



The Commonwealth of Massachusetts
Executive Office of Energy and Environmental Affairs
 100 Cambridge Street, Suite 900
 Boston, MA 02114

DEVAL L. PATRICK
 GOVERNOR
 TIMOTHY P. MURRAY
 LIEUTENANT GOVERNOR
 IAN A. BOWLES
 SECRETARY

October 17, 2007

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

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

PROJECT NAME : Northwest Park Redevelopment
 PROJECT MUNICIPALITY : Middlesex Turnpike - Burlington
 PROJECT WATERSHED : Boston Harbor
 EOE A NUMBER : 14000
 PROJECT PROPONENT : Nordblom Company
 DATE NOTICED IN MONITOR : September 10, 2007

As Secretary of Energy & Environmental Affairs, I hereby determine that the Draft Environmental Report (DEIR) submitted on the above project **adequately and properly** complies with the Massachusetts Environmental Policy Act (G. L., c. 30, ss. 61-62H) and with its implementing regulations (301 CMR 11.00).

Project Description

As described in the DEIR, the proposed project consists of the redevelopment of Northwest Park into approximately 3.28 million square feet (sf) of mixed-use development. The Mixed-Use Phase or Area A includes approximately 1.28 million sf of space. It is comprised of approximately 300 residential units, 600,000 sf of retail/restaurant space, an approximately 200-room hotel, 260,000 sf of general office space, and additional open space. Area A is approximately 48 acres. The Office Phase or Area B includes approximately 2 million sf of general office space. Area B is approximately 79 acres. Both Areas A and B will be constructed simultaneously. The existing project site contains approximately 1.34 million sf of existing office space with some commercial uses with parking for 4,830 cars in surface lots. These buildings will be demolished or reconfigured to make way for the proposed project. The site is adjacent to Route 3 and close to I-95 (Route 128). It is comprised of approximately 127 acres, between Route 3 and the Middlesex Turnpike.

The project requires a mandatory EIR. It will require an Indirect Access Permit and

Traffic Signal Permits from the Massachusetts Highway Department (MassHighway). The project may require a Construction Dewatering Permit, a Notice of Construction & Demolition, a Limited Air Plan Approval/Fossil Fuel Emission Permit, a Notice Regarding Demolition and Construction, a Modification Permit for the water distribution system, a Cross Connection Permit, and a Sewer Extension/Connection Permit from the Department of Environmental Protection (MassDEP). It may need to obtain a Construction Dewatering Permit from the Massachusetts Water Resources Authority (MWRA). The project may require a blasting permit from the State Fire Marshall's Office. It must comply with the National Pollutant Discharge Elimination System (NPDES) General Permit for stormwater discharges from a construction site. The project may require a Programmatic General Permit from the U.S. Army Corps of Engineers. An Order of Conditions will be required from the Burlington Conservation Commission for impacts to wetland resource areas and buffer zones. MEPA jurisdiction extends to land alteration, traffic, air quality, wetlands, stormwater, blasting, water, and wastewater issues that may have significant environmental impacts.

Using the unadjusted Institute of Traffic Engineers Trip Generation land use codes (220, 310, 710, and 820), the proponent has estimated that the project will generate approximately 39,735 average weekday (unadjusted) vehicle trips and approximately 36,930 Saturday trips. The proponent has estimated that the project would generate about 20,990 net new vehicle trips on a weekday and 23,070 trips on Saturday when adjustments are made for shared, pass-by, diverted link, and existing vehicle trips. Access to the project site from the regional highway system would be provided from Second, Third, and Fourth Avenues to the Middlesex Turnpike and to I-95 and to Route 62 and its interchange with Route 3. The proponent has estimated that the project will require 12,040 shared parking spaces in structured and surface facilities.

The proposed project will be connected to existing municipal water and sewer service. It will consume approximately 412,460 gallons per day (gpd) of water (daily design flow) and will generate approximately 374,963 gpd of wastewater flow (Title 5).

