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

PROJECT NAME	: Little Pond Landing
PROJECT MUNICIPALITY	: Falmouth
PROJECT WATERSHED	: Cape Cod
EEA NUMBER	: 13883R
PROJECT PROPONENT	: Little Pond Landing, LLC
DATE NOTICED IN MONITOR	: December 10, 2008

Pursuant to the Massachusetts Environmental Policy Act (G. L. c. 30, ss. 61-62I) and Section 11.06 of the MEPA regulations (301 CMR 11.00), I hereby determine that this project **requires** the preparation of an Environmental Impact Report (EIR).

Project Description

As described in the Environmental Notification Form (ENF), the project consists of the construction of a 168-unit residential condominium development pursuant to M.G.L. c.40B. The project includes the construction of five buildings, an onsite RUCK CFT denitrifying sewage disposal system, interior roadways and parking, drainage structures, utilities, grading, and landscaping. The 21.2-acre site is a former sand and gravel pit, with altered topography subsequent to these historic mining operations. Portions of the site lie below the 100-year floodplain. The site is adjacent to Little Pond, a nitrogen sensitive embayment with a Total Maximum Daily Load (TMDL) set by the Massachusetts Estuaries Program (MEP) in 2006.

Anticipated environmental impacts outlined in the ENF include alteration of 11 acres of the 21.2-acre project site. Approximately 4.6 new acres of impervious area will be created in association with the construction of buildings, driveways and parking areas. Wetland impacts are estimated by the Proponent to include 278,000 square feet (sf) of Land Subject to Coastal Storm Flowage (LSCSF) and 80 linear feet of Coastal Bank. Wastewater discharges to the on-site wastewater treatment system will include 39,710 gallons per day (gpd) of sewage from Little Pond Landing and 8,000 gpd from the adjacent Falmouth Trade Center (FTC). Approximately 14,500 cubic yards of fill will be placed on-site to increase elevations above the 100-year floodplain.

Jurisdiction and Permitting

This project is subject to MEPA review because it requires a State agency action and exceeds two of the review thresholds at Section 11.03 of the MEPA regulations. The project will discharge to groundwater more than 10,000 gallon per day of sewage within an area established to protect a nitrogen sensitive embayment (Section 11.03(5)(b)(4)(c)(i)) and the project involves the alteration of ½ or more acre of any other wetland (i.e. Land Subject to Coastal Storm Flowage) (Section 11.03(3)(b)(1)(f)). The project will require a Major Groundwater Discharge Permit from the Massachusetts Department of Environmental Protection (MassDEP) and a Superseding Order of Conditions from MassDEP, as the Order of Conditions issued by the Falmouth Conservation Commission has been appealed by the Proponent. The project will require a National Pollutant Discharge Elimination System (NPDES) Construction General Permit from the U.S. Environmental Protection Agency (U.S. EPA). The project has obtained a Comprehensive Permit from the Falmouth Zoning Board of Appeals.

Because the Proponent is not seeking financial assistance from the Commonwealth for the project, MEPA jurisdiction extends to those aspects of the project that are within the subject matter of required or potentially required state permits and which may cause Damage to the Environment as defined in the MEPA regluations. In this case, MEPA jurisdiction exists over wetlands, stormwater, and wastewater. For the purposes of MEPA review, receipt of a Comprehensive Permit in accordance with M.G.L. c.40B, is not considered financial assistance under 301 CMR 11.00. Furthermore, the project does not require a State agency action pertaining to traffic impacts or rare species impacts, therefore, MEPA does not maintain jurisdiction over these subject areas.

The project, as presented in the ENF, is not subject to a mandatory EIR based upon the MEPA regulations. However, due to the potential environmental impacts of the project, the unique nature of the project site, and the established nitrogen sensitivity of Little Pond, I am requiring that an EIR be prepared. While MEPA does have a Memorandum of Understanding with the Cape Cod Commission outlining a Joint Development of Regional Impact (DRI) / EIR review process, the Cape Cod Commission Act specifically identifies the Cape Cod Commission as a local board during the residential 40B process. Therefore, a Joint DRI/EIR review process will not be established for this project.

