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Marion, MA 02738
(508) 748-0937
foth.com

June 30, 2021

Ms. Tori Kim
Director, Massachusetts Environmental Policy Act Office
100 Cambridge St, Suite 900
Boston, MA 02114

RE: EEA #16190 Notice of Project Change

Dear Ms. Kim:

On behalf of the Tisbury Marine Terminal, Foth Infrastructure & Environment, LLC (Foth) is herewith submitting a Notice of Project Change (NPC) for the Certificate issued by the Secretary on May 29, 2020 (EEA Project #16190). The most recently reviewed project consisted of maintenance and improvements to the existing Tisbury Marine Terminal Facility in Vineyard Haven as well as proposal to construct an Operations and Maintenance Facility (O&M) on the property. Consideration has been given to redesign the facility while maintaining the project goals. The attached Notice of Project Change will review the recently reviewed project that received the Certificate of the Secretary on May 29, 2020, and the proposed changes to the project.

We respectfully request the proposed changes be reviewed in accordance with 301 CMR 11.10(6)(e): *New application for a permit or New request for Financial Assistance or a Land Transfer* with the understanding that the proposed project will require new permits. This Notice of Project change has been circulated in accordance with 301 CMR 11.10(7).

We request that it be placed in the July 9, 2021 Environmental Monitor. We appreciate your attention to this request and please do not hesitate to contact me at (508) 801 6262 or Susan.Nilson@foth.com should you require any information to complete the evaluation.

Sincerely,

Foth Infrastructure & Environment, LLC

A handwritten signature in blue ink that reads "Susan E. Nilson".

Susan E. Nilson, P.E.
Director, Ports and Harbors
Licensed in MA, RI, CT, NY, NJ, WI

Enclosure(s):
Notice of Project Change

Commonwealth of Massachusetts
Executive Office of Energy and Environmental Affairs ■ MEPA Office

For Office Use Only
Executive Office of Environmental Affairs

MEPA Analyst:

Phone: 617-626-

Notice of Project Change

The information requested on this form must be completed to begin MEPA Review of a NPC in accordance with the provisions of the Massachusetts Environmental Policy Act and its implementing regulations (see 301 CMR 11.10(1)).

EEA # 16190		
Project Name: Tisbury Marine Terminal		
Street Address: 190 Beach Road		
Municipality: Tisbury (Vineyard Haven)	Watershed: Vineyard Haven Harbor	
Universal Transverse Mercator Coordinates: 4590533.90 N 366853.83 E	Latitude: 41.455352	Longitude: -70.594156
Estimated commencement date: Fall 2021	Estimated completion date: Winter 2022	
Project Type: Marine Terminal	Status of project design: 70	%complete
Proponent: Tisbury Marine Terminal, LLC		
Street Address: 190 Beach Road		
Municipality: Tisbury (Vineyard Haven)	State: MA	Zip Code: 02568
Name of Contact Person: Susan Nilson		
Firm/Agency: Foth, Infrastructure & Environment, LLC	Street Address: 15 Creek Road	
Municipality: Marion	State: MA	Zip Code: 02738
Phone: 508-762-0764	Fax:	E-mail: Susan.Nilson@Foth.com

With this Notice of Project Change, are you requesting:

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

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

11.03(3)(b)(1)[a]; 11.03(3)(b)(1)[e]; 11.03(3)(b)(1)[f]; 11.03(3)(b)(6)

Which State Agency Permits will the project require?

Chapter 91 License from DEP Waterways; 401 Water Quality Certification from DEP; Concurrence of Consistency from Massachusetts Office of Coastal Zone Management

Identify any financial assistance or land transfer from an Agency of the Commonwealth, including the Agency name and the amount of funding or land area in acres: Not Applicable

PROJECT INFORMATION

In 25 words or less, what is the project change? The project change involves . . .
The project change involves removal of the support building, removal of the diagonal bulkhead along the shoreline, pier modifications, removal of a barge ramp, and removal of seaward piles for barge ramps. See additional description in Attachment A.

Date of publication of availability of the ENF in the Environmental Monitor: (Date:)

Was an EIR required? Yes No; if yes,
was a Draft EIR filed? Yes (Date:) No
was a Final EIR filed? Yes (Date:) No
was a Single EIR filed? Yes (Date:) No

Have other NPCs been filed? Yes (Date(s):) No

If this is a NPC solely for lapse of time (see 301 CMR 11.10(2)) proceed directly to **ATTACHMENTS & SIGNATURES**.

PERMITS / FINANCIAL ASSISTANCE / LAND TRANSFER

List or describe all new or modified state permits, financial assistance, or land transfers not previously reviewed: **dd w/ list of State Agency Actions (e.g., Agency Project, Financial Assistance, Land Transfer, List of Permits)**

There are no new permits to be reviewed at this time. There is no financial assistance or land transfer involved with this project.

Are you requesting a finding that this project change is insignificant? A change in a Project is ordinarily insignificant if it results solely in an increase in square footage, linear footage, height, depth or other relevant measures of the physical dimensions of the Project of less than 10% over estimates previously reviewed, provided the increase does not meet or exceed any review thresholds. A change in a Project is also ordinarily insignificant if it results solely in an increase in impacts of less than 25% of the level specified in any review threshold, provided that cumulative impacts of the Project do not meet or exceed any review thresholds that were not previously met or exceeded. (see 301 CMR 11.10(6)) Yes No; if yes, provide an explanation of this request in the Project Change Description below.

FOR PROJECTS SUBJECT TO AN EIR

If the project requires the submission of an EIR, are you requesting that a Scope in a previously issued Certificate be rescinded?

Yes No; if yes, provide an explanation of this request_____.

If the project requires the submission of an EIR, are you requesting a change to a Scope in a previously issued Certificate?

Yes No; if yes, provide an explanation of this request_____.

SUMMARY OF PROJECT CHANGE PARAMETERS AND IMPACTS

Summary of Project Size & Environmental Impacts	Previously reviewed	Net Change	Currently Proposed
LAND			
Total site acreage	1.4 acres	0	1.4 acres
Acres of land altered	1.0 acres	0.14 acres	1.14 acres
Acres of impervious area	0.36 acres	-0.23 acres	0.13 acres (existing)
Square feet of bordering vegetated wetlands alteration	N/A	N/A	N/A
Square feet of other wetland alteration	71,114 SF	1,838 SF	72,952 SF
Acres of non-water dependent use of tidelands or waterways	0	0	0
STRUCTURES			
Gross square footage	15,811 SF	-10,111 SF	5,700 SF (existing)
Number of housing units	N/A	N/A	N/A
Maximum height (in feet)	36 FT	-16 FT	20 FT (existing)
TRANSPORTATION			
Vehicle trips per day	N/A	N/A	N/A
Parking spaces	N/A	N/A	N/A
WATER/WASTEWATER			
Gallons/day (GPD) of water use	N/A	N/A	N/A
GPD water withdrawal	N/A	N/A	N/A
GPD wastewater generation/ treatment	N/A	N/A	N/A
Length of water/sewer mains (in miles)	N/A	N/A	N/A

Does the project change involve any new or modified:

1. conversion of public parkland or other Article 97 public natural resources to any purpose not in accordance with Article 97? Yes No

2. release of any conservation restriction, preservation restriction, agricultural preservation restriction, or watershed preservation restriction? Yes No

3. impacts on Rare Species? Yes No

4. demolition of all or part of any structure, site or district listed in the State Register of Historic Place or the inventory of Historic and Archaeological Assets of the Commonwealth? Yes No

5. impact upon an Area of Critical Environmental Concern? Yes No

If you answered 'Yes' to any of these 5 questions, explain below:

The proposed project includes a slight increase of Dredge area impact to area delineated as habitat for endangered and threatened species.

