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November 14, 2008

CERTIFICATE OF THE SECRETARY OF ENERGY & ENVIRONMENTAL AFFAIRS  
ON THE  
FINAL 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 Energy and Environmental Affairs, I hereby determine that the Final Environmental Impact Report (FEIR) submitted on this project **does not adequately and properly** comply with the Massachusetts Environmental Policy Act (M.G.L. c. 30, ss. 61-62I) and with its implementing regulations (301 CMR 11.00), and requires the preparation of a Supplemental Final Environmental Impact Report (SFEIR).

The FEIR has adequately evaluated project impacts related to traffic, wetlands and stormwater, and identified sufficient mitigation for those impacts. The FEIR has not however adequately evaluated and identified mitigation for project-related greenhouse gas (GHG) emissions. While I recognize the commitment the Proponent has already made to GHG emissions reductions reflected in the FEIR, the report's discussion GHG impacts and mitigation does not meet the requirements of the EEA Greenhouse Gas (GHG) Emissions Policy and Protocol. The Certificate on the Draft EIR (September 12, 2008) required the Proponent to provide a detailed evaluation of additional transportation demand management (TDM) measures beyond those presented in the Draft EIR and to provide a technical and cost analysis for several additional building-related GHG mitigation measures. The FEIR did not include some of the requisite technical analysis and data and I am therefore requiring the preparation of a limited-scope Supplemental FEIR (SFEIR), which will provide an opportunity to resolve outstanding

details regarding TDM measures, parking and other GHG mitigation measures prior to allowing the project to proceed to state permitting. The limited scope for the SFEIR is outlined below.

I note that the Climate Protection and Green Economy Act, M.G.L. c. 21N, recently became effective on November 5, 2008. The Act mandates economy-wide reduction targets for GHG emissions in Massachusetts of between 10 and 25 percent across all sectors of the economy by the year 2020. It is therefore possible that additional GHG emission reduction measures could be required for the proposed project under the new law as early as January, 2011. The Act also expressly contemplates early action credit for adoption of voluntary reduction measures prior to 2011. I strongly encourage the Proponent to give serious consideration to adoption of the additional GHG mitigation measures that will need to be presented in the SFEIR and to consider the potential advantages of early GHG reduction under the new law.

### 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 includes the demolition of the existing two-story 42,230-square foot (sf) Patriot Ledger Newspaper Building and construction of an 84,360-sf BJ's Wholesale Club store, 397 surface parking spaces, and new stormwater management infrastructure. Subsequent to the issuance of the Certificate on the DEIR, the Proponent revised the development program to reduce the total number of surface parking spaces from 397 spaces to 387 spaces. 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. As noted above, 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 are within the subject matter of required or potentially required state permits and that may cause Damage to the

Environment as defined in the MEPA regulations. In this case, jurisdiction extends to transportation, wetlands, stormwater and GHG emissions.

### Review of the Non-GHG Sections of the FEIR

#### 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 FEIR, 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*). According to the comments received from MassDEP, the project design provides for adequate compensatory flood storage in compliance with MassDEP's wetlands regulations and the performance standards for BLSF.

#### 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 VortSentry 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 Plan 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.

In its comments, MassDEP has expressed concern with the proposed stormwater management plan and its ability to meet MassDEP's Stormwater Management Regulations pertaining to the removal of total suspended solids (TSS). According to MassDEP, the VortSentry water quality unit has not been evaluated to demonstrate that its performance (TSS

removal rate) would achieve an acceptable TSS removal rate for a land use with a higher potential pollutant load. In addition, MassDEP notes concerns about the lack of signage on catch basins to minimize illegal dumping that could impact water quality. I anticipate that MassDEP's comments and concerns regarding the Proponent's proposed stormwater management plan can be addressed during permitting in consultation with the agency.

The FEIR 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 FEIR 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 a 50 foot extension to the existing Crown Colony westbound approach left-turn lane to project site;
- Construction of a pedestrian crosswalk 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 fronting 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;
- 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; and,
- Installation of traffic signal hard wire interconnect on Crown Colony Drive between Centre Street and Crown Colony Drive.

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.

#### 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. The Proponent has agreed to encourage the project contractor to participate in MassDEP's Clean Air Construction Initiative (CACI) and the MassDEP Diesel Retrofit Program and use low sulfur diesel (LSD) fuel. The Proponent should consult with MassDEP during the preparation of the SFEIR 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>.

### **SCOPE**

The SFEIR should contain a copy of this Certificate and a copy of each comment letter received on the FEIR. Due to the limited scope for the Supplemental FEIR, the Proponent should address only those comments that are relevant to the Proponent's TDM plan, parking and the GHG Policy. Remaining comments submitted on the FEIR can be addressed during permitting.

