address

4. Representative (if any):

Paul — a. First Name
Santos — b. Last Name
Nantucket Surveyors, LLC — c. Company
P.O. Box 3627 — d. Street Address
Nantucket — e. City/Town
MA — f. State
02554 — g. Zip Code
508-228-0240 — h. Phone Number
508-228-9856 — i. Fax Number
psantos@nantucketsurveyors.com — j. Email address

5. Total WPA Fee Paid (from NOI Wetland Fee Transmittal Form):

$500 — a. Total Fee Paid
$237.50 — b. State Fee Paid
$262.50 — c. City/Town Fee Paid

A. General Information (continued)

6. General Project Description:

This application is for the proposed razing of an existing dwelling and construction of a new dwelling, guest house, garage, pool, pool house and septic system as well as relocation of the existing driveway and associated grading and landscaping within the buffer zone to Coastal Bank, Coastal Dune, and Bordering Vegetated Wetland.

7a. Project Type Checklist: (Limited Project Types see Section A. 7b.)

1. ☒ Single Family Home
2. ☐ Residential Subdivision
3. ☐ Commercial/Industrial
4. ☐ Dock/Pier
5. ☐ Utilities
6. ☐ Coastal engineering Structure
7. ☐ Agriculture (e.g., cranberries, forestry)
8. ☐ Transportation
9. ☐ Other

7b. Is any portion of the proposed activity eligible to be treated as a limited project (including Ecological Restoration Limited Project) subject to 310 CMR 10.24 (coastal) or 310 CMR 10.53 (inland)?

1. ☐ Yes ☒ No

If yes, describe which limited project applies to this project. (See 310 CMR 10.24 and 10.53 for a complete list and description of limited project types)

2. Limited Project Type

If the proposed activity is eligible to be treated as an Ecological Restoration Limited Project (310 CMR10.24(8), 310 CMR 10.53(4)), complete and attach Appendix A: Ecological Restoration Limited Project Checklist and Signed Certification.

8. Property recorded at the Registry of Deeds for:

Nantucket	25245
a. County	b. Certificate # (if registered land)
c. Book	d. Page Number

B. Buffer Zone & Resource Area Impacts (temporary & permanent)

1. ☒ Buffer Zone Only – Check if the project is located only in the Buffer Zone of a Bordering Vegetated Wetland, Inland Bank, or Coastal Resource Area.
2. ☐ Inland Resource Areas (see 310 CMR 10.54-10.58; if not applicable, go to Section B.3, Coastal Resource Areas).

Check all that apply below. Attach narrative and any supporting documentation describing how the project will meet all performance standards for each of the resource areas altered, including standards requiring consideration of alternative project design or location.

B. Buffer Zone & Resource Area Impacts (temporary & permanent) (cont'd)

For all projects affecting other Resource Areas, please attach a narrative explaining how the resource area was delineated.

Resource Area	Size of Proposed Alteration	Proposed Replacement (if any)
a. ☐ Bank	1. linear feet	2. linear feet
b. ☐ Bordering Vegetated Wetland	1. square feet	2. square feet
c. ☐ Land Under Waterbodies and Waterways	1. square feet	2. square feet
	3. cubic yards dredged	

Resource Area	Size of Proposed Alteration	Proposed Replacement (if any)
d. ☐ Bordering Land Subject to Flooding	1. square feet	2. square feet
	3. cubic feet of flood storage lost	4. cubic feet replaced
e. ☐ Isolated Land Subject to Flooding	1. square feet	
	2. cubic feet of flood storage lost	3. cubic feet replaced

f. ☐ Riverfront Area

1. Name of Waterway (if available) - **specify coastal or inland**

2. Width of Riverfront Area (check one):

☐ 25 ft. - Designated Densely Developed Areas only

☐ 100 ft. - New agricultural projects only

☐ 200 ft. - All other projects

3. Total area of Riverfront Area on the site of the proposed project: _____ square feet

4. Proposed alteration of the Riverfront Area:

a. total square feet _____ b. square feet within 100 ft. _____ c. square feet between 100 ft. and 200 ft. _____

5. Has an alternatives analysis been done and is it attached to this NOI? ☐ Yes ☐ No

6. Was the lot where the activity is proposed created prior to August 1, 1996? ☐ Yes ☐ No

3. ☒ Coastal Resource Areas: (See 310 CMR 10.25-10.35)

Note: for coastal riverfront areas, please complete **Section B.2.f**. above.

B. Buffer Zone & Resource Area Impacts (temporary & permanent) (cont'd)

Check all that apply below. Attach narrative and supporting documentation describing how the project will meet all performance standards for each of the resource areas altered, including standards requiring consideration of alternative project design or location.

Online Users: Include your document transaction number (provided on your receipt page) with all supplementary information you submit to the Department.

Resource Area	Size of Proposed Alteration	Proposed Replacement (if any)
a. ☐ Designated Port Areas	Indicate size under Land Under the Ocean, below	
b. ☐ Land Under the Ocean	1. square feet 2. cubic yards dredged	
c. ☐ Barrier Beach	Indicate size under Coastal Beaches and/or Coastal Dunes below	
d. ☐ Coastal Beaches	1. square feet	2. cubic yards beach nourishment
e. ☐ Coastal Dunes	1. square feet	2. cubic yards dune nourishment
	Size of Proposed Alteration	Proposed Replacement (if any)
f. ☐ Coastal Banks	1. linear feet	
g. ☐ Rocky Intertidal Shores	1. square feet	
h. ☐ Salt Marshes	1. square feet	2. sq ft restoration, rehab., creation
i. ☐ Land Under Salt Ponds	1. square feet 2. cubic yards dredged	
j. ☐ Land Containing Shellfish	1. square feet	
k. ☐ Fish Runs	Indicate size under Coastal Banks, inland Bank, Land Under the Ocean, and/or inland Land Under Waterbodies and Waterways, above 1. cubic yards dredged	
l. ☐ Land Subject to Coastal Storm Flowage	1. square feet	

4. ☐ Restoration/Enhancement
If the project is for the purpose of restoring or enhancing a wetland resource area in addition to the square footage that has been entered in Section B.2.b or B.3.h above, please enter the additional amount here.

a. square feet of BVW | b. square feet of Salt Marsh

5. ☐ Project Involves Stream Crossings

a. number of new stream crossings | b. number of replacement stream crossings

C. Other Applicable Standards and Requirements

☐ This is a proposal for an Ecological Restoration Limited Project. Skip Section C and complete Appendix A: Ecological Restoration Notice of Intent – Required Actions (310 CMR 10.11).

Streamlined Massachusetts Endangered Species Act/Wetlands Protection Act Review

1. Is any portion of the proposed project located in **Estimated Habitat of Rare Wildlife** as indicated on the most recent Estimated Habitat Map of State-Listed Rare Wetland Wildlife published by the Natural Heritage and Endangered Species Program (NHESP)? To view habitat maps, see the *Massachusetts Natural Heritage Atlas* or go to http://maps.massgis.state.ma.us/PRI_EST_HAB/viewer.htm.

   a. ☒ Yes ☐ No

   If yes, include proof of mailing or hand delivery of NOI to:

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

   2008
   b. Date of map

   If *yes*, the project is also subject to Massachusetts Endangered Species Act (MESA) review (321 CMR 10.18). To qualify for a streamlined, 30-day, MESA/Wetlands Protection Act review, please complete Section C.1.c, and include requested materials with this Notice of Intent (NOI); *OR* complete Section C.1.f, if applicable. *If MESA supplemental information is not included with the NOI, by completing Section 1 of this form, the NHESP will require a separate MESA filing which may take up to 90 days to review (unless noted exceptions in Section 2 apply, see below).*

   c. Submit Supplemental Information for Endangered Species Review*

   1. ☒ Percentage/acreage of property to be altered:

      (a) within wetland Resource Area — 0 percentage/acreage

      (b) outside Resource Area — 60%/0.7 percentage/acreage

   2. ☒ Assessor's Map or right-of-way plan of site

2. ☒ Project plans for entire project site, including wetland resource areas and areas outside of wetlands jurisdiction, showing existing and proposed conditions, existing and proposed tree/vegetation clearing line, and clearly demarcated limits of work **

   (a) ☒ Project description (including description of impacts outside of wetland resource area & buffer zone)

   (b) ☒ Photographs representative of the site

---

* Some projects **not** in Estimated Habitat may be located in Priority Habitat, and require NHESP review (see http://www.mass.gov/eea/agencies/dfg/dfw/natural-heritage/regulatory-review/). Priority Habitat includes habitat for state-listed plants and strictly upland species not protected by the Wetlands Protection Act.

** MESA projects may not be segmented (321 CMR 10.16). The applicant must disclose full development plans even if such plans are not required as part of the Notice of Intent process.

C. Other Applicable Standards and Requirements (cont'd)

(c) ☒ MESA filing fee (fee information available at http://www.mass.gov/dfwele/dfw/nhesp/regulatory_review/mesa/mesa_fee_schedule.htm). Make check payable to "Commonwealth of Massachusetts - NHESP" and ***mail to NHESP*** at above address

*Projects altering **10 or more acres** of land, also submit:*

(d) ☐ Vegetation cover type map of site

(e) ☐ Project plans showing Priority & Estimated Habitat boundaries

(f) OR Check One of the Following

1. ☐ Project is exempt from MESA review.
Attach applicant letter indicating which MESA exemption applies. (See 321 CMR 10.14, http://www.mass.gov/dfwele/dfw/nhesp/regulatory_review/mesa/mesa_exemptions.htm; the NOI must still be sent to NHESP if the project is within estimated habitat pursuant to 310 CMR 10.37 and 10.59.)

2. ☐ Separate MESA review ongoing. a. NHESP Tracking # b. Date submitted to NHESP

3. ☒ Separate MESA review completed.
Include copy of NHESP "no Take" determination or valid Conservation & Management Permit with approved plan.

3. For coastal projects only, is any portion of the proposed project located below the mean high water line or in a fish run?

a. ☐ Not applicable – project is in inland resource area only b. ☐ Yes ☒ No

If yes, include proof of mailing, hand delivery, or electronic delivery of NOI to either:

South Shore - Cohasset to Rhode Island border, and the Cape & Islands:

Division of Marine Fisheries -
Southeast Marine Fisheries Station
Attn: Environmental Reviewer
1213 Purchase Street – 3rd Floor
New Bedford, MA 02740-6694
Email: DMF.EnvReview-South@state.ma.us

North Shore - Hull to New Hampshire border:

Division of Marine Fisheries -
North Shore Office
Attn: Environmental Reviewer
30 Emerson Avenue
Gloucester, MA 01930
Email: DMF.EnvReview-North@state.ma.us

Also if yes, the project may require a Chapter 91 license. For coastal towns in the Northeast Region, please contact MassDEP's Boston Office. For coastal towns in the Southeast Region, please contact MassDEP's Southeast Regional Office.

C. Other Applicable Standards and Requirements (cont'd)

Online Users: Include your document transaction number (provided on your receipt page) with all supplementary information you submit to the Department.

4. Is any portion of the proposed project within an Area of Critical Environmental Concern (ACEC)?

   a. ☐ Yes ☒ No — If yes, provide name of ACEC (see instructions to WPA Form 3 or MassDEP Website for ACEC locations). **Note:** electronic filers click on Website.

   b. ACEC

5. Is any portion of the proposed project within an area designated as an Outstanding Resource Water (ORW) as designated in the Massachusetts Surface Water Quality Standards, 314 CMR 4.00?

   a. ☐ Yes ☒ No

6. Is any portion of the site subject to a Wetlands Restriction Order under the Inland Wetlands Restriction Act (M.G.L. c. 131, § 40A) or the Coastal Wetlands Restriction Act (M.G.L. c. 130, § 105)?

   a. ☐ Yes ☒ No

7. Is this project subject to provisions of the MassDEP Stormwater Management Standards?

   a. ☐ Yes. Attach a copy of the Stormwater Report as required by the Stormwater Management Standards per 310 CMR 10.05(6)(k)-(q) and check if:

      1. ☐ Applying for Low Impact Development (LID) site design credits (as described in Stormwater Management Handbook Vol. 2, Chapter 3)

      2. ☐ A portion of the site constitutes redevelopment

      3. ☐ Proprietary BMPs are included in the Stormwater Management System.

   b. ☒ No. Check why the project is exempt:

      1. ☒ Single-family house

      2. ☐ Emergency road repair

      3. ☐ Small Residential Subdivision (less than or equal to 4 single-family houses or less than or equal to 4 units in multi-family housing project) with no discharge to Critical Areas.

D. Additional Information

☐ This is a proposal for an Ecological Restoration Limited Project. Skip Section D and complete Appendix A: Ecological Restoration Notice of Intent – Minimum Required Documents (310 CMR 10.12).

Applicants must include the following with this Notice of Intent (NOI). See instructions for details.

Online Users: Attach the document transaction number (provided on your receipt page) for any of the following information you submit to the Department.

1. ☒ USGS or other map of the area (along with a narrative description, if necessary) containing sufficient information for the Conservation Commission and the Department to locate the site. (Electronic filers may omit this item.)

2. ☒ Plans identifying the location of proposed activities (including activities proposed to serve as a Bordering Vegetated Wetland [BVW] replication area or other mitigating measure) relative to the boundaries of each affected resource area.

D. Additional Information (cont'd)

3. ☒ Identify the method for BVW and other resource area boundary delineations (MassDEP BVW Field Data Form(s), Determination of Applicability, Order of Resource Area Delineation, etc.), and attach documentation of the methodology.

4. ☒ List the titles and dates for all plans and other materials submitted with this NOI.

Site Plan to Accompany a Notice of Intent "#1A Crows Nest Way"
a. Plan Title

Nantucket Surveyors, LLC
b. Prepared By

Paul Santos, PLS
c. Signed and Stamped by

5/13/16
d. Final Revision Date

1"=30'
e. Scale

f. Additional Plan or Document Title

g. Date

5. ☐ If there is more than one property owner, please attach a list of these property owners not listed on this form.

6. ☒ Attach proof of mailing for Natural Heritage and Endangered Species Program, if needed.

7. ☐ Attach proof of mailing for Massachusetts Division of Marine Fisheries, if needed.

8. ☒ Attach NOI Wetland Fee Transmittal Form

9. ☐ Attach Stormwater Report, if needed.

E. Fees

1. ☐ Fee Exempt: No filing fee shall be assessed for projects of any city, town, county, or district of the Commonwealth, federally recognized Indian tribe housing authority, municipal housing authority, or the Massachusetts Bay Transportation Authority.

Applicants must submit the following information (in addition to pages 1 and 2 of the NOI Wetland Fee Transmittal Form) to confirm fee payment:

252
2. Municipal Check Number

5/11/16
3. Check date

254
4. State Check Number

5/11/16
5. Check date

John G.
6. Payor name on check: First Name

Goldsmith
7. Payor name on check: Last Name

Provided by MassDEP:

MassDEP File Number

Document Transaction Number

City/Town

F. Signatures and Submittal Requirements

I hereby certify under the penalties of perjury that the foregoing Notice of Intent and accompanying plans, documents, and supporting data are true and complete to the best of my knowledge. I understand that the Conservation Commission will place notification of this Notice in a local newspaper at the expense of the applicant in accordance with the wetlands regulations, 310 CMR 10.05(5)(a).

I further certify under penalties of perjury that all abutters were notified of this application, pursuant to the requirements of M.G.L. c. 131, § 40. Notice must be made by Certificate of Mailing or in writing by hand delivery or certified mail (return receipt requested) to all abutters within 100 feet of the property line of the project location.

1. Signature of Applicant	2. Date 5-10-16
3. Signature of Property Owner (if different)	4. Date
5. Signature of Representative (if any)	6. Date

For Conservation Commission:
Two copies of the completed Notice of Intent (Form 3), including supporting plans and documents, two copies of the NOI Wetland Fee Transmittal Form, and the city/town fee payment, to the Conservation Commission by certified mail or hand delivery.

For MassDEP:
One copy of the completed Notice of Intent (Form 3), including supporting plans and documents, one copy of the NOI Wetland Fee Transmittal Form, and a **copy** of the state fee payment to the MassDEP Regional Office (see Instructions) by certified mail or hand delivery.

Other:
If the applicant has checked the "yes" box in any part of Section C, Item 3, above, refer to that section and the Instructions for additional submittal requirements.

The original and copies must be sent simultaneously. Failure by the applicant to send copies in a timely manner may result in dismissal of the Notice of Intent.

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

NOI Wetland Fee Transmittal Form

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Important: When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.

A. Applicant Information

1. Location of Project:

1A Crows Nest Way	Nantucket
a. Street Address	b. City/Town
254	$237.50
c. Check number	d. Fee amount

2. Applicant Mailing Address:

a. First Name	b. Last Name

Beach Nut LLC
c. Organization

P.O. Box 659
d. Mailing Address

Nantucket	MA	02554
e. City/Town	f. State	g. Zip Code

802-862-4053		grahamg1947@gmail,com
h. Phone Number	i. Fax Number	j. Email Address

3. Property Owner (if different):

a. First Name	b. Last Name

c. Organization

d. Mailing Address

e. City/Town	f. State	g. Zip Code

h. Phone Number	i. Fax Number	j. Email Address

To calculate filing fees, refer to the category fee list and examples in the instructions for filling out WPA Form 3 (Notice of Intent).

B. Fees

Fee should be calculated using the following process & worksheet. ***Please see Instructions before filling out worksheet.***

Step 1/Type of Activity: Describe each type of activity that will occur in wetland resource area and buffer zone.

Step 2/Number of Activities: Identify the number of each type of activity.

Step 3/Individual Activity Fee: Identify each activity fee from the six project categories listed in the instructions.

Step 4/Subtotal Activity Fee: Multiply the number of activities (identified in Step 2) times the fee per category (identified in Step 3) to reach a subtotal fee amount. Note: If any of these activities are in a Riverfront Area in addition to another Resource Area or the Buffer Zone, the fee per activity should be multiplied by 1.5 and then added to the subtotal amount.

Step 5/Total Project Fee: Determine the total project fee by adding the subtotal amounts from Step 4.

Step 6/Fee Payments: To calculate the state share of the fee, divide the total fee in half and subtract $12.50. To calculate the city/town share of the fee, divide the total fee in half and add $12.50.

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

NOI Wetland Fee Transmittal Form

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

B. Fees (continued)

Step 1/Type of Activity	Step 2/Number of Activities	Step 3/Individual Activity Fee	Step 4/Subtotal Activity Fee
This application is for the proposed razing of an existing dwelling and construction of a new dwelling, guest house, garage, pool/house septic system as well as relocation of the existing driveway and associated grading and landscaping within the buffer zone to Coastal Bank, Coastal Dune, and Bordering Vegetated Wetland.	1	$500	$500

Step 5/Total Project Fee: $500

Step 6/Fee Payments:

Total Project Fee:	$500 a. Total Fee from Step 5
State share of filing Fee:	$237.50 b. 1/2 Total Fee **less** $12.50
City/Town share of filling Fee:	$262.50 c. 1/2 Total Fee **plus** $12.50

C. Submittal Requirements

a.) Complete pages 1 and 2 and send with a check or money order for the state share of the fee, payable to the Commonwealth of Massachusetts.

Department of Environmental Protection
Box 4062
Boston, MA 02211

b.) **To the Conservation Commission:** Send the Notice of Intent or Abbreviated Notice of Intent; a **copy** of this form; and the city/town fee payment.

To MassDEP Regional Office (see Instructions): Send a copy of the Notice of Intent or Abbreviated Notice of Intent; a **copy** of this form; and a **copy** of the state fee payment. (E-filers of Notices of Intent may submit these electronically.)

ATTACHMENT A

NOTICE OF INTENT

1A Crows Nest Way
Nantucket, Massachusetts
Map: 12 Parcel: 24

List of Plans and Supporting Documents

APPENDIX A – Assessor's Map

APPENDIX B – Project Narrative

APPENDIX C – Nantucket Topography Map

APPENDIX D – NHESP Estimated and Priority Habitat Map/NHESP File No.:12-31562

APPENDIX E – FEMA Flood Insurance Rate Map

APPENDIX F – Site Photographs

APPENDIX G – Abutter Notification Information

APPENDIX H – Haines Hydrogeologic Consulting
Wetland Evaluation
Dated December 11, 2012

APPENDIX I – Order of Conditions SE48-2502

APPENDIX J – "Site Plan to Accompany a Notice of Intent #1A Crows Nest Way"
Prepared by Nantucket Surveyors LLC
Dated May 13, 2016

APPENDIX A

Assessors Map

Figure 1: ASSESSOR'S MAP

#1A CROWS NEST WAY
NANTUCKET, MASSACHUSETTS

SCALE: N.T.S. DATE: MAY 13, 2016

ASSESSOR'S REFERENCE:
MAP: 12 PARCEL: 24

PREPARED FOR:
BEACH NUT LLC

NANTUCKET SURVEYORS LLC
5 WINDY WAY
NANTUCKET, MA. 02554

SOURCE: 2014 NANTUCKET GIS

N-10498

APPENDIX B

Project Narrative

APPENDIX B PROJECT NARRATIVE

Introduction

This Notice of Intent is submitted to the Nantucket Conservation Commission ("the Commission") and the Massachusetts Department of Environmental Protection (MassDEP) pursuant to the Massachusetts Wetlands Protection Act, MGL c.131, s.40, for the proposed razing of an existing dwelling and construction of a new dwelling, guest house, garage, pool, pool house and septic system as well as relocation of the existing driveway and associated grading and landscaping within the buffer zone to Coastal Bank, Coastal Dune, and Bordering Vegetated Wetland.

Existing Site Conditions

The subject property is located on the east side of Crows Nest Way, Nantucket Assessors Map: 12 Parcel: 24.The site is approximately 48,332+/- S.F. The surrounding land uses are residential.

This site contains coastal resource areas subject to jurisdiction under the Nantucket Wetland Bylaw and Massachusetts Wetlands Protection Act. The resource area includes Land Under The Ocean, Coastal Beach, Coastal Dune and Bordering Vegetated Wetland.

The Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) for this portion of Nantucket (Map No. 25019C0103G), dated June 9, 2014 shows that the developed portion of the property is not located within a Flood Hazard Zone. VE Elevation 10 is adjacent.

The Massachusetts Natural Heritage Atlas, 13th Edition, dated October 2008 (Appendix D) shows that Priority Habitat and Estimated Habitat is mapped within the project vicinity. The proposed work does require a filing with NHESP.

Proposed Work

The proposed work is shown on the included plan, "Site Plan to Accompany a Notice of Intent #1A Crows Nest Way", Nantucket, MA prepared by Nantucket Surveyors, LLC dated May 13, 2016.

APPENDIX C

Nantucket Topography

Figure 2: Nantucket Topography Map

#1A CROWS NEST WAY
NANTUCKET, MASSACHUSETTS
N.T.S.
DATE: MAY 13, 2016
ASSESSOR'S REFERENCE:
MAP: 12 PARCEL: 24

PREPARED FOR:
BEACH NUT LLC

NANTUCKET SURVEYORS LLC
5 WINDY WAY
NANTUCKET, MA. 02554

SOURCE: Nantucket GIS

N-10498

APPENDIX D

NHESP Estimated and Priority Habitat Map
NHESP File No.: 12-31562

NHESP PRIORITY HABITATS OF RARE SPECIES

NHESP ESTIMATED HABITATS OF RARE WILDLIFE

Figure 3: NHESP MAP

#1A CROWS NEST WAY
NANTUCKET, MASSACHUSETTS

SCALE: N.T.S. DATE: MAY 13, 2016

ASSESSOR'S REFERENCE:
MAP: 12 PARCEL: 24

PREPARED FOR:
BEACH NUT LLC

NANTUCKET SURVEYORS LLC
5 WINDY WAY
NANTUCKET, MA. 02554

SOURCE: 2008 NHESP PRIORITY HABITAT AND ESTIMATED HABITAT

N-10498

Commonwealth of Massachusetts

Division of Fisheries & Wildlife

MassWildlife

Wayne F. MacCallum, *Director*

November 13, 2012

Nantucket Conservation Commission
37 Washington Street
Nantucket MA 02554

Gleed Thompson
Gleed Thompson Trust
1431 Hollow Road
Clinton Corners NY 12514

RE:	Applicant:	Gleed Thompson
	Project Location:	1A Crow's Nest Way
	Project Description:	Renovate Dwelling and Construct New Garage
	DEP Wetlands File No.:	048-2502
	NHESP File No.:	**12-31562**

Dear Commissioners & Applicant:

The Natural Heritage & Endangered Species Program (NHESP) of the Massachusetts Division of Fisheries & Wildlife received a Notice of Intent with site plans entitled "ALTERATIONS & ADDITIONS TO: ONE CROW'S NEST WAY NANTUCKET", dated 8/28/2012, prepared by McMullen & Associates, in compliance with the rare wildlife species section of the Massachusetts Wetlands Protection Act Regulations (310 CMR 10.37) and the MA Endangered Species Act Regulations (321 CMR 10.18). It is the understanding of the NHESP that the aforementioned site plans are subject to change relative to only the location of the Coastal Bank and thus the affected setbacks. The proposed project is expected to have a de minimus impact within the 50' setback (as currently shown).

WETLANDS PROTECTION ACT (WPA)

Based on a review of the information that was provided and the information that is currently contained in our database, the NHESP has determined that this project, as currently proposed, **will not adversely affect** the actual Resource Area Habitat of state-protected rare wildlife species. Therefore, it is our opinion that this project meets the state-listed species performance standard for the issuance of an Order of Conditions.

Please note that this determination addresses only the matter of rare wildlife habitat and does not pertain to other wildlife habitat issues that may be pertinent to the proposed project.

MASSACHUSETTS ENDANGERED SPECIES ACT (MESA)

Based on a review of the information that was provided and the information that is currently contained in our database, the NHESP has determined that this project, as currently proposed, **will not result in a prohibited "take"** of state-listed rare species. This determination is a final decision of the Division of Fisheries and Wildlife pursuant to 321 CMR 10.18. Any changes to the proposed project or any additional work beyond that shown on the site plans may require an additional filing with the NHESP pursuant to

the MESA. This project may be subject to further review if no physical work is commenced within five years from the date of issuance of this determination, or if there is a change to the project.

Please note that this determination addresses only the matter of state-listed species and their habitats. If you have any questions regarding this letter please contact Amy Coman-Hoenig, Endangered Species Review Assistant, at (508) 389-6364.

