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
IAN A. BOWLES
SECRETARY

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

June 8, 2007

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

PROJECT NAME	: Jefferson at Westford
PROJECT MUNICIPALITY	: Littleton Road (Route 110) – Westford and Chelmsford
PROJECT WATERSHED	: Concord River
EOEA NUMBER	: 14028
PROJECT PROPONENT	: **Jefferson at Westford, L.P.**
DATE NOTICED IN MONITOR	: May 9, 2007

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

According to the Environmental Notification Form (ENF), the proposed project consists of the construction of an up to a 268-unit (112,069 square feet (sf)) apartment development with associated access roadways on a 97.03-acre site. The proponent presented two alternatives in the ENF, a 250-unit (the proponent's Preferred Alternative) and a 268-unit apartment complex. These alternatives depend on whether the proponent's access roadway is 24-feet wide or 27-feet wide. The width of the access roadway will determine the amount of wetland resource areas impacted by the construction of the roadway. A minimum of fifty of the units will be affordable. The project will have its access driveway from Littleton Road. The site is vacant of structures and contains a 13.4 acre gravel pit. Approximately 6.87 acres of the project site are located within Chelmsford, but no alterations are proposed in this area.

The project is subject to review pursuant to Sections 11.03(1)(b)(2), 11.03(3)(b)(1)(d), 11.03(6)(b)(14), and 11.03(6)(b)(15) of the MEPA regulations because the project creates five or more acres of impervious area, alters 5,000 or more sf of bordering vegetated wetlands (BVW), generates 1,000 or more new vehicle trips and includes the construction of 150 or more parking spaces, and includes the construction of 300 or more new parking spaces. It may require a Comprehensive Permit from the Housing Appeals Committee (HAC) under Chapter 40B. The project will need an Access Permit from the Massachusetts Highway Department (MassHighway) for access to Littleton Road (Route 110). It may require a Signalization Permit

from MassHighway for the signalization of Littlton/Tadmuck Roads. The project will need a Groundwater Discharge Permit and a Water Quality Certificate from the Department of Environmental Protection (MassDEP). It must comply with the National Pollutant Discharge Elimination System (NPDES) General Permit for stormwater discharges from a construction site. The project may require a Section 404 Programmatic General Permit (PGP) from the U.S. Army Corps of Engineers. It will need to obtain an Order of Conditions from the Westford Conservation Commission. Because the proponent is seeking financing from Mass Development, MEPA jurisdiction extends to all aspects of the project that may have significant environmental impacts.

Based on the Institute of Traffic Engineers Land Use Code 220, the proposed project is estimated to generate approximately 1,800 new vehicle trips per weekday. About 480 parking spaces will be constructed by the proponent.

The project will be supplied with potable water by the municipal supplier. It will consume approximately 48,642 gallons per day (gpd) of water. The project will generate approximately 44,220 gpd of wastewater (based on 402 bedrooms). The proponent is proposing to construct a private wastewater package treatment plant with a groundwater discharge.

Although this project did not require a mandatory EIR, I am utilizing my discretionary authority to require an EIR. This project requires the preparation of an EIR to address the concerns of MassDEP, the Towns of Westford and Chelmsford, and abutters. The EIR should develop a Reduced-Build Alternative within its alternatives analysis. The ENF's Traffic Impact and Access Study provided information on just two intersections and no information on traffic conditions at other intersections within the area. The EIR should analyze other nearby intersections within Westford and Chelmsford to determine if there are capacity problems for the minor streets. It should provide an alternatives analysis within its wetland section that demonstrates that the proponent has reduced the amount of impacts to wetland resource areas to the greatest extent possible and that proponent has investigated additional access alternatives. The EIR should demonstrate that the drainage system will meet MassDEP's Stormwater Management Policy. It should consider other leaching areas for its proposed wastewater treatment facility or a Reduced-Build Alternative that can be accommodated on the project site.

SCOPE

As modified by this scope, the EIR should conform to Section 11.07 of the MEPA regulations for outline and content. The EIR should resolve the remaining issues outlined below. It should address the comments listed at the end of this Certificate to the extent that they are within this scope, and it should include a copy of this Certificate and all comment letters.

Project Description & Regulatory Environment:

The EIR should provide a detailed project description with a summary/history of the project. It should include existing and proposed site plans. The EIR should identify and describe any proposed project phasing. It should describe the proponent's Preferred Alternative. The EIR should briefly describe each state agency action required for the project. It should demonstrate how the project is consistent with the applicable performance standards. The EIR should contain sufficient information to allow the permitting agencies to understand the environmental consequences related to the project. It should discuss how this project is compatible with Executive Orders 385 and 418, the Northern Middlesex Council of Governments (NMCOG) Long Range Plan, and Westford's Master Plan, Open Space Plan, and Zoning.

