# The Commonwealth of Massachusetts

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

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| PROJECT NAME | : Proposed Riverwalk Redevelopment |
| PROJECT MUNICIPALITY | : Lawrence |
| PROJECT WATERSHED | : Merrimack |
| EEA NUMBER | : 14389 |
| PROJECT PROPONENT | : 280 Riverwalk LLC, 290 Riverwalk LLC, and 350 Riverwalk LLC |
| DATE NOTICED IN MONITOR | : March 25, 2009 |

Pursuant to the Massachusetts Environmental Policy Act (MEPA) (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). In a separate Draft Record of Decision (DROD) also issued today, I propose granting a Phase I Waiver to allow a portion of the project to proceed to state permitting prior to completion of the EIR for the entire project. The DROD will be noticed in the May 6, 2009 issue of the *Environmental Monitor* for a 14-day public comment period. Within seven days of the close of comments, I shall reconsider, modify, or confirm the waiver in a Final Record of Decision

Project Description

As described in the Environmental Notification Form (ENF), the project consists of phased (Phase I-II) mixed-use redevelopment on an 11.8-acre historic mill property in Lawrence. Phase I consists of: the abatement and demolition of the mill buildings at 290, 300, and half of 350 Merrimack Street; the creation of new public infrastructure which includes a new city owned roadway and utilities; the construction a 1,500 square foot (sf) community building, public park, and 17,000 sf retail building; and the renovation of the existing parking field, which includes stormwater management improvements. Phase II consists of: the construction of an aboveground 550-car, 5-story parking garage; the renovation and adaptive reuse of existing mill buildings at 280 Merrimack Street (Wood Mill) and the remaining half of 350 Merrimack Street (Cotton

Mill); and the construction of a 115,000 sf, 3-story commercial building. The project includes restoration of the historic Wood Mill building. The EENF indicates that the historic building at 290 Merrimack Street (Power House) is proposed for demolition with the approval of the Lawrence Historical Commission as it is unsafe and has received a Notice of Violation from the Lawrence Department of Inspectional Services ordering it to be razed pursuant to the Massachusetts Building Code.

The demolition of the existing buildings will reduce the gross square footage of structures on the site by 111,700 gross square feet (gsf), for a project total of 638,200 sf of office, commercial, retail, and community space. Because this is a previously developed site, the project will not result in any addition of impervious area, but will include the addition of 2.1 acres of new pervious area. Water consumption and wastewater generation are estimated at 11,073 new gallons per day (gpd), respectively (for a project total of 12,810 gpd, respectively). The proposed project is expected to generate 6,269 new average daily trips (adt) and will include the construction of 662 new parking spaces including an aboveground parking structure.

MEPA Jurisdiction and Required Permits

The project is undergoing review and requires the preparation of a mandatory EIR pursuant to Section 11.03(6)(a)(6) of the MEPA regulations because it will result in the generation of 3,000 or more new adt on roadways providing access to a single location. The project is also undergoing MEPA review pursuant to Section 11.03(10)(b)(1) because it involves demolition of a historic structure located in a Historic District listed in the State Register of Historic Places

The project is seeking financial assistance from the Massachusetts Department of Housing and Economic Development under the Growth Districts Initiative (GDI). The project was issued an Order of Conditions (OOC) by the Lawrence Conservation Commission for Phase I which was reviewed for consistency with the Wetlands Protection Act (WPA) and Massachusetts Department of Environmental Protection (MassDEP) Stormwater Management Policy (SMP). Phase I of the project does not require any additional permits.

Phase II of the project may also require an OOC and, on appeal only, a Superseding Order of Conditions from the Massachusetts Department of Environmental Protection (MassDEP). The project will also require a National Pollutant Discharge Elimination System Construction General Permit (NPDES CGP) from the United States Environmental Protection Agency (U.S. EPA) and may require review by the Massachusetts Historic Commission (MHC). The project is subject to the EEA/MEPA Greenhouse Gas Emissions Policy and Protocol.

Because the Proponent is seeking financial assistance from the Commonwealth for the project, MEPA jurisdiction is broad and extends to all aspects of the project that are likely, directly or indirectly, to cause Damage to the Environment as defined in the MEPA regulations.

