Islesboro Islands Trust Offshore Wind Port Advisory Group Comments

Islesboro Islands Trust (IIT) supports the development of an offshore wind facility at Mack Point, and opposes development of that facility on Sears Island, if any such facility is to be built in Penobscot Bay.

On November 18, 2021, the Maine Department of Transportation (MDOT) released the *Offshore Wind Port Infrastructure Feasibility Study* prepared by Moffatt and Nichol (M&N). It concluded, in part, that, "With certain modifications, both the Mack Point and Sears Island sites can meet the floating OSW Port Criteria." However, that November 2021 M&N report proposed development of "a marine terminal on Sears Island as a centralized hub for assembly and launching of floating foundations as well as erection of the WTG components onto the foundations."

Today, 19 months after release of the initial M&N report and one year after formation of the Offshore Wind Port Advisory Group (OSWPAG), every measurable, publicly available criterion discussed and reviewed over that time period reconfirms that, "With certain modifications, both the Mack Point and Sears Island sites can meet the floating OSW Port Criteria."

When developing an offshore wind manufacturing, assembling, and/or launching facility, otherwise called an offshore wind port, IIT strongly urges the MDOT and State of Maine to: (1) ensure that the least environmentally damaging plan is pursued, (2) favor repurposing outdated industrial and/or energy sites for the proposed facility, (3) avoid damaging undeveloped and ecologically significant locations, and (4) thoroughly evaluate impacts on wildlife and fisheries.

Considering the above, IIT supports the development of an offshore wind facility at Mack Point, and opposes development of that facility on Sears Island, if any such facility is to be built in Penobscot Bay.

Renewable Energy, Climate Change and the Environment

IIT applauds our State Government's vigorous response to climate change and offshore wind research. In this context, we cannot over-emphasize the crucial importance of applying strong, proven environmental standards and existing state policies to siting and construction of an offshore wind port.

The Intergovernmental Panel on Climate Change 2022 report makes the case that conservation of fully functioning ecosystems provides a highly effective climate change response. For example, in this scientifically validated report we find the following:

- "Conservation, improved management, and restoration of forests and other ecosystems offer the largest share of economic mitigation potential..."
- "Some options, such as conservation of high-carbon ecosystems (e.g., peatlands, wetlands, rangelands, mangroves and forests), deliver immediate benefits..."

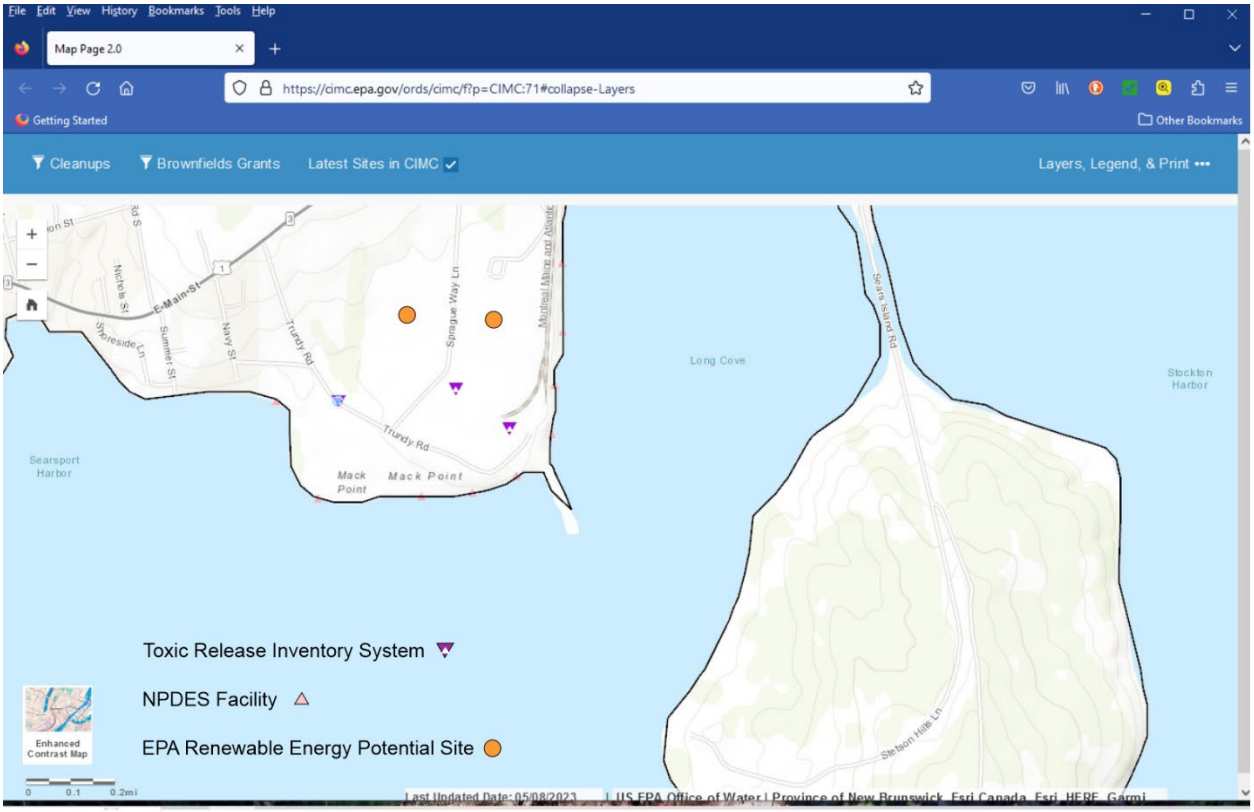
Maine's *Offshore Wind Roadmap* includes the following at Objective E:

- "Maine is committed to protecting and preserving the Gulf's marine species, habitats, and wildlife, and to pursuing responsible development of offshore wind technology that advances renewable energy **with as few adverse impacts as possible**." [Emphasis added.]

The Maine Climate Council's *Plan for Climate Action, Maine Won't Wait*, says in part:

- "Climate change and development are harming Maine's natural and working lands and waters, which are key to the state achieving its carbon neutrality commitment by 2045. Protecting natural and working lands from development maintains their potential to draw back carbon from the atmosphere, as well as provide important co-benefits. Maine's coastal and marine areas also store carbon, while supporting our fishing, aquaculture, and tourism industries."

A United States Environmental Protection Agency (EPA) program called RE-Power (see https://www.epa.gov/re-powering) urges repurposing outdated or unused carbon-based



https://cimc.epa.gov/ords/cimc/f?p=CIMC:71#collapse-Layers

energy facilities for renewable energy use. EPA identified Mack Point (see map illustration above) as a suitable site for this re-powering/renewable energy development program.

The National Oceanic and Atmospheric Administration (NOAA) recognizes the Penobscot River and Bay as a nationally important habitat focus area. One objective of this Penobscot watershed habitat focus cited by NOAA would, "Promote habitat restoration that results in benefits to water quality, watershed-based recreation, and resilient coastal communities."

Key Points:

- Build-out at Mack Point furthers Maine's Offshore Wind Roadmap and related state and federal climate change policies.
- Built-out at Mack Point consolidates industry in one location, economizes on existing infrastructure and replaces and remediates Mack Point's past outdated coal and oil history.
- MDOT consultants and Dawson Associates determined that Maine's OSW manufacturing, assembling and launching needs can be fulfilled at Mack Point.
- Sprague Energy publicly favors working in partnership with the State of Maine to locate such a facility at Mack Point.
- Sears Island's current undeveloped, natural condition, provides important ecological services to the region and state, especially for fisheries, carbon sequestration and publicly assessable recreation. Mack Point does not provide these ecological services.
- Acquiring federal, state and local permits for an offshore wind facility at Mack Point would be far less controversial than attempting to secure those permits for Sears Island, and prevent protracted intervention and possibly litigation during Site Location Law, NEPA, Clean Water Act and other permitting reviews
- A groundswell of public opinion supports protecting Sears Island's ecological resources.

If Maine pursues building an OSW facility in Penobscot Bay, Mack Point is best for business, best for the environment and best for the State of Maine.

The OSWPAG Process

On March 11, 2020, Governor Janet Mills circulated a press release (https://www.maine.gov/governor/mills/news/governor-mills-announces-assessment-mack-point-terminal-searsport-support-growth-renewable; copy attached) announcing an assessment of Mack Point for possible support of offshore wind. Sears Island was not mentioned in that announcement. The title of the Governor's press release explicitly and exclusively identified the "Mack Point Terminal in Searsport" as the location of the study.

Somewhat aside, the press release also notes that the single Aqua Ventus experimental turbine slated for deployment near Monhegan hoped to assemble and launch at Mack Point, following PUC approval in late 2019, which assembly and launch has not yet happened.

Twenty months later, the M&N report proposed creation of a "Port of Searsport offshore wind hub" built around "a marine terminal on Sears Island as a centralized hub for assembly and launching of floating foundations as well as erection of the WTG components onto the foundations."

Caught off-guard by the M&N report's recommendation, IIT wondered what happened between March of 2020 and November of 2021 that caused Sears Island to become the recommended "centralized hub." Personal communication among some highly respected environmental leaders who, we were told, had been notified of the report's findings, revealed they received telephone calls from representatives of the Governor's administration prior to release of the M&N saying that the OSW hub required use of Sears Island.

In order to learn exactly how M&N came to recommend Sears Island as the OSW hub, attorney David Perkins, on behalf of IIT, sent a Freedom of Information request to Maine DOT on February 22, 2022.

Information provided as a result of the request shows evidence of preference to develop Sears Island prior to M&N and OSWPAG.

Documents include [emphasis added]:

- A "Pre-decisional Working Paper Prepared by MaineDOT" dated **March, 31, 2021** (copy attached) lists, in part: "Next Steps to Support Floating Off-Shore Wind (OSW) Port Development"
  Near-term Steps (within 3-4 months):
    - Planning for Request for Information (RFI/RFP) to Explore Potential for Partnerships.
        - Derived from the results of the M&N feasibility study. Focused on Port Development for OSW.
        - **RFI will focus on primary site, Sears Island**
        - **RFI is synonymous with "Open for Business for OSW"**
        - Award criteria and approval TBD by GEO
        - Need to nail down how the timing of the RFI interacts with the pursuit of the research lease.
        - Also consider whether we are looking for partners with wind projects in the region, not necessarily the state.

  Long-term Steps (8 months +):

- **Start Terminal Design**. Start 30% design effort on OSW terminal. This will further refine and update scope and cost estimates and bring the project to the level needed for design/build with a partner.

This memo precedes public release of M&N by nearly 8 months, indicates that the M&N report was completed, refers to Sears Island as the "primary site" and "open for OSW business," exposes that a 30% Sears Island design effort was imminent and clearly displays MDOT preference and intentions regarding Sears Island.

- Six months after the above memo, a confidential memo from Matt Burns to Josh Singer of M&N, dated September, 10, 2021 (copy attached) references "MaineDOT **Sears Island OSW Terminal 30% Design Project**;
  - "MaineDOT is requesting a proposal for a 30% design effort to construct a terminal for floating wind turbine hull fabrication and WTG installation (Marshalling Facility). The design will utilize the concept developed by Moffatt & Nichol for the Offshore Wind Port Infrastructure Feasibility Study Concept Design Report as a basis for designing a new terminal on the transportation parcel of Sears Island."
  - **"Primary Tasks/Components of Sears Island 30% Design include "Environmental permitting assistance with relevant state/federal agencies (Pre-application meeting assistance)"**

Movement toward a new contract with M&N for a Sears Island 30% design quickly resulted in a draft proposal sent from M&N to Matt Burns dated October 26, 2021 (copy attached) containing considerable scope of work detail that clearly required discussion and communications not been included in the FOAA received by IIT.