PROJECT CHANGE DESCRIPTION (attach additional pages as necessary). The project change description should include:

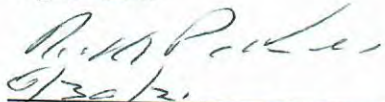
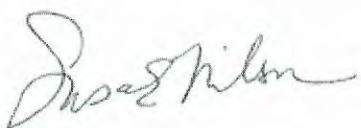
- (a) a brief description of the project as most recently reviewed
- (b) a description of material changes to the project as previously reviewed,
- (c) if applicable, the significance of the proposed changes, with specific reference to the factors listed 301 CMR 11.10(6), and
- (d) measures that the project is taking to avoid damage to the environment or to minimize and mitigate unavoidable environmental impacts. If the change will involve modification of any previously issued Section 61 Finding, include a draft of the modified Section 61 Finding (or it will be required in a Supplemental EIR).

ATTACHMENTS & SIGNATURES

Attachments:

1. Secretary's most recent Certificate on this project
2. Plan showing most recent previously-reviewed proposed build condition
3. Plan showing currently proposed build condition
4. Original U.S.G.S. map or good quality color copy (8-1/2 x 11 inches or larger) indicating the project location and boundaries
5. List of all agencies and persons to whom the proponent circulated the NPC, in accordance with 301 CMR 11.10(7)

Signatures:

	06/30/21	
Date	Date	Date
Signature of Responsible Officer or Proponent	Signature of person preparing NPC (if different from above)	Signature of person preparing NPC (if different from above)

<u>Mr. Ralph M. Packer</u>	<u>Susan Nilson</u>
Name (print or type)	Name (print or type)
<u>Tisbury Marine Terminal, LLC</u>	<u>Foth Infrastructure & Environment, LLC</u>
Firm/Agency	Firm/Agency
<u>190 Beach Road</u>	<u>15 Creek Road</u>
Street	Street
<u>Tisbury (Vineyard Haven), MA 02568</u>	<u>Marion, MA 02738</u>
Municipality/State/Zip	Municipality/State/Zip
<u>508-693-0900</u>	<u>508-762-0764</u>
Phone	Phone



TABLE OF ATTACHMENTS

ATTACHMENT A	PROJECT NARRATIVE
ATTACHMENT B	CERTIFICATE OF THE SECRETARY
ATTACHMENT C	PREVIOUSLY REVIEWED PROJECT PLAN SET (April 15, 2020)
ATTACHMENT D	PROPOSED PROJECT PLAN SET (June 30, 2021)
ATTACHMENT E	U.S.G.S.
ATTACHMENT F	CIRCULATION LIST



ATTACHMENT A
PROJECT NARRATIVE



**NOTICE OF PROJECT CHANGE
PROJECT NARRATIVE AND ALTERNATIVES
TISBURY MARINE TERMINAL
TOWN OF TISBURY, MA**

I. PROJECT INTRODUCTION

The Tisbury Marine Terminal, LLC (TMT) has previously proposed a project to maintain and improve existing marine infrastructure and construct an Operations and Maintenance Facility (O&M) that can serve as a hub for offshore wind at 190 Beach Road, Tisbury MA (subject property). The subject property is located in Vineyard Haven Harbor (**Attachment E**) and currently is utilized for the receipt/transfer of materials, cargo and bulk, and storage. The marine terminal currently accommodates a variety of land and water based equipment, vessels and barges, and the previous MEPA Certificate of the Secretary EEA No. 16190 included additional barge ramps, berthing areas, a marine support building and pile supported pier for additional storage and parking for the O&M facility.

The yard at TMT has been in operation since the late 1800s and provides critical and essential services for the entire island of Martha's Vineyard (MV). The proposed change in the design of the O&M facility will have a reduction in area and impacts to coastal resources while still providing for a safe accessible berthing area for wind farm support vessels into the future.

The primary goals/objectives of the proposed project remain as presented in the original ENF:

- Create a centralized control facility that has the unique ability to provide operational and maintenance services for offshore wind farms;
- Reduce global green-house gases by providing O&M services required to support offshore wind farms;
- Economic growth and job creation on Martha's Vineyard;
- Maintain and improve TMT marine infrastructure; and
- Enhanced public access to the shoreline while maintaining the working waterfront.

II. MOST RECENTLY REVIEWED PROJECT (Plans dated April 15, 2020)

The most recently reviewed project included measures to update and improve the existing TMT facility and additional structures to allow for wind farm vessel and personnel support. The updates and improvements to the existing facilities included replacement & realignment of the solid fill pier, replacement of the existing barge ramp, two (2) additional barge ramps, dredging the existing berthing areas, oversheeting of the existing bulkhead, six (6) dolphin piles, and leveling the fill grade at the site.

The recently reviewed project included expanding the existing facility to include an O&M facility to support offshore wind on the northeast side of the property. The proposed O&M facility included adding three (3) berthing areas to accommodate offshore wind support vessels, which would require improvement dredging to appropriate depths for the vessels. The design of the



berthing areas included a bulkhead extending from the existing solid-filled pier to the east/northeast to reduce dredging in the berthing areas, a steel sheet pile bulkhead fender system along the three (3) berthing areas, a floating dock supported by five (5) piles dividing two (2) smaller berthing areas, three dolphin pile clusters to separate the smaller berthing area from the larger, and a steel sheet pile wave fence bordering the northeast side of the berthing areas. The berthing areas included improvement dredging to appropriate depths to accommodate crew and equipment vessels to support the offshore wind farm. In addition to the berthing areas a pile-supported pier was proposed to the southeast of the bulkhead fender system with a 30' wide concrete deck section for high capacity live loads just behind the bulkhead fender system, and a timber and/or concrete deck for material storage and personnel parking on the remainder of the pier. A bulkhead was proposed along the landward side of the pier deck to support the deck and the landward fill. A marine support building and access road was proposed just landward of this bulkhead to support the O&M facility.

III. CHANGES TO THE RECENTLY REVIEWED PROJECT (Revised Plans dated June 29, 2021)

The changes to the recently reviewed project are described below in the property sections of the existing TMT Facility, Offshore Wind O&M Facility, and the Public Access area. The recently reviewed project plans can be reviewed in Attachment C and the proposed project plans can be found in Attachment D.

i. Facility Site Work

TMT Facility Operations (Southern Section) The recently reviewed project included three (3) barge ramps extending seaward of the sheetpile bulkhead on the TMT Terminal side of the property. The changes to the TMT Facility Operations include removal of the third barge ramp, designing the proposed barge ramps to the landward side of the steel sheet pile bulkhead, and removal of the three (3) timber pile dolphins on the southwest side of the berthing area and three (3) timber piles along the northern side of the TMT facility. The oversheeting of the steel bulkhead, realigning and filling of the solid fill wharf, proposed fill to level site to 6.0' NAVD88, and maintenance dredging is not changing in the proposed project.