Request for Phase I Waiver

The Proponent has requested a Waiver to allow Phase I of the project to proceed prior to the completion of the EIR for the entire project, because the proposed Phase I development plan

does not meet or exceed MEPA review thresholds for a mandatory EIR and the timing for completing the Phase I work is critical for obtaining the project funding.

Water consumption and wastewater generation for Phase I are estimated at 200 new gpd, respectively (for a Phase I total of 1,938 gpd, respectively). Phase I is estimated to generate 2,246 new adt. Phase I will result in the removal of approximately 69,793 cubic feet (cf) of Bordering Land Subject to Flooding (BLSF).

Measures to avoid, minimize and mitigate project impacts presented in the EENF for Phase I include: redevelopment of an existing developed site; increase of 2.1 acres of pervious area; avoidance of wetland impacts; constructing 28,026 cf additional compensatory flood storage that increases flood storage capacity onsite; compliance with the WPA; construction of new stormwater management system compliant with the MassDEP SMP; use of Low Impact Development Best Management Practices; and measures to minimize construction period impacts.

Greenhouse gas mitigation measures proposed for Phase I include energy efficient HVAC systems, increased boiler efficiency, energy management systems, cool roof design and Transportation Demand Management (TDM) measures. The Proponent is committing to greenhouse gas reduction measures for Phase I that are estimated to result in a reduction of total $CO_2$ emissions by approximately 6.3% from the code-compliant base case. I note that the building area (gross square feet) proposed for Phase I is only a small fraction of the area proposed for the full build-out, and that greenhouse gas emissions and proposed mitigation will be further evaluated for the entire the project as part of the Draft EIR, as detailed below.

## SCOPE

### General

The Proponent should prepare the Draft EIR (DEIR) in accordance with the general guidance for outline and content found in Section 11.07 of the MEPA regulations, as modified by this Certificate. The DEIR should include maps and plans at a reasonable scale, a project summary and schedule, impacts and mitigation associated with each phase of the project, a list of permits required and a description of any changes since the filing of the EENF.

### Project Description

The DEIR should include a thorough description of the entire project and all project elements and construction phases, including Phase I. The DEIR should outline any changes to the project since the review of the EENF. It should describe the context of this proposal within the long-term redevelopment of the Lawrence waterfront (Riverwalk) and address any redevelopment plans for abutting uses. The DEIR should provide a baseline of information about the project area and an initial analysis of the different types and levels of development that may be suitable for the Riverwalk area. The Proponent should use the DEIR as a tool to ensure

appropriate planning for the full build-out of the site, analyze cumulative impacts, and provide an understanding of background conditions and resources present on the site.

The DEIR should include an existing conditions plan illustrating resources and abutting land uses for the entire project area and a proposed conditions plan (or plans) illustrating proposed elevations, structures, access roads, stormwater management systems, and utility connections associated with each phase of the project. The DEIR should also include a site circulation plan illustrating how motor vehicles, pedestrians and cyclists will be accommodated on the site for each phase of the project. The site circulation plan should delineate paths and connections to and along existing open space, transportation infrastructure, the waterfront and other locations. Plans must be provided for the entire site at a reasonable scale (e.g. 40 or 60 scale).

Permitting and Consistency

The DEIR should briefly describe each state permit or agency action required or potentially required for each phase of the project, and should demonstrate that the project meets applicable performance standards. The DEIR should contain sufficient information to allow the permitting agencies to understand the environmental consequences of their actions. In accordance with section 11.01(3)(a) of the MEPA regulations, the DEIR should discuss the consistency of the project with any applicable local or regional land use plans. The DEIR should also address the project's consistency with the Commonwealth's Sustainable Development Principles and Executive Order 385 (Planning for Growth).

Alternatives

The Proponent states in the EENF that in the early planning phase it considered several alternatives to the proposed design. However, because of the need to raze the existing Power House building (290 Merrimack Street), uneven site grading, and poor vehicular and pedestrian circulation, there were limited options to avoid the impacts associated with redeveloping the site. The City of Lawrence has clearly indicated its support of the proposed project. According to the Proponent, the preferred alternative transforms a degraded site into a productive area which residents can enjoy, while keeping resource area impacts minimal, providing improvements to on-site stormwater, and committing to mitigation for project-related traffic.

