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# The Commonwealth of Massachusetts

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December 12, 2007

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

PROJECT NAME : Stone Ridge
PROJECT MUNICIPALITY : Milford
PROJECT WATERSHED : Charles River

EEA NUMBER : 14127

PROJECT PROPONENT : The Gutierrez Company DATE NOTICED IN MONITOR : November 12, 2007

Pursuant to the Massachusetts Environmental Policy Act (G. L. c. 30, ss. 61-62H) and Section 11.03 of the MEPA regulations (301 CMR 11.00), I hereby determine that this project **requires** the preparation of a mandatory Environmental Impact Report (EIR).

# Project Description

As described in the Environmental Notification Form (ENF), the project includes construction of four (4) office buildings totaling 625,000 square feet (sf) in area; approximately 1,800 feet of improved roadway within an existing right-of-way, including a bridge crossing of the Charles River and a road culvert designed in accordance with the Army Corps of Engineers Stream Crossing Guidelines; approximately 2,131 total parking spaces; associated stormwater management facilities; connections to available water and sanitary sewer facilities; and a 29-acre conservation easement.

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The project site is approximately 80 acres in area, located adjacent to Route 85 (Cedar Street) and Interstate 495 in Milford. The site is currently undeveloped and contains a portion of the Charles River and an associated wetland system. Wildcat Pond is located to the east of the project site, and is part of the local water supply system. The project will alter approximately 44.5 acres of land, rendering 25 acre of land impervious. Wastewater generation is estimated at 46,125 gallons per day, with connections to existing sewer infrastructure in Cedar Street and the construction of a new pump station. The office uses will generate approximately 5,470 new vehicle trips per day, with peak hours occurring in the morning and afternoon on weekdays. There will be minimal traffic impact on weekends. Finally, there will be modest areas of wetland alteration to facilitate two roadway crossings within the project site. Mitigation for these impacts will be required through the provision of wetland replication areas.

# Jurisdiction and Permitting

The project exceeds several ENF and mandatory EIR thresholds in accordance with 301 CMR 11.03, and will require several State permits. The project is subject to the preparation of a mandatory EIR pursuant to: Section 11.03(1)(a)(2) due to the creation of ten or more acres of impervious area; Section 11.03(6)(a)(6) due to the generation of 3,000 or more new average daily trips on roadways providing access to a single location; and Section 11.03(6)(a)(7) due to the construction of 1,000 or more new parking spaces at a single location. The project also exceeds ENF thresholds pursuant to Section 11.03(2)(b)(2) because the project will result in the take of an endangered or threatened species or species of special concern and Section 11.03(3)(b)(d) due to the alteration of 5,000 or more square feet of bordering or isolated vegetated wetlands. The project will require a Section 401 Water Quality Certificate (WQC) and a Sewer Connection/Extension Permit from the Massachusetts Department of Environmental Protection (MassDEP). The project will also require an Indirect Highway Access Permit from the Massachusetts Highway Department (MassHighway) and a Conservation and Management Permit from the Massachusetts Division of Fisheries and Wildlife Natural Heritage and Endangered Species Program (NHESP). A Section 404 Category II Permit from the U.S. Army Corps of Engineers (U.S ACOE) and National Pollutant Discharge Elimination System (NPDES) Construction General Permit from the U.S. Environmental Protection Agency will be required. Finally, the project must obtain an Order of Conditions from the Milford Conservation Commission, or in the case of an appeal, a Superseding Order of Conditions from MassDEP.

Because the proponent is not seeking financial assistance from the Commonwealth for the current phase of the project, MEPA jurisdiction extends to those aspects of the project that may have significant environmental impacts and that are within the subject matter of required or potentially required state permits. In this case, MEPA jurisdiction applies to impacts to land, rare species, wetlands, transportation, wastewater, and stormwater.

#### **SCOPE**

#### General

The EIR should follow Section 11.07 of the MEPA regulations for outline and content, as modified by this scope. The DEIR should include a copy of this Certificate.

#### Project Description and Permitting

The DEIR should include a detailed description of the proposed project and characterization of the existing environment in compliance with 301 CMR 11.07(e) and (g). 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 is likely to significantly impact the existing conditions of the project site through the construction of office buildings, parking areas, roadways and associated infrastructure. The project site is located in a Zone A to a public surface water supply, immediately adjacent to the Charles River, and on-site stormwater discharges to designated Outstanding Resource Waters (ORWs). The project site contains Priority Habitat for a species of Special Concern. A more robust alternatives analysis should be included in the DEIR that effectively demonstrates that impacts to the environment have been avoided, minimized, or mitigated to the maximum extent practicable.