Table 1 below presents the change in impact area of the TMT Facility Operations in comparison to the most recently reviewed project.



Table 1: Summary of Changes for TMT Facility Operations Area

	Recently Reviewed Project	Change	Currently Proposed Project
TMT Dolphin Piles	45 SF	0 SF	0 SF
36" Dia Barge Ramp Piles	28 SF	-28 SF	0 SF
20' x 40' Seaward Barge Ramps (2 ramps)	1,600 SF	-1,600 SF	0 SF
Level Landward Site Grade to +6.0' NAVD88	30,164 SF	16,653 SF	46,817 SF
Dredge to EL -14' NAVD88 +1' O.D.	30,144 SF 5,922 CY	392 SF 99 CY	30,536 SF 6,020 CY

O&M Facility (Northern Section) The changes to the recently reviewed project within the proposed O&M Facility area include changes to the dredge area, pile-supported pier, marine support building, and access road. The O&M marine support building has been removed from the proposed project due to a change in operational constraints of the proposed project site. The removal of the support building from the site also included removing the access roadway along the existing grade and allowed for changes to site access.

The O&M facility and dredge footprint was reduced in area and shifted approximately 5 feet to the north. The proposed site access is through a ramp from Beach Road within the pile-supported pier. With the change of access and removal of the O&M marine support building, the pier for the O&M facility was redesigned as a rectangular pile-supported pier to optimize function and usability to meet the project needs. The proposed pier is a steel pipe pile-supported concrete or timber deck with a deck elevation of 8.0 FT NAVD88, which was elevated an additional 2 feet to accommodate projected sea level rise (SLR). The proposed pier is approximately 38,821 SF supported by 204 steel pipe piles. This pier design change reduces the access road impact to LSCSF and Coastal Beach. The construction of the pier will include temporary impact to the Coastal Beach to construct the pier deck. The sediments in the area of the beams will be excavated to approximately 3.0 FT NAVD88 and stockpiled to allow for placement of the support beams. Once placement is complete, the stockpiled sediment will be replaced to pre-construction conditions around the beams.

The bulkhead from the TMT Facility northern barge ramp to the intersection of TMT Facility and O&M Facility operations will not change, the bulkhead landward return will extend at a 6.0 FT elevation along the intersection of the facilities to serve as the interface between the pile-supported pier and the landside stone revetment. Installation of three (3) 36" pipe pile mooring dolphins along the southern boundary of the O&M facility to replace previously proposed timber pile dolphins. The diagonal bulkhead along



the Coastal Beach has been removed from the design. The existing riprap along the Coastal Beach will remain and stones will be reset around the proposed access ramp apron. The revetment located along the Coastal Beach was previously permitted. The proposed project includes resetting stones in the revetment to support the landward area.

The sheetpile wall and fender system, wave fence, gangway, and float within the berthing area of the O&M facility have not changed within the proposed reconfiguration zone. The dredge depth did not change, and remains at -18.39 FT NAVD88 with a 1 FT allowable overdredge depth. The dolphins between the small and large berthing area in the recently reviewed project have not changed.

Table 2 below presents the change in impact area of the O&M Facility Operations in comparison to the most recently reviewed project.

Table 2: Summary of Changes for O&M Facility Operations Area

	Recently Reviewed Project	Change	Currently Proposed Project
O&M Bulkhead with Fender System	190 LF 7.5 SF	-4 LF -0.2 SF	186 LF 7.3 SF
36" Dia Mooring Piles (3)	0 SF	21 SF	21 SF
O&M Bulkhead Landward Return (Recently Reviewed Diagonal Bulkhead)	283 LF 12 SF	-182 LF -8 SF	101 LF 4 SF
O&M Pile Supported Pier with Concrete or Timber Deck to +8.0' – DECK AREA	31,468 SF	7,353 SF	38,821 SF
O&M Pile Supported Pier with Concrete or Timber Deck to +8.0' – PILE AREA	235 SF	210 SF	445 SF
Reset Revetment Stones	N/A	914 SF	914 SF
O&M Support Building – PILES	136 SF	-136 SF	0 SF
Dredge to EL. -18.39 + 1' O.D.	42,609 SF 14,759 CY	-1,253 SF -830 CY	41,356 SF 13,929 CY



ii. Public Access

The recently reviewed project included a pile supported public lookout located on the Town of Tisbury property east of the O&M Facility, and connected to the Beach Road crosswalk by a 10' wide boardwalk. This public lookout landing allows for public access along the beach and remains in the proposed project with the beach nourishment component.

Table 3 below presents the change in impact area of the Public Access in comparison to the most recently reviewed project.

Table 3: Summary of Changes for Public Access

	Recently Reviewed Project	Change	Currently Proposed Project
Public Lookout Access Boardwalk - PILES	0 SF	13 SF	13 SF
Public Lookout Access Platform Timber Stairs	0 SF	70 SF	70 SF

IV. AVOID, MINIMIZE AND MITIGATE IMPACTS

The proposed changes to the O&M facility reduce the overall footprint within Coastal resource areas from the previously proposed, recently reviewed project. The previously reviewed project and currently proposed project included impact in the following Coastal Resource areas: Coastal Beach, Coastal Bank, Land Subject to Coastal Storm Flowage, Land Under the Ocean, Coastal Dune, and Habitat for endangered and threatened species under Natural Heritage Endangered Species Program (NHESP). The changes minimize the impacts to Coastal Beach, Coastal Dune, and Land Under the Ocean resource areas while reaching the project goals of the TMT and O&M facilities to serve offshore wind. Summary of the changes to the resource area impacts are shown in the tables below.



Table 4: Summary of Resource Area Impacts within Changes to TMT Facility Operations Area

	Coastal Beach	Land Under Ocean	Coastal Dune	LSCSF	Land Containing Shellfish	NHESP
TMT Bulkhead (including Return to O&M)	94 LF 3.7 SF	3 LF .1 SF	4 .2	98 LF 3.9 SF	101 LF 4 SF	0 0
Sediment Fill on TMT Lot to El. +6 ft NAVD88	3,436 SF	0	43,380 SF	46,816 SF	26,139 SF	0
TMT Facility Dredging (-14' NAVD88 + 1' OD)	2,352 SF 1,419 CY	30,536 SF 4,601 CY	0 0	2,352 SF 1,419 CY	32,888 SF 6,020 CY	0 SF
	*The solid-filled pier is being reduced in overall size by 252 SF which is within Land Under Ocean. The area will be dredged to -14' NAVD88 where being removed, then fill placed to top of solid-filled pier elevation, +6' NAVD88.					



Table 5: Summary of Resource Area Impacts within Changes to O&M Facility Operations Area

	Coastal Beach	Land Under Ocean	Coastal Dune	LSCSF	Land Containing Shellfish	NHESP
Offshore Wind O&M Bulkhead along Berth Area	0 LF 0 SF	186 LF 9.9 SF	0 0	0 LF 0 SF	186 LF 9.9 SF	0 0
Offshore Wind O&M – Wave Fence	0 0	203 LF 90 SF	0 0	0 0	203 LF 90 SF	155 LF 67 SF
Timber O&M Pile-Supported Deck – PILES	131 SF	266 SF	48 SF	179 SF	443 SF	0
O&M Dredging (-18.4' NAVD88 + 1' OD)	87 SF 45 CY	41,269 SF 13,884 CY	0 0	87 SF 45 CY	41,356 SF 13,929 CY	10,803 SF 2,816 CY

Table 6: Summary of Resource Area Impacts within Changes to Public Access Area

	Coastal Beach	Land Under Ocean	Coastal Dune	LSCSF	Land Containing Shellfish	NHESP
Public Lookout Boardwalk and Lookout – PILES	21 SF	0	3	24 SF	24 SF	0
10' x 7' Timber Stairs	70 SF	0	0	70 SF	70 SF	0

There will be sediment and erosion control features in place throughout construction to minimize and potentially avoid impact of sediment to areas outside of the Work site. The project team will work with the state agencies on the appropriate mitigation, and will follow standard construction best management practices.



