

**MEMO**

**To: Alex Elvin & Adam**

**From: Carlos Peña and Richard Andre**

**Date: August 19, 2021**

**Re: Response to post-LUPC meeting comments on the Tisbury Marine Terminal expansion (DRI #277m)**

**PRESENTATION**

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**Clarify in the presentation that the Operation & Maintenance portion is separate from the TMT portion, and show a line separating the two.**

Moving forward, **the Development** will be referring to the entirety of the DRI Application #277m currently under review. The Development includes the following two operations at the Tisbury Marine Terminal site. For clarity these have been described below and the naming will be utilized going forward to help differentiate the operations and mitigate any confusion:

1. Tisbury Marine Terminal (TMT) Barging Operations or "TMT"
  - a. Referring to the Southern Portion of the Property including the two (2) barge ramps extending seaward, over-sheeting of the steel bulkhead, reconstructing and filling of the solid fill wharf, and maintenance dredging.
  - b. The upgrades to the TMT Barging Operations will provide enhanced facilities for the transport of bulk, cargo and other products essential for life on the island of Martha's Vineyard.
2. Operation and Maintenance (O&M) Wind Farm Terminal or "O&M"
  - a. Referring to the Northern Portion of the Property including the proposed dredging, pile supported pier with ramp access from Beach Road, bulkhead, sheet pile wall fender system, wave fence, gangway, and float within the berthing area.
  - b. The O&M Wind Farm Terminal will serve as a transportation hub for the offshore wind industry, strategically located near the wind farm lease sites in the only deep-water harbor on Martha's Vineyard. The pile supported pier has been designed to support the logistics and operations requirements of maintaining an offshore wind farm allowing spare parts, general maintenance equipment, tools, and wind farm technicians to be transferred from onshore to the vessels to be taken offshore through the support of an onsite crane and containers.

**Show renderings of the project at road level, approaching from either direction on Beach Road, and directly across, looking toward the entrance.**

To be provided Friday 8/20.

**In the traffic slide, distinguish between Operation & Maintenance (O&M) Offshore Terminal traffic and Tisbury Marine Terminal (TMT) traffic.**

Completed. Additionally, copied in below.

**Traffic**

1. TMT Barging Operations: <1 average incremental daily trips
  - a. The TMT Barging Operations provides critical and essential services for the entire economy of Martha's Vineyard. The TMT Barging Operations transported 84,000+/- tons of freight and 53 modular homes on average annually over the last five years. This is the equivalent of 6,500 one-way truck trips that are not transported by the Steamship Authority ferries.
  - b. In addition, the terminal provides alternative off-peak transportation for island cargo that would otherwise be shipped through the SSA terminals at Vineyard Haven & Oak Bluffs. The enhancement of the terminal will not only improve island resiliency it will enable future opportunities to haul trash, wastewater, hazardous materials, and sand/aggregate with potential additional benefits of removing noxious cargo from ferries and parking lots.

- c. The enhancement and upgrades to the TMT Barging Operation will result in **negligible** increase in traffic under the following assumptions:
    - i. Assuming a projected annual economic growth of 4% increase in traffic related to existing operations (according to the Martha's Vineyard Commission projected economic growth rate).
    - ii. Current annual one-way truck trips are estimated at 6,500. 6,500 average annual one-way truck trips x 4% assuming economic growth = an estimated increase of less than 1 truck-load per day or 260+/- truck loads a year.
  - d. Traffic projections for the TMT barging operations assumes regular operations and does not account for unforeseen "short term" large projects on Martha's Vineyard for limited durations
2. **Operation and Maintenance (O&M) Wind Farm Terminal: ~25 average daily trips**
- a. November 1 – May 1 (180 days): 14 average daily trips seasonally
    - i. Vessel 1 will not be deployed
    - ii. Vessel 2 will operate an estimated 65 days (36% Vessel weather accessibility in winter)
    - iii. 3 vessel crew members will report to the O&M Wind Farm Terminal on 180 days
    - iv. On days accessible by Vessel (65 days) material supplies will be transferred between the O&M Support Building (offsite) and the O&M Wind Farm Terminal: 2-3 trips at 6-7AM, 2-3 trips 6-7PMs
  - b. May 1 – November 1 (180 days): 35 average daily trips seasonally
    - i. Both Vessel 1&2 will operate an estimated 126 days (70% Vessel availability in summer)
      1. 6 crew members will report to O&M Wind Farm Terminal 180 days (3 crew per vessel)
    - ii. 2 van trips in AM & PM carrying 12 Technicians 126 days
    - iii. On days accessible by Vessel (126 days) material supplies will be transferred between the O&M Support Building (offsite) and the O&M Wind Farm Terminal: 2-3 trips at 6-7AM, 2-3 trips 6-7PMs

## **SITE FEATURES AND USES**

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All below answers refer to the O&M Wind Farm Terminal.

