



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

WLC 7/1/08  
 FILE COPY

Deval L. Patrick  
 GOVERNOR

Timothy P. Murray  
 LIEUTENANT GOVERNOR

Ian A. Bowles  
 SECRETARY

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

June 27, 2008

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

PROJECT NAME : Reading Woods  
 PROJECT MUNICIPALITY : Reading  
 PROJECT WATERSHED : Boston Harbor  
 EEA NUMBER : 14252  
 PROJECT PROPONENT : Jacob Way, LLC c/o National Development  
 DATE NOTICED IN MONITOR : May 21, 2008

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 Expanded Environmental Notification Form (EENF), the project consists of the redevelopment of the 24.8-acre Addison-Wesley-Longman office/warehouse complex into a mix of residential, senior living, and office space. The project site is located at the Route 128/Route 28 interchange (exit 38) and presently contains 208,000 square feet (sf) of office/warehouse space in six buildings. The project entails the construction of 202 apartment units in two buildings (including 41 affordable units) in compliance with the Commonwealth's 40R Smart Growth Zoning allowance in Reading's newly established Gateway Smart Growth District; 160 senior independent and assisted living units; 16 townhouses; and, 160,000 sf of Class A office space.

An EENF was previously filed for the project site in 2000 (EEA No. 12156), with a proposed redevelopment program of 600,000 sf of office space, a 300-room hotel and parking for 2,300 cars. A new EENF has been filed due to the lapse of time and substantial differences in the proposed project. Anticipated environmental impacts associated with the project include an additional 2.1 acres of impervious area (for a project site total of 13.5 acres), the generation of 3,890 new vehicle trips per day, the creation of 392 additional parking spaces (for a project site total of 1,061), demand for 78,680 gallons per day (gpd) of water, and the generation of 71,530 gpd of wastewater. The project will include the upgrade of the on-site stormwater management system, off-site and on-site traffic improvements, and improved infrastructure to service the project site.

### Jurisdiction and Permitting

This project is subject to MEPA review as it requires a State agency action and will generate of 3,000 or more new average daily trips on roadways providing access to a single location (301 CMR 11.03(6)(a)(6)). The project will require an Indirect Vehicular Access Permit from the Massachusetts Highway Department (MassHighway) for impact to state-controlled roadways. The project will also require a Sewer Connection/Extension Permit from the Massachusetts Department of Environmental Protection (MassDEP). Coverage under the 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 Reading Conservation Commission, or in the case of an appeal, a Superseding Order of Conditions from MassDEP. The project is subject to the EEA/MEPA Greenhouse Gas (GHG) Emissions Policy.

The project will receive financial assistance from the Massachusetts Department of Housing and Community Development in accordance with M.G.L. Chapter 40R – Smart Growth Zoning and Housing Production Bylaw. Therefore, MEPA jurisdiction for this project is broad and shall extend to all aspects of the project that are likely, directly or indirectly, to cause Damage to the Environment.

### Single EIR/Waiver Request

In accordance with Section 11.05(7) of the MEPA regulations, the proponent has submitted an Expanded ENF with a request that I allow the proponent to fulfill its EIR obligations under MEPA with a Single EIR, rather than require the usual two-step Draft and Final EIR process. The Expanded ENF received an extended public comment period pursuant to Section 11.06(1) of the MEPA regulations. I have reviewed the proponent's request for a Single EIR in accordance with Section 11.06(8) of the MEPA regulations, and I hereby find that the Expanded ENF meets the regulatory standards. I will therefore allow the proponent to prepare a Single EIR in fulfillment of the requirements of Section 11.03 of the MEPA regulations.

I acknowledge the proponent's efforts in developing the EENF, which contained considerable information that has been particularly helpful in understanding the project and defining the scope for the EIR. While I am allowing the proponent to prepare a Single EIR, I note the receipt of thoughtful and technical comments on the EENF that must be addressed in detail in the Single EIR. In particular, the proponent should investigate reducing greenhouse gas emissions associated with the project and make more substantial commitments to mitigate potential project environmental impacts. I retain my authority to require further review in the form of a Supplemental Environmental Impact Report if issues outlined in this Scope and in comments are not thoroughly addressed in the Single EIR.

