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February 13,2009

# CERTIFICATE OF THE SECRETARY OF ENERGY AND ENVIRONMENTAL AFFAIRS ON THE DRAFT ENVIRONMENTAL IMPACT REPORT

| PROJECT NAME            | : Hamilton Canal District                    |
|-------------------------|--|
| PROJECT MUNICIPALITY    | : Lowell                                     |
| PROJECT WATERSHED       | : Merrimack                                  |
| EEA NUMBER              | : 14240                                      |
| PROJECT PROPONENT       | : Trinity Hamilton Canal Limited Partnership |
| DATE NOTICED IN MONITOR | : January 7,2009                             |

As Secretary of Energy and Environmental Affairs, I hereby determine that the Draft Environmental Impact Report (DEIR) submitted on this project **adequately and properly complies** with the Massachusetts Environmental Policy Act (M.G.L. c. 30, ss. 61-621) and with its implementing regulations (301 CMR 11.00). The proponent should prepare a Final Environmental Impact Report (FEIR) as further detailed in the scope below.

## Project Description

The proposed project consists of a transit-oriented, mixed use development on a 13-acre site in the Hamilton Canal District. The project includes housing (affordable and market-rate), commercial and retail space, restaurants, a theatre, and art gallery, and includes new construction as well as adaptive reuse of historic buildings. Comments received from the public, state and federal agencies, and city and regional governments express genuine support for the project, its redevelopment goals, and appreciation of the proponent's responsiveness to public input on the project design. I commend the proponent for engaging in such an inclusive planning process for this major redevelopment and revitalization project.

#### **DEIR** Certificate

The project has also made noteworthy commitments to green building and sustainable design. The project is being designed to meet Leadership in Energy and Environmental Design for Neighborhood Development (LEED-ND) criteria and all buildings will be LEED-certifiable. The proponent has also committed to incorporate renewable energy features into the project design.

The project is located within the boundaries of three historic districts including the Lowell National Historic Park and Preservation District, the Downtown Lowell Historic District and the Locks and Canals Historic District. The site is adjacent to the National Historical Park Visitor Center and the proposed new Lowell Trial Court. The City of Lowell has partnered with the proponent in developing a Master Plan for the project, which is considered a significant next step in the redevelopment and revitalization of downtown Lowell. The project site includes historic mill buildings associated with former textile manufacturing operations. It is a brownfields site, which is currently undergoing assessment and remediation in accordance with the Massachusetts Contingency Plan (MCP).

The total development proposed, approximately 1.8 million square feet, includes 767,000 gross square feet (gsf) of housing (623 units), 54,800 gsf of retail space, 424,000 gsf of commercial spaces and 627,000 gsf of parking (1,964 surface, above and below-grade spaces including a 980-car garage). The proponent has developed an alternative plan for Parcel 10, which consists of an additional 50 units of housing, if the proposed office space for this parcel is not marketable. According to the DEIR, the project will generate approximately 10,440 new vehicle trips per day. The project is being designed as a transit-oriented development with an expanded trolley system proposed from Dutton Street to the Gallagher Transportation Terminal, located a quarter mile south of the site. The transportation component of the project also includes a new four-way intersection and reconfiguration at the Lord Overpass, pedestrian linkages and canal walks, a new Jackson Street extension to Thorndike Street, and an extension of Broadway Street across the Merrimack Canal. The project includes new bridge construction across the Hamilton and Pawtucket Canals, rehabilitation of existing canal crossings, and a temporary bridge across the Hamilton Canal.

The project includes restoration of the majority of the Freudenberg building (an existing building addition is proposed for demolition), and retention of historic walls remaining from other structures, primarily the Appleton Manufacturing Company buildings.

## Phase I

In a Final Record of Decision (FROD) dated July 11, 2008, I granted a waiver allowing the proponent to proceed to permitting for Phase I of the project prior to completion of the EIR for the entire project. Phase I consists of adaptive reuse of the Appleton Mill complex for161 housing units and the Freudenberg Building for 50,000 sf of commercial space. A temporary bridge will be constructed across the Hamilton Canal to accommodate construction vehicles during Phase I.

