



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

Deval L. Patrick
GOVERNOR

Timothy P. Murray
LIEUTENANT GOVERNOR

Jan A. Bowles
SECRETARY

Tel: (617) 626-1000
Fax: (617) 626-1181
<http://www.mass.gov/envir>

August 1, 2008

CERTIFICATE OF THE SECRETARY OF ENERGY AND ENVIRONMENTAL AFFAIRS
ON THE
FINAL LANDSIDE ENVIRONMENTAL IMPACT REPORT (EIR) /SITE MASTER PLAN
AND DRAFT MARINA EIR

PROJECT NAME : Cordage Seaside
PROJECT MUNICIPALITY : Plymouth
PROJECT WATERSHED : Plymouth Harbor
EEA NUMBER : 12513
PROJECT PROPONENT : Cordage Development, LLC
DATE NOTICED IN MONITOR : June 25, 2008

As Secretary of Energy and Environmental Affairs, I hereby determine that the Final Landside Environmental Impact Report (EIR)/Site Master Plan and Draft Marina EIR submitted on the above project **adequately and properly comply** with the Massachusetts Environmental Policy Act (G. L., c. 30, ss. 61-62H) and with its implementing regulations (301 CMR 11.00). The proponent may prepare and submit the Final Marina EIR for review

Project Description

The project as described in the Final Landside EIR/Site Master Plan and Draft Marina EIR is a redevelopment and reuse of the former Plymouth Cordage Company site that includes a mix of residential, office, commercial, and marine uses. The project involves the development of 675 housing units, 33,500 square feet (sf) of retail space, a 6,960-sf/180-seat restaurant, a 4,000-sf club house, 21,000-sf of office space, and a 250-slip marina on a 36-acre site. The current filing includes the potential for constructing an additional floor to Building 1400 (an existing two-story structure located on the filled pier) to accommodate an additional 18 residential units.

The preferred marina alternative, as proposed, includes the development of a 250-slip, year-round pile supported facility. This alternative will require the removal of 38,510 cubic yards (CY) of dredged material from a 235,230-sf area and will be dredged to a depth of (-) five feet below mean low water (MLW). Of this area, 87,090 sf will be maintenance dredging and

147,470-sf will be improvement dredging. Total intertidal dredging will be 44,890-sf with a corresponding volume of 8,570 CY. A fixed wave screen structure is proposed for the marina. Vessel pump-out service will be conducted by a fixed shore-side pumpout station connected to the Town of Plymouth's sewer system. Marina amenities will include lockers, showers, washer/dryer area, restrooms and a meeting space in the Building 1400.

This project is being proposed through the creation of a 40R Smart Growth District approved by the Town of Plymouth and the State Department of Housing and Community Development.

Special Review Procedure

The Environmental Notification Form (ENF) originally submitted for this project described two project phases - a Landside component and a Marina component. The ENF required the development of a Draft and Final EIR for the marina and landside components of the project. A Special Review Procedure (SRP) was developed in a separate Certificate that requires:

1. Draft Landside EIR/Site Master Plan, with a request from the proponent to allow the redevelopment of Building 16;
2. Final Landside EIR/Site Master Plan and Draft Marina EIR; and
3. Final Marina EIR

This proposed redevelopment, as a 40R Smart Growth District, served by public transportation, has the potential to exemplify the policy goals of Executive Order 385 (planning for Growth), Executive Office of Energy and Environmental Affairs' (EEA) Community Preservation Initiative, and the Southeastern Massachusetts' Vision 2020 Project. At the same time, state resource agencies have requested specific additional information regarding the Marina component of the project. I expect that that the MEPA process will afford the necessary opportunities to address the concerns of agencies and citizens. To facilitate development of the Final Marina EIR that adequately avoids, minimizes and mitigates impacts to marine resources, I expect the proponent to continue consulting with the state agencies that have provided detailed comments on the Final Landside EIR/Site Master Plan and Draft Marina EIR.

MEPA History Since the Submittal of the Environmental Notification Form (ENF)

On September 24, 2004, the proponent submitted a Chapter 91 Application to the Department of Environmental Protection (MassDEP) for after-the-fact licensing of a 54-slip marina and a boat ramp. MassDEP negotiated an Administrative Consent Order (ACO) with the proponent. In December, 2005 the proponent submitted an after-the-fact Notice of Project Change (NPC) to the MEPA office. In the NPC, the proponent described the already constructed project change as temporary in nature because it was intended to support boating activity only until the project originally submitted to MEPA for the entire site was permitted and constructed. A Section 404 Permit will be required from the US Army Corps of Engineers for this project; therefore, a 401 Water Quality Certification will also be required from MassDEP.

