

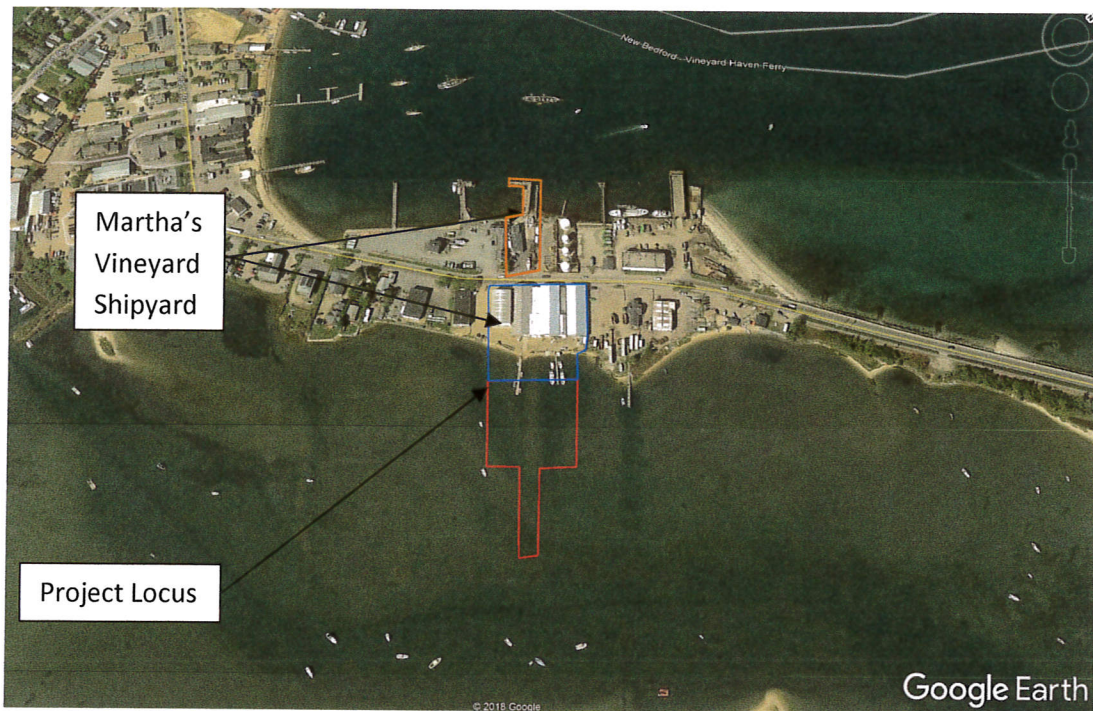
Project Narrative

I. Existing Property Description

Martha's Vineyard Shipyard is located at 159 and 173 along Beach Road in the Town of Tisbury, MA and has been owned by the Hale family for three generations since 1961. The Martha's Vineyard Shipyard Facility is composed of one parcel located on the north-west side of Beach Road (that provide access to Vineyard Haven) and two parcels located on the south-east side of Beach Road (that provide access to Lagoon Pond). The project site is limited to work proposed on the parcels located on the south-east side of Beach Road. The existing project site is currently developed with 4 warehouse buildings used for seasonal storage of vessels, two concrete boat ramps, a seasonal floating dock, fixed pier, a rip-rap (6-9" stone) armored slope along the shoreline, and dirt/gravel driveways and parking areas. Currently the use of the property is to seasonally launch and haul vessels, provide service (mechanical, cleaning etc.) to vessels, and store vessels during the off-season.



Aerial Image of Google Earth showing Vineyard Haven, Lagoon Pond, and the project locus.



Zoomed in aerial image from Google Earth showing the project locus and the properties owned by Martha's Vineyard Shipyard.

Martha's Vineyard Shipyard is one of the oldest businesses on Martha's Vineyard and has been operating since 1856. Since the Shipyard has been operating it has been essential to the working waterfront of Vineyard Haven. Over the years the Shipyard use has remained the same. The occupation of the property (configuration of buildings and structures) has been modified over time to adapt to the changing environment, changing marine industry, and maintain the working waterfront. In the past few decades the Shipyard has constructed a new warehouse building (smaller building in the south west edge of the property) to increase seasonal storage capabilities and removed and replaced their rail launch system with two concrete boat ramps. A pier was constructed and floating docks were installed to store vessels and improve boater access to Lagoon Pond.