## Permits and Jurisdiction

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 generation of 3,000 or more new average daily trips (adt) and Section 11.03 (6)(a)(7) due to construction of 1,000 or more new parking spaces at a single location. The project is also undergoing environmental review pursuant to: Section 11.03(1)(b) (3) because it involves conversion of land held for natural resources purposes in accordance with Article 97 of the Amendments to the Constitution of the Commonwealth to any purpose not in accordance with Article 97, Section 11.03(1)(b)(7) because it requires approval in accordance with M.G.L. c. 121B of a modification to an existing urban renewal plan; Section 11.03(3)(b)(6) because it involves reconstruction of a pile-supported structure of 2,000 or more square foot (sf) base area that occupies waterways; 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; and Section 11.03(5)(b)(3)(c) because it involves construction of one-half or more miles of new sewer mains.

The proposed project is being reviewed under the Integrated MEPA/Permitting Review pilot process. Permits and approvals required include a Vehicular Access Permit from the Massachusetts Highway Department (MassHighway); a Chapter 91 License and Sewer Connection/Extension Permit from the Massachusetts Department of Environmental Protection (MassDEP); and approval of an Urban Renewal Plan Amendment from the Department of Housing and Community Development (DHCD). The project involves disposition of property that is under the care and control of the Department of Conservation and Recreation (DCR). The disposition requires legislative approval pursuant to Article 97 of the Massachusetts Constitution and a conveyance from the Division of Capital Assets and Management (DCAM). An approval from the National Park Service is also required since land that is the subject of the disposition was acquired by the Commonwealth using federal Land and Water Conservation Funds (LWCF). The project is subject to review by the Massachusetts Historic Commission and involves state funding (transportation funding and potentially State Historic Tax Credits). The project is subject to the EEAIMEPA Greenhouse Gas Emissions Policy and Protocol.

As discussed in the DEIR, there are several ownership entities involved in the project, including the City of Lowell, the Lowell National Historic Park (LNHP), DCAM and DCR, Boot Hydropower, and the proprietors of the Locks and Canals. Implementation of the project will require conveyance of parcels of land from the City to the proponent and a conveyance or lease from the LNHP for redevelopment of existing parking lots. The City of Lowell will retain ownership of streets, bridges, and rights of way connecting the project parcels. The City will also be conveying parcels to DCAM for the proposed Trial Court.<sup>1</sup>

As noted above, the project involves state funding. Therefore, MEPA jurisdiction is broad and extends to all aspects of the project with the potential to cause Damage to the Environment as defined in the MEPA regulations.

<sup>&</sup>lt;sup>1</sup> The proposed new Lowell Trial Court is not part of the Hamilton Canal District Project but was considered in the EENF traffic analysis.

# **REVIEW OF DEIR**

#### Alternatives

The scope for the DEIR required that the proponent include an analysis of alternatives to the removal and reconstruction of two bridges associated with the Lord Overpass reconfiguration. The project as proposed in the DEIR will maintain the uses of the existing Chelmsford Street Bridge and maintain the function of the Middlesex Street Bridge. Comments received on the DEIR express widespread support for this change to the project design.

As required by the Certificate on the Expanded Environmental Notification Form (EENF), the DEIR considers additional Low Impact Development (LID) techniques. As noted in the DEIR, implementation of certain LID techniques, such as groundwater recharge, is restricted on-site due to the presence of contaminated soils and the potential for migration of contaminants. The proponent has incorporated many LID features in project design including bio-retention areas, cisterns to collect rooftop run-off for irrigation use, green roofs, and drought tolerant landscaping.