In April, 2007, the proponent submitted a second NPC. The project changes involved the redevelopment and reuse proposal for the former Plymouth Cordage Company that included a mix of residential, office, commercial, and marine uses originally described in an Environmental Notification Form (ENF) dated June 22, 2001. The project modifications as proposed in the NPC were the result of the inclusion of additional parcels and the creation of a 40R Smart Growth District approved by the Town of Plymouth and the Massachusetts Department of Housing and Community Development. Specific project modifications include: increasing the number of housing units from 160 to 675; eliminating the 275-room hotel; providing 70,620-sf of retail and restaurant space; adding a 4,000-sf club house; reducing restaurant use from 850 to 401 seats; reducing the office space from 270,000-sf to 21,000-sf; and, an overall increase in project area from 21.6 acres to approximately 36 acres. As originally described in the ENF, the overall project site contained 11.3 acres of formerly filled tidelands, with nine structures. An NPC Certificate was issued on May 25, 2007 that reiterated that the Scope issued for the 2001 ENF, including the Special Review Procedures, continued to provide appropriate guidance for preparation of the Draft Landside EIR/Site Master Plan. The EIR was also required to include a full discussion of the project changes stated in both NPCs, as well a discussion of the already developed temporary 54-slip marina and responses to the comments on the original ENF and both NPCs. In December, 2007, the proponent submitted the Draft Landside EIR/Site Master Plan. On January 16, 2008, a Certificate was issued that found the Draft Landside EIR/Site Master Plan adequate and issued a scope for the Final Landside EIR/Site Master Plan and Draft Marina EIR.

MEPA Jurisdiction and Permitting Requirements

The project is undergoing review and requires the preparation of a mandatory EIR pursuant to Section 11.03 (6)(a)(6) of the MEPA regulations, because it will generate more than 3,000 new average daily trips on roadways providing access to a single location. The project requires a Chapter 91 License, 410 Water Quality Certification, and a Sewer Extension/Connection Permit from the Department of Environmental Protection (MassDEP). It requires approval of grade crossing modifications by the Massachusetts Bay Transportation Authority (MBTA). The project may require federal consistency review by the Massachusetts Office of Coastal Zone Management (CZM). Also, the project requires an Order of Conditions from the Plymouth Conservation Commission. Because the proponent is not seeking Commonwealth financial assistance to construct the project, MEPA jurisdiction is limited to those aspects of the project within the subject matter (wetlands, stormwater, waterways, water quality and transportation) of required or potentially required permits.

Review of the Final Landside EIR/Site Master Plan

The Final Landside EIR/Site Master Plan is well organized and generally thorough in its response to the Scope relative to the Landside component of the project. It includes a project summary, an analysis of impacts, mitigation commitments, and detailed technical information and data to support the discussions and conclusions presented in the main text.

Stormwater

This project is considered to be a redevelopment pursuant to 310 CMR 10.05 (6)(k)7 and therefore must meet the MassDEP Stormwater Management Standards to the maximum extent practicable, and must be designed to improve existing conditions with no net increase in impervious surfaces. I note that the project site is located near a number of critical areas, including mapped shellfish habitat, mapped shellfish growing areas, and the Town of Kingston's Grey's Beach (the town's primary recreational beach). Plymouth Harbor is also a Class SA waterbody and has been identified as an impaired water body for pathogen pollution under the state's integrated list of waters. Under the Massachusetts Stormwater Management Standards, promulgated on January 2, 2008, discharges to sensitive or critical receiving waters will require the use of specific source control and pollution prevention measures and the implementation of specific structural stormwater best management practices (BMPs) determined to be suitable for managing discharges.

The Final Landside EIR indicates that the project will mitigate for stormwater pollution through a combination of reduction in impervious area (approximately 12%) and through a combination of street sweeping, deep sump catch basins with hoods, hydrodynamic water quality inlets, and sediment forebays or water quality swales where feasible in order to achieve the Massachusetts Stormwater Management Standards' required 80% removal rate for Total Suspended Solids. MassDEP has indicated in its comment letter that additional information relative to stormwater must be provided as part of the permitting process. In addition, due to the sensitivity of the receiving waters, CZM strongly recommends that the stormwater mitigation system be designed for a water quality volume equal to 1.0 inch of runoff times the total impervious surface of the post-development project site. If sub-surface soil and depth-to-groundwater investigations indicate that infiltration is not a viable option at sites identified for infiltration, CZM recommends that other suitable pollution prevention measures, as described in Stormwater Management Standard #6, be utilized. I remind the proponent that compliance with the Stormwater Regulations is required prior to the issuance of a 401 Water Quality Certificate. The proponent should consult with both MassDEP and CZM on this issue.