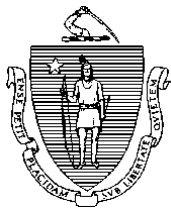
V. REFERENCE TO 301 CMR 11.10(1)

The proposed work is being submitted under a Notice of Project Change in reference to 301 CMR 11.10(1). This Notice of Project Change includes changes made to the proposed project based on comments from local, state, and federal agencies areas as well as changes in site operational requirements. The changes may be considered insignificant as they include removal of several proposed structures (i.e. barge ramp, marine support building, and bulkhead), modification to length and area of bulkhead and pile supported pier, and the increase in height of the pile supported pier deck to better address sea level rise and resiliency. The proposed changes reduce the overall impacts to wetland resource areas, while maintaining the project goals. The local, state and federal agencies have not taken final action on the project and the proposed modifications will be submitted to each agency for their consideration during their review process.



ATTACHMENT B

CERTIFICATE OF THE SECRETARY



The Commonwealth of Massachusetts
Executive Office of Energy and Environmental Affairs
100 Cambridge Street, Suite 900
Boston, MA 02114

Charles D. Baker
GOVERNOR

Karyn E. Polito
LIEUTENANT GOVERNOR

Kathleen A. Theoharides
SECRETARY

Tel: (617) 626-1000
Fax: (617) 626-1081
<http://www.mass.gov/eea>

May 29, 2020

CERTIFICATE OF THE SECRETARY OF ENERGY AND ENVIRONMENTAL AFFAIRS
ON THE
ENVIRONMENTAL NOTIFICATION FORM

PROJECT NAME : Tisbury Marine Terminal
PROJECT MUNICIPALITY : Tisbury
PROJECT WATERSHED : Islands
EEA NUMBER : 16190
PROJECT PROPONENT : Tisbury Marine Terminal, LLC
DATE NOTICED IN MONITOR : April 22, 2020

Pursuant to the Massachusetts Environmental Policy Act (MEPA; M.G. L. c. 30, ss. 61-62I) and Section 11.06 of the MEPA regulations (301 CMR 11.00), I hereby determine that this project **does not require** an Environmental Impact Report (EIR). However, as described below, this Certificate identifies concerns raised by State Agencies that should be addressed during the permitting process. Comments from State Agencies also identify additional measures that could be incorporated into the design to reduce project impacts and increase the resiliency of the project. I expect that the Proponent will consider these measures as the project design progresses.

Project Description

As described in the Environmental Notification Form (ENF), the project consists of improvements to and expansion of an existing marine industrial site to improve existing marine industrial activities as well as accommodate Operations and Maintenance (O&M) activities for offshore wind projects. Improvements to the existing Tisbury Marine Terminal (TMT) operations will occur on the southern section of the site. The proposed construction of an O&M support building and related infrastructure for offshore wind will be located in the northern section of the project site. The expansion on the north side will include the construction of three deep water berthing areas to accommodate

berthing of O&M crew transfer vessels (CTV) and service accommodation transfer vessels (SATV). The project includes the following specific components:

- **Replacement and realignment of an existing solid fill pier:** The existing 3,552 square foot (sf) solid-fill pier will be replaced with a new 3,330 sf solid fill pier with concrete deck and steel sheet-pile bulkhead. The new structure will be realigned slightly from its existing location so that it will be perpendicular to the shoreline.
- **Improvements to barge access berthing area:** The existing TMT barge ramp will be replaced and two new barge ramps will be constructed. Each ramp will be 40 feet long 20 feet wide (800 SF each). The ramps will be located largely landward of the bulkhead, each surrounded by a concrete perimeter wall, but portions will also extend over the water with support/guide piles. The replacement and two new steel barge ramps will allow for increased efficiencies and volume of material transfer for TMT operations by providing for simultaneous loading and unloading operations.
- **Steel solid fill bulkhead improvements and expansion:** The existing 209 linear foot (lf) bulkhead will be reinforced with new steel sheet piles to be installed seaward of the bulkhead. The solid fill bulkhead will be extended approximately 70 lf to east/northeast of the solid fill pier to accommodate an additional barge ramp as described above. The solid fill bulkhead extension includes a 35-lf return and then travels along the shoreline approximately 283 lf to Beach Road.
- **Creation of three O&M berthing areas and operations support deck:** Three deep water berths will be constructed to accommodate O&M vessels. The berths will be bounded on the southeastern end by an approximately 185 ft long by 35 ft wide pile supported bulkhead. This bulkhead includes 80 lf of underwater “environmental windows,” which are constructed by keeping the top of sheets just above the existing ocean floor on the south side of the bulkhead (the north side ocean floor will be dredged) resulting in openings that provide water and sediment circulation. This bulkhead is intended to minimize intertidal dredging that would otherwise be required through the dredging of side slopes needed to create the berths and to minimize the frequency of required maintenance dredging within the berthing areas. Two of the berths will be approximately 57 ft wide and the remaining berth will be approximately 70 feet wide. A floating dock (1,704 sf) supported by five steel piles will provide access to the vessels and act as a wave attenuator between berthing areas as it will separate the two 57-foot wide berthing areas. Three dolphin pile clusters will be installed to separate the smaller berthing area from the larger berthing area.
- **Construction of O&M support deck:** A 30,577 sf support deck will tie into the bulkhead as described above. The deck will include and approximately 6,510 sf concrete deck immediately adjacent to the berthing areas which will be supported by steel pipe piles. The deck will enable this area of the pier to service high capacity live loads of up to 700 pounds per square foot (PSF) and allow for a crawler crane and other offshore wind support equipment and materials to be loaded/offloaded at this location. The concrete deck will also support a 3,000-gallon fuel tank so that vessels can refuel on site. The remaining section (24,067 sf) of the pile-supported operations deck will be utilized for storage of materials and personnel parking and consist of timber decking which will support up to a maximum live load capacity of 250 PSF. This portion of the deck will be supported by 156 12-inch diameter greenheart timber piles. The new operations support

deck (including both concrete and timber deck sections) will have a top finish elevation of 6.0 feet NAVD88.