#### Article 97 Disposition

The DEIR includes a discussion of the project's compliance with EEA's Article 97 Land Disposition Policy, including a copy of the Article 97 legislation, and a proposal for mitigation. Since the filing of the EENF, the proponent has worked with state agencies to develop agreements, including a mitigation plan, for the transfer of property rights from the Commonwealth to the City of Lowell for bridge construction and reconstruction, and pedestrian crossings associated with the project. DCR has care and control of Commonwealth-owned property and associated volumetric air rights on the project site, including air rights above the canals and narrow strips of land along the edge of the canals. The current land transfer plan consists of conveyance of fee interests (and other volumetric rights) from the Commonwealth to the City. Article 97 legislation for the land conveyance was filed and approved by the legislature in August 2008 (section 25 of Chapter 312 of the Acts of 2008). As part of the authorization, section 25(e) of the statute requires the City of Lowell to ensure a no-net loss of lands protected for conservation and recreation purposes by permanently protecting land acceptable to DCR. As discussed in the DEIR and in DCR's comment letter, the City proposes to comply with statute by designating an approximately 1,400 square foot parcel at the confluence of the Hamilton, Pawtucket and Merrimack Canals as permanent parkland open to the general public. The net effect of this exchange is to designate a new public park as part of the project in exchange for DCR's air rights and narrow strips of land. As such, DCR believes that this replacement land, properly designed and developed as a public park, would constitute acceptable replacement lands to meet the requirements of the statute.

## Wetlands and Waterways

The proposed development parcels abut three canals, which are considered wetland resource areas and include Land Under Water (LUW) and Bank. According to the DEIR, there will be no alteration of LUW or Bank. However, the buffer zone extends 100 feet inland from

the edge of canal walls, which encompasses 8.5 acres of the 13.5 acre project site. The DEIR outlines a series of measures the proponent will adopt to avoid adverse impacts to wetland resources, including physical barriers to prevent debris from entering canals, erosion and sedimentation controls, and a monitoring system to measure any displacement or movement of canal walls during construction. Excavation will be done by hand directly behind canal walls when required and the proponent will conduct a structural analysis of the potential load on canal walls associated with construction equipment.

The DEIR includes a discussion and summary of wetlands impacts associated with the proposed bridge work. Permanent impacts include approximately 2,600 square feet associated with concrete piers to be constructed within the canal. The project will result in temporary impacts on canal walls and LUW associated with cofferdams at the bridge abutments. The DEIR describes proposed measures to avoid and minimize impacts, which include silt booms, permanent sheeting installed as forms of abutment footings, cofferdam configuration for dewatering, and use of siltation bags and approved filters prior to discharge of water back to the canals.

The primary issue for Chapter 91 permitting for the project is the clearance height under the bridges to ensure the project does not adversely impact navigation. As indicated in the MassDEP comment letter, bridge clearance must be maintained to provide for existing and future canal tours offered by the National Park Service. The DEIR identifies six bridges that will need Chapter 91 licenses and discusses compliance with MassDEP's standards for water-dependent uses. As noted in the DEIR, all of the proposed bridges will have the same or greater clearance above the water level as the existing bridges and there will be no adverse impacts to navigation. At the Swamps Locks Bridge, the current clearance varies with the profile of the existing structure and the navigable waterways through the locks. The proponent intends to raise the current vertical clearance over the lock chamber by 1.5 feet to better accommodate canal boat traffic.

I note DCR's comments regarding the proposed bridge work and potential stress on canal walls. The proponent should continue to work with DCR's Bridge Section and Cultural Resources Program to explore rehabilitation design options that will avoid or minimize impacts on the canal walls.

## Stormwater Management and Low Impact Development (LID')

The DEIR describes the stormwater management system and best management practices (BMPs) proposed for the project. The proponent has committed to several LID measures including incorporation of green roofs on 30 percent of all buildings, and rain gardens. Additional information on stormwater should be included in the FEIR as further detailed in the scope below.

