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September 12, 2008

CERTIFICATE OF THE SECRETARY OF ENERGY & ENVIRONMENTAL AFFAIRS  
ON THE  
DRAFT ENVIRONMENTAL IMPACT REPORT

PROJECT NAME: BJ's of Quincy  
PROJECT MUNICIPALITY: Quincy  
PROJECT WATERSHED: Boston Harbor  
EEA NUMBER: 14233  
PROJECT PROPONENT: QBJ Land Development, LLC  
DATE NOTICED IN MONITOR: August 6, 2008

As Secretary of Environmental Affairs, I determine that the Draft Environmental Impact Report (DEIR) submitted on the above project adequately and properly complies with the Massachusetts Environmental Policy Act (MGL, c. 30, ss. 61-62I) and with its implementing regulations (301 CMR 11.00). However, for the Final Environmental Impact Report (FEIR) to be found adequate, I am requiring the Proponent to provide additional information in the FEIR pertaining to the mitigation measures proposed to reduce the Project's direct and indirect energy-related greenhouse gas (GHG) emissions. The FEIR should also include a detailed discussion of the project's stormwater management plan and its consistency with MassDEP's Stormwater Management Regulations. This information is necessary to ensure that the requirements of 301 CMR 11.07 are met, that the environmental impacts and issues of the entire project have been clearly described, that a range of project alternatives have been fully analyzed, that the proponent has committed to a set of mitigation measures that will allow the state agencies to satisfy their Section 61 obligations, and that there will be meaningful opportunities for public review prior to any Agency action.

### Project Description

As described in the Draft Environmental Impact Report (DEIR), the project involves the redevelopment of a 7.5-acre parcel of industrially-zoned property bounded by Crown Colony Drive to the north, Centre Street to the east, the Burgin Parkway and Route 3 off-ramp to the south, and the Crown Colony Office Park to the west. As currently designed, the project involves the demolition of the existing two-story 42,230-square foot (sf) Patriot Ledger Building and construction of an 84,360-sf BJ's Wholesale Club store, 360 surface parking spaces, and new stormwater management infrastructure. Subsequent to the issuance of the Secretary's Certificate on the EENF, the Proponent revised the development program to eliminate the construction of a separate gasoline service station (eight vehicle fueling positions). The Proponent now proposes to add an additional 37 surface parking spaces (397 spaces total) where the gasoline service station was to be located. The project site is located off Crown Colony Drive and Centre Street and near the MBTA Quincy Adams Red Line station in Quincy. The project will require 5,207 gpd of potable water supply and will generate approximately 7,720 gpd of wastewater flow. Both water and wastewater needs will be met through existing municipal systems, administered by the City of Quincy.

### Jurisdiction

The project is undergoing environmental review and requires the preparation of an Environmental Impact Report pursuant to Section 11.03(6)(a)(6) of the MEPA regulations because it requires state permits and because it will generate more than 3,000 new average daily trips on roadways providing access to a single location. The project requires a National Pollutant Discharge Elimination System (NPDES) General Construction Permit from the U.S. Environmental Protection Agency (EPA); an Indirect Highway Access Permit from the Massachusetts Highway Department (MassHighway); and an Order of Conditions (OOC) from the Quincy Conservation Commission. The project is subject to the EEA Greenhouse Gas (GHG) Emissions Policy and Protocol. Because the Proponent is not seeking financial assistance from the Commonwealth for the project, MEPA jurisdiction is limited to those aspects of the project that may cause significant Damage to the Environment and that are within the subject matter of required or potentially required state permits. In this case, jurisdiction extends to transportation, wetlands and stormwater.

### Wetlands

As currently designed, the project will not directly impact wetland resources, but will result in alterations to Bordering Land Subject to Flooding (BLSF) (Flood Zone AE) and Riverfront Area (RA) associated with Town Brook. Town Brook is a perennial stream that flows north through a concrete culvert system along the eastern boundary of the site. As noted in the DEIR, significant portions of Town Brook's streambed and hydrology within the project area have been improved by the Army Corps of Engineers (USACE) and the Massachusetts Department of Conservation and Recreation (DCR) under the Town Brook Flood Control Project. Town Brook supports migration and spawning habitat for coldwater fisheries including Rainbow Smelt (*Osmerus mordax*) and American eel (*Anguilla rostrata*).

### Stormwater Management

According to the Proponent, the project's stormwater management plan has been designed to meet MassDEP's Stormwater Management Regulations standards and practices as they apply to redevelopment projects, and the City of Quincy's Stormwater Program. The stormwater management plan includes the use of Best Management Practices (BMPs), deep-sump hooded catch basins, a Vortech water quality unit and a subsurface detention basin with Stormtech chambers to reduce total suspended solids (TSS) and provide for the on-site infiltration of nearly all of the project's on-site impervious surface area stormwater and roof runoff. A long term Operation and Maintenance Plan (O&M Plan) will be implemented to ensure that BMPs are maintained to function as designed.