- **Construction of wave fence:** A steel sheet pile wave fence will extend approximately 202 lf into the harbor from the face of the pile supported bulkhead and provide protection to the berthing area from storm-generated waves during high northeast winds and coastal storm events. The wave fence will have a top elevation of 10 feet NAVD88 and help reduce reflected/refracted waves by utilizing pile-supported sheet piles with deep connecting cavities and framed with a timber cap and fender piles. A 6-foot wide catwalk to provide access to the vessels will be constructed along the full length of the wave fence to provide crew access.
- **Construction of an O&M support building and access way:** A 10,111 sf marine support building is proposed to provide material storage for components required for O&M operations as well as crew facilities and offices. Because of the building's location on coastal dune, it will be raised on 136 piles to an elevation of 11ft NAVD88. The proposed internal access way located adjacent to the building will allow for access to/from Beach Road for deliveries of materials to the building, which will contain several loading bay areas.
- **Dredging:** Improvement dredging is proposed generally within the O&M berthing area and expanded TMT operations area to an elevation of -18.4 feet NAVD88 with a 1-foot allowable over dredge to -19.4 ft NAVD88. An estimated 14,759 cubic yards (cy) of sediment is anticipated to be dredged from an approximately 42,609 sf area, with a typical 3:1 (horizontal:vertical) side slope. Approximately 5,923 cy of maintenance dredging is proposed within an approximately 28,141 sf area.
- **Public Access:** The project includes the construction of an 800-sf public deck which will extend off of Beach Road into Vineyard Harbor and will provide pedestrians access to the waterfront.

Project Site

The existing 1.4-acre marine terminal is located on Vineyard Haven Harbor and provides critical services to the entire island of Martha's Vineyard including receiving fuel, building materials and other cargo. The site has been in operation since the late 1800s. The project site consists of maintained gravel surfaces extending to the edge of the existing solid fill pier and northerly to a sandy coastal beach. The current TMT operations are located within a Waterfront/Commercial zoned district which allows for industrial uses to occur along the waterfront.

According to the Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Map (FIRM) 25007C0103J and 25007C0104J effective July 20, 2016, the entire project area is located within a designated Velocity Zone (VE Zone) with a Base Flood Elevation (BFE) of El. 13 ft NAVD88 and AE Zone with a BFE of 11 ft NAVD88.

The project site includes a variety of coastal resource areas including coastal beach, coastal dune, rocky intertidal shore, land under the ocean (LUO), barrier beach, land containing shellfish, land subject to coastal storm flowage (LSCSF), and is also within the 100-foot buffer zone to these resource areas. Other regulated areas within the proposed project area include historically mapped eelgrass and Natural Heritage and Endangered Species Program (NHESP) Priority and Estimated Habitat for rare species.

The proposed O&M berthing area and wave fence extends into a portion of Priority Habitat. Nearshore waters along Beach Road to the east of the project site have been aerially mapped by the Massachusetts Department of Environmental Protection (MassDEP) as eel grass (*Zostera marina*) habitat. Eel grass meadows provide one of the most productive habitats for numerous marine species and are designated “special aquatic sites” under the Federal Clean Water Act 404(b)(1) guidelines. The footprint for the in-water component of the project is within and adjacent to mapped shellfish habitat for quahog (*Mercenaria mercenaria*), bay scallop (*Argopecten irradians*), and blue mussel (*Mytilus edulis*). This area is also in the juvenile cod (*Gadus morhua*) Habitat Area of Potential Concern (HAPC) designated by the New England Fishery Management Council (2017). Vineyard Haven Harbor provides spawning habitat for winter flounder (*Pseudopleuronectes americanus*).

Environmental Impacts and Mitigation

As described in the ENF, the project will impact 68,466 sf of LUO; 5,656 sf of coastal beach, 34,638 sf of coastal dune, 76,342 sf of LCSF, and 40,294 sf of LSCSF.¹ The project involves dredging approximately 20,682 cy of sediment. The project will alter 1 acre of land and create 0.23 acres of new impervious area on the site (0.36 acres total).

Measures to avoid, minimize and mitigate damage to the environment include sediment and erosion control measures during the construction period and adherence to Time of Year (TOY) restrictions. The ENF also indicates that site selection and design choices were made in a manner that best meets project goals while minimizing environmental impacts.

Jurisdiction and Permitting

This project is subject to MEPA review and preparation of an ENF pursuant to 301 CMR 11.03(3)(b)(6) 301 CMR 11.03(3)(b)(1)(a), 11.03(3)(b)(1)(e), 11.03(3)(b)(1)(f); 11.03(3)(b)(3) and 11.03(3)(b)(6) because it requires a State Agency Action and involves the alteration of a coastal dune, barrier beach or coastal bank; involves new fill or structure or expansion of existing fill or structure in a velocity zone or regulatory floodway; alteration of 1/2 or more acres of any other wetlands; dredging of 10,000 or more cy of material; and construction, reconstruction or expansion of a solid fill structure of 1,000 or more sf base area. The project requires a 401 Water Quality Certification (WQC) and Chapter 91 (c.91) License from MassDEP.

The project requires an Individual Permit from the U.S. Army Corps of Engineers (ACOE) and Federal Consistency Review by the Office of Coastal Zone Management (CZM). The project requires an Order of Conditions from the Tisbury Conservation Commission, or in the case of an appeal, a Superseding Order of Conditions from MassDEP. The project also requires Development of Regional Impact Review by the Martha’s Vineyard Commission.

The project is not receiving Financial Assistance from the Commonwealth. Therefore, MEPA jurisdiction for any future review would be limited to those aspects of the project that are within the subject matter of any required or potentially required Agency Actions and that may cause Damage to the Environment, as defined in the MEPA regulations.

¹ Based on revised impact information provided in the supplemental information distributed on 05/08/2020.

Review of the ENF

The ENF provided a description of existing and proposed conditions, preliminary project plans, and an alternatives analysis, and identified measures to avoid, minimize and mitigate environmental impacts. The ENF included the results of a sediment transport analysis which was undertaken to analyze the impact of the proposed bulkhead structures and wave fence on the adjacent coastal resources. The comment period was extended by one week and closed on May 12, 2020 to facilitate the review of supplemental information that was submitted to the distribution on May 8, 2020. The supplemental information identified measures that would be taken to increase the resiliency of the proposed infrastructure, identified the presence of coastal dune on the project site, and disclosed impacts to coastal dune not originally identified in the ENF. I received a number of letters of support including from the Town of Tisbury's Board of Selectmen and Senator Julian Cyr and Representative Dylan Fernandes. Comments from State Agencies identify additional analysis that must be provided during the permitting process including how the project will meet the performance standards for impacts to coastal beach and coastal dune.

Alternatives Analysis

The ENF included an alternatives analysis which considered alternative site locations and designs as well as dredge disposal alternatives. As described in the ENF, A No-Build Alternative was dismissed because it would not achieve the project goals of providing an on-island support for offshore wind O&M activities and the associated jobs and economic growth that are likely to result from the project. O&M infrastructure on Martha's Vineyard would provide a much closer support base than mainland locations to off-shore wind farms. Additionally, as described in the ENF, the No-Build alternative would result in the continued deterioration of infrastructure to support existing industrial operations and would not improve the efficiency of operations, potentially compromising existing loading/off-loading services critical to island operations.

The ENF considered alternative on-island locations including within the harbors of Oak Bluffs, Edgartown and Menemsha. As described in the ENF, these harbors do not have available navigable working waterfront space or the potential for the development/expansion of existing marine terminal operations such as the TMT. The ENF also considered the use of a floating dock system to support O&M activities for daily transfer of crew and materials as a way to reduce impacts to coastal wetland resources. However, this alternative was dismissed because of the exposure to storm-driven waves from the northeast. The Proponent determined that it is not safe, practical or feasible to use floating docks to adequately station and operate a floating O&M facility at the project site or any other island location. The ENF indicated that locating the O&M infrastructure at the TMT is the Preferred Alternative because it is an existing serviceable marine industrial property that can accommodate offshore wind support operations through improvements to existing infrastructure and expansion for construction of new infrastructure. The project site is in relatively close proximity to the proposed wind farms (approximately 30 nautical miles), and the TMT waterfront is located nearby the existing authorized federal 17-ft deep navigation channel. The proximity to safe, deep-water navigable channels is essential to supporting vessel excursions to/from the wind farms.