- This draft proposal says, in part,
  - Moffat & Nichol (M&N) is pleased to submit this proposal for the preliminary design of a proposed floating offshore wind (FOSW) marine terminal on **Sears Island** Searsport, Maine.
  - This preliminary design of the terminal will aim to provide sufficient flexibility so that a wide variety of foundation types and logistics plans can be accommodated. In addition, **it will aim to provide the State of Maine with a flexible marine terminal that can service multiple cargo types (containers and bulk) both between wind projects and after the market for FOSW turbines has run its course.**
  - **We understand that MaineDOT wants to move forward with design and permitting** of Phase 1 of the OSW terminal at this time.
  - VHB will prepare draft permits for the Phase 1 FOSW terminal.
  - Total Moffat & Nichol Fee - $1,697,007

Just five days after the confidential memo from Matt Burns to M&N requesting a proposal for a Sears Island OSW Terminal 30% Design Project and two months before release of the M&N November 2021 report, on September 15, 2021, Kay Rand sent email (copy attached) to several people in the Governor's administration about an OSW/Port Development Stakeholder Plan. That email included a *Stakeholder Management Plan* dated September 8, 2021, which included:

- **GOAL: To develop and execute a stakeholder outreach strategy that would enable Governor Mills to announce the results of the M & N study, announce a commitment to pursue development of Sears Island as the Renewable Energy Port of the Northeast**…
- **Sears Island to become the Renewable Energy Port of the Northeast; other ports up and down the Maine coast will play auxiliary roles to support OSW**
- **Sears Island can become the Renewable Energy Port of the Eastern Seaboard**

MDOT signed a final contract for the 30% design on or about December 29, 2021. One year later, IIT learned of that final 30% design agreement and asked for copies of the final report. To date, that report has not been released for public review.

Figure 2 (below), found in "Final Recommendations, Supply Chain, Workforce, Ports and Marine Transportation Working Group of the Maine Offshore Wind Roadmap" on page 4, is captioned, "Examples from the study of statewide port infrastructure for offshore wind."

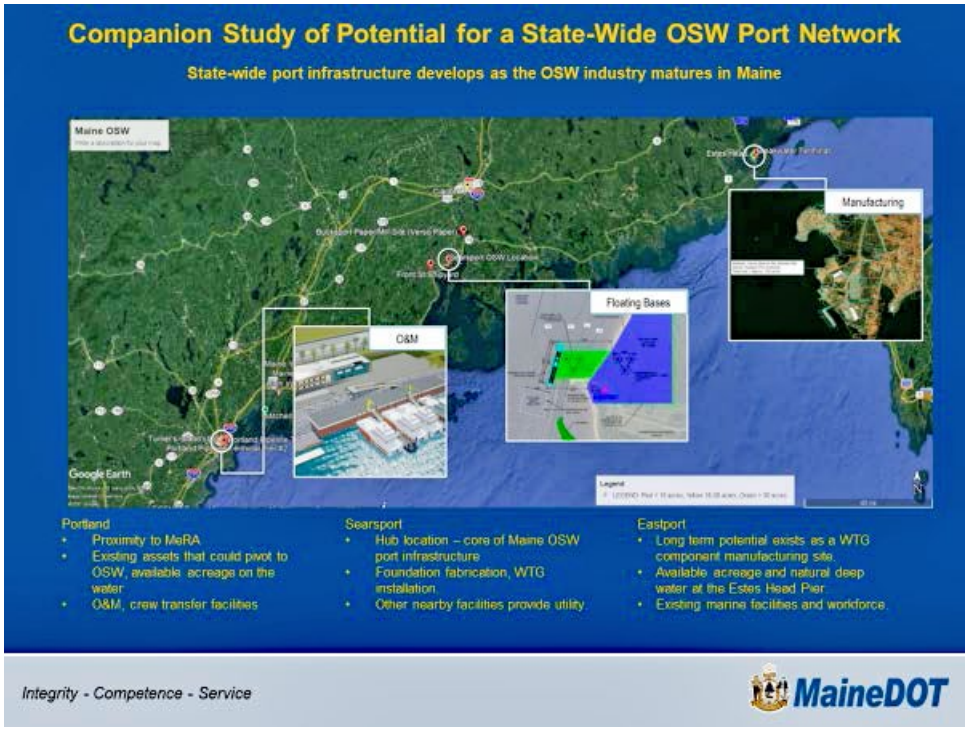
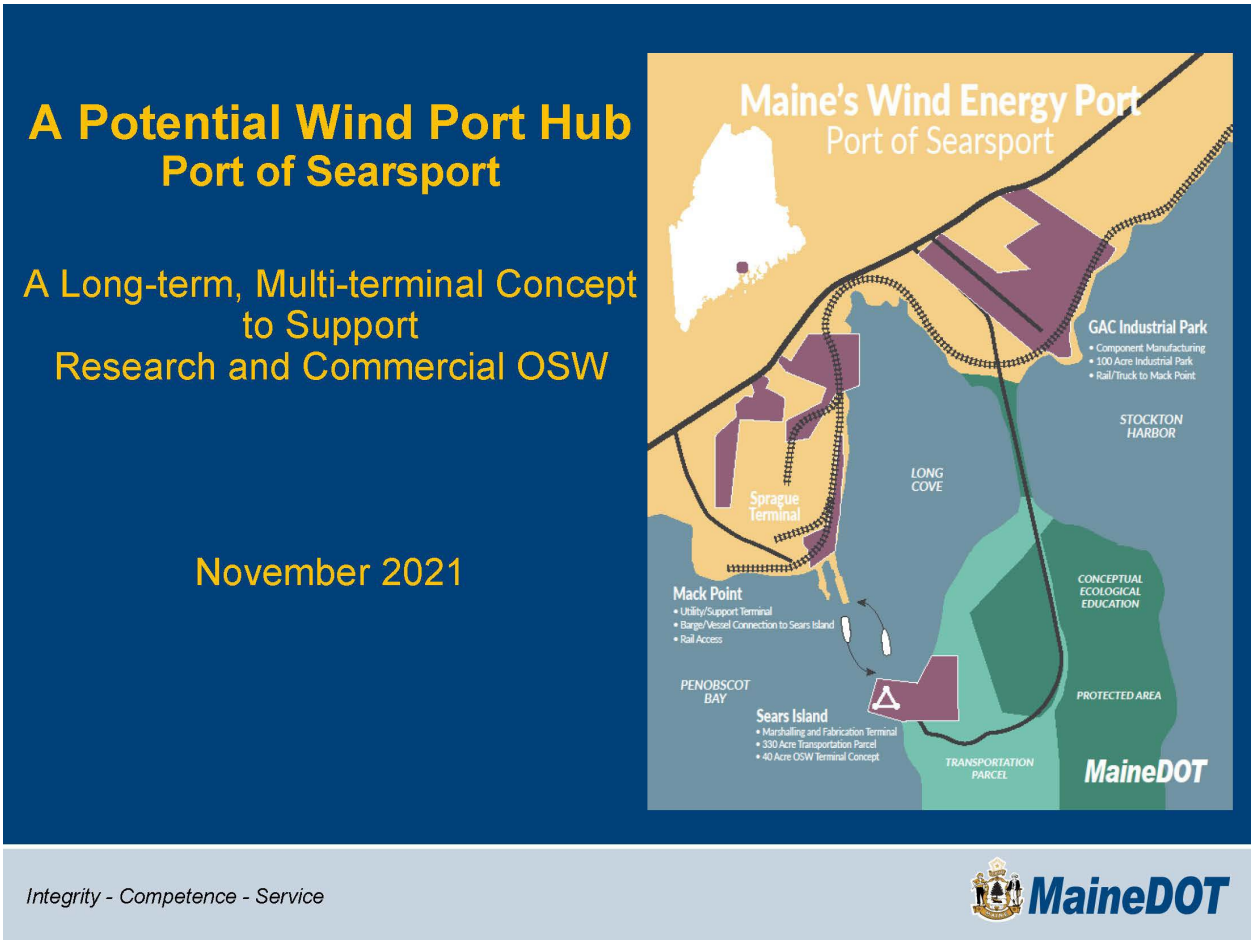


Figure 2 above identifies Sears Island, not Mack Point, as the Floating Bases Hub for fabrication and WTG installation; nearby facilities "provide utility," illustrating how "State-wide port infrastructure develops."

Metadata for the version of the Supply Chain, Workforce, Ports and Marine Transportation report available as of 2/27/2023 at https://www.maineoffshorewind.org/working-group-recommendations/ appears to have last been modified by Blaze Partners on February 6, 2023. Therefore, the "Companion Study" from M&N, or at least part of it, was available to Blaze Partners and, presumably, the Supply Chain, Workforce, Ports, and Marine Transportation Working Group. The "Companion Study" has not been made available to OSWPAG or the public.

Five months prior to OSWPAG formally beginning on May 26, 2022, during a Mainers for Offshore Wind presentation, the slide below showing a "Marshalling and Fabrication Terminal" on Sears Island and identifying the existing Mack Point piers as the "Utility/Support Terminal" illustrated the proposed OSW port concept. Although acknowledged that no decision had been made at that time, the slide continued to illustrate preference for developing Sears Island.



Often throughout the OSWPAG process, IIT requested background information, such as copies of the M&N 30% design report, the eelgrass inventory, available information about Mack Point and all documentation in support of the Matrix; all to no avail.

IIT presented several questions about entries in the matrix draft brought to the April 2023 OSWPAG and requested to see reference materials used for the matrix. These reference materials have not been delivered to OSWPAG.

We continue to have significant questions. Freshwater Open Water at Mack Point? Brook Trout Habitat? USFWS Birds of Conservation Concern and Other Migratory Birds? Federal agencies in the past noted that, "Mack Point has much less diverse marine habitat composed primarily of a small amount of rocky intertidal habitat and larger areas of unvegetated intertidal and subtidal bottom The quality of the unvegetated subtidal habitat has undoubtedly been diminished due to its proximity to the Searsport primary treatment wastewater discharge and chronic exposure to vessel operations and occasional oil spills from the existing facility on Mack Point. NMFS has concluded that the marine habitat on Mack Point comprises a notably less diverse habitat assemblage than the intertidal and shallow subtidal zones at the proposed port location on the western shore of Sears Island."

At the beginning of the OSWPAG, MODT provided an explanation of this process. We were assured that, "The Advisory Group program will provide the structure for a robust and transparent stakeholder and public participation process with respect to wind port planning and development." The absence of repeated requests for supportive information undermines the "robust and transparent" nature of these proceedings.

State policy, established by the January 22, 2009 Baldacci Executive Order, requires compliance with the Sears Island Planning Initiative Steering Committee (SIPISC) Consensus Agreement, signed in April 2007. Among the many terms of the SIPISC Consensus Agreement we know that, "Mack Point shall be given preference as an alternative to port development on Sears Island" and among the list of activities and uses not appropriate for Sears Island is "soil harvesting." MDOT's blatant preference shown for developing the OSW facility at Sears Island, as well as acknowledgement by M&N that developing Sears Island requires harvesting 1,215,000 cubic yards of soils, expose unmistakable failure to comply with State policy.

Conclusion

Sadly, all of the above instances of MDOT preference for developing Sears Island, failure to comply with the SIPISC Consensus Agreement and the absence of important information did not surprise IIT. We have engaged with MDOT for more than 30 years as proposals to develop

Sears Island -- cargo port, LNG terminal, container port – failed. In August 2017, the *Searsport Intermodal Commodity Final Report* (relevant pages attached) undertaken by HDR engineering consultants for the Maine Port Authority and MDOT, opined that “Sears Island… could be used for project cargo, specialized production or assembly of offshore wind components or neo-bulk cargoes.” For decades, MDOT continues to search for a reason to develop Sears Island even when a need to develop Sears Island fails to materialize.

On June 2, 2023, President Biden spoke from the Oval Office, praising the way that two very different perspectives negotiated a debt ceiling agreement. He said, "We were straightforward with one another, completely honest with one another, and respectful with one another. Both sides operated in good faith."

As representative of IIT, I conveyed our perspective on OSW port issues candidly and in the hope that our common concerns about climate change and ecological overshoot could perhaps find mutual understanding. Despite a preponderance of evidence showing MDOT preference to develop Sears Island, the absence of important information and indications of MDOT insincerity, IIT remained committed to this process throughout.

OSWPAG and the State of Maine will be judged by our decision in this OSW port matter. We can choose to ignore Rachel Carson's wise observation that, "The real wealth of the Nation lies in the resources of the earth -- soil, water, forests, minerals, and wildlife..." and destroy the lavish fertility of Sears Island. Or we can acknowledge our incontrovertible connection with what Physicist David Bohn calls the undivided wholeness of reality and what Aldo Leopold understood as a "community to which we belong," and pursue research into floating offshore wind that (1) confirms the least environmentally damaging plan, (2) favors repurposing outdated industrial and/or energy sites, (3) avoids damaging undeveloped and ecologically significant locations, and (4) considers impacts on wildlife and fisheries.