I acknowledge that the project area has been mapped by the Executive Office of Energy and Environmental Affairs (EEA) as containing an income-based Environmental Justice (EJ) population. However, the project is not subject to the EEA Environmental Justice Policy (the Policy), as the environmental thresholds exceeded by this project are not specifically addressed in the Policy. I encourage the Proponent to consider outreach efforts to EJ populations during the ongoing MEPA review process.

SCOPE

General

The Draft EIR (DEIR) should follow Section 11.07 of the MEPA regulations for outline and content, as modified by this scope.

Project Description and Permitting

The DEIR should include a detailed description of the proposed project and describe any changes to the project since the filing of the ENF. The DEIR should provide a brief description and analysis of applicable statutory and regulatory standards and requirements, and a description of how the project will meet those standards. The DEIR should include a list of required permits and approvals and provide an update on the status of each permit and/or approval.

Alternatives

The project will result in the development of a vacant parcel, ultimately resulting in the fill of floodplain areas and the introduction of new wastewater sources. The ENF provided a cursory alternatives analysis regarding the potential build-out of the property as a light industrial commercial subdivision. The DEIR must expand upon this alternatives analysis to explore ways to further avoid, minimize or mitigate Damage to the Environment as defined in the MEPA regulations including:

- A No-Build Alternative;
- A 104-unit Only Alternative as suggested in the ENF as the first phase of development associated with the initial installation of the RUCK CFT system;
- A Below-unit Parking Alternative in which the majority of the required parking is provided in first floor garages, resulting in less fill within the floodplain; and
- A Preferred Alternative, if different from the alternatives required above.

It is possible that, subsequent to the completion of the alternatives analysis, the Preferred Alternative could be modified in comparison to that presented in the ENF. The DEIR should identify the impacts for each of the alternatives on land alteration (including impervious area), wetlands, drainage, and wastewater in a tabular format. This table, along with a supporting narrative and conceptual site plans, should provide a comparative analysis that clearly shows the

differences between the environmental impacts associated with each of the alternatives. The DEIR should describe how each alternative can be constructed in a manner, if possible, consistent with applicable FEMA floodplain construction standards. The DEIR should clarify any grading or site configuration alterations that will be made on the FTC site to accommodate each alternative. Finally, the DEIR should discuss current and future off-site wastewater treatment alternatives to accommodate flows from the project.

I note several comments regarding potential inconsistencies with the Regional Policy Plan (RPP) and the preferred project alternative. The DEIR should make note of these inconsistencies and be sure to address these concerns as part of the Response to Comments.

Wetlands / Stormwater

The project site contains a variety of upland and coastal wetland resource areas. According to the Order of Conditions included in the ENF, the wetland resource areas affected by the project include Isolated Land Subject to Flooding (ILSF), Bordering Vegetated Wetlands (BVW), a Vernal Pool, Coastal Bank, Land Under Salt Ponds, Land Containing Shellfish, and Riverfront Area. Land Under Salt Ponds, Land Containing Shellfish and some Coastal Banks are associated with Little Pond, a tidal waterbody adjacent to the project site. The ENF states that approximately 6.4 acres of land will be disturbed within Land Subject to Coastal Storm Flowage (LSCSF) with a total placement of 14,500 cubic yards of fill to increase elevations on-site. I note that the Vernal Pool has not been certified by the Natural Heritage and Endangered Species Program (NHESP) and the project site does not contain any mapped *Estimated* or *Priority Habitat* according to the most recent NHESP Atlas. The Division of Marine Fisheries (*MarineFisheries*) has determined that the northern portion of Little Pond is considered suitable shellfish habitat for quahogs (*Mercenaria mercenaria*) and soft shelled clams (*Mya arenaria*). Comments received indicate that Little Pond has been used by the Town of Falmouth as a source of shellfish for their shellfish relay program.