Sincerely,

Thomas W. French

Thomas W. French, Ph.D.
Assistant Director

cc: MA DEP Southeast Region
Nathan McMullen, McMullen & Associates

APPENDIX E

FEMA Flood Insurance Rate Map

Figure 4: FIRM MAP

#1A CROWS NEST WAY
NANTUCKET, MASSACHUSETTS

SCALE: N.T.S. DATE: MAY 13, 2016

ASSESSOR'S REFERENCE:
MAP: 12 PARCEL: 24
25019C0103G

PREPARED FOR:
BEACH NUT LLC

NANTUCKET SURVEYORS LLC
5 WINDY WAY
NANTUCKET, MA. 02554

SOURCE: FEMA MAP SERVICE CENTER

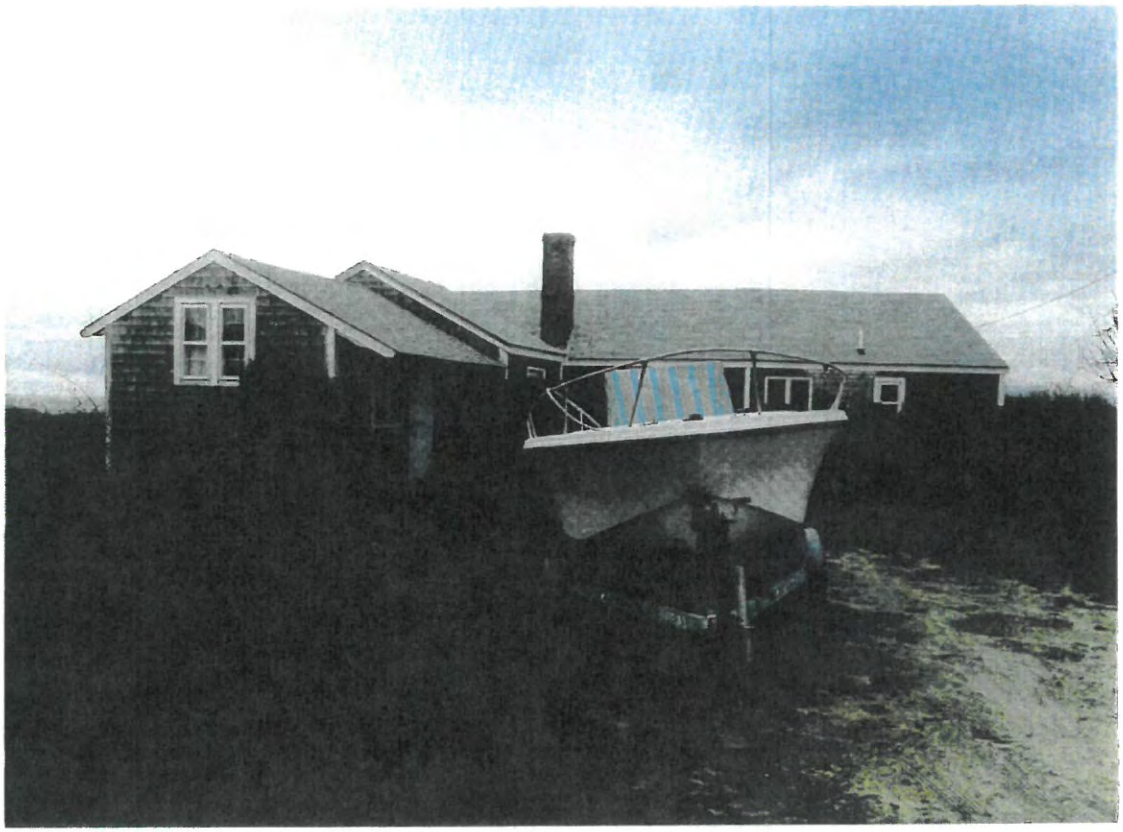
N-10498

APPENDIX F

Site Photographs

1A Crows Nest Way, Nantucket, MA
Applicant: Beach Nut LLC

North Elevation



West Elevation

Coastal Resource

APPENDIX H

Haines Hydrogeologic Consulting
Wetland Evaluation
Dated December 11, 2012

Haines Hydrogeologic Consulting

specialising in groundwater & wetlands

141 Old Enfield Road
Belchertown
Mass. 01007
413 323 7156
Fax 413 323 4776

Paul Santos
Nantucket Surveyor LLC
5 Windy Way
Nantucket, MA 02554

December 11, 2012

Re: Wetland Evaluation – Smith/Thompson Property (portion), 1 Crow's Nest Way, Nantucket Map 12 Parcel 23

Dear Mr. Santos:

As requested, we have delineated the wetland resource areas under jurisdiction of *Section 404 of the Federal Clean Water Act*, the *Massachusetts Wetlands Protection Act*, and/or the *Nantucket Wetlands By-law* on a portion of the above-referenced site. The portion of the site that was examined is in the southeast third of the entire site as shown as Lot 174 on the plan titled *"Plan of Land in Nantucket proposed for Urban E. Smith & Sue B. Smith"*, prepared by Roger Woods & Co., dated July 31, 2012.

The site consists of a 1.11-acre parcel containing a house, driveway and lawn area. The resource areas on the site include **Land under the Ocean, Coastal Beach, Coastal Dune,** and the associated **100-foot Buffer Zone**. There is a **Bordering Vegetated Wetland** off-site on the property to the southeast.

Land under the Ocean consists of the areas of the site seaward of the mean low water line. This is comprised of the area beneath the Atlantic Ocean along the northeastern property line. Any work proposed in this resource area must be permitted and must meet the performance standards for the resource area.

The **Coastal Beach** on the site consists of the unconsolidated sediment (sand) subject to wave, tidal and coastal storm action between the mean low water line and the lower edge of the Coastal Dune. Any proposed work in this resource area must be permitted and must meet the performance standards for the resource area.

The **Coastal Dune** on the site consists of the natural hill of sand deposited by wind action landward of the beach and seaward of the upland. The landward edge of the Coastal Dune was delineated with numbered blue flags (#1-7) demarcating the currently migrating sand with a thickness of greater than 12 inches. Any proposed work in the resource area must be permitted and must meet the performance standards for the resource area.

There is a **Bordering Vegetated Wetland** located off site on the property to the southeast. The closest edge of the wetland to the subject site has been flagged and surveyed. The wetland is comprised of a shrub swamp dominated by wetland vegetation and underlain by hydric soils. Wetland Data Forms are attached.

The **100-foot Buffer Zone** from the Coastal Dune and from the off-site Bordering Vegetated Wetland extends into the upland portions of the subject site. Any work in the Buffer Zone must be permitted and must be done in such a manner as to not impact the adjacent resource areas.

The portion of the site containing Coastal Dune, Coastal Beach and Land under the Ocean is within mapped endangered species habitat as identified by the Massachusetts Natural Heritage and Endangered Species Program (NHESP) in 2008. Any work within the mapped habitat requires review from NHESP under the Massachusetts Endangered Species Act (MESA) and the Massachusetts Wetlands Protection Act regulations.

If you have any questions, please call.

Yours truly,

David M. Haines
Hydrogeologist/Wetland Scientist

Appendix G

DEP Bordering Vegetated Wetland (310 CMR 10.55) Delineation Field Data Form

Applicant: Smith/Thompson Prepared by: Haines Hydrogeologic Consulting Project location: 1 Crows Nest Nantucket DEP File #:

Check all that apply:

- ☐ Vegetation alone presumed adequate to delineate BVW boundary: fill out Section I only
- ☒ Vegetation and other indicators of hydrology used to delineate BVW boundary: fill out Sections I and II
- ☐ Method other than dominance test used (attach additional information)

Section I. Vegetation

Observation Plot Number: 2 Wet 15' BELOW FLAG #2 Transect Number: 2 Date of Delineation: 11/27/12

A. Sample Layer and Plant Species (by common/scientific name)	B. Percent Cover (or basal area)	C. Percent Dominance	D. Dominant Plant (yes or no)	E. Wetland Indicator Category*
Highbush Blueberry	20.5	46	yes	FACW-
Arrowwood	10.5	23	yes	FAC
Winterberry Holly	10.5	23	yes	FACW+
Bayberry	3.0	7	No	—
Fox Grape	10.5	100	yes	FACU
Mosses (sp)	10.5	100	yes	?

* Use an asterisk to mark wetland indicator plants: plant species listed in the Wetlands Protection Act (MGL c.131, s.40); plants in the genus *Sphagnum*; plants listed as FAC, FAC+, FACW-, FACW, FACW+, or OBL; or plants with physiological or morphological adaptations. If any plants are identified as wetland indicator plants due to physiological or morphological adaptations, describe the adaptation next to the asterisk.

Vegetation conclusion:

Number of dominant wetland indicator plants: 3 Number of dominant non-wetland indicator plants: 1

Is the number of dominant wetland plants equal to or greater than the number of dominant non-wetland plants? yes no

If vegetation alone is presumed adequate to delineate the BVW boundary, submit this form with the Request for Determination of Applicability or Notice of Intent.

Pg 2- Smith/Thompson site 1 Crows Nest Way Plot 2 West 11/25/12

Section II. Indicators of Hydrology

Hydric Soil Interpretation

1. Soil Survey

Is there a published soil survey for this site? (yes) no

title/date: Nantucket County 1979

map number: #1

soil type mapped: EVESBORO

hydric soil inclusions:

Are field observations consistent with soil survey? yes (no)

Remarks:

2. Soil Description

Horizon	Depth	Matrix Color	Mottles Color
A	0-6	5YR 3/2	ONY
B	6-8	7.5YR 6/1	10B 5YR 4/4

Remarks:

3. Other:

Conclusion: Is soil hydric? (yes) no

Other Indicators of Hydrology: (check all that apply and describe)

- ☐ Site inundated:
- ☐ Depth to free water in observation hole:
- ☐ Depth to soil saturation in observation hole:
- ☒ Water marks:
- ☐ Drift lines:
- ☐ Sediment deposits:
- ☐ Drainage patterns in BVW:
- ☒ Oxidized rhizospheres:
- ☒ Water-stained leaves:
- ☐ Recorded data (stream, lake, or tidal gauge; aerial photo; other) :
- ☐ Other:

Vegetation and Hydrology Conclusion

	yes	no
Number of wetland indicator plants ≥ number of non-wetland indicator plants	☒	☐
Wetland hydrology present:		
hydric soil present	☒	☐
other indicators of hydrology present	☒	☐
Sample location is in a BVW	☒	☐

Submit this form with the Request for Determination of Applicability or Notice of Intent.

Appendix G

DEP Bordering Vegetated Wetland (310 CMR 10.55) Delineation Field Data Form

Applicant: Smith/Thompson Prepared by: HAINES Hydrogeologic Consulting Project location: 1 Crows Nest Nantucket DEP File #:

Check all that apply:

- ☐ Vegetation alone presumed adequate to delineate BVW boundary: fill out Section I only
- ☒ Vegetation and other indicators of hydrology used to delineate BVW boundary: fill out Sections I and II
- ☐ Method other than dominance test used (attach additional information)

Section I. Vegetation

Observation Plot Number: 2 UP 15' Above Flag #2 Transect Number: 2 Date of Delineation: 11/27/12

A. Sample Layer and Plant Species (by common/scientific name)	B. Percent Cover (or basal area)	C. Percent Dominance	D. Dominant Plant (yes or no)	E. Wetland Indicator Category*
Sassafras	20.5	100	yes	FACU-
Tartarian Honeysuckle	10.5	33	yes	FACU
Arrowwood	10.5	33	yes	FAC
Highbush Blueberry	10.5	33	yes	FACW-
Canada Goldenrod	10.5	100	yes	FACU
Dewberry	10.5	33	yes	FACU
Foxgrape	10.5	33	yes	FACU
Cat Brier	10.5	33	yes	

* Use an asterisk to mark wetland indicator plants: plant species listed in the Wetlands Protection Act (MGL c.131, s.40); plants in the genus *Sphagnum*; plants listed as FAC, FAC+, FACW-, FACW, FACW+, or OBL; or plants with physiological or morphological adaptations. If any plants are identified as wetland indicator plants due to physiological or morphological adaptations, describe the adaptation next to the asterisk.

Vegetation conclusion:

Number of dominant wetland indicator plants: 2 Number of dominant non-wetland indicator plants: 5

Is the number of dominant wetland plants equal to or greater than the number of dominant non-wetland plants? yes no

If vegetation alone is presumed adequate to delineate the BVW boundary, submit this form with the Request for Determination of Applicability or Notice of Intent.

Pg 2- Smith/Thompson site 1 Crows Nest Way Plot 2 UP 11/25/12

Section II. Indicators of Hydrology

Hydric Soil Interpretation

1. Soil Survey

Is there a published soil survey for this site? (yes) no

title/date: Nantucket County 1979

map number: #1

soil type mapped: EVES Bond

hydric soil inclusions:

Are field observations consistent with soil survey? (yes) no

Remarks:

2. Soil Description

Horizon	Depth	Matrix Color	Mottles Color
A	0-6	7.5yr 4/2	—
B	6-18+	5yr 5/4	—

Remarks:

3. Other:

Conclusion: Is soil hydric? yes (no)

Other Indicators of Hydrology: (check all that apply and describe)

- ☐ Site inundated: _____
- ☐ Depth to free water in observation hole: _____
- ☐ Depth to soil saturation in observation hole: _____
- ☐ Water marks: _____
- ☐ Drift lines: _____
- ☐ Sediment deposits: _____
- ☐ Drainage patterns in BVW: _____
- ☐ Oxidized rhizospheres: _____
- ☐ Water-stained leaves: _____
- ☐ Recorded data (stream, lake, or tidal gauge; aerial photo; other) : _____
- ☐ Other: _____

Vegetation and Hydrology Conclusion

	yes	no
Number of wetland indicator plants ≥ number of non-wetland indicator plants	☐	☒
Wetland hydrology present:		
hydric soil present	☐	☒
other indicators of hydrology present	☐	☒
Sample location is in a BVW	☐	☒

Submit this form with the Request for Determination of Applicability or Notice of Intent.

APPENDIX I

Order of Conditions SE48-2502

144888

2014 00144888
Cert: 23960 Doc: OOC
Registered: 06/25/2014 03:39 PM

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WPA Form 5 – Order of Conditions

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40
And the Town of Nantucket Wetlands Bylaw Chapter 136

Provided by MassDEP:
SE48-2502
MassDEP File #

eDEP Transaction #

Nantucket
City/Town

A. General Information

1. From: Nantucket
Conservation Commission

2. This issuance is for (check one): a. ☒ Order of Conditions b. ☐ Amended Order of Conditions

3. To: Applicant:

Gleed — a. First Name
Thompson Jr. + Marian G. Thompson — b. Last Name
~~Gleed Thompson Trust~~ — c. Organization
1431 Hollow Road — d. Mailing Address
Clinton Corners — e. City/Town
NY — f. State
12514 — g. Zip Code

4. Property Owner (if different from applicant):

Same as applicant — a. First Name
b. Last Name
c. Organization
d. Mailing Address
e. City/Town
f. State
g. Zip Code

5. Project Location:

1A Crow's Nest Way — a. Street Address
Nantucket — b. City/Town
12 — c. Assessors Map/Plat Number
23 — d. Parcel/Lot Number

Latitude and Longitude, if known: d m s — d. Latitude; d m s — e. Longitude

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WPA Form 5 – Order of Conditions

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40
And the Town of Nantucket Wetlands Bylaw Chapter 136

Provided by MassDEP:
SE48-2502
MassDEP File #

eDEP Transaction #

Nantucket
City/Town

A. General Information (cont.)

6. Property recorded at the Registry of Deeds for (attach additional information if more than one parcel):

Nantucket — a. County
23960 — b. Certificate Number (if registered land)
c. Book
d. Page

7. Dates: 10/12/2012 — a. Date Notice of Intent Filed; 12/19/2012 — b. Date Public Hearing Closed; 1/9/2013 — c. Date of Issuance

8. Final Approved Plans and Other Documents (attach additional plan or document references as needed):

Alterations and Additions to: One Crow's Nest Way — a. Plan Title
McMullen & Associates — b. Prepared By
McMullen & Associates — c. Signed and Stamped by
12/14/2012 — d. Final Revision Date
1"=30' — e. Scale
f. Additional Plan or Document Title
g. Date

B. Findings

1. Findings pursuant to the Massachusetts Wetlands Protection Act:

Following the review of the above-referenced Notice of Intent and based on the information provided in this application and presented at the public hearing, this Commission finds that the areas in which work is proposed is significant to the following interests of the Wetlands Protection Act (the Act). Check all that apply:

a. ☒ Public Water Supply
b. ☒ Land Containing Shellfish
c. ☒ Prevention of Pollution
d. ☒ Private Water Supply
e. ☒ Fisheries
f. ☒ Protection of Wildlife Habitat
g. ☒ Groundwater Supply
h. ☒ Storm Damage Prevention
i. ☒ Flood Control
j. ☒ Wetland Scenic Views (bylaw)
k. ☒ Recreation (Bylaw)

2. This Commission hereby finds the project, as proposed, is: (check one of the following boxes)

Approved subject to:

a. ☒ the following conditions which are necessary in accordance with the performance standards set forth in the wetlands regulations. This Commission orders that all work shall be performed in accordance with the Notice of Intent referenced above, the following General Conditions, and any other special conditions attached to this Order. To the extent that the following conditions modify or differ from the plans, specifications, or other proposals submitted with the Notice of Intent, these conditions shall control.

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B. Findings (cont.)

Denied because:

b. ☐ the proposed work cannot be conditioned to meet the performance standards set forth in the wetland regulations. Therefore, work on this project may not go forward unless and until a new Notice of Intent is submitted which provides measures which are adequate to protect the interests of the Act, and a final Order of Conditions is issued. **A description of the performance standards which the proposed work cannot meet is attached to this Order.**

c. ☐ the information submitted by the applicant is not sufficient to describe the site, the work, or the effect of the work on the interests identified in the Wetlands Protection Act. Therefore, work on this project may not go forward unless and until a revised Notice of Intent is submitted which provides sufficient information and includes measures which are adequate to protect the Act's interests, and a final Order of Conditions is issued. **A description of the specific information which is lacking and why it is necessary is attached to this Order as per 310 CMR 10.05(6)(c).**

3. ☒ Buffer Zone Impacts: Shortest distance between limit of project disturbance and the wetland resource area specified in 310 CMR 10.02(1)(a) — 25 a. linear feet

Inland Resource Area Impacts: Check all that apply below. (For Approvals Only)

Resource Area	Proposed Alteration	Permitted Alteration	Proposed Replacement	Permitted Replacement
4. ☐ Bank	a. linear feet	b. linear feet	c. linear feet	d. linear feet
5. ☐ Bordering Vegetated Wetland	a. square feet	b. square feet	c. square feet	d. square feet
6. ☐ Land Under Waterbodies and Waterways	a. square feet	b. square feet	c. square feet	d. square feet
	e. c/y dredged	f. c/y dredged		
7. ☐ Bordering Land Subject to Flooding	a. square feet	b. square feet	c. square feet	d. square feet
Cubic Feet Flood Storage	e. cubic feet	f. cubic feet	g. cubic feet	h. cubic feet
8. ☐ Isolated Land Subject to Flooding	a. square feet	b. square feet		
Cubic Feet Flood Storage	c. cubic feet	d. cubic feet	e. cubic feet	f. cubic feet
9. ☐ Riverfront Area	a. total sq. feet	b. total sq. feet		
Sq ft within 100 ft	c. square feet	d. square feet	e. square feet	f. square feet
Sq ft between 100-200 ft	g. square feet	h. square feet	i. square feet	j. square feet

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B. Findings (cont.)

Coastal Resource Area Impacts: Check all that apply below. (For Approvals Only)

	Proposed Alteration	Permitted Alteration	Proposed Replacement	Permitted Replacement
10. ☐ Designated Port Areas	Indicate size under Land Under the Ocean, below			
11. ☐ Land Under the Ocean	a. square feet	b. square feet		
	c. c/y dredged	d. c/y dredged		
12. ☐ Barrier Beaches	Indicate size under Coastal Beaches and/or Coastal Dunes below			
13. ☐ Coastal Beaches	a. square feet	b. square feet	cu yd c. nourishment	cu yd d. nourishment
14. ☐ Coastal Dunes	a. square feet	b. square feet	cu yd c. nourishment	cu yd d. nourishment
15. ☐ Coastal Banks	a. linear feet	b. linear feet		
16. ☐ Rocky Intertidal Shores	a. square feet	b. square feet		
17. ☐ Salt Marshes	a. square feet	b. square feet	c. square feet	d. square feet
18. ☐ Land Under Salt Ponds	a. square feet	b. square feet		
	c. c/y dredged	d. c/y dredged		
19. ☐ Land Containing Shellfish	a. square feet	b. square feet	c. square feet	d. square feet
20. ☐ Fish Runs	Indicate size under Coastal Banks, Inland Bank, Land Under the Ocean, and/or inland Land Under Waterbodies and Waterways, above			
	a. c/y dredged	b. c/y dredged		
21. ☐ Land Subject to Coastal Storm Flowage	a. square feet	b. square feet		

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B. Findings (cont.)

22. ☐ Restoration/Enhancement *:

a. square feet of BVW | b. square feet of salt marsh

23. ☐ Stream Crossing(s):

a. number of new stream crossings | b. number of replacement stream crossings

C. General Conditions Under Massachusetts Wetlands Protection Act

The following conditions are only applicable to Approved projects.

1. Failure to comply with all conditions stated herein, and with all related statutes and other regulatory measures, shall be deemed cause to revoke or modify this Order.
2. The Order does not grant any property rights or any exclusive privileges; it does not authorize any injury to private property or invasion of private rights.
3. This Order does not relieve the permittee or any other person of the necessity of complying with all other applicable federal, state, or local statutes, ordinances, bylaws, or regulations.
4. The work authorized hereunder shall be completed within three years from the date of this Order unless either of the following apply:
   a. the work is a maintenance dredging project as provided for in the Act; or
   b. the time for completion has been extended to a specified date more than three years, but less than five years, from the date of issuance. If this Order is intended to be valid for more than three years, the extension date and the special circumstances warranting the extended time period are set forth as a special condition in this Order.
5. This Order may be extended by the issuing authority for one or more periods of up to three years each upon application to the issuing authority at least 30 days prior to the expiration date of the Order.
6. If this Order constitutes an Amended Order of Conditions, this Amended Order of Conditions does not extend the issuance date of the original Final Order of Conditions and the Order will expire on 1/9/2016 unless extended in writing by the Department.
7. Any fill used in connection with this project shall be clean fill. Any fill shall contain no trash, refuse, rubbish, or debris, including but not limited to lumber, bricks, plaster, wire, lath, paper, cardboard, pipe, tires, ashes, refrigerators, motor vehicles, or parts of any of the foregoing.
8. This Order is not final until all administrative appeal periods from this Order have elapsed, or if such an appeal has been taken, until all proceedings before the Department have been completed.

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C. General Conditions Under Massachusetts Wetlands Protection Act (cont.)

9. No work shall be undertaken until the Order has become final and then has been recorded in the Registry of Deeds or the Land Court for the district in which the land is located, within the chain of title of the affected property. In the case of recorded land, the Final Order shall also be noted in the Registry's Grantor Index under the name of the owner of the land upon which the proposed work is to be done. In the case of the registered land, the Final Order shall also be noted on the Land Court Certificate of Title of the owner of the land upon which the proposed work is done. The recording information shall be submitted to the Conservation Commission on the form at the end of this Order, which form must be stamped by the Registry of Deeds, prior to the commencement of work.

10. A sign shall be displayed at the site not less then two square feet or more than three square feet in size bearing the words,

    "Massachusetts Department of Environmental Protection" [or, "MassDEP"]

    "File Number SE48-2502 "

11. Where the Department of Environmental Protection is requested to issue a Superseding Order, the Conservation Commission shall be a party to all agency proceedings and hearings before MassDEP.

12. Upon completion of the work described herein, the applicant shall submit a Request for Certificate of Compliance (WPA Form 8A) to the Conservation Commission.

13. The work shall conform to the plans and special conditions referenced in this order.

14. Any change to the plans identified in Condition #13 above shall require the applicant to inquire of the Conservation Commission in writing whether the change is significant enough to require the filing of a new Notice of Intent.

15. The Agent or members of the Conservation Commission and the Department of Environmental Protection shall have the right to enter and inspect the area subject to this Order at reasonable hours to evaluate compliance with the conditions stated in this Order, and may require the submittal of any data deemed necessary by the Conservation Commission or Department for that evaluation.

16. This Order of Conditions shall apply to any successor in interest or successor in control of the property subject to this Order and to any contractor or other person performing work conditioned by this Order.

17. Prior to the start of work, and if the project involves work adjacent to a Bordering Vegetated Wetland, the boundary of the wetland in the vicinity of the proposed work area shall be marked by wooden stakes or flagging. Once in place, the wetland boundary markers shall be maintained until a Certificate of Compliance has been issued by the Conservation Commission.

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C. General Conditions Under Massachusetts Wetlands Protection Act (cont.)

18. All sedimentation barriers shall be maintained in good repair until all disturbed areas have been fully stabilized with vegetation or other means. At no time shall sediments be deposited in a wetland or water body. During construction, the applicant or his/her designee shall inspect the erosion controls on a daily basis and shall remove accumulated sediments as needed. The applicant shall immediately control any erosion problems that occur at the site and shall also immediately notify the Conservation Commission, which reserves the right to require additional erosion and/or damage prevention controls it may deem necessary. Sedimentation barriers shall serve as the limit of work unless another limit of work line has been approved by this Order.

NOTICE OF STORMWATER CONTROL AND MAINTENANCE REQUIREMENTS

19. **The work associated with this Order (the "Project") is** (1) ☐ **is not** (2) ☒ **subject to the Massachusetts Stormwater Standards. If the work is subject to the Stormwater Standards, then the project is subject to the following conditions:**

a) All work, including site preparation, land disturbance, construction and redevelopment, shall be implemented in accordance with the construction period pollution prevention and erosion and sedimentation control plan and, if applicable, the Stormwater Pollution Prevention Plan required by the National Pollution Discharge Elimination System Construction General Permit as required by Stormwater Condition 8. Construction period erosion, sedimentation and pollution control measures and best management practices (BMPs) shall remain in place until the site is fully stabilized.

b) No stormwater runoff may be discharged to the post-construction stormwater BMPs unless and until a Registered Professional Engineer provides a Certification that:
i. all construction period BMPs have been removed or will be removed by a date certain specified in the Certification. For any construction period BMPs intended to be converted to post construction operation for stormwater attenuation, recharge, and/or treatment, the conversion is allowed by the MassDEP Stormwater Handbook BMP specifications and that the BMP has been properly cleaned or prepared for post construction operation, including removal of all construction period sediment trapped in inlet and outlet control structures;
ii. as-built final construction BMP plans are included, signed and stamped by a Registered Professional Engineer, certifying the site is fully stabilized;
iii. any illicit discharges to the stormwater management system have been removed, as per the requirements of Stormwater Standard 10;
iv. all post-construction stormwater BMPs are installed in accordance with the plans (including all planting plans) approved by the issuing authority, and have been inspected to ensure that they are not damaged and that they are in proper working condition;
v. any vegetation associated with post-construction BMPs is suitably established to withstand erosion.

C. General Conditions Under Massachusetts Wetlands Protection Act (cont.)

c) The landowner is responsible for BMP maintenance until the issuing authority is notified that another party has legally assumed responsibility for BMP maintenance. Prior to requesting a Certificate of Compliance, or Partial Certificate of Compliance, the responsible party (defined in General Condition 18(e)) shall execute and submit to the issuing authority an Operation and Maintenance Compliance Statement ("O&M Statement) for the Stormwater BMPs identifying the party responsible for implementing the stormwater BMP Operation and Maintenance Plan ("O&M Plan") and certifying the following: *i.*) the O&M Plan is complete and will be implemented upon receipt of the Certificate of Compliance, and *ii.*) the future responsible parties shall be notified in writing of their ongoing legal responsibility to operate and maintain the stormwater management BMPs and implement the Stormwater Pollution Prevention Plan.

d) Post-construction pollution prevention and source control shall be implemented in accordance with the long-term pollution prevention plan section of the approved Stormwater Report and, if applicable, the Stormwater Pollution Prevention Plan required by the National Pollution Discharge Elimination System Multi-Sector General Permit.

e) Unless and until another party accepts responsibility, the landowner, or owner of any drainage easement, assumes responsibility for maintaining each BMP. To overcome this presumption, the landowner of the property must submit to the issuing authority a legally binding agreement of record, acceptable to the issuing authority, evidencing that another entity has accepted responsibility for maintaining the BMP, and that the proposed responsible party shall be treated as a permittee for purposes of implementing the requirements of Conditions 18(f) through 18(k) with respect to that BMP. Any failure of the proposed responsible party to implement the requirements of Conditions 18(f) through 18(k) with respect to that BMP shall be a violation of the Order of Conditions or Certificate of Compliance. In the case of stormwater BMPs that are serving more than one lot, the legally binding agreement shall also identify the lots that will be serviced by the stormwater BMPs. A plan and easement deed that grants the responsible party access to perform the required operation and maintenance must be submitted along with the legally binding agreement.

f) The responsible party shall operate and maintain all stormwater BMPs in accordance with the design plans, the O&M Plan, and the requirements of the Massachusetts Stormwater Handbook.

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C. General Conditions Under Massachusetts Wetlands Protection Act (cont.)

g) The responsible party shall:
1. Maintain an operation and maintenance log for the last three (3) consecutive calendar years of inspections, repairs, maintenance and/or replacement of the stormwater management system or any part thereof, and disposal (for disposal the log shall indicate the type of material and the disposal location);
2. Make the maintenance log available to MassDEP and the Conservation Commission ("Commission") upon request; and
3. Allow members and agents of the MassDEP and the Commission to enter and inspect the site to evaluate and ensure that the responsible party is in compliance with the requirements for each BMP established in the O&M Plan approved by the issuing authority.

h) All sediment or other contaminants removed from stormwater BMPs shall be disposed of in accordance with all applicable federal, state, and local laws and regulations.

i) Illicit discharges to the stormwater management system as defined in 310 CMR 10.04 are prohibited.

j) The stormwater management system approved in the Order of Conditions shall not be changed without the prior written approval of the issuing authority.

k) Areas designated as qualifying pervious areas for the purpose of the Low Impact Site Design Credit (as defined in the MassDEP Stormwater Handbook, Volume 3, Chapter 1, Low Impact Development Site Design Credits) shall not be altered without the prior written approval of the issuing authority.

l) Access for maintenance, repair, and/or replacement of BMPs shall not be withheld. Any fencing constructed around stormwater BMPs shall include access gates and shall be at least six inches above grade to allow for wildlife passage.