Leopold again: "A thing is right when it tends to preserve the integrity, stability, and beauty of the biotic community. It is wrong when it tends otherwise." IIT again urges, implores MDOT to do the right thing. If an offshore wind facility is to be built in Penobscot Bay, it should be located at Mack Point, not on Sears Island.

Governor Mills Announces Mack Point Assessment

March 11, 2020

Governor Mills Announces Assessment of Mack Point Terminal in Searsport to Support Growth of Renewable Energy Industry in Maine

March 11, 2020

Searsport, MAINE – Standing at the pier of Mack Port Terminal, Governor Janet Mills announced today that her Administration will examine the site for opportunities to support Maine's renewable energy industry, specifically offshore wind. The announcement follows Governor Mills' visit to Scotland last week as a member of a U.S. state and federal delegation organized by the United Kingdom government to learn more about offshore wind. It also follows her State of the State address in which she spoke of unleashing Maine's offshore wind potential.

(L:R): Representative Scott Cuddy (D-Winterport), Governor Mills, Tim Theriault, VP of Materials Handling for Sprague, Dan Burgess, Commissioner Heather Johnson, Commissioner Bruce Van Note and Searsport Town Manager James Gillway

"Offshore wind is poised to become a $1 trillion industry by 2040, creating thousands of good-paying jobs, providing clean renewable energy, and spurring economic growth. With our existing port infrastructure and proximity to both European and east coast markets, Maine is well-positioned to become a leader in the offshore wind industry just as Scotland has," said Governor Mills. "Searsport has been critical for the delivery and deployment of onshore wind in New England for years. My Administration will evaluate how the Port can do the same for offshore

wind. I look forward to the results of this assessment and charting a path forward for this industry in Maine."

The assessment, called the Port Infrastructure and Market Potential Assessment, will be led by the Maine Department of Transportation (Maine DOT), the Governor's Energy Office, and the Department of Economic and Community Development as a part of the Maine Offshore Wind Initiative. It will utilize the 2017 Searsport Intermodal Commodity Study as a foundation and identify and assess short-term and long-term port opportunities related to the offshore wind industry. It will, at a minimum, review current site characteristics, provide an analysis of potential port users and identify structural improvements or capital investments that may be needed. Additional analysis and review will also be undertaken to review offshore wind supply chain opportunities such as foundation and turbine assembly as well as the workforce needed to support these activities in Maine.

Searsport Town Selectpersons

In addition, Aqua Ventus, the project slated to be the first floating offshore wind project in the country, is also planning for approval to use the Port to assemble the hull that will be towed out to the demonstration test site off Monhegan Island. In June of 2019, Governor Mills signed into law LD 994, a Resolve sponsored by Republican Senator David Woodsome, directing the Maine PUC to approve the contract for Aqua Ventus, which was done in late 2019. The University of Maine has estimated that Aqua Ventus will produce nearly $152 million in total economic output, and more than 553 Maine-based direct jobs during the construction period, including jobs for design and construction. Operations and maintenance of the facility will create an additional direct economic output of approximately $16 million over 20 years.

Prior to the announcement, Governor Mills toured Mack Point Terminal and viewed onshore wind turbine components that have been delivered to the terminal for the Weaver Wind onshore project in Hancock County.

An active seaport since the 1700s, Searsport is Maine's second largest seaport and is home to an intermodal port facility serving coastal and inland areas of Maine. The Mack Point terminal is currently able to handle a diverse array of product including bulk shipments as well as project and containerized cargo. The terminal currently has space for laydown, bulk piling, warehousing and liquid tank storage as well as a potential for further development on existing property. Sprague Operating Resources, LLC operates Mack Point and owns the liquid bulk pier, while the Maine Port Authority owns the dry bulk pier, which Sprague operates. The Maine Port Authority and MaineDOT recently invested in a new heavy bulk cargo handling equipment at the port. In addition, MaineDOT over the last two years has made investments in upgrading the connecting rail infrastructure at the port.

"Onshore wind development has provided a great boost to Maine's economy. Hundreds of Maine construction workers have been kept employed by this industry for many years," said Representative Scott Cuddy. "The oncoming development of offshore wind is an exciting time for Maine and an exciting time for Searsport. Maine is poised to be an industry leader, and Searsport is perfectly situated to help make that happen!"

"The town of Searsport is excited and pleased to see progress in the development of offshore wind out of our Port," said Searsport Town Manager, James Gillway. "We have been closely connected to the ocean since our inception in 1845. We thank the Governor for moving this industry forward as clean, renewable energy is vitally important to our community and state.

(L:R): Governor Mills, Representative Scott Cuddy, Dan Burgess, Commissioner Bruce Van Note, Commissioner Heather Johnson

"The port facility in Searsport is playing an integral part in the logistics of bringing in the components to construct the Weaver wind project, as it has on previous wind power projects we've developed in Maine," said Paul Gaynor, chief executive officer of Longroad Energy. "Over the last decade, wind investment in Maine has crossed the $2 billion mark – the Searsport

terminal and many other Maine businesses have benefited from this influx of capital; importantly, it allows our investment to directly benefit Maine people and Maine industry."

Over the past year, Maine has made significant progress in moving forward renewable energy and offshore wind, including lifting the wind moratorium, passing legislation requiring the PUC to approve the contract for Maine Aqua Ventus, which will be the first floating offshore wind project in the country, and joining with New Hampshire and Massachusetts on the federal Gulf of Maine Renewable Energy Task Force to examine opportunities for offshore wind. The Task Force, led by the federal government, seeks to identify potential opportunities for renewable energy leasing and development sites in federal waters off the coast of Maine.

As a part of the Maine Offshore Wind Initiative, the state will also soon be launching an initiative to engage directly with the commercial fishing industry to facilitate communication and solicit input to ensure any potential development considers the fishing industry and other maritime interests.

https://www.maine.gov/governor/mills/news/governor-mills-announces-assessment-mack-point-terminal-searsport-support-growth-renewable

Pre-decisional Working Paper
Prepared by MaineDOT

March 31, 2021

Next Steps to Support
Floating Off-Shore Wind (OSW) Port Development

Near-term Steps (within 3-4 months)**:**

1. Finalize and Publish M&N Feasibility Study. Finalize/release "Offshore Wind Feasibility Study" by M&N. The study is substantially completed and needs a final/overall Sears Island use drawing (access road, trails, water access, parking, etc.).
2. Identify and Contract with a Public Relations Liaison Specific to OSW.
3. Planning for Request for Information (RFI/RFP) to Explore Potential for Partnerships.
    - Derived from the results of the M&N feasibility study. Focused on Port Development for OSW.
    - RFI will focus on primary site, Sears Island
    - RFI is synonymous with "Open for Business for OSW"
    - Award criteria and approval TBD by GEO
    - Need to nail down how the timing of the RFI interacts with the pursuit of the research lease.
    - Also consider whether we are looking for partners with wind projects in the region, not necessarily the state.
4. Prepare Renderings and Summary. Produce higher quality 3D conceptual drawings, rendering, schematic videos and high-level summary (PowerPoint) of selected OSW port terminal concept(s).
5. Refine Permitting Risk. Discussions/briefings/coordination with permitting and oversight agencies to identify hurdles and refine permitting timelines. We have had one discussion with MDEP to date but will need to do another (pre) pre-meeting that is more focused and better organized.
6. Early Policy Work. Identify supporters / opponents. Reach out to gauge support. Brief Congressional staff / key legislators / committees / opinion leaders.
7. Perform Further Market Research. Scope of work has been written and MaineDOT received a proposal from Moffatt & Nichol for a Ports Opportunity Analysis, currently under assignment. There will also be high level economic impacts of OSW (regional and state) included in this study. Estimate July 2021 completion date.

Mid-term Steps (TBD: 4-8 months)

8. Start Permitting. Pre-permitting meetings with state and federal agencies (ACOE and MDEP).
9. Perform Additional Site Investigation Work Including:
    a. Geotechnical borings
    b. Topo survey (upland area)
    c. Bathymetric survey
    d. Utility discussion (investigate if any existing infrastructure and talk to utility companies)
    e. Any other site work necessary to fill gaps and tighten estimates.

10. Issue RFP/RFI to Seek a Port Development Partner. 1-2-month advertisement. Selection process could take months to get to the point of signing a contract.

Long-term Steps (8 months +)

11. Seek Terminal Project Funding. Sources TBD, but will likely include private partner, federal, state bonding, or a combination of all. Very important to have discussions with Congressional delegation staff and members early. All delegation members expressed public support the UMaine / NEAV demonstration project when announced on August 5, 2020. This project could very fit well with infrastructure priorities of the incoming Administration.
12. Start Terminal Design. Start 30% design effort on OSW terminal. This will further refine and update scope and cost estimates and bring the project to the level needed for design/build with a partner.

Confidential Memo
Burns to Singer

September 10, 2021

CONFIDENTIAL
To: Josh Singer, M&N
From: Matt Burns, MaineDOT
Subject: MaineDOT Sears Island OSW Terminal 30% Design Project
Date: 9/10/21

MaineDOT is requesting a proposal for a 30% design effort to construct a terminal for floating wind turbine hull fabrication and WTG installation (Marshalling Facility). The design will utilize the concept developed by Moffatt & Nichol for the Offshore Wind Port Infrastructure Feasibility Study Concept Design Report as a basis for designing a new terminal on the transportation parcel of Sears Island.

The terminal design will be based from the Phase 2 concept (1000MW project) provided by M&N and optimized for use. This design should include a clear delineation between the Phase 1 and Phase 2 facility concepts as the State of Maine intends to permit for Phase 2 but will likely only pursue funding for Phase 1 construction.

Phase 2 facility features:

- Approximately 21-acre heavy lift area (5,000psf)
- Heavy-lift quay structure with appropriate crane(s)
- 44-acre upland area (3,000psf)
- Capability to support up to a 1000MW commercial scale floating OSW farm.

Primary Tasks/Components of Sears Island 30% Design

- Project initiation/kickoff
- Geotechnical/Bathymetric analysis
- Topographic survey
- Site layout and landscaping
- Utility Coordination and terminal lighting
- Hull fabrication logistics and optimization
- Drainage/Stormwater design
- Heavy lift area design
- Quay design
- Upland area design
- Terminal office building design
- Access road design
- Terminal fencing and security design
- Sears Island recreational improvement design (eastern side of island)
- **Environmental permitting assistance with relevant state/federal agencies (Pre-application meeting assistance)**
- 3D renderings and presentation
- Refined project estimates

Draft Sears Island
30% Design Proposal

October 26, 2021

Hughes, Amy

From: Dominguez, Justin <jdominguez@moffattnichol.com>
Sent: Tuesday, October 26, 2021 3:54 PM
To: Burns, Matthew
Cc: Singer, Joshua
Subject: Searsport 30% Design Draft Proposal
Attachments: DRAFT MaineDOT Searport Proposal 2021 10 26.pdf

Hi Matt,

Attached is a draft of our proposal for preliminary design of the proposed floating offshore wind marine terminal in Searsport. I would have liked to have sent you a final version by now, but our main hang-up is getting the drilling program squared away. We found out that the soonest our original geotechnical consultant could get a driller out to do the marine borings was April, which would have extended the schedule out much too far. We have reached out to a new consultant who has confirmed that they can get a driller out there much sooner (ideally as soon as permits will allow, in an attempt to complete most of the work before the worst of the winter weather), but we are still awaiting their proposal. In the attached draft, we included an estimated cost for the geotechnical explorations scope for now, so we could get something in front of you for review.

Please let us know if you have any comments or questions. Once we get the drilling proposal in and we've addressed any preliminary comments you might have, we can get you an updated proposal.

Thanks,
Justin

Justin A. Dominguez, P.E.
Senior Geotechnical Engineer

180 Wells Avenue, Suite 302 | Newton, MA 02459
P 857.856.4655 | **M** 617.909.6844

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October 26, 2021

Matt Burns
Director of Ports and Maritime Transportation
MaineDOT
24 Child Street
Augusta, ME 04330

Re: Searsport Offshore Wind Port Preliminary Design

Mr. Burns,

Moffatt & Nichol (M&N) is pleased to submit this proposal for the preliminary design of a proposed floating offshore wind (FOSW) marine terminal on **Sears Island** in Searsport, Maine. This terminal will allow for the following activities:

- Manufacturing/assembly of the foundations.
- Delivery of the wind turbine generation (WTG) components (towers, nacelles, and blades).
- Storage, staging and preassembly of the WTG components.
- Transfer of foundations from wharf deck to waterway
- Installation of WTG components onto foundation in water at quayside
- Rigging of fully assembly floating foundation and WTG components for tow out to installation site.