The alternatives analysis also considered four different structural alternatives for the preferred location at the TMT. Structural Alternative 1 consists of improvements to and re-purposing of the

existing TMT operations without expanding the marine terminal. This alternative includes improvements to the existing sheet pile bulkhead along the TMT shoreline; reconstruction/realignment of the existing solid-fill pier; and reconstruction of the existing barge ramp located southwest of the solid-fill pier. The proposed improvements would allow current operations to be performed with O&M needs being supported by the existing berthing area when available. However, this alternative would not fully meet the operational needs of the proposed O&M operations. Specifically, this alternative does not provide adequate serviceability/capacity to support the use/access needs of the O&M operations associated with offshore wind since the existing industrial shoreline area is continuously in use, and there are no vacant areas for berthing the CTV and SATV vessels concurrent with TMT barges. The O&M operations require the ability to function on an uninterrupted, daily basis. Interference from on-going daily island commerce at the TMT facility significantly reduces the viability of this alternative. Additionally, O&M operations will require a support building that will include office for personnel and warehouse space for storage equipment and materials. This alternative would result in the least amount of wetland resource impacts; however, it was dismissed because it would not meet the project goals due to the constraints of shared space for TMT operations and the O&M facility.

Structural Alternative 2 is consistent with all of the components included in the Preferred Alternative as described above; however, the proposed pile supported O&M operations deck would be replaced with a solid fill structure. A bulkhead would be constructed within the general footprint of the proposed deck. Structurally unsuitable soils would be removed from the area landward of the bulkhead. The unsuitable material excavated on-site would be removed and disposed of at an approved facility and replaced with structural backfill or suitable dredged sediment. Utilities, including the spill prevention and storm water systems, would be installed below finished grade to provide frost protection as well as sufficient cover from the proposed site loadings. This alternative would involve significant impacts to areas delineated as Land Under Ocean and Coastal Beach which include both sub-tidal and intertidal areas. Approximately 5,800 SF of Coastal Beach and 17,800 SF of Land Under Ocean resource areas will be adversely impacted by the solid fill in Alternative 2.

Structural Alternative 3 is similar to the Preferred Alternative but would reduce the number of O&M berthing spaces from three to one. This alternative would provide a new berthing space for existing TMT operations adjacent to the reconstructed solid fill pier. The berthing area adjacent to the reconstructed solid-fill pier will be utilized by TMT exclusively. The second berth will be situated adjacent to the proposed O&M operations deck and would be available to support offshore wind operations. The berthing area for the offshore wind vessels would need to be designed to accommodate the larger SATV and include a wave fence for protection against the storm events. Under this alternative, only one vessel can off load or load for the O&M facility operations. The single berthing area would be approximately 70 ft wide by 165 ft long as required to accommodate larger SATV vessels. The bulkhead extending from the TMT solid-fill pier will extend approximately 150 linear feet to the northeast to a wave fence.

The Preferred Alternative provides the required berthing areas for both existing TMT and new O&M offshore wind operations. A pile supported operations deck will significantly reduce impacts to coastal wetland resource areas when compared to a solid fill structure. As described above, the pile supported bulkhead extending from the solid-fill pier will extend approximately 185 linear feet to the northeast to a wave fence. The bulkhead includes 80 linear feet of “environmental windows,” which are constructed by keeping the top of the sheet piles just above the existing grade of the ground floor to the

south of the bulkhead (the north side will be dredged) resulting in openings that provide water circulation.

Wetlands, Waterways and Fisheries

The Tisbury Conservation Commission will review the project for its consistency with the Wetlands Protection Act (WPA) and implementing regulations (310 CMR 10.00). As noted above, the project will result in significant impacts to coastal wetland resources including Coastal Beach, Coastal Dune, LCSF, LSCSF and LUO. Comments from MassDEP indicate that additional information will need to be provided during the permitting process to demonstrate how the project will meet applicable performance standards for Coastal Beach and Coastal Dune.

The project, as proposed, will impact approximately 5,656 sf of Coastal Beach. The impacts are associated with the installation of multiple bulkheads, dredging, and construction of the proposed access road. The performance standards for coastal beach (310 CMR 10.27(3)) require that any project on a coastal beach 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 down drift coastal beach. The Proponent must demonstrate that the proposed work will not adversely impact the storm damage prevention and flood control function of the coastal beach. As noted above, the presence of coastal dune on the site was identified during the MEPA review process. As a result, the building design was revised to be a pile-supported structure instead of a solid foundation. The proposed project will impact an estimated 34,638 sf of coastal dune. These impacts are associated with the construction of an access road, filling required to grade the lot to el. 6 ft NAVD88, and construction of a pile supported O&M support building. The performance standards for coastal dune at 310 CMR 10.28(3) require that any alteration of, or structure on, a coastal dune shall not have an adverse effect on the coastal dune by: affecting the ability of waves to remove sand from the dune; disturbing the vegetative cover so as to destabilize the dune; causing any modification of the dune form that would increase the potential for storm or flood damage; or interfering with the landward or lateral movement of the dune. As described in MassDEP's comment letter, the dune has been used for industrial purposes for decades and therefore has minimal vegetative cover. However, during permitting, the Proponent must demonstrate that the proposed fill will be clean, granular sediment that can be moved by waves, and that the structure will not inhibit landward or lateral movement of the dune. The Proponent must also demonstrate that the proposed work will not adversely impact the storm damage prevention and flood control function of the coastal dune.

Comments from CZM note that the proposed operations support deck may interfere with the ability of the beach and dune to move and shift in response to tides, waves, and storms. The ability of these resource areas to slow down water as it moves across the site is important to providing storm damage protection and flood control to protect landward areas, including Beach Road, which is an important transportation link for the island. To reduce the impacts of the platform, the Proponent should consider elevating it a minimum of two feet above the existing dune grade to allow the beach and dune to provide the storm damage protection and flood control functions. Elevating the platform will also make it more resilient to coastal storms.

The project requires a c.91 License from MassDEP. As described in MassDEP's comment letter, MassDEP has determined that the Project which includes the reconstruction and continued use of the TMT for the transfer of fuel, bulk materials, cargo, etc. and a proposed O&M facility for offshore wind

projects would be classified as a water-dependent-industrial use pursuant to the Waterways Regulations at 310 CMR 9.12(2)(b). I refer the Proponent to comments from MassDEP which identify information that should be included with the c.91 License application including additional cross section views; detailed plans of the proposed marine support building which is partially located on historic filled tidelands; and section views of the barge loading ramps and public deck. The design and timing of the proposed work should be consistent with any TOY restriction as indicated by DMF which recommend that proposed in-water, silt-producing work should be conducted outside of the period between January 15 to May 31.