Special Conditions (if you need more space for additional conditions, please attach a text document):

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D. Findings Under Municipal Wetlands Bylaw or Ordinance

1. Is a municipal wetlands bylaw or ordinance applicable? ☒ Yes ☐ No
2. The Nantucket Conservation Commission hereby finds (check one that applies):
   a. ☐ that the proposed work cannot be conditioned to meet the standards set forth in a municipal ordinance or bylaw, specifically:

      1. Municipal Ordinance or Bylaw — 2. Citation

      Therefore, work on this project may not go forward unless and until a revised Notice of Intent is submitted which provides measures which are adequate to meet these standards, and a final Order of Conditions is issued.

   b. ☐ that the following additional conditions are necessary to comply with a municipal ordinance or bylaw:

      1. Municipal Ordinance or Bylaw — 2. Citation
3. The Commission orders that all work shall be performed in accordance with the following conditions and with the Notice of Intent referenced above. To the extent that the following conditions modify or differ from the plans, specifications, or other proposals submitted with the Notice of Intent, the conditions shall control.
   The special conditions relating to municipal ordinance or bylaw are as follows (if you need more space for additional conditions, attach a text document):
   Please view additional findings and conditions page(s)

Town of Nantucket, Massachusetts

WPA Form 5 – Order of Conditions

The Town of Nantucket Bylaw Chapter 136

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Provided by DEP

B1. Additional Conditions

The Town of Nantucket Conservation Commission has found it necessary to include these additional conditions as a standard part of every Order. If the condition applies, then the corresponding box will be checked:

☒ 1. Pursuant to General Condition Number 8, this Order of Conditions must be registered with the Registry of Deeds for Nantucket, and proof of recording shall be submitted to the Commission prior to the commencement of any work approved in this Order.

☒ 2. No work approved under this Order shall take place until all administrative appeal periods from the Order have elapsed, or, if an appeal has been filed, until all proceedings have been completed.

☒ 3. The landowner, applicant, and/or the contractor will notify the Commission in writing five days prior to the start of work. The letter shall state the name, address, and telephone number of the project supervisor who will be responsible for insuring onsite compliance with this Order. (All erosion/sedimentation control devices shall be installed BEFORE the start of work.)

☒ 4. Prior to any activity at the site, a snow fence, siltation fence or a line of straw bales shall be staked as shown on the plan of record. After the fence or straw bales are installed, notice shall be given to the Nantucket Conservation Commission. **No work shall begin on the site for 72 hours after said notice is given; so as to allow Commission members time to inspect all siltation devices.** The snow fence, siltation fence, or straw bale line erected to prevent siltation, erosion, filling of the wetland, and trap windblown debris during construction, will also serve as a limit of the activity for work crews. It shall remain in good repair during all phases of construction, and it shall not be removed until all soils are stabilized and revegetated or until permission to remove it is given by the Commission.

☒ 5. An as-built plan, signed and stamped by a registered professional engineer or land surveyor in the Commonwealth of Massachusetts, and having the same scale as the final approved plans, shall be submitted to the Commission at the same time as a written request for a Certificate of Compliance, and shall specify how, if at all, the completed plan differs from the final approved plan. The as-built plan shall include, but not be limited to, the following: any/culvert inverts for inflow and outfalls; pipe slope, size, and composition; location of any other drainage structures and their composition; limits of fill or alteration; location of all structures and pavement within 100 feet of the wetland; the edge of the wetland; the grade contours within 100 feet of the wetland.

☒ 6. Members, employees, and agents of the Commission shall have the right to enter and inspect the premises to evaluate compliance with the conditions and performance standards stated in this Order, the Massachusetts Wetlands Protection Act, and pertinent Massachusetts regulations (310CMR10:00 through 10:99). The Commission may require the submittal of any data deemed necessary by the Commission for that evaluation.

☒ 7. The applicant, owners, successors, or assignees shall be responsible for maintaining any on-site drainage structures and outfalls, assuring the lasting integrity of vegetative cover on the site, and monitoring of site activities so as to prevent erosion, siltation, sedimentation, chemical contamination, or other detrimental impact to any on-site or off-site resource area. It shall be the responsibility of the property owner of record to ensure compliance with the maintenance conditions required by this Order.

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B1. Additional Conditions (cont.)

☒ 8. This document shall be included in all construction contracts and subcontracts dealing with the work proposed and shall supersede other contract requirements.

☒ 9. A complete copy of this permit, including its drawings, Special Conditions, and any Amendments shall be available at the work site whenever work is being performed. The permittee shall provide a copy of this permit to all contractors, subcontractors, and other personnel performing work relating to this project in order to assure full knowledge and compliance with the permit's terms and conditions.

☒ 10. Natural vegetation between the wetland edge and upland edge of the Undisturbed Buffer shall be left intact. Within 48 hours of project completion, weather permitting, all disturbed areas shall be replanted as previously approved by the Commission. There shall be at least a 25-foot undisturbed buffer on the upland side of the wetland boundary, unless otherwise specified by this Order. This shall be an ongoing Condition that shall survive the expiration of this permit and shall be so noted on the Certificate of Compliance.

☒ 11. To minimize adverse effects on wildlife and water resources, the use of any pesticide or fertilizer requires explicit permission to be granted by the Commission. This shall be an ongoing Condition that shall survive the expiration of this permit, and shall be so noted on the Certificate of Compliance.

☒ 12. In all cases, no part of any structure, including decks, stairs, cantilevers, etc., may be closer than 50 feet from the approved wetland boundary unless otherwise specified in this Order. This shall be an ongoing Condition that shall survive the expiration of this permit and shall be so noted on the Certificate of Compliance.

☒ 13. Any refuse material found on the site shall be disposed of at an approved landfill and in no case may these materials be buried or disposed of in or near a wetland.

☒ 14. This Order of Conditions shall apply to any successor in interest or successor in control of the property.

☒ 15. No underground petroleum product storage tanks are allowed within 100 feet of any wetland or within any velocity (V) flood zone as indicated on the most recent FEMA floodplain maps.

☒ 16. No work under this Order of Conditions may proceed until the applicant has filed all necessary permits and applications with:

Board of Health, ZBA, HDC, Building Inspector, Army Corps of Engineers, DEP, Waterways, MNH, etc.

☒ 17. All construction and alterations must comply with the above referenced plans and the Conditions of this Order. Any changes intended to be made in the plans or in the work shall require the applicant to file a new Notice of Intent, or to inquire of the Commission in writing whether the change is substantial enough to require a new filing. No change in plan or work under this filing is permissible without a new Notice of Intent, or permission from the Commission.

FINDINGS and ADDITIONAL CONDITIONS

Massachusetts Wetlands Protection Act (MGL Chapter 131, Section 40)
Town of Nantucket Wetlands Bylaw (Chapter 136)

Address:	1A Crow's Nest Way
Assessor's Map and Parcel:	12-23
Property Owner:	Gleed Thompson
Applicant:	Gleed Thompson
DEP File Number:	SE48-2502
Filing Date:	October 12, 2012
Date Hearing Closed:	December 19, 2012
Date Orders Issued:	January 9, 2013
Plan of Record Information:	Alterations & Additions to: One Crow's Nest Way, Received 12/14/2012, prepared by McMullen & Associates

Permit Overview:
This order permits the relocation and expansion of an existing dwelling, the renovation of the existing driveway and associated grading and landscaping within the buffer zone to Coastal Bank, Coastal Dune, and Bordering Vegetated Wetland. Waivers are required for this project.

Additional Findings:

1. The area falls inside mapped habitat areas and requires NHESP review.

In addition to the General Conditions contained elsewhere in this document, the Commission includes the following Special Conditions pursuant to MGLCh131s40 and the Town of Nantucket Wetlands Protection Bylaw, Chapter 136:

18. All work shall be performed in accordance with the Site and Work Description contained within the Notice of Intent and plan notes set out on the plan of record, provided project narratives, waiver request and protocols.
19. All materials and machinery are to be stored outside of the fifty foot setback areas.
20. All disturbed dune areas shall be allowed to re-vegetate naturally.
21. No fertilizers or irrigation is permitted by this Order.

WAIVERS UNDER THE NANTUCKET WETLANDS BYLAW/REGULATIONS

Waivers are required to Section 2.03(B)(5) for structures within fifty feet of the Coastal Dune. The Commission finds that the project involving increasing the separation of the structure from the resource area as proposed will not have adverse impact to the interests protected by the bylaw and that there are no reasonable alternatives that allow the project to proceed. Therefore the Commission grants a waiver under Section 1.03(F)(3)(a) of the Nantucket Wetland Protection Regulations.

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E. Signatures

This Order is valid for three years, unless otherwise specified as a special condition pursuant to General Conditions #4, from the date of issuance.

1/9/2013
1. Date of Issuance

Please indicate the number of members who will sign this form.
This Order must be signed by a majority of the Conservation Commission.

5
2. Number of Signers

The Order must be mailed by certified mail (return receipt requested) or hand delivered to the applicant. A copy also must be mailed or hand delivered at the same time to the appropriate Department of Environmental Protection Regional Office, if not filing electronically, and the property owner, if different from applicant.

Signatures:

Andrew Bennett

Ernest Steinauer

Ian Golding

Sarah Oktay

Michael Glowacki

John D. Braginton-Smith

Jennifer Karberg

☒ by hand delivery on

Date

☐ by certified mail, return receipt requested, on

Date

F. Appeals

The applicant, the owner, any person aggrieved by this Order, any owner of land abutting the land subject to this Order, or any ten residents of the city or town in which such land is located, are hereby notified of their right to request the appropriate MassDEP Regional Office to issue a Superseding Order of Conditions. The request must be made by certified mail or hand delivery to the Department, with the appropriate filing fee and a completed Request of Departmental Action Fee Transmittal Form, as provided in 310 CMR 10.03(7) within ten business days from the date of issuance of this Order. A copy of the request shall at the same time be sent by certified mail or hand delivery to the Conservation Commission and to the applicant, if he/she is not the appellant.

Any appellants seeking to appeal the Department's Superseding Order associated with this appeal will be required to demonstrate prior participation in the review of this project. Previous participation in the permit proceeding means the submission of written information to the Conservation Commission prior to the close of the public hearing, requesting a Superseding Order, or providing written information to the Department prior to issuance of a Superseding Order.

The request shall state clearly and concisely the objections to the Order which is being appealed and how the Order does not contribute to the protection of the interests identified in the Massachusetts Wetlands Protection Act (M.G.L. c. 131, § 40), and is inconsistent with the wetlands regulations (310 CMR 10.00). To the extent that the Order is based on a municipal ordinance or bylaw, and not on the Massachusetts Wetlands Protection Act or regulations, the Department has no appellate jurisdiction.

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G. Recording Information

Prior to commencement of work, this Order of Conditions must be recorded in the Registry of Deeds or the Land Court for the district in which the land is located, within the chain of title of the affected property. In the case of recorded land, the Final Order shall also be noted in the Registry's Grantor Index under the name of the owner of the land subject to the Order. In the case of registered land, this Order shall also be noted on the Land Court Certificate of Title of the owner of the land subject to the Order of Conditions. The recording information on this page shall be submitted to the Conservation Commission listed below.

_____
Conservation Commission

Detach on dotted line, have stamped by the Registry of Deeds and submit to the Conservation Commission.

To:

_____
Conservation Commission

Please be advised that the Order of Conditions for the Project at:

_____ _____
Project Location MassDEP File Number

Has been recorded at the Registry of Deeds of:

_____ _____ _____
County Book Page

for: _____
Property Owner

and has been noted in the chain of title of the affected property in:

_____ _____
Book Page

In accordance with the Order of Conditions issued on:

_____
Date

If recorded land, the instrument number identifying this transaction is:

_____
Instrument Number

If registered land, the document number identifying this transaction is:

_____
Document Number

_____
Signature of Applicant

144888

DOC No: 00144888

NANTUCKET COUNTY LAND COURT

REGISTRY DISTRICT

** RECEIVED FOR REGISTRATION **

On: Jun 25,2014 at 03:39P

Document Fee: 75.00 Rec Total:$15,577

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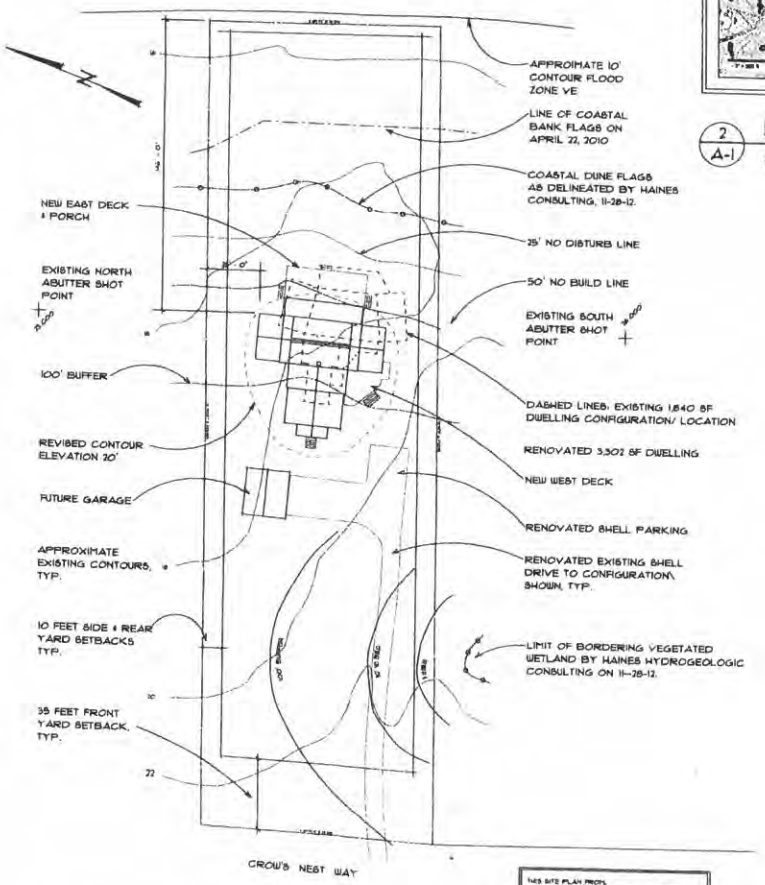
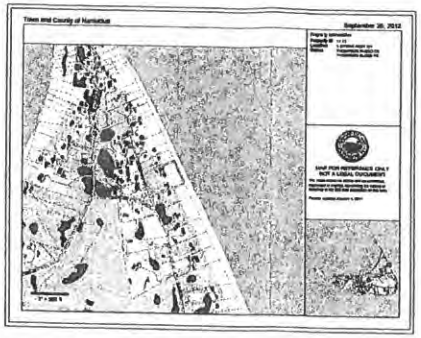


THIS SITE PLAN PROPS. "EASEMENT PLAN OF LAND IN NANTUCKET, MA FOR HORNBEAM & BEACHNUT NOMINEE TRUST BY: ROGER WOODS & CO. OF PALMER, MA PROJECT NO: 09875 NO C-194 DATED: APRIL 22, 2010

1 / A-1 SITE PLAN
1" = 30' - 0"



2 / A-1 LOCUS PLAN
NTS

Zone LUG - 1			
	Req'd./Allowed	Existing	Proposed
Lot Size	40,000 SF	48,332 SF	48,332 SF
Min. Frontage	100 FT	118.84 FT	118.85 FT
Front Yd. Setback	35 FT	212 FT	193 FT
Side/Rear Setbacks	10 FT	18 FT	24 FT
1st Floor S.F.	14,499 SF	1,840 SF	2,369 SF
2nd Floor S.F.	14,499 SF	0 SF	933 SF
Ground Cover Ratio	7 %	3.8 %	4.9 %
Height Above Grade	30 FT	19 FT	26 FT
Off Street Parking	2	2	4

3 / A-1 ZONING ANALYSIS

Note:. All Windows Are "Andersen", A-Series, Simulated Divided Lights (SDL), With 3/4" Muntins, Impact Resistant, Rated DP-50, Tilt-Wash, With Half Screens Of "High Transparency", Stainless Steel, Exteriors Finished With Manufacturer's White, Interior Finish Of Natural Pine With Varnish. All Hardware Is Finished "Stone". Note: Head heights of windows vary. See Elevations, Building Sections & Written Specs. Verify All Exact Heights, Both Floors, With Designer In Field.

NOTE: EXTERIOR WALLS ARE OF (3) DIFFERENT R.O. WIDTHS: 3-1/2", 5-1/2" & 8". VERIFY EXACT R.O. WIDTH FOR EACH OPENING. ORDER ALL WINDOWS & DOORS WITH FACTORY-INSTALLED EXTENSION JAMBS.

No.	MFG.	Series	Model #	Type	Sash Dim.	R.O. Dim.	LTS.	Jamb	Material	Remarks
1	ANDERSEN	A-Series	ADH2438	D. HUNG	2'-3-1/4"x 3'-7-1/4"	2'-4"x 3'-8"	6/6	VIF	S.S. CLAD	
2	ANDERSEN	A-SERIES	ADH2644	D. HUNG	2'-5-1/4"x 4'-3-1/4"	2'-6"x 4'-4"	6/6	VIF	S.S. CLAD	Verify as Min. Egress
3	ANDERSEN	A-SERIES	CUSTOM	D. HUNG	2'-5-1/4"x 2'-7-1/4"	2'-6"x 2'-8"	3/3	VIF	S.S. CLAD	
4	ANDERSEN	A-SERIES	APW8048	FIXED	4'-11-1/4"x 4'-7-1/4"	5'-0"x 4'-8"	1	VIF	S.S. CLAD	
5	ANDERSEN	A-SERIES	ADH1848	D.HUNG	1'-7-1/4"X 4'7-1/4"	2'-8" x 6'-8"	4/4	VIF	S.S. CLAD	
6	ANDERSEN	A-SERIES	APW6068	FIXED	5'-11-1/4"X 6'-7-1/4"	6'-0"X 4'-8"	1	VIF	S.S. CLAD	
7	ANDERSEN	A-SERIES	ADH2068	D-HUNG	1'-11-1/4"X 4'-7-1/4"	2'-0"X 6'-8"	4/4	VIF	S.S. CLAD	
8	ANDERSEN	A-SERIES	ADH2636	D-HUNG	2'-5-1/4"X 3'-7-1/4"	2'-6"X 3'-8"	6/6	VIF	S.S. CLAD	
9	ANDERSEN	A-SERIES	ACU2038	CASEM.	1'-11-1/4"X 3'-7-3/4"	2'-0"X 3'8"	8	5-1/2"	S.S. CLAD	
10	ANDERSEN	A-SERIES	ADH2434	D-HUNG	2'-3-1/4"X 3'3-1/4"	2'-4" X 3'-4"	6/6	5-1/2"	S.S. CLAD	

4 / A-1 WINDOW SCHEDULE

No.	MFG.	Series	Model #	Type	Door Dim.	R.O. Dim.	LTS.	Jamb	Material	Remarks
A	SIMPSON	VERIFY	VERIFY	ENTRY	3'-0" x 6'-8"	As Required	6	VIF	Mahogany	Verify Model To Design Shown
B	ANDERSEN	A-SERIES	6068APLR	FRENCH	5'11-1/4"X 11'-1/2"	6'-0"X8'-0"	18	VIF	S.S. CLAD	
C	CUSTOM	-	-	OUT BLD.	2'-4" x 6'6"	As Required	1	VIF	MAHOG.	Custom To Design Shown
D	SIMPSON	EXTERIOR	1344	ENTRY	4-PANEL	3'-0" x 6'-8"	-	5-1/2"	MAHOGANY	

5 / A-1 DOOR SCHEDULE

McMullen & Associates Nantucket

ALTERATIONS & ADDITIONS TO:
ONE CROW'S NEST WAY
NANTUCKET

Issues & Revisions

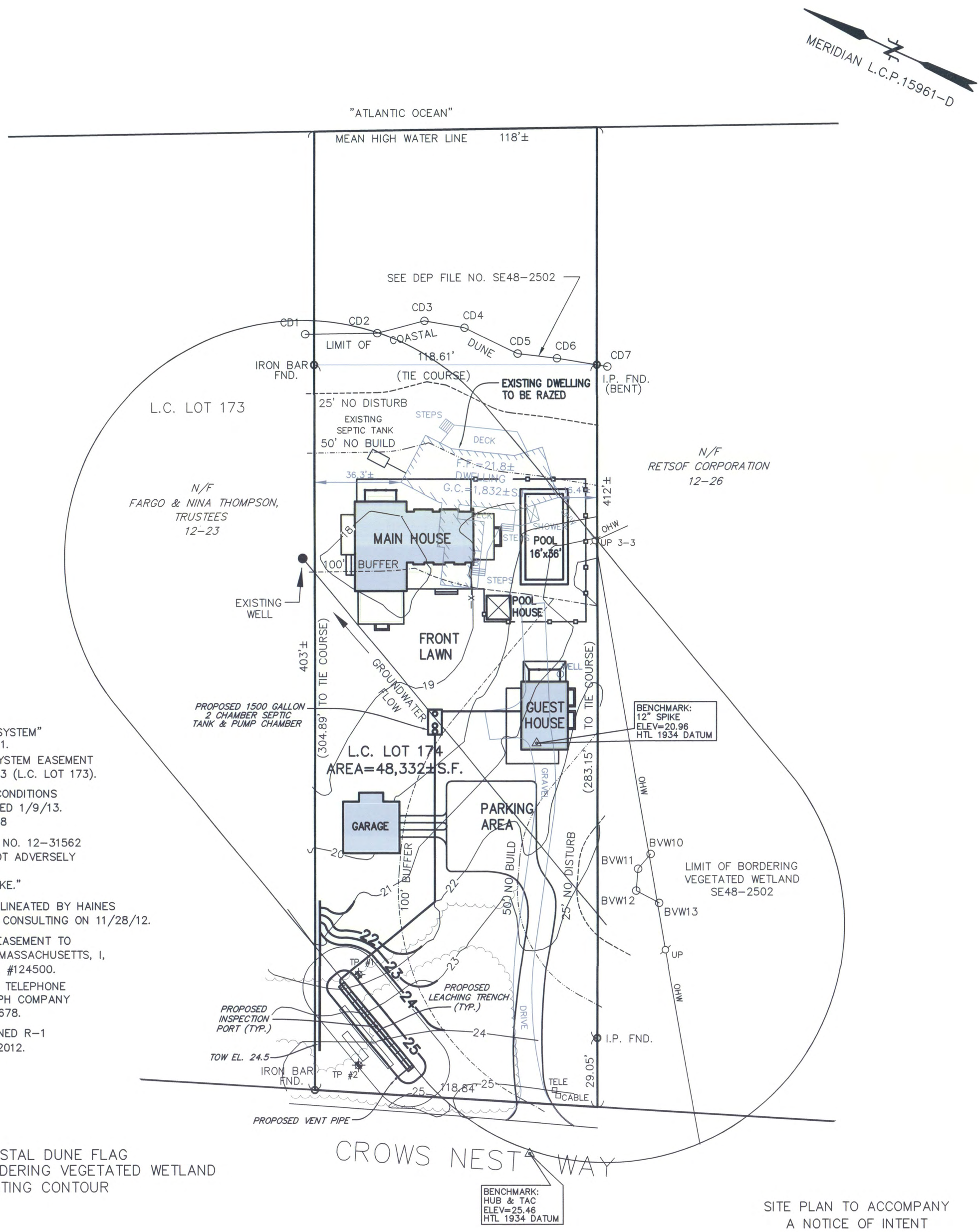
1	9-28-12	HDC Submission

Site & Locus Plans
Zoning Analysis
General Notes
Window & Door Schedules

Sheet A-1

APPENDIX J

"Site Plan to Accompany a Notice of Intent #1A Crows Nest Way"
Prepared by Nantucket Surveyors LLC
Dated May 13, 2016



NOTES:

1.a. DEP "SHARED SYSTEM" L.C.DOC #142011.
b. SEE SHARED SYSTEM EASEMENT L.C.DOC #134413 (L.C. LOT 173).

2. SEE ORDER OF CONDITIONS SE48-2502 ISSUED 1/9/13. L.C. DOC #144888

3. SEE NHESP FILE NO. 12-31562
a. WPA "WILL NOT ADVERSELY AFFECT"
b. MESA "NO TAKE."

4. WETLANDS AS DELINEATED BY HAINES HYDROGEOLOGIC CONSULTING ON 11/28/12.

5. SEE GRANT OF EASEMENT TO
a. COMCAST OF MASSACHUSETTS, I, INC. L.C. DOC. #124500.
b. NEW ENGLAND TELEPHONE AND TELEGRAPH COMPANY L.C. DOC. #15678.

6. PROPERTY REZONED R-1 TO LUG-1 ATM 2012.

LEGEND:

CD1	COASTAL DUNE FLAG
BVW	BORDERING VEGETATED WETLAND
—20—	EXISTING CONTOUR

CURRENT ZONING: LUG-1
MINIMUM LOT SIZE: 40,000 S.F.
MINIMUM FRONTAGE: 100'
FRONTYARD SETBACK: 35'
SIDE AND REAR SETBACK: 10'
ALLOWABLE G.C.R.: 7%

FOR PROPERTY LINE DETERMINATION THIS PLOT PLAN RELIES ON CURRENT DEEDS AND PLANS OF RECORD, VERIFIED BY FIELD MEASUREMENTS AS SHOWN HEREON. THIS PLAN IS NOT REPRESENTED TO BE A TITLE EXAMINATION OR A RECORDABLE SURVEY.

N.B. 386/67-

COMMONWEALTH OF MASSACHUSETTS PAUL J. SANTOS #36124 PROFESSIONAL LAND SURVEYOR
5/13/16

SITE PLAN TO ACCOMPANY
A NOTICE OF INTENT
#1A CROWS NEST WAY
IN
NANTUCKET, MASSACHUSETTS
SCALE: 1"=30' DATE: 5/13/16

DEED REFERENCE: L.C. CERT. #25245
PLAN REFERENCE: L.C. PLAN #15961-36
ASSESSOR'S REFERENCE:
MAP: 12 PARCEL: 24

PREPARED FOR:
BEACH NUT LLC

NANTUCKET SURVEYORS LLC
5 WINDY WAY
NANTUCKET, MA. 02554

N-10498

COPYRIGHT BY NANTUCKET SURVEYORS, LLC.

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Nantucket SURVEYORS LLC

P.O. Box 3627, Nantucket, Massachusetts 02584-3627
Tel. (508) 228-0240 Fax (508) 228-9856
www.nantucketsurveyors.com
nsllcinfo@nantucketsurveyors.com

N10498

May 27, 2016

Nantucket Conservation Commission
2 Bathing Beach Road
Nantucket, MA 02554

Re: Waiver Request
Applicant: Beach Nut LLC
1A Crows Nest Way (Map 12 Parcel 24)
Nantucket, MA 02554

Dear Commissioners:

Oh behalf of the applicant, Nantucket Surveyors LLC is requesting a waiver from the Nantucket Wetland Protection Regulations, Section 2.03 (B)(5) for the above referenced project, specifically a waiver to raze an existing structure within the 50 ft. setback to a coastal dune. The applicant wishes to apply for this waiver under the premise that there will be a long term net benefit/improvement to the resource area, Section 1.03 (F)(3C).

The applicant proposes re-development of the existing site. More specifically the following work is proposed:

25' No Disturb Zone

- No activity is proposed.

50' No Build Zone

- Raze existing structure partially within no build zone to a coastal dune.

50' - 100' Buffer Zone

- Raze existing structure and construction of a new dwelling, guest house, pool, pool house, relocation of existing driveway and associated grading and landscaping.