Review of the DEIR

The DEIR included a detailed description of the project with a summary/history of the project. It described each state agency action required for the project. The DEIR contained sufficient information to allow the permitting agencies to understand the environmental consequences related to the project. It discussed how this project is compatible with Executive Order 385 – Planning for Growth, by discussing its consistency with local zoning, and the Metropolitan Area Planning Council's *Metro Plan*.

In the DEIR, the proposed trip generation numbers utilized the Institute of Traffic Engineers' land use codes. The DEIR presented the credit assumptions for existing, internal captured, pass-by and diverted link and specified which land use they were applied to. It

explained how the trip generation numbers were developed.

The DEIR provided for the analysis of impacts on the level of service (LOS) at the intersections that were required in the Certificate on the ENF dated May 11, 2007. It also included a LOS analysis of the Route 3/Route 128/I-95 interchange. The LOS analysis in the Traffic Study included the a.m. and p.m. weekday peak hours, Saturday midday peak hour, volume to capacity ratios, a traffic distribution map, and background growth from other proposed developments in the area. The DEIR presented the traffic generated by the other projects undergoing MEPA review in the background traffic numbers. Because the Mixed Use Phase (Area A) and the Office Phase (Area B) will now be constructed simultaneously by the proponent, the DEIR used 2016 as its build year. MassHighway has agreed to this build year. For each intersection in the study area, the DEIR included with its LOS analysis: time delay, capacity, and a summary of the average and 95th percentile vehicle queues. The DEIR included a traffic signal warrant analysis for the unsignalized intersections at Third Avenue/Middlesex Turnpike and Second Avenue/South Street.

The DEIR presented merge, diverge, and weave analysis for each ramp junction at the I-95/Route 3/Middlesex Turnpike and its frontage roadways and the Route 3/Route 62 interchanges. In its response to comments section, the DEIR addressed how the project intends to accommodate service and loading functions.

The DEIR described Burlington's parking supply requirements (zoning). It identified the local bus routes and their scheduled hours. Transit services are operated by the MBTA, the Town of Burlington (B-Line), and the Lowell Regional Transit Authority. There were no capacity constraints on the transit services that were identified in the DEIR.

The DEIR showed existing and proposed pedestrian facilities in the study area. It identified that the project would include a one-mile shared path and three miles of sidewalks as the proposed bicycle facility improvements included with this project.

The DEIR provided a mesoscale air quality analysis. The mesoscale analysis for ozone assessed the total ozone precursor (volatile organic compounds and nitrogen oxides) emissions associated with all project-related vehicle trips. Because ozone precursor emissions from the preferred alternative are greater than the no-build case, reasonable and feasible ozone precursor reduction/mitigation measures were included in the DEIR. While the project was filed with MEPA prior to the adoption of the EEA Greenhouse Gas (GHG) Emissions Policy, the proponent has voluntarily quantified GHG emissions generated by the proposed project and identified measures to avoid, minimize, or mitigate GHG emissions.

The DEIR discussed several project alternatives in an attempt to avoid wetland impacts.

Where unavoidable impacts occur, impacts are minimized and mitigated. The DEIR illustrated that the impacts have been minimized and that the project will be accomplished in a manner that is consistent with the Performance Standards of the Wetlands Regulations (310 CMR 10.00). The resource area boundaries, riverfront areas, applicable buffer zones, and 100-year flood elevations were delineated in Figure 5.1. The Bordering Vegetated Wetlands (BVW), which have been delineated in the field, were surveyed, mapped, and located on the plans. Each wetland resource area and riverfront area has been characterized according to 310 CMR 10.00. The Burlington Conservation Commission has accepted the resource area boundaries. The DEIR has identified that the project will impact the following wetland resource areas: 370 lf of Bank, 1,400 sf of BVW, and 420,000 sf of Bordering Land Subject to Flooding. A detailed wetlands replication plan was provided in the DEIR. The proponent is proposing to restore 370 feet of Bank and to replicate 7,500 sf of BVW.