This work will build on the M&N report entitled *"Maine Department of Transportation Offshore Wind Port Infrastructure Feasibility Study, Concept Design Report"* submitted to the MaineDOT on February 9, 2021.

We appreciate your invitation to provide a proposal to MaineDOT for the subject assignment. Our proposal outlines our project scope, associated fee, and project schedule.

The project scope discussion outlines our proposed approach to the project. We have included a short list of assumptions with our proposed scope and will work with you as we move forward so that our efforts will precisely meet your needs.

We are the industry leaders in the development of port infrastructure to support the quickly growing US offshore wind industry. Our work in this field incorporates six states on the eastern seaboard, Louisiana, and California. We were recently awarded a contract with the U.S. Department of the Interior's Bureau of Safety and Environmental Enforcement/Bureau of Ocean Energy Management to assess port infrastructure needs and capabilities to support development of floating offshore wind farms on the Pacific Coast and Hawaii. Our hands-on familiarity in developing new and retrofitting existing port infrastructure to service the offshore wind industry will provide the State of Maine with a high level of industry knowledge and relevant experience.

PROJECT UNDERSTANDING

In 2020, M&N performed a feasibility study of four candidate sites to be considered for the construction of a port in the Searsport area to support the OSW industry on the eastern seaboard. We concluded that two of the sites, Mack Point and Sears Island were suitable for development, and based on a

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number of factors, recommended that the Sears Island site be chosen to develop. We understand that MaineDOT wishes to move forward with design development of the Sears Island site.

Sears Island is a wooded, undeveloped area located about a half-mile off the mainland. The island is connected to the mainland via an earthen causeway. MaineDOT owns an approximately 330-acre Transportation Parcel on the western side of the island. There are approximately 9,000 linear feet of undeveloped available water frontage. Vessel access to the site is via Penobscot Bay and the maintained federal navigation channel. The parcel is zoned for Transportation/Marine development.

A section of the Transportation Parcel will be developed in two stages. Stage 1 will be designed to be capable of supporting a demonstration-type FOSW project of approximately 150 MW to 200 MW. Stage 2 will be designed to be capable of supporting a full-scale commercial wind farm installation (approximately 1,000 MW).

The deployment of fully assembled floating FOSW turbines requires approximately 35 to 40 feet of water at the berth. In order to attain this depth at the site, the berthing face needs to be located approximately 600 to 900 feet offshore. In our feasibility report, we recommended that the berthing face be formed by a steel sheet pile cellular cofferdam, with a pile-supported relieving platform to be constructed along the outer 50 feet of the cofferdam, to allow heavily loaded equipment to access the berthing face. The area between the cofferdam and shore would be infilled with soils excavated from the uplands, and riprapped slopes would protect the sloped ends of the infill. The uplands would be cut to grade, providing a level surface for the terminal uplands. The project will also include upgrading the access road from the north end of the island to the terminal to accommodate the anticipated industrial traffic.

Phase 1 would include development of approximately 600 linear feet of berthing face, 7 acres of heavy-lift area in between the cofferdam and shore, and 30 acres of uplands. Phase 2 would expand the facility to 1,600 of berthing face, 22 acres of heavy-lift area, and 44 acres of uplands. Figure 1 shows the approximate footprint of the two phases. The exact configuration and extents of the wharf and uplands developed in each stage may vary from the amount stated above. M&N and the MaineDOT will meet to establish the extents of the berths and uplands required for Phase 1 as a part of the project kickoff.

Floating offshore wind technology is currently in the prototype/demonstration stage. There are multiple foundation types of differing geometries and weights being proposed and installed. In addition, each FOSW developer will have a preferred logistics and loadout plan for the marine terminal. This preliminary design of the terminal will aim to provide sufficient flexibility so that a wide variety of foundation types and logistics plans can be accommodated. **In addition, it will aim to provide the State of Maine with a flexible marine terminal that can service multiple cargo types (containers and bulk) both between wind projects and after the market for FOSW turbines has run its course.**

In addition to the marine terminal facility, improvements to the Conservation Parcel area of the island will be installed. The exact scope of this work has not yet been defined; however, a preliminary plan was submitted in the previously referenced report. These preliminary improvements included public amenity space consisting of an educational center building and enhanced trail, parking and landscaping features.

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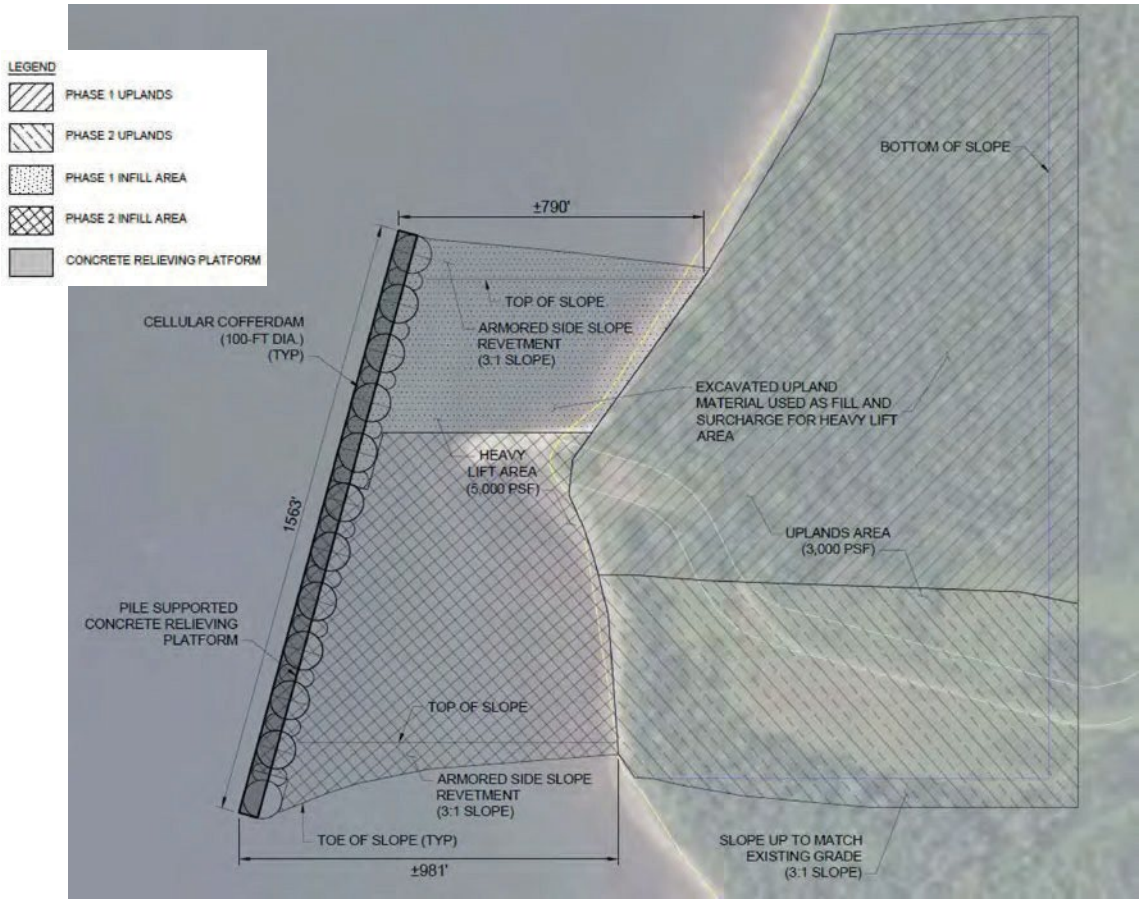

Figure 1- Phases 1 and 2 of the proposed OSW facility.

PROJECT SCOPE

This section provides our proposed Scope of Services and associated approach to the completion of the preliminary design for the Sears Island FOSW marine terminal, upgrades to Sears Island Road (which will serve as the access road to the terminal), and public improvements to the Conservation Parcel area of Sears Island. The preliminary design will be based on berth and uplands concept developed in the feasibility study. The scope will be to develop preliminary design (30%) documents (plans, specifications, opinion of probable construction costs, and construction schedule) and draft permit application for Phase 1. The preliminary design drawings will be of sufficient detail to submit in the permitting package.

We are proposing to perform the field work for the design of both phases under the current scope in order to eliminate the need for additional mobilizations, resulting in cost savings for the overall project.

The design will include two buildings, an office building on the Transportation Parcel and an educational center building on the Conservation Parcel. For 30% design, we have assumed that design of these buildings will be limited to developing the footprint and approximate location of the buildings. The M&N team anticipates that this level of detail will be sufficient for permitting of the project.

The Scope is based on our general understanding of the study efforts completed to date and our interpretation of efforts required to fulfill preliminary design requirements for the Sears Island FOSW

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project. While we have carefully considered project development needs, we are prepared to modify or otherwise tailor the proposed Scope as needed to fulfill project requirements and meet the needs of MaineDOT.

While the tasks associated with the Scope are presented in general chronological order, the nature of preliminary design is such that tasks are iterative and comparative in nature; therefore, there is some overlap within the preliminary design tasks.

TASK 1: PROJECT INITIATION

Key M&N Team members will meet with MaineDOT, project stakeholders, and others involved to initiate the project and to fully define and clarify project objectives, schedule requirements, and budget constraints. These lines of communication will remain open throughout the design process to form a system of continual input and feedback. The proposed meeting location is at MaineDOT's offices in Augusta. A team visit to the Sears Island site will occur following the kick-off meeting.

M&N will provide a draft kick-off meeting agenda for review, incorporate input, and distribute to attendees. M&N will record meeting notes and distribute the record of discussion for review and comment.

TASK 2: DATA COLLECTION/REVIEW AND SITE INVESTIGATIONS

M&N will collect and review all data provided by MaineDOT. This data will allow M&N to gain an understanding of the existing conditions at the facility and to develop a data-gap analysis to support the preliminary design. M&N will produce a list of requested information and submit to MaineDOT at the commencement of the project. There has been a significant information exchange during the feasibility phase of this project, and in this task, we will consolidate the existing information and gather any additional available information on the site.

In addition, we will engage several subconsultants to perform field surveys and site data collection.

Limited Site Survey

Our subconsultant Vanasse Hangen Brustlin, Inc. (VHB) will serve as the site surveyor. For 30% design, we will utilize LiDAR data from the National Oceanographic and Atmospheric Administration for topographic data for 30% design. Therefore, VHB will perform limited site survey to identify existing features within the project limits. A control point will also be set up on the Mack Point Pier to provide a tie-in for water depth measurements for the bathymetric survey. We anticipate that full topographic survey will be performed during final design. Performing a full survey during final design will also be easier in the wooded areas, because some tree clearing will have been performed for the uplands geotechnical explorations.

Wetlands Delineation

VHB will delineate the wetlands boundaries within the project area. The delineation will focus on the Phase 1&2 Terminal footprint and an approximately 15-acre area at the northeast corner the Conservation Parcel, where most of the public improvements are planned. As the extents of the public

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improvements are not fully defined at this time, there may be additional areas (i.e., along trails might be improved) that may need delineation at a later date.

Additional details for this scope item are provided in VHB's proposal, which is included in Attachment A.

Bathymetric and Geophysical Survey

Our subconsultant Ocean Surveys, Inc. (OSI) will perform bathymetric and geophysical surveys of boat-accessible waters within 300 feet of the proposed quay. Multibeam soundings will be performed to develop a bathymetric contour plan (1 ft intervals). A sub bottom geophysical survey will be used to identify the top of a hard stratum (likely either glacial till or bedrock). Both high (chirp) and low (boomer) frequencies will be used to give the best chance of obtaining stratigraphic information. Sub bottom results will be ground-truthed to the results of the water-based geotechnical borings. Daily operations will be based out of a marina in Belfast.

Additional details for this scope item are provided in OSI's proposal, which is included in Attachment A.

