Charles River Watershed Association

BY FAX AND MAIL

April 28, 2008

Ian Bowles, Secretary
Executive Office of Environmental Affairs
100 Cambridge Street, Suite 900
Boston, MA 02114

Attn: Briony Angus, MEPA Unit

Re: Environmental Notification Form, The Shoppes at Bellingham, Bellingham, MA EOEA # 13914

Dear Secretary Bowles:

The Charles River Watershed Association (CRWA) submits the following comments on the Draft Environmental Impact Report (DEIR) for the above-referenced project. MEPA scoped a detailed DEIR in recognition of the environmental impacts from the proposed project, which will alter 100 acres of land, create 63.5 acres of new imperviousness and destroy 85,000 s.f. of wetlands in the upper Charles watershed. CRWA believes that the information submitted by the proponent and the proposed mitigation are inadequate given the project's size[1] and location near the Charles River in the upper watershed – an area that is already highly stressed – and in the Zone II of Bellingham's public water supply wells.

Although the ENF certificate specified a comprehensive alternatives analysis "to ascertain which site layout minimizes environmental impacts and reduces the amount of impervious surface on site," the proponent only considered reduction of surface parking with one parking deck in its analysis. DEIR at p. 4.[2] As the proponent readily admits, only "minor changes" to the project have occurred since the ENF filing, with no changes to the project's size or composition. DEIR at 6. Contrary to the Secretary's request in the ENF certificate, no alternative building configurations or a reduced build alternative

[1] The November 1999 ENF certificate for Bellingham Corporate Park noted that "this project represents the largest single project proposed to date in the area."

[2] The proponent also claims that putting stormwater systems underground is an improvement because this will limit site disturbance. DEIR at 4. CRWA disagrees since many low impact development (LID) techniques effectively control and infiltrate stormwater while alleviating heat island and providing landscape benefits as discussed further below.

that might result in fewer impacts are discussed in the DEIR. The DEIR also does not contain an alternatives analysis for the Section 401 Water Quality Certification although explicitly required in the ENF certificate. Instead, the proponent asserts that impacts to federal jurisdiction wetlands B, X and W are unavoidable. DEIR at 9. The DEIR is not responsive to the ENF certificate many respects. The proponent should be required to comply with the ENF certificate's directive of a real alternatives analysis that reduces imperviousness, wetland destruction, vehicle trips and wastewater generation.

While the project now has 662 spaces in a parking deck, this is only two levels of parking and the project will still have 1994 surface parking spaces. Based on the proponent's own calculation that 354 spaces disturb 2.5 acres of land, the surface parking alone will take up 14 acres of land! Much more surface parking could and should be eliminated: the parking deck in Phase I should contain more levels (and be covered to reduce contaminated stormwater runoff) with additional parking decks or underground parking constructed for Phase I and certainly for Phase II. Buildings could also be massed and heightened for greater density, thus reducing site disturbance and leaving more of the site as open space.

While the project has reduced the number of parking spaces, according to the DEIR, average demand for shopping centers surveyed is 2.94 spaces per 1,000 sf with highest demand of 4.25 spaces per 1,000 sf. The project will exceed even this peak demand with 4.39 spaces per 1,000 sf. Given the almost complete gridlock in this area at times, and notwithstanding the proponent's assertion that its roadway mitigation will improve traffic conditions overall, the proponent should work with the Town of Bellingham to further reduce the amount of parking. Since many trips may be intra-project from the offices to the retail area, the proponent should commit to providing continuous shuttle bus service between the two areas to reduce parking needs and reduce air emissions.

The project is subject to the Nutrient Total Maximum Daily Loads (TMDL) developed for the Charles River by DEP and U.S. EPA.[3] The TMDLs document that phosphorous loadings to the river are directly causing or contributing to the euthrophication and excessive algal blooms in the Charles River -- including the very severe toxic algal bloom in the downstream portion the river that first appeared last year and reappeared this summer. The TMDLs establish that phosphorous loadings from <u>existing</u> large industrial/commercial sites need to be reduced by 65 percent on an annual basis to achieve water quality standards.

Stormwater (from both overland and piped drainage systems) is a major contributor of phosphorous loading to the river. Parking lots are a major source of phosphorous, in addition to other contaminants: car exhaust literally paints parking lots with phosphorous. Because the TMDLs do not factor in phosphorous loadings from new development projects, new development must rigorously control phosphorous-laden stormwater runoff.

[3] The Upper Charles Nutrient TMDL is currently in draft. The lower basin Nutrient TMDL, which was issued in 2007, recognizes and accounts for the upper watershed phosphorous contributions.

DEP Commissioner Laurie Burt recently convened a stormwater stakeholder group in which she made it clear that the state is committed to implementing TMDLs and that not doing nothing so is not an option. At a minimum, DEP expects to regulate direct stormwater discharges (*i.e.*, not into the municipal storm sewer) from large industrial and commercial impervious sites across the state. Industrial and commercial dischargers in areas with TMDLs will have additional requirements. EPA New England, recognizing the severity of the nutrient problem in the Charles, is planning to issue a stormwater general permit commercial and industrial properties with two acres or greater of imperviousness. The general permit will cover such properties in Bellingham and encompass several other watershed towns.

The proponent should discuss how it will meet the TMDL phosphorous reduction target. See Secretary's EIR Certificate in Redevelopment of 175 Wyman Street, Waltham, MA, EOEEA No. 14134. It is far cheaper for this project to design and install BMPs to control phosphorous in runoff now than to have to retrofit the site in the future. It may also make structured parking more cost-effective. While the proponent has already committed to weekly sweeping of parking lots, this should be done with high efficiency vacuum sweepers to collect fines, to which phosphorous adheres. .