Interests Protected:

- **Public and Private Water Supply:** The existing site is serviced by well water. No modification to this is proposed.
- **Groundwater:** Not applicable to this project.
- **Fisheries and Shellfish:** Not applicable to this project.
- **Recreation:** The coastal dune is on private property, and it is not available for recreational use by the public.
- **Water Pollution:** All resources areas are within a level area of the parcel. No erosion is anticipated.
- **Wetland Scenic Views:** The existing views will not be altered.
- **Wildlife:** No changes in landscape will take place that would cause a change in the movement of wildlife. No wildlife obstruction will occur.
- **Flood Control and Storm Damage Prevention:** The developed portion of the site is located above the adjacent Flood Hazard Zone (VE El. 10).
- **Erosion Control:** The site will be protected during the construction phase of this project.

Thank you for your attention to this matter.

Sincerely,
Nantucket Surveyors LLC

Paul J. Santos, PLS
Agent for the Applicant

CC: Beach Nut LLC

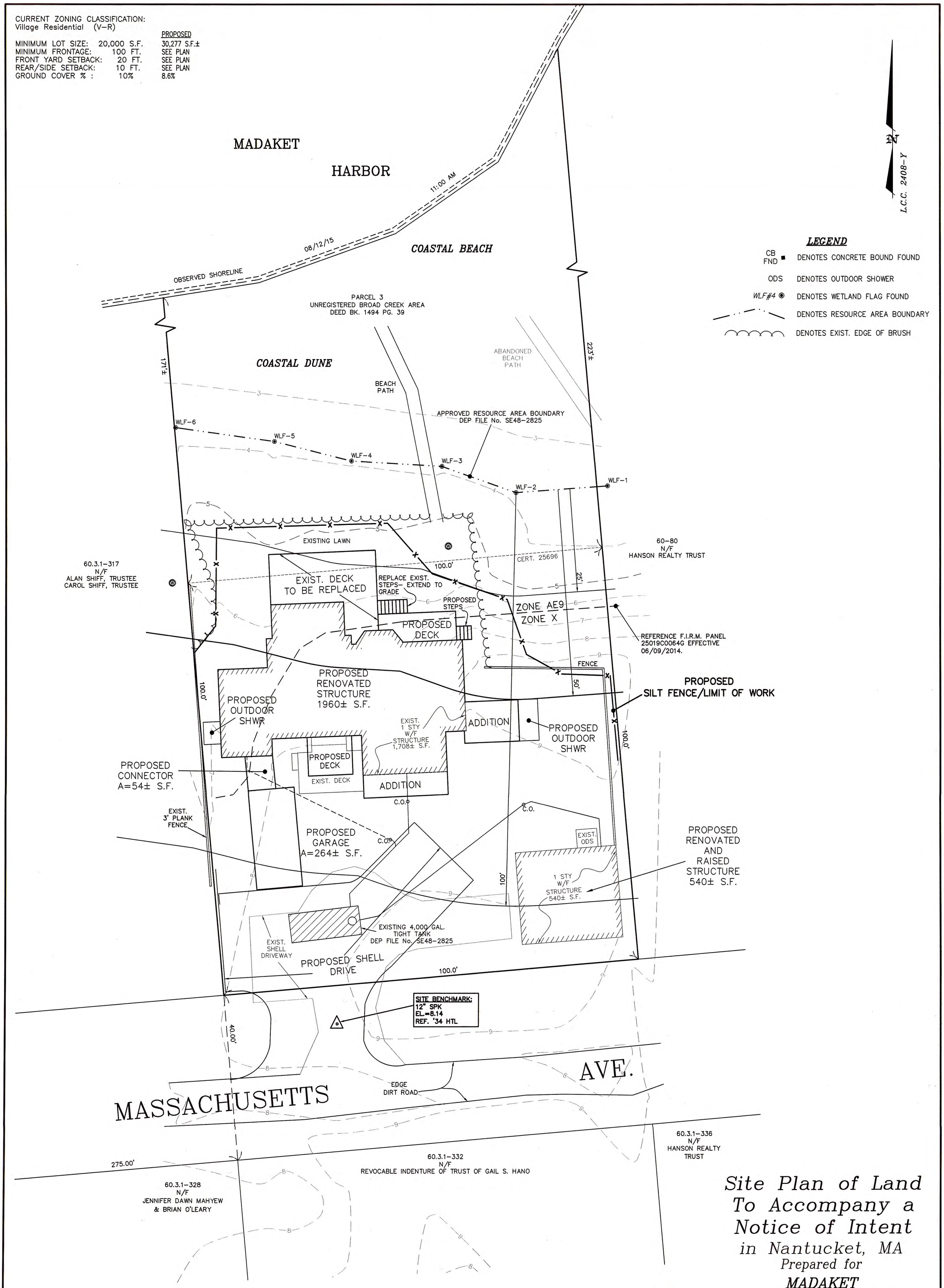
Madaket Wheelhouse LLC

13 Massachusetts Ave

(60-75)

CURRENT ZONING CLASSIFICATION:
Village Residential (V–R)

		PROPOSED
MINIMUM LOT SIZE:	20,000 S.F.	30,277 S.F.±
MINIMUM FRONTAGE:	100 FT.	SEE PLAN
FRONT YARD SETBACK:	20 FT.	SEE PLAN
REAR/SIDE SETBACK:	10 FT.	SEE PLAN
GROUND COVER % :	10%	8.6%



LEGEND

CB FND ■	DENOTES CONCRETE BOUND FOUND
ODS	DENOTES OUTDOOR SHOWER
WLF#4 ◉	DENOTES WETLAND FLAG FOUND
	DENOTES RESOURCE AREA BOUNDARY
	DENOTES EXIST. EDGE OF BRUSH

OWNER'S INFORMATION

MADAKET WHEELHOUSE, LLC
CERT. OF TITLE #25696
L.C.C. 2408–Y
LOTS 12–15, BLOCK 29
DEED Bk./Pg.: 1494/39
UNREGISTERED PARCEL– NO PLAN
ASSESSOR'S MAP 60, PARCEL 75
#13 MASSACHUSETTS AVENUE

COMMONWEALTH OF MASSACHUSETTS
JEFFREY L. BLACKWELL
No. 35388
REGISTERED PROFESSIONAL LAND SURVEYOR

Site Plan of Land To Accompany a Notice of Intent in Nantucket, MA

Prepared for

MADAKET WHEELHOUSE, LLC

Scale: 1"= 10' MAY 13, 2016

BLACKWELL & ASSOCIATES, Inc.
Professional Land Surveyors
20 TEASDALE CIRCLE
NANTUCKET, MASS. 02554
(508) 228–9026

GRAPHIC SCALE

10 0 5 10 20 40

(IN FEET)
1 inch = 10 ft.

B8042

T:\JEFF 26 JOB 96
V:\DRAWFILES\B8042\2016 NOI.dwg 5/13/2016 11:27:29 AM EDT

3 Beacon Lane NT

3 Beacon Lane

(21-26.9)

NOTICE OF INTENT APPLICATION

For Residential Redevelopment

At

3 Beacon Lane

Nantucket, MA

May 2016

Prepared For

3 BEACON LANE NOMINEE TRUST

20 Mary Ann Drive • Nantucket, MA 02554
508-825-5053 • www.NantucketEngineer.com

May 13, 2016

Mr. Ernest Steinauer, Chair
Nantucket Conservation Commission
2 Bathing Beach Road
Nantucket, MA 02554

Re: Notice of Intent
3 Beacon Lane
Map 21 Parcel 26.9

Dear Mr. Steinauer:

On behalf of the property owner, 3 Beacon Lane Nominee Trust, Nantucket Engineering & Survey, P.C. is submitting this Notice of Intent (NOI) to the Nantucket Conservation Commission for proposed activities within the Buffer Zone to a Coastal Bank and Bordering Vegetated Wetland at the above referenced property (the "Site") in Nantucket, Massachusetts.

Proposed activities at the Site consist of residential redevelopment that includes removing the existing structures, replacing them with new structures and landscaping. Attached are permit drawings, including plans showing a site locus, existing conditions including resource area locations, and proposed construction areas.

A completed WPA Form 3 – Notice of Intent is attached along with the NOI Wetland Fee Transmittal Form including checks for $237.50, $262.50, $25 and $200 to cover the WPA filing fee, Nantucket Wetland by-law fee and the Nantucket Expert Review fee. Also included is a check for $266.90 to the Inquirer & Mirror for publication of the notice of the public hearing. A waiver is required from the Town of Nantucket Bylaw Chapter 136 for the proposed project to allow the footings for the structure within two-feet of groundwater.

Notification of this NOI filing was provided to all abutting property owners by certified mail. This property owner listing was obtained from the Town of Nantucket Assessor's office. Documentation of the notification is provided including a copy of the notification letter, the property owner listing and certified mail receipts.

SITE DESCRIPTION

The subject property is approximately one-quarter of an acre in size and is located in the Brant Point section of Nantucket Island. The property is bounded to the north and south by existing residential-use properties. The westerly boundary is Willard Street, a paved traveled way, and to the east by a Bordering Vegetated Wetland. The property contains an existing residential-use structure served by municipal water and sewer. The defined resource areas on-site are Land Subject to Coastal Storm Flowage, a Bordering Vegetated Wetland, Coastal Bank, with the associated Buffer Zones subject to jurisdiction under both the Massachusetts Wetland Protection Act and the Nantucket Wetland Bylaw and Regulations. A review of the October 1, 2008 "Massachusetts Natural Heritage Atlas", prepared by the Massachusetts Natural Heritage and

Endangered Species Program (NHESP), indicates that the project area is within the known range of state listed rare wildlife species. An application for project review has been provided to the NHESP.

WORK DESCRIPTION

Prior to commencement of work, a silt fence will be placed at the limit of work as shown on the site plan. This fence will be inspected regularly and kept in good repair until the work has been completed and the site has stabilized. The Applicant proposes to remove the structures. Excavation for the new foundations will then occur. Dewatering will be pumped to an area outside of the 100-foot buffer zone. The foundation will then be backfilled and the wood frame structures constructed. The landscaping will be installed, with all disturbed areas will be covered with a minimum of 6" of topsoil and planted as shown on the accompanying landscape plan.

WAIVER REQUEST

A waiver is required from Section 3.02.B.1 to allow the footings within two-feet vertically of estimated seasonal high groundwater. Any dewatering activity will be temporary. Disturbed areas will be covered with topsoil and then be planted with Cape Cod Premium Grass Seed Mix. Waivers from the By-law can be granted for a number of reasons including:

- **Chapter 1.03 F.3.c** *The Commission may grant a waiver from these regulations when the Commission finds that a project will provide a long-term net benefit/improvement to the resource area, provided any adverse effects are minimized by carefully considered conditions. However, no such project may be permitted which could have an adverse effect on rare wildlife species.*

The proposed project will not have any adverse impact to the interests protected in the resource area by the Commission.

CONCLUSION

The proposed redevelopment of the existing residential-use property will not result in an adverse impact on the areas or the interests protected by the Commission including flood control, erosion control, storm damage prevention, prevention of pollution, wildlife, and wetland scenic views.

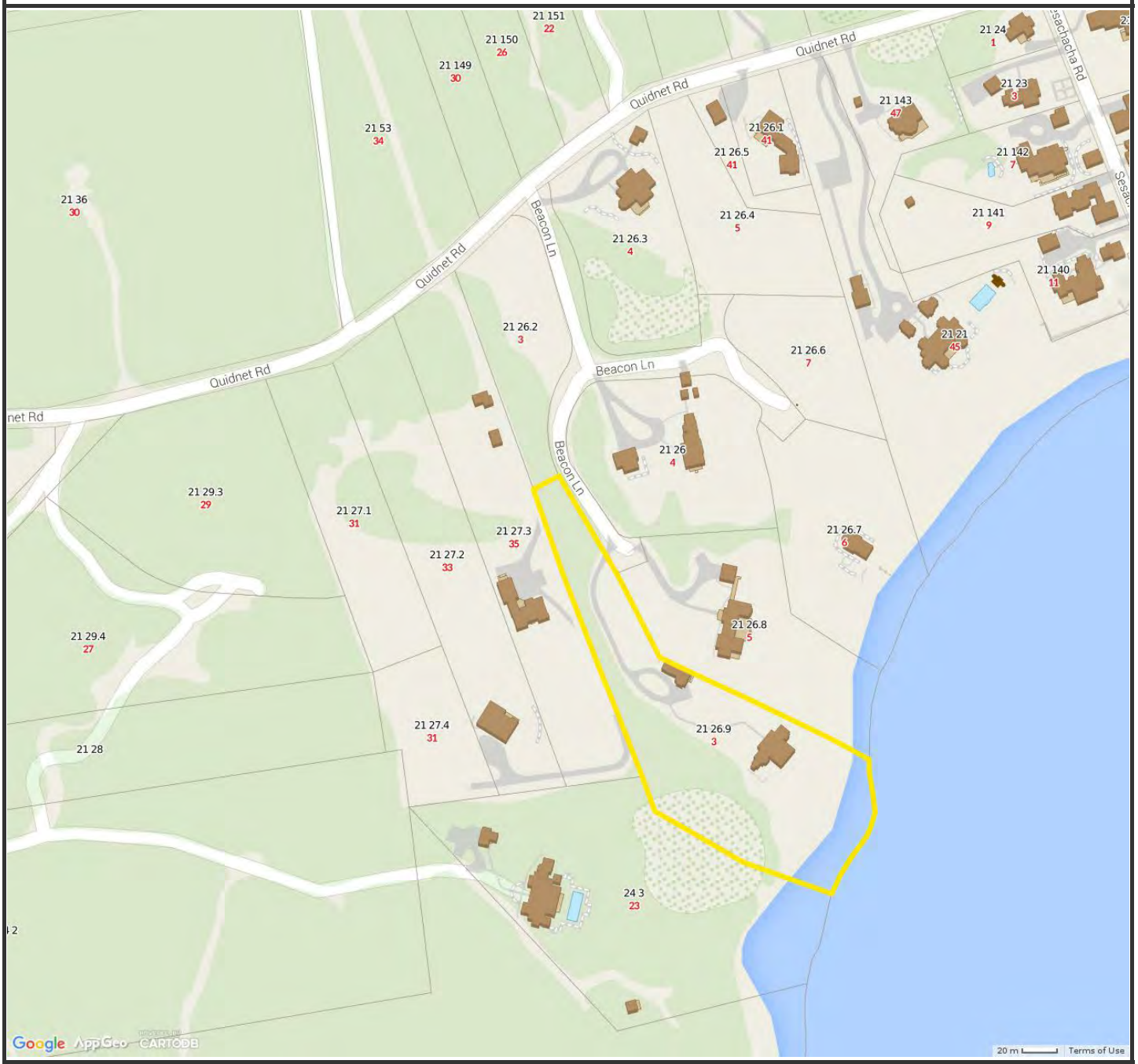
I plan to attend the Public Hearings for this application to address any questions, comments or concerns that the Commission may have.

Sincerely,

Arthur D. Gasbarro, PE, PLS, LEED AP

Cc: MassDEP
Mass DWF – NHESP
Sarah F. Alger, Trustee of 3 Beacon Lane Nominee Trust
Andrew Kotchen

Locus Map



Property Information

Property ID	21 26.9
Location	3 BEACON LN
Owner	ALGER SARAH F TRUSTEE

MAP FOR REFERENCE ONLY
NOT A LEGAL DOCUMENT

Town and County of Nantucket, MA makes no claims and no warranties, expressed or implied, concerning the validity or accuracy of the GIS data presented on this map.

Parcels updated December, 2014
Properties updated January, 2015

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WPA Form 3 – Notice of Intent

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40
And the Town of Nantucket Wetlands Bylaw Chapter 136

Provided by MassDEP:
MassDEP File Number
Document Transaction Number
NANTUCKET
City/Town

A. General Information

1. Project Location (**Note:** electronic filers will click on button to locate project site):

3 Beacon Lane — a. Street Address
Nantucket — b. City/Town
02554 — c. Zip Code

Latitude and Longitude:
41d 18'04"N — d. Latitude
69d 59'00"W — e. Longitude

21 — f. Assessors Map/Plat Number
26.9 — g. Parcel /Lot Number

2. Applicant:

Sarah F. — a. First Name
Alger, Trustee — b. Last Name
3 Beacon Lane Nominee Trust — c. Organization
2 South Water Street — d. Street Address
Nantucket — e. City/Town
MA — f. State
02554 — g. Zip Code
h. Phone Number
i. Fax Number
j. Email Address

3. Property owner (required if different from applicant): ☐ Check if more than one owner

a. First Name
b. Last Name
c. Organization
d. Street Address
e. City/Town
f. State
g. Zip Code
h. Phone Number
i. Fax Number
j. Email address

4. Representative (if any):

Arthur D. — a. First Name
Gasbarro, PE, PLS, LEED AP — b. Last Name
Nantucket Engineering & Survey, P.C. — c. Company
20 Mary Ann Drive — d. Street Address
Nantucket — e. City/Town
MA — f. State
02554 — g. Zip Code
508-228-9026 x13 — h. Phone Number
508-228-5292 — i. Fax Number
art@blackwellsurvey.com — j. Email address

5. Total WPA Fee Paid (from NOI Wetland Fee Transmittal Form):

$500 + $25 + $200 — a. Total Fee Paid
$237.50 — b. State Fee Paid
$262.50 + $25 + $200 — c. City/Town Fee Paid

A. General Information (continued)

6. General Project Description:

The Applicant proposes to redevelop an existing residential-use property. The proposal includes removing an existing structure, and constructing new residential structures with landscaping located within the buffer zone to a Coastal Bank and Vegetated Wetland. The structures are proposed outside of the 50-foot buffer zone, and the limit of work outside of the 25-foot buffer zone. A new septic system will be installed outside of the 100-foot buffer zone. A siltation fence will be installed and maintained at the limit of work.

7a. Project Type Checklist:

1. ☒ Single Family Home
2. ☐ Residential Subdivision
3. ☐ Limited Project Driveway Crossing
4. ☐ Commercial/Industrial
5. ☐ Dock/Pier
6. ☐ Utilities
7. ☐ Coastal Engineering Structure
8. ☐ Agriculture (e.g., cranberries, forestry)
9. ☐ Transportation
10. ☐ Other

7b. Is any portion of the proposed activity eligible to be treated as a limited project subject to 310 CMR 10.24 (coastal) or 310 CMR 10.53 (inland)?

1. ☐ Yes ☒ No If yes, describe which limited project applies to this project:

2. Limited Project

8. Property recorded at the Registry of Deeds for:

NANTUCKET	25,933
a. County	b. Certificate # (if registered land)
c. Book	d. Page Number

B. Buffer Zone & Resource Area Impacts (temporary & permanent)

1. ☒ Buffer Zone Only – Check if the project is located only in the Buffer Zone of a Bordering Vegetated Wetland, Inland Bank, or Coastal Resource Area.
2. ☐ Inland Resource Areas (see 310 CMR 10.54-10.58; if not applicable, go to Section B.3, Coastal Resource Areas).

   Check all that apply below. Attach narrative and any supporting documentation describing how the project will meet all performance standards for each of the resource areas altered, including standards requiring consideration of alternative project design or location.

For all projects affecting other Resource Areas, please attach a narrative explaining how the resource area was delineated.

Resource Area	Size of Proposed Alteration	Proposed Replacement (if any)
a. ☐ Bank	1. linear feet	2. linear feet
b. ☐ Bordering Vegetated Wetland	1. square feet	2. square feet
c. ☐ Land Under Waterbodies and Waterways	1. square feet 3. cubic yards dredged	2. square feet

B. Buffer Zone & Resource Area Impacts (temporary & permanent) (cont'd)

Resource Area	Size of Proposed Alteration	Proposed Replacement (if any)
d. ☐ Bordering Land Subject to Flooding	1. square feet	2. square feet
	3. cubic feet of flood storage lost	4. cubic feet replaced
e. ☐ Isolated Land Subject to Flooding	1. square feet	
	2. cubic feet of flood storage lost	3. cubic feet replaced
f. ☐ Riverfront Area	1. Name of Waterway (if available)	

2. Width of Riverfront Area (check one):

☐ 25 ft. - Designated Densely Developed Areas only

☐ 100 ft. - New agricultural projects only

☐ 200 ft. - All other projects

3. Total area of Riverfront Area on the site of the proposed project: _____ square feet

4. Proposed alteration of the Riverfront Area:

a. total square feet _____ b. square feet within 100 ft. _____ c. square feet between 100 ft. and 200 ft. _____

5. Has an alternatives analysis been done and is it attached to this NOI? ☐ Yes ☐ No

6. Was the lot where the activity is proposed created prior to August 1, 1996? ☐ Yes ☐ No

3. ☐ Coastal Resource Areas: (See 310 CMR 10.25-10.35)

Check all that apply below. Attach narrative and supporting documentation describing how the project will meet all performance standards for each of the resource areas altered, including standards requiring consideration of alternative project design or location.

Online Users: Include your document transaction number (provided on your receipt page) with all supplementary information you submit to the Department.

Resource Area	Size of Proposed Alteration	Proposed Replacement (if any)
a. ☐ Designated Port Areas	Indicate size under Land Under the Ocean, below	
b. ☐ Land Under the Ocean	1. square feet	
	2. cubic yards dredged	
c. ☐ Barrier Beach	Indicate size under Coastal Beaches and/or Coastal Dunes below	
d. ☐ Coastal Beaches	1. square feet	2. cubic yards beach nourishment
e. ☐ Coastal Dunes	1. square feet	2. cubic yards dune nourishment

B. Buffer Zone & Resource Area Impacts (temporary & permanent) (cont'd)

	Size of Proposed Alteration	Proposed Replacement (if any)
f. ☐ Coastal Banks	1. linear feet	
g. ☐ Rocky Intertidal Shores	1. square feet	
h. ☐ Salt Marshes	1. square feet	2. sq ft restoration, rehab., creation
i. ☐ Land Under Salt Ponds	1. square feet 2. cubic yards dredged	
j. ☐ Land Containing Shellfish	1. square feet	
k. ☐ Fish Runs	Indicate size under Coastal Banks, inland Bank, Land Under the Ocean, and/or inland Land Under Waterbodies and Waterways, above 1. cubic yards dredged	
l. ☐ Land Subject to Coastal Storm Flowage	1. square feet	

4. ☐ Restoration/Enhancement
If the project is for the purpose of restoring or enhancing a wetland resource area in addition to the square footage that has been entered in Section B.2.b or B.3.h above, please enter the additional amount here.

a. square feet of BVW _____ b. square feet of Salt Marsh _____

5. ☐ Project Involves Stream Crossings

a. number of new stream crossings _____ b. number of replacement stream crossings _____

C. Other Applicable Standards and Requirements

Streamlined Massachusetts Endangered Species Act/Wetlands Protection Act Review

1. Is any portion of the proposed project located in **Estimated Habitat of Rare Wildlife** as indicated on the most recent Estimated Habitat Map of State-Listed Rare Wetland Wildlife published by the Natural Heritage and Endangered Species Program (NHESP)? To view habitat maps, see the *Massachusetts Natural Heritage Atlas* or go to http://www.mass.gov/dfwele/dfw/nhesp/regulatory_review/priority_habitat/online_viewer.htm.

a. ☒ Yes ☐ No

If yes, include proof of mailing or hand delivery of NOI to:

Natural Heritage and Endangered Species Program
Division of Fisheries and Wildlife
Route 135, North Drive
Westborough, MA 01581

10/1/08
b. Date of map

C. Other Applicable Standards and Requirements (cont'd)

If *yes*, the project is also subject to Massachusetts Endangered Species Act (MESA) review (321 CMR 10.18). To qualify for a streamlined, 30-day, MESA/Wetlands Protection Act review, please complete Section C.1.C, and include requested materials with this Notice of Intent (NOI); *OR* complete Section C.1.d, if applicable. *If MESA supplemental information is not included with the NOI, by completing Section 1 of this form, the NHESP will require a separate MESA filing which may take up to 90 days to review (unless noted exceptions in Section 2 apply, see below).*

1. c. Submit Supplemental Information for Endangered Species Review*

   1. ☒ Percentage/acreage of property to be altered:

      (a) within wetland Resource Area — 0 percentage/acreage

      (b) outside Resource Area — 10%/12k s.f. existing disturb, 3%/4k s.f. additional in mapped area percentage/acreage

   2. ☒ Assessor's Map or right-of-way plan of site

   3. ☒ Project plans for entire project site, including wetland resource areas and areas outside of wetlands jurisdiction, showing existing and proposed conditions, existing and proposed tree/vegetation clearing line, and clearly demarcated limits of work ********

      (a) ☒ Project description (including description of impacts outside of wetland resource area & buffer zone)

      (b) ☒ Photographs representative of the site

      (c) ☒ MESA filing fee (fee information available at: http://www.mass.gov/dfwele/dfw/nhesp/regulatory_review/mesa/mesa_fee_schedule.htm). Make check payable to "Commonwealth of Massachusetts - NHESP" and ***mail to NHESP*** at above address

      *Projects altering **10 or more acres** of land, also submit:*

      (d) ☐ Vegetation cover type map of site

      (e) ☐ Project plans showing Priority & Estimated Habitat boundaries

   d. OR Check One of the Following

      1. ☐ Project is exempt from MESA review.
         Attach applicant letter indicating which MESA exemption applies. (See 321 CMR 10.14, http://www.mass.gov/dfwele/dfw/nhesp/regulatory_review/mesa/mesa_exemptions.htm; the NOI must still be sent to NHESP if the project is within estimated habitat pursuant to 310 CMR 10.37 and 10.59.)

      2. ☐ Separate MESA review ongoing. — a. NHESP Tracking # — b. Date submitted to NHESP

* Some projects **not** in Estimated Habitat may be located in Priority Habitat, and require NHESP review (see http://www.mass.gov/dfwele/dfw/nhesp/nhesp.htm, regulatory review tab). Priority Habitat includes habitat for state-listed plants and strictly upland species not protected by the Wetlands Protection Act.

** MESA projects may not be segmented (321 CMR 10.16). The applicant must disclose full development plans even if such plans are not required as part of the Notice of Intent process.

C. Other Applicable Standards and Requirements (cont'd)

3. ☐ Separate MESA review completed.
Include copy of NHESP "no Take" determination or valid Conservation & Management Permit with approved plan.

2. For coastal projects only, is any portion of the proposed project located below the mean high water line or in a fish run?

a. ☐ Not applicable – project is in inland resource area only

b. ☐ Yes ☒ No If yes, include proof of mailing or hand delivery of NOI to either:

South Shore - Cohasset to Rhode Island, and the Cape & Islands:

Division of Marine Fisheries - Southeast Marine Fisheries Station
Attn: Environmental Reviewer
1213 Purchase Street – 3rd Floor
New Bedford, MA 02740-6694

North Shore - Hull to New Hampshire:

Division of Marine Fisheries - North Shore Office
Attn: Environmental Reviewer
30 Emerson Avenue
Gloucester, MA 01930

Also if yes, the project may require a Chapter 91 license. For coastal towns in the Northeast Region, please contact MassDEP's Boston Office. For coastal towns in the Southeast Region, please contact MassDEP's Southeast Regional Office.

3. Is any portion of the proposed project within an Area of Critical Environmental Concern (ACEC)?

a. ☐ Yes ☒ No If yes, provide name of ACEC (see instructions to WPA Form 3 or MassDEP Website for ACEC locations). **Note:** electronic filers click on Website.

b. ACEC

Online Users: Include your document transaction number (provided on your receipt page) with all supplementary information you submit to the Department.

4. Is any portion of the proposed project within an area designated as an Outstanding Resource Water (ORW) as designated in the Massachusetts Surface Water Quality Standards, 314 CMR 4.00?

a. ☐ Yes ☒ No

5. Is any portion of the site subject to a Wetlands Restriction Order under the Inland Wetlands Restriction Act (M.G.L. c. 131, § 40A) or the Coastal Wetlands Restriction Act (M.G.L. c. 130, § 105)?

a. ☐ Yes ☒ No

6. Is this project subject to provisions of the MassDEP Stormwater Management Standards?

a. ☐ Yes. Attach a copy of the Stormwater Report as required by the Stormwater Management Standards per 310 CMR 10.05(6)(k)-(q) and check if:

1. ☐ Applying for Low Impact Development (LID) site design credits (as described in Stormwater Management Handbook Vol. 2, Chapter 3)

2. ☐ A portion of the site constitutes redevelopment

3. ☐ Proprietary BMPs are included in the Stormwater Management System.

b. ☒ No. Check why the project is exempt:

1. ☒ Single-family house

C. Other Applicable Standards and Requirements (cont'd)

2. ☐ Emergency road repair

3. ☐ Small Residential Subdivision (less than or equal to 4 single-family houses or less than or equal to 4 units in multi-family housing project) with no discharge to Critical Areas.