The DEIR should contain a discussion of previously-considered site planning alternatives, and in particular, outline how site planning has been influenced by existing infrastructure, most notably buildings, roads and access to transit facilities, public access to the waterfront, and impacts to wetlands and historic resources. The purpose of this discussion should be to evaluate how various frameworks that have informed the planning process have shaped the project and to demonstrate how the preferred alternative avoids, minimizes and mitigates impacts to environmental resources and sensitive receptors to the maximum extent feasible while maximizing the public benefits, including open space and access to the waterfront. The alternatives analysis should include a clear comparison (quantified to the extent feasible) of the impacts of each alternative and its project components (including but not limited to acres of land alteration, impervious area, wetlands, traffic and parking, and greenhouse gas emissions). The Proponent should also evaluate the No Build alternative as required by the MEPA regulations.

The EENF proposes 1,151 parking spaces, which includes an additional 662 new spaces. The DEIR should identify the total number of parking spaces required for the project under current City of Lawrence bylaws. The DEIR should indicate how the parking supply was developed and demonstrate that the parking supply is the minimum necessary to accommodate project demand without encouraging additional single occupant vehicle trips. The DEIR should evaluate the feasibility of creating additional pervious open space on the site which is currently proposed for parking by increasing parking spaces within the proposed structured parking garage. As discussed elsewhere in this Certificate, implementation of transportation demand management (TDM) measures and provision of good bicycle and pedestrian access can further reduce the amount of parking needed.

The Proponent should also evaluate all measures to increase the long-term sustainability and energy efficiency of the site. Because the project is at a conceptual design stage, there are ample opportunities to incorporate renewable energy technology, energy efficiency and Low Impact Development (LID) techniques into the site design and individual building design. I strongly encourage the Proponent to develop an alternative that includes a commitment to renewable energy technology (e.g solar, fuel cells, geothermal and combined heat and power). These efforts can minimize the long term environmental impacts of this project while reducing operating costs. I encourage the Proponent to consult with EEA staff regarding the development of a sustainable design strategy for the project.

LID techniques incorporate stormwater best management practices (BMPs) and can reduce impacts to land and water resources by conserving natural systems and hydrologic functions. The primary tools of LID are landscaping features and naturally vegetated areas, which encourage detention, infiltration and filtration of stormwater on-site. Other tools include water conservation and use of pervious surfaces. Clustering of buildings is an example of how LID can preserve open space and minimize land disturbance.

Wetlands

Phase I of the project will result in the removal of approximately 69,793 cubic feet (cf) of Bordering Land Subject to Flooding (BLSF). The Proponent proposes to construct approximately 28,026 cf of compensatory flood storage as mitigation for project impacts to BLSF resource areas. The project's Riverfront Area is associated with historic mill complexes and as such, is exempt from the Massachusetts Riverfront Protection Act. The Proponent has obtained an Order of Conditions from the Lawrence Conservation Commission for Phase I of the project which was reviewed for consistency with the Wetlands Protection Act (WPA) and the Massachusetts Department of Environmental Protection (MassDEP) Stormwater Management Policy. The Proponent may be required to obtain a local OOC for Phase II of the project, however according to the EENF Phase II does not propose any direct alteration to wetlands.

The DEIR should include an update of wetland alterations associated with Phase I and Phase II of the project. The DEIR should explain how the project will comply with the performance standards in the wetlands regulations, and demonstrate that alteration of resource areas has been avoided and minimized. The EIR should include plans that reflect the most recently approved delineation of all applicable resource area boundaries including riverfront

areas, buffer zones, 100-year flood elevations, priority and/or estimated habitat, wetland replication areas, water supply and waterways. It should describe the nature of all impacts that cannot be avoided including grading, clearing and construction-related disturbances and whether they are temporary or permanent in nature.

Stormwater Management and Low Impact Development (LID)

According to the EENF, stormwater is currently discharged untreated into the adjacent Merrimack River via three outfalls located along the bank of the river. The Proponent proposes a stormwater management system incorporating the use of conventional and LID BMPs, including deep sump catch basins, water quality units, bioretention units, and subsurface infiltration basins, in Phase I of the project. As noted in the MassDEP comment letter, it appears the stormwater management system design complies with the Redevelopment standard of the Stormwater Management Standards (SMS), and would fully comply with the SMS if BMPs are sized appropriately. The DEIR should include an updated stormwater management plan that demonstrates that source controls, pollution prevention measures, erosion and sediment controls and the drainage system will comply with the SMS and local wetlands bylaws for water quality and quantity both during construction and post-development. A copy of the Stormwater Pollution Prevention Plan (SWPPP) should be included in the DEIR.