## **SCOPE**

### General

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

### Project Description and Permitting

The Single EIR should include a detailed description of the proposed project and describe any changes to the project since the filing of the EENF. The Single EIR 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 Single EIR should include a list of required permits and approvals and provide an update on the status of each permit and/or approval.

### Alternatives

The EENF included an alternatives analysis that compared a No-Build Alternative, the previously approved project (600,000 sf office, 300-room hotel; EEA No. 12165), and the Preferred Alternative. A comparison of each alternatives' impact on land, water, wastewater, traffic and air quality was provided. The Preferred Alternative has fewer water/wastewater, traffic and parking impacts than the previously approved project. The Preferred Alternative has been designed in accordance with the zoning created in conjunction with the designation of the Chapter 40R smart growth district.

The Single EIR will be required to re-evaluate the Preferred Alternative to investigate greater GHG reductions than those estimated in the EENF. Guidance for this alternatives analysis has been outlined in the MassDEP/Division of Energy Resources (DOER) comment letter on the EENF, and is described in the GHG section of this Certificate.

### Traffic and Transportation

The EENF stated that the project will result in the generation of approximately 3,890 new vehicle trips on an average weekday. Access to the site will be provided from Jacob Way, proximate to the Route 128/Route 28 interchange. A MassHighway Indirect Vehicular Access Permit will be required for the project. The EENF included a transportation study that generally conforms to the EOEEA/EOTPW Guidelines for EIR/EIS Traffic Impact Assessments. This study included a description of nearby intersections, an inventory of nearby sidewalks, traffic volume data, vehicular crash history, accessibility to public transportation, trip generation estimates, level of service analyses, highway ramp merge and diverge and weaving analyses, and a discussion of mitigation measures. The EENF also outlined possible components of a Travel Demand Management (TDM) program.

#### Mitigation measures proposed include:

Widening the South Street eastbound and westbound approaches to two lanes. This will allow for an exclusive left turn lane and shared through/right turn lane in each direction;

Upgrading the traffic signal hardware at the intersection of Main Street/South Street; providing a left turn arrow designation for northbound traffic; and

If desired by the Town of Reading, reconfiguration of the intersection of South Street/Jacob Way to promote Jacob Way as the primary route to the site, and treat South Street as a minor street under stop sign control.

The Single EIR should include detailed plans, preferably 80-scale, of the intersection improvements. The EOT comment letter has noted that the proposed widening of South Street at the Route 28/South Street intersection crosses a designated "no access" layout line; therefore a change in the State Highway layout will be required. Furthermore, EOT has indicated if future noise abatement devices such as sound barriers become necessary, the proponent will be responsible for constructing them.

While the EENF outlined possible TDM measures to be utilized on-site, the DEIR did not provide firm commitments to implementing these measures. I note the quality of suggestions offered in comment letters regarding an enhanced TDM program. The Single EIR must include clear, viable commitments to a robust TDM program. As recommended by EOT, the Single EIR should include plans to provide service between at least one of the three identified commuter rail stations within a three-mile radius of the project site. Such services should be provided to residents and employees of the site, with specific incentives geared toward office commuters. The Single EIR should include an update on discussions with the Massachusetts Bay Transportation Authority (MBTA) and the Reading Council on Aging to identify and provide potential on-site amenities to reduce vehicle trips.

### Air Quality

The mesoscale air quality analysis evaluated existing and future levels of volatile organic compounds (VOC) and nitrogen oxides (NOx) emissions for the study area using the traffic volumes, delay and speed data presented in the project's TIAS. The results of the analysis reveal that future Build Condition VOC and NOx emissions are greater than the future No-Build Condition VOC and NOx emissions. Consistent with MassDEP guidelines, the Proponent will incorporate mitigation measures to reduce VOC and NOx emissions resulting from the project. These mitigation measures include construction of roadway and traffic signal improvements and a program of TDM measures. According to the EENF, the results of the mesoscale analysis demonstrate that the project complies with the federal Clean Air Act Amendments (CAAA) and the State Implementation Plan (SIP) for Massachusetts.