D. Additional Information

Applicants must include the following with this Notice of Intent (NOI). See instructions for details.

Online Users: Attach the document transaction number (provided on your receipt page) for any of the following information you submit to the Department.

1. ☒ USGS or other map of the area (along with a narrative description, if necessary) containing sufficient information for the Conservation Commission and the Department to locate the site. (Electronic filers may omit this item.)

2. ☒ Plans identifying the location of proposed activities (including activities proposed to serve as a Bordering Vegetated Wetland [BVW] replication area or other mitigating measure) relative to the boundaries of each affected resource area.

3. ☒ Identify the method for BVW and other resource area boundary delineations (MassDEP BVW Field Data Form(s), Determination of Applicability, Order of Resource Area Delineation, etc.), and attach documentation of the methodology.

4. ☒ List the titles and dates for all plans and other materials submitted with this NOI.

Site Plan to Accompany a Notice of Intent Application a. Plan Title	
Blackwell & Associates, Inc. b. Prepared By	Jeffrey Blackwell, PLS c. Signed and Stamped by
5/13/16 d. Final Revision Date	1"=20' e. Scale
Landscape Plan by Ahern LLC f. Additional Plan or Document Title	5/4/16 g. Date

5. ☐ If there is more than one property owner, please attach a list of these property owners not listed on this form.

6. ☒ Attach proof of mailing for Natural Heritage and Endangered Species Program, if needed.

7. ☐ Attach proof of mailing for Massachusetts Division of Marine Fisheries, if needed.

8. ☒ Attach NOI Wetland Fee Transmittal Form

9. ☐ Attach Stormwater Report, if needed.

E. Fees

1. ☐ Fee Exempt: No filing fee shall be assessed for projects of any city, town, county, or district of the Commonwealth, federally recognized Indian tribe housing authority, municipal housing authority, or the Massachusetts Bay Transportation Authority.

Applicants must submit the following information (in addition to pages 1 and 2 of the NOI Wetland Fee Transmittal Form) to confirm fee payment:

1041	5/12/16
2. Municipal Check Number	3. Check date
1038	5/12/16
4. State Check Number	5. Check date
Nantucket Engineering & Survey, PC	
6. Payor name on check: First Name	7. Payor name on check: Last Name

F. Signatures and Submittal Requirements

I hereby certify under the penalties of perjury that the foregoing Notice of Intent and accompanying plans, documents, and supporting data are true and complete to the best of my knowledge. I understand that the Conservation Commission will place notification of this Notice in a local newspaper at the expense of the applicant in accordance with the wetlands regulations, 310 CMR 10.05(5)(a).

I further certify under penalties of perjury that all abutters were notified of this application, pursuant to the requirements of M.G.L. c. 131, § 40. Notice must be made by Certificate of Mailing or in writing by hand delivery or certified mail (return receipt requested) to all abutters within 100 feet of the property line of the project location.

Arthur D. Sabaso Agent	5/13/16
1. Signature of Applicant	2. Date
3. Signature of Property Owner (if different)	4. Date
Arthur D. Sabaso	5/13/16
5. Signature of Representative (if any)	6. Date

For Conservation Commission:
Two copies of the completed Notice of Intent (Form 3), including supporting plans and documents, two copies of the NOI Wetland Fee Transmittal Form, and the city/town fee payment, to the Conservation Commission by certified mail or hand delivery.

For MassDEP:
One copy of the completed Notice of Intent (Form 3), including supporting plans and documents, one copy of the NOI Wetland Fee Transmittal Form, and a **copy** of the state fee payment to the MassDEP Regional Office (see Instructions) by certified mail or hand delivery.

Other:
If the applicant has checked the "yes" box in any part of Section C, Item 3, above, refer to that section and the Instructions for additional submittal requirements.

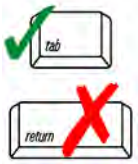
The original and copies must be sent simultaneously. Failure by the applicant to send copies in a timely manner may result in dismissal of the Notice of Intent.

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

NOI Wetland Fee Transmittal Form

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Important: When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



A. Applicant Information

1. Applicant:

Sarah F.	Alger, Trustee
a. First Name	b. Last Name

3 Beacon Lane Nominee Trust
c. Organization

2 South Water Street
d. Mailing Address

Nantucket	MA	02554
e. City/Town	f. State	g. Zip Code

508-228-1118		
h. Phone Number	i. Fax Number	j. Email Address

2. Property Owner (if different):

a. First Name	b. Last Name

c. Organization

d. Mailing Address

e. City/Town	f. State	g. Zip Code

h. Phone Number	i. Fax Number	j. Email Address

3. Project Location:

3 Beacon Lane	Nantucket
a. Street Address	b. City/Town

To calculate filing fees, refer to the category fee list and examples in the instructions for filling out WPA Form 3 (Notice of Intent).

B. Fees

The fee should be calculated using the following six-step process and worksheet. **Please see Instructions before filling out worksheet.**

Step 1/Type of Activity: Describe each type of activity that will occur in wetland resource area and buffer zone.

Step 2/Number of Activities: Identify the number of each type of activity.

Step 3/Individual Activity Fee: Identify each activity fee from the six project categories listed in the instructions.

Step 4/Subtotal Activity Fee: Multiply the number of activities (identified in Step 2) times the fee per category (identified in Step 3) to reach a subtotal fee amount. Note: If any of these activities are in a Riverfront Area in addition to another Resource Area or the Buffer Zone, the fee per activity should be multiplied by 1.5 and then added to the subtotal amount.

Step 5/Total Project Fee: Determine the total project fee by adding the subtotal amounts from Step 4.

Step 6/Fee Payments: To calculate the state share of the fee, divide the total fee in half and subtract $12.50. To calculate the city/town share of the fee, divide the total fee in half and add $12.50.

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

NOI Wetland Fee Transmittal Form

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

B. Fees (continued)

Step 1/Type of Activity	Step 2/Number of Activities	Step 3/Individual Activity Fee	Step 4/Subtotal Activity Fee
Construct a Single Family Dwelling	1	$500	$500
Nantucket Wetland By-law Fee			$25
Nantucket Expert Review Fee			$200

Step 5/Total Project Fee: $500 + $25 + $200

Step 6/Fee Payments:

Total Project Fee:	$500 + $25 + $200 a. Total Fee from Step 5
State share of filing Fee:	$237.50 b. 1/2 Total Fee **less $**12.50
City/Town share of filling Fee:	$262.50 c. 1/2 Total Fee **plus** $12.50

C. Submittal Requirements

a.) Complete pages 1 and 2 and send with a check or money order for the state share of the fee, payable to the Commonwealth of Massachusetts.

Department of Environmental Protection
Box 4062
Boston, MA 02211

b.) **To the Conservation Commission:** Send the Notice of Intent or Abbreviated Notice of Intent; a **copy** of this form; and the city/town fee payment.

To MassDEP Regional Office (see Instructions): Send a copy of the Notice of Intent or Abbreviated Notice of Intent; a **copy** of this form; and a **copy** of the state fee payment. (E-filers of Notices of Intent may submit these electronically.)

CURRENT ZONING CLASSIFICATION:
Limited Use General 3 (L.U.G.–3)

MINIMUM LOT SIZE: 120,000 S.F.
MINIMUM FRONTAGE: 200 FT.
FRONT YARD SETBACK: 35 FT.
REAR/SIDE SETBACK: 20 FT.
GROUND COVER % : 3%

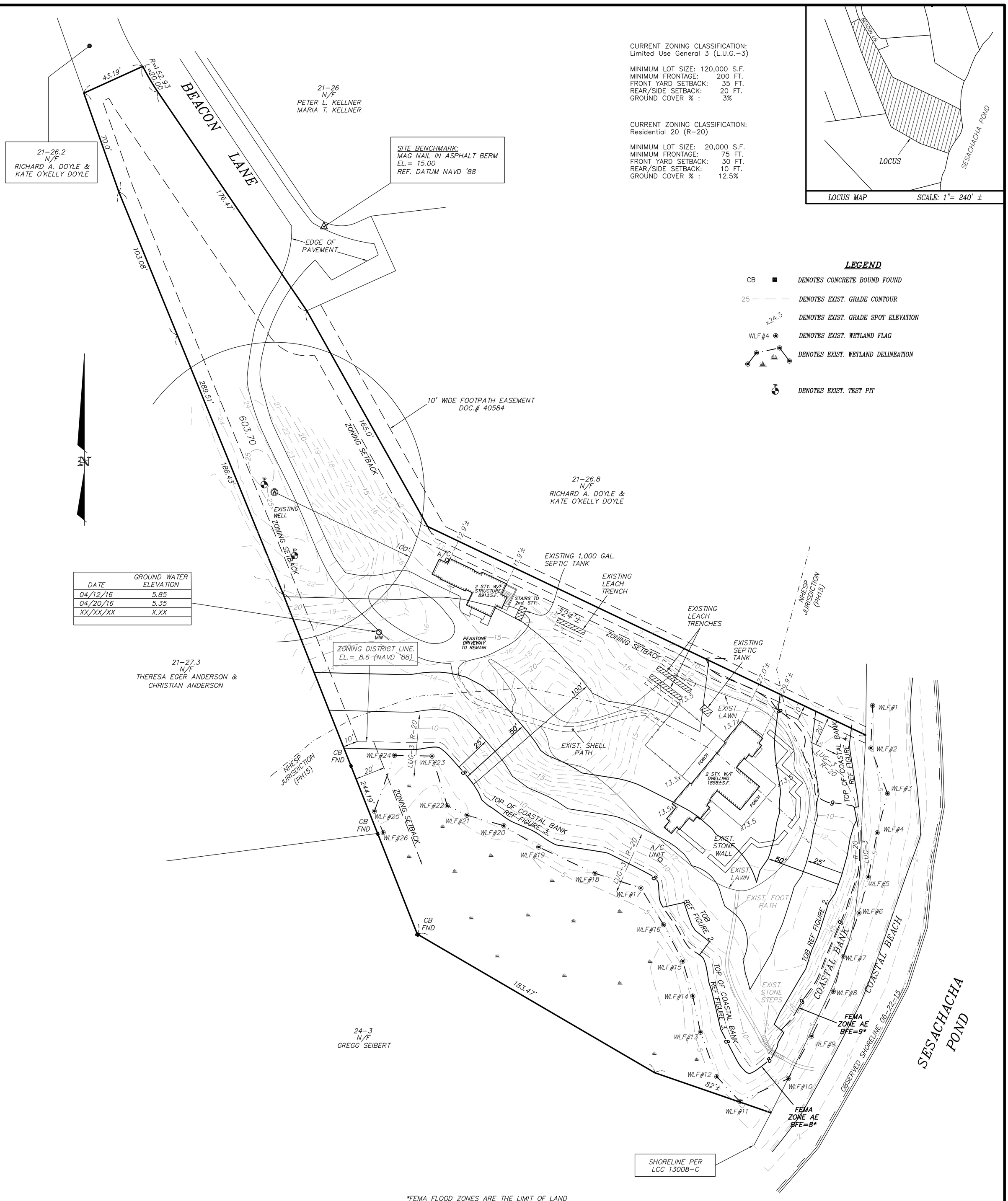
CURRENT ZONING CLASSIFICATION:
Residential 20 (R–20)

MINIMUM LOT SIZE: 20,000 S.F.
MINIMUM FRONTAGE: 75 FT.
FRONT YARD SETBACK: 30 FT.
REAR/SIDE SETBACK: 10 FT.
GROUND COVER % : 12.5%

LOCUS MAP SCALE: 1"= 240' ±

LEGEND

CB ■	DENOTES CONCRETE BOUND FOUND
25 — — —	DENOTES EXIST. GRADE CONTOUR
x24.3	DENOTES EXIST. GRADE SPOT ELEVATION
WLF#4 ◉	DENOTES EXIST. WETLAND FLAG
	DENOTES EXIST. WETLAND DELINEATION
TP	DENOTES EXIST. TEST PIT



DATE	GROUND WATER ELEVATION
04/12/16	5.85
04/20/16	5.35
XX/XX/XX	X.XX

*FEMA FLOOD ZONES ARE THE LIMIT OF LAND SUBJECT TO COASTAL STORM FLOWAGE.

Site Plan of Land

in Nantucket, MA

Prepared for

ALGER/3 BEACON LANE

#3 Beacon Lane

Assessor Map 21 Parcel 26.9

Scale: 1"= 30' April 20, 2015

BLACKWELL & ASSOCIATES, Inc.
Professional Land Surveyors
20 TEASDALE CIRCLE
NANTUCKET, MASS. 02554
(508) 228–9026

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.

RESOURCE AREA BOUNDARIES SUBJECT TO REVIEW BY THE NANTUCKET CONSERVATION COMMISION.

WETLAND BOUNDARY DELINEATED BY LEC ENVIRONMENTAL.

COASTAL BANK DETERMINATION PER MASS DEP POLICY 92–1.

OWNER INFORMATION

JILL L. FAIRCHILD
Cert. 16,985
LCC 13008–C, LOT 8
#3 BEACON LANE
ASSESSORS MAP 21 PARCEL 26.9

LOT AREA TO LC SHORELINE= 120,054± S.F.

LOT AREA WITHIN R–20 ZONING DISTRICT= 87,986± S.F.
– ALLOWABLE GROUND COVERAGE: 10,998± S.F.
– AVAILIBLE GROUND COVERAGE: 8,249± S.F.

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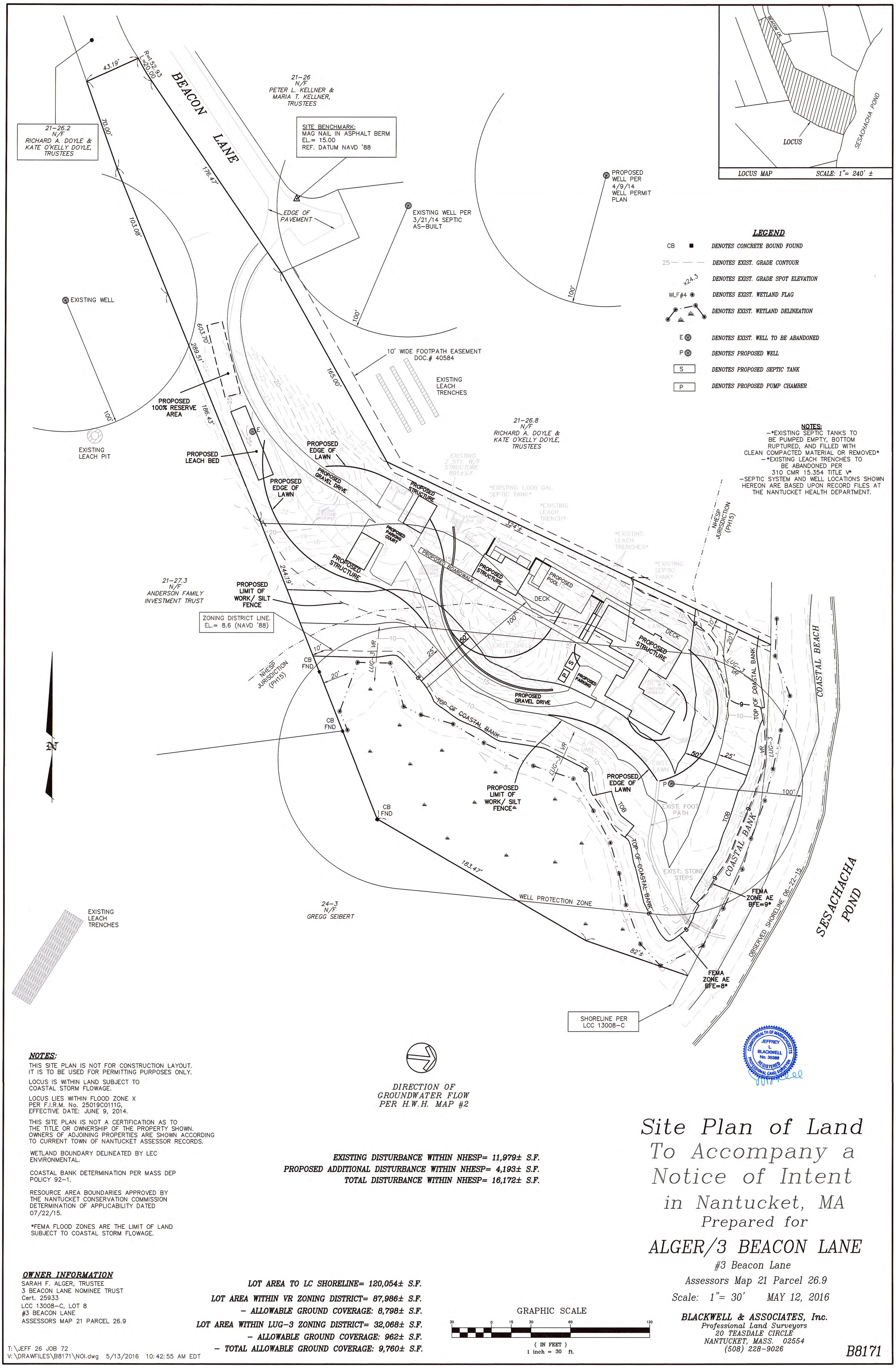
V:\DRAWFILES\B8171\SP.dwg 4/20/2016 3:22:23 PM EDT

B8171



NOTES:

THIS SITE PLAN IS NOT FOR CONSTRUCTION LAYOUT. IT IS TO BE USED FOR PERMITTING PURPOSES ONLY.

LOCUS IS WITHIN LAND SUBJECT TO COASTAL STORM FLOWAGE.

LOCUS LIES WITHIN FLOOD ZONE X PER F.I.R.M. No. 25019C0111G, EFFECTIVE DATE: JUNE 9, 2014.

THIS SITE PLAN IS NOT A CERTIFICATION AS TO THE TITLE OR OWNERSHIP OF THE PROPERTY SHOWN. OWNERS OF ADJOINING PROPERTIES ARE SHOWN ACCORDING TO CURRENT TOWN OF NANTUCKET ASSESSOR RECORDS.

WETLAND BOUNDARY DELINEATED BY LEC ENVIRONMENTAL.

COASTAL BANK DETERMINATION PER MASS DEP POLICY 92-1.

RESOURCE AREA BOUNDARIES APPROVED BY THE NANTUCKET CONSERVATION COMMISSION DETERMINATION OF APPLICABILITY DATED 07/22/15.

*FEMA FLOOD ZONES ARE THE LIMIT OF LAND SUBJECT TO COASTAL STORM FLOWAGE.

EXISTING DISTURBANCE WITHIN NHESP= 11,979± S.F.
PROPOSED ADDITIONAL DISTURBANCE WITHIN NHESP= 4,193± S.F.
TOTAL DISTURBANCE WITHIN NHESP= 16,172± S.F.

OWNER INFORMATION

SARAH F. ALGER, TRUSTEE
3 BEACON LANE NOMINEE TRUST
Cert. 25933
LCC 13008-C, LOT 8
#3 BEACON LANE
ASSESSORS MAP 21 PARCEL 26.9

LOT AREA TO LC SHORELINE= 120,054± S.F.
LOT AREA WITHIN VR ZONING DISTRICT= 87,986± S.F.
- ALLOWABLE GROUND COVERAGE: 8,798± S.F.
LOT AREA WITHIN LUG-3 ZONING DISTRICT= 32,068± S.F.
- ALLOWABLE GROUND COVERAGE: 962± S.F.
- TOTAL ALLOWABLE GROUND COVERAGE: 9,760± S.F.

GRAPHIC SCALE
30 0 15 30 60 120
(IN FEET)
1 inch = 30 ft.

Site Plan of Land
To Accompany a Notice of Intent
in Nantucket, MA
Prepared for
ALGER/3 BEACON LANE

#3 Beacon Lane
Assessors Map 21 Parcel 26.9
Scale: 1"= 30' MAY 12, 2016

BLACKWELL & ASSOCIATES, Inc.
Professional Land Surveyors
20 TEASDALE CIRCLE
NANTUCKET, MASS. 02554
(508) 228-9026

B8171

T:\JEFF 26 JOB 72
V:\DRAWFILES\B8171\NOI.dwg 5/13/2016 10:42:55 AM EDT

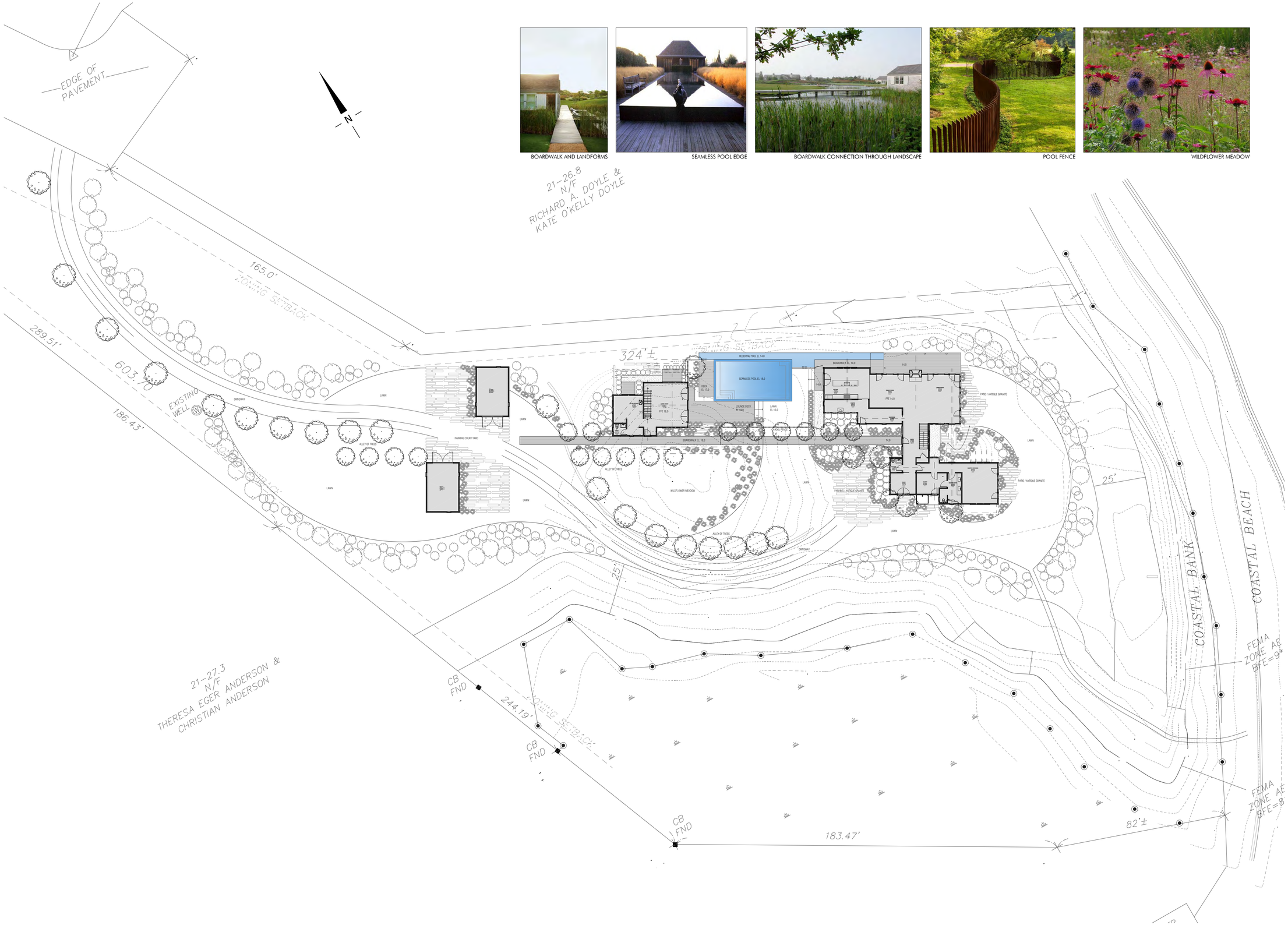
BOARDWALK AND LANDFORMS

SEAMLESS POOL EDGE

BOARDWALK CONNECTION THROUGH LANDSCAPE

POOL FENCE

WILDFLOWER MEADOW



AHERN LLC
LANDSCAPE DESIGN STUDIO
PO Box 2213, Nantucket MA 02584
T (508) 333-5138 F (508) 325-4616
design@ahernllc.com

PROJECT

3BL RESIDENCE

3 BEACON LANE NANTUCKET MA 02554

OWNER

3 BEACON LAND NOMINEE TRUST
2 South Water Street, Nantucket MA 02584

ARCHITECT

WORKSHOP / APD
39 West 38th Street, 7th FL, New York, NY 10018
T (212) 273-9712

SURVEYOR

BLACKWELL & ASSOCIATES, Inc.
20 Teasdale Circle, Nantucket MA 02554
T (508) 228-9026

BUILDER

LANDSCAPE CONTRACTOR

POOL CONTRACTOR

PLAN

LANDSCAPE SCHEMATIC

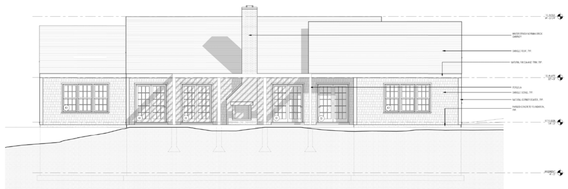
DRAWING INFO

DATE	MAY 4, 2016
SCALE	1' = 20' - 0"

REVISIONS

L.00.0

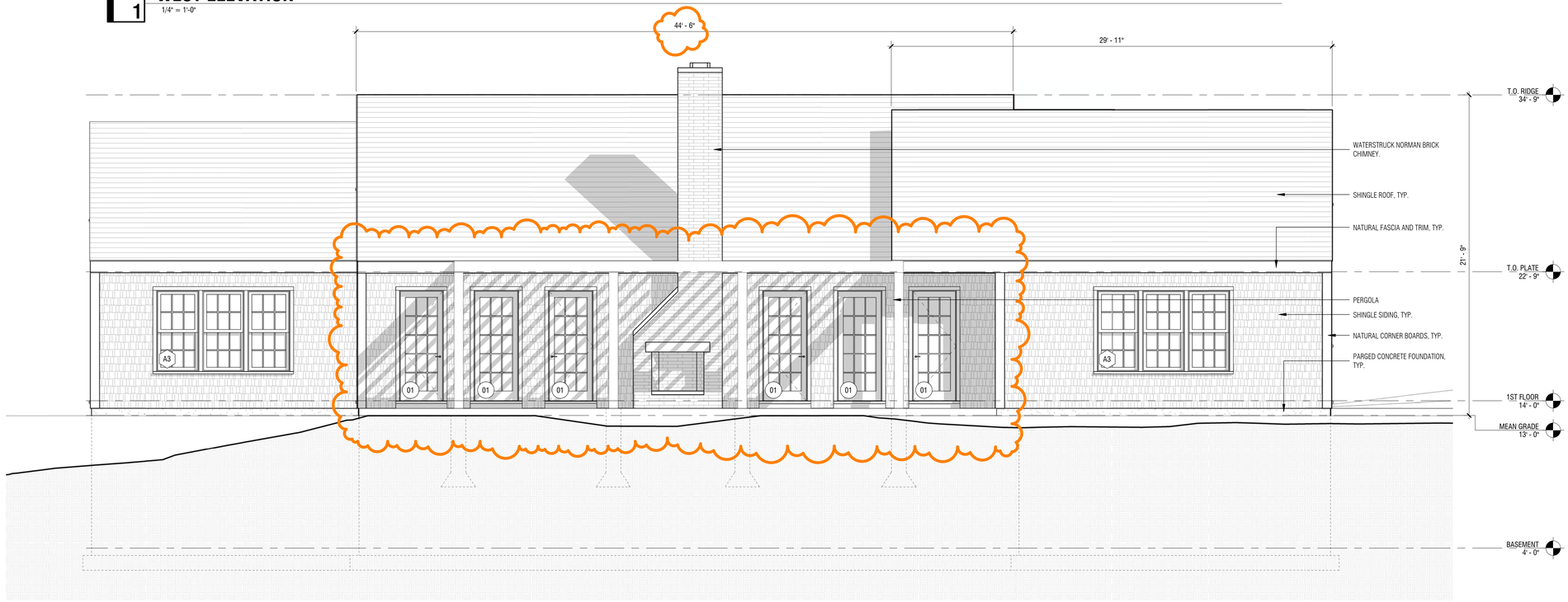
WEST ELEVATION: HDC SUBMISSION 03.18.2016