## Historical Resources

The DEIR includes an update on the status of the historic building rehabilitation in the project area, proposed new building designs, the historic regulatory review process, and

proposed mitigation measures. The proponent has begun the application process for state and federal tax credits for the rehabilitation work. The DEIR includes a draft Memorandum of Agreement (MOA) between the Lowell National Historic Park, the City of Lowell, the Massachusetts Historic Commission (MHC), and the proponent. The MOA describes proposed measures to mitigate the project's adverse impacts on historic resources. The MHC has indicated that the adverse effects can be adequately mitigated by the proposed stipulations in the draft MOA. The Lowell Historic Board indicates in its comment letter that the proposed MOA adequately addresses its concerns and provides safeguards to avoid adverse impacts to historic resources. In addition, the Lowell National Park Service has submitted a comment letter in support of the project as proposed in the DEIR.

## Environmental Justice

Although the project is not subject to the EEA Environmental Justice Policy, as a participant in the Integrated MEPA/Permitting Review, the proponent agreed to conduct expanded outreach to Environmental Justice (EJ) communities in the project area. As noted in the DEIR, the proponent and the City of Lowell have worked together on an extensive community outreach plan, which included many public meetings and charettes to facilitate public involvement in the project planning and development process. The proponent provided translation services on an as-needed basis for public meetings and translated public notices into Spanish Portuguese, and Khmer for distribution and posting throughout the City. These documents were posted on the project website and included in the DEIR.

# **Transportation**

The DEIR includes a revised transportation study prepared in confomance with EEA/Executive Office of Transportation and Public Works (EOT) guidelines for the preparation of Traffic Impact Assessment. The DEIR proposes a series of mitigation measures including roadway improvements, traffic signal coordination, pedestrian and bicycle improvements, public transportation improvements, and Transportation Demand Management (TDM) measures.

The major roadway improvements on state highway consist of the extension of Jackson Street to create a new four-way intersection and the reconfiguration of the Lord Overpass to improve traffic flow. The proponent has conducted a more detailed review of the Thorndike Street Bridge to respond to EOT concerns regarding potential impacts to the canal of the Thorndike Street/Dutton Street/Fletcher Street/Jackson Street Extension intersection. The DEIR has responded to the concerns raised by commenters on the EENF regarding elimination of the Middlesex Bridge. This bridge will now be preserved. However, it is expected that it will require reconstruction to accommodate the proposed road widening of Thorndike Street.

The DEIR includes a capacity analysis for existing and future conditions at the Thorndike Street/Gallagher Transportation Center driveway. The analysis indicates that traffic increases associated with general area traffic growth will cause the intersection to operate at failing conditions in the future. The traffic associated with the proposed project will also exacerbate conditions. The proponent has proposed mitigation consisting of widening and re-striping of the

Thorndike Street northbound approach to provide a separate left-turn lane and two through travel lanes, which will require additional right-of-way along South Common Park.

The DEIR proposes a comprehensive pedestrian access plan consisting of sidewalks, canal walks and other pedestrian accommodations, which will enhance connections between the Hamilton Canal District and the surrounding neighborhoods, including downtown Lowell and the Gallagher Transportation Terminal. The DEIR also proposes expanding trolley service by accommodating a 14 foot wide dedicated right-of-way through the Hamilton Canal District to allow for a future trolley connection between the existing terminus on Dutton Street and the Gallagher Transportation Center. The DEIR also proposes a range of TDM measures to reduce vehicle trip generation and associated air quality impacts. Additional information on proposed transportation improvements and mitigation plans should be provided in the FEIR as indicated in the scope below.

## Air Quality

#### Greenhouse Gas (GHG) Emissions

The DEIR includes a revised GHG analysis. The GHG emissions analysis quantifies Carbon dioxide ( $CO_2$ ) emissions for (1) the Base Case corresponding to the Massachusetts Building Code, (2) the Preferred Alternative, which includes energy saving features and (3) the Mitigation Alternative, which includes additional energy saving elements consisting of high efficiency HVAC systems and cool roofs on all buildings. The analysis includes emissions associated with mobile and stationary sources and uses the Tech Environmental Energy Model to analyze and compare alternatives. The proponent has committed to the Mitigation Alternative.