I commend the Proponent for employing LID BMPs in a dense, urban area and I acknowledge that the proposed redevelopment will result in a decrease of impervious area by introducing 2.1 acres of new landscaped green space. I encourage the Proponent to continue to evaluate opportunities for incorporating sustainable design alternatives including LID techniques in the project's site design and stormwater management plans. The DEIR should include a discussion and evaluation of integrated stormwater management techniques for redevelopment sites with significant surface area parking. The Proponent should consult with MassDEP during the preparation of this section of the DEIR. The DEIR should reconsider opportunities to harvest rainwater from the proposed buildings for reuse on green roofs or irrigation of proposed green space. The Proponent should strive to retain stormwater on-site through the use of the proposed stormwater BMPs and LID techniques and to reduce overall discharges to the Merrimack River. The DEIR should confirm that all feasible methods to reduce impervious surfaces, including minimizing parking supply, providing structured or underground parking and use of permeable pavement have been explored.

The DEIR should include an updated Operation and Maintenance Plan (O&M Plan) which specifies the type of sweeping provided to warrant a five percent total suspended solids removal credit. The Proponent must implement the long term O&M Plan to ensure that BMPs are maintained to function as designed. The O&M should incorporate MassDEP's Snow Disposal Guidelines, and in addition to showing and marking with signage the location on site where snow will be plowed or disposed, the O&M Plan should commit to using the minimum amount of deicing and abrasive agents, and include catch basin stenciling to discourage illicit discharges to storm drains on site, which discharge to the Merrimack River. I encourage the Proponent to consider using a non-sodium based deicer on pavement surfaces. The updated O&M Plan should outline the actual maintenance operations, sweeping schedule, responsible parties, and back-up systems.

Historical Resources

The Wood Worsted Mill Power House building (290 Merrimack Street) and the Wood Worsted Main Mill building (280 Merrimack Street) are listed in MHC's State Register of Historic Places. According to the EENF, Phase I of the project includes demolition of the Wood Worsted Mill Power House building which is currently in an advanced state of disrepair and has received a Notice of Violation from the Lawrence Department of Inspectional Services requiring it to be razed pursuant to Massachusetts Building Code. The Proponent should comply with the conditions outlined in the Demolition Permit authorized by the Lawrence Historical Commission. Phase II of the project proposes to renovate the interior of Wood Worsted Main Mill building. The project is subject to review by MHC and the DEIR should include an update on consultations with MHC as well as any design changes since the filing of the EENF and a description of measures to avoid, minimize or mitigate impacts to historic resources.

Transportation

The EENF included a preliminary analysis of the project's traffic impacts in the EENF. A Traffic Impact and Access Study (TIAS) addressing only Phase I of the project states that the proposed Phase I development will slightly increase traffic along the roadway network within the project area. Phase I is expected to generate 2,246 new adt and the entire project is expected to generate 6,269 new adt and to increase the overall number of vehicle trips in the area due to the conversion of the site from limited manufacturing use to predominately office, commercial, retail and community uses. A full TIAS should be prepared for the DEIR in accordance with EEA/EOT Guidelines for Traffic Impact Assessments. The TIAS should analyze the impacts of the project related to vehicle trips; pedestrian, bicycle and transit trips; parking; and truck routes and loading activities.

Although the project does not require a Massachusetts Highway Department (MassHighway) Access Permit, the site is in close proximity to Interstate 495, and the Patricia McGovern multimodal transportation center. Therefore, the Proponent should coordinate with MassHighway and the Massachusetts Bay Transportation Authority (MBTA) regarding long-term transportation planning for the area. The EENF indicates that the City of Lawrence is conducting a corridor study of Merrimack Street as part of the Merrimack Street Master Plan and that project mitigation as determined in the pending DEIR will compliment this Plan. The DEIR should outline and commit to a specific traffic mitigation proposal. The DEIR should discuss the consistency of the project with local, regional and state transportation plans.

Access to the site is via two driveways off of Merrimack Street. According to the EENF, the project is proposing to renovate the associated parking area, utilities, and site features to provide improved pedestrian and vehicular access to the site, including new City-owned roadway infrastructure and a public park. The renovated parking/drive areas will have new curbing, sidewalks, stormwater infrastructure, landscaped areas and a restructured parking layout, facilitating the addition of 662 parking spaces.