I acknowledge the concerns received regarding the potential displacement of floodwaters subsequent to the filling of LSCSF. As noted by MassDEP, the Wetlands Protection Act Regulations do not establish specific performance standards for LSCSF. The project will be required to conform to the construction standards of the State Building Code and National Flood Insurance Program for construction within a coastal flood zone. The DEIR should confirm that basements are not proposed below base flood elevation (zone A11, 11 NGVD). The DEIR should discuss how considerations for sea-level rise will be worked into the final elevations of buildings and grades. The DEIR should elaborate on how elevations will be adjusted to allow for sea-level rise, including the source of anticipated sea-level rise data. I encourage the Proponent to discuss potential sea-level rise impacts with the Office of Coastal Zone Management (CZM). The DEIR should confirm that potential floodwaters within Little Pond, or the project site itself, will result from an overland flow of floodwaters from the Atlantic Ocean, and not exclusively from any potential hydraulic restrictions or limiting flow characteristics unique to Little Pond.

The ENF included a groundwater mounding analysis detailing the potential groundwater impacts associated with the wastewater discharge on-site. The DEIR should clarify the duration of the mounding conditions on-site (along with RUCK CFT operating assumptions), with particular discussion of conditions within the adjacent wetland resource areas, as sustained increases in the water table or changes in groundwater flows may negatively impact the viability of wetland resource areas. If an extended period of elevated groundwater levels are expected, the DEIR should discuss potential impacts to wetland resource areas and how these impacts may be avoided, minimized or mitigated. Considerations should be given to the potential amplified effect of both tidal cycle influences and groundwater mounding effects from the wastewater treatment facility on the water table within the wetland resource areas. The DEIR should confirm that the watershed delineation used to calculate potential salinity changes to Little Pond is consistent with the watershed used by the MEP.

MassDEP has stated that the Wetlands Regulations related to the protection of the Coastal Banks require that any project on a Coastal Bank or within 100 feet landward of the top of a Coastal Bank not have an adverse effect due to wave action on the movement of sediment from the Coastal Bank to Coastal Beaches or Land Subject to Tidal Action (310 CMR 10.30(4)); or shall have no adverse effect on the stability of the Coastal Bank (310 CMR 10.30(6)). MassDEP has indicated that the Coastal Banks on the interior of the site (not those immediately adjacent to Little Pond) do not appear to provide sediment to Coastal Beaches, Coastal Dunes or Barrier Beaches, rendering (310 CMR 10.30(4)) non-applicable to this project. Furthermore, MassDEP has indicated that the proposed filling of the formerly excavated sand and gravel pits will not have an adverse effect on the stability of Coastal Banks. The DEIR should include a graphic at a readable scale that clearly outlines proposed grades in the vicinity of the interior BVW to confirm that vertical buffers will be maintained. The DEIR should elaborate on the outstanding concerns regarding the applicability of a 50-foot Limit on Future Development restriction. This restriction appears to be coincident with the on-site Coastal Banks, however it is unclear if this restriction applies to the property in its entirety or the southwest corner of the site alone. Supporting data should be provided in the DEIR to confirm the location of these restrictions.

The original Notice of Intent for the project was filed in 2006. Therefore, the project is required to comply with the MassDEP Stormwater Management Policy (SMP), not the new Stormwater Management Regulations effective January 2, 2008. The DEIR should include drainage calculations with supporting data, updated stormwater system design plans at a readable scale (if applicable), best management practice (BMP) designs, and a narrative description of the stormwater management plan to affirm that the stormwater system design is in conformance with the SMP. I acknowledge the comments from *MarineFisheries* noting the importance of water quality from stormwater discharges from the project site on the shellfish habitat within Little Pond. The DEIR should affirm that water quality standards set forth in the SMP will be met. Stormwater management calculations must include graphics depicting the existing and proposed drainage areas used in the stormwater modeling process and Total Suspended Solids (TSS) calculations to confirm compliance with the SMP.

To evaluate the potential flooding impact on the on-site wetlands and stormwater management system, the DEIR should delineate the watershed volume of runoff coming from the

site during a 100-year rainstorm. The DEIR should discuss how runoff volumes in a storm of this magnitude may impact wetland resource areas.