Alternatives Analysis:

The EIR should summarize and compare the Preferred Alternative - the 250-unit apartment complex, the 268-unit Alternative, a Reduced Build Alternative that is capable of supporting the groundwater discharge from a wastewater package treatment plant, and the No-Build Alternative. It should identify the impacts of each of the alternatives on each of the scoped areas in this Certificate. The EIR should discuss alternative building configurations that might result in fewer impacts, such as reducing the amount of impervious area. It should incorporate site design that maximizes site layout and sustainable design/Low Impact Development (LID) opportunities to minimize water, wastewater, stormwater and wetlands impacts. The EIR should summarize the alternatives already developed for the project site. The alternatives analysis should clearly present the alternative driveway configurations with a reduced width to decrease wetlands impacts. The EIR should identify emergency access alternatives at the site and discuss the advantages and disadvantages of the Preferred Alternative. The EIR should provide a comparative analysis that clearly shows the differences between the environmental impacts associated with each alternative for the areas listed within this scope.

Traffic:

The EIR should be prepared in conformance with the EOEA/EOTC Guidelines for EIR/EIS Traffic Impact Assessment. It should identify appropriate mitigation measures for areas where the project will produce impacts on local and regional traffic operations, especially where delay increases at intersections.

The ENF's Traffic Impact and Access Study completed a Level-of-Service (LOS) analysis for the weekday morning and evening peak hours at the Route 110/Tadmuck Road and Route 110/Site Driveway intersections. The EIR should summarize this LOS analysis as well as provide the additional LOS analysis for the Route 110/South Chelmsford Road, the Route 110/Boston Road/Carlisle Road, the Route 110/Tadmuck Road/Garrison Road (in Chelmsford),

and the Route 110/Hunt Road (in Chelmsford) intersections. It should include a map of the traffic study area. The EIR should also include development related growth identified in the Town of Chelmsford letter.

The EIR's LOS tables should include each movement for these above intersections. The Volume/Capacity ratio should also be provided for any proposed signalized intersections. The EIR should include a summary of average and 95th percentile vehicle queues for each intersection within the study area.

In the EIR, traffic accident problem areas should be summarized identified, and solutions should be proposed.

The EIR should discuss the proponent's coordination efforts with MassHighway and the local municipalities as they address regional and local traffic concerns within this area. It should provide the most current information on the proposed construction dates for any roadway improvements in the area. The EIR should provide a traffic signal warrant analysis for the unsignalized intersections in the study area operating at LOS F.

The EIR should discuss the suitability of proposed signalization improvements, visibility enhancements, and any roadway widening. It should discuss right-of-way (ROW) implications of possible widening and describe how such ROW's would be acquired.

Parking:

The EIR should describe how the number of parking spaces was determined. It should identify the number of parking spaces required by local zoning for the land uses proposed on the project site. The EIR should address my concern that the project is providing too many parking spaces. It should identify the number of parking spaces within garages, in-front of garages, tandem spaces, and visitor and club-house parking.

Pedestrian and Bicycle Facilities:

The EIR should show where sidewalks currently exist in a map of the area and where the proponent proposes sidewalks. It should identify how these sidewalks would connect to other sidewalks and proposed crosswalks. If the proponent does not provide sidewalks along its frontage with Route 110 as recommended by MassHighway and the Town of Westford, the EIR should provide a justification for not providing a sidewalk with supporting letters from MassHighway and the Town of Westford.

The EIR should identify the proposed bicycle facility improvements included with this project. The EIR should state the number of bicycle parking spaces and show their locations.

Public Transportation:

The EIR should include a map displaying public transportation bus routes in the project area. If there is no available transit service from the project site, the EIR should consider whether a shuttle bus service would be feasible.

Wetlands:

According to the proponent, the project may alter up to 9,016 sf of Bordering Vegetated Wetlands (BVW) and approximately 6,013 sf of Isolated Vegetated Wetlands (IVW) in order to provide access to upland portions of the site. The proponent is proposing this alteration as a "limited" project under the wetlands regulations. It is utilizing retaining walls and one culvert to reduce wetland impacts. The proponent is proposing a 7,500 sf replication area.

The EIR should identify the proponent's efforts to obtain an Order of Conditions from the Westford Conservation Commission (WCC). It should specify whether any additional Orders of Conditions would be required for any proposed roadway improvements. The Wetland Section of the EIR should contain an alternatives analysis to ensure that all wetland impacts are avoided, and where unavoidable impacts occur, impacts are minimized and mitigated. The EIR should illustrate that the impacts have been minimized and that the project will be accomplished in a manner that is consistent with the Performance Standards of the Wetlands Regulations (310 CMR 10.00).