The O&M must incorporate MassDEP's Snow Disposal Guidelines (<http://mass.gov/dep/water/laws/policies.htm>) and require that no snow will be placed in or adjacent to wetland resource areas, and commit to using a minimal amount of deicing and abrasive agents. The Proponent has also committed to implementing a Stormwater Pollution Prevention Plan (SWPPP) that will exceed the minimum requirements established for SWPPPs in accordance with EPA's NPDES General Permit. The SWPPP must include a Sedimentation and Erosion Control Plan that outlines measures that will be implemented to minimize and mitigate construction period impacts.

According to MassDEP, the proposed project will result in a net increase of impervious surface area and does not appear to meet the definition of a redevelopment project as defined in MassDEP's Stormwater Management Regulations. The FEIR must demonstrate the proposed stormwater management plan's consistency with MassDEP's Stormwater Management performance standards for new construction projects particularly as they may pertain to the removal of total suspended solids (TSS), or provide additional information to demonstrate how the project meets the criteria and stormwater management performance standards for redevelopment projects. I strongly encourage the Proponent to consult with MassDEP during the preparation of this section of the FEIR.

The DEIR includes a detailed discussion of changes in flood elevations within and adjacent to the project site resulting from the Town Brook Flood Control Project. Although the Town Brook Flood Control Project has resulted in limiting the actual 100-year flood elevation associated with Town Brook to a small area of the project site, the Proponent has committed to re-grading the project site to provide approximately 44,000 cubic feet (cf) of additional on-site flood storage capacity based on the 2006 Federal Emergency Management Act's (FEMA's) Flood Insurance Rate Map (FIRM).

### Traffic

The Proponent has prepared a Traffic Impact and Access Study (TIAS) in accordance with Executive Office of Energy & Environmental Affairs (EEA)/Executive Office of Transportation and Construction (EOTC) guidelines.

Using the Institute of Transportation Engineers (ITE) Trip Generation manual's land use codes 861 (Discount Club), the Proponent estimates a total of 4,552 vehicle trips per day (vtd) associated with the proposed project. The main access to the site will be provided via a new four-lane site drive located at the existing Patriot Ledger site drive/Crown Colony Drive intersection. A second site drive will be located approximately 100 feet west of the main site drive to accommodate delivery trucks.

The Proponent has committed to a transportation mitigation program in the DEIR to address potential project-related traffic impacts and to help address existing operational and safety deficiencies. The following mitigation measures for the reconstruction of the Crown Colony Drive/Main Site Drive intersection are proposed:

- Construction of an extension to the existing westbound approach left-turn lane to project site;
- Construction of pedestrian crosswalks with modified signals across Congress Street and Crown Colony Drive at the Crown Colony Drive/Congress Street intersection and sidewalk along the southwestern portion of the site frontage on Crown Colony Drive;
- Construction of a new 4-lane site drive with 15 feet wide left-turn and right-turn exit lanes, and two 15 feet wide entrance lanes; and,
- Construction of a new service site drive located approximately 100 feet west of the main site drive to serve as a right-turn only truck egress driveway.

MassHighway's Route 3 fly-over ramp construction project is currently underway and is located adjacent to the project site's Burgin Parkway boundary. The Route 3 fly-over ramp project begins at the Burgin Parkway/Route 3/Centre Street intersection and spans southward to connect to the Route 3 and I-93 ramps, and will result in a significant amount of additional non-project generated vehicle traffic being re-routed away from the Bergin Parkway and Centre Street intersection. In its comments, MassHighway has indicated that any new road work, such as that proposed by the Proponent, may be restricted following the completion of MassHighway's Route 3 fly-over ramp project. The Proponent is strongly encouraged to coordinate the construction of its off-site roadway improvements with the MassHighway Route 3 project.

#### Transportation Demand Management (TDM)

The DEIR includes a description of the Proponent's Transportation Demand Management (TDM) plan proposed for the project. All project tenants and businesses should be required to participate in the proposed TDM plan. The Transportation Demand Management (TDM) plan includes:

- appointing an on-site Employee Transportation Coordinator (ETC);
- encouraging employees to use commuter assistance programs available through MassRides;
- investigating the use of on-site banking and employee direct deposit banking;
- installing secure on-site bicycle storage racks;
- posting MBTA schedules in a centralized location; and,
- scheduling non-standard hours employee work shifts.

As I have recently requested in my review of the Lowe's of Quincy project (EEA #14222, May 2008) also located in close proximity to this project site, the Proponent for this BJ's Wholesale Club project must evaluate all feasible TDM measures for store employees and patrons to reduce peak employee traffic demand and to encourage the use of alternative transportation modes by retail customers.

According to the comments received from MassHighway and others, an MBTA transit pass reimbursement program for BJ's employees would take advantage of the project site's close proximity to the MBTA Quincy Adams Commuter Rail Station and reduce the project's overall traffic impacts and GHG emissions. The FEIR must include an evaluation of providing reduced rate transit passes for employees to further reduce vehicle trips to and from the project. The final TDM plan should describe any monitoring necessary to ensure the success of the program. The FEIR must demonstrate the Proponent's commitment to implement, monitor, and continuously fund the proposed TDM plan. The Proponent should consult with the City of Quincy, MBTA, MassHighway and WalkBoston before filing the FEIR to discuss coordination of this project with any existing or proposed transit services to promote transit use by employees and patrons. The Proponent's TDM plan should be incorporated as part of the Proponent's transportation mitigation program.

#### Transit

The FEIR should demonstrate the support of the MBTA for any existing and proposed transit amenities in the project area. The Proponent should consult further with MBTA, the City of Quincy, MassHighway and others to identify opportunities for accommodating existing MBTA bus service and/or Shuttle service at the project site.

#### Pedestrian and Bicycle Facilities

I strongly encourage the Proponent to consult with WalkBoston, and to continue to work closely with the City of Quincy and MassHighway to evaluate the feasibility of constructing pedestrian and bicycle amenities that would enhance safe bicycle and pedestrian connections between the project site and the Quincy Adams MBTA station.

#### Parking

The DEIR proposes an increase in on-site surface parking from 360 spaces to 397 spaces. According to the comments received from the Quincy PCD, the proposed parking plan exceeds the City of Quincy's local zoning ordinance for required parking (170 parking spaces). The FEIR must demonstrate that the parking supply is the minimum necessary to accommodate project demand without encouraging additional single occupant vehicle trips. Implementation of TDM measures and provision of good bicycle and pedestrian access to and from the project site can further reduce the amount of parking required.

#### Greenhouse Gas Policy

The DEIR includes the results of the Greenhouse Gas (GHG) emissions analysis based on the Proponent's assumptions regarding the type of project-related traffic and proposed building/energy consumption sources.

The Proponent evaluated the change in carbon dioxide (CO<sub>2</sub>) emissions from project-related traffic and proposed building/energy consumption sources for the Base Case scenario (compliance with MA Building Code), the Preferred Efficiency Alternative and the Full Efficiency Alternative. The total CO<sub>2</sub> emissions for the Base Case scenario is estimated to be approximately 955 tons per year (tpy). For the Preferred Efficiency Alternative, the Proponent estimates that total CO<sub>2</sub> emissions would be reduced by 61.4 tpy (894 tpy total), a 6.4 percent reduction. Under the Full Efficiency Alternative, total CO<sub>2</sub> emissions are estimated to be reduced by 109 tpy, (845.7 tpy total), a 11.5 percent reduction.

As described in the DEIR, the Proponent is considering a number of mitigation measures under the Preferred Efficiency Alternative to reduce the Project's direct and indirect energy-related CO<sub>2</sub> emissions including:

- Increase Insulation;
- Duct Sealing;
- Energy Management Systems/Programmable Thermostats;
- High –Efficiency HVAC Systems;
- Use of Energy Efficient Exterior Lighting;
- Use of Skylights to Maximize Interior Day-Lighting;
- Use of Environmentally Friendly Building Materials;
- Use of a Recyclables Collection Program;
- Use of water conservation fixtures;
- Use of an Operations Waste Management Program; and,
- Use of Energy Star Rated Appliances.

In order to achieve the gains proposed and meet the intent of EEA's GHG Emissions Policy, the Proponent should commit to incorporating these and other mitigation commitments into the design, construction and operation of the project particularly. The FEIR must clearly identify the mitigation measures the Proponent has committed to incorporate into the project. When comparing the Preferred Efficiency Measure Alternative to the Full Mitigation Efficiency Measure Alternative, the Proponent must explain which alternatives were rejected, and the reasons for rejecting them. It will benefit the Proponent to use functional and quantitative analyses to assess feasible greenhouse gas reduction measures for this warehouse retail project, starting with measures that offer the greatest energy reductions, and then considering opportunities to improve ongoing operations. For those elements not selected, the FEIR must do a credible job in explaining why a particular efficiency or green power generation component is impracticable.

MassDEP has reviewed the DEIR and has identified several additional mitigation measures to be considered in the FEIR filing, and adoption into the project, where feasible, as detailed below. The following are among the suitable energy efficient measures for this project that should be considered fully and incorporated into the project to the greatest extent feasible.