Transportation Demand Management

The DEIR should present a comprehensive Transportation Demand Management (TDM) program that investigates all feasible measures to reduce site trip generation, including specifically those measures outlined in the comment letter from MassDEP. In addition to the

recommended TDM measures provided by MassDEP, the TDM program should evaluate additional measures and incentives to encourage the use of alternative modes such as transit, walking, and bicycling. The TDM plan should identify the existing modes in the project area including transit, walking and bicycling, analyze their existing and future conditions based on the project's impacts, and provide improvements to attract mode usage. The Proponent should also discuss how plans for individual buildings and the development of the project area as a whole will encourage sustainable transportation choices. The Proponent should provide clear implementation commitments including funding for TDM measures deemed feasible and necessary to sustain and/or increase mode usage over time to ensure a balanced and functional transportation system in the area.

*Transit*

The Proponent should provide a description and analysis of existing public transportation in the project area. The Proponent should discuss its goals for working with the MBTA to optimize transit service to the project area. The DEIR should demonstrate that sufficient transit system capacity is available to meet the projected ridership increase.

*Pedestrian and Bicycle Facilities*

The proposed redevelopment offers significant opportunities to improve pedestrian and bicycle access to and within the site. In response to MassDEP's comments, the DEIR should identify the predicted bicycle generation trip rate and commit to all necessary facility enhancements to accommodate these trips including the provision for both short and long-term bicycle storage for visitors and employees. In addition to on-site amenities, the Proponent should work with City and State transportation officials to ensure that Merrimack Street design not only accommodates, but enhances pedestrian and bicycle access to the project site and the Patricia McGovern transportation center as applicable.

The Proponent should address WalkBoston's concerns regarding diminished access to the riverfront as a result of the proposed layout of the new buildings and driveways for truck access. The DEIR should discuss the consistency of the project with the City of Lawrence's plans for the Riverwalk. The DEIR should identify appropriate mitigation measures for areas where the project will have an impact on traffic operations. The Proponent should provide a clear commitment to implement and fund mitigation measures and should describe the timing of their implementation based on the phases of the project.

The DEIR should evaluate project-generated pedestrian and bicycle trips and distribution, identify intersections and other areas where mitigation may be required to ensure safe access, and commit to appropriate mitigation measures. It should identify how the project will improve and support connectivity to and within the site. The DEIR should outline a pedestrian and bicyclist activity monitoring plan that evaluates usage, level-of-service at pedestrian/bike path intersections, and signal timing, to ensure that proposed facilities are adequate and that crossing times are maximized and safe. Plans submitted with the DEIR should provide details on proposed pedestrian and bicycle infrastructure including design standards for plantings, street furniture, signage, sidewalk/crosswalk widths, paving, bike lanes, bike racks and employer shower facilities. The Proponent should respond to specific comments from WalkBoston about

pedestrian connections in the project area and addition of sidewalks along the Wood Mill building.

Parking

The project proposes 662 additional parking spaces. The Proponent has indicated that parking has been sized below the City of Lawrence zoning requirements for the site. The Proponent should explain how the number of parking spaces was determined and discuss parking demand management for the project area. The DEIR should evaluate adjusting the parking capacity of the above ground garage to create more green space on the site.

The DEIR should include a parking needs assessment and demonstrate that the parking supply is appropriate for a mixed-use redevelopment planned in conjunction with high-quality transit access. It should explain the nature of the on-site parking (i.e. commercial/visitor, underground/surface, long-term/short-term), identify turnover rates for employees and others, and include an analysis of parking supply, demand and pricing in the project area. The DEIR should evaluate, and I strongly urge the Proponent to commit to, a project scenario in which the commercial parking supply is reduced in light of the extensive public transit, bicycle and pedestrian opportunities in the project area.

Site Access/Loading

The DEIR should describe how the project intends to accommodate service and loading functions to the Cotton Mill and the requirements of the project for service/loading infrastructure (e.g., projected demand, circulation, required turning radii, etc.). The Proponent should analyze the impacts of service and loading functions on the area traffic network. The Proponent should address Walk Boston's comments on investigating alternative locations for truck access to the Cotton Mill to improve pedestrian use of the river frontage of the site.