### Greenhouse Gas Emissions (GHG)

The proposed project is also subject to EEA's Greenhouse Gas (GHG) Policy that requires proponents to quantify project-related GHG emissions and propose and quantify the impact of mitigation measures to reduce GHG emissions. The proponent submitted the results of the GHG analysis with the EENF. In the study, the proponent calculated GHG emissions from both mobile and stationary sources. The GHG emissions analysis evaluated the change in carbon dioxide (CO<sub>2</sub>) emissions from project-related traffic and proposed building sources for the 2006 Existing, the 2012 No-Build, the 2012 Build and the 2012 Build with Improvements Conditions. The EENF used the EQUEST model to compute direct and indirect CO<sub>2</sub> emissions from stationary sources and the U.S. EPA's COMMUTER model Version 2 to estimate changes in CO<sub>2</sub> emissions due to roadway mitigation and traffic demand management measures.

As can be seen in the Table below, under the Build Condition, CO<sub>2</sub> emissions are expected to increase by 2,727.6 tons per year (tpy) from the No-Build Condition. With recommended mitigation measures, CO<sub>2</sub> emissions are estimated to be reduced by 151.9 tpy, a 0.6 percent reduction.

GHG Analysis	2006 Existing Condition	2012 No-Build	2012 Build	2012 Build/No-Build Difference	2012 Build with Improvements	2012 Build with Improvements/Build Difference	Percent Reduction in GHG Emissions between Build and Build with Improvements
Mobile Sources	19,245.0	24,047.8	24,671.8	624.0	24,626.6	-45.2	0.2%
Direct/Indirect Stationary Sources	0.0	0.0	2,103.6	2,103.6	1,996.9	-106.7	5.1%
Total	19,245.0	24,047.8	26,775.4	2,727.6	26,623.5	-151.9	0.6%

(All data expressed in tons per year)

Source: DEIR Table 4b-1.

As mitigation for GHG emissions from mobile sources, the proponent will widen roadways and reconfigure lane usage, upgrade traffic signal hardware, and implement a TDM program. The analysis submitted with the EENF did not quantify the GHG reduction due to proposed TDM measures, nor was it clear which TDM measures will be implemented in order to achieve the anticipated GHG reductions. In the Single EIR, the proponent should evaluate the impact of TDM measures following guidance in the EEA Policy.

The following mitigation measures were listed in the EENF to help reduce GHG emissions from stationary sources:

- use highly-reflective (high-albedo) roofing materials;
- maximize interior daylighting;
- window glazing;
- install high-efficiency HVAC systems;
- eliminate or reduce use of refrigerants in HVAC systems;
- incorporate super insulation;
- incorporate motion sensors and lighting and climate control;
- use efficient, directed exterior lighting; and
- track energy performance of building and develop a strategy to maintain efficiency.

The EENF also provided a list of possible sustainable building design and systems that may be utilized if they are determined to be practical and feasible. The EENF notes that indoor environmental air quality, water efficiency, and building energy efficiencies will be considered in project design. The proponent will also evaluate and provide sustainable design measures using the Leadership in Energy and Environmental Design (LEED®) Green Building Rating System as a general guideline. The proponent should clarify in the Single EIR which of the above-listed measures were evaluated using energy modeling software to determine the 2012 Build conditions.

The Proponent should demonstrate in the Single EIR that it has evaluated and committed to GHG-reduction measures consistent with the MEPA GHG Emissions Policy. The proponent should evaluate additional GHG mitigation alternatives as suggested by MassDEP/DOER in comment submitted on the EENF. The proponent should clarify which specific measures will be implemented, provide supporting modeling data that reflects the implementation of these measures, and clearly depict how these measures reduce GHG emissions in the 2012 Build with Mitigation scenario.

