



Charles River Watershed Association

Stephen R. Pritchard, Secretary
Executive Office of Environmental Affairs
MEPA Unit
251 Causeway Street, Suite 900
Boston, MA 02114

Attn: Deirdre Buckley

Re: Environmental Notification Form (ENF), Dana-Farber Cancer Institute, EOEA
13776

Dear Secretary Pritchard:

Charles River Watershed Association has reviewed the ENF for the above referenced project and we provide these comments for your consideration through the MEPA program.

As you know, this project is also undergoing review by the Boston Redevelopment Authority under the Article 80 review process, and will require the preparation of both a Development Impact Project Plan and an amendment to the Institutional Master Plan (IMP). Since there will be significant refinement of project design as these processes evolve, and there are several important environmental issues that have not been adequately addressed in the ENF, **we suggest that you require the completion of an Environmental Impact Report for this project.**

Our comments are focused on environmental issues that have been addressed in only a limited way in the ENF, but are of significant importance to Executive Office of Environmental Affairs and the neighboring communities around the proposed development: the project's potential impacts to the Emerald necklace and the Muddy River; and water resource management.

Project Context

The location of the site for the proposed development, in the Longwood Medical and Academic Area (LMA), is one of the most rapidly changing areas of the City of Boston, and indeed in the entire region. In the past several years, numerous redevelopment projects have been completed, or are under construction or in the review phase. The expanded development in the LMA is leading to numerous cumulative environmental strains that are

poorly addressed by site-specific planning and design review processes. Assessing cumulative impacts, and identifying appropriate mitigation, is an important function of the MEPA review process.

The proposed development is indeed on a parcel that is “under-utilized,” and we recognize the proposed redevelopment as an opportunity to provide benefits to DFCI, to the economic development of the area, and to the local environment, which has been heavily impacted by urban development. However, there has not to date been enough examination of the opportunities for reducing project impacts, and mitigating remaining impacts.

Impacts to the Emerald Necklace

The LMA is surrounded on three sides by the Muddy River and its park and parkway system, known as the Emerald Necklace. Designed by Frederick Law Olmsted, this historic park system provides much needed open space in an area of the City that is generally underserved by public open space. The Riverway section of the Emerald Necklace is in effect the front garden of the LMA, and is steps away from the proposed development site. Most workers and visitors to the LMA arrive by traveling along or through the park system, which greatly enhances the LMA and provides relief from the high density, hardscape environment.

The project will increase not only the vehicular traffic in the area, but also the number of pedestrians, and will increase the use of the Emerald Necklace Parