Charles River Watershed Association

Boston Redevelopment Authority
One City Hall Square
Boston, MA 02201
Attn: Jay Rourke

January 12, 2006

Dear Mr. Rourke:

RE: DPIR Simmons College School of Management and Quad Project

Charles River Watershed Association has review the DPIR for the above referenced project. There are several project elements that we believe need further analysis and discussion in the FPIR in order to ensure that all environmental impacts have been minimized and mitigated. We hope these comments will assist the BRA and Simmons College as the planning process moves forward.

Stormwater Management

Stormwater from this site drains, via the Boston Water and Sewer Commission's municipal storm drain system, into either the Muddy River conduit and out to the Charles River; or, during larger storm events, into the Muddy River Fens and then out to the Charles River via Charlesgate. In either case, stormwater from the site enters and impacts the Muddy River and its drainage network.

As you are undoubtedly aware, there are significant and long-standing flooding and water quality problems in the Muddy River. The US Army Corps of Engineers is currently in the process of designing a dredging and environmental restoration project for the entire Muddy River that is estimated to cost well over $60 million. The Muddy River Restoration project is needed to reduce significant flood hazards, to improve water quality, to restore degraded habitat, and to remove sediments that have accumulated in the Muddy River. Most of these problems are a direct result of stormwater discharges into the Muddy River.

Any redevelopment that is proposed in areas that drain directly into the Muddy River system, therefore, needs to focus carefully on stormwater management issues, and should maximize opportunities to reduce peak storm flows, minimize imperviousness, maximize infiltration and capture sediments. The significant expenditure that will be made by the federal and state government, as well as by the City of Boston, to dredge and restore the Muddy River must be protected to the maximum extent possible.

The DPIR does not contain enough detail about the stormwater management program to ensure that every effort has been made to protect the Muddy River from flooding and water quality impairments. While there will clearly be improvements made over the existing conditions, these improvements are not explained in sufficient detail to determine their effectiveness. In addition, there are many alternatives that are not evaluated in the DPIR that could enhance stormwater management on the site.

Since there will be no further MEPA review of this project, the Article 80 Project Impact Review is the appropriate process for a full analysis of the stormwater management program. The FPIR should include specific, detailed information and alternatives analyses of stormwater management on the site. Stormwater management should aim to maximize infiltration, slow runoff from the site, maximize the use of vegetation, capture rooftop runoff for irrigation, and minimize sediment and nutrient loading. We suggest that the FPIR include more documentation about the proposed stormwater management program including:

- Detailed information about the final design of the proposed stormwater management infrastructure including the location and design of drains, catch basins, water quality structures, and infiltration structures;
- Detailed information about any surface stormwater management features such as swales, vegetative filter strips, rain gardens, permeable pavement or vegetated storage areas;
- More information about the proposed green roof;
- An assessment of the opportunities to reduce even further the peak flows and volume of stormwater runoff, including estimates of the impacts in a one-year storm;
- An assessment of how the site could meet DEP's stormwater management policy in its entirety, not just "to the maximum extent practicable;"
- A plan to minimize the primary pollutants of concern for the Muddy River, sediments and nutrients;
- A maintenance plan for the stormwater management plan.

<u>Groundwater</u>

This project is proposed to have a 5 level underground parking garage. While there are many significant environmental and aesthetic benefits to underground parking, there are important issues both during and post- construction that such a structure must address. The location of this project in an area of historic fill, and the ongoing problems throughout many areas of the City with groundwater levels, make it all the more important that this aspect of the project be designed with the utmost care and in anticipation of any potential impacts.

The project is designed to minimize groundwater impacts from the project, and the proponent has committed to working closely with abutters and the Boston Groundwater Trust to ensure that there are no alterations to groundwater levels as a result of the project. Investigations should be expanded however into the potential seasonal changes in groundwater levels, as well as potential effects on groundwater flow. In some areas of Boston, construction of sub-surface projects such as tunnels, underpasses and even some building foundations have altered groundwater flow patterns, resulting over time in changes to ambient groundwater levels. Groundwater flows are extremely slow so alterations may occur over years.

The FPIR should include an assessment of groundwater flow directions, as well as a determination of whether those directional flows change seasonally. If the project shows any potential for altering flows, either slowing or reducing flows into the Muddy River, or conversely reducing flows back into the ground during periods of high groundwater, or causing any groundwater "mounding," the FPIR should document a mitigation plan for any such alterations. In addition, the FPIR should specify what source of water would be used should groundwater recharging be necessary during or after construction.

Given that the parking structure will underlay much of the project, opportunities for on-site infiltration of stormwater may be minimal. If so, the FPIR should evaluate the possibility of seeking off-site locations for groundwater recharge and stormwater infiltration.

Finally, a detailed plan for the treatment and disposal of water from dewatering activities should be included in the FPIR.

<u>Impacts to the Emerald Necklace</u>

The project is designed to improve the pedestrian environment of the campus, and to integrate faculty, administration and students from the School of Management into the main campus environment. As such, it will increase the number of pedestrians in the area, and will likely increase the use of the Emerald Necklace Parks, including the Fenway, that abut the campus. This park system is already heavily used, and is in need of significant capital and operations improvements.

We suggest that Simmons College work with the BRA, the Boston Park and Recreation Commission, the Medical Academic and Scientific Community Organization (MASCO), the Fenway Alliance, and the Emerald Necklace Conservancy to develop a program to support the improvement of maintenance and management of the park system to mitigate this increased use and to provide support for the community-wide effort that is underway to bring this park system up to an acceptable community standard.

We appreciate the opportunity to provide comment on this project through the Article 80 review process. Please feel free to contact me should you have any questions.

Sincerely,

Kate Bowditch
Director of Projects

cc: Simmons College
Boston Parks and Recreation Department
Boston Groundwater Trust