Mitigation measures include on-site renewable energy generation; green roofs on 30 percent of buildings; increased roof and wall insulation; duct sealing; programmable thermostats; high-efficiency HVAC systems with an energy efficiency rating (EER) of 11.5; solar orientation and interior daylighting; third party commissioning; energy efficient windows and lighting; and water conservation measures. The proponent has also committed to recycling 50 percent of all construction debris, a materials recycling plan, and to use environmentally preferred and regionally produced building materials where possible.

The mitigation alternative reduces the project's direct and indirect stationary source energy-related emissions of  $CO_2$  by 22.6% and 25.8% respectively, compared to the base case. Emissions reductions associated with the generation of renewable energy are not included in the analysis, so total reductions will actually be larger. The project's total  $CO_2$  emissions for stationary and mobile sources are estimated at approximately 18,664 tons per year (tpy), which will be reduced to 14,213 tpy after the implementation of mitigation measures. This represents a substantial reduction in  $CO_2$  emissions (23.9 percent) compared to the base case.

The proponent has also committed to generate 5 percent of the project's energy needs from renewable sources. This is an admirable commitment that will provide a valuable contribution to reducing GHG emissions associated with the project. The DEIR indicates that electricity for the project will be generated from photo-voltaic (PV) systems, wind and possibly

hydro-electric power. As noted in the DEIR, on-site renewable energy planning is at a conceptual stage of development. The FEIR should include additional information on potential strategies for achieving this target as indicated in the Scope below.

# Indirect Emissions Associated with Transportation

The DEIR proposes a range of TDM measures as mitigation for mobile source air emissions, including GHGs, and estimates that these measures will reduce the projects motor vehicle CO<sub>2</sub> emissions by 5 percent. TDM measures proposed include an on-site vehicle trip reduction coordinator; joining a Transportation Management Association (TMA); pedestrian and bicycle accommodations; preferential carpool and vanpool parking. The proponent has also committed to work with regional transit authorities to develop a comprehensive transportation plan for the project. As described in the DEIR, the proponent will encourage tenants to adopt additional TDM measures. The FEIR should expand upon this component of the TDM plan as further detailed in the Scope below.

## Sustainable Design

The proponent has committed to achieve compliance with the Leadership in Energy and Environmental Design (LEED) for Neighborhood Development (ND) criteria of the U.S. Green Building Council. The DEIR includes the detailed LEED ND checklist indicating which points the project will achieve on the LEED ND rating scale. The project performance will be rated under four different categories: Smart Location and Linkage; Neighborhood Pattern and Design; Green Construction and Technology; and Innovation and Design Process.

I commend the proponent for its commitment to achieve LEED ND Gold rating for the project. All new buildings within the development will be designed to meet LEED New Construction or Existing Building guidelines, and will be certifiable under these systems. The proponent intends to certify 30 percent of the overall square footage of the development. Other green building features include improvements in building energy performance (Desrcribed above) and a 20 percent reduction in water use. As also noted above, green roofs are proposed for 30 percent of the building roof area.

## Wastewater

The DEIR includes a concept sewer master plan and a draft Sewer Extension Permit application. The FEIR should include additional information and analysis as further detailed in the Scope below.

## Waste Site Clean-up

The DEIR includes an update on the status of Massachusetts Contingency Plan (MCP) response actions at the project site. The proponent expects to complete MCP response actions to address soil contamination and potential ongoing sources of groundwater or surface water contamination within the property boundaries of 307 Jackson Street. According to the DEIR, the proponent does not anticipate evaluating surface water or sediment quality in the canals which

may have resulted from historical discharges. I refer the proponent to MassDEP's comment letter regarding MCP issues and encourage the proponent to consult with MassDEP to resolve any outstanding issues prior to submittal of the FEIR. Additional information on site assessment and related indoor air quality issues should be included in the FEIR as outlined in the Scope below.