The DEIR should analyze the following alternatives:

- A No-Build Alternative;
- A Reduced Impact Alternative, which incorporates low-impact design techniques and minimizes overall impact to wetland resource areas and associated buffer zones; and,
- A Preferred Alternative, with modifications to the location of infiltration basins.

It is possible that subsequent to the completion of the alternatives analysis, that the Preferred Alternative will be modified in comparison to that presented in the ENF. The alternatives analysis should include previously discarded conceptual design plans to support the proponent's conclusion that the Preferred Alternative avoids, minimizes, and mitigates damage to the environment. The DEIR should identify the impacts for each of the alternatives on land alteration (including impervious area), traffic, parking, drainage, wastewater, rare species, historic/archaeological resources, and wetlands 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

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alternatives. I encourage the proponent to demonstrate the feasibility or infeasibility of other alternatives suggested in comment letters on the ENF.

The DEIR should identify and explain any project phasing, including potential impacts on construction sequencing and traffic patterns. It should discuss how this project is compatible with Executive Order 385 – Planning for Growth, by discussing its consistency with local land use plans and applicable regional plans.

## Traffic and Transportation

The ENF states that the project will result in the generation of approximately 5,470 new vehicle trips on an average weekday. Access to the site will be provided from Deer Street to Route 85. A MassHighway permit is required for indirect access to I-495.

The DEIR should include a traffic study prepared in conformance with EOEEA/EOTPW Guidelines for EIR/EIS Traffic Impact Assessments. The DEIR should present capacity analyses and a summary of average and 95<sup>th</sup> percentile vehicle queues for each intersection within the study area. In addition, the DEIR should present a merge and diverge analysis for each ramp junction at the I-495 ramps intersection with Route 85. Any proposed traffic signal along Cedar Street (Route 85) must include a traffic signal warrant analysis according to the Manual of Uniform Traffic Control Devices (MUTCD) standards.

At a minimum, the traffic study should analyze the following state highway and local roadway locations:

- The Route 85/I-495 northbound ramps intersection; and
- The Route 85/I-495 southbound ramps intersection;

I encourage the proponent to work with EOT prior to the preparation of the traffic study to confirm the study area and methodologies. The DEIR should include conceptual plans for the proposed roadway improvements at a legible scale with sufficient details to verify the feasibility of constructing such improvements. The conceptual plans should clearly show proposed lane widths and offsets, layout lines and jurisdictions, and the land uses (including access drives) adjacent to areas where improvements are proposed.

The proponent should provide a clear commitment to implement mitigation measures and should describe the timing of their implementation based on the phases of the project, if any. Mitigation within the state highway layout must conform to MassHighway standards, including but not limited to, provisions for lane, median and shoulder widths, and bicycle lanes and sidewalks. The DEIR should include a comprehensive Transportation Demand Management (TDM) plan that investigates all feasible measures aimed at reducing site trip generation. The TDM plan should identify the existing modes along the corridor such as transit, walking, and bicycling; analyze their existing and future conditions based on the project's impacts; and provide improvements to attract mode usage. The DEIR should discuss how the project will

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comply with the Massachusetts Rideshare Regulations and the Massachusetts Idling Regulations, as applicable.

#### **Air Quality**

The project triggers MassDEP's review threshold requiring the project proponent to conduct an air quality mesoscale analysis comparing the Build and No-Build conditions. The proponent should consult with MassDEP regarding modeling protocol prior to conducting this analysis. The current emission model, MOBILE 6.2 should be used for this effort.

The purpose of the mesoscale analysis is to determine whether and to what extent the proposed project will increase the amount of volatile organic compounds (VOCs) and nitrogen oxides (NOx) in the project area. The mesoscale analysis will also be used to determine if the project will be consistent with the Massachusetts State Implementation Plan (SIP). Emission increases due to the project must be mitigated and any subsequent environmental impact analysis should include the project proponent's commitment to implement said mitigation measures. The information provided in the DEIR should be prepared in accordance with the guidance outlined in the MassDEP comment letter and/or through consultation with MassDEP staff.

#### Greenhouse Gas Emissions (GHG)

Because the project was filed before November 1, 2007, when the EEA/MEPA Greenhouse Gas Emissions (GHG) Policy and Protocol became effective, the project is not required to quantify GHG emissions and the benefits of potential mitigation. However, the project is required to identify and describe all project-related GHG emissions and discuss proposed measures to mitigate for those emissions. I encourage the proponent to voluntarily provide a quantitative analysis pursuant to the final policy.