Geotechnical Explorations and Laboratory Testing

Our subconsultant Haley & Aldrich, Inc. (H&A) will perform a geotechnical exploration and laboratory testing program. The goals of the program are the following:

- Obtain stratigraphic information, including depth to various soil units and bedrock.
- Collect soil and rock samples for laboratory testing.
- Perform in-situ testing (i.e., standard penetration tests) and laboratory testing to characterize the strengths and bearing capacities of the site soils and develop recommendations for the reuse of the onsite soils.
- Characterize the amount of cobbles and boulders present in the glacial till soils.
- Obtain information about the groundwater conditions on land.
- Provide information for the design of stormwater treatment structures.

Based on these goals, we have developed an exploration program consisting of up to 10 water borings, up to 16 land borings, and up to 20 test pits and a laboratory testing program consisting of index testing (moisture content, grain size, and Atterberg limits), modified Proctor compaction tests, California Bearing Ratio tests, and unconfined compression testing of rock.

The water borings will be performed using a barge-mounted drill rig. The barge will be left at the work area overnight and on weekends, and the drill crew will travel by boat to the site from a nearby marina each work day.

The land borings will be performed using an all-terrain vehicle drill rig, and the test pits will be excavated using a rubber-tired backhoe. Significant tree clearing will be required to access the land boring and test pit locations. H&A has budgeted for a tree service to perform clearing. The tree clearing effort will be limited to the amount necessary to access the exploration locations and provide adequate work space at each location. Trees will be left where they fall; removal of fallen trees and grubbing of stumps has not been included in this scope.

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H&A will prepare a geotechnical data report summarizing the findings of the exploration program and presenting boring/test pit logs and geotechnical laboratory results. We have also included budget for H&A to consult with M&N's engineering staff during the design.

Additional details regarding the geotechnical exploration scope are provided in H&A proposal, which is included in Attachment A. [Note to MaineDOT: H&A's proposal is still pending, so we have included an estimated cost as a placeholder.]

Maine Stormwater Management Law requires that a certified soil scientist log test pits at the location of each stormwater treatment location. Main-Land Development Consultants, as a subcontractor to M&N, will provide a certified soil scientist to observe and log test pits at proposed stormwater treatment locations. Additional details regarding the soil scientist scope is included in Attachment A. [Note to MaineDOT: Main-Land's proposal is still pending, so we have included an estimated cost as a placeholder.]

Semi-submersible Barge Compatibility Consultation

A large semi-submersible barge will be required to accommodate the transfer of the fully assembled floating wind foundations from the quay to water. The finished foundations will be transferred from the quay to the barge via SPMTs. Once the foundation is secured, the barge will be moved to the sinking basin to be sunk and allow the foundation to become buoyant.

The deck of the barge will need to remain level with the quay deck at all times during the foundation transfer. This will require self-ballasting capabilities and certain freeboard and vessel draft characteristics.

Our subconsultant, Crowley Engineering Services, will evaluate the compatibility of various types of barges to complete this transfer. These types include:

- Existing Jones-Act-compliant Crowley Barges
- Existing international barges
- New build Jones-Act-compliant barge

If the existing barges cannot perform this transfer, Crowley will provide an order of magnitude cost estimate to retrofit the barge to allow for the transfer as well as a high-level time frame to perform these retrofits. Crowley will also provide an order of magnitude cost estimate to build a Jones-Act-compliant barge and provide a high-level time frame for this buildout.

This task is not meant to perform the preliminary or final design of the semi-submersible barge, but rather to confirm the feasibility of this loadout methodology.

Additional details regarding the barge compatibility consultation scope are provided in Crowley's proposal, which is included in Attachment A.

TASK 3: BASIS OF DESIGN

M&N will prepare a Basis of Design (BOD) document for the project. The BOD will establish criteria to be used throughout the evaluation and design process, including geometric, environmental, equipment,

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and loading characteristics, along with a bibliography of applicable design codes, standards, and references. The following is a list of typical items in a BOD for a project of this size and complexity.

A. Project Basis - Provides a description of project, codes references and standards that will be used for design.

B. General Design Data - Identifies project datums and coordinate system, elevations and service life of structures, project boundary limits, navigation criteria, and property lines.

C. Functional Requirements - Establishes the key functional aspects that will be incorporated into the design including site elevations, berth depths, site settlement requirements, etc.

D. Operational Criteria - Establishes operational vehicles, crane sizes and wheel loadings, pavement area load ratings, functional and operational service descriptions, allowable overtopping criteria.

E. Environmental Criteria - Establishes environmental design criteria (wind, wave, current, rainfall, etc.) and forces that will be imparted on the structures. Establishes the base flood and design flood elevation for the quay and upland areas.

F. Geotechnical Criteria - Establishes subsurface conditions and geotechnical design criteria for the project based upon existing and new geotechnical boring investigations. Define methodologies for slope failure analysis, pile capacities, seismic analysis, and approach to consolidation/compaction of fill.

G. Vessel Design Parameters - Establishes the design vessels for the facility and defines the parameters impacting the design of the mooring and fendering systems. Defines cold ironing vessel requirements.

H. Design Loads - Establishes the design loadings and loading combinations on the structures.

I. Material Properties - Identifies required material properties for the structures.

The basis of design document will be submitted to MaineDOT and others (as requested by MaineDOT) for review and input, as the project moves into the initial phase. Similarly, as the designs and design input from potential manufacturers and/or offshore wind component lease holders evolve, the BOD will be updated to remain current.

TASK 4: UTILITY COORDINATION

Power, water, telecommunication, and possibly sewer are required for development of the site. Based on the proposed usage, M&N will create a utility demand list for the site and share this list with the utility providers. M&N will coordinate with the utility providers to help them understand the level of service that will be required to support the proposed project and gain an understanding of any potential charges to the project from the utilities to meet this demand. We have assumed that this coordination can be done primarily by teleconference. We have budgeted for two on-site meetings at Sears Island (one for electrical and telecommunications and one for water and sewer), where we would meet with the project team and the various utility suppliers.

It is assumed that the utilities will bring lines to the northern extents of the Transportation and Conservation Parcels and that M&N will start the preliminary utility design from this point.

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TASK 5: PERMITTING

M&N subconsultant VHB will lead the permitting effort on this project. There are two main goals of the permitting: (1) to enable the geotechnical exploration program, and (2) to prepare a draft permit submittal based on the preliminary design. Additional details of the permitting scope are provided in VHB's proposal, which is included in Attachment A. M&N will support VHB's efforts by providing relevant input and figures as needed. Based on VHB's reviews of the local permitting, the level of detail required for these permits is essentially the same or less than that needed for national and state permits. Therefore, budget for drafts of the local applications is not included in this scope of work. We anticipate that the local permit applications can be prepared by drawing extensively from the national and state permits, so we recommend that the local permit applications be developed after the national and state permit applications are finalized.

We understand that MaineDOT wants to move forward with design and permitting of Phase 1 of the OSW terminal at this time. While it is likely that we can demonstrate that Phase 1 is a "single and complete project" (USACE terminology), Maine's Site Law requires that an application include plans for "all phases of a development to be undertaken on a parcel". This scope also includes meeting with the state and federal permitting agencies to present an overview of the Phase 2 project. It is assumed these will be virtual meetings.

Inclusion of Phase 2 design and permitting would require additional effort that is not included in our Phase 1 30% design scope. Therefore, we recommend that we consult with DEP and USACE as soon as practical to confirm that our design and permitting approach is acceptable.

Geotechnical Exploration Program Permitting

The geotechnical exploration program will require the submittal of a permit application to the Maine Department of Environmental Protection (MDEP) and the U.S. Army Corps of Engineers (USACE). A single permit application will be submitted to MDEP and USACE. VHB will develop the permit in consultation with M&N. Based on the extents of clearing required for the uplands explorations, it is likely that MDEP will require the preparation of a site-specific Soil Erosion and Water Pollution Control Plan for the geotechnical explorations. M&N will prepare this Plan, as well as all figures and descriptions of work needed for the permit application.

Phase 1 OSW Terminal Permitting

VHB will prepare draft permits for the Phase 1 FOSW terminal. Preparation of the permits will include the following tasks:

- Consult with the various state resource agencies requesting information about known locations of significant cultural resources and state threatened and endangered species.
- Coordinate a pre-application meeting with MDEP and USACE to present the project, confirm permitting requirements and required content of the applications, establish review timelines, and discuss potential resource protection and impact mitigation measures with agency staff.
- Develop a draft application for a USACE Individual Permit.
- Develop a draft application for a Maine Site Law Permit.
- Develop a draft application for a Maine Natural Resources Protection Act Permit

Additional details are provided in VHB's proposal, which is included in Attachment A.

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TASK 6: SITE LAYOUT/LOGISTICS OPTIMIZATION

M&N will develop a site layout plan that includes conceptual locations of the various buildings, laydown areas, transport paths, site access, and logistical flow of operations. Our initial layout/logistics plan would be developed based on our experience with OSW ports and other marine terminal facilities.

We will present this plan for MaineDOT initial review, and revise based on MaineDOT comments. We will then participate in an in-person site layout design review meeting to be arranged by MaineDOT and facilitated by M&N. The proposed meeting location is Maine Port Authority's offices in Portland. We anticipate that this meeting would include representatives from M&N, MaineDOT, and potential terminal users as identified by MaineDOT.

The purpose of the meeting would be to elicit input from the prospective tenants and MaineDOT to develop a site layout that meets the near-term needs of the demonstration-phase FOSW facility, intermediate-term needs of the commercial-scale OSW facility, and the State's long-term needs considering potential use after OSW.

We will prepare a memo documenting the meeting and present an updated site layout plan. We anticipate that the layout plan will be distributed to the stakeholders. We will incorporate additional comments on the layout into the 30% design drawings.

TASK 7: CONSERVATION PARCEL SITE LAYOUT DEVELOPMENT

M&N prepared a conceptual layout for Conservation Parcel improvements at the northeast quadrant of Sears Island during the project's conceptual design phase. For this effort, M&N will advance this concept to the 30% level in cooperation with MaineDOT and key project stakeholders.

M&N will participate in an in-person meeting to discuss the layout of public area improvements. This meeting will be arranged by MaineDOT and facilitated by M&N. The proposed meeting location is MPA's offices in Portland. This meeting will include representatives from M&N, MaineDOT, and any other stakeholders MaineDOT feels appropriate to involve in the design process. The purpose of the meeting is to elicit input from MaineDOT and project stakeholders. In preparation for the in-person meeting, M&N will prepare an updated conceptual plan based on our latest understanding of the project.

M&N will prepare a memo documenting the meeting, along with a revised public improvements concept plan that clearly defines the overall limit of works {project boundary). MaineDOT will be responsible for collecting and distributing follow-on internal and stakeholder feedback. M&N will incorporate any additional comments on the layout into the 30% design drawings.

TASK 8: COASTAL ANALYSIS

M&N will perform a coastal analysis of the site that consists of the following:

A. Establish Site Environmental Parameters - M&N will establish the relevant site environmental parameters. These parameters will include:

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1. Design Water Levels, including extreme flood elevations and sea level rise
2. Operational and Extreme Wave Heights
3. Operational and Extreme Winds
4. Operational and Extreme Currents
5. Ice Loading
6. Temperature Range

B. Establish Environmental Forces on Structures - M&N will use the selected environmental factors to calculate the environmental forces on the designed structures. These forces will then be used in the appropriate loading combinations.

C. Vessel Berthing and Mooring Forces - The operational level wind, wave and current conditions will form the basis for a dynamic mooring analysis of the design vessels in berth to determine mooring line loads, bollard capacities and fender size requirements. At the 30% level, mooring and berthing loads will be approximated based on typical vessels and barges that will be anticipated to be used at the facility.

TASK 9: CIVIL DESIGN

M&N will perform the preliminary civil design for the project uplands. The area being filled behind the cofferdams will be considered a heavy-lift area and will be rated at an allowable uniform live load of 5,000 psf. The existing uplands soils in the cut area will be rated at an allowable uniform live load of 3,000 psf. This design consists of the following:

A. Estimate water capacity needs for potable water and fire protection to support the utility coordination outlined in Task 4. The estimate of site demands will factor in the future needs of the Phase 2 work. We will develop recommendations for further study to enable water supply.