As further detailed in the MassDEP comment letter, two Special Permit Designation (SPD) permits have been granted by MassDEP for disposal sites in the project area. The SPDs extend the deadline for Tier Classification to January 2010, thereby establishing a schedule consistent with the project development. However, two other sites; Release Tracking Number (RTN) 3-25687 (221 Jackson Street) and RTN 3-26095 (307 Jackson Street) have earlier report due dates. The DEIR indicates that the City of Lowell will be completing MCP response actions for 221 Jackson Street. The proponent should consult with MassDEP to discuss the response action requirements, timelines and responsible parties, and to identify any potential conflicts with project development schedules.

#### Construction and Demolition

The proponent has committed to development and implementation of a Construction Management Plan (CMP). As described in the DEIR, a CMP will be prepared and submitted to the Lowell Public Works Department for review prior to the start of construction. The CMP will include detailed information on demolition, removal, construction activities and mitigation measures, construction materials, access and staging areas, traffic routing plans, and noise and dust controls.

#### SCOPE

#### General

The proposed project is being reviewed under the Integrated MEPA/Permitting Review Process. As part of this integrated review process, an Inter-Agency meeting was held during the DEIR review period, which included representatives of state agencies, the City of Lowell and the regional planning agency (Northern Middlesex Council of Governments).

Several agencies have submitted comment letters on the DEIR, including recommendations for additional information and clarification to be presented in the FEIR. The FEIR should include revised permit applications and draft Section 61 Findings as appropriate to respond to the scope and the agency comments received.

The proponent should prepare a FEIR in accordance with the general guidance for outline and content found in Section 11.07 of the MEPA regulations as modified by this Scope. The FEIR should includes maps and plans at a reasonable scale, a project summary and schedule, a list of permits required and a description of any changes since the filing of the DEIR. In addition, the FEIR should include project design drawings at as advanced a stage as is possible in accordance with the Integrated MEPA/Permitting Review Policy.

# Article 97 Land Disposition

The FEIR should include an update on the status of the Article 97 land disposition agreement with DCR and the associated DCAM conveyance and National Park Service approval required for Phase I and the full project build-out.

The property identified for disposition to the City of Lowell was originally acquired using federal Land and Water Conservation Funds (LWCF). The proponent should consult with EEA's Division of Conservation Services (DCS), the state agency that administers the LWCF program, regarding fulfillment of LWCF requirements for approval of the land transfer.

## Greenhouse Gas Emissions

The proponent should use the current building code for the base (code compliant) case. The current building code is the October 18,2008 7<sup>th</sup> edition, which adopts and integrates either the current version of the International Energy Conservation Code (IECC) or ASHRAE 90.1. The proponent has indicated that the 7<sup>th</sup> edition was used for the GHG analysis provided in the DEIR.

MassDEP/Division of Energy Resources (DOER) comments request additional detail on the proposed building heating and cooling systems. I understand that the project is at the master plan stage of development with conceptual plans for building design and that some of the details requested by MassDEP may not be available at this time. However, the FEIR should clearly identify inputs and assumptions used for the energy modeling, including assumptions regarding the type and quantify of mechanical equipment. The FEIR should respond to other MassDEP/DOER comments relating to GHG emissions including those related to lighting upgrades and monitoring of energy performance.

As noted previously, I commend the proponent for its commitment to incorporate renewable energy into this project. The FEIR should identify strategies for achieving the project's stated goal for development of on-site renewable energy (five percent of total energy use on an annual basis). The FEIR should consider use of solar hot water to meet this target, as recommended by MassDEP/DOER. In addition, the emissions reductions associated with the on-site renewables should be incorporated into the GHG analysis and the associated percentage reductions recalculated.

Water conservation measures adopted by the proponent will contribute to the overall reduction of GHG emissions associated with the project. As recommended by MassDEP/DOER, the proponent should consider improvements to the water distribution system and inflow/infiltration (I/I) removal as part of the overall GHG mitigation plan.