Martha's Vineyard Shipyard is now one of the few remaining facilities with access to the waterfront that services public boaters in Martha's Vineyard. The Shipyard is currently facing issues with increasing rates of coastal flooding and limitations to waterfront access for the public. Coastal flooding due to storm surges and high astronomical tides has always been an issue for the Shipyard, but over the past decade the owners of the Shipyard have noticed the rate of coastal flooding has increased due to sea level rise. Coastal flooding can cause damage to the buildings, structures, and stored vessels on the property. Coastal flooding can also be a working hazard to employees. The Shipyard is currently limited in providing access to public boaters to Lagoon Pond because there are limited dock slips for vessel storage and limited public parking onsite due to the current occupation of the lot. For these reasons the owners of Martha's Vineyard Shipyard are proposing to make several new improvements to their existing facilities to adapt to climate change, improve the coastal resiliency against sea level rise, increase public boater access to Lagoon Pond, improve water quality and continue to serve its essential role to maintain the working waterfront.

II. Project Description

The proposed project is to modify the existing Shipyard facility located along and adjacent to Lagoon Pond to adapt to climate change, improve the coastal resiliency against sea level rise, provide improved access to the waterbody for boaters, and maintain the working waterfront. The proposed project will include several improvements to the shorefront area and portions of the property that are currently used as warehouse storage and parking.

Proposed Shorefront Improvements

Shorefront improvements include the following: installation of two piers/ ramps/ and floating dock systems, and two finger floats adjacent to the existing boat ramps; a zone of float reconfiguration; an offshore pile to mark the channel entrance and provide nesting habitat for Ospreys; and modest re-dredging (in a previously dredged area) around the area of the slips as well as the approach to the existing navigational channel. The proposed footprint for re-dredging includes the "boat slip basin" (area around the proposed floating docks), and the "approach channel" (50 foot wide channel connecting the boat slip basin to the existing channel through Lagoon Pond).

The proposed pier/ ramp/ floating dock systems are designed to berth approximately **48 small-craft vessels**. The total area of the proposed floats is **5,107 S.F.** The proposed float system will allow for easier and safer water access for the Martha's Vineyard Shipyard patrons. The float system will also allow for safer maneuverability of the work staff in the parking area by reducing any potential congestion as boats will now be in the water as opposed to on the upland.

The proposed dredge depth is to 4' below mean low water (MLW) with a one foot allowable over-dig to 5' below MLW. In reference to sheet C3.1.1 and C3.2.1 of the accompanying plans it can be observed that the entire proposed dredge footprint does not currently need to be dredged because the existing seafloor in many areas is already deeper than the proposed dredge depth. The primary area that needs to be dredged currently is the middle and west-side of the proposed "boat slip basin" (refer to the attached sketch plans titled "Sketch Plan Showing Bathymetry From Hydro Survey" and "Sketch Plan Showing Proposed Dredge Face" for more information). This deeper depth (after dredging) will contribute to safer navigation as well as increased water flow during tide cycles. Increased water flow will provide for better water circulation, which will improve water quality. Increased water depth will also alleviate potential prop-wash. Reducing prop-wash will alleviate sediment being re-suspended into the water column by boat propellers. Reducing sediment into the water column will improve water quality. The proposed dredge volume to the design grade is **2,350 C.Y.** and the total dredge volume to the allowable over-dig is **4,700 C.Y.** Prior to this application, **six** sediment samples from the proposed dredge footprint were obtained, and a grain size distribution (GSD) analysis were completed for each sample. The results from the laboratory analysis demonstrated there are less than 10% fines in each sample. Based on DEP Division of Water Quality, the results of the analysis indicated that the dredge sediment is suitable for re-use as beach nourishment. Dredge construction may be completed by either hydraulic or mechanical means as approved by the engineer. Dredged material can be pumped or placed in a de-watering/ containment area to be constructed within the footprint of the existing warehouse buildings that will be removed. De-watering of dredge sediment may also be done on a barge and then offloaded onto shore using the existing boat ramps. Stock piling of dredged material will be onsite within the dewatering/ containment area. Some of the de-watered dredged sediment (approximately 500 cubic yards depending on the size of the excavation from removing the warehouses) will be re-used on site, and the remaining dredge sediment will be disposed of at an approved upland site that is permitted to receive beach compatible sediment.