Inland Wetlands

The project site contains various inland resource areas including bank, bordering vegetated wetlands, land under waterbodies, and land subject to flooding (bordering and isolated). Although work is intended in the buffer zones of some of these resource areas, no 'direct alteration of these wetlands is proposed. Some portions of the proposed work occur in Land Subject to Coastal Storm Flowage and coincide with the buffer zones to coastal resource areas as well. In response to MassDEP's comment letter on the Draft Landside EIR, the proponent has identified an off-site perennial stream and its associated 200-foot riverfront area on site plans submitted in the Final Landside EIR. According to the Final Landside EIR, it appears that related site work will occur in the outer riparian zone of the riverfront area within an existing parking lot. MassDEP has stated in its comment letter that the proponent has assumed that the activity is classified as redevelopment of previously degraded riverfront area. The proponent should work with MassDEP prior to permitting to determine what activities that occur

within the riverfront area are subject to a Chapter 91 License pursuant to 310 CMR 9.00.

Transportation and Air Quality

The project is expected to generate 9,768 new weekday trips and 7,728 new Saturday trips. The projected trip generation numbers was derived from the Institute of Traffic Engineers' land use codes. The Draft Landside EIR submitted in December, 2007 was prepared in conformance with the EOE/EOTC Guidelines for EIR/EIS Traffic Impact Assessment. The proponent summarized the analysis of impacts on levels-of-service (LOS) at the intersections listed in the original ENF Certificate. The mesoscale traffic analysis contains 12 roadway segments, most of which intersect with Route 3A and all of which now operate poorly (LOS E and F). A Memorandum of Understanding (MOU) between the Town of Plymouth and the project proponent required the proponent to provide certain transportation improvements to offset project-related traffic impacts. These improvements as required by the MOU include:

- Roadway improvements at the site access driveway on Court Street, at Hedge Road, at South Spooner Street, at Standish Avenue, and at Spooner Street;
- Possible roadway improvements at Route 3A and Crescent Street;
- Route 3 ramps at Exit 9, Samoset Street at Route 3 Exit 6, Route 3A at Howlands Lane, and Route 3A at Samoset Street which are discussed in detail in the Mitigation section below;
- Transportation Demand Management (TDM) measures;
- Improvements to MBTA Commuter Rail access/egress easements and commuter parking; and
- Connection to the Plymouth Bikeway.

The Final Landside EIR/Site Master Plan discussed a more comprehensive mitigation package including additional TDM measures.

An air quality mesoscale analysis for ozone was completed in the Draft Landside EIR to assess the total volatile organic compound (VOC) and nitrogen oxides (NOx) emissions associated with all project-related vehicle trips. The mesoscale analysis was also used to provide a carbon dioxide (CO₂) calculation which showed a considerable increase in CO₂ emissions for the project. Although the Greenhouse Gas Emissions (GHG) Policy does not formally apply to this project, the proponent provided in the Final Landside EIR/Site Master Plan a greater commitment to reduce project-related emissions of CO₂ and incorporated GHG reduction measures.

Historic and Archaeological Resources

The Massachusetts Historical Commission (MHC) believes that the Plymouth Cordage Complex is eligible for listing in the State and National Registers of Historic Places. The proponent has consulted with MHC prior to the submittal of the Final Landside EIR/Site Master Plan and is continuing to work with MHC on a draft Memorandum of Agreement (MOA). MHC has stated in its comment letter that the draft MOA addresses concerns and issues MHC has

raised about the adverse effects to the historic buildings and provides photographic documentation of those structures proposed for demolition, and design review of proposed historic rehabilitation and new construction. The proponent has committed to provide MHC with project plans early in the design process to facilitate an effective design review. The proponent should continue to work closely with MHC.

Tidelands and Public Waterfront

The proposed Landside development involves both non- water-dependent and water-dependent uses. The proposed residential, office, retail and restaurant uses are considered nonwater-dependent uses. The public waterfront access, transient docking, and access to navigable waters are water-dependent uses. Since the proposed project includes a mix of water-dependent and nonwater-dependent uses on geographic areas subject to Chapter 91 jurisdiction, the proposed project will be reviewed as a nonwater-dependent project pursuant to 310 CMR 9.12(1).