### **How high up will materials be stored on the pier deck? Is there a height limit?**

All containers present on site will be single stacked. The containers will typically have temporary storage of spare parts, general maintenance equipment, and tools. These material/spares will be frequently moved in and out and onto the bow of the vessels via a crane. Portable restroom containers additionally have been proposed on site with connection to the Tisbury Wastewater Treatment Facility. The single-stacking limitation will extend to any proposed portable restroom or office trailers. [see 'Wastewater' Section below for more detail]

The O&M Wind Farm Terminal (live-load 800 PSF) was strategically designed to support the following operations:

- Ability to storage and maneuver spare parts, maintenance equipment, and other tools of up to an estimated ~2,500lbs
- Store typical 20' containers – not over-packed with frequent material movement in and out with either front or side access
- Ability to accommodate temporary truck deliveries & site trucks (example pictures below)
- Sufficient maneuverable space for a mobile crane and forklift for loading and unloading of the vessels and trucks
- Electricity and clean water supply will be available at berthing facility
- Refueling capabilities
- Sewage (grey and black water) disposal and waste management
- Security fencing

The wind farm maintenance equipment and tools that can be expected on the O&M Wind Farm Terminal pier will typically fit on your standard pallet and are not anticipated in the majority of cases to weight more than ~2,500lbs. Materials/spares will be transported to the pier from an O&M Support Building located on an offsite property not associated with the current DRI under review. The material is anticipated to be brought to the O&M Wind farm terminal in a truck similar to that pictured below. Material movement was considered in the traffic evaluation of the Development above. Once the material arrives to the site it will either be temporarily stored in the onsite containers or loaded directly onto the bow of the vessels

in lift bags utilizing the crane. A forklift could also be located on the pier to assist with material handling. When the vessel(s) are at the O&M Wind Farm Terminal berthing area, they will be carefully loaded by crane from the quayside with any of the required maintenance equipment and spare parts for the particular activities of the day(s).

*Figure 1 Sample Truck*



*Figure 2 Sample Container*



*Figure 3 Sample Container*



**Will the crane be onsite permanently? Where will it be stored?**

The crane will be stored on site permanently. The crane will support loading materials and other spares onto the bow of the vessels.

**Specify the fueling situation for boats. Will fueling take place at the site? Where will the gas be stored?**

**Show the locations and capacity of any onsite fuel storage.**

The fueling of vessels will take place by either the proposed 4,000 Convault tank as shown on the plan dated August 16, 2021 or by fuel trucks that will pull onto the O&M Wind Farm Terminal.

**Is a fence still proposed for the walkway to the east of the site entrance? Will that area still be vegetated?**

A fence is required for the secure operations and to protect the site and safety. The fence will be located at the top of the ramp to ensure adequate traffic flow on Beach Road. The entirety of the O&M Wind Farm Terminal will be secured with a fence, guardrail and automatic gate. Landscaping will be as per the approved MassDOT Plans for Beach Toad and in coordination with the Tisbury Open Space Committee.

**How much smaller is the public beach in the revised plans?**

There was no change made to the public beach area. The public beach area remains the same as was first proposed.

**Show that the proposed crosswalk will not interfere with the MassDOT plans (there was a question about the MassDOT plan for bike crossing).**

The Development project team has been working closely with Greenman Pedersen Inc (GPI), the Beach Road Massachusetts Department of Transportation (MassDOT) consultant, to coordinate the O&M Wind Farm Terminal pier design features, required entrance road cuts and utility connections with the proposed Beach Road reconstruction project. The design collaboration process with GPI is supported by bi-monthly conference calls.

## **WASTEWATER**

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**How much wastewater flow is the property currently using, and how much will it increase?**

- TMT Barging Operations currently is allotted ~300 gallons/day and does not exceed this amount. The proposed infrastructure upgrades to the TMT Barging Operations will not increase wastewater flow.
- The O&M Wind Farm Terminal is estimated to require below 250 gallons/day total to service the vessels and onsite portable toilet facility. The vessels are estimated to generate a maximum of 95 gallons per day each (total of 190 gallons per day). The portable toilet is estimated to generate a maximum amount of 60 gallons per day (310 CMR 15.203). The added wastewater flow is within the allocation of Tisbury Wastewater Treatment Facility to Tisbury Marine Terminal (the Applicant).

**Will increased wharfage capacity result in any additional TMT employees, and would they use existing restrooms at TMT?**

- TMT Barging Operations are not anticipated to trigger any additional employees at this time. TMT Barging Operations current Staff will use the existing restroom as they have bene in the existing building.
- O&M Wind Farm Terminal will be self-contained through the proposed portable toilet facility. The wastewater produced by this terminal operation is within the allocation by the Tisbury Wastewater Treatment Facility to Tisbury Marine Terminal (the Applicant).

**What is the proposal for pump-out facilities for the vessels? Where would that material be treated?**

O&M Wind Farm Terminal: All wastewater water generated from the O&M Wind Farm Terminal vessel pump-out system will be pumped into the pressurized Beach Road sewer pipe for treatment at the Tisbury Wastewater Treatment Facility.