The DEIR should demonstrate that source controls, pollution prevention measures, erosion and sedimentation controls during construction, and the post-development drainage system for the project are designed in compliance with the SMP and standards for water quality and quantity impacts. The DEIR should demonstrate that the proposed grade changes on-site will not result in overland flows to wetland resource areas that are not in compliance with the SMP or lead to on-going erosion and sedimentation issues. The DEIR should discuss measures that may be implemented to limit the use of fertilizers and pesticides on the property and limit their potential entry into stormwater runoff and wetlands. I strongly encourage the Proponent to incorporate Low Impact Design (LID) stormwater management techniques on-site such as vegetated swales or bioretention to further mitigate stormwater impacts.

Wastewater / Water

The ENF states that the project will generate a total of approximately 39,710 gpd of wastewater on-site. The DEIR should clarify how the effluent estimates were determined based upon Title 5 design flow, as commenters have raised concerns as to whether the project consists of 316 bedrooms (110gpd/bedroom = 34,760 gpd) as proposed in the Comprehensive Permit or 361 bedrooms (110 gpd/bedroom = 39,710 gpd) as presented in the ENF. The DEIR should address why higher flow estimates may have been used and how this potentially impacts the nitrogen offsets required for the project. An additional 8,000 gpd of off-site wastewater generated by the FTC is proposed for treatment in the on-site RUCK CFT system. The RUCK CFT system had been designed to accommodate a total leaching capacity of 47,710 gpd and discharge a final effluent with a Total Nitrogen Concentration of 5 milligrams per liter (mg/L) at full project build-out. The existing soil absorption systems at the FTC site will be abandoned. The ENF has indicated that the project will be constructed in two phases in order to evaluate the performance of the RUCK CFT system. Phase I consists of 104 units located in Buildings 3,4 and 5, and Phase II consists of the full-buildout of 168 units in Buildings 1,2,3,4 and 5. The Proponent has completed a site soils evaluation witnessed by MassDEP and filed a Groundwater Discharge Permit application in accordance with 314 CMR 5.00.

The project is located in the Little Pond watershed, and Little Pond is a nitrogen impaired embayment for which a TMDL has been established. MassDEP has stated that due to existing nitrogen impairment, MassDEP is requiring the Proponent to secure nitrogen offsets to ensure that no additional nitrogen load is discharged to the watershed. In the process of evaluating nitrogen offset requirements, MassDEP considers the nitrogen load that will be generated from the proposed project and directs the project Proponent to reduce existing sources of nitrogen equal to the amount generated by the project. The ENF included a Nitrogen Reduction Analysis describing proposed offsets, nitrogen loading calculations and information on the existing wastewater flows generated by the FTC. Offset calculations were developed for both Phase I and Phase II of the development. These calculations have been prepared in association with the Groundwater Discharge Permit (314 CMR 5.00) and will be used during the State permitting process.

The Phase I nitrogen calculations presented in the ENF are based on achieving a 10 mg/L total nitrogen effluent discharge from the project site (this includes project flows and FTC flows). Phase II nitrogen assessment and removal estimates assume a 5 mg/L final effluent. The DEIR should clarify if these final effluent nitrogen estimates are assumed at the end of pipe or the property line. While these nitrogen loads were generally calculated using the MEP methodology, the septic nitrogen coefficients in the MEP methodology are for domestic wastewater only. MassDEP has confirmed that due to the nature of flows from the FTC, the nitrogen reduction analysis appropriately developed septic concentrations from the FTC based on an analysis of actual septic tank effluent samples. The DEIR should discuss how possible changes to tenancy at the FTC may increase or decrease achievable nitrogen offsets and how flexibility in tenancy will be accommodated in the anticipated overall permitted final nitrogen effluent requirements. The DEIR should confirm that the proposed agreement to treat flows from the FTC can meet MassDEP Groundwater Discharge Permit regulations.

MassDEP has indicated that based on the offset calculations included in the ENF, the Proponent will initially be limited to 104 units. Prior to commencement of Phase II, MassDEP will require proof of higher levels of nitrogen removal at the wastewater treatment facility. The DEIR must include a discussion of proposed wastewater monitoring protocols to be implemented during the Phase I operation of the wastewater treatment facility. I encourage the Proponent to discuss appropriate testing methodologies and protocols with MassDEP prior to filing the DEIR. The DEIR should provide a preliminary discussion of strategies to mitigate nitrogen loading from the Phase I project should the anticipated nitrogen offsets not materialize subsequent to monitoring. I note that should the project be limited to Phase I only, the ability of the project to meet the conditions outlined in local permitting approvals regarding wastewater nitrogen treatment to a final effluent level of 5 mg/L may not be achievable.

Construction Period Impacts

The DEIR should provide updated information on construction sequencing, phasing and construction period impacts. The proponent must comply with MassDEP's Solid Waste and Air Quality Control regulations during construction. The DEIR should discuss and commit to a plan for reuse and recycling of construction materials. The proponent should consult with MassDEP for appropriate standards and guidelines for managing demolition and construction waste.

I encourage the proponent to outline in the DEIR the measures that will be implemented to reduce construction-period diesel emission mitigation. Current options to reduce the emissions include the installation of after-engine emission controls such as diesel oxidation catalysts (DOCs) or diesel particulate filters (DPFs). Additionally, I recommend that the Proponent use ultra low sulfur diesel (ULSD) fuel in construction equipment. Commitments to these mitigation measures may be outlined in the DEIR.

MassDEP has advised the Proponent that, if oil and/or hazardous material is identified during the implementation of this project, notification pursuant to the Massachusetts Contingency Plan (310 CMR 40.0000) must be made to DEP, if necessary.

Mitigation

The DEIR should outline a clear commitment to viable and effective mitigation measures to offset projected environmental impacts. The DEIR should include a separate chapter summarizing proposed mitigation measures. This chapter should also include a draft Section 61 finding for each State agency that will issue permits for the project. Each draft Section 61 finding should contain clear commitments to implement mitigation measures, estimate the individual costs of each proposed measure, identify the parties responsible for implementation, and contain a schedule for implementation based upon discrete project construction milestones.

Comments/Circulation

The DEIR should contain a copy of this Certificate and a copy of each comment letter received. In order to ensure that the issues raised by commenters are addressed, the DEIR should include a response to comments. This directive is not intended to, and shall not be construed to, enlarge the scope of the DEIR beyond what has been expressly identified in this certificate.

The Proponent should circulate the DEIR to those parties who commented on the ENF, to any state agencies from which the proponent will seek permits or approvals, and to any parties specified in section 11.16 of the MEPA regulations. I ask that a copy of the DEIR also be provided to the Office of Coastal Zone Management. A copy of the DEIR should be made available for review at the Falmouth Public Library.

January 9, 2009
Date

Ian A. Bowles

Comments received:

12/03/2008	Charles and Lucy Wyker
12/03/2008	David and Maureen Soutter
12/05/2008	Maureen Yauckoes
12/05/2008	Teaticket Civic Association (1st letter)
12/08/2008	Mary Little (1st letter)
12/08/2008	Adele M. Rohe
12/09/2008	Janet Hand
12/09/2008	Paul and MaryAnn Affsa
12/11/2008	Elizabeth W. Cant
12/26/2008	Craig A. Martin
12/23/2008	Virginia L Rabesa
12/26/2008	Sally N. Tracy
12/29/2008	Cape Cod Commission

12/29/2008	Daley and Witten, LLC on behalf of Ed Jalowiec
12/30/2008	Mary Little (2nd letter)
12/30/2008	Town of Falmouth (Board of Selectmen, Conservation Commission, Department of Public Works)
12/30/2008	Division of Marine Fisheries
12/30/2008	Teaticket Civic Association (2nd letter)
01/06/2009	Department of Conservation and Recreation – Flood Hazard Management Program
01/06/2009	Massachusetts Department of Environmental Protection - SERO

IAB/HSJ/hsj