B. Evaluate sizing and options for sanitary design requirements. We anticipate that wastewater could be handled in three ways: {1) store, pump, and haul offsite; {2) treat onsite; and {3) connect to existing municipal sewer. The purpose of this subtask will be to identify the preferred alternative for wastewater handling. Depending on the selected alternative, additional design effort may be required to bring the preferred alternative to the 30% design level.

C. Convert topographic files from NOAA and limited site survey data from VHB to base plans for the site civil and utility designs.

D. Develop site grading plan.

E. Develop overall layout for stormwater management design.

F. Develop overall layout for utilities and site lighting, including utility vault locations and duct banks.

G. Develop overall layout for terminal fencing and security design. At the 30% design level, security features will be shown schematically, based on a level of security that is typical for this type of facility and input from M&N staff experienced in port security design. During final design, a security assessment will need to be performed to finalize the security layout for the facility.

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H. Select location for terminal office building, educational center building, and parking areas associated with the buildings and the proposed trailhead parking area off of the cell tower access road.

I. Design the layout and traffic flow of entry and exit gates of terminal.

J. M&N will perform the design of the terminal topping surface. This surface will be dense graded aggregate.

K. Perform stormwater management design in support of permit applications. This includes stormwater outfalls. These outfalls will return water to Penobscot Bay.

L. Develop Soil Erosion and Water Pollution Control plan in support of permit applications.

M. Develop overall layout for the terminal access road, extending from the existing access gates at the north end of Sears Island to the proposed terminal. We have assumed that the access road will follow the existing Sears Island Road alignment, and that modifications will be limited to minor geometric adjustments (i.e., curvature and slope) and design of a full-depth pavement replacement.

TASK 10: GEOTECHNICAL DESIGN

M&N will perform geotechnical engineering and design required for the preparation of the preliminary design for this project. The geotechnical related activities in support of the detailed design efforts will include:

A. Assemble and review all existing geotechnical data for the site.

B. Develop soil/rock design parameters, assess liquefaction considerations, develop seismic design parameters, and select site coefficients for all development areas of the project.

C. Perform global stability and slope stability evaluations for revetment and uplands cut slopes.

D. Prepare pile capacity evaluations including axial capacities and lateral capacities for the foundation elements for the project.

E. Determine suitability of excavated uplands soils for use as backfill.

F. Provide recommendations for imported select soils where needed (e.g., cofferdam fill and dense graded aggregate topping surface).

G. Determine appropriate method for backfilling and soil consolidation/compaction for the infill area.

H. Assess short term and long-term settlement of the infill area, including design of surcharge and wick drains.

I. Provide bearing capacity recommendations for the infill and uplands areas.

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TASK 11: STRUCTURAL DESIGN

M&N will perform the preliminary structural design for the project. A cellular cofferdam with a pile-supported relieving platform is being considered for design. The structural design of the marine infrastructure and uplands will consider the ability to integrate with future expansions to the south of the current terminal area {Phase 2). These designs consist of the following:

A. Design of Cofferdam Structures - M&N will advance the design of a gravity-based cellular sheet pile cofferdam bulkhead that will serve as the berthing surface for the quay, with a length of about 630 feet. The cofferdam will be designed to retain and support the lateral earth pressures of the filled upland area and an allowable uniform live load of 5,000 psf.

B. Design of Pile-Supported Relieving Platform - M&N will advance the design of a pile-supported relieving platform that will be located over the approximately outboard half of the cellular cofferdam. This platform will run the full 630-foot length of the cofferdam. The relieving platform piles will be topped with a concrete deck, and the deck will be topped with dense graded aggregate. This relieving platform will be rated for an allowable live load of 5,000 psf.

C. Design of Mooring Dolphins - The Phase 1 quay allows for approximately 630 linear feet of berthing space. In order to allow for mooring of one of the floating units, two mooring dolphins are proposed to the south of the quay.

D. Design of Stormwater Inlet Grates, Manholes, Conveyance Piping, Trench Drains and Stormwater Treatment Structures - M&N will use the preliminary calculations performed in the civil design phase to perform the preliminary structural design of these elements. These elements will be structurally rated to handle the proposed terminal loadings. The design of these elements will be in conformance with the State of Maine Best Management Practices Manual and Maine Stormwater management rules.

E. Preliminary Layout of Mooring Bollards and Fender System - M&N will select the appropriate capacity bollards and fenders so that the design vessels can be moored at the berths. M&N will size the bollards and fenders. It is anticipated that bollards and fenders will be installed every+/- 50 ft to 75 ft.

TASK 12: ELECTRICAL DESIGN

M&N will perform preliminary electrical design for the project. This design consists of the following:

A. Estimate electrical load demands to support the utility coordination outlined in Task 4. The estimate of site demands will factor in the future needs of the Phase 2 work. We will provide an overall electrical load estimate provide this list to the site service provider.

B. Preliminary design of nacelle rack electrical system. The staged nacelles require power to perform system diagnostics and testing. The location of these outlets **will** be selected in Task 6.

C. Preliminary design of vessel cold ironing system. This system will provide ship to shore power for the design vessels. The system will allow operation of hotel loading and vessel operations power. Ship-based cranes will not be powered by this system.

D. Electrical one-line diagrams for the sites.

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E. Layout of electrical system including locations of electrical gear and ductbank routing for the sites.

F. Layout of lighting along access road, education center area, and terminal.

G. Layout of telecommunications.

TASK 13: LANDSCAPE ARCHITECTURE DESIGN

M&N will perform preliminary landscape architecture design for this project. We will incorporate the modifications to the design of the public improvements resulting from the review meeting in Task 7. Preliminary landscape architecture design consists of the following:

A. Layout of the public improvements on the Conservation Parcel. At this stage in design, the layout will be limited to a delineation of paved, hardscaped, and landscaped areas. Specific hardscape and landscape features will be identified during final design.

B. Development of a preliminary planting plan for the public improvements.

C. Typical cross sections illustrating the design concept.

TASK 14: PHASE 2 PRELIMINARY DESIGN REPORT

M&N will prepare a preliminary design report (PDR) for Phase 2 of the FOSW terminal. The purpose of the PDR will be to provide MaineDOT with a reference document that can be used to communicate the conceptual design of Phase 2 without having to advance the design to a 30% level (as is being done for Phase 1). This PDR will clearly define the Phase 2 work with both text and supporting sketches and will be of sufficient detail to describe the project to the various permitting agencies.

We anticipate that the PDR will draw heavily from the already Conceptual Design Report that the M&N team has already developed but will be updated to focus primarily on Phase 2 in the context of being an upgrade to the Phase 1 facility, and any changes to the layout informed by the site layout design review meeting in Task 6.

We have assumed that we will prepare a draft of the PDR after the completion of Task 6. We will incorporate review comments from MaineDOT into a draft final version of the PDR. At the conclusion of Phase 1 30% design, we will update the PDR based on any changes made during the 30% design. We have assumed this update will also receive one round of review from MaineDOT.

TASK 15: THREE-DIMENSIONAL RENDERINGS AND PRESENTATION

M&N will develop a three-dimensional rendering of the proposed Phase 1 and the Phase 2 work. This rendering will show the following elements for each of the phases:

- Wharf development
- Upland development
- WTG components on the uplands
- Land based crawler crane
- Scheuerle SPMT transport units (or similar) on uplands
- FOSW vessels at berth
- FOSW foundations being assembled on the uplands

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- Semi-submersible barge at berth or dolphins
- One-story building with parking lot
- Security fence at perimeter of site

The deliverable will be up to 8 photo-realistic, oblique-aerial renderings/photo-simulations of the project and immediate environment. The final output of renderings (file type and size) will be predetermined by MaineDOT.

We will develop a PowerPoint master slide deck presenting the design features of the project to aid in developing presentations to various stakeholders. Presentations will be developed from this master slide deck and adjusted to meet the needs of the meeting and the audience. We anticipate that the slide deck will include overview maps, layout plans, typical cross sections, descriptions of design features, and 3D renderings.

TASK 16: DESIGN DELIVERABLES

M&N will create 30% design documents for the project. At the 30% level, these documents will meet the following criteria:

A. Drawings -At this level, plans, cross sections, and elevations of the following information will be included:

   - Preliminary geotechnical information
   - Preliminary demolition
   - Site topographic and bathymetric survey drawings
   - Preliminary site erosion and sediment controls
   - Preliminary grading and storm drains
   - Preliminary utilities
   - Preliminary structures
   - Preliminary electrical plans and diagrams

   The 30% drawing level is intended to clearly represent the main elements of the projects and their sizing and geometric layout.

B. Technical Specifications -A list of the technical specification sections will be provided.

C. Opinion of Probable Construction Costs - M&N will produce a Class 4 estimate, as defined by the American Association of Cost Estimating (AACE) Recommended Practice No. 18R-97, for this project. This estimate has a level of accuracy of +20% to +50% and -15% to -30%. The work will be broken down into tasks and a quantity and unit price will be developed for each task. This estimate will have a 25% contingency included.

D. Construction Schedule - We will develop an estimated construction schedule. The work will be broken down into a series of sequential and concurrent tasks, and a duration will be estimated for each task. A critical construction path will be identified.

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TASK 17: MEETINGS

We will hold periodic coordination calls with MaineDOT to coordinate the work. We anticipate that bi-weekly meetings will be appropriate, supplemented by occasional weekly meetings during busier times in the project.

We have also budgeted for two face-to-face meetings in Portland during design development, for coordination and discussions with MaineDOT and potential leaseholder(s), in addition to the meetings in Tasks 1, 4, 5, 6, and 7 specifically noted above. We anticipate that periodic teleconferences will occur as required to coordinate work.

ASSUMPTIONS AND EXCLUSIONS

The following assumptions, qualifications, and exclusions are made regarding the services the M&N team will provide to MaineDOT for the Preliminary Design for the Sears Island FOSW Marine Terminal:

1. The scope and associated fee for M&N and subconsultant services represent our understanding of work performed to date, and MaineDOT's project development needs. We are prepared to modify or otherwise tailor the proposed Scope as needed to fulfill project requirements, and otherwise achieve the needs of MaineDOT.
2. Negotiation with state and federal environmental agencies for required environmental mitigation and design of environmental mitigation will be by others.
3. Design work to bring utilities to the site from the mainland is not included.
4. Sampling and testing soils and existing structures for hazardous, toxic, radioactive, and other waste materials are excluded from the scope.
5. Environmental and fish and wildlife investigations, testing, and reporting (e.g. water, air, noise, hazardous substances, threatened and endangered species) are excluded from the scope.
6. Cultural, archeological, and historic investigations and reporting are excluded from the scope. The Maine Historic Preservation Commission will determine if the site is potentially sensitive in terms of archeological resources and may require a Phase 1 cultural resources survey.
7. Real Estate considerations, including land acquisition, right-of-way acquisition, land and riparian easements, and mitigation impact design are not included in this scope. M&N is not responsible for identifying any easements on the property. If easements exist, they will be provided by MaineDOT.
8. Services required because of third-party intervention or challenges to the project are not included.
9. Given MaineDOT's desire to incorporate public feedback into the design of the public improvements, there is a possibility that the design of these features lags the design of the terminal. We will incorporate changes informed by the design meeting in Task 7. Changes to the layout of the public improvements based on stakeholder feedback that are requested after this meeting may require additional scope and fee to incorporate.
10. Architectural, structural, mechanical, electrical, and plumbing design of the proposed terminal buildings will not be performed as part of this scope.
11. This fee proposal includes the performance of a number of soil borings and test pits anticipated at this time to meet the needs of the project design requirements. Should it be determined that additional borings are required to obtain acceptance of the project by government agencies, the cost for additional borings will be separately charged to MaineDOT.