The proponent was required to make a determination of the limits of Chapter 91 jurisdiction on the project site, including a depiction of the historical low water mark, along with all wetland resource areas and buffer zones, on a reasonably scaled plan. The proponent was also requested to provide sufficient information to document the project's compliance regarding the proposed marina with the requirements of the Chapter 91 Waterways Regulations at 310 CMR 9.00 governing public access to recreational boating facilities (RBFs). MassDEP has commented that the project meets the Chapter 91 Waterways performance standards and accurately delineates the resource areas. However, MassDEP has stated that the project description lacks detail, but because the proponent understands the parameters governing the design of the project, this issue can be addressed through the license application review process. The proponent should consult with MassDEP to address the detailed information needed for the license application such as specific ground floor public uses, confirmation that an additional story may be added to the building on the solid fill wharf, lack of parking within the water-dependent use zone, and a landscape plan articulating the waterfront walkway and landscape details.

Mitigation

The Final Landside EIR identifies the following measures to avoid, minimize and mitigate project impacts:

Water Quality

- Best Management Practices (BMPs) will be implemented to ensure that construction activities do not result in adverse water quality impacts to Plymouth Harbor during construction.

Transportation

- Reconstruct primary site driveway with two 15-foot wide (minimum) travel lanes separated by an 8-foot wide (minimum) raised median within the development.

- Widen driveway to provide separate left and right-turn lanes exiting the site and two lanes entering approaching Route 3A.
- Reconstruct existing traffic signal system as necessary to accommodate the reconstruction of the site roadway.
- Construct 24-foot-wide internal roadways for two-way travel, or 16-foot-wide roadways for one-way travel. Provide marked crosswalks at pedestrian crossings of major internal roadways.

Route 3A at Crescent Street

- Monitor traffic volumes and operating conditions at this intersection on a periodic basis as the Project is developed.
- If monitoring demonstrates that a traffic signal is warranted in the future, a formal, detailed Traffic Signal Warrant Analysis (TSWA) will be prepared in accordance with MassHighway standards and provided to MassHighway and the Town of Kingston.

Route 3A at Crescent Street and Foundry Lane

- Monitor traffic volumes and operating conditions at this intersection on a periodic basis as the Project is developed.
- If monitoring demonstrates that a traffic signal is warranted in the future, detailed TSWA will be prepared in accordance with MassHighway standards and provided to MassHighway, the Town of Kingston and the OCPC.

Route 3A at Hedge Road and South Spooner Street

- Design and construct an emergency vehicle/pedestrian crossing signal at the intersection of Route 3A at Hedge Road and South Spooner Street that will facilitate emergency vehicular access to Route 3A from the Standish Avenue fire station and that will be equipped with pushbuttons and countdown signals to accommodate pedestrian access across Route 3A.

Route 3A at Cherry Street and Prince Street

- Design and implement an optimal traffic signal timing and phasing plan for the intersection of Route 3A at Cherry Street.

Standish Avenue at South Spooner Street

- Design and construct an emergency vehicle/pedestrian crossing signal equipped with pedestrian pushbuttons and pedestrian countdown signals at the intersection of Standish Avenue at South Spooner Street for emergency vehicular access to Standish Avenue and South Spooner Street from the Standish Avenue fire station.

Route 3A at the Route 3 Southbound Ramps

- Review the existing traffic signal timing and phasing, with particular emphasis on the yellow and all-red clearance intervals, and provide recommended timing and phasing adjustments, if any, to MassHighway and the Town of Kingston for implementation.

Route 3A at the Route 3 Northbound Ramps and Home Park Court

- Conduct a detailed TSWA for the intersection of Route 3A at the Route 3 northbound ramps and Home Park Court, including performing a continuous 12-hour (7:00 AM to 7:00 PM) manual TMC and provide the results of the TSWA to the Town of Kingston and MassHighway for use in prioritizing funding for the future installation of a traffic control signal at the intersection if and when warranted.

Samoset Street Westbound at the Route 3 Southbound Off-Ramp

- Conduct a detailed TSWA for the intersection of Samoset Street westbound at the Route 3 southbound off ramp and provide the results of the TSWA to the Town of Kingston and MassHighway for use in prioritizing funding for the future installation of a traffic control signal at the intersection if and when warranted.

Route 3A at Howlands Lane and a Private Driveway

- Conduct a detailed TSWA for the intersection of Route 3A at Howlands Lane and a private driveway, including performing a continuous 12-hour (7:00 AM to 7:00 PM) manual TMC and provide the results of the TSWA to the Town of Kingston and MassHighway for use in prioritizing funding for the future installation of a traffic control signal at the intersection if and when warranted.

Route 3A at Samoset Street and North Park Avenue

- Review the existing traffic signal timing and phasing, with particular emphasis on the yellow and all-red clearance intervals, and provide recommended timing and phasing adjustments, if any, to MassHighway and the Town of Plymouth for implementation.