**Provide documentation that the town has assigned 3,000 GPD of wastewater flow to TMT. This was mentioned by Ralph Packer.**

To be provided by Friday 8/20

**How much septage will the Crew Transfer Vessels (CTV) hold?**

A typical Crew Transfer Vessel (CTV) sewage holding tank has a capacity of up to ~790 gallons. It is estimated that for standard operations the vessel will generate an average of 95 gallons/day.

**OTHER**

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**How many and what type of employees (including year-round/seasonal and salaries) are associated with this DRI?**

- TMT Barging Operations: No additional jobs are expected for TMT Barging operations at the Development.
- O&M Wind Farm Terminal: Three all year Maritime jobs and three seasonal Maritime jobs will be associated with the O&M Wind Farm Terminal. Those employees could be classified as “Water Transportation Workers” as defined in the [2018 Massachusetts Offshore Wind Workforce Assessment](#). (“Workforce Assessment”). The Workforce Assessment provides a comprehensive analysis of the workforce needs and economic development impacts associated with the deployment of offshore wind in Massachusetts. The Workforce Assessment includes wage information for Water Transportation Workers including at the Development (Table 1, below). The Workforce Assessment also identifies other positions that do not apply to the Development, which are not shown in this table.

**Table 1: Expected Job Titles, Education Credentials, Average Wages and Descriptions associated with DRI #277m**

Potential Job Titles <sup>1</sup>	Common Education Credentials	Average Annual Wage <sup>1</sup>	Description
<b>Maritime</b>			
<b>Water Transportation Workers</b>	Postsecondary Training or Associate's	\$69,700 <sup>2</sup> - \$103,800 <sup>2</sup>	Include all vessel crews, such as captains, mates, and ship engineers, responsible for transporting turbine components to the wind farm site and piloting vessels. Workers would need to be trained in general sea safety techniques and have experience in piloting ships in a working industrial harbor and specific training on how to operate in a marine construction environment.

<sup>1</sup>2018 Massachusetts Offshore Wind Workforce Assessment

<sup>2</sup>The Average Annual Wage inflated to 2021 dollars, as determined by the US Bureau of Labor and Statics ([https://www.bls.gov/data/inflation\\_calculator.htm](https://www.bls.gov/data/inflation_calculator.htm))

**Clarify whether operations at the site can begin before the maintenance building is operational.**

Yes, operations at the Development can begin even if an O&M Support Building is not complete. The TMT Barging Operations are unaffected by an O&M Support Building. The O&M Wind Farm Terminal can function without the O&M Support building in operations on 61 Beach Road if an offshore wind company or its contractors utilize an alternate location.

**The following items relate mostly to the 61 Beach Road project, but we should have this information on hand for the hearing:**

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The Applicant acknowledges the request to have information about 61 Beach Road on hand. That location is not and will not be owned, operated or controlled by the Applicant (or any affiliated entity) nor it is part of the Applicant’s DRI application under review. In addition, no DRI Application has been filed that might refine the currently available information for 61 Beach Road. The Applicant’s knowledge about 61 Beach Road is limited, and any information that can be provided is solely for informational purposes and not for inclusion in this DRI.

**It would be helpful to provide an approximate range of traffic calculations, based on whether the maintenance facility and housing end up at 61 Beach Road or somewhere else.**

Traffic estimation previously provided and discussed assumed that no housing is located at an O&M Support Building location, wherever that is eventually located. That estimation conservatively assumed all employees that travel to or from an O&M Support Building are driving to that location.

**Current estimate for the number of employees associated with the project (and which if any are directly associated with the TMT portion), as well as how many are seasonal vs. year-round, and the range of salaries. Explain where the future workers will be going – some to O&M facility, some to harbor or MVY.**

The number of employees associated with the Development under review in this DRI can be found below in Table 2. No jobs are directly associated with the TMT barging operation. The specific hiring needs, credentials, and salaries for the O&M Wind Farm Terminal will be determined by the Tenant or its affiliates and contractors, but the Applicant expects will be similar to those specified below.

**Table 2: Projection of New Employees Associated with DRI #277m**

	All Year	November 1 – May 1	May 1 – November 1	Average Annual Wage <sup>1</sup>
<b>TMT Barging Operations (DRI #277)</b>	N/A	N/A	N/A	N/A
<b>O&amp;M Offshore Wind Terminal (DRI #277m)</b>	N/A	3 Maritime Vessels Operators	6 Maritime Vessels Operators	\$69,700 <sup>2</sup> - \$103,800 <sup>2</sup>

<sup>1</sup>2018 Massachusetts Offshore Wind Workforce Assessment

<sup>2</sup>The Average Annual Wage inflated to 2021 dollars, as determined by the US Bureau of Labor and Statics ([https://www.bls.gov/data/inflation\\_calculator.htm](https://www.bls.gov/data/inflation_calculator.htm))

**Project what the traffic may be in the future (perhaps a range) if the operation as a whole reaches’ capacity.**

All anticipated traffic has been considered and reviewed assuming the Development reaches full capacity projecting a growth rate of 4% per annum.

**Provide a copy of the signed purchase option agreement.**

The signed Purchase Option Agreement is a confidential business document that does not involve or affect the Applicant, the Development, or this DRI Application.