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12. Contaminated soils are not expected to be encountered. Costs of off-site disposal of contaminated soils and drilling fluid are not included in this fee proposal.
13. The drilling budget includes a contingency of 5 weather days (i.e., no-work days) for inclement weather. Standby time will apply for drill rigs and barge that have been mobilized to the site but cannot operate due to weather.
14. The bathymetry and geophysical budget includes a contingency of 20% of the field budget for inclement weather. Standby time will apply for the survey boat that has been mobilized to the site but cannot operate due to weather.
15. Base mapping from previous evaluations, designs, and/or surveys will be provided by the MaineDOT, in electronic format (AutoCAD).
16. A Metes and Bounds survey will not be performed as a part of this scope. It is assumed that the MaineDOT will provide the site boundaries for M&N use.
17. Coastal evaluations include only wind, wave, current, water elevation, and preliminary mooring and berthing assessments. Refined coastal evaluations, including but not limited to wave run-up assessments, sedimentation and scour evaluations, shoreline morphology, and similar studies and evaluations are excluded from this scope. Design of coastal revetments (excluding northern and southern sides of fill area), breakwaters, jetties, groins, and similar coastal protection structures are excluded from this scope of work.
18. Special studies and other work not specifically defined as services included in the Scope are fully excluded.
19. Submerged and submarine utilities are assumed to not exist. Assessment of submerged obstructions is limited to those depicted within public documents (NOAA navigation charts), or as otherwise identified by the multi-beam survey.
20. The proposed site stormwater system will treat water with in-line solids removal systems and then return treated water to the Penobscot Bay. There will be no stormwater retention on site.
21. MaineDOT will provide copies of current or previous agency authorizations, permits and approvals. The other authorizations and approvals may include EIS, EIR, National Pollutant Discharge Elimination System (NPDES) Permits, or Maine DEP permitting.
22. The Scope represents development for an approximate 30% level of design. Once preliminary design is completed, M&N can provide MaineDOT an additional proposal to capture the work associated with final design, plus additional efforts associated with bidding, award, and construction phase services through project acceptance and close-out. These services, if desired, would be performed under a separate future agreement.
23. **M&N** will provide a list of technical specifications only. It is assumed that MaineDOT will provide Front End specifications for the project.
24. It is assumed there are no functioning monitoring wells on site. Design of monitoring well closure or relocation has not been included in the scope or fee.
25. It is assumed the entity providing the high-mast lights will also provide the foundation design for these lights. Geotechnical information will be provided to facilitate this design.

PROPOSED FEE

M&N proposes to complete this work on a time and materials basis as broken down in Table 1 below. A detailed fee breakdown is provided in Attachment B.

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:rable 1: P oposed Fee

Task	Item	Fee
1	PROJECT INITIATION	$10,932
2	DATA COLLECTION/REVIEW AND SITE INVESTIGATIONS	$41,326
3	BASIS OF DESIGN	$29,314
4	UTILITY COORDINATION	$34,248
5	PERMITTING	$32,912
6	SITE LAYOUT/LOGISTICS OPTIMIZATION	$17,252
7	CONSERVATION PARCEL SITE LAYOUT DEVELOPMENT	$27,900
8	COASTAL ANALYSIS	$36,558
9	CIVIL DESIGN	$102,152
10	GEOTECHNICAL DESIGN	$45,374
11	STRUCTURAL DESIGN	$158,370
12	ELECTRICAL DESIGN	$69,284
13	LANDSCAPE ARCHITECTURE DESIGN	$59,424
14	PHASE 2 PRELIMINARY DESIGN REPORT	$20,762
15	THREE-DIMENSIONAL RENDERINGS AND PRESENTATION	$20,880
16	DESIGN DELIVERABLES	$148,686
17	MEETINGS	$29,578
	Moffatt & Nichol Labor Fee	**$884,952**
	Permitting and Site Survey Subcontract (VHB)	$79,900
	Bathymetry and Geophysical Subcontract (Ocean Surveys Inc.)	$65,985
	Geotechnical Exploration Subcontract (Haley & Aldrich)	$550,000 (estimated)
	Barge Consultation Subcontract (Crowley)	$42,800
	Soil Scientist Subcontract (Main-Land)	$20,000 (estimated)
	Subconsultant Markup (5%)	$37,934
	Moffatt & Nichol Expenses	$15,436
	Total Moffat & Nichol Fee I	**$1,697,007**

SCHEDULE

We anticipate an approximately 7-month duration to complete the scope above. An estimated project schedule that graphically depicts the timeline and association of work activities is provided in Attachment C.

The key personnel and technical staff that will be involved in the Preliminary Design of the Sears Island FOSW Facility, and any subsequent and other related assignments, are available and committed to providing the highest level of service to you.

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M&N appreciates the opportunity to submit a proposal for this project. Please contact me with any questions or if you require any additional information.

Sincerely,

MOFFATT & NICHOL

Justin A. Dominguez, PE (MA)
Project Manager

moffatt & nichol

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Attachment A

Subconsultant Proposals

September 21, 2021

Justin A. Dominguez, P.E.
Joshua Singer, P.E.
Moffatt & Nichol
180 Wells Avenue, Suite 302
Newton, MA 02459

RE: Proposal to Support Sears Island Offshore Wind Port Permitting

Dear Justin and Josh:

VHB is pleased to submit our proposal to provide permitting and regulatory support services for the Sears Island Offshore Wind Port Project (Project). We appreciate you including us on Moffatt & Nichol's team and look forward to continuing to work with you on this Project.

We have reviewed the Concept Design Report and Conceptual Sears Island Master Plan that you provided, as well as our notes from our recent meetings. Based on this information, we believe we have developed a scope of services that meets the needs of Moffatt & Nichol and the Maine Department of Transportation as they move the Sears Island site forward.

VHB is excited about the opportunity to submit this proposal and to build a relationship with Moffatt & Nichol. If you have any questions about our proposed approach, please don't hesitate to contact me at 207.536.2588 or via email at SHale@vhb.com.

Sincerely,

S. D. H

Sean Hale

Director, Environmental/ Energy Services

SCOPE OF WORK
AGREEMENT FOR PROFESSIONAL SERVICES
BETWEEN
VANASSE HANGEN BRUSTLIN, INC.
AND
MOFFATT & NICHOL

September 21, 2021

1.0 Project Understanding

Vanasse, Hangen, and Brustlin, Inc. (VHB) previously contracted with Moffatt & Nichol **(M&N)** on a proposal to the Maine Department of Transportation (MOOT) to study the feasibility of constructing a port, in the Searsport region, to support the offshore wind (OSW) industry on the eastern seaboard. This feasibility study included an assessment of the physical infrastructure as well as the economic case for certain identified locations within the Searsport area, as well as potential permitting hurdles. Based on this analysis, the Final Concept Design Report recommended installing this port facility on Sears Island.

The Sears Island site is part of an approximately 330-acre parcel owned by the MOOT and which is undeveloped. The Phase 1 Development project is comprised of approximately 30-acres of upland area for the component storage area and development support, with approximately 7.2-acres of infill and cofferdams. The Phase 2 Commercial Scale project would expand to approximately 44-acres of uplands and 21.5-acres of infill and cofferdams. Because the entire site is owned by the MOOT and there are no existing structures with which to contend, it is not necessary at this time to closely delineate the areas that will be developed. The area is accessed by Sears Island Road, which is also known as Stetson Hills Road, which connects to a causeway from the mainland. Topography is gently sloping from east to west, with elevations ranging from approximately 70 feet amsl to the east to 4 feet amsl at the western end. In addition, the MOOT is contemplating including a new public amenity, the Sears Island Education Center, as part of their application.

VHB understands that the Maine Department of Transportation intends to contract with Moffatt & Nichol to advance the Sears Island site to the 30% design stage (the "Project") in preparation for submitting the required permit applications. To support this work, VHB will provide services related to a) permitting the necessary site studies; and b) developing drafts of selected federal and state applications. VHB also appreciates that this work needs to be completed in coordination with the MDOT's public information activities and that contacts with outside entities need to receive prior approval.

2.0 Technical Approach and Preliminary Scope of Work

This scope of work includes the development of selected state and federal permit applications to a draft status, so as to advance the planning and design of the Project. A detailed breakdown of the scope of work and associated tasks are described below. VHB's overall approach to this Project is based on our commitment to provide the highest quality of service to M&N. This approach and commitment to quality, schedule, and costs are reflected in our company's philosophy for successful delivery of services.

Stakeholder Management Plan

September 8, 2021

Hughes, Amy

From: Hinkley, Angela R
Sent: Friday, September 17, 2021 12:34 PM
To: Merrill, Paul
Subject: FW: OSW/Port Development Stakeholder Plan
Attachments: PORT DEVELOPMENT TO SUPPORT OFF SHORE WIND INITIATIVE.docx; Stakeholder Messaging.docx

---

From: Kathryn Rand <kayrand2018@gmail.com>
Sent: Wednesday, September 15, 2021 3:21 PM
To: Van Note, Bruce A <Bruce.DOT@maine.gov>; Moulton, Nathan <Nathan.Moulton@maine.gov>; Burns, Matthew <Matthew.Burns@maine.gov>; Pingree, Hannah <Hannah.Pingree@maine.gov>; Burgess, Dan <Dan.Burgess@maine.gov>; Cunningham, Celina <Celina.Cunningham@maine.gov>; Ronzio, Anthony <Anthony.Ronzio@maine.gov>; Mercer, Paul <Paul.Mercer@maine.gov>; Mendelson, Meredith <Meredith.Mendelson@maine.gov>; Hinkley, Angela R <Angela.R.Hinkley@maine.gov>; Miller, Cheryl <Cheryl.Miller@maine.gov>
Subject: Re: OSW/Port Development Stakeholder Plan

I've attached the proposed Stakeholder Management Plan and timeline that we'll be discussing on Friday.

I've also attached some draft messaging points that we should also plan to discuss. It may be that we'll want to create a media team to refine the messaging points.

I look forward to the conversation! Thanks, again, for your contributions to this plan.

From: Kathryn Rand <kayrand2018@gmail.com>
Date: Wednesday, September 15, 2021 at 2:38 PM
To: "Van Note, Bruce A" <Bruce.DOT@maine.gov>, "Moulton, Nathan" <Nathan.Moulton@maine.gov>, "Burns, Matthew" <Matthew.Burns@maine.gov>, "Pingree, Hannah" <Hannah.Pingree@maine.gov>, "Burgess, Dan" <Dan.Burgess@maine.gov>, "Cunningham, Celina" <Celina.Cunningham@maine.gov>, "Ronzio, Anthony" <Anthony.Ronzio@maine.gov>, "Mercer, Paul" <Paul.Mercer@maine.gov>, "Mendelson, Meredith" <Meredith.Mendelson@maine.gov>, "Hinkley, Angela R" <Angela.R.Hinkley@maine.gov>, "Miller, Cheryl" <Cheryl.Miller@maine.gov>
Subject: OSW/Port Development Stakeholder Plan

Kathryn Rand is inviting you to a scheduled Zoom meeting. Topic: OSW/Port Development Stakeholder Plan Time: Sep 17, 2021 03:00 PM Eastern Time (US and Canada) Join Zoom Meeting https://us02web.zoom.us/j/87319643774?pwd=aU0wcTRteC91aG5uRnNQT0dCWUVQdz09 Meeting ID: 873 1964 3774 Passcode: 737881 One tap mobile +13126266799,,87319643774#,,,,*737881# US (Chicago) +19294362866,,87319643774#,,,,*737881# US (New York) Dial by your location +1 312 626 6799 US (Chicago) +1 929 436 2866 US (New York) +1 301 715 8592 US (Washington DC) +1 346 248 7799 US (Houston) +1 669 900 6833 US (San Jose) +1 253 215 8782 US (Tacoma) Meeting ID: 873 1964 3774 Passcode: 737881 Find your local number: https://us02web.zoom.us/u/kd7UV6kj8M

PORT DEVELOPMENT TO SUPPORT OFF SHORE WIND INITIATIVE

STAKEHOLDER MANAGEMENT PLAN

September 8, 2021

Kay Rand
Kay Rand LLC
8 Pine Street
Bar Harbor, Maine 0460

Background: The Maine Department of Transportation (MaineDOT), as part of Governor Mills' Maine OffShore Wind Initiative, retained Moffatt & Nichol to study the feasibility of constructing a port in the Searsport region to support the off shore wind (OSW) industry on the eastern seaboard.

4 potential sites were studied and compared against an extensive list of criteria – Mack Point Terminal, Sears Island, Sprague Put Parcel, and the GAC Chemical Site, and the study recommended the selection of the Sears Island site to construct a port to service the floating offshore wind industry. The circumstances at Sears Island make it uniquely positioned to serve, not just the Gulf of Maine, but also a more extensive US Northeast floating offshore wind market.

Some urgency exists to stay ahead of other states along the eastern seaboard also planning to invest in their ports for this purpose, including Massachusetts, Connecticut, New York, New Jersey and Virginia.