Transportation Demand Management

- Pedestrian Improvements such as sidewalks, lighting and full handicapped access along the proposed roadways within the project
- Bicycle Accommodations such as bicycle racks, storage lockers, modify all project traffic signals to include bicycle detection, and access to the bicycle path.
- Encourage residents and commercial tenant to participate in ridesharing programs.
- Work with the Town of Plymouth, the MBTA and GATRA to implement a fixed-route shuttle service between the Project and the MBTA Kingston Commuter Rail Station.
- Alternate Work Schedules
- Provide designated areas for loading, delivery, and moving functions on site that are appropriately designed to accommodate these activities in a safe and efficient manner.

Sewer

The Project will undertake improvements to the Town's sanitary sewer system including upgrades to the Hedge Road sewage pump station as summarized below to ensure that the Project flows can be accommodated. These measures include the following:

- Upgrade sewage pumps.
- Modify level controls within the pump chamber.
- Upgrade generator to accommodate the upsizing of the new sewage pumps.
- Replace existing 6 inch sewer force main with an 8 inch sewer force main.
- Repair or replace existing sewer serving the proposed development that do not have adequate capacity, are in disrepair, or which have significant infiltration problems.

Stormwater

The project will improve the existing stormwater conditions on-site by implementing the following measures:

- Reduce the amount of impervious cover on-site by eliminating currently paved areas.
- Replace existing drainage infrastructure as necessary to support the new development.
- Create a stormwater treatment train to achieve a minimum 80% TSS removal rate as outlined in the MASWMP.
- Provide deep sump catch basins with oil/gas hoods, water quality inlets such as

Stormceptor© units.

- Construct water quality swales where site conditions allow.
- Undertake regularly scheduled sweeping of roads/parking lots.
- Perform routine maintenance of drainage structures to improve stormwater quality, which in turn will improve water quality in the Plymouth Harbor.

Water

The existing water system on-site is a separated potable/non-potable water distribution system. The potable water system is served by the Town of Plymouth and provides domestic and heating, ventilating, and air conditioning (HVAC) make-up water throughout the development and fire protection water to the Wal-Mart building. The non-potable water distribution system is a fire protection system that serves the existing mill buildings and is fed by the centrally-located Mill Pond on the Property. The non-potable water distribution system will not serve the proposed development, but will be maintained to continue serving the mill buildings that remain on the Property. The proponent will:

- Abandon the existing jacketed water main that serves the sites from Court Street through the funeral home parcel.
- Create a water loop within the Property by extending the 12 inch water main at the Wal-Mart building to the 8 inch water main in Hedge Road via Sandri Drive.
- Provide a hydraulic analysis of the proposed water distribution system to the Town to determine the suitability of the water system to accommodate domestic and fire protection needs, and provide upgrades or improvements as necessary to accommodate the proposed development program.
- Provide a hydraulic analysis of the proposed water distribution system to the Town to determine the suitability of the water system to accommodate domestic and fire protection needs, and provide upgrades or improvements as necessary to accommodate the proposed development program.

Historical and Archaeological Resources

As part of the Site Avoidance and Protection Plan, the proponent will:

- Insure that temporary protective fencing will be erected between the archaeological site area and the Project impact area prior to the start of demolition or construction activities.
- An archaeologist will monitor any demolition or excavation activities within 25 feet of the protective fence line.
- An archaeologist will conduct a pre-demolition/construction briefing for the project foreman;
- Record the general archaeological avoidance area on construction and “as-built” plans.
- Consult with the MHC prior to any future activities which may be proposed within the PCC Site Locus 1 archaeological avoidance area, including the consideration of donating a Preservation Restriction for the PCC Locus 1 Site.

Air Quality

A mesoscale air quality analysis was performed for the Preferred Alternative and

predicted that volatile organic compound (VOC) and nitrogen oxides (NOx) emissions in the project study area for the 2012 No-Build and Build cases will be less than the emissions for the 2007 Existing case. Emissions of VOC and NOx in the project study area for the 2012 Build case will be greater than the emissions for the 2012 No-Build case as a result of the traffic generated by the Project.

- The proponent will mitigate the project's potential air quality impacts by implementing Transportation Demand Management (TDM) strategies.
- Reduce Greenhouse Gas Emissions by incorporating sustainable design principals and by reducing paved areas.

Noise

- Equip emergency generator with a silencer and operate only when electrical service to the buildings is interrupted and for occasional brief daytime periods for reliability testing required by the manufacturer.
- Install acoustic louvers on the garage fan closest to the residences along Route 3A.