#### Greenhouse Gas Policy

The FEIR includes a revised GHG analysis to address issues raised in the Certificate on the DEIR and to provide analysis of additional mitigation measures consistent with the EEA Greenhouse Gas Emissions Policy and Protocol.

The FEIR provides a quantitative analysis of total project emissions and potential mitigation that will allow the proponent and reviewers to assess the overall impact of the project as proposed, and the reduction in emissions if various measures are implemented. As required, the FEIR includes analysis of a Mitigation Alternative that includes greater GHG emissions-related mitigation than the Preferred Alternative. The Mitigation Alternative has been modified since the filing of the DEIR to further reduce GHG emissions through adoption of the following measures: increasing the efficiency of the HVAC system (from an EER of 10.7 to 11.0), use of a high-albedo roof and building commissioning. The FEIR indicates that the Proponent has committed to implement the Mitigation Alternative to further decrease the project's GHG emissions. As presented in the FEIR, total CO<sub>2</sub> emissions in the 2012 Base Case is estimated to be approximately 965.1 tons per year (tpy). The Preferred Alternative would lower total CO<sub>2</sub>

emissions by 82.7 tpy (882.4 tpy total). The Mitigation Alternative would lower total CO<sub>2</sub> emissions by 121.1 tpy, (844 tpy total), a 12.5 percent reduction.

### Building-Related Mitigation Measures

The Proponent's Mitigation Alternative is comprised of a number of mitigation measures to reduce the Project's direct and indirect energy-related CO<sub>2</sub> emissions including:

- Increase roof/ceiling insulation from R-24 to R-30;
- Duct Sealing;
- Energy Management System to Control Heating, Cooling and Lighting;
- High –Efficiency (EER – 11.0) HVAC System;
- Use of Energy Efficient Exterior Lighting with Automatic Controls;
- Use of Energy Efficient T-5 Interior Lighting for 95% of Lighting and T-8 Interior Lighting for 5%;
- Use of Skylights (2% of roof area) to Maximize Interior Day-Lighting;
- Use of a highly-reflective (high-albedo) Cool Roof Design;
- Use of a Recyclables Storage and Collection Program;
- Use of Energy Star Rated Appliances for Bakery Equipment; and
- Comprehensive Building Commissioning.

I commend the Proponent for its commitment to above-listed mitigation measures related to energy efficiency and its commitment to reduce overall project-related emissions by 12.5 percent. However, the Certificate on the DEIR specifically required the Proponent to provide data and analysis related to several additional GHG mitigation and TDM measures that could serve to further reduce project-related emissions. The Proponent should resolve the issues outlined below in order to demonstrate that the additional mitigation measures have been adequately evaluated in accordance with the GHG Emissions Policy & Protocol. This information would benefit from additional public and state agency review, which will be afforded by the SFEIR.

### Solar Photovoltaic (PV)

In addition to the mitigation measures the Proponent has committed to noted above, I am requiring the Proponent to provide in the SFEIR a technical and cost analyses to document the rationale for not making a commitment to use of a roof-top solar photovoltaic (PV) system. The Proponent should evaluate the potential for a solar PV installation in light of the likely continued rise in electricity prices, the continued reduction in the cost of PV, opportunities for third party PV arrays with power purchase agreements, options for utility ownership of solar PV arrays, the recent extension of federal tax credits for solar PV systems and other opportunities available under the recently passed Green Communities Act (Chapter 169 of the Acts of 2008). The SFEIR 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. In addition, the SFEIR should present a revised Mitigation Alternative that incorporates solar PV as a mitigation measure and a revised quantitative analysis of CO<sub>2</sub> emissions reductions that would be achieved by the revised Mitigation Alternative.

In its comments on the FEIR, MassDEP indicates that a power purchase agreement with a third party provider could have a significant impact on the payback period of the solar PV system; however, this option was not analyzed as part of the FEIR. It appears that BJ's Wholesale Club has entered into similar arrangements for the installation of solar PV arrays by third parties at other BJ's locations and it is therefore unclear why such an arrangement would not provide similar benefits at the Quincy location.

In the event that the Proponent does not reconsider addition of a solar PV system, MassDEP recommends that the building be designed and constructed so as not to preclude future installation of a solar PV system. This would include locating and consolidating the HVAC and other roof-based systems on the north facing side of the roof and providing adequate structural support to accommodate the additional load (5-10 lbs/sf) associated with the installation of a PV system.