The EIR 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. It should identify the location of nearby public water supplies and wells.

All resource area boundaries, riverfront areas, applicable buffer zones, and 100-year flood elevations should be clearly delineated on a plan. Bordering Vegetated Wetlands that have been delineated in the field should be surveyed, mapped, and located on the plans. Each wetland resource area and riverfront area should be characterized according to 310 CMR 10.00. The text should explain whether the local conservation commission has accepted the resource area boundaries, and any disputed boundary should be identified. The EIR should describe any outstanding issue with the Westford Conservation Commission, such as potential vernal pools on the site.

For any amount of required wetlands replication, a detailed wetlands replication plan should be provided in the EIR that, at a minimum, includes: replication location(s) delineated on plans, elevations, typical cross sections, test pits or soil boring logs, groundwater elevations, the

hydrology of areas to be altered and replicated, list of wetlands plant species of areas to be altered and the proposed wetland replication species, planned construction sequence, and a discussion of the required performance standards and monitoring. I suggest a replication ratio of greater than 1:1.

In order to preserve wildlife travel corridors through the large wetland through which the access roadway travels, and to reduce the potential for vehicle mortality of small wildlife, the WCC would like to see over-sized culverts provided under the roadway to allow for the continued passage of wildlife such as turtles and amphibians.

Drainage:

The quality of stormwater runoff generated by the project will be improved by the implementation of Best Management Practices. Existing site runoff is sheet flow. The project will create approximately 8.9 acres of new impervious area. Runoff from the proposed roadways, driveways, and parking areas will flow to catch basins equipped with deep sumps and hoods. Stormwater flows to detention basins with forebays. Roof runoff will be infiltrated where possible. The rate of water discharging from the site will remain less than existing peak runoff rates. The proponent has committed to perform an annual inspection and maintenance program for the stormwater collection system and a seasonal sweeping program of the proposed driveways and parking areas.

The EIR should include a detailed description of the proposed drainage system design, including a discussion of the alternatives considered along with their impacts. The Town of Westford has reported that the project site has a high water table. It should provide pre- and post-drainage calculations. The proponent should recharge roof runoff and other treated stormwater runoff from parking areas and driveways in order to retain as much as possible of the existing groundwater flows and drainage patterns. If the proponent ties into the existing MassHighway or municipal drainage systems, the EIR should clarify the permits required and if there will be a recharge deficit on-site. The EIR should indicate and discuss where the MassHighway drainage system discharges in this area.

Proposed activities, including construction mitigation, erosion and sedimentation control, phased construction, and drainage discharges or overland flow into wetland areas, should be evaluated. The location of detention/infiltration basins and their distances from wetland resource areas, and the expected water quality of the effluent from said basins should be identified. This analysis should address current and expected post-construction water quality (including winter deicing and sanding analyses) of the predicted final receiving water bodies. Sufficient mitigation measures should be incorporated to ensure that no downstream impacts would occur. The drainage analysis should ensure that on- and off-site wetlands are not impacted by changes in stormwater runoff patterns.

The EIR should address the performance standards of MassDEP's Stormwater Management Policy. It should address the groundwater recharge issues and demonstrate that the project will meet the Stormwater Management Policy. The EIR should demonstrate that the design of the drainage system is consistent with this policy, or in the alternative, why the proponent is proposing a drainage system design not recommended by MassDEP. The proponent should use the MassDEP Stormwater Management Handbook when addressing this issue.

The EIR should discuss the consistency of the project with the provisions of the National Pollutant Discharge Elimination System (NPDES) General Permit from the U.S. Environmental Protection Agency for stormwater discharges from construction sites. It should include a discussion of best management practices employed to meet the NPDES requirements, and should include a draft Pollution Prevention Plan. The EIR should identify how this project will comply with the NPDES Phase II Stormwater General Permit, which Westford is required to implement.

The EIR should describe the maintenance program for the drainage system, which will be needed to ensure its effectiveness. This maintenance program should outline the actual maintenance operations, responsible parties, and back-up systems.

In the EIR, the proponent should consider committing to using a non-sodium based deicer on the project's paved surfaces and limiting the use of chemical fertilizers and pesticides on grass areas maintained by the apartment proponent. The proponent should develop a low impact turf management program in the EIR with an integrated pest management plan for the turf.

The EIR should address reducing the amount of impervious area proposed on the project site by alternative layout and reduced pavement areas.