The expected GHG emission reductions for mobile sources are based in part on the transit-oriented nature of the project and transportation demand management (TDM) measures that may be implemented by future tenants. The FEIR should consider additional measures to reduce trip generation and related GHG emissions, and to enhance TDM implementation, as recommended by MassDEP/DOER and EOT, and as outlined in the transportation section below.

# **Transportation**

The FEIR should include draft Section 61 Findings with revisions as appropriate to identify responsible parties for Middlesex Bridge and other transportation improvements. The proponent should consult with EOT's Office of Transportation Planning to determine eligibility of the Middlesex Bridge reconstruction for inclusion in the Transportation Improvement Plan. The FEIR should indicate the parties responsible for improvements at the Thorndike Street northbound approach to the Gallagher Transportation Center Driveway and additional right-of-way takings that will be required along the South Common Park.

The FEIR should include additional details on the proposed pedestrian access plan including timing of implementation and the parties responsible for implementing proposed improvements. The FEIR should discuss the outcome of proponent consultations with the Massachusetts Bay Transit Authority, the Lowell Regional Transit Authority and the Merrimack Valley Transit Authority, as recommended by EOT, regarding potential on-site amenities to facilitate bus access to and from the site. The FEIR should include more detailed information on the interaction of the public transportation system to include the number of bus routes expected to serve the site, the frequency of service, the passenger load, and provisions for amenities such as bus shelters.

The FEIR should describe commitments the proponent will make to increase the likelihood that trip reductions projected as a result of TDM measures implemented by tenants will actually be achieved. The FEIR should discuss how lease agreements could be structured or other specific means developed to ensure implementation of proposed TDM measures. I encourage the proponent to commit to funding of a transit pass program, which would be available to tenants, as a component of the mitigation plan, and to consider zipcars and zipbike programs as suggested by MassDEP.

The proponent has indicated a willingness to join a Transportation Management Association (TMA). However, since there is no TMA established as yet in the project area, I encourage the proponent to initiate discussions with major employers in the area regarding the possible formation of a TMA.

The FEIR should include revised draft Section 61 Findings for MassHighway including a more detailed letter of commitment that identifies all the proposed mitigation measures as well as the parties responsible for implementing these improvements as recommended by EOT in its comment letter. The revised Section 61 Findings should indicate that the proponent will provide a certification to the MEPA Office signed by an appropriate consultant (e.g. engineer, architect, general contractor) indicating that all of the above referenced GHG mitigation measures have been incorporated into the project. The certification should be supported by as-built plans. For those measures that are operational in nature (i.e. TDM, recycling), the proponent's certification should provide an updated plan identifying the measures, the schedule for implementation and how progress towards achieving measures will be obtained. MassHighway should incorporate this self-certification requirement into its Section 61 Findings for the project.

Finally, I encourage the proponent to consult with the EOT Public/Private Development Unit and the MassHighway District 4 Office during the preparation of the FEIR to ensure that all outstanding issues are addressed prior to submission of the FEIR.

#### **Stormwater**

The FEIR should address the stormwater issues raised by MassDEP including the efficiency of the proposed Stormceptor 450i units 'for drainage, the use of brick pavers, and the Operations and Maintenance Plan. The FEIR should include more detail on the proposed Stormwater Pollution Prevention Plan (SWPPP) to address site specific issues relating to pollution prevention and good housekeeping practices on the proposed brownfields site that may affect stormwater quality.

#### Historic Resources

The FEIR should include a final Memorandum of Agreement (MOA) between the Lowell National Historic Park, the City of Lowell, the Massachusetts Historic Commission (MHC), and the proponent. If the MOA has not been finalized, the FEIR should include the most up to date version and identify any changes since the filing of the DEIR.

#### Wastewater

The FEIR should include a detailed summary of the phasing of the project, and an estimate of the associated wastewater flows for each phase. The FEIR should include back-up documentation for flow estimates, which should be based on the design flow estimates included in 314 CMR 7.15. The FEIR should consider additional opportunities for water conservation as recommended by MassDEP in its comment letter.