NORTH ELEVATION: HDC SUBMISSION 03.18.2016

1 WEST ELEVATION

1/4" = 1'-0"



2 NORTH ELEVATION

1/4" = 1'-0"

3BL RESIDENCE

3 BEACON LANE, NANTUCKET, MA 02554

OWNER

3 BEACON LAND NOMINEE TRUST
2 South Water Street
Nantucket, MA 02554

ARCHITECT

WORKSHOP/APD

WORKSHOP/APD ARCHITECTURE DPC
39 West 38th Street, 7th Fl, New York, NY 10018
T: (212) 273-9712 info@workshopapd.com

STRUCTURAL ENGINEER

CRAFT - ENGINEERING STUDIO
39 West 38th Street, 7th Flr
New York, NY 10018
T: (646) 912-9867

SURVEYOR

BLACKWELL & ASSOCIATES, INC.
20 Teasdale Circle
Nantucket, MA 02554
T: (508) 228-9026

CONTRACTOR

ROBERT J. REID BUILDERS
7 Windy Way
Nantucket, MA 02554
T: (508) 737-6191

ALL DESIGNS & SPECS ARE SUBJECT TO VERIFICATION OF EXG. FIELD CONDITIONS

REVISIONS

01	04/11/2016	HDC REVISION (PRIMARY)

NOT FOR CONSTRUCTION

SIGN & SEAL

ISSUES

01	03/18/2016	HDC SUBMISSION (PRIMARY)
02	03/18/2016	HDC SUB. (2ND DWELLING)
03	03/18/2016	HDC SUB. (GARAGE A)
04	03/18/2016	HDC SUB. (GARAGE B)

DRAWING INFO

CONSTRUCTION DOCUMENTS

DRAWN BY:	ZSH/MLW/WJP
CHECKED BY:	ADK/AFH
DATE:	JANUARY 4, 2016
SCALE:	AS NOTED
PROJ. NO.	3BL - 315019

ELEVATIONS

A-200.00

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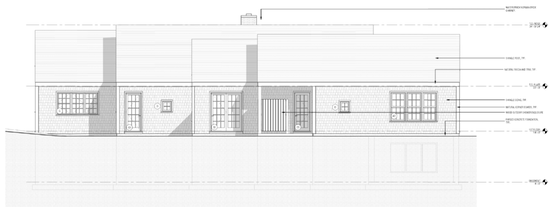
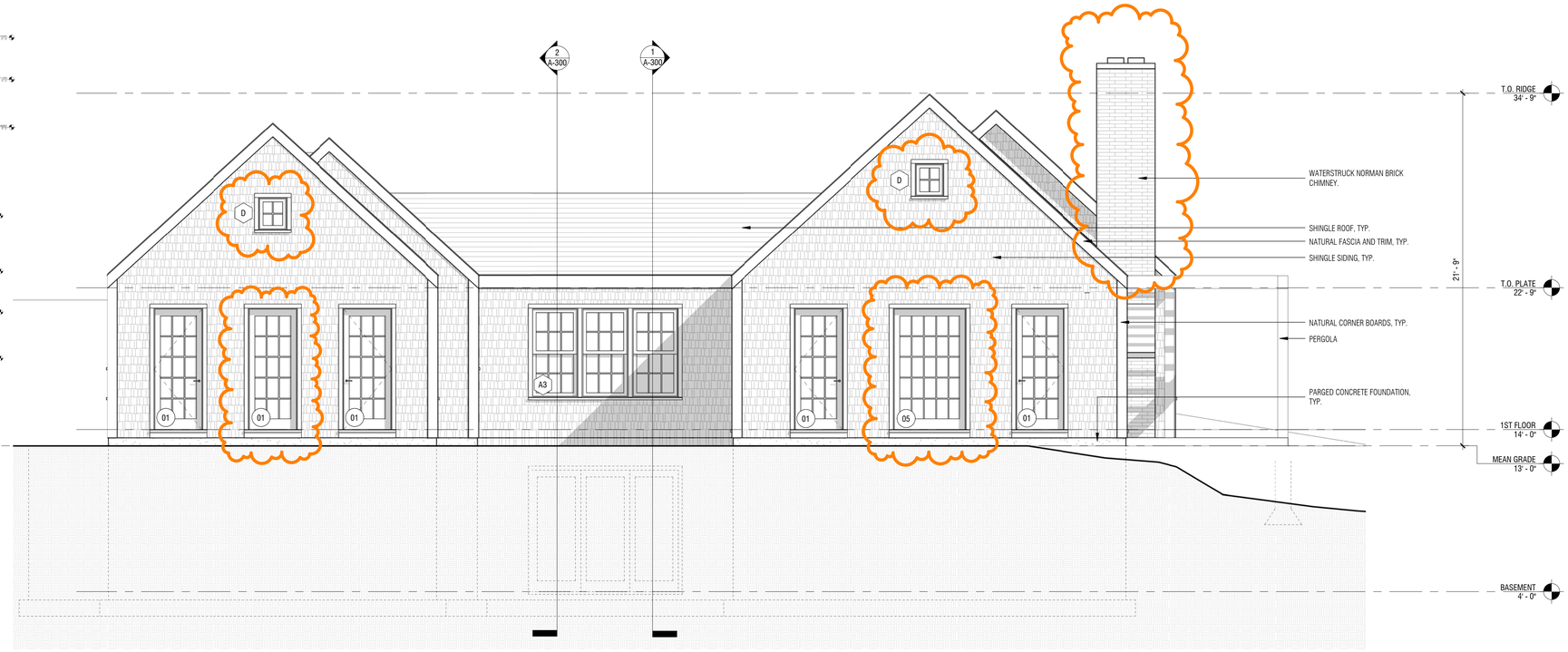
EAST ELEVATION: HDC SUBMISSION 03.18.2016

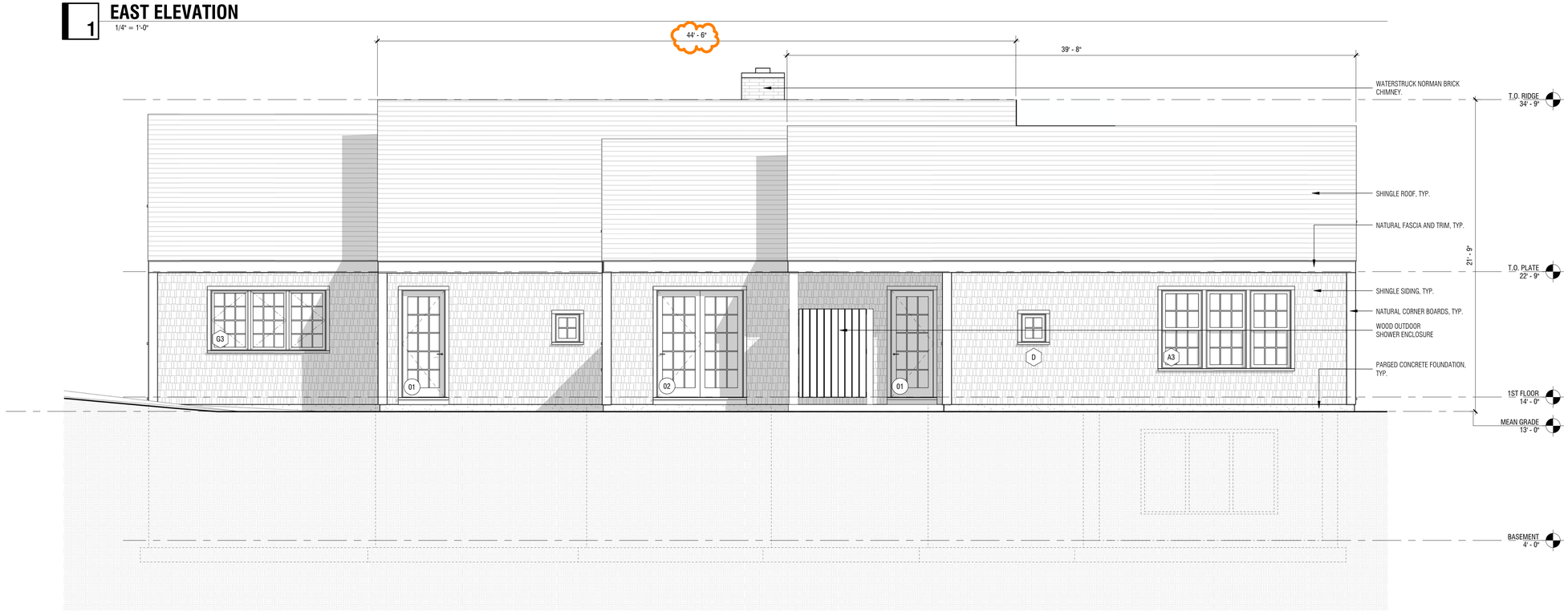


SOUTH ELEVATION: HDC SUBMISSION 03.18.2016



1 EAST ELEVATION

1/4" = 1'-0"



2 SOUTH ELEVATION

1/4" = 1'-0"

3BL RESIDENCE

3 BEACON LANE, NANTUCKET, MA 02554

OWNER

3 BEACON LAND NOMINEE TRUST
2 South Water Street
Nantucket, MA 02554

ARCHITECT

WORKSHOP/APD

WORKSHOP/APD ARCHITECTURE DPC
39 West 38th Street, 7th Fl, New York, NY 10018
T: (212) 273-9712 info@workshopapd.com

STRUCTURAL ENGINEER

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39 West 38th Street, 7th Flr
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T: (646) 912-9867

SURVEYOR

BLACKWELL & ASSOCIATES, INC.
20 Teasdale Circle
Nantucket, MA 02554
T: (508) 228-9026

CONTRACTOR

ROBERT J. REID BUILDERS
7 Windy Way
Nantucket, MA 02554
T: (508) 737-6191

ALL DESIGNS & SPECS ARE SUBJECT TO VERIFICATION OF EXG. FIELD CONDITIONS

REVISIONS

01	04/11/2016	HDC REVISION (PRIMARY)

NOT FOR CONSTRUCTION

SIGN & SEAL

ISSUES

01	03/18/2016	HDC SUBMISSION (PRIMARY)
02	03/18/2016	HDC SUB. (2ND DWELLING)
03	03/18/2016	HDC SUB. (GARAGE A)
04	03/18/2016	HDC SUB. (GARAGE B)

DRAWING INFO

CONSTRUCTION DOCUMENTS

DRAWN BY:	ZSH/MLW/WJP
CHECKED BY:	ADK/AFH
DATE:	JANUARY 4, 2016
SCALE:	AS NOTED
PROJ. NO.	38L - 315019

ELEVATIONS

A-201.00

COPYRIGHT © 2016 WORKSHOP/APD ARCHITECTURE DPC

1 BUILDING SECTION A

1/4" = 1'-0"

2 BUILDING SECTION B

1/4" = 1'-0"

3BL
RESIDENCE

3 BEACON LANE, NANTUCKET, MA 02554

OWNER

3 BEACON LAND NOMINEE TRUST
2 South Water Street
Nantucket, MA 02554

ARCHITECT

WORKSHOP/APD

WORKSHOP/APD ARCHITECTURE DPC
39 West 38th Street, 7th Fl, New York, NY 10018
T: (212) 273-9712 info@workshopapd.com

STRUCTURAL ENGINEER

CRAFT - ENGINEERING STUDIO
39 West 38th Street, 7th Flr
New York, NY 10018
T: (646) 912-9867

SURVEYOR

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T: (508) 228-9026

CONTRACTOR

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Nantucket, MA 02554
T: (508) 737-6191

ALL DESIGNS & SPECS ARE SUBJECT TO VERIFICATION OF EXG. FIELD CONDITIONS

REVISIONS

01	04/11/2016	HDC REVISION (PRIMARY)

NOT FOR CONSTRUCTION

SIGN & SEAL

ISSUES

01	03/18/2016	HDC SUBMISSION (PRIMARY)
02	03/18/2016	HDC SUB. (2ND DWELLING)
03	03/18/2016	HDC SUB. (GARAGE A)
04	03/18/2016	HDC SUB. (GARAGE B)

DRAWING INFO

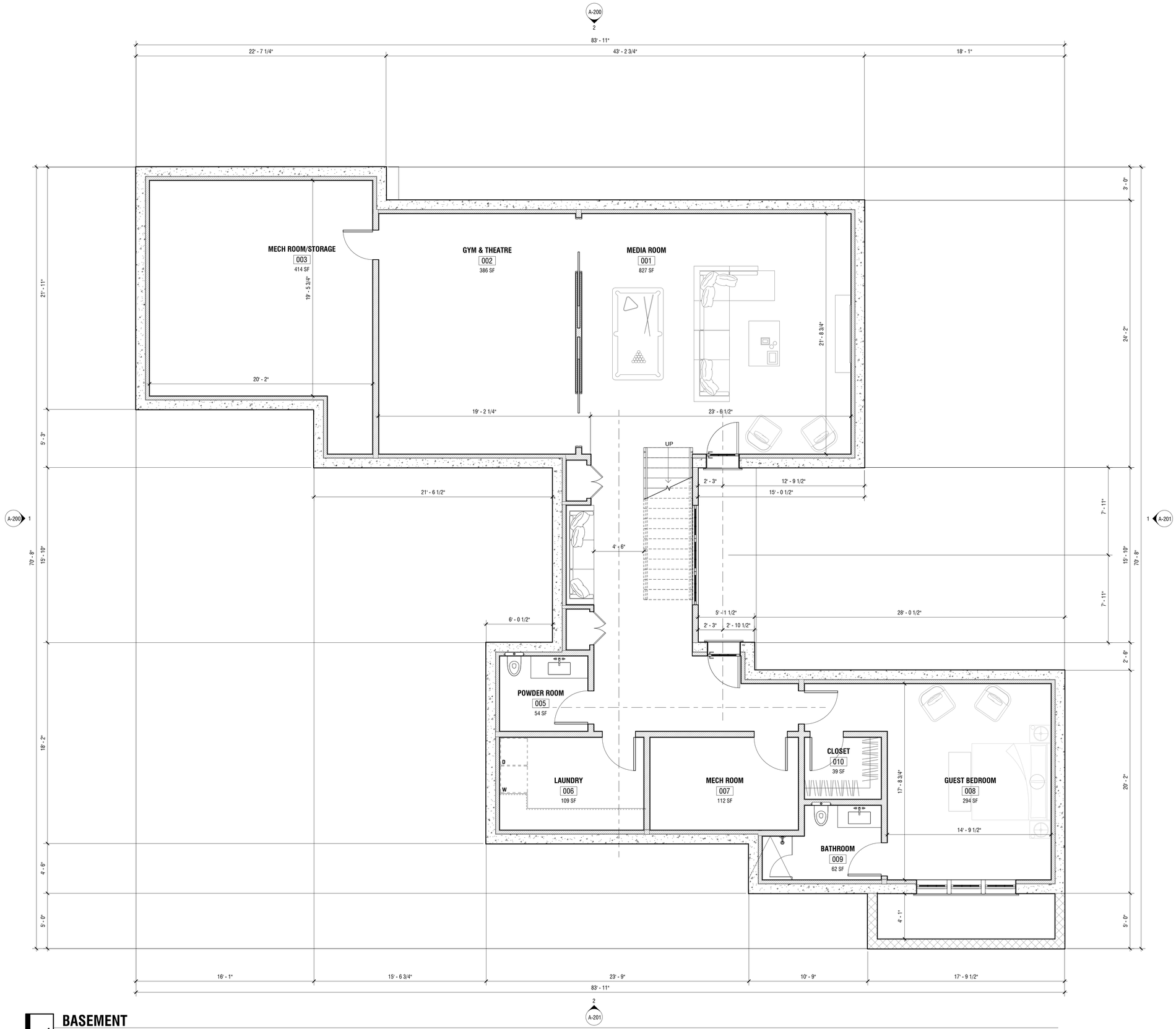
CONSTRUCTION DOCUMENTS

DRAWN BY:	ZSH/MLW/WJP
CHECKED BY:	ADK/AFH
DATE:	JANUARY 4, 2016
SCALE:	AS NOTED
PROJ. NO.	3BL - 315019

BUILDING SECTIONS

A-300.00

© COPYRIGHT WORKSHOP/APD ARCHITECTURE DPC



1 **BASEMENT**
1/4" = 1'-0"

3BL
RESIDENCE

3 BEACON LANE, NANTUCKET, MA 02554

OWNER
3 BEACON LAND NOMINEE TRUST
2 South Water Street
Nantucket, MA 02554

ARCHITECT
WORKSHOP/APD
WORKSHOP/APD ARCHITECTURE DPC
39 West 38th Street, 7th Fl, New York, NY 10018
T: (212) 273-9712 info@workshopapd.com

STRUCTURAL ENGINEER
CRAFT - ENGINEERING STUDIO
39 West 38th Street, 7th Flr
New York, NY 10018
T: (646) 912-9867

SURVEYOR
BLACKWELL & ASSOCIATES, INC.
20 Teasdale Circle
Nantucket, MA 02554
T: (508) 228-9026

CONTRACTOR
ROBERT J. REID BUILDERS
7 Windy Way
Nantucket, MA 02554
T: (508) 737-6191

ALL DESIGNS & SPECS ARE SUBJECT TO VERIFICATION OF EXG. FIELD CONDITIONS

REVISIONS

01	04/11/2016	HDC REVISION (PRIMARY)

NOT FOR CONSTRUCTION

SIGN & SEAL

ISSUES

01	03/18/2016	HDC SUBMISSION (PRIMARY)
02	03/18/2016	HDC SUB. (2ND DWELLING)
03	03/18/2016	HDC SUB. (GARAGE A)
04	03/18/2016	HDC SUB. (GARAGE B)

DRAWING INFO

CONSTRUCTION DOCUMENTS	
DRAWN BY:	ZSH/MLW/WJP
CHECKED BY:	ADK/AFH
DATE:	JANUARY 4, 2016
SCALE:	AS NOTED
PROJ. NO.	38L - 315019

BASEMENT PLAN

TN PN

A-100.00

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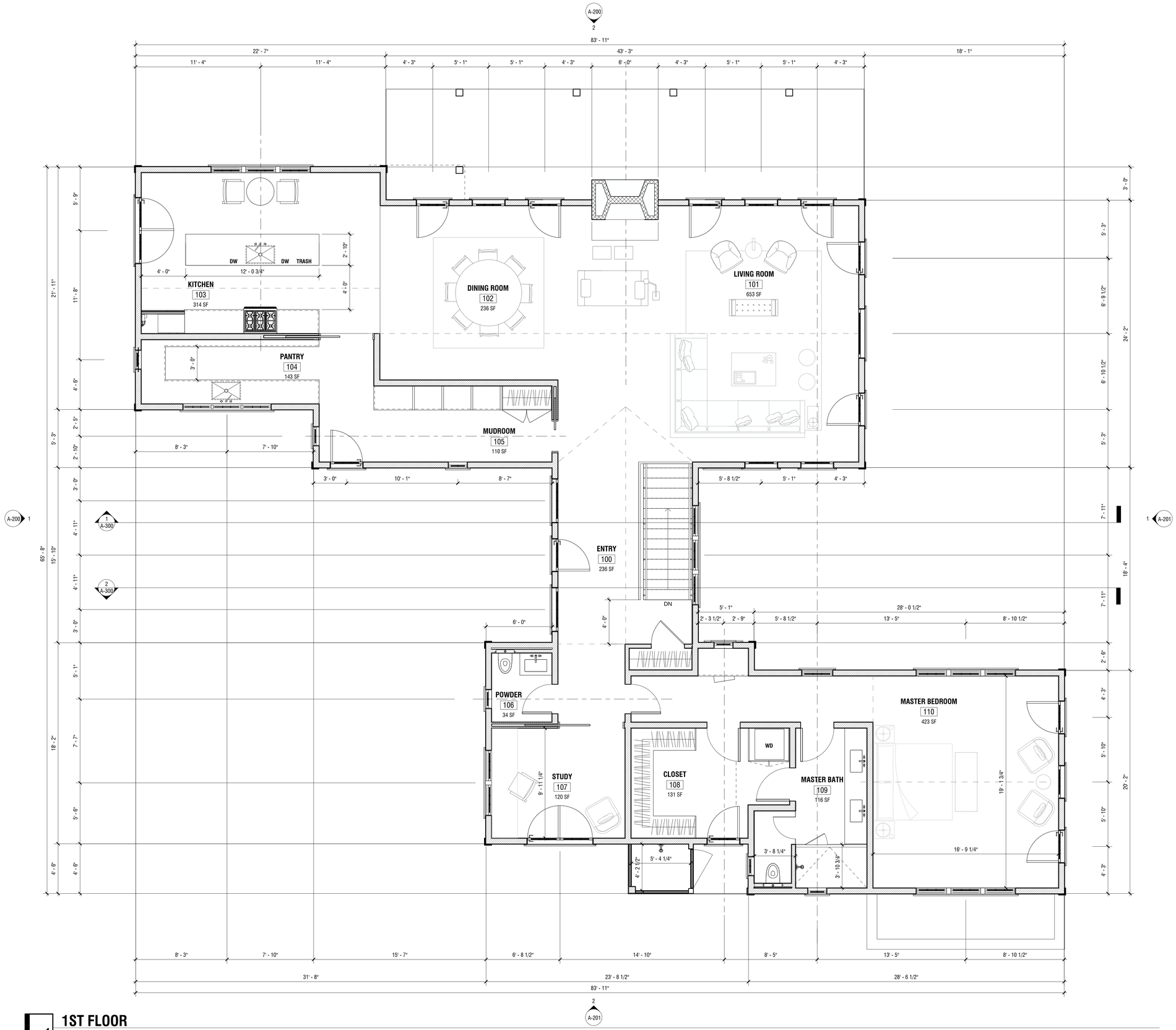

1 1ST FLOOR

1/4" = 1'-0"

3BL RESIDENCE

3 BEACON LANE, NANTUCKET, MA 02554

OWNER

3 BEACON LAND NOMINEE TRUST
2 South Water Street
Nantucket, MA 02554

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REVISIONS

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NOT FOR CONSTRUCTION

SIGN & SEAL

ISSUES

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02	03/18/2016	HDC SUB. (2ND DWELLING)
03	03/18/2016	HDC SUB. (GARAGE A)
04	03/18/2016	HDC SUB. (GARAGE B)

DRAWING INFO

CONSTRUCTION DOCUMENTS

DRAWN BY:	ZSH/MLW/WJP
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SCALE:	AS NOTED
PROJ. NO.	3BL - 315019

1ST FLOOR

TN PN

A-110.00

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1 WEST ELEVATION

1/4" = 1'-0"

2 NORTH ELEVATION

1/4" = 1'-0"

3 EAST ELEVATION

1/4" = 1'-0"

4 SOUTH ELEVATION

1/4" = 1'-0"

3BL
RESIDENCE

3 BEACON LANE, NANTUCKET, MA 02554

OWNER

3 BEACON LAND NOMINEE TRUST
2 South Water Street
Nantucket, MA 02554

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ALL DESIGNS & SPECS ARE SUBJECT TO VERIFICATION OF EXG. FIELD CONDITIONS

REVISIONS

NOT FOR CONSTRUCTION

SIGN & SEAL

ISSUES

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02	03/18/2016	HDC SUB. (2ND DWELLING)
03	03/18/2016	HDC SUB. (GARAGE A)
04	03/18/2016	HDC SUB. (GARAGE B)

DRAWING INFO

CONSTRUCTION DOCUMENTS

DRAWN BY:	ZSH/WJP
CHECKED BY:	ADK/AFH
DATE:	JANUARY 4, 2016
SCALE:	AS NOTED
PROJ. NO.	3BL - 315019

GUEST ELEVATIONS

A-250.00

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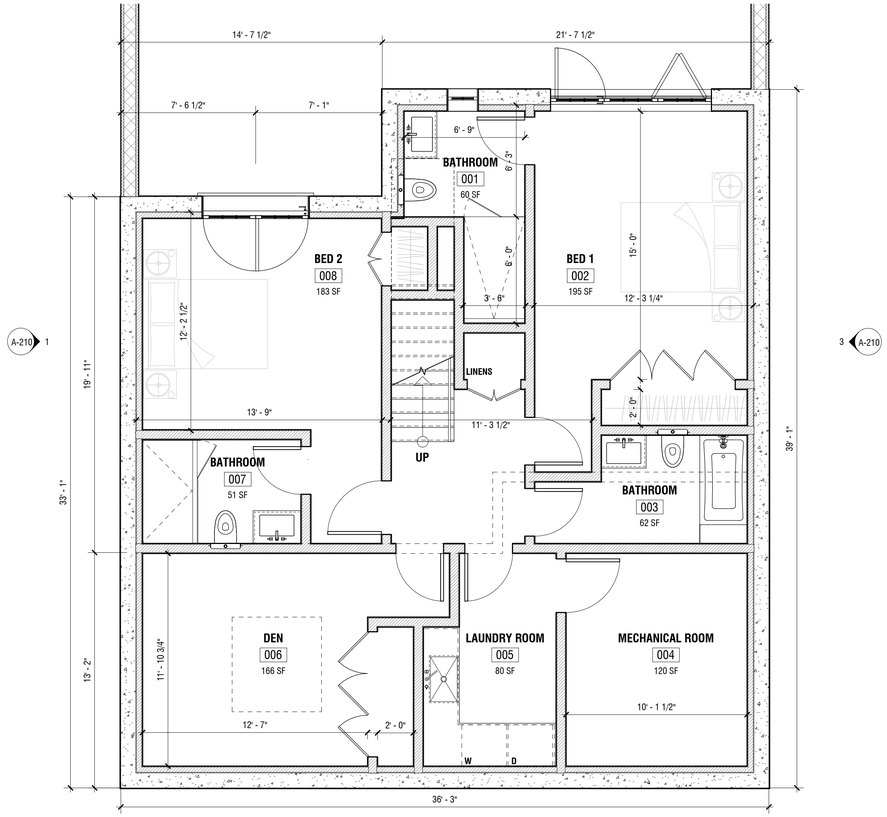
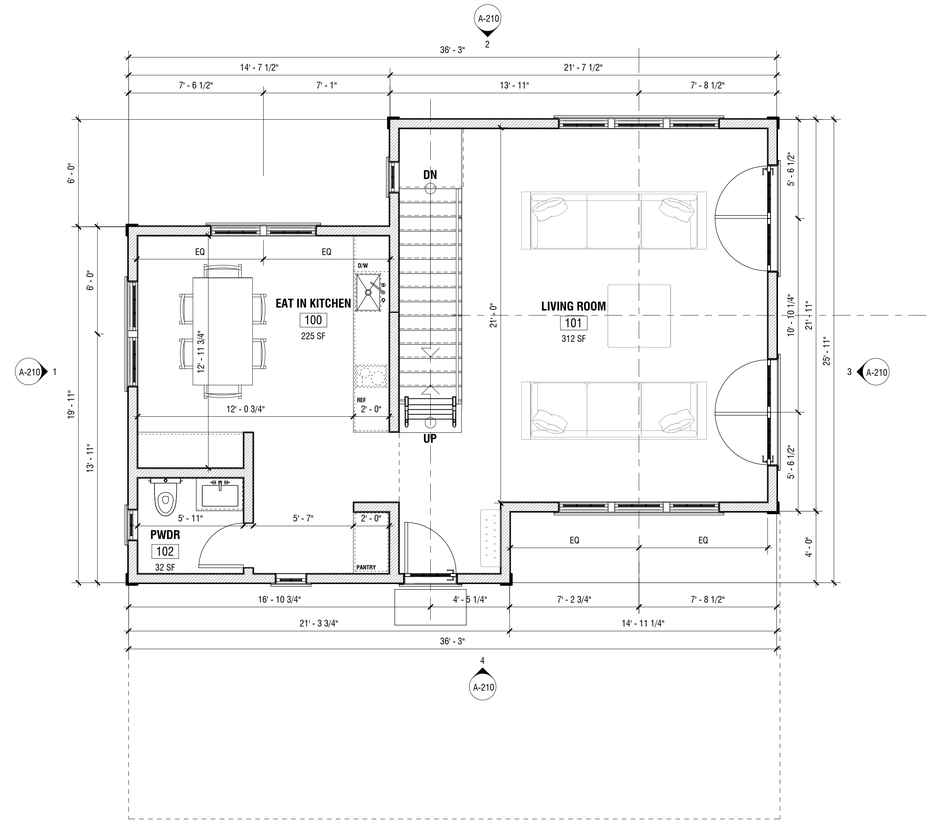