The University of Maine (UMaine) is a national leader in research and development around wind power and is the holder of a patent on the VolturnUS floating concrete hull technology that can support wind turbines in very deep water. The economic benefit of building UMaine's hull design in Maine is huge. Developing the port infrastructure that allows it to happen in Maine, rather than having another state reap the financial benefits of the research that took place right here, is a significant accomplishment and game changer for Maine's ports, the Maine economy and our climate change goals.

GOAL: To develop and execute a stakeholder outreach strategy that would enable Governor Mills to announce the results of the M & N study, announce a commitment to pursue development of Sears Island as the Renewable Energy Port of the Northeast, and announce a statewide port strategy spanning the entire coast to provide auxiliary roles to position Maine as a national leader in the OffShore Wind Industry.

If the Stakeholder Plan is successful, the public announcement will include supportive parties representing the Town of Searsport, business and environmental leaders, and address the opposition to be expected from Maine's fishing community by committing to listen to them and involve them in the planning of the port development to minimize impacts to fishing and other ocean uses.

KEY FOUNDATIONAL CONCEPTS:

1. **DOT should be the project lead,** coordinating closely with an internal team of the Governor's Energy Office, the Office of Policy and Innovation, the Governor's Off Shore Wind Advisor; the Department of Community Development and the Maine International Trade Center.
2. **DMR and DEP should always be copied on all materials,** and their input is key, but they should not be listed or officially included in the decision-making internal team as they both have regulatory roles over the project. They will also be key liaisons to the fishing and conservation communities who must trust their ability to objectively perform their regulatory roles.
3. **The key messages are three:**
    a. **Maine is committed to developing the port infrastructure at Sears Island to be the Renewable Energy Port of the Northeast** and at other ports up and down the Maine coast to comprehensively support the Off Shore Wind Industry;
    b. The economic benefit of building the hulls designed by UMaine in Maine and investing in other Maine ports to provide auxiliary roles to support the OSW industry is significant; and
    c. Maine's climate goals are significantly advanced by enabling the development of a strong Off Shore Wind industry.
4. A power point containing these messages will be developed for use by all team members for each stakeholder briefing.
5. **NEAV and UMaine** are key partners to the project and should be kept apprised of documents and plans and allowed input.
6. **Interface with the Road Map Project is key.** Announcing the Research Array ahead of the Road Map being completed was controversial. To avoid that with this announcement, it'll be important for the Governor to give the Road Map specific follow up duties – namely to ask the Fisheries Working Group and the Ports and Marine Transportation Working Group to analyze impacts to ocean users from increased shipping traffic and the port development and design strategies to eliminate or minimize them.

STAKEHOLDER OUTREACH STEPS:

STEP ONE: Arrange and conduct a meeting with the **Maine Coast Heritage Trust and Friends of Sears Island** to alert them to the study's conclusions and to present the conservation investments that MaineDOT is also planning to make on Sears Island's conservation parcels.

TBD: Who will arrange meeting? Who will participate in the briefing? Should DEP be included in this meeting as the 3rd party enforcer outlined in the Executive Order?

STEP TWO: Arrange and conduct a meeting with **Sprague Energy** to share the study and its conclusions.

TBD: Who is best to make contacts? Who will participate in meeting?

STEP THREE: Call **Jim Gilway, Searsport Town Manager** to brief him and to request and schedule an opportunity to present the study in Executive Session to the Board of Selectmen. Under Maine's Right to Know Law, municipal boards are allowed to meet in Executive Session to discuss economic development matters.

TBD: Who is best to make contacts? Who will participate in briefing? Will we present powerpoint with all messaging or simply present the study?

STEP FOUR: Brief, by phone, the members of **Searsport's legislative delegation (Senator Chip Curry and Representative Scott Cuddy)** and tell them that the Board of Selectmen in Searsport is being briefed in executive session.

TBD: Who is best to contact?

STEP FIVE: Arrange a remote meeting with the state staff of all four members of the **Maine Congressional Delegation** to alert them to the pending announcement and to enlist their aid in identifying available federal funding. A follow up joint conversation with Governor Mills and the four Members could be arranged the evening before the announcement or the morning of the announcement.

TBD: Who is best to arrange meeting? Who will participate in the briefing?

STEP SIX: Brief, by phone, **President Bill Brennan of the Maine Maritime Academy**, to solidify their support and interest in developing the port as future employment for their graduates, and as one of the closest neighbors to the port.

TBD: Who is best to make the contact?

STEP SEVEN: Reach out and individually brief the executive director or president of **business organizations and labor organizations** that are likely to support the initiative. Offer in depth briefings after the announcement.

- Dana Connors, Maine State Chamber of Commerce
- Maria Fuentes, Maine Better Transportation Association
- Jeremy Payne, Maine Renewable Energy Association
- Matt Marks, AGC Maine
- Jack Humeniuk, Maine Longshoreman (AFL-CIO)
- Matt Schlobohm, AFL-CIO

- Maine Lobsterman's Union

TBD: Who is best to make the contacts?

STEP EIGHT: Brief key leaders of Maine's environmental non-governmental organizations. Offer in depth briefings after the announcement.

- Don Perkins and David Reidmiller - Gulf of Maine Research Institute
- Jeff Marks, Acadia Center
- Sam Belknap, Emma Wendt, Nick Battista - Island Institute
- Sarah Leighton, Matthew Cannon - Sierra Club
- Andrew Beahm, Eliza Donoghue, Nick Lund – Maine Audubon
- Anya Fletcher, Environment Maine
- Beth Ahearn, Maine Conservation Voters
- Keith Arnold, Robert Wood, Kaitlyn Bernard - The Nature Conservancy
- Lisa Pohlmann, Pete Didisheim, Melanie Sturm, David Costello, - Natural Resources Council of Maine
- Sean Mahoney, Conservation Law Foundation

TBD: Are these the right representatives of the organizations? Who is best to make the contacts?

STEP NINE: Call each member of the Road Map's Fisheries Working Group to provide a heads up about the pending announcement and alert them to the role that the Governor will ask of them as part of the Road Map project.

TBD: Who is best to make the contacts?

STEP TEN: ANNOUNCEMENT (Note: We should consider editorial board briefings with Maine Biz, Bangor Daily News and Portland Press Herald the day before the announcement)

TBD: Who will comprise the Media Team to prepare press advisories and press releases? Who will assume responsibility for Governor's speech? Should we do Editorial boards? Are there Key reporters to whom we should grant exclusive interiews? Are there Industry publications that we should reach out to arrange interviews?

STEP ELEVEN: Send invitation to the town manager/key official of each **municipality in the proximity of Searsport**, inviting them to a location in Searsport to get a briefing about the project, perhaps hosted by the Town of Searsport, and include area legislators. The invitation should be sent the day of the announcement, but calls should also be placed alerting them to the event. Those towns include:

Belfast, Stockton Springs, Bucksport, Winterport, Lincolnville, Islesboro, Penobscot, Castine, Brooksville, North Haven

TBD: Who should the invitation come from? Who is best to make the calls? Where will the briefing be? Who will participate in the briefing? Are there other islands in Penobscot Bay, other municipalities in Waldo or Hancock Counties that should be invited?

TIMELINE:

Week of October 18: Meeting with area town/county officials
October 13, 14, or 15 – ANNOUNCEMENT
October 11-12: Contact members of Fisheries Working Group
October 6-8: Contact Environmental NGOs
October 4-5: Contact business and labor groups
October 4: Contact MMA
September 27-October 1: Meet with MCHT/FOSI; Meet with Sprague Energy; Meet with Town of Searsport; Call Searsport legislators

The post-announcement stakeholder management strategy is being developed and will be partially informed by the feedback and reactions gained during the roll-out of the pre-announcement stakeholder strategy, but should definitely revolve somewhat around the Road Map project.

Messages Supporting Roll-out of OSW Port Development

I. OSW Background – Why Maine?
II. Sears Island to become the Renewable Energy Port of the Northeast; other ports up and down the Maine coast will play auxiliary roles to support OSW
III. Building the VOLTURNUS floating hulls designed by UMaine in Maine will create significant economic benefit – Maine patented and Maine built
IV. OSW energy critical to achieving our climate action goals

I. Off Shore Wind – Why Maine can be become the National Hub

- OSW represents Maine's largest untapped sources of clean energy with more than 156 gigawatts (156,000 megawatts) of potential energy off the Maine coast
- UMaine is a national leader in research and development around wind power and the holder of a patent on the VOLTURNUS floating hull technology that can support wind turbines in deep water – a demonstration of UMAINE's floating hull technology is moving forward off Monhegan Island
- Maine has an enterprising citizenry with centuries of maritime experience
- Maine is pursuing federal approval for a Research Array of up to 12 floating turbines using UMaine technology – to best determine how OSW and Fisheries can co-exist
- Governor Mills' Energy Office received $2.167 million EDA Grant to develop OSW industry in Maine

II. Port Infrastructure in Maine to Support OSW Industry

A. As part of Governor's OSW Initiative, DOT commissioned Moffatt & Nichol to study the feasibility of constructing a port in the Searsport region to support OSW industry on the eastern seaboard
    a. Four locations were extensively studied – Mack Point Terminal, Sears Island, Sprague Put Parcel, and the GAC Chemical Site
    b. Study criteria included the required draft for delivery vessels; vessel clearances; upland area sufficient to fabricate the foundations and storage and staging of wind turbine components; required loading levels; unlimited air draft; length of quay, capacity for sufficiently-sized land based crane; and distance to installation sites.
    c. The Sprague Put Parcel and GAC Chemical Site were ruled out based on an initial analysis to identify fatal flaws;
    d. Sears Island was recommended as the ideal location
        i. Required depths can be met WITHOUT DREDGING at the site
        ii. There is sufficient upland area for fabrication and component assembly

iii. There is access to existing deep water for the fabricated hull and the completed turbine
iv. Total project costs will be less than at Mack Point

B. Moffatt & Nichol is also conducting a Phase 2 study to analyze port locations along the entire Maine coast to perform auxiliary roles such as Maintenance and Operations, Crew Transfer, Component Manufacturing
C. **Sears Island can become the Renewable Energy Port of the Eastern Seaboard**
D. Other ports up and down the Maine coast can perform auxiliary roles– making Maine a national hub for the OSW industry

III. Building the VOLTURN US in Maine yields the greatest economic benefit of Maine-based research at the University of Maine

- In a March 2019 study led by Professor Todd Gabe at UMaine's School of Economics, it was estimated that constructing the OSW floating hull would result in 3,928 jobs for five years for each 500 MW project;
- Building 9,000 MW of offshore wind by 2035 will create more than 10,000 jobs
- Jobs include iron workers, carpenters, electricians, plumbers, operating engineers, laborers, truck drivers, maintenance technicians, vessel crews and white collar engineering, permitting and management jobs
- The total economic gain to Maine has not been quantified, but will be a game-changer

IV. Enabling the OSW Industry from Maine will significantly advance the state's and nation's climate goals

- OSW will diversify Maine's energy sources and reduce fossil fuel emissions

Searsport Intermodal Commodity Final Report

August 3, 2017

FINAL REPORT

Searsport Intermodal Commodity Study

Maine Port Authority/Maine DOT

HDR Project No. 10040573

Searsport, Maine
August 3, 2017

Figure 13: Existing Main Rail Yard and Heavy Weight Pad Area[75]

Land Expansion and Industrial Park Development

Another primary concern is the availability of land for Port expansion. Development of Sears Island has been a controversial issue for a number of years, but Searsport represents one of the most flexible and adaptable Port facilities in the Northeast. If the Port were to grow with the removal of constraints, additional land would be needed for handling of cargo. Future development of an efficient, major container terminal on Sears Island is impractical. This site, however, could be used for project cargo, specialized production or assembly of offshore wind components, or neo-bulk cargoes. While not an immediate need, preservation of the Sears Island site for future Port use should be considered since lack of land for expansion is often the major constraint in the growth of successful ports.

Developing an industrial park near the Port should be included in Searsport's future town planning. The Town has identified industrial property near the Port which could include some 100 acres of industrial land for new development. This could be enhanced for development by planning the property and identifying utility capabilities, including the provision of gas through Bangor Gas's line into the Port. Additionally, during interviews with Town officials, it was made apparent that the Town is committed to embracing its maritime heritage. It is therefore recommended that the Town consider appointing an employee to be responsible for focusing on Port planning and industrial issues for future growth.

[75] Source: HDR