Comments from CZM recommend that in order to minimize impacts to coastal dune, any stairs or ramps should be pile-supported, without solid landing pads (e.g. concrete or pavement). Comments from CZM also indicate that the proposed accessway will impact existing vegetation in this area and will reduce the ability of the beach and dune areas to dissipate wave energy and provide storm damage protection and flood control to landward areas. During permitting, the Proponent should evaluate additional measures to reduce impacts of the accessway, including using existing access ways within the site and reducing the width of the proposed accessway.

The ENF did not include information on chemical testing or grain size analysis of the proposed dredge sediment. This information will be required during c. 91 and the 401 WQC permitting. The ENF did identify potential sediment management alternatives including on-site and off-site beneficial reuse, on-site fill or off-site disposal at an approved location.

Sediment Transport Analysis

As noted above, the ENF included a sediment transport analysis which provided an analysis of alterations to tidal circulation caused by the pile array and other structural elements (e.g. new bulkheads adjacent to O&M berthing area and wave fence), as well as changes to tidal and wave-induced sediment movement potentially caused by the proposed alterations. The analysis utilized the Delft3D modeling suite to provide detailed circulation and sediment transport information, including simulation of 'annualized' morphologic change (accretion and erosion patterns). The analysis included the following scenarios:

- Scenario 1: Existing Conditions
- Scenario 2: Full Bulkhead Structures and new solid fill pier location
- Scenario 3: Full Bulkhead Structures and new solid fill pier location with a revised bulkhead elevation to within 2 ft above existing sea bed grade (ranges between -5 ft and -7 ft NAVD88).
- Scenario 4: Full Bulkhead Structures and new solid fill pier location with a revised bulkhead elevation to within 2 ft above existing sea bed grade (ranges between -5 ft and -7 ft NAVD88) with a wave fence design allowing for a gap along the sea bed for circulation.
- Scenario 5: Full Bulkhead Structures and new solid fill pier location with a revised bulkhead elevation of -5 feet NAVD88 for 40 feet and -4 feet NAVD88 for an additional 40 feet. This is the Environmental Window Scenario and is identified as the preferred alternative for water circulation patterns and sediment transport patterns. Scenario 5 is the same as the Preferred Alternative.

As described in the sediment analysis report, wave-induced sediment transport along the beach system at the eastern extent of the TMT is minimal and structural alterations including construction of the proposed bulkhead and wave fence will have similar minimal effects on the stability and form of the overall beach system. The wave-induced sediment transport showed minimal change of sediment movement from the existing conditions to the Scenario 2 conditions. The modeling under scenario 3 showed greater changes from the existing conditions than Scenario 2 during strong flooding tide. The modeling showed increased flow velocities along both ends of the wave fence, less impact to water circulation in the berthing areas, and improved flow on the western side of the basin. There was not a significant change during the ebb tide. There is a difference from Scenario 2 to Scenario 3 with the lowering of the bulkhead leading to better circulation.

In Scenario 4, the gap between the sea floor and the bottom of the wave fence allows sediment and water to flow beneath the structure. The hydrodynamic model showed a slight increase in velocity near the northwestern end of the wave fence in flood tide, as seen in the previous scenario. There is some flow into the berthing areas, though not as much as the existing conditions. As in previous scenarios, there is not much difference from existing conditions during the ebb flow. The changes in sediment transport are similar to those in the previous scenarios with no movement 50' from the bulkhead and same change as the existing conditions.

Scenario 5 is similar to Scenario 3 with the addition of an opening in the bulkhead (environmental windows) allowing water flow through the bulkhead. Scenario 5 showed similar results to the previous scenarios with increased velocities around the northwest end of the wave fence during flood tide and similarly there is minimal difference to the existing conditions during ebb tide. Scenario 5 does significantly improve the circulation in the berthing areas in comparison to Scenario 2 (full structures). The hydrodynamic sediment transport was negligible in difference from Scenario 5 to existing conditions. The sediment transport changes were the same as seen in previous scenario modeling with no change within 50 feet of the bulkhead and beyond that the changes were similar to the existing conditions.

Comments from DMF note that the sediment transport analysis considered a wave attenuator design with a three-foot gap above the seafloor (Scenario 4). While the ENF reports that the model did not identify any "measurable" improvement in water circulation, DMF notes that the gap was estimated to increase wave energy under the attenuator and also increase the required dredging area relative to a design that extended to the seafloor. While a gap design may not have a large effect on circulation, it would benefit fisheries habitat by allowing organisms, particularly benthic fauna, to freely migrate between the project area and the adjacent habitat to the east of the project. A more detailed analysis that considers different gap heights would be beneficial as it may identify a height that could minimize wave energy and the need for additional dredging while still allowing for benthic habitat connectivity. If a continuous gap is not feasible, intermittent gaps similar to the proposed "environmental windows" for the bulkhead may provide some corridors for passage.

Comments from DMF also identify several additional alternatives that would reduce impacts from the project including shifting the project footprint seaward to potentially avoid the need for intertidal dredging. Design alternatives that would enhance marine habitat is also recommended. For cases where hard structures are necessary, alternative designs that promote colonization by native species (e.g., substrate for blue mussels) while still meeting project objectives would aid in limiting

negative impacts to marine habitat. For the proposed bulkhead landward of the new berthing spaces, the proposed “environmental windows” will increase water circulation and potentially light penetration at the edge of the deck. For the intertidal portion that is designed to be elevated above the substrate to limit infill of the dredged area, alternatives should be considered that still provide spacing between the deck and the bulkhead surface to allow additional light penetration under the deck.

Rare Species

As proposed, portions of the project will occur within Priority and Estimated Habitat for the Roseate Tern (*Sterna dougallii*) and Common Tern (*Sterna hirundo*), species state-listed as “Endangered” and “Special Concern”, respectively. These species are protected pursuant to the Massachusetts Endangered Species Act (M.G.L. c. 131A) and its implementing regulations (MESA, 321 CMR 10.00) as well as the Massachusetts Wetlands Protection Act and its implementing regulations (WPA, 310 CMR 10.37, 10.58(4)(b) and 10.59). The Roseate Tern is also listed as Endangered and protected pursuant to the U.S. Endangered Species Act (ESA, 50 CFR 17.11). The project will require a filing with NHESP for compliance with the Massachusetts Endangered Species Act (M.G.L. c. 131A) and its implementing regulations (MESA, 321 CMR 10.00). Based on the information contained within the ENF and in advance of a formal filing pursuant to the MESA, comments from NHESP indicate that the project is not anticipated to result in a prohibited Take of state-listed species or their habitats. As review is not complete, no alteration to the soil, surface, or vegetation and no work associated with the proposed project shall occur on the property until NHESP has made a final determination.

Climate Change

Governor Baker’s Executive Order 569: Establishing an Integrated Climate Change Strategy for the Commonwealth (EO 569; the Order) was issued on September 16, 2016. The Order recognizes the serious threat presented by climate change and direct Executive Branch agencies to develop and implement an integrated strategy that leverages state resources to combat climate change and prepare for its impacts. The Order seeks to ensure that Massachusetts will meet GHG emissions reduction limits established under the Global Warming Solution Act of 2008 (GWSA) and will work to prepare state government and cities and towns for the impacts of climate change. I note that the MEPA statute directs all State Agencies to consider reasonably foreseeable climate change impacts, including additional greenhouse gas emissions, and effects, such as predicted sea level rise, when issuing permits, licenses and other administrative approvals and decisions. M.G.L. c. 30, § 61.