#### Land

The proposed project will alter approximately 44.5 acres of land and create 25 acres of impervious area on the 80-acre project site. The DEIR should present existing and proposed grades at a reasonable scale on site plans, and summarize conceptual cuts and fills to prepare development parcels and to construct stormwater management facilities. The DEIR should summarize assumptions used to calculate anticipated land alteration and impervious areas within the ENF. Under existing conditions, the project site is densely forested. The DEIR should depict those areas that will be cleared to facilitate construction, with an emphasis on retaining vegetative cover to the maximum extent practicable. The Preferred Alternative includes a total of 2,131 parking spaces. The DEIR should discuss how the number of parking spaces was derived, and if reserved parking or porous pavement could be used for portions of the parking field to reduce overall impact.

## Rare Species

The Massachusetts Division of Fisheries and Wildlife Natural Heritage and Endangered Species Program (NHESP) has indicated that the project site is mapped as Priority Habitat for the Wood Turtle (*Glyptemys insculpta*), a species listed as "Special Concern" pursuant to the Massachusetts Endangered Species Act (MESA) (M.G.L. c. 131A) and its implementing regulations (MESA, 321 CMR 10.00). The proponent and their representatives have consulted with the NHESP in advance of a formal MESA filing to evaluate ways to minimize and avoid impacts to the Wood Turtle in association with the project. Subsequent to discussions between the NHESP and the proponent, the proponent has proposed the following mitigation measures in order to qualify for a MESA Conservation and Management Permit: (1) protection of 29± acres of on-site Wood Turtle habitat through an Executive Office of Energy and Environmental Affairs endorsed Conservation Restriction, (2) construction and maintenance of a turtle protective barrier system to minimize road mortality, (3) installation of two bridges to afford a stream crossing, and (4) providing off-site mitigation in the form of conservation research and/or land acquisition funding for the Wood Turtle.

The DEIR should include an update of the proposed mitigation measures and the results of correspondence or discussions with the NHESP. The proponent will be required to apply for and receive a Conservation and Management Permit from the NHESP prior to the commencement of construction. The NHESP has indicated that as part of the MESA permit process, the NHESP will continue to work with the proponent to develop construction, blasting (if necessary), and work-timing plans to avoid and minimize harm to Wood Turtles during permitted construction. Permanent boundary markers and signage will also be required as part of the Conservation Restriction. If possible, the DEIR should indicate what entity may control the Conservation Restriction and outline potential allowed or prohibited uses.

#### Historic Resources

The Massachusetts Historical Commission (MHC) determined that based upon review of the Inventory of Historic and Archaeological Assets of the Commonwealth that the project area includes portions of one historical archaeological site, the Cedar Street Quarries (MIL.HA.6). The project area is adjacent to a recorded ancient archaeological site, the Terrace Site (19-WR-445) and several inventoried historic properties along Deer Street (MIL.34, 310, 311). Furthermore, MHC has noted that undisturbed portions of the project area are archaeologically sensitive, likely to contain significant archaeological resources.

In accordance with MHC's request, the proponent should conduct an intensive (locational) archaeological survey (950 CMR 70) for the project. The purpose of this survey is to locate and identify any significant historical or archaeological resources that may be affected by the project. The results of the survey will provide information to assist in consultation to avoid, minimize or mitigate any adverse effects to significant archaeological resources. As recommended by MHC, the proponent should provide project information to the Milford Historical Commission for review and comment and any comments received from that body should be provided to the MHC and U.S. ACOE.

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#### Wetlands

The project site contains a portion of the Charles River and several areas of Bordering and IsoIated Vegetated Wetlands. The project will result in the alteration of 4,615 sf of Bordering Vegetated Wetlands (BVW), 7,700 sf of IsoIated Land Subject to Flooding (ILSF), 50 linear feet of Bank, 470 sf of Land Under Water, 2,730 sf of Bordering Land Subject to Flooding (BLSF), and 78,550 sf of Riverfront Area. The project will require the filling of some wetland resource areas and the provision of wetland replication areas in accordance with local and State wetland regulations.

The DEIR should provide plans at an appropriate scale to accurately discern the location of each wetland area regulated under the Wetlands Protection Act (WPA) located on the project site. Each wetland resource area and Riverfront Area should be characterized according to 310 CMR 10.00. Based upon information shared at the MEPA scoping session, the site also contains locally-regulated wetlands. To aid in the review process, I encourage the proponent to clarify which on-site wetland resource areas are regulated by the State regulations, versus only local regulations under the Milford Wetland Bylaw. The DEIR should address the significance of the wetland resources on site, including public and private water supply; riverfront areas; flood control; storm damage prevention; fisheries; shellfish; and wildlife habitat. The DEIR should provide an accurate measurement of each wetland resource area that will be affected by the project and describe the amount of fill necessary to achieve the Preferred Alternative.