The Single EIR should respond to the comments by MassDEP/DOER with respect to:

- Pursuit of potential rebates for installation of highly energy efficient equipment from its natural gas provider, National Grid and the Reading Municipal Light Department;
- Explanation of building orientation and discussion of expected impacts on energy usage. If the buildings will be oriented to minimize energy usage, corresponding reductions in CO<sub>2</sub> emissions should be modeled;

- Additional information on the HVAC system(s), including heating systems of all the building types;
- Energy efficient lighting;
- Duct insulation, and if incorporated into the project, modeling results of CO<sub>2</sub> reductions;
- Incorporation of third-party building commissioning;
- Implementation of building energy management systems;
- Roof and wall insulation;
- On-site renewable energy sources. The Single EIR should evaluate the use of photovoltaic (PV) systems in accordance with the recommendations of DOER. The Single EIR should provide additional justification as to why wind, geothermal and/or biomass energy sources are not feasible for the project site; and
- District heating and cooling systems.

The Single EIR should reflect a commitment to pursue additional GHG mitigation measures in response to the modeling. If the proponent chooses not to model a specific mitigation measure recommended by MassDEP/DOER because it determines the measure to be infeasible for this particular project, the Single EIR must justify why modeling was not conducted. If, after further evaluation of a GHG mitigation measure using energy modeling software, the proponent does not propose to implement the measure, the Single EIR should provide technical and cost analyses to document the rationale for not making the commitment. I strongly encourage the proponent to consult with the MEPA Office, MassDEP and DOER prior to submission of the Single EIR with regard to the anticipated content of the GHG analysis.

The updated GHG analysis should clearly present modeling data inputs, the results of calculations used to quantify Existing Conditions, the Build Condition, and the impact of proposed emissions-reduction mitigation. If the proponent uses bar graphs, graphs should be produced in color so that the reader can understand the results and understand the potential CO<sub>2</sub> reductions associated with discrete mitigation measures. In the Single EIR, the proponent should fully explain any trade-offs inherent in the evaluation of GHG reduction measures, such as increased impacts on some resources to avoid impacts to other resources.

### Wetlands

The existing wetlands on the site include approximately 4,743 sf of Bordering Vegetated Wetlands (BVW). This basin is regulated as a wetland under the Massachusetts Wetlands Protection Act (310 CMR 10.55). This wetland occurs in a stormwater detention area likely constructed during the original 1965 site development. No work is proposed within the BVW resource area; however work will occur within the 100-foot buffer zone to BVW and an existing stormwater discharge point to the wetland will remain. Stormwater discharges to the wetland will be improved in comparison to existing conditions as all stormwater flows will be directed through water quality treatment structures prior to release to the wetland. The proponent will be required to file a Notice of Intent with the Reading Conservation Commission prior to commencement of construction. The Single EIR should include a brief discussion of the significance of the wetland resources on site, including public and private water supply;

riverfront areas; flood control; storm damage prevention; fisheries; shellfishies; and wildlife habitat, and how these functions will be maintained in a post-construction state.

### Stormwater

MassDEP has noted in its comment letter that the information included in the EENF on the stormwater management system generally shows that the proposed drainage system would comply with the Massachusetts Stormwater Management Regulations (SMR). MassDEP has requested that the Single EIR include expanded stormwater information to confirm compliance with the SMR standards for water quality and quantity impacts and Reading's Stormwater Program under the NPDES Phase II Stormwater General Permit. Stormwater design plans included in the Single EIR should be at an easily readable scale. In addition to the general response to comments, the proponent shall provide a detailed response to the "Stormwater" section of the comment letter dated June 20, 2008 submitted by MassDEP, and I hereby incorporate by reference the additional requests for information contained in the "Stormwater" section of that letter as part of the Scope of the Single EIR.