Contrary to the proponent's claim, project design does not appear to meet the MA Stormwater Standards (Standards):

a. In type A soils, DEP recharge volume (not "rate" as stated in the DEIR) is 0.6 inches of runoff times the total impervious area, NOT 0.4 inches as stated in the DEIR at 10. The recharge volume appears to have been calculated erroneously and it is therefore impossible to tell whether the recharge systems are sized correctly.
b. The project's stormwater management design totally ignores the Standards' requirement that: "Proponents of projects subject to the Stormwater Management Standards must consider environmentally sensitive site design and low impact development techniques to manage stormwater. Proponents shall consider decentralized systems that involve the placement of a number of small treatment and infiltration devices located close to the various impervious surfaces that generate stormwater runoff…" (Standards, Volume 1: Overview of Massachusetts Stormwater Standards, Chapter 1, page 4). Current site design does not use LID approaches, and does not appear to have considered them or shown why they cannot be implemented.[4]

[4] There is no indication that the proponent evaluated LID techniques for site design and stormwater management, despite the urging of the Secretary that it do so. ENF Certificate at p. 5. Stormwater tree planters in the parking areas (using rainwater for tree irrigation and reducing pollution at the same time) and porous asphalt in areas where groundwater elevations do not preclude it should be evaluated. The proponent should also consider and the EIR discuss, green roofs, permeable pavement and pedestrian areas, rain gardens and other forms of biofiltration. Increasing the tree canopy where feasible while maximizing recharge is a potential approach to reducing pollutants including thermal loads.

c. Because this site is a Land Use with Higher Potential Pollutant Load (LUHPPL), a significantly more detailed stormwater management plan is required and should be included in the MEPA filings. The water quality treatment volume for such sites is 1 inch, and the stormwater management plan must demonstrate that appropriate BMPs are designed and sized appropriately. In addition, a detailed source control and pollution prevention plan is necessary for such sites, using BMPs approved for LUHPPLs, with appropriate pre-treatment prior to infiltration. The DEIR contains no evidence that this standard has been met.
d. Because this development is in the zone II of a water supply well, source control and pollution prevention are particularly important. The source control and pollution prevention plan discussed above should include an explicit snow management and deicing control plan. Because porous pavement allows for significantly reduced deicing materials use, we strongly recommend the proponent consider its use in appropriate areas of the site.

Design weaknesses:

b. Overall, design misses many opportunities to reduce impervious cover, reduce heat island effects, decentralize stormwater management and maintain evapotranspiration rates. Green roofs should be considered as they will provide significant energy cost savings as well as reducing stormwater impacts.
c. While stormwater flow rates off the site may not be increased, it is erroneous to state, as the proponent does on page 9 of the drainage report Appendix E, that "The proposed development will not increase the runoff to adjacent wetlands and drainage areas." The proposed project may not increase the *rate* of runoff but it will certainly increase the *volume* of runoff. Numerous opportunities to reduce the volume of runoff from this site have been missed, especially by using vegetation and vegetative BMPs, and a new stormwater management design should be developed to reduce the impacts of this site.
d. The type A soils in this area make LID approaches very feasible, and far more should be included.
e. Rooftop runoff should be separated from parking lot runoff since rooftop runoff may be infiltrated directly whereas parking lot runoff needs to be pre-treated prior to infiltration.

CRWA is concerned about the apparent segmentation of Phase II. The Phase II development should at least be discussed in terms of larger scale and cumulative stormwater management and planning.

The proponent should include a site plan showing stormwater, water and wastewater infrastructure. This was lacking in the DEIR.

The proponent should break out the water demand for irrigation. It should discuss how much of this will be provided by rainwater harvesting.[5] Public water supply should not be used for irrigation. The proponent should commit to xeriscaping and drip irrigation only, and avoid inground sprinklers. Turf areas should be minimized. A full landscaping plan should be submitted. Since an irrigation well will be drawing from the same aquifer as the Bellingham's water supply, it should not be permitted. If the Town does allow an irrigation well, the proponent should agree to abide by all watering restrictions imposed on public water supply customers. Any well should it should be located in the upland away from streams and the mainstem to lessen pumping impacts on streamflow. Water use, if any, for HVAC/cooling systems should be factored into total project water demand. The proponent should go beyond "working with tenants" on low flow fixtures and require them and water conservation plans as lease provisions. DEIR at 64.

In its response to comments, the proponent baldly states that grey water not feasible for a retail center. In fact grey water has been used in Foxboro and at the Wrentham stores. The proponent should be required to explore this option in order to reduce project wastewater flows. Far more information should be included on the wastewater plant.

The wetlands replication should be 2:1 and the proponent should commit to this, particularly given the high rate of failure of replacement wetlands. It should also explain the statement that federal wetlands B,W, X are "low function wetlands," DEIR at 31.

Hedging its bets, the proponent states that if its traffic assessment is erroneous, it will scale back Phase II. Response to comments, BCC 2-19. We are skeptical about the proponent's assertion that its proposed traffic mitigation will improve LOSs at intersections in this already congested corridor. Intra project vehicle trips are not broken out, nor does the proponent commit to (or even discuss) the feasibility of continuous shuttle service between the project's two phases. ENF at 4. Every effort should be made to implement effective transportation demand management measures.

CRWA appreciates this opportunity to comment. Please feel free to call me if you have any questions at 781-788-0007 ext. 234.

Very truly yours,

Margaret Van Deusen

cc: Bellingham Planning Board
Bellingham Conservation Commission
Don DiMartino, Director, Bellingham DPW

[5] In its response to MassDEP's comments, the proponent states that it will be recharging roof runoff wherever feasible.