Drinking Water:

The EIR should summarize the impacts from the project on the drinking water supply and distribution system. It should propose mitigation as appropriate. The EIR should identify the location of any groundwater wells proposed for irrigation purposes and the amount of gallons per day that the well would use. It should identify if any water storage tanks are proposed on-site. The Town of Westford has requested that the proponent should investigate the establishment a potable well on the project site that could reduce the net gain of water leaving the property.

Wastewater:

The EIR should outline the proponent's efforts to reduce water consumption and thereby reduce wastewater generation. It should describe the design of the wastewater package treatment

plant, leaching area, and groundwater discharge issues. The EIR should determine if the proposed addition of 44,000 gpd will impact the groundwater tables and wetlands. It should identify the number of proposed bedrooms at the site, and how it determined the 44,220 gpd of wastewater generation.

The EIR should address the concerns stated in MassDEP's comment letter of May 29, 2007. MassDEP has serious concerns regarding the limitations of the site. The project proponent should consider other leaching area locations and/or the downsizing of the project.

Hazardous Waste:

The EIR should present a summary of the results of hazardous waste studies and remediation efforts undertaken at the site by the proponent to comply with the Massachusetts Contingency Plan, 310 CMR 40.0000.

Visual/Aesthetics:

The EIR should discuss the aesthetics of the project, and should include a conceptual-level landscaping plan and building elevations from all sides. It should investigate the legalities and requirement for utilizing the Town Forest for an emergency access.

Construction/Community Disruption:

The EIR should present a discussion on potential construction period impacts (including but not limited to noise, dust, wetlands, and traffic maintenance) and analyze feasible measures that can avoid or eliminate these impacts. It should identify the amount of blasting required to develop the site. The EIR should estimate the amount of fill to be removed or brought to the site. According to the Town of Westford, approximately 34,000 cubic yards of clean fill will be brought to the site. It should identify the number of truck trips required to handle the filling operation and the truck routes proposed to allow for this filling operation. The EIR should show where filling will be required on the site.

Sustainable Design:

This project presents a good opportunity to successfully incorporate cost-effective sustainable design elements and construction practices into the project. These elements can minimize environmental impacts and reduce operating costs. The EIR should summarize the proponents' efforts to ensure that this project includes Leadership in Energy and Environmental Design (LEED) Certified buildings or the equivalent. I strongly encourage the proponent to consider incorporating elements, such as those noted below, into its project design, construction and management:

- water conservation and reuse of wastewater and stormwater;
- renewable energy technologies to meet energy needs;
- optimization of natural day lighting, passive solar gain, and natural cooling;
- energy efficient HVAC and lighting systems, appliances and other equipment, and solar preheating of air;
- building supplies and materials that are non-toxic, made from recycled materials, and made with low embodied energy ;
- easily accessible and user-friendly recycling system infrastructure incorporated into the 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;
- LID principles that reduce stormwater, potable water, wastewater, and wetland impacts and that provide water conservation and the reuse of wastewater and stormwater; and
- LEED certification.

Mitigation:

The EIR should include a separate chapter on mitigation measures. In the ENF, the proponent committed to widening Route 110 and constructing a left-turn lane and roadway shoulders for bicycle accommodation at the Site Driveway. The EIR should include plans showing the configuration of each roadway intersection proposed for modification.

The proponent should consider participating in proposals by the Towns of Westford and Chelmsford and MassHighway to provide additional traffic mitigation measures to reduce the impacts on estimated delay at adjacent intersections.

This chapter on mitigation should include Proposed Section 61 Findings for all state permits: MassHighway, MassDEP, and Mass Development. The Proposed Section 61 Findings should contain a clear commitment to mitigation, an estimate of the individual costs of the proposed mitigation and the identification of the parties responsible for implementing the mitigation. A schedule for the implementation of mitigation should also be included.

I urge the proponent to participate in any discussions and studies that evaluate the feasibility of traffic, pedestrian and bicycle improvements within this area.

Response to Comments:

The EIR should respond to the comments received to the extent that the comments are within the subject matter of this scope. Each comment letter should be reprinted in the EIR. I

defer to the proponent as it develops the format for this section, but the Response to Comments section should provide clear answers to the questions raised.

Circulation:

The EIR should be circulated in compliance with Section 11.16 of the MEPA regulations and copies should also be sent to the list of "comments received" below and to Westford and Chelmsford officials. A copy of the EIR should be made available for public review at the Westford and Chelmsford Public Libraries.

June 8, 2007
Date

Ian A. Bowles

Comments received:

EOT, 5/24/07
Westford Town Manager, 5/25/07
Ruth and Joel Luna, 5/29/07
Chelmsford Community Development Department, 5/29/07
MassDEP/NERO, 5/29/07
Westford Town Manager, 5/30/07
JPI, 5/31/07

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