### Wastewater

The project is projected to generate approximately 71,350 gpd of wastewater based upon MassDEP sewer design flows (314 CMR 7.15). Wastewater generated by the project will discharge into the 8-inch gravity sewer main in South Street, flow to the Sturges pump station and into the Massachusetts Water Resources Authority (MWRA) system and ultimately to the Deer Island Wastewater Treatment Facility. MassDEP requires projects that are adding significant new wastewater flow to assist in the infiltration/inflow (I/I) reduction effort and to ensure that additional wastewater flows are offset by the removal of I/I. MassDEP uses a minimum 4:1 ratio for I/I removal to new wastewater flow added. MassDEP has recommended that the proponent work with the Town of Reading and consult with MassDEP on this removal requirement. Within the EENF, the proponent proposed aligning I/I mitigation requirements with construction permits for individual buildings. The Single EIR should include details and estimated scheduling for I/I mitigation implementation. The MWRA has indicated that the program to offset the impact of the project's new flows should provide assurance that the new flows will not contribute to higher wet weather discharges from the downstream Town pump station in the short term, and will not contribute to the need for greater pumping capacity in the future. These requirements may require a modification to the existing Development and Infrastructure Agreement between the proponent and the Town of Reading to reflect the ratio of I/I mitigation.

### Water Supply

Water usage associated with the project is estimated at 78,680 gpd. Potable and fire protection water requirements will continue to be served through the existing 8-inch water main in Jacob Way. The Town of Reading receives water from the Massachusetts Water Resources



Authority (MWRA), specifically, from the MWRA's Northern Intermediate High distribution system. There is sufficient capacity in the existing MWRA system to provide water for the project. MWRA has identified the need for a redundant pipeline and additional water tank storage for MWRA's Northern Intermediate High Service Area. The proponent should continue to work with the MWRA to coordinate MWRA's proposed improvements in the vicinity of the project site with those site improvements proposed by the project proponent.

I strongly encourage the proponent to commit to water-wise landscape irrigation technologies, including a commitment to the use of drought-tolerant native species, moisture sensors, rain gauges, and/or drip irrigation. Additionally, the Single EIR should provide additional information regarding the proponent's investigation of recycling grey water to reduce potable water demand for irrigation needs. The Single EIR should discuss grey water recycling feasibility, estimated volumes, and the potential benefits of and challenges to implementing this technology. If feasible, I encourage the proponent to outline a firm commitment to implement grey water recycling for the project.

### Construction Period Impacts

The EENF included a discussion of potential construction period impacts (including but not limited to noise, vibration, dust, and traffic flow disruptions) and outlined feasible measures that could be implemented to eliminate or minimize these impacts. The Single EIR should clarify how such construction period impacts will be mitigated during the phased and/or possibly extended construction period. The proponent will comply with MassDEP's Solid Waste and Air Quality Control regulations during construction. The EENF indicated that solid waste/debris from construction activities will be managed and disposed of in accordance with MassDEP's Waste and Recycling and Standards (310 CMR 16.00 and 310 CMR 19.000).

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. If the proponent intends to participate in these initiatives, the Single EIR should include a clear commitment to such measures. The proponent has committed to utilizing construction machinery that uses Low Sulfur Diesel (LSD) fuel or Ultra-Low Sulfur Diesel (ULSD) fuel in off-road construction equipment.

### Mitigation

The Reading Woods project provides numerous opportunities for mitigation of anticipated project impacts. The Single EIR should outline a clear commitment to viable and effective mitigation measures to offset impacts on traffic, water, wastewater, stormwater, and greenhouse gases. The Single EIR 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.

Comments/Circulation

The Single EIR 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 Single EIR should include a response to comments. This directive is not intended to, and shall not be construed to, enlarge the scope of the Single EIR beyond what has been expressly identified in this certificate.

The proponent should circulate the Single EIR 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 Single EIR should be made available for review at the Reading Public Library.

June 27, 2008  
Date

  
Ian A. Bowles

Comments received:

- 06/19/2008 Gina Snyder
- 06/19/2008 Massachusetts Water Resources Authority
- 06/20/2008 **Reading Advisory Committee on Cities for Climate Protection**
- 06/20/2008 Massachusetts Department of Environmental Protection – NERO and the Division of Energy Resources (DOER)
- 6/23/2008 Executive Office of Transportation

IAB/HSJ/hsj