Review of the Draft Marina EIR and Scope for the Final Marina EIR

The Draft Marina EIR includes a project summary, an analysis of impacts, mitigation commitments, and detailed technical information and data to support the discussions and conclusions presented in the main text. The Final Marina EIR should follow Section 11.07 of the MEPA regulations for outline and content, as modified by this scope. It should include a copy of this Certificate and of each comment received.

Ocean Sanctuaries Act

The waterside components of the project, including development of the marina, the associated dredging, and the long-term operation of the marina, raise significant concerns regarding the potential impacts to water quality and marine resources including shellfish beds, eelgrass beds, and fisheries. The Department of Conservation and Recreation (DCR), under the Ocean Sanctuaries Act (Act) (M.G.L. c. 132A SS 12B-16E, 18) and corresponding regulations (302 CMR 5.00), is charged with the care, control, and protection of designated ocean sanctuaries. DCR requests, in its comment letter, that more information be provided in the Final Marina EIR to determine whether the proposed actions are consistent with the Act's requirements. The proponent must address the comments raised in DCR's comment letter which request that the proponent provide further details on two components - the public necessity and convenience standard of the Act. I strongly advise the proponent to consult with DCR to ensure that that these issues are addressed properly in the Final Marina EIR.

Dredging

The proponent has redesigned the marina layout to avoid impacts to eelgrass beds. However, the preferred 250-slip design alternative will now result in the dredging of over one

acre of coastal beach. Intertidal dredging had not been proposed for the 300-slip marina conceptual plan. The intertidal dredging of the beach will result in a loss of shellfish habitat. The Draft Marina EIR indicates that an in-water eelgrass survey will be conducted in July, 2008. The Draft Marina EIR includes several dredge disposal options, but does not adequately address actual dredge alternatives. The 401 Water Quality Certificate regulations at 314 CMR 9.07 state that no dredging shall be permitted if there is a practicable alternative that would have less impact on the aquatic ecosystem. MassDEP has requested that the Final Marina EIR should include a float layout design to avoid any impacts to eelgrass beds and to avoid or minimize dredging of the coastal beach to the extent feasible.

I note that the performance standards for Land Containing Shellfish 310 CMR 10.34(4) and (5) will not be met if shellfish habitat is permanently lost due to intertidal dredging. In addition, the performance standards for Coastal Beaches 310 CMR 10.27(3), (6) and (7), including tidal flats, may not be met due to intertidal dredging. The Final Marina EIR must discuss these issues thoroughly. I strongly advise the proponent to work with state agencies to address this issue.

Coastal Shoreline and Floodplain Management

Much of the project site is located within Special Flood Hazard Area (SFHAs) for the Town of Plymouth, revised December 19, 2006. The proposed project includes renovation of an existing two-story structure located on a filled pier, Building 1400, for residential retail and restaurant uses. The site is within a flood zone level VE with a base flood elevation of 18 feet above North American Vertical Datum (NAVD). Structures built or substantially improved within this zone must meet appropriate building code and Wetlands Protection Act requirements.

The proponent must provide in the Final Marina EIR a description, including maps with structure elevations, as to how the proposed redevelopment of Building 1400 will conform to applicable requirements, including flood program and building codes.

In previous comments on the Draft Landside EIR, both CZM and DCR noted that Building 1400 appeared to be located within a mapped velocity zone. Both DCR and CZM in the Draft Landside EIR comments recommended that the proponent provide a depiction of the revised Federal Emergency Management Agency (FEMA) flood zones and a description, including maps of structural elevations (plan view and cross-section), as to how the redevelopment of this structure would conform to applicable building codes and National Flood Insurance Program Requirements. The Final Landside EIR provides a map of the FEMA flood zones and a statement that the proposed structures or renovations will comply with new FEMA design plans and Massachusetts State Building Code; however, no details are provided. The location, design, and mitigation measures for building 1400 will affect the flow of storm surge and waves and may exacerbate landward flooding and storm damage problems; more information and detail must be provided in the Final Marina EIR. I advise the proponent to consult with DCR and CZM on this issue and address all issues raised in both comment letters related to floodplain management.

The Draft Marina EIR indicates that the expanded marina is expected to be pile-supported and remain in place year round. The Final Marina EIR should include plans of greater detail that would illustrate an approximate number of pilings and the size and type of floats to be utilized. The Final Marina EIR should address how the marina will be protected from ice and winter storm damage.

While the Draft Marina EIR states that the landside support for the marina has yet to be determined, it is anticipated that lockers, showers, washer/dryers, restrooms and a meeting room will be provided. The Final Marina EIR should contain more information on the location and number of each of these amenities.