A shellfish survey was completed of the area surrounding the project area in March, 2019. Refer to attached shellfish study titled "Martha's Vineyard Shipyard Shellfish Study" as well as the attached "Shellfish Sustainability Statement". After reviewing the results of the shellfish study the dredge footprint in the approach channel was re-designed to avoid certain areas where shellfish were observed. In reference to the Shellfish Sustainability Statement, the Shipyard owners are willing to voluntarily take additional measures to further promote the shellfish habitat and shell-fishing community. These measures include: 1. not allowing over-night boaters; 2.

removing the shellfish prior to dredging; and 3. donating funds towards a shellfish seeding budget (refer to attached Shellfish Sustainability Report for more specific details).

There is no existing salt marsh or eelgrass within 100 feet of the project locus.

Proposed Upland Improvements

Upland improvements include: removal of two existing warehouse buildings; re-grading; and constructing (within the footprint of the removed warehouse buildings and existing parking areas) a new smaller warehouse building and formal parking areas. A stormwater management system is proposed for management, treatment, and recharge of stormwater runoff from the improved parking areas and new building roof. The stormwater management system proposed will be a great improvement over the existing stormwater conditions on the site and is described in detail in the Stormwater Management Report that is submitted as part of this application. Overall, as a result of the proposed upland site improvements the impervious building coverage on the property will be reduced by 15,200 +/- S.F. The net reduction in existing impervious coverage area within the footprint of the two removed warehouse buildings and existing dirt/gravel parking areas will be 9,300 +/- S.F. Landscape areas are proposed along the seaward edge of the existing parking areas to provide a vegetated buffer. The vegetated buffer will further enhance stormwater management and erosion control on the re-developed site by providing enhanced pollution prevention and stabilization of the slope located between the parking area and beach. The reduction of the impervious areas and implementation of planting areas on the site will reduce the direct flow of rain runoff into Lagoon Pond which will help improve the water quality of the pond.

As previously mentioned, after razing the two existing warehouse buildings a temporary dredge sediment de-watering/ containment area will be constructed within the footprint of the removed buildings. Upon completion of dredging, the de-watered dredge sediment will be used to re-grade the area and/or be removed from the property and disposed offsite in approved locations. The area will be regraded to direct storm water runoff away from the waterbody and toward the stormwater management system. Grade will also be raised as much as 18+” in some areas to reduce the occurrence of flooding. A parking area for boat slip holders will be constructed to allow parking of up to **42 new spaces for patrons** with **5 additional oversize spaces** primarily used for garage bay access to the proposed building. (The existing parking at the site consists of open dirt/ gravel space along the existing warehouse. There are currently no designated parking areas, and there is currently room for approximately 25 cars to park. The proposed 42 new spaces are not located within the current parking area, so the new spaces will be in addition to the existing 25 spaces). The parking area will consist of bituminous concrete pavement along the main driveway access aisle and in front of the boat storage garage access bays with pervious gravel parking spaces reinforced with the True-Grid gravel pave system. Bituminous/concrete paving is proposed for the driveway aisle and garage bay access aisle to provide support for the boat lift that transports boats between the Shipyard's facilities. The gravel True Grid reinforced parking spaces will allow rain water to percolate directly into the ground. The True Grid parking spaces will have a gravel surface which will also reduce the volume of rain runoff into the waterbody. Several plant beds are also proposed along the existing rip-rap slope along the shorefront of the property as well as along the beach road side of the property.

Access for upland site work will be from Beach road, and access for dredging and pier/ dock installation will be primarily by barge. (Refer to access and limit of work (L.O.W.) as shown on the accompanying plan). Siltation barriers (as shown on sheet C2.4.1) will be placed along the perimeter of the upland L.O.W. to contain any silt produced by the construction. Dredging will be completed by mechanical or hydraulic means and from a barge. Material will be pumped by pipe or brought to the disposal area by barge, sand bags, or trucks using the boat ramps for access. Dredged sediment may also be dewatered on a barge and then brought to shore using the existing boat ramps. The piers, floating docks, and ramps may be constructed using equipment staged in the upland area, equipment on the coastal beach, and/or equipment on a barge.