Air Quality

The project triggers MassDEP's review threshold (greater than 6,000 new daily vehicle trips for a mixed-used project) requiring the Proponent to conduct an air quality mesoscale analysis comparing the indirect emissions from transportation sources under various, No Build, Build, and Build with Mitigation conditions. The Proponent should consult with MassDEP regarding modeling protocol prior to conducting this analysis. The mesoscale analysis should be conducted in accordance with guidance found in the MassDEP comment letter and as described in the 2009 MEPA Greenhouse Gas (GHG) Emissions Policy and Protocol (Policy).

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 Proponent's commitment to implement said mitigation measures. The MassDEP comment letter has outlined a variety of recommended Transportation Demand Management (TDM) measures for consideration on-site, as the project is ideally suited

for alternative transportation methods. These TDM measures should be evaluated in the DEIR as part of the transportation analysis as they will result in additional air quality improvements through a reduction in project trips. The DEIR should include an updated Table 3.5 – Unsignalized Intersection Capacity Analysis Study which correctly reflects the Level of Service criteria.

The Proponent has committed to compliance with the idling provisions of the Massachusetts Air Pollution Control Regulations (310 CMR 7.11). The DEIR should discuss project compliance with the Massachusetts Idling regulation. The Proponent should post idling restriction signs in all loading and drop-off areas within the site to remind all drivers, patrons, and delivery personnel of the state's idling regulation. The Proponent should consider commitment to the additional measures recommended by MassDEP to further reduce vehicle trips and construction-vehicle emissions within the project area.

The proposed project may be subject to the Rideshare Regulation (310 CMR 7.16), a clean air program that applies to employers with 250 or more daily employees. If the project may include facilities subject to this regulation, the Proponent should consult with MassDEP for assistance. The DEIR should discuss project compliance with the Rideshare regulation.

*Greenhouse Gas (GHG) Emissions*

A project at this early stage of development provides a multitude of opportunities for designing buildings and transportation management measures that reduce energy consumption and substitute fossil fuel with renewable energy sources. Based upon information provided at the MEPA scoping session, the Proponent is investigating the feasibility of various GHG reduction measures such as wind energy use, combined heat and power sharing, and energy efficient design. I strongly encourage the Proponent to continue to focus on sustainable design measures as project design is advanced as a way to mitigate these potential GHG emissions in accordance with the MEPA GHG Policy.

The EENF included a preliminary GHG Emission Analysis which assessed Phase I of the project and included several potential GHG mitigation measures for Phase II. The DEIR should include an updated analysis of GHG emissions and mitigation measures in accordance with the standard requirements of the MEPA GHG Policy. The DEIR should quantify the direct and indirect GHG emissions associated with the project's energy use and transportation-related emissions. Direct emissions include on-site stationary sources, which typically emit GHGs by burning fossil fuel for heat, hot water, steam and other processes. Indirect emissions result from the consumption of energy, such as electricity, that is generated off-site by burning of fossil fuels, and from emissions associated with vehicle use by employees, vendors, customers and others. The DEIR should outline and commit to mitigation measures to reduce GHG emissions. I refer the Proponent to the MEPA GHG Policy for additional guidance on the analysis and I encourage the Proponent to meet with representatives from MEPA, MassDEP and the Department of Energy Resources (DOER).

The DEIR should include an updated GHG emissions analysis that calculates and compares GHG emissions associated with:1) a Massachusetts Building Code-compliant baseline

(the sum of direct emissions from stationary sources and indirect emissions from energy consumption and transportation); 2) the proposed Preferred Alternative (the sum of direct emissions from stationary sources, indirect emissions from energy consumption, and transportation for the project as proposed); and 3) a project alternative with greater GHG emissions-related mitigation than the Preferred Alternative. Please note that the code currently in effect for the design and construction of this project and for the establishment of the Base Code Compliant Case is 780 CMR 13.00 (dated 1/9/09) that incorporates the performance standards of the International Energy Conservation Code (IECC) as further detailed in the MassDEP/DOER comment letter. The DEIR should indicate which energy modeling tool was used and present the data used to model the energy use in buildings. The DEIR should also identify TDM measures proposed for each of the alternatives and the corresponding emission reductions expected.