High-Efficiency HVAC Systems – The Proponent is considering incorporating a heating, ventilation and air conditioning (HVAC) system with an Energy Efficiency Rating (EER) of at least 9.5.

In their comments, MassDEP notes that several similar projects have committed to install HVAC systems with an EER of 11.5, and recommends that the Proponent commit to the installation of a HVAC system with an EER of 11.0. The Proponent should contact the New Construction division of its electricity utility in Quincy, NStar, and its natural gas utility, National Grid, to take advantage of potential rebates available for the installation of highly energy efficient equipment.

Third Party Building Commissioning – The Green Communities Act requires all new non-residential buildings larger than 10,000 sf or any major construction, alteration or repair of such buildings undergo building commissioning or acceptance testing. Building commissioning must be completed prior to the issuance of a Certificate of Occupancy. It is also expected that building commissioning will be required by the MA Building Code when Massachusetts adopts the International Energy Conservation Code in the Fall of 2008. Commissioning should be conducted by a third party to ensure that the commissioning process is thorough and the energy performance of the building is maximized.

High Albedo Roofing Materials – MassDEP notes in its comments that high albedo roofing materials can reduce HVAC loads and is being used effectively on the BJ's Wholesale Club building in Revere (EEA #13717) to minimize the heat island impact. The FEIR should explain why the use of high albedo roofing materials for the BJ's Wholesale Club building in Quincy is impractical, technically infeasible or cost ineffective.

Solar Photovoltaic (PV) – According to MassDEP, BJ's has installed solar panels on retail buildings in the northeast and in Massachusetts. The Proponent should explain why the use of a PV system for the proposed BJ's Wholesale Club building in Quincy is not cost ineffective. The FEIR should include a basic life-cycle cost analysis illustrating the expected payback for a rooftop PV system that takes into account the support of subsidies through the Commonwealth Solar and Massachusetts Renewable Portfolio Standard (RPS) programs and future incentives provided under the Green Communities Act. The analysis should include an evaluation of the installation of a PV system during project construction under two scenarios: 1) construction, ownership and operation of a PV system by BJ's; or 2) construction, ownership, and operation of a PV system by a third party that will then enter into a long-term power purchase agreement with BJ's for the electricity produced by the system.

As discussed elsewhere in this Certificate, if the Proponent is not able to adopt one of these measures, the FEIR must provide technical and cost analyses to document the rationale for not making a commitment to a mitigation recommendation.

### Construction Period Impacts

The proposed project includes demolition of an existing 42,230 sf building. The Proponent's demolition and construction activities must comply with both Solid Waste and Air Quality control regulations.

I continue to strongly encourage the Proponent to participate in MassDEP's Clean Air Construction Initiative (CACI) and the MassDEP Diesel Retrofit Program to mitigate the construction-period impacts of diesel emissions to the maximum extent feasible. The CACI program helps Proponents identify appropriate mitigation for minimizing air pollution from construction vehicles such as retrofit of construction equipment with particulate filters and oxidation catalysts and/or use of on-road low sulfur diesel (LSD) fuel. The Proponent should consult with MassDEP during the preparation of the FEIR to develop appropriate construction-period diesel emission mitigation, which could include the installation of after-engine emission controls such as diesel oxidation catalysts (DOCs) or diesel particulate filters (DPFs). For more information on these technologies, see: <http://www.epa.gov/otaq/retrofit/verif-list.htm>.

### Mitigation

The FEIR should include a separate chapter on mitigation measures. This chapter should include a Draft Section 61 Finding (in the form of an updated letter of commitment for all state permits that includes 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.

### Response to Comments

The FEIR should include responses to comments to the extent that they are within MEPA jurisdiction for this project. This directive is not intended to, and shall not be construed to enlarge the scope of the FEIR beyond what has been expressly identified in the initial scoping certificate or this certificate.

### Circulation

The FEIR must be circulated in compliance with Section 11.16 of the MEPA regulations and copies should be sent to commenters as listed below, to any state agencies from which the Proponent will be seeking state permits and approvals, and to and to City of Quincy officials. A copy of the FEIR should be made available for review at the Quincy Public Library.

September 12, 2008

Date



Ian A. Bowles, Secretary



Comments received:

- 09/02/2008 City of Quincy, Department of Traffic and Parking
- 09/04/2008 Executive Office of Transportation - Massachusetts Highway Department (MassHighway)
- 09/05/2008 Department of Environmental Protection (MassDEP), NERO
- 09/05/2008 City of Quincy, Department of Planning and Community Development (PCD)

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EEA #14233 DEIR