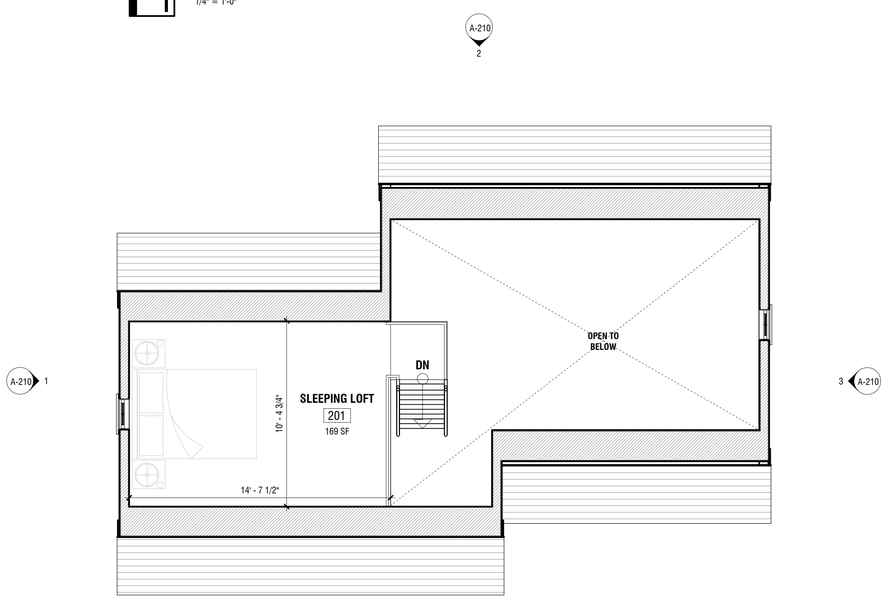
1 BASEMENT

1/4" = 1'-0"



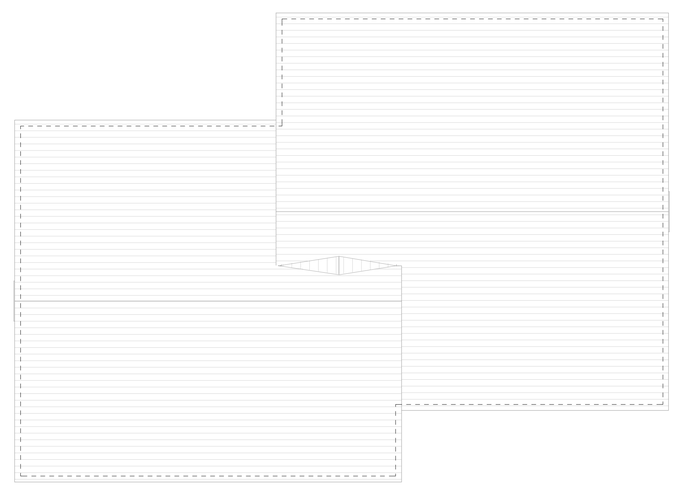
2 1ST FLOOR

1/4" = 1'-0"



3 2ND FLOOR

1/4" = 1'-0"



4 T.O. RIDGE

1/4" = 1'-0"

3BL RESIDENCE

3 BEACON LANE, NANTUCKET, MA 02554

OWNER

3 BEACON LAND NOMINEE TRUST
2 South Water Street
Nantucket, MA 02554

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REVISIONS

NOT FOR CONSTRUCTION

SIGN & SEAL

ISSUES

01	03/18/2016	HDC SUBMISSION (PRIMARY)
02	03/18/2016	HDC SUB. (2ND DWELLING)
03	03/18/2016	HDC SUB. (GARAGE A)
04	03/18/2016	HDC SUB. (GARAGE B)

DRAWING INFO

CONSTRUCTION DOCUMENTS

DRAWN BY:	ZSH/WJP
CHECKED BY:	ADK/AFH
DATE:	JANUARY 4, 2016
SCALE:	AS NOTED
PROJ. NO.	3BL - 315019

GUEST FLOOR PLANS

PN TN

A-150.00

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MESA PROJECT REVIEW CHECKLIST

Massachusetts Endangered Species Act M.G.L. c. 131A and Regulations (321 CMR 10.00)

Massachusetts Division of Fisheries & Wildlife
Natural Heritage & Endangered Species Program

~~~~ CONTACT INFORMATION ~~~~

If you already completed your Notice of Intent- Form 3, you can send page 1 of the NOI in place of questions 1 through 4 in this section

1. **Project Location:**

The applicants are proposing to install an | $300.00 | 0.6+/-
Street Address/Location | City/Town | Zip Code

21 +/-
Assessors Map/Plat Number | Parcel | /Lot Number

2. **Applicant:**

Arthur D. | Gasbarro, PE, PLS, LEED AP
First Name Last Name | Company

20 Mary Ann Drive
Mailing Address

Nantucket | MA | 02554
City/Town | State | Zip Code

508-825-5053 | 5
Phone Number | Fax Number | Email address

3. **Property owner (if different from applicant):**

See NOI Application Page 1
First Name Last Name | Company

Mailing Address

City/Town | State | Zip Code

Phone Number | Fax Number | Email address

4. **Representative (if any):**

Company

art@nantucketengineer.com
Contact Person First Name | Contact Person Last Name

Mailing Address

City/Town | State | Zip Code

Phone Number | Fax Number | Email address

~~~~ADDITIONAL INFORMATION ~~~~

1. Will this project require a filing with the Conservation Commission and/or DEP? ☐ No ☑ Yes
2. Will this project meet any threshold for a MA Environmental Policy Act (MEPA) filing (excluding rare species, 301 CMR 11.03 (2))? ☑ No ☐ Yes
3. Has this project previously been issued a NHESP Tracking Number (either by previous NOI Submittal or MESA Information Request Form)? ☑ No ☐ Yes

If Yes - Tracking No._____

~~~~PROJECT DESCRIPTION (attach separate sheet, as needed) ~~~~

Please note, certain projects or activities are exempt from review, see 321 CMR 10.14. The MESA does not allow project segmentation. Your filing must reflect all anticipated work associated with the proposed project (CMR 321 10.16).

The Applicant proposes to redevelop an existing residential-use property. The proposal includes removing an existing structure, and constructing new residential structures with landscaping located within the buffer zone to a Coastal Bank and Vegetated Wetland. The structures are proposed outside of the 50-foot buffer zone, and the limit of work outside of the 25-foot buffer zone. A new septic system will be installed outside of the 100-foot buffer zone. A siltation fence will be installed and maintained at the limit of work.

~~~~INCLUDE THE FOLLOWING INFORMATION ~~~~

The NHESP will notify the applicant within 30 days if the materials submitted do not satisfy requirements for a filing and request submission of any missing materials (321 CMR 10.18(1)).

ALL Applicants must submit:

- ☑ USGS map (1:24,000 or 1:25,000) with property boundary clearly outlined
- ☑ Project plans for entire site (including wetland Resource Areas, showing existing and proposed conditions, existing and proposed tree/vegetation clearing line, and clearly demarcated limits of work)
- ☑ Assessor's map or right-of-way plan of site
- ☑ Project description
- ☑ Statement/proof that applicant is the Record Owner or that applicant is a person authorized in writing by the record owner to submit this filing
- ☑ Photographs representative of the site

Projects altering* 10 or more acres, must also submit:

- ☐ A vegetation cover type map of the site
- ☐ Project plans showing Priority Habitat boundaries

The NHESP may request additional information, such as, but not limited to, species and habitat surveys, wetland reports, soil map and reports, and stormwater management reports (321 CMR 10.16).

*Alteration: Any physical alteration of land, soils, drainage or destruction of plant life, see "Project or Activity" (321 CMR 10.02).

~~~~ FILING FEES ~~~~

See Fee Schedule below

a. Total MESA Fee Paid $300 b. Acreage of Disturbance* 0.4+/- c. Total Site Acreage 2.9 +/-

~~~~ REQUIRED SIGNATURES~~~~

I hereby certify under the penalties of perjury that the foregoing MESA filing and accompanying plans, documents, and supporting data are true and complete to the best of my knowledge.

Arthur D. Salvano Agent 5/13/16

Signature of Property Owner/Record Owner of Property Date

Signature of Applicant (required, if different from Owner) Date

Please send form, required information, and filing fee (payable to "Comm. of MA - NHESP") to:

Regulatory Review
Natural Heritage & Endangered Species Program
1 Rabbit Hill Road
Westborough, MA 01581

Natural Heritage & Endangered Species Program
Massachusetts Division of Fisheries & Wildlife

Questions regarding this form should be directed according to the county that the property is located:

Berkshire, Essex, Franklin, Hampshire, Hampden, Middlesex & Worcester Counties call: 508-389-6361
Barnstable, Bristol, Dukes, Nantucket, Norfolk, Plymouth & Suffolk Counties call: 508-389-6385

PROJECT REVIEWS 321 CMR 10.18			
Project Definition	**Project Criteria**	**Fee**	**Response Time**
Simple	Less than 5 acres of disturbance*	$ 300.00	60 days from determination of complete filing
Intermediate *(Moderate)*	5 to 20 acres of disturbance*	$ 1800.00	60 days from determination of complete filing
Complex	More than 20 acres of disturbance* or project requires wetlands variance	$ 4000.00	60 days from determination of complete filing
Linear	Projects greater than 1 mile in length.	$ 4000.00 per Priority Habitat intersected	60 days from determination of complete filing

* Disturbance means direct physical disturbance of the land surface or waterbody, soil and/or vegetation, if only a portion of the project site is located within Priority Habitat, indicate total area of disturbance for site as a whole.

TRAIL
JEEP
ROAD
BM 39
Quidnet
QUIDNET
ROAD
Sesachacha
Pond
POLPIS
Hoicks Hol

Google earth
1995
Imagery Date: 5/23/2015 41°18'04.01" N 69°59'00.51" W elev 10 ft eye alt 194 ft

DEP Bordering Vegetated Wetland (310 CMR 10.55) Delineation Field Data Form

Applicant: _____ Prepared by: LEC Environmental Project location: 3 Beacon Lane Nantucket DEP File #: _____

Check all that apply:

- ☐ Vegetation alone presumed adequate to delineate BVW boundary: fill out Section I only
- ☑ Vegetation and other indicators of hydrology used to delineate BVW boundary: fill out Sections I and II
- ☐ Method other than dominance test used (attach additional information)

Section I. Vegetation Observation Plot Number: 1 Transect Number: 1 Date of Delineation: 6/3/15

A. Sample Layer and Plant Species (by common/scientific name)	B. Percent Cover (or basal area)	C. Percent Dominance	D. Dominant Plant (yes or no)	E. Wetland Indicator Category*
Ground				
Cattails (Typha angustifolia)	63.0	60.3%	Y	OBL *
Marsh fern (Thelypteris palustris)	20.5	19.6	N	—
Sensitive fern (Onoclea sensibilis)	10.5	10.0	N	—
Swamp rose (Rosa palustris)	10.5	10.0	N	—
Shrub				
Arrowwood (Viburnum dentatum)	20.5	100%	Y	FAC *
Vine				
Fox grape (Vitis labrusca)	10.5	100%	Y	FACU

* Use an asterisk to mark wetland indicator plants: plant species listed in the Wetlands Protection Act (MGL c.131, s.40); plants in the genus *Sphagnum*; plants listed as FAC, FAC+, FACW-, FACW, FACW+, or OBL; or plants with physiological or morphological adaptations. If any plants are identified as wetland indicator plants due to physiological or morphological adaptations, describe the adaptation next to the asterisk.

Vegetation conclusion:

Number of dominant wetland indicator plants: 2 **Number of dominant non-wetland indicator plants:** 1

Is the number of dominant wetland plants equal to or greater than the number of dominant non-wetland plants? (yes) no

If vegetation alone is presumed adequate to delineate the BVW boundary, submit this form with the Request for Determination of Applicability or Notice of Intent.

MA DEP; 3/95

T1, P1

Section II. Indicators of Hydrology

Hydric Soil Interpretation

1. Soil Survey

Is there a published soil survey for this site? (yes) no

title/date: Soil Survey of Nantucket County, June 1979

map number: 5

soil type mapped: EvB

hydric soil inclusions: ME

Are field observations consistent with soil survey? (yes) no

Remarks:

2. Soil Description

Horizon	Depth	Matrix Color		Mottles Color
O	3-0"			
A	0-9"	10YR 2/1	sandy loam	N/A
C	9-24"	10YR 4/3	sandy loam	10YR 3/4

Remarks: Plot located downgradient of wetland flag #14.

3. Other:

Conclusion: Is soil hydric? (yes) no

Other Indicators of Hydrology: (check all that apply and describe)

- ☐ Site inundated: _____
- ☑ Depth to free water in observation hole: 22"
- ☑ Depth to soil saturation in observation hole: 13"±
- ☑ Water marks: Interior
- ☐ Drift lines: _____
- ☐ Sediment deposits: _____
- ☐ Drainage patterns in BVW: _____
- ☐ Oxidized rhizospheres: _____
- ☐ Water-stained leaves: _____
- ☐ Recorded data (stream, lake, or tidal gauge; aerial photo; other): _____
- ☐ Other: _____

Vegetation and Hydrology Conclusion

	yes	no
Number of wetland indicator plants ≥ number of non-wetland indicator plants	☑	☐
Wetland hydrology present:		
hydric soil present	☑	☐
other indicators of hydrology present	☑	☐
Sample location is in a BVW	☑	☐

Submit this form with the Request for Determination of Applicability or Notice of Intent.

DEP Bordering Vegetated Wetland (310 CMR 10.55) Delineation Field Data Form

Applicant: _____ Prepared by: LEC Environmental Project location: 3 Beacon Lane Nantucket DEP File #: _____

Check all that apply:

- ☐ Vegetation alone presumed adequate to delineate BVW boundary: fill out Section I only
- ☑ Vegetation and other indicators of hydrology used to delineate BVW boundary: fill out Sections I and II
- ☐ Method other than dominance test used (attach additional information)

Section I. Vegetation Observation Plot Number: 2 Transect Number: 1 Date of Delineation: 6/3/15

	A. Sample Layer and Plant Species (by common/scientific name)	B. Percent Cover (or basal area)	C. Percent Dominance	D. Dominant Plant (yes or no)	E. Wetland Indicator Category*
Ground	Purple lovegrass (Eragrostis spectabilis)	20.5	30.6%	Y	FAC
	Fox grape (Vitis labrusca)	10.5	15.7	N	
	Dewberry (Rubus flagellaris)	10.5	15.7		
	Poison ivy (Toxicodendron radicans)	10.5	15.7		
	Virginia rose (Rosa virginiana)	3.0	4.5		
	Groundsel tree (Baccharis halimifolia)	3.0	4.5		
	Arrowwood (Viburnum dentatum)	3.0	4.5		
	Scrub oak (Quercus ilicifolia)	3.0	4.5		
	Goldenrod (Solidago spp)	3.0	4.5		
	garlic mustard				
		63.0	60.6%	Yes	NI
Shrub	Scrub oak	38.0	36.5	Yes	FAC
	Arrowwood	3.0	2.9	No	
	Bush honeysuckle (Lonicera spp)	10.5	100%	Yes	FACU
Vine	Fox grape				

* Use an asterisk to mark wetland indicator plants: plant species listed in the Wetlands Protection Act (MGL c.131, s.40); plants in the genus *Sphagnum*; plants listed as FAC, FAC+, FACW-, FACW, FACW+, or OBL; or plants with physiological or morphological adaptations. If any plants are identified as wetland indicator plants due to physiological or morphological adaptations, describe the adaptation next to the asterisk.

Vegetation conclusion:

Number of dominant wetland indicator plants: 2 **Number of dominant non-wetland indicator plants:** 2

Is the number of dominant wetland plants equal to or greater than the number of dominant non-wetland plants? (yes) no

If vegetation alone is presumed adequate to delineate the BVW boundary, submit this form with the Request for Determination of Applicability or Notice of Intent.

Section II. Indicators of Hydrology

Hydric Soil Interpretation

1. Soil Survey

Is there a published soil survey for this site? (yes) no

title/date: Soil Survey of Nantucket County, June 1979

map number: 5

soil type mapped: EvB

hydric soil inclusions: ME

Are field observations consistent with soil survey? (yes) no

Remarks:

2. Soil Description

Horizon	Depth	Matrix Color	Mottles Color
O	0.5-0"		
A	0 - 19"	10YR 2/1 Sandy loam	N/A
B	19-24"	10YR 5/6 Sandy loam	N/A

Remarks: Plot located upgradient of wetland flag # 14

3. Other:

Conclusion: Is soil hydric? yes (no)

N/A T1, P2

Other Indicators of Hydrology: (check all that apply and describe)

- ☐ Site inundated: _____
- ☐ Depth to free water in observation hole: _____
- ☐ Depth to soil saturation in observation hole: _____
- ☐ Water marks: _____
- ☐ Drift lines: _____
- ☐ Sediment deposits: _____
- ☐ Drainage patterns in BVW: _____
- ☐ Oxidized rhizospheres: _____
- ☐ Water-stained leaves: _____
- ☐ Recorded data (stream, lake, or tidal gauge; aerial photo; other): _____
- ☐ Other: _____

Vegetation and Hydrology Conclusion

	yes	no
Number of wetland indicator plants ≥ number of non-wetland indicator plants	☑	☐
Wetland hydrology present:		
hydric soil present	☐	☑
other indicators of hydrology present	☐	☑
Sample location is in a BVW	☐	☑

Submit this form with the Request for Determination of Applicability or Notice of Intent.

AMENDED ORDER OF CONDITIONS REQUESTS

Glenhurst West Realty Trust

137 Cliff Road

(30-610)

SE48-2384

May 12, 2016

Jeff Carlson, Administrator
Nantucket Conservation Commission
2 Bathing Beach Road
Nantucket, MA 02554

RE: 137 Cliff Road
Map 30 Parcel 610
SE48-2384

Dear Commissioners:

I am writing to request the issuance of an Amended Order of Conditions for the referenced project. Attached for review are an updated site plan and landscape drawings to accompany the request for an Amended Order of Conditions. Also included is a locus map, the front page of the original Order, as recorded at the Registry of Deeds and the required filing fee.

The applicant is seeking approval of the final landscape layout design which has been developed since the original application. Various landscape modifications include the addition of a fire pit with sitting area outside of the 50-foot buffer zone, creation of a meadow, installation of a boardwalk and beach access stairs. There is a vegetated 25-foot no disturb zone provided along the top of the coastal bank other than for access to the beach stairs, which will serve as a protective area for the bank.

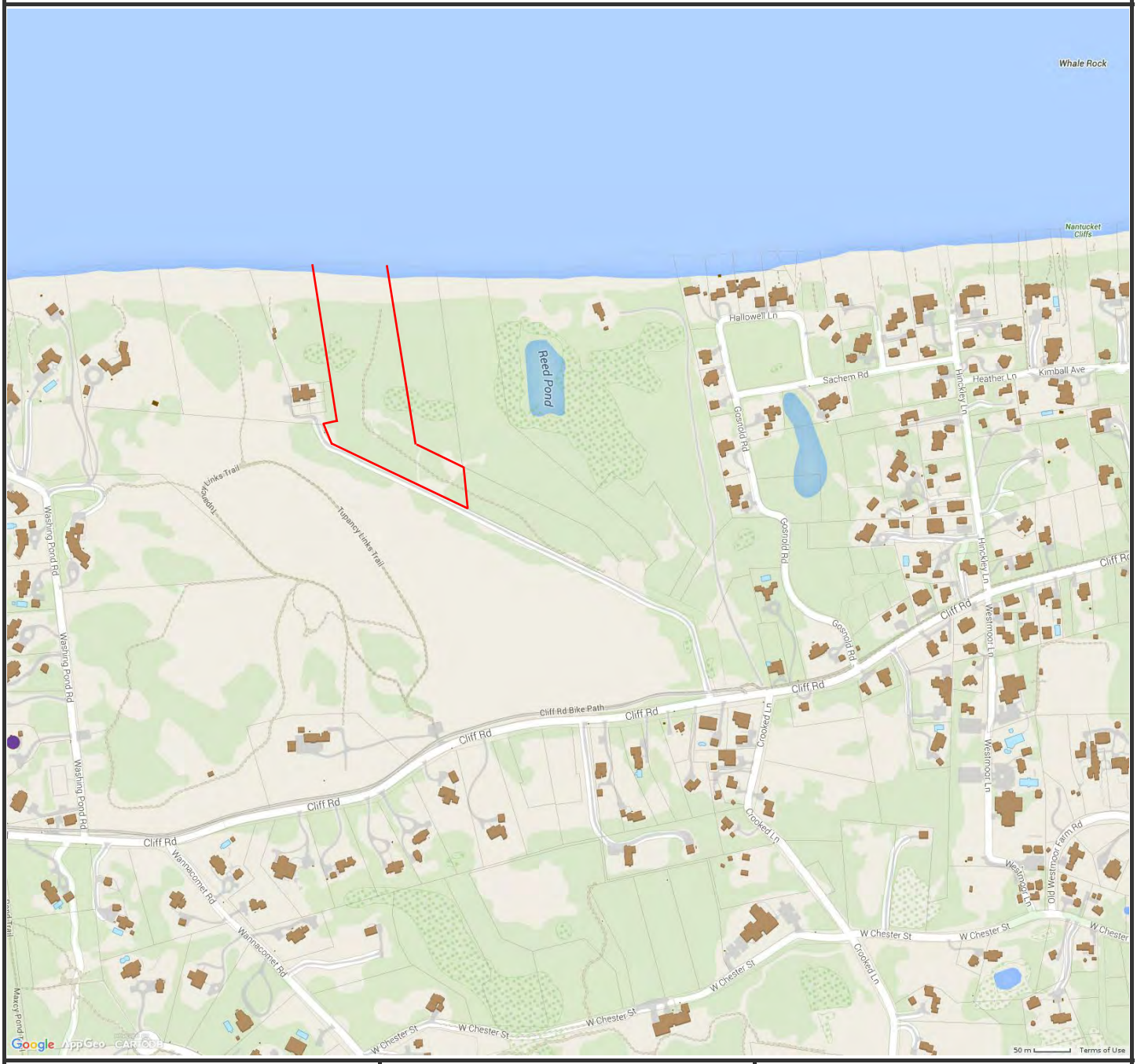
The proposal is within the scope of the original approval, and will not have an adverse impact on the interests protected by the Commission. I plan to attend the public hearing on this matter to address any questions or concerns.

Sincerely,
Nantucket Engineering & Survey, P.C.
By: Arthur D. Gasbarro, PE, PLS, LEED AP

CC: Arthur I. Reade, Jr., Trustee

20 Mary Ann Drive • Nantucket, MA 02554
508-825-5053 • www.NantucketEngineer.com

Locus Map - 137 Cliff Road (Off Chase Links Circle)



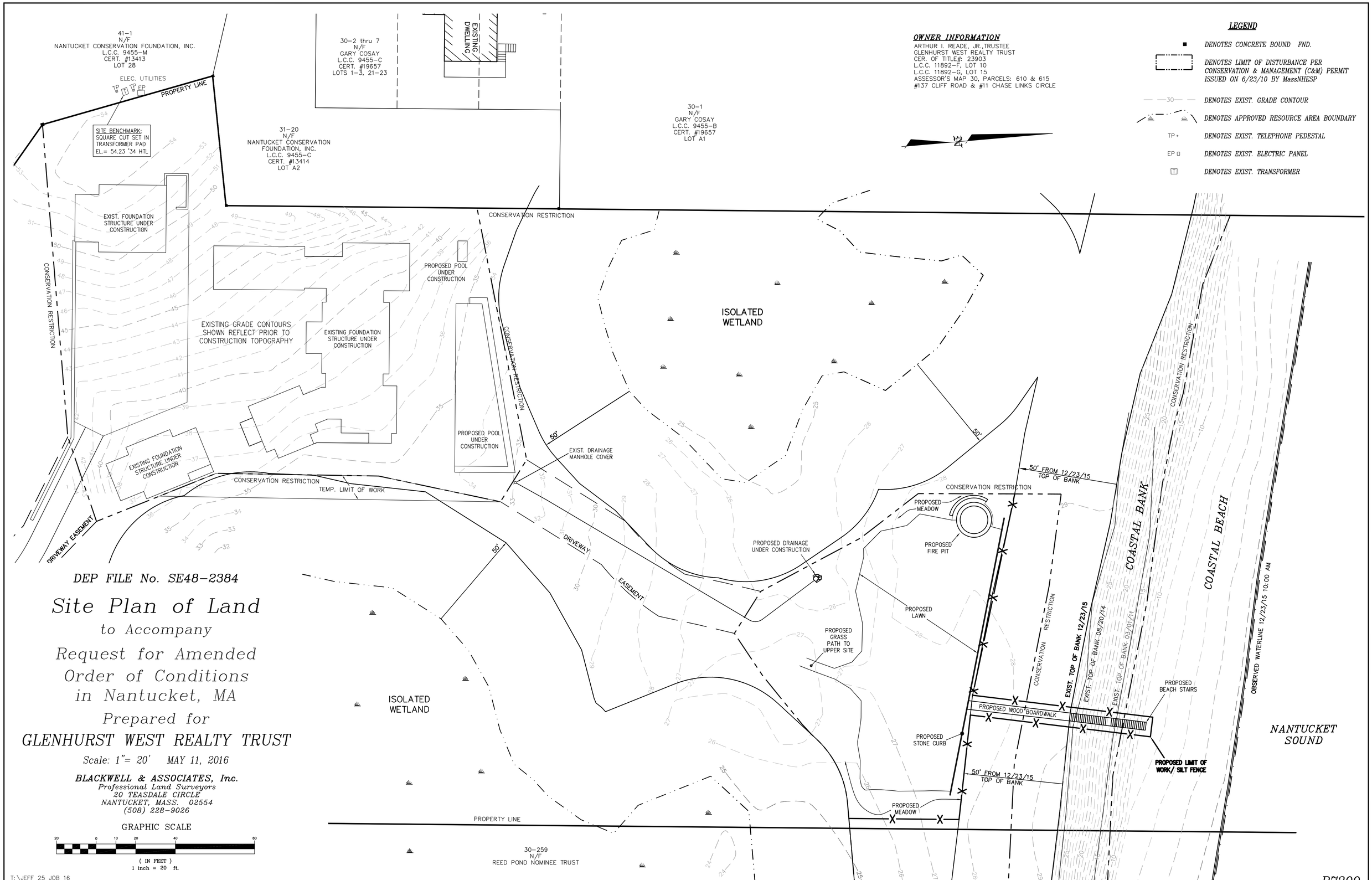
Property Information

Property ID	40 65.1
Location	17 PRIMROSE LN
Owner	MCINTOSH JAMES K & PRISCILLA A

MAP FOR REFERENCE ONLY
NOT A LEGAL DOCUMENT

Town and County of Nantucket, MA makes no claims and no warranties, expressed or implied, concerning the validity or accuracy of the GIS data presented on this map.