The MassDEP comment letter, with contributions from DOER, has provided additional guidance regarding mitigation measures that should be explored as part of the GHG analysis, as well as resources to assist in preparation of the analysis. While the GHG analysis need not provide a complete technological and financial analysis of all GHG reduction measures, it would benefit the Proponent to assess feasible GHG reduction measures for the project type, starting with measures that offer the greatest energy reductions and then consider opportunities to improve ongoing operations. These assessments should either lead to commitments to adopt the LEED, Energy Star element or other equivalent design features, or the EIR should do a credible job in explaining why a particular efficiency or green power generation component is impracticable. The DEIR should include an assessment of the feasibility of implementing solar and other alternative energy sources for the project, and explore opportunities to purchase power generated by renewable energy sources for any portion of the electricity use on the site. The DEIR should clarify commitments to solar energy, wind energy and other renewable sources. The Proponent should continue to evaluate the feasibility of constructing roofs for new buildings to support the added weight of a solar photovoltaic (PV) system for potential installation during project construction or at a future date.

The Proponent has committed to energy efficient elements such as lighting, insulation and high-albedo roof materials, which is commendable. MassDEP and DOER have reviewed the EENF and identified several measures listed below that should be analyzed in the DEIR and incorporated into the project, where feasible. The DEIR should include additional information and analysis in response to the MassDEP/DOER comments and the energy efficient measures listed below. The EENF notes that certain energy-efficient measures, such as constructing green roofs, reducing energy demand by using peak shaving or load shifting strategies, on-site renewables, combined heat and power technologies, and purchasing alternate fuel for vehicles, are infeasible or inappropriate. These potential mitigation measures should be reconsidered in the DEIR. Also, it is recommended that the Proponent contact the electricity and natural gas utilities providers in Lawrence, to take advantage of potential rebates available for the installation of highly energy efficient equipment.

The following are among the mitigation measures identified by MassDEP and DOER. They should be considered and incorporated into the project to the greatest extent feasible.

Energy Efficient Interior Lighting – energy use by interior lighting is a very significant contributor to GHG emissions. In light of this, the commitment to a 5 percent reduction should be substantially improved. Some further measures to be analyzed:

- Incorporation of LED fixtures;
- Use of dynamic dimmer controls which will continuously monitor lighting levels and adjust fixtures to the minimum power needed to supplement daylight contribution; and
- Incorporation of occupancy sensors.

Energy Efficient Exterior Lighting – analyze the use of LED exterior fixtures which are becoming increasingly commercially available.

Maximize Interior Day-lighting – DOER requires clarification of the commitment for the application of this measure to the new buildings, including the retail and community center buildings. Also, analyze the use of skylights, particularly in one and two story buildings.

Energy Efficient Windows and Building Envelope - The DEIR should identify the R (or U) values for the exterior walls, roof and windows and the Solar Heat Gain Factor (SHGF) for the windows.

High-Efficiency HVAC Systems – The DEIR should evaluate more efficient HVAC systems in more detail to determine if additional efficiencies are feasible.

Third Party Building Commissioning – Building commissioning is required by the MA Building Code but should be performed by a third party to ensure that the commissioning process is thorough and the energy performance of the building is maximized. To be considered a mitigation measure, Third Party Commissioning should be reevaluated for inclusion in the list of project GHG reduction measures as part of the DEIR.

Reduce Energy Demand by Using Peak Shaving or Load Shifting Strategies - Provide analysis of measures whereby the inclusion of controls and fixtures which will allow for reduced lighting levels when called for may allow tenants to benefit from demand response incentives. This measure has been utilized by others.

Incorporate Combined Heat and Power (CHP) Technologies – DOER agrees that a thermal load is required, however there are technologies and suppliers that provide CHP packages which use the rejected heat for space heating in the heating season, and for cooling (using and absorption chiller) in the winter. Depending on the type, size and performance a CHP system would be eligible for utility rebates, federal tax credits, and Alternate Energy Credits as allocated per the Mass. Alternate Energy Portfolio Standard. Provide an analysis which includes these options and factors that justifies the conclusion the CHP is not feasible.

On-Site Renewable Energy – The DEIR should evaluate this option in more detail to confirm feasibility based upon the project type and location.