Adaptation and Resiliency

As described in the ENF, the design life of the project is 50 years and the design of the bulkhead and pier expansion are based upon the current elevations of the existing site and Beach Road which range from 4 ft NAVD88 to 6 ft NAVD88. The Northeast Climate Science Center at the University of Massachusetts at Amherst has developed projections of sea level rise for Massachusetts. This data is available through the Climate Change Clearinghouse for the Commonwealth at www.resilientMA.org. According to the sea level rise projections for the Intermediate-High (IH) scenario the probabilistic projections for the next fifty years to 2070 is a sea level rise of 3.0 ft for nearest tidal stations in Nantucket, MA and Newport, RI. As described by the Proponent, the project design has considered sea level rise while maintaining a functional design for operations at the facility considering adjacent

property and road elevations. The structures will be built to withstand wave forces of a 50-year storm forces plus an additional 3.0 ft of additional surface load on the bulkhead structure. The existing site elevation generally ranges from 5 to 6 ft NAVD88. The site will be evenly graded to an elevation of 6 ft NAVD88 but will be able to accommodate future modifications to the site which may be made to raise the lot elevation an additional 3.0 ft to elevation 9.0 ft NAVD88.

The current 100-year storm BFE is 11 ft and 13 ft NAVD88, meaning all structures below these elevations (including the proposed O&M operations deck and associated bulkheads, berthing areas and other infrastructure) will be inundated under current conditions during a 100-yr storm event.

The proposed O&M marine support building will be located away from the in-water structures in a coastal dune. Although the State Building Code requires the top of the first floor to be one foot above the FEMA flood elevation, the FEMA flood elevation does not consider any future sea level rise. While the project design does locate the first floor of the O&M support building above the FEMA flood plain, the Proponent should consider incorporating sea level rise projections into final design and elevating the building further above the flood elevation to provide a factor of safety and improve resilience. The Proponent should coordinate with relevant agencies, such as MassDOT, on resiliency measures so that elevations of the building and surrounding roadways can be considered simultaneously. The project should be designed to enable future retrofits and upgrades that fully consider climate change impacts. I refer the Proponent to comments from CZM which identify additional design details that should be provided during permitting, including additional cross-sections and information to address how the building will be accessed from proposed grades. Comments from CZM also note that the existing conditions on the site include some beach grass and other vegetation. The proponent should develop a landscaping plan to incorporate as much native, salt-tolerant, deep-rooted vegetation on the site as possible to reduce erosion and dissipate flood waters moving across the site in coastal storms. Recommendations regarding plantings are available through CZM's *StormSmart Properties Fact Sheet #3: Planting Vegetation to Reduce Erosion and Storm Damage*.² Comments from CZM also express concern with the location of a 3,000-gallon fuel tank on the O&M support deck potentially located within the VE Zone. Subsequent correspondence with the Proponent indicates that the fuel tank will be located with the AE Zone and will comply with all applicable building code requirements and fire department regulations.³

Tisbury is a participant in the Commonwealth's Municipal Vulnerability Preparedness (MVP) program. The MVP program is a community-driven process to define natural and climate-related hazards, identify existing and future vulnerabilities and strengths of infrastructure, environmental resources and vulnerable populations, and develop, prioritize and implement specific actions the Town can take to reduce risk and build resilience. The Proponent should consult this plan as the design of the project is finalized.

Construction Period

Comments from the Massachusetts Board of Underwater Archaeological Resources (BUAR) indicate that a review of records indicate that no submerged archaeological resources are known to exist at the project site. BUAR notes that the area is generally archaeologically sensitive and unknown

² <https://www.mass.gov/service-details/stormsmart-properties-fact-sheet-3-planting-vegetation-to-reduce-erosion-and-storm>

³ Information provided by e-mail to the MEPA Office on 5/27/2020.

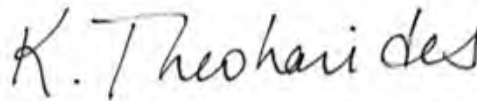
resources may be encountered during construction. If resources are encountered, the Proponent should consult with BUAR.

The project should utilize erosion control measures including turbidity curtains as necessary. All construction and demolition activities should be managed in accordance with applicable MassDEP’s regulations regarding Air Pollution Control (310 CMR 7.01, 7.09-7.10), and Solid Waste Facilities (310 CMR 16.00 and 310 CMR 19.00, including the waste ban provision at 310 CMR 19.017). The project should include measures to reduce construction period impacts (e.g., noise, dust, odor, solid waste management) and emissions of air pollutants from equipment, including anti-idling measures in accordance with the Air Quality regulations (310 CMR 7.11). I encourage the Proponent to require that its contractors use construction equipment with engines manufactured to Tier 4 federal emission standards, or select project contractors that have installed retrofit emissions control devices or vehicles that use alternative fuels to reduce emissions of volatile organic compounds (VOCs), carbon monoxide (CO) and particulate matter (PM) from diesel-powered equipment. Off-road vehicles are required to use ultra-low sulfur diesel fuel (ULSD). If oil and/or hazardous materials are found during construction, the Proponent should notify MassDEP in accordance with the Massachusetts Contingency Plan (310 CMR 40.00). All construction activities should be undertaken in compliance with the conditions of all State and local permits. I encourage the Proponent to reuse or recycle construction and demolition (C&D) debris to the maximum extent.

Conclusion

The ENF has sufficiently defined the nature and general elements of the project for the purposes of MEPA review. Based on review of the ENF and comments received, and in consultation with State Agencies, I have determined that no further MEPA review is required; however, significant outstanding issues must be addressed during permitting. Additional analysis of less impactful alternatives, sediment analysis, and analysis of potential project impacts will be required during the permitting processes. MassDEP has sufficient regulatory authority to address these issues and condition permits as necessary. I anticipate that the Proponent will address the concerns highlighted in this Certificate and comment letters as part of these processes. The Proponent should continue to engage with CZM, DMF, and MassDEP through the local and State permitting process to ensure that appropriate mitigation measures are developed to avoid, minimize and mitigate Damage to the Environment. I note that the Proponent may be required to file a Notice of Project Change (NPC) if there is a material change to the project that will increase environmental impacts prior to the completion of Agency Actions for the project.

May 29, 2020
Date



Kathleen A. Theoharides

Comments received:

05/02/2020 Gerald Green

05/04/2020 Penny Weinstein
05/05/2020 Town of Tisbury – Office of Selectmen
05/06/2020 Kate Warner
05/07/2020 Anne Berwick
05/09/2020 Julie Livingston
05/09/2020 Tom Solidini
05/11/2020 Michael Jacobs
05/11/2020 Ron Dagostino
05/11/2020 Sen. Julian Cyr and Rep. Dylan Fernandes
05/12/2020 Dan Seidman
05/12/2020 Dana Heffner
05/12/2020 Robert J. Hannemann
05/12/2020 Alan H. Strahler
05/18/2020 Board of Underwater Archaeological Resources (BUAR)
05/19/2020 Division of Marine Fisheries (DMF)
05/19/2020 Natural Heritage and Endangered Species Program (NHESP)
05/20/2020 Office of Coastal Zone Management (CZM)
05/20/2020 Massachusetts Department of Environmental Protection (MassDEP) Southeaster
Regional Office (SERO)

KAT/EFF/eff



ATTACHMENT C

PREVIOUSLY REVIEWED PROJECT PLAN SET

(April 15, 2020)