Parcels updated December, 2014
Properties updated January, 2015



DEP FILE No. SE48-2384

Site Plan of Land

to Accompany

Request for Amended Order of Conditions in Nantucket, MA

Prepared for

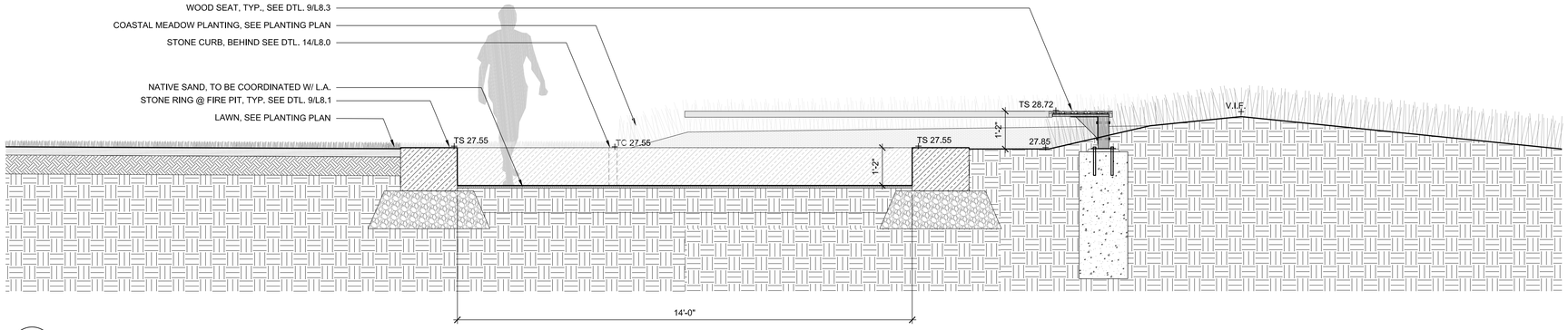
GLENHURST WEST REALTY TRUST

Scale: 1"= 20' MAY 11, 2016

BLACKWELL & ASSOCIATES, Inc.
Professional Land Surveyors
20 TEASDALE CIRCLE
NANTUCKET, MASS. 02554
(508) 228-9026

T:\JEFF 25 JOB 16
V:\DRAWFILES\B7399\A00C.dwg 5/11/2016 4:19:47 PM EDT

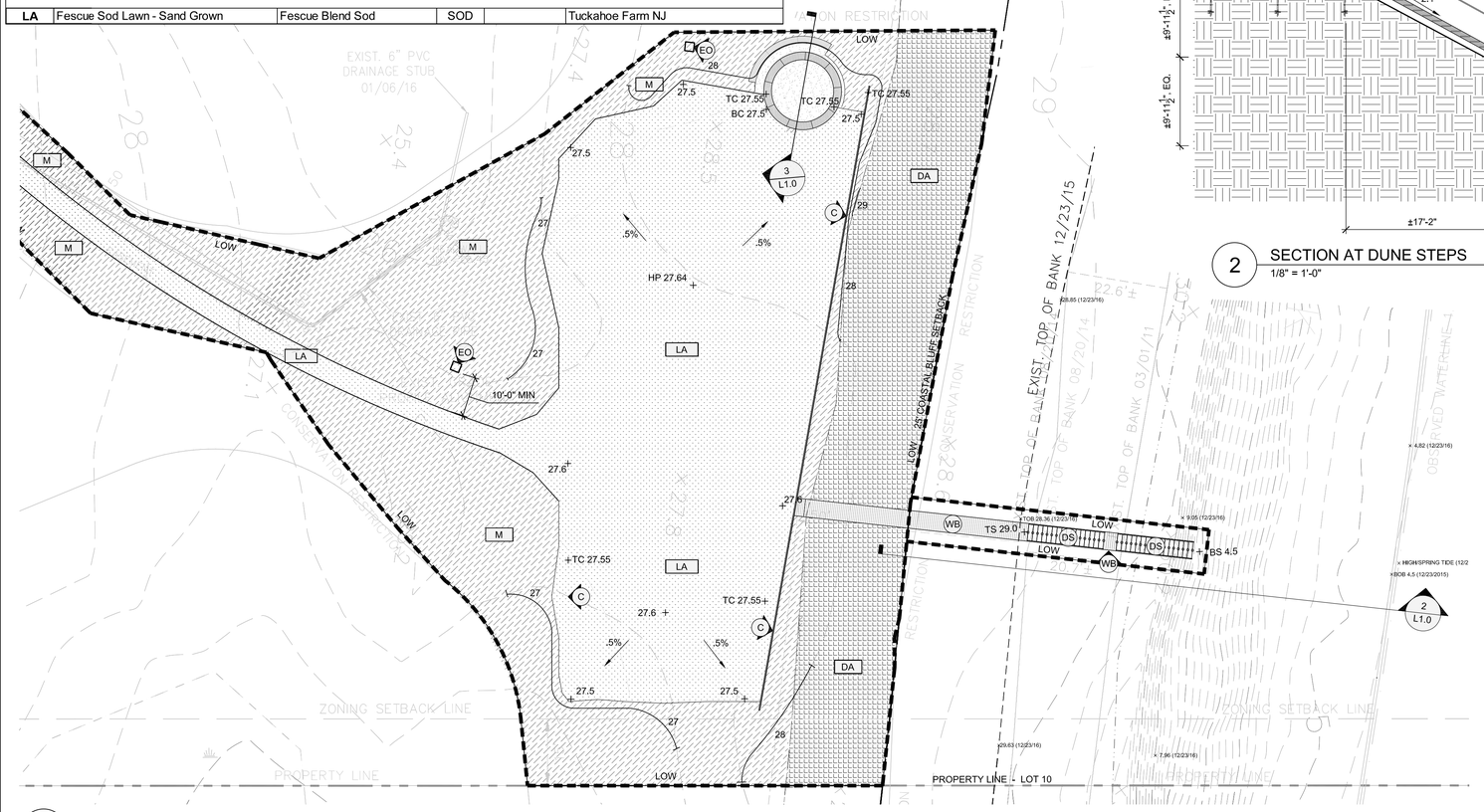
B7399



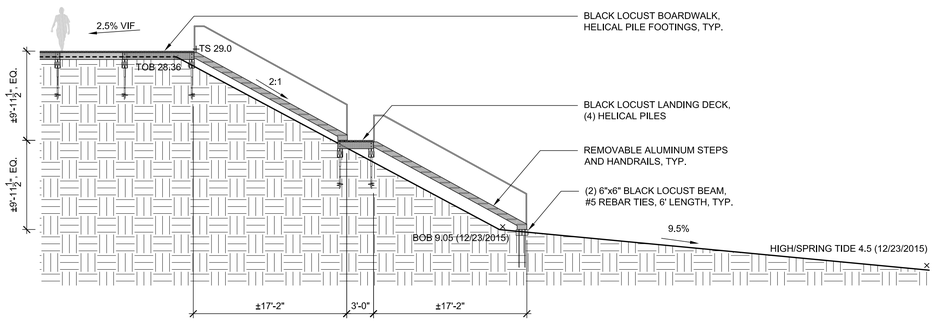
3 SECTION @ GATHERING AREA
1/2" = 1'-0"

DUNE PLANT LIST

SYM	BOTANICAL NAME	COMMON NAME	QTY	SIZE	COMMENT
DA	Ammophila breviligulata	Beach Grass	86 flats	32 flat	12" o.c.
DA	Arctostaphylos uva-ursi	Bearberry	350	3" av pot	10" o.c.
DA	Rosa virginiana	Virginia Rose	287	#1	24" o.c.
DA	Solidago sempervirens	Coastal Goldenrod	15 flats	32 flat	12" o.c.
M	New England Wetland Plants Coastal Salt Tolerant Grass Mix		SEED		35lbs/acre PLS
LA	Fescue Sod Lawn - Sand Grown	Fescue Blend Sod	SOD		Tuckahoe Farm NJ



1 LOWER SITE PLAN
1/16" = 1'-0"



2 SECTION AT DUNE STEPS
1/8" = 1'-0"

LEGEND

SYM	DESCRIPTION	
WB	WOOD BOARDWALK	1-2 L8.3
WS	WOOD SEAT	3 L8.3
SR	STONE RING @ FIRE PIT	9 L8.1
DS	DUNE STEPS W/ LANDING,SEE SPEC., SHOP DWGS. TO BE SUBMITTED TO L.A. FOR APPROVAL PRIOR TO CONSTRUCTION. VARIFY ALL SITE CONTOURS AND DIMENSION IN FIELD PRIOR TO FABRICATION.	
BP	NATIVE SAND, TO BE COORDINATED W/ L.A.	
C	STONE CURB @ LOWER SITE	14 L8.0
EO	ELECTRICAL OUTLET, TO BE APROVED AND LOCATED IN FIELD BY L.A.	
29	EXISTING CONTOUR	
30	PROPOSED CONTOUR	
x28.3	EXISTING SPOT GRADE	
+31.5	PROPOSED SPOT GRADE	
1.5%	PROPOSED SLOPE	
+TW	TOP OF WALL	
+BW	BOTTOM OF WALL	
+TS	TOP OF STEP	
+BS	BOTTOM OF STEP	
+TF	TOP OF FENCE	
+BF	BOTTOM OF FENCE	
+HP	HIGH POINT	
+LP	LOW POINT	
VIF	VERIFY IN FIELD	
M	COASTAL MEADOW PLANTING 1. PRIOR TO SEEDING PREPARE EXISTING SOIL BY DECOMPACTING TO FULL DEPTH OF COMPACTION RESULTING FROM CONSTRUCTION. 2. PLACE STOCKPILED EXISTING SITE SOIL FOR MEDIAN STRIP AND RAISED EXISTING GRADES. SEE DTL. 3/L5.0 3. SEED ALL DISTURBED AREAS WITH 'COASTAL GRASS MIX' FROM NEW ENGLAND WETLAND PLANTS, INC. COVER W/ WEED FREE STRAW.	
L	LAWN: SEE SCHEDULE FOR SPECIES AND QTYS, SEE DTL. 3/L5.2	
DA	COASTAL BANK	
LOW	LIMIT OF WORK LINE	
	PROPERTY LINE	

N

STEPHEN STIMSON ASSOCIATES LANDSCAPE ARCHITECTS
288 NORFOLK STREET CAMBRIDGE MA 02139
T 617 876 8960 F 617 876 8906
71 GATES ROAD PRINCETON MA 01541
T 617 876 8960 F 617 876 8906
WWW.STEPHENSTIMSON.COM

ARCHITECT
CHIP WEBSTER ARCHITECTURE
9 Amelia Drive
Nantucket, MA 02554
P 508 228 3600
F 508 228 3630

CIVIL ENGINEER
BLACKWELL & ASSOCIATES, INC.
20 TEASDALE CIRCLE
NANTUCKET, MA 02554
T 508 228 9026

INTERIOR ARCHITECT
DAVID MACKENZIE INC.
5443 NORTH BROADWAY #2S
CHICAGO, ILLINOIS 60640
P 773 561 9930
F 773 561 4480

STRUCTURAL ENGINEER
RICHMOND SO ASSOCIATES, INC
60 PLEASANT STREET, SUITE 300
WATERTOWN, MA 02472
P 617 926 9300

PRELIMINARY: NOT FOR CONSTRUCTION

THIS DRAWING IS FOR INFORMATIONAL PURPOSES ONLY AND IS NOT INTENDED FOR CONSTRUCTION. DO NOT START CONSTRUCTION WITHOUT A SEALED SET OF CONSTRUCTION DOCUMENTS.

ALL RIGHTS RESERVED. THE DRAWINGS, DESIGNS, AND IDEAS EMBODIED THEREIN ARE PROPERTY OF STEPHEN STIMSON ASSOCIATES AND SHALL NOT BE COPIED, REPRODUCED, OR DISCLOSED IN CONNECTION WITH ANY WORK OTHER THAN THE PROJECT FOR WHICH THEY HAVE BEEN PREPARED, IN WHOLE OR PART, WITHOUT PRIOR WRITTEN AUTHORIZATION OF STEPHEN STIMSON ASSOCIATES.

ISSUE	DATE	DESCRIPTION	ISSUE	DATE	DESCRIPTION
8			16		
7			15		
6			14		
5			13		
4			12		
3			11		
2			10		
1	04.21.16	REVISION	9		

CLIFF ROAD RESIDENCE

137 CLIFF ROAD,
NANTUCKET, MA

SCALE: AS SHOWN
DATE: 28 MAR 2015
DRAWN BY: TF
REVIEWED BY: JW

PERMIT DRAWINGS

L1.0

LAND COURT, BOSTON. The Land herein described will be shown on our approved plan to follow as
Referred to

JUN 16 2011
11892F Lot 10
Plan 11892G Lot 15
(EXAMINED AS DESCRIPTION ONLY)
T.C. PONTBRIAND
ACTING CHIEF ENGINEER
(716)

2011 00133928
Cert: 19163 Doc: OOC
Registered: 06/22/2011 11:43 AM

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WPA Form 5 – Order of Conditions

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40
And the Town of Nantucket Wetlands Bylaw Chapter 136

Provided by MassDEP:
SE48-2384
MassDEP File #

eDEP Transaction #

Nantucket
City/Town

A. General Information

1. From: Nantucket
Conservation Commission

2. This issuance is for (check one): a. ☒ Order of Conditions b. ☐ Amended Order of Conditions

3. To: Applicant:

Arthur I.
a. First Name

Reade, Jr. Trustee
b. Last Name

Glenhurst West Realty Trust
c. Organization

6 Young's Way
d. Mailing Address

Nantucket
e. City/Town

MA
f. State

02554
g. Zip Code

4. Property Owner (if different from applicant):

William P Graves III Trustee and
a. First Name

Lydia B. Graves, II Trustee
b. Last Name

Reed Pond Nominee Trust; and William P. Grave III and Lydia B. Graves II individually
c. Organization

78 Prescott Street
d. Mailing Address

Pepperell
e. City/Town

MA
f. State

01463
g. Zip Code

5. Project Location:

137 Cliff Road
a. Street Address

Nantucket
b. City/Town

30
c. Assessors Map/Plat Number

8 & 259 (Portion)
d. Parcel/Lot Number

Latitude and Longitude, if known: d m s
d. Latitude

d m s
e. Longitude

Polpis Harbor LLC

250 Polpis Harbor

(26-27)

SE48-2779

SITE DESIGN ENGINEERING, LLC.
11 Cushman Street, Middleboro, MA 02346
P: 508-967-0673 F: 508-967-0674

May 13, 2016 SDE No. 14122

Nantucket Conservation Commission
2 Bathing Beach Road
Nantucket, MA 02554

Subject: Request for Amendment for a Notice of Intent
DEP File No.: SE48-2779
250 Polpis Road, Nantucket, MA
Map 26, Parcel 27

Dear Members of the Commission:

The purpose of this letter is to request an amendment for the above referenced Notice of Intent (NOI). A Site Plan prepared by Site Design Engineering, LLC (SDE) dated May 11, 2016 showing all proposed site modifications is being submitted as part of this request.

Permitting History

An Order of Conditions (OOC) permitting renovation of three existing structures and a boathouse as well as the construction of a new structure, two pools, patios, fences, decks, tennis court, driveway, septic components, sewer components, retaining walls, and associated landscaping and grading was approved by the Commission and issued on May 27, 2015. The extent of all wetland resource areas and associated buffer zones on the Subject Property was confirmed as part of this OOC. The majority of the Subject Property is located within the 100-foot wetland buffer zone. Additionally, a significant portion of the 25-foot to 50-foot wetland buffer zone on the Subject Property has previously been altered and landscaped.

Initial site preparation as approved under SE48-2779, has commenced on the Subject Property.

Proposed Amendment Modifications

Detached Garage

The Applicant is proposing to replace the previously approved tennis court with a detached garage. The proposed detached garage will be located entirely outside of the 50-foot Coastal Bank and BVW buffer zones and will be located within the area of the previously approved tennis court. All proposed activities will occur within previously altered and landscaped portions of the Subject Property.

Conclusion

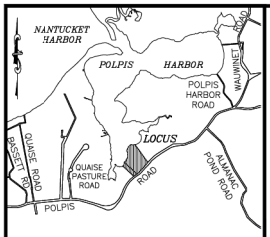
The proposed detached garage will replace the previously approved tennis court and will be located entirely outside of the 50-foot Coastal Bank and BVW buffer zones. The proposed

detached garage will be located in a previously altered and landscaped portion of the Subject Property. The Applicant feels that the proposed site modifications will not result in any significant additional adverse impacts to the resource areas or associated buffer zones when compared with previously approved site alterations. Therefore, the Applicant respectfully requests that the Commission approve the proposed Amendment as requested.

If you have any questions, please feel free to contact me via email at mrits@sde-ldec.com or at 508-802-5832.

Respectfully,
Site Design Engineering, LLC.

Mark Rits
Project Manager/Permitting Specialist



LOCUS MAP SCALE: N.T.S.

LEGEND

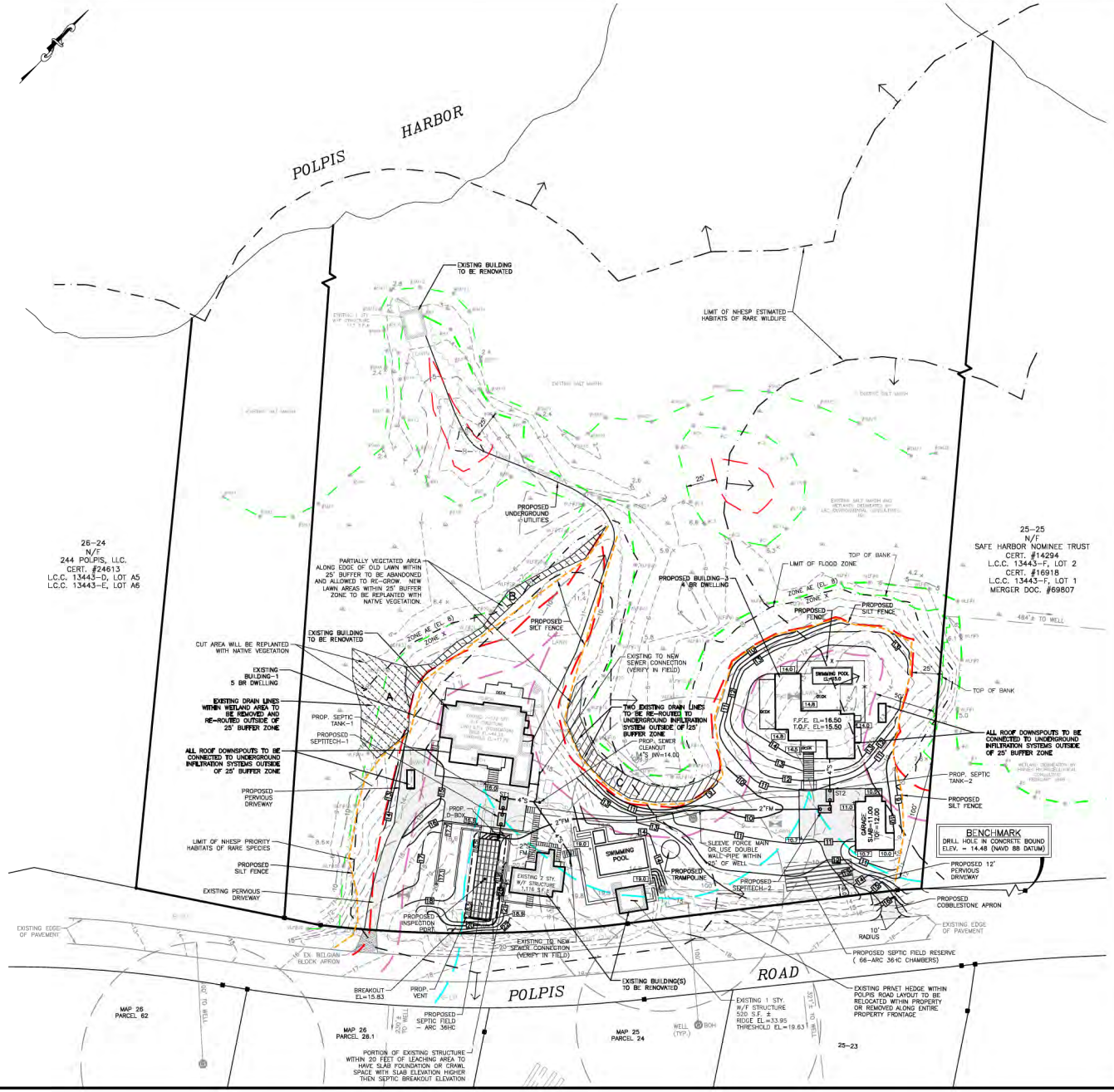
- PROPERTY LINE
- TOPOGRAPHIC CONTOUR
- 10.5 x SPOT ELEVATION
- TREE LINE
- UP UTILITY POLE
- ICV IRRIGATION CONTROL VALVE
- TP TELEPHONE PEDESTAL
- EHH ELECTRIC HAND HOLE
- ST SEPTIC TANK
- PC PUMP CHAMBER
- PF PICKET FENCE
- WF WIRE FENCE
- TW TOP OF RETAINING WALL ELEVATION
- BW BOTTOM OF RETAINING WALL ELEVATION
- SRW STONE RETAINING WALL
- WRW WOODEN RETAINING WALL
- WETLAND LINE
- 25' WETLAND BUFFER LINE
- 50' WETLAND BUFFER LINE
- 100' WETLAND BUFFER LINE
- PROPOSED SILT FENCE

ZONING REQUIREMENTS	
ZONING DISTRICT: LIMITED USE GENERAL (LUG 3)	
	REQUIRED
LOT AREA	120,000 S.F.
LOT FRONTAGE	200 FT.
FRONT YARD SETBACK	35 FT.
REAR YARD SETBACK	20 FT.
SIDE YARD SETBACK	20 FT.
MAX. GROUND COVER RATIO	3 %
UPLAND AREA	90 %

GENERAL NOTES:

1. EXISTING CONDITIONS INFORMATION WAS COMPILED FROM AN ON THE GROUND SURVEY PERFORMED BY BLACKWELL & ASSOCIATES, INC. AND SUPPLEMENTED WITH RECORD PLAN INFORMATION.
2. ELEVATIONS ARE REFERENCED TO NAVD 88.
3. THE SITE IS LOCATED WITHIN A KNOWN FLOOD HAZARD ZONE AS SHOWN ON THE FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD INSURANCE RATE MAP COMMUNITY–PANEL NUMBER 25019C0092G, DATED JUNE 9, 2014.
4. THIS SITE IS LOCATED WITHIN THE NATURAL HERITAGE ENDANGERED SPECIES PROGRAM (NHESP) PRIORITY HABITATS OF RARE SPECIES AND NHESP ESTIMATED HABITATS OF RARE WILDLIFE AS SHOWN IN THE MASSACHUSETTS NATURAL HERITAGE ATLAS, 13TH EDITION, EFFECTIVE OCTOBER 1, 2008, ISSUED BY THE NHESP, MASSACHUSETTS DIVISION OF FISHERIES AND WILDLIFE.
5. THIS PLAN AND ANY ACCOMPANYING CERTIFICATIONS DO NOT CONSTITUTE A CERTIFICATION OF TITLE TO THE PROPERTY DISPLAYED HEREON. THE OWNER OF LOCUS AND ABUTTING PROPERTIES ARE SHOWN ACCORDING TO CURRENT TOWN ASSESSORS RECORDS.
6. EXISTING UTILITY LINES SHOWN ON THIS PLAN ARE FROM AVAILABLE INFORMATION AND ARE APPROXIMATE LOCATIONS. THERE MAY BE EXISTING LINES OTHER THAN THOSE INDICATED. SITE DESIGN ENGINEERING, LLC. ASSUMES NO RESPONSIBILITY FOR DAMAGES INCURRED AS A RESULT OF UTILITES OMITTED OR INACCURATELY SHOWN. BEFORE PLANNING FUTURE CONNECTIONS, THE PROPER PUBLIC UTILITY ENGINEERING DEPARTMENT SHOULD BE CONSULTED.
7. ALL DWELLINGS WITH GUTTERS AND DOWNSPOUTS ARE TO BE CONNECTED TO UNDERGROUND INFILTRATION SYSTEMS.

40 0 20 40 80
SCALE: 1 INCH = 40 FEET



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11 CUSHMAN STREET
MIDDLEBORO, MA 02346
T: 508-967-0673 F: 508-967-0674
WWW.SITEDESIGNENG.COM

NO.	DATE	DESCRIPTION	APPROVED
3	5/13/16	REPLACED TENNIS COURT WITH GARAGE & MISCELLANEOUS MINOR PLAN UPDATES	DCM
2	5/8/15	REVISED PER CONCOM COMMENTS	DCM
1	4/23/15	UPDATED PLANTING INFORMATION	DCM

PLAN REVISIONS

DATE: MARCH 27, 2015

DRAWN BY:	DESIGN BY:	CHECK BY:
SKD/RT	RT/DCM	DCM

PROJECT NO. 14122

ISSUED FOR: APPROVAL

SITE PLAN

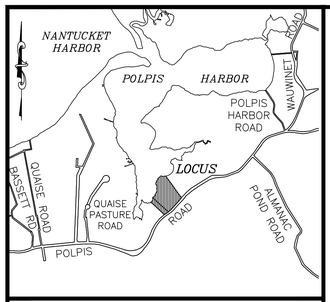
248 & 250 POLPIS ROAD
ASSESSOR'S MAP 26 PARCELS 26 & 27
NANTUCKET, MASSACHUSETTS

PREPARED FOR POLPIS HARBOR LLC

DRAWING TITLE: SITE PLAN

SCALE: 1" = 40'

SHEET NO. 1 OF 1



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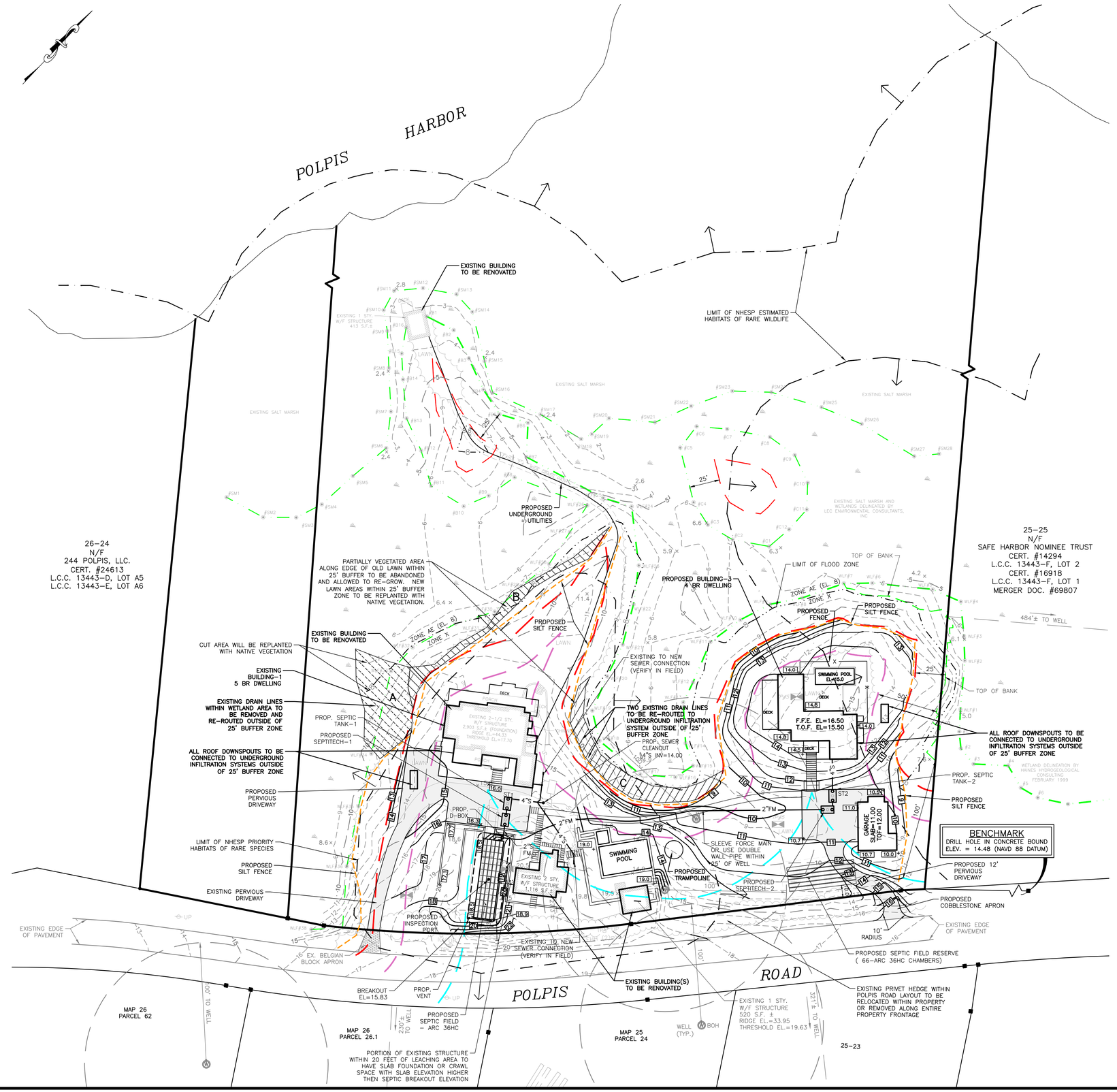

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