Marine Resource Characterization

The area around the project site contains mudflats and eelgrass (*Zostera marina*) beds. Eelgrass beds provide one of the most productive marine habitats for numerous marine species and are designated "special aquatic sites" under the Federal Clean Water Act guidelines. As designed the project may not meet the performance standards for Land Under the Ocean 310 CMR 10.25 due destruction of eelgrass beds. The Draft Marina EIR claims that an eelgrass survey will be conducted in July, 2008 and results reported in the Final Marina EIR. The proponent must propose under 310 CMR 10.25(6)(b) best available measures that will be taken to minimize adverse effects on marine fisheries habitat or wildlife habitat caused by destruction of eelgrass beds. I advise the proponent that proposals included in the Final Marina EIR should be designed to avoid any areas containing eelgrass.

The Division of Marine Fisheries (DMF) has indicated in its comment letter that the project site lies within mapped shellfish habitat for quahogs (*Mercenaria mercenaria*), soft shelled clams (*Mya arenaria*) and European oysters (*Ostrea edulis*), which are protected under the Wetlands Protection Act (310 CMR 10.34). Mapped land containing shellfish is considered by MassDEP to be significant to the protection of shellfish. Plymouth Harbor and Kingston Bay are also winter flounder (*Pseudopleuronectes americanus*) spawning habitats which the Atlantic States Marine Fisheries Commission has designated as "Habitat Areas of Particular Concern" (HAPC). The Final Marina EIR should demonstrate all the efforts undertaken to protect these species. The proponent should work closely with the Division of Marine Fisheries (DMF) and address all the issues raised in its comment letter on the Draft Marina EIR.

The Division of Fisheries and Wildlife's Natural Heritage & Endangered Species Program (NHESP) has indicated that a portion of the proposed project will occur within a mapped habitat for three state-listed species of birds. NHESP does not anticipate any rare species concerns with this project. However, the proponent should file a Massachusetts Endangered Species Act (MESA) filing with NHESP for a final decision.

Marina Development

The Draft Marina EIR addresses the magnitude and climate of waves at the site and anticipates the need for a wave attenuator structure. However, no proposed wave attenuator

designs are addressed in the Draft Marina EIR or shown on the project plans. The Certificate on the Draft Landside EIR indicated that the proponent should analyze the impacts of the proposed marina on wave action and the flood zone and describe any anticipated changes in wave behavior resulting from the project, specifically the potential for wave reflection off the marina. This analysis should also include the proposed wave attenuation structure. Although the current filing provides an evaluation of the wave action and justification for a fixed wave structure to protect the preferred alternative, there is no discussion or evaluation of potential wave reflection, scour, impacts to adjacent coastal resources, and wave attenuator design or location. A fixed wall-type wave attenuation structure will reflect energy, and could change sediment transport and currents, adversely affecting the nearby eelgrass beds. Both CZM and MassDEP have requested that the Final Marina EIR include analysis of impacts from wave behavior including, but not limited to; impacts from the proposed wave attenuation structure; impacts from wave reflection, scour, sediment transport, and deposition; wave propagation and transmittal due to increased depths associated with dredging and changes in bathymetry; and, impacts to adjacent benthic resource areas including eelgrass beds and shellfish habitat. CZM also recommends that the proponent evaluate a range of wave attenuation structure types and configurations and operational alternatives.

Marina Operation

In order to minimize the potential impacts to resource areas, the proponent should develop a marine management plan that is consistent with the CZM/EEA Massachusetts Clean Marina Guide. Although the current filing indicates a Marina Management Plan will be developed, no details are provided. The Final Marina EIR should provide a detailed Marina Management Plan. CZM recommends that the plan address issues including, but not limited to: boat cleaning; engine maintenance; bilge water handling; spill response; boat sewage and wastewater management; solid waste management; and hazardous waste management. The plan should describe how all boat maintenance activities would be monitored and evaluated for conformance with the marina management plan.

The Final Marina EIR should address whether there are any navigational issues or other implications regarding the placement docking facilities within designated state and federal channels. The Draft Marina EIR indicates that educational materials, navigational aids, and corresponding charts will be developed for marina patrons to address impacts from marina-related vessel traffic to resource areas (including eelgrass) adjacent to the navigation channel. A draft copy of these materials should be provided in the Final Marina EIR for review and comment.