The DEIR presented drainage calculations and detailed plans for the management of stormwater from the proposed project. It included a detailed description of the proposed drainage system design, including a discussion of the alternatives considered along with their impacts. The DEIR identified the quantity and quality of flows. It described the rates of stormwater runoff for the 2, 10, 25 and 100-year storm events. The DEIR addressed the performance standards of MassDEP's Stormwater Management Policy. It identified the groundwater recharge issues. Appendix E of the DEIR contained a maintenance program for the drainage system. This maintenance program outlined the actual maintenance operations, a twice per year sweeping schedule, responsible parties, and back-up systems. The proponent has committed to use a non-sodium based deicer on pavement surfaces. The DEIR summarized the existing pre-construction groundwater conditions.

The DEIR did not identify any impacts from the project on the drinking water supply and distribution system. No alternative water supply sources were considered. The DEIR outlined the proponent's efforts to reduce water consumption and thereby reduce wastewater generation. The proponent considered implementing several Low Impact Design (LID) features for the wastewater system.

The DEIR presented a discussion on potential construction period impacts and analyzed feasible measures, which can avoid or eliminate these impacts. It estimated that approximately 495,000 cubic yards of fill may be hauled off-site. The DEIR provided a landscaping plan in Figure 1.4.

The DEIR presented a summary of the results of hazardous waste studies and remediation efforts undertaken at the project site by the proponent and others to comply with the Massachusetts Contingency Plan (MCP).

The FEIR should resolve all the remaining issues outlined below, as required by this Certificate. It should include a copy of this Certificate.

Project Description & Regulatory Environment

The FEIR should include a detailed description of the project with a summary/history of the project. It should briefly describe each state agency action required for the project. The FEIR should demonstrate how the project is consistent with the applicable performance standards. It should contain sufficient information to allow the permitting agencies to understand the environmental consequences related to the project.

Alternatives Analysis

In addition to the No-Build Alternative and the Preferred Alternative (3.28 million sf), the FEIR should develop an alternative that maximizes site layout and sustainable design/Low Impact Development (LID) opportunities to minimize water, wastewater, stormwater and wetland impacts. The FEIR should identify the impacts of each of the alternatives, on traffic, parking, transit, pedestrian/bicycle facilities, transportation demand management, air quality, wetlands, drainage, drinking water, wastewater, construction, visual aesthetics (building renderings), blasting, and sustainable design. It should provide a comparative analysis that clearly shows the differences between the environmental impacts associated with each of the alternatives.

Traffic

A full Roadway Segment Analysis (RSA) for the Middlesex Turnpike between Route 62 and Wheeler Road West should be conducted by the proponent in the FEIR. The RSA should include access management along the corridor, traffic signal warrant analysis at the major driveways/intersections, traffic signal coordination/interconnection, and providing sufficient capacity (two through travel lanes in either direction with left/right turning lanes) along the Middlesex Turnpike.

Parking

Parking at the site has increased from the ENF to the DEIR from 8,620 to 12,040 spaces in parking garages and surface lots or 3.67 spaces per 1,000 sf of space. There was no identified increase in the project size to justify this increase in parking spaces. The FEIR must provide a breakdown of parking needs by land use category/use, time of day, and employee/customer/resident/visitor category to demonstrate the need for the proposed 12,040 spaces. The parking needs assessment should take into account the turnover rates for employees, customers,

residents, valet parkers, and visitors, and parking fees. The FEIR should describe how the number of parking spaces needed was determined. Parking demand management should be a key component of the overall mitigation analysis. The FEIR should identify the proposed parking fees for the various project uses. The proponent should consider using the ULI Minimum Parking Rate of 9,209 spaces or 8,856 spaces, which is 2.7 spaces per 1,000 sf of space. The number of 2.7 spaces per 1,000 sf of space was utilized by the proponent for the Westwood Station project (EEA #13826), which is a similar mixed-use redevelopment project. Any valet parking operations for the proposed project should be described in the FEIR. The FEIR should identify taxi-parking areas along curbs and reserved parking for Zip Car or a similar service within the parking garages.

Pedestrian/Bicycle Issues

The FEIR should show where traffic calming measures are proposed. The proponent should provide pedestrian connections and signage to the Burlington Mall, and the FEIR should include a Figure displaying these connections. The FEIR should show where temporary and longer visit bicycle parking would occur on the project site. It should show the number of bicycle parking spaces and their location on the project site.

Transit

The FEIR should identify private shuttle bus routes in the area operating to the Anderson Transportation Center or other transit centers. It should identify the specifics and amount of its transit subsidy to employees for monthly transit passes.

Transportation Demand Management

The FEIR should present a comprehensive Transportation Demand Management (TDM) Program designed to minimize reliance on single passenger vehicle trips for employees at Northwest Park.

Air Quality

The FEIR should provide the 2016 No-Build baseline information for CO2 emissions. The proponent should consider additional sustainable design principles and TDM measures to offset the difference in the 2016 No-Build and the 2016 Build scenarios. In the FEIR, the proponent should commit to landscape screening and filtering methods that will keep potentially harmful pollutants away from the new residences at this site, which is within 1,000 feet of a high volume roadway (Route 3). MassDEP recommends that the proponent fund a shuttle bus service linking the project with the Anderson Regional Transportation Center to improve air quality. The

FEIR should specify mitigation measures to reduce GHG emissions and characterize the expected benefits of that mitigation.

Wetlands

The FEIR should explain the proposed compensatory flood storage area or show the areas that would be altered and replaced. It should also demonstrate that the wetlands replication areas are designed in accordance with MassDEP's *Massachusetts Inland Wetland Replication Guidelines*, March 2002, as recommended by MassDEP.

Drinking Water

The FEIR should explain the subsurface conditions where stormwater infiltration is proposed in the wellhead protection area to demonstrate that the project impacts are within regulatory compliance. It should evaluate the potential for irrigation wells in both Areas A and B. The FEIR should identify the potential alternative deicing agents to be used at the project site.

Wastewater

According to MassDEP, the proponent will need to eliminate 1.3 million gallons of Infiltration/Inflow (I/I). The proponent should consider the installation of High Efficiency Toilets throughout the project to reduce water demand. The FEIR should identify any capacity deficiencies within the municipal wastewater system to handle the project's additional wastewater flows. The FEIR must address this I/I issue and work closely with the Massachusetts Water Resources Authority (MWRA), MassDEP, and the Town of Burlington.

Stormwater Management

The FEIR should discuss consistency of the project with the provisions of the National Pollutant Discharge Elimination System (NPDES) General Permit from the U.S. Environmental Protection Agency for stormwater discharges from construction sites. It should include a discussion of best management practices employed to meet the NPDES requirements, and it should include a draft Pollution Prevention Plan. Any discrepancies between the stormwater management plan for this project and the Town of Burlington's stormwater program should be resolved before proceeding with this project. The FEIR should consider additional Low Impact Development (LID) measures that minimize the volume of stormwater runoff to be treated and controlled by maintaining the existing hydrologic functions. In its comment letter, MassDEP has recommended that LID techniques should be incorporated into the drainage plan early in the project design phase. The FEIR should consider other LID tools to reduce the amount of impervious areas. It should describe if any dewatering of the construction site will include

monitoring to ensure that there is no impact to the groundwater level. The FEIR should outline the monitoring program of groundwater levels.

The FEIR should address MassDEP's concerns regarding conformance to the Critical Area Standard 6. It should identify measures to contain stormwater runoff in the event of an emergency spill. Any storm drains that discharge toward Vine Brook should be consistent with the Town of Burlington's NPDES General Permit. The snow disposal plan for the project should show the location on- or off-site where snow will be plowed or disposed. The FEIR should explain rainwater reuse for irrigation.

Construction/Community Disruption

The FEIR should outline how this proponent will coordinate its construction program with other nearby projects. It should identify the number of truck trips required to handle the filling operation and the truck routes for fill removal. The FEIR should describe any blasting proposed at the project site. It should identify the proponent's plans to deal with blasting and the notification process to adjacent land owners and local officials.

Visual/Aesthetics

The FEIR should include an analysis of the visual impacts of the proposed project, including renderings of the proposed buildings. In the FEIR, the proponent should incorporate native plants and low water using landscape materials in this plan.