Wastewater

As described in the EENF, the project will generate an additional 11,073 gpd of wastewater flow for a project total of 12,810 gpd. Phase I of the project will generate an additional 200 gpd of wastewater flow. The DEIR should provide an update on the volume of wastewater generated by the project. The DEIR should confirm that wastewater generated by the project will be discharged to the existing Greater Lawrence Sanitary District (GLSD) sewer line to the GLSD Wastewater Treatment Facility for treatment and disposal. The project is not

proposing any new sewer connections and is employing the existing infrastructure, however 0.14 miles of water and sewer main is proposed for removal. No sewer permit is required. The DEIR should discuss how anticipated wastewater flows were calculated. The Proponent must confirm in the DEIR that the project will be served by separate sanitary and storm drain systems. The Proponent should clarify in the DEIR whether any dewatering will be required during construction, and whether these flows can be discharged into existing storm drains, or if groundwater will be discharged into the sanitary sewer system.

Hazardous Material

The project site is currently being regulated under the Massachusetts Contingency Plan (MCP) and governed by the Massachusetts Oil and Hazardous Material Release Prevention and Response Act, MGL c. 21E. According to the EENF, one Release Tracking Number (RTN) 3-26003 is associated with the project site. The DEIR should identify known hazardous waste sites on-site and in the vicinity of the project site and provide an updated summary on the status of these sites consistent with the MCP. The Proponent should provide an overview of planned remediation efforts.

The project will likely require abatement and removal of asbestos from existing buildings. The Proponent should ensure that MassDEP requirements for asbestos remediation are met as further detailed in its comment letter. The DEIR should include an update on asbestos investigations and remediation plans.

Construction and Demolition

The proposed demolition and reconstruction will generate a significant amount of construction and demolition (C&D) debris. The DEIR should commit to recycling construction debris. As further detailed in the MassDEP comment letter, demolition activities must comply with both Solid Waste and Air Pollution Control regulations, including those related to asphalt, brick and concrete (ABC) rubble, and asbestos-containing materials. The Proponent has been, and should continue to work, in consultation with staff of the Bureau of Waste Prevention's Asbestos Removal Program. The DEIR should discuss the project's consistency with applicable regulations and identify any additional MassDEP permits or approvals required.

The DEIR should include a Construction Management Plan (CMP) describing project activities and their schedule and sequencing, site access and truck routing, and best management practices that will be used to avoid and minimize adverse environmental impacts. The CMP should address potential impacts and mitigation relating to land disturbance, noise, dust, odor, nuisance, vehicle emissions, construction and demolition debris, and construction-related traffic. The CMP should discuss plans for reuse and recycling of construction materials. The CMP should include an erosion control component to address protection of water quality and wetlands resources.

I ask that the Proponent participate in MassDEP's Diesel Retrofit Program to minimize the air quality impacts of construction vehicles. The DEIR should include a commitment to participate in this program and describe the specific measures that will be employed including retrofitting of construction equipment with EPA-certified emission control devices and use of

off-road Low Sulfur Diesel Fuel (LSD). The DEIR should include commitments to construction-period diesel emission mitigation.

Mitigation and Section 61 Findings

The DEIR should include a separate chapter on mitigation measures, which should include a summary table of all mitigation commitments as well as detailed proposed Section 61 Findings for all state permits. The Section 61 Findings should describe proposed mitigation measures, contain clear commitments to mitigation and a schedule for implementation, based on the construction phases of the project, and identify parties responsible for funding and implementing the mitigation measures. The proposed Section 61 Findings will serve as the primary template for permit conditions.

Response to Comments

The DEIR should include a copy of this Certificate and a copy of each comment letter received on the EENF. In order to ensure that the issues raised by commenters are addressed, the DEIR should include a response to comments received to the extent they are within MEPA jurisdiction. 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. I recommend that the Proponent use either an indexed response to comments format, or a direct narrative response.

Circulation

The DEIR should be circulated in compliance with Section 11.16 of the MEPA regulations. Copies should be sent to those parties that submitted comments on the EENF, and to each federal, state and local agency from which the Proponent will seek permits or approvals. A copy of the DEIR should be made available for public review at the Lawrence Public Libraries.

May 1, 2009
Date

Ian A. Bowles, Secretary

Comments Received

03/31/2009 Natural Heritage and Endangered Species Program
04/23/2009 Massachusetts Department of Environmental Protection – NERO
04/24/2009 Massachusetts Department of Conservation and Recreation
04/27/2009 WalkBoston

IAB/PPP/ppp