The FEIR should include a revised draft Sewer Extension Permit application to include additional information as required by MassDEP and as noted in its comment letter. The FEIR and permit application should identify the owners of the pump stations and identify the locations of the proposed stations. If the pump stations are privately owned, the application should include documentation that establishes provisions for proper operation, maintenance and repair of the pump stations. If the proponent intends to use any of the existing onsite wastewater infrastructure as part of the redevelopment project, the FEIR should include a written description of the condition of the infrastructure.

As noted in the MassDEP comment letter, the Lowell Regional Wastewater Utility (LRWU) is presently under an administrative order from the U.S. Environmental Protection Agency (EPA) to proceed with actions to address combined sewer overflows and related water quality problems in the Merrimack River. The proponent should work with LRWU staff to confirm that capacity exists to convey and treat flows from the project and to establish appropriate mitigation actions to ensure that combined sewer overflows (CSO) will not be exacerbated by the project. The FEIR should include an update on consultations with LRWU and MassDEP on wastewater permitting issues and describe the proponent's commitments to

measures to eliminate sources of infiltration and inflow (I/I) from the project site, and to address any failing infrastructure.

#### Massachusetts Contingency Plan (MCP)

As noted in the MassDEP comment letter, there has been a report of a release of chlorinated volatile organic compounds (VOCs) at each of the seven disposal sites listed in the project area. The FEIR should provide additional information to address MassDEP comments regarding evaluation of the migration pathways for VOCs and potential indoor air quality impacts.

The proposed dewatering activities may require on-site treatment of groundwater and permits for discharge of treated groundwater. The FEIR should include additional information to address the potential for lateral migration of contaminated groundwater. The FEIR should describe proposed assessments of vapor intrusion pathways through groundwater, soil, gas and/or indoor air sampling, any off-site assessments that may be required, and data reporting to MassDEP. The FEIR should describe proposed contaminant assessments and response actions in the context of the MCP process and the project's consistency with MassDEP requirements.

#### Mitigation, Permit Applications and Section 61 Findings

As required by the Integrated MEPA/Permitting Review Policy, the FEIR should include draft permit applications and Section 61 Findings for all required state agency actions. The FEIR should include an updated list of mitigation measures that the proponent is committing to with a schedule for implementation and identification of responsible parties. The draft Section 61 Findings contained in the DEIR should be revised as appropriate to include mitigation required for state agency permitting.

The FEIR should specifically include revised draft Section 61 Findings that clarify responsibilities for proposed infrastructure improvements and reflect the Land Disposition Agreement (LDA) between the proponent and the City of Lowell. As noted above, the revised Section 61 Findings for MassHighway should include a requirement for self-certification of GHG mitigation measures.

Final Section 61 Findings will be included with all state permits issued for this project and will be considered binding upon the proponent as mitigation commitments. In accordance with Section 11.12(5)(c) of the MEPA regulations, final Section 61 Findings must be forwarded by each state permitting agency to the MEPA Office. The MEPA Office will publish a Notice of Availability in the Environmental Monitor.

## Response to Comments

In order to ensure that the issues raised by commenters are addressed, the FEIR should include a response to comments 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. The FEIR should include a copy of this Certificate and a copy of each comment letter received on the DEIR.

## **Circulation**

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

vies. Secretary lan A.

February 13,2009

Comments Received

- 1/22/09 Joseph P. Smith
- 1/27/09 Massachusetts Historical Commission
- 2/04/09 National Park Service
- 2/06/09 Lowell Historic Board
- 2/06/09 Department of Environmental Protection, Northeast Regional Office
- 2/06/09 Department of Conservation and Recreation
- 2/06/09 James T. Lichoulas, Jr.
- 2/03/09 City of Lowell, Office of the City Manager
- 2/03/09 Northern Middlesex Council of Governments
- 2/10/09 Executive Office of Transportation, Public/Private Development Unit
- 2/11/09 Jamie Fay, Fort Point Associates (response to comments, on behalf of proponent)

IAB/AE/ae