Hazardous Waste

The FEIR should identify how construction activities will be coordinated with the ongoing remedial activities at MCP sites at the project site. It should address MassDEP's concerns regarding hazardous waste issues. According to MassDEP, a comprehensive groundwater monitoring plan capable of monitoring contaminant concentrations in overburden, shallow bedrock, and deep bedrock groundwater will be necessary during construction and blasting activities.

Sustainable Design/Low Impact Design (LID)

To the maximum feasible extent, the proponent should incorporate additional sustainable design elements into the project design. The FEIR should summarize the proponents' efforts to ensure that this project includes Leadership in Energy and Environmental Design (LEED) Certified buildings or the equivalent. The basic elements of a sustainable design program may include, but not be limited to, the following measures:

- optimization of natural day lighting, passive solar gain, and natural cooling;
- use of energy efficient HVAC and lighting systems, appliances and other equipment, and use of solar preheating of makeup air;
- favoring building supplies and materials that are non-toxic, made from recycled materials, and made with low embodied energy;
- provision of easily accessible and user-friendly recycling system infrastructure into building design;
- development of a solid waste reduction plan;
- development of an annual audit program for energy consumption, waste streams, and use of renewable resources;
- LID principles that reduce stormwater, potable water, wastewater, and wetland impacts and that provide water conservation and the reuse of wastewater and stormwater; and
- LEED certification.

Mitigation

The FEIR should include a separate chapter on mitigation measures. It should develop transportation and parking demand management measures to reduce single passenger automobile trips to the project and encourage ridesharing to the site through the use of preferential parking. I encourage the proponent to identify measures to increase transit usage to the project site. This chapter on mitigation should include a Draft Section 61 Finding for all state permits. The Draft Section 61 Findings should contain clear commitments to mitigation, estimates of the individual costs of the proposed mitigation, and the identification of the parties responsible for implementing the mitigation. A schedule for the implementation of mitigation should also be included, which should describe any phasing of the mitigation.

In the DEIR, the proponent has committed to the following mitigation measures:

- Provide a minimum increase of 10 percent above the existing infiltration volume of groundwater into the surrounding aquifer.
- Implement a General Environmental Management Plan to clean up hazardous waste contamination, approximately \$650,000.
- Provide approximately 1.38 million gpd of I/I removal for project's added wastewater flows to the municipal system, between \$1 and \$2.2 million.
- Fund the Town of Burlington for a Town Sewer Study to identify wastewater I/I projects up to \$300,000.
- Provide an independent sewer study, approximately \$50,000.
- Utilize ultra-low sulfur diesel fuel in construction vehicles.
- Replicate 7,500 sf of BVW, provide 370 feet of bank mitigation and maintain the same

floodplain volume, approximately \$150,000.