The DEIR should demonstrate that all wetland impacts have been avoided, and where unavoidable impacts occur, impacts are minimized and mitigated. The DEIR should demonstrate that the project will be accomplished in a manner that is consistent with the Performance Standards of the Wetlands Regulations (310 CMR 10.00). Consistency of the proposed river and stream crossings with applicable U.S. ACOE or MassDEP Stream Crossing Standards should be discussed in the DEIR. Finally, the proponent should demonstrate compliance with applicable floodway and floodplain development requirements, as indicated in the comment letter from the Department of Conservation and Recreation Flood Hazard Management Program.

Proposed activities, including construction mitigation, erosion and sedimentation control, phased construction, and drainage discharges or overland flow into wetland areas, should be evaluated. The DEIR should specifically address the impact, if any, to the placement of stormwater outfalls within resource areas. The DEIR should clarify what portions of the project may result in the permanent alteration of wetland resource areas versus temporary impacts to facilitate construction. The DEIR must also address the current and expected post-construction water quality of the predicted final receiving water bodies (in this case, designated Outstanding Resource Waters (ORWs)) and demonstrate compliance with applicable water quality regulations or guidelines. I encourage the proponent to provide constructive responses to the wetland concerns outlined in the Charles River Watershed Association (CRWA) comment letter, particularly related to the functionality of on-site wetlands in a post-construction state.

Mitigation for wetland alteration includes the replication of wetland resource areas onsite. The DEIR should identify potential replication areas, quantify the amount of replication area to be provided and if feasible, include hydrologic data to support the wetland replication

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plans. The DEIR should include a discussion of project consistency with MassDEP's Inland Wetland Replication Guidelines (dated March 2002).

The proponent should consider the potential for water supply contamination in selecting blasting materials. The DEIR should address how blasting of ledge on the project site, if necessary, will be conducted in accordance with state standards for percholrate in blasting materials. The proponent should follow the recommendations outlined in the MassDEP comment letter. Additional information on the state standards for perchlorate is available at the following website: <a href="http://mass.gov/dep/water/drinking/percinfo.htm">http://mass.gov/dep/water/drinking/percinfo.htm</a> and <a href="http://mass.gov/dep/cleanup/laws/blasting.htm">http://mass.gov/dep/cleanup/laws/blasting.htm</a>.

## Water Supply

The project site includes an area classified as a Zone A Surface Water Supply Protection Area (Zone A). MassDEP has recently proposed modifications to 314 CMR 5.00 that would prohibit the use of infiltration basins within a Zone A. The ENF included the location of infiltration basins within a Zone A. The proponent has indicated a willingness to voluntarily comply with the proposed regulations (to become mandatory in early 2008) by relocating the proposed basin outside of the Zone A. I expect that the DEIR will address this matter and reflect changes on site plans and in drainage calculations.

#### Stormwater

The project will include the addition of approximately 25 acres of new impervious surfaces on an 80-acre vegetated site. The DEIR should include drainage calculations, stormwater system design plans at a readable scale, best management practice (BMP) designs and models for proprietary BMPs, and a clear description of the stormwater management plan to affirm that the stormwater system design is in conformance with the MassDEP Stormwater Management Policy (SMP). The proponent is reminded that, according to the MassDEP comment letter, revisions to the SMP, and incorporation of the policy into the wetlands and 401 Water Quality Certification regulations, will take effect on January 2, 2008. The DEIR should include a description of the proposed drainage system design, including a discussion of the alternatives considered along with their impacts. The DEIR should discuss the feasibility of maximizing stormwater infiltration and identify the quantity and quality of flows.

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. Furthermore, the DEIR should address how the project will comply with the Total Maximum Daily Load (TMDL) for phosphorous that has recently been issued (October 17, 2007) for the Lower Charles River. Additionally, stormwater will discharge from the project site to a designated Outstanding Resource Waters (ORWs). Therefore stormwater must be treated to meet the critical standards criteria outlined in the SMP. The DEIR should present an operation and maintenance plan for the drainage system to ensure its effectiveness. This plan should be consistent with the Stormwater Pollution Prevention Plan required under the NPDES

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Construction General Permit and should outline the actual maintenance operations, sweeping schedule, responsible parties, and back-up systems. Consideration should be given as to the location of snow removal and sanding operations on-site.