Underwater Archaeology

The Massachusetts Board of Underwater Archaeological Resources (BUAR) has stated in its comment letter that much of Plymouth Harbor is considered to be of high archaeological sensitivity therefore the BUAR cannot conclude whether or not there are submerged cultural resources in the proposed project area. Due to the high archaeological potential of the proposed project area, the BUAR has recommended in its comment letter that the proponent should perform

an archaeological assessment of the areas where dredging is proposed. The proponent should consult with the BUAR in developing an appropriate research design and methodology for this assessment and report the results in the Final Marina EIR.

Mitigation and Section 61

The Final Marina EIR should include a separate chapter on mitigation that includes a summary of all mitigation measures to which the proponent has committed. The Final Landside EIR/Site Master Plan and Draft Marina EIR should also include updated Section 61 Findings for use by the state permitting agencies.

The Draft Landside EIR identifies the following measures to avoid, minimize and mitigate project impacts:

Coastal Wetlands

- To minimize the potential for any adverse impacts to marine fisheries from the proposed dredging activities, a time-of-year (TOY) restriction will be implemented in order to avoid the winter flounder spawning and juvenile recruitment season. This TOY restriction will also incorporate the spawning seasons of anadromous fish.
- If the dredged materials are disposed of at the Cape Cod Bay disposal site, additional TOY restrictions on dredge disposal activities will be adhered to in order to protect Right Whales.
- Turbidity from dredging will be minimized to the greatest extent possible.
- Mitigation will also include the use of construction best management practices during all in-water activities. A silt curtain will be used during dredging to protect adjacent eelgrass beds from impacts caused by potential turbidity and/or sedimentation.

Habitat-based Mitigation

- Compensatory mitigation will be proposed to offset any impacts to shellfish populations or habitat. The proponent will work with the Town of Plymouth Harbormaster's office and the DMF to determine appropriate compensatory mitigation measures;
- Shellfish relocation after consultation with the local shellfish constable and under the guidelines of the DMF, who must approve a suitable location for relocation (310 CMR 10.34 (6)).
- Shellfish propagation after proper consultation with DMF; and
- Intertidal area restoration/creation: The restoration or creation of intertidal areas could offset the loss of intertidal area by dredging to create deeper subtidal areas (land under the ocean).

Water-quality

- The project will implement several storm drainage improvements including the reduction of storm water runoff that will improve the water quality of Plymouth Bay which will benefit shellfish resources.
- In addition, the project will provide a fixed sewage pump-out station to serve the

proposed marina expansion.

Tidelands

The Project includes activities within filled tidelands. The following public benefits will be provided:

- Expansion of recreational marina;
- Continuous public walkway along the waterfront;
- Public access along the entire west and northern edges of the solid filled pier (access on the east side of the pier may not be possible as the side of the building is integral with the pier foundation in this location);
- Activation of water by providing public viewing and fishing opportunities at the existing salt water intake pier;
- A harbor overlook;
- Use of existing boat ramp by kayakers and canoeists;
- Transient berthing; and
- Potential for berthing commuter ferry in the future.

Response to Comments

To ensure that the issues raised by commentators are addressed, the Final EIR should include responses to comments. This directive is not intended to, and shall not be construed to, enlarge the scope of the Final EIR beyond what has been expressly identified in the initial scoping Certificate or this Certificate. The Final EIR should include a copy of this Certificate and a copy of each comment letter received. I defer to the proponent as it develops the format for this section, but it should provide clear answers to questions and issues raised.


I note the comment letter submitted by the Town of Duxbury expressing concern with the scale of the proposed project, impacts on fisheries habitat and potential changes to sediment transport patterns. I expect the proponent will provide a response to those issues that are within the Scope of this Certificate.

Circulation

The Final EIR should be circulated in compliance with Section 11.16 of the MEPA regulations. Copies should be sent to any state agencies from which the proponent will seek permits or approvals, to the list of "comments received" below, to the Conservation Commissions in Plymouth and Duxbury and copies should be provided to the Plymouth, Duxbury and Kingston public libraries.

August 1, 2008

Date



Ian A. Bowles

Comments Received:

07/25/08 Massachusetts Office of Coastal Zone Management
07/25/08 Massachusetts Division of Marine Fisheries
07/25/08 Department of Conservation and Recreation
07/25/08 Department of Environmental Protection, 1st Comment (letter)
07/25/08 Town of Duxbury, Conservation Commission
07/25/08 Town of Duxbury, Duxbury Bay Management Commission
07/25/08 Massachusetts Board of Underwater Archaeological Resources
07/28/08 Massachusetts Historical Commission
07/28/08 Jones River Watershed Association
07/30/08 Department of Environmental Protection, 2nd Comment (e-mail)
07/31/08 Division of Fisheries and Wildlife, Natural Heritage & Endangered Species
Program

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