- Fund a Regional Transportation Master Plan for the area to identify and address long-term transportation improvements, approximately \$150,000.
- Designate 10 percent of the housing units as affordable units to comply with the Commonwealth's affordable housing policies.
- Install a fully-actuated traffic signal at the Middlesex Turnpike/Third Avenue intersection, make geometric improvements, and coordinate the new signal with the next three signals along the Turnpike to the north, approximately \$600,000.
- Modify traffic signal phasing and timings at the Middlesex Turnpike/Second Avenue/Burlington Mall Road (BMR) intersection and make geometric improvements with accommodations for pedestrians and bicycles, approximately \$1.2 million.
- Install a fully-actuated traffic signal at the South Avenue/Second Avenue intersection, coordinate the new signal with the signal at Middlesex Turnpike/Second Avenue/BMR, and make geometric improvements with accommodations for pedestrians and bicycles, approximately \$400,000.
- Design signal timing modifications and geometric improvements with pedestrian accommodations at Middlesex Turnpike/Fourth Avenue, approximately \$250,000.
- Provide signal phasing and lane reconfigurations at Route 62/Network Drive, approximately \$10,000 (provided by the Tri-Town Commission).
- Provide 100 percent design plans for the full buildout of the interchange and widen the northbound Middlesex Turnpike approach to provide a 4-lane cross-section and turn lane between Wheeler Road to a point past the I-95 northbound ramps at the Middlesex Turnpike/I-95 Northbound Ramps/Wheeler Road intersection, approximately \$850,000.
- Provide 100 percent design plans for the full buildout of the interchange and install queue detection on the southbound off-ramps and coordinate with the traffic signal system along the Middlesex Turnpike at the Middlesex Turnpike/Route 128/I-95 Southbound interchange, approximately \$275,000.
- Design and construct the continuation of the right-hand lane through the weaving section on the Route 128/I-95 Southbound frontage road between the Middlesex Turnpike on-ramp and the Route 3 Northbound on-ramp and other geometric improvements, approximately \$100,000.
- Provide signal timing modifications after the occupancy of each 300,000 sf by the proponent at the following intersections: Route 62/Route 3 Southbound Ramps; Route 62/Route 3 Northbound Ramps/Crosby Drive; Route 62/Middlesex Turnpike; Middlesex Turnpike/Terrace Hall Avenue; and Middlesex Turnpike/South Avenue/Burlington Mall Driveway (\$5,000 per visit per intersection).
- Modify the signal timing at the BMR/Marriott Driveway, approximately \$5,000.
- Construct three miles of sidewalks and a one mile of a shared-use (bicycle/pedestrian) path on the project site and provide short- and long-term bicycle parking facilities throughout the project, approximately \$250,000.

- Provide street sweeping within the project site.
- Install a stormwater management system with water quality treatment units, between \$700,000 and \$1 million.
- Install water-efficient appliances and fixtures (low flush toilets and faucet aerators).
- Utilize low-demand irrigation plantings.
- Provide the following to reduce GHG emissions: high-albedo roofing materials; high-efficiency HVAC systems with little or no refrigerants; use peak shaving or load shifting energy strategies; maximize interior day lighting by the use of skylights and light wells; incorporate window glazing to balance day lighting, heat loss, and solar heat gain; incorporate super insulation; install energy motion sensors for lighting and building climate control
- Provide a TDM program with an on-site coordinator and commuter information.
- Provide spaces for a car-sharing service, such as ZipCar.
- Implement a Construction Management Plan (includes traffic).
- Evaluate applying to the LEED-Neighborhood Development (ND) Program.

The FEIR should determine the amount of the proponent's contribution toward the additional mitigation measures required at the Middlesex Turnpike/Route 128/I-95 northbound and southbound ramps to alleviate existing roadway deficiencies and future project impacts. At the northbound ramps, the proponent has identified that the northbound on- and off-ramps should provide additional queuing and operational enhancements (\$700,000) and that the northbound Middlesex Turnpike beneath the Route 128 overpass should be widened and provided with signal timing modifications (\$550,000). At the southbound ramps, the proponent has identified that the southbound on- and off-ramps should be provided with additional queuing and operational enhancements to the signal system (\$600,000) and that the northbound Middlesex Turnpike approach should be widened and provided with signal timing modifications. The proponent should coordinate the traffic signals along the Middlesex Turnpike from the Middlesex Commons Mall entrance to the Network Drive intersection. I urge the proponent to participate in any discussions and studies, which evaluate the feasibility of traffic, transit, pedestrian and bicycle improvements within this area.

Response to Comments


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

Circulation

The FEIR should be circulated in compliance with Section 11.16 of the MEPA regulations and copies should also be sent to the list of "comments received" below and to local officials in Burlington and Bedford. It should be sent to the Lexington Town Administrator. A copy of the FEIR should be made available for public review at the Burlington and Bedford Public Libraries. The proponent should provide a hard copy of the FEIR to each state agency from which the proponent will seek permits or approvals and to Burlington's commenting agencies.

October 17, 2007

DATE


Ian A. Bowles

Comments received:

VHB, 9/27/07

MassDEP/NERO, 10/10/07

EOT, 10/10/07

MAPC, 10/11/07

VHB, 10/12/07

14000deir

IAB/WTG/wtg