#### Third-Party Building Commissioning

The FEIR indicates that the proponent has added comprehensive building commissioning to the Mitigation Alternative. Commissioning will be performed before the building is operational to ensure that the building's heating, cooling, ventilation, lighting, and energy management systems are operating according to their design specifications. The FEIR states that the commissioning will not be performed by a third party but that the building development team will have the necessary trained staff to perform the building commissioning. As noted in the comments from MassDEP, commissioning by a third party is preferred for oversight of energy efficiencies in construction and operations. I encourage the proponent to further consider the benefits of using a third party for commissioning. Third party or independent commissioners specialize in commissioning, and make sure the performance of all systems is maximized.

#### Transportation Demand Management (TDM)

The FEIR includes a description of the Proponent's Transportation Demand Management (TDM) plan proposed for the project. As described in the FEIR, the Proponent has committed to complete an annual TDM monitoring program that will include an evaluation of site vehicle trip generation, pedestrian counts, parking, ride-sharing and transit usage. 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;
- scheduling non-standard hours employee work shifts;
- working with the Crown Colony Association to possibly provide shuttle service between the project site and the Quincy Adams MBTA station.

The Certificate on the DEIR required the Proponent to include in the FEIR an evaluation of providing reduced rate transit passes for employees to further reduce vehicle trips to and from the project. In the Response to Comments section of the FEIR the Proponent indicated that BJ's determines benefits such as subsidized transit passes on a company-wide basis and offering employee transit subsidies at the Quincy location is therefore not feasible. This response falls short of the Certificate's requirement for an evaluation of this TDM measure.

The SFEIR must include a more thorough evaluation of the feasibility of providing reduced rate transit passes for employees. According to the comments submitted by MassHighway on the DEIR and the FEIR, 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 Station and reduce the project's overall traffic impacts and GHG emissions. This SFEIR must therefore discuss the benefits of this TDM measure with regard to further reducing the project's GHG emissions. The SFEIR should also include an evaluation of the feasibility of establishing a shuttle service between the project site and the Quincy Adams MBTA station and discuss the benefits of this measure including trip reduction and associated GHG emissions. If these measures are not found to be feasible, the Proponent should propose other additional TDM measures that could be adopted to mitigate the number of vehicle trips to the project site. However, I strongly encourage the Proponent to make a firm commitment to implement a transit pass subsidization program at the BJ's Quincy store.

I note that in the Certificate for the recently reviewed Lowe's of Quincy project (EEA #14222, October 31, 2008), also located in close proximity to this project site, I conditioned my finding that the project adequately and properly complied with the Massachusetts Environmental Policy Act and its implementing regulations with a requirement that the Lowe's Quincy proponent make a firm commitment to implement a transit pass subsidization program at the Lowe's Quincy store. Should the SFEIR indicate that a transit pass subsidization program is not going to be adopted as a mitigation measure for the project, the SFEIR should also include a discussion of how the project has otherwise met its obligation to avoid, minimize and mitigate transportation-related GHG emissions associated with the project.

### Parking

The Proponent is now proposing to decrease the project's on-site surface parking from 397 spaces to 387 spaces. According to the comments received from the Quincy Department of Planning and Community Development, the proposed parking plan continues to significantly exceed the City of Quincy's local zoning ordinance for required parking for retail located in an industrial district by more than 200 parking spaces.

According to the Proponent, the minimum amount of parking typically needed for BJ's stores in Massachusetts is 1 space for 200 square feet of gross floor area (GFA). The Proponent's



currently proposed parking plan is based on 1 space for 218 sf of GFA. The FEIR states that further reducing the project's total number of on-site surface parking spaces may create inadequate parking availability especially during peak shopping periods. The SFEIR should revisit this analysis in light of the reduced demand for parking that may be achieved by additional TDM measures proposed for the project in the SFEIR.

#### Mitigation/Section 61

The Proponent should submit an updated discussion of mitigation and an updated Section 61 Finding for MassHighway to reflect any changes proposed in the SFEIR.

#### Response to Comments

The SFEIR should include a copy of this Certificate and a copy of each comment letter received. It should respond to the comments received to the extent that the comments are within the subject matter of this scope. I defer to the proponent as it develops the format for this section, but the Response to Comments section should provide clear answers to questions raised. This directive is not intended to, and shall not be construed to, enlarge the scope of the SFEIR beyond what has been expressly identified in this certificate.

#### Circulation

The SFEIR should be circulated in compliance with Section 11.16 of the MEPA regulations and copies should also be sent to any state or local agencies from which the Proponent will seek permits or approvals, to the list of "comments received" below, and to City of Quincy town officials, and be made available for public review at the Quincy Public Library.

November 14, 2008

Date



Ian A. Bowles, Secretary

#### Comments received:

11/12/2008	Executive Office of Transportation and Public Works - Massachusetts Highway Department (MassHighway)
11/07/2008	Department of Environmental Protection (MassDEP), NERO
11/05/2008	City of Quincy, Department of Planning and Community Development (PCD)

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EEA #14233 FEIR