#### Low Impact Development

The DEIR should discuss the opportunities to incorporate low impact development (LID) stormwater runoff controls into the project. The DEIR should address how and why LID techniques may or may not be integrated into the overall site design and stormwater management system. The primary tools of LID are the use of landscaping features and naturally vegetated areas in site design, which encourage the detention, infiltration and filtration of stormwater onsite, and the in-basin recharge of groundwater resources. Other tools include water conservation and use of pervious surfaces. LID can also protect natural resources by incorporating wetlands, stream buffers and mature forests as project design features. For more information on LID, visit <a href="http://www.mass.gov/envir/lid/">http://www.mass.gov/envir/lid/</a>. Other LID resources include the national LID manual (Low Impact Development Design Strategies: An Integrated Design Approach), which can be found on the EPA website at: <a href="http://www.epa.gov/owow/nps/lid/">http://www.epa.gov/owow/nps/lid/</a>. If LID techniques are not included in the Preferred Alternative, the DEIR should demonstrate why such techniques were not feasible or applied to the project site.

#### Wastewater

The project will generate approximately 46,125 gallons per day (GPD) of wastewater. According to the ENF, wastewater will be pumped from the site through a proposed pump station at the southeast end of Deer Street through an existing force main and discharged to the Milford Wastewater Treatment Plant. The DEIR should clarify the location and length of new and existing sewer mains, the approximate location of the proposed pump station, ownership of existing and proposed force mains, and discuss any design requirements necessary due to the proximity to wetland resource areas and a public water supply. The DEIR should respond to MassDEP's comment related to the project's impact on existing infrastructure and inflow and infiltration (I/I) removal requirements.

#### Sustainable Design

To the maximum feasible extent, the proponent should incorporate sustainable design elements into the project design. The basic elements of a sustainable design program may include, but not be limited to, the following measures:

- Optimization of natural day lighting, passive solar gain, and natural cooling;
- Use of energy efficient HVAC and lighting systems, appliances and other equipment, and use of solar preheating of makeup air;
- Favoring building supplies and materials that are non-toxic, made from recycled materials, and made with low embodied energy;
- Provision of easily accessible and user-friendly recycling system infrastructure into

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building design;

- Development of a solid waste reduction plan;
- Development of an annual audit program for energy consumption, waste streams, and use of renewable resources;
- LEED certification;
- Feasibility of "green roofs" to reduce stormwater runoff; and
- Water conservation and reuse of wastewater and stormwater.

The DEIR should include a narrative describing policies regarding waste reduction, water use, and other sustainable design initiatives that may be implemented on site.

# Construction Period Impacts

The DEIR should discuss potential excavation and construction period impacts (including but not limited to noise, vibration, dust, and traffic flow disruptions) and analyze and outline feasible measures that can be implemented to eliminate or minimize these impacts. The proponent must comply with MassDEP's Solid Waste and Air Quality Control regulations during construction. I encourage the proponent to incorporate construction waste recycling activities as a sustainable measure for the project. The proponent should consult with MassDEP for appropriate standards and guidelines for managing construction waste.

I encourage the proponent to mitigate the construction period impacts of diesel emissions to the maximum extent feasible. This mitigation may be achieved through participation in the MassDEP Diesel Retrofit Program. The proponent should work with MassDEP staff to implement construction-period diesel emission mitigation, which could include the installation of after-engine emission controls such as oxidation catalysts or diesel particulate filters. MassDEP has recommended that the proponent use ultra low sulfur diesel (ULSD) fuel in off-road engines. If the proponent intends to participate in these initiatives, a commitment should be outlined in the DEIR.

# **Mitigation**

The DEIR should include a separate chapter summarizing proposed mitigation measures. This chapter should also include draft Section 61 Findings for each state agency that will issue permits for the project. The draft Section 61 Findings 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.

#### Comments/Circulation

The DEIR should contain a copy of this Certificate and a copy of each comment letter received. The DEIR should respond fully to each substantive comment received to the extent

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that it is within MEPA jurisdiction. The DEIR should present additional technical analyses and/or narrative as necessary to respond to the concerns raised.

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. A copy of the DEIR should be made available for review at the Milford Public Library.

December 12, 2007

Date

Ian A. Bowles

#### Comments received:

11/19/2007	Massachusetts Historical Commission
11/29/2007	Vanasse Hangen Brustlin, Inc.
12/03/2007	Massachusetts Division of Fisheries and Wildlife - Natural Heritage and
	Endangered Species Program
12/03/2007	Department of Conservation and Recreation – Flood Hazard Management
	Program
12/03/2007	Executive Office of Transportation
12/03/2007	Massachusetts Department of Environmental Protection – CERO
12/03/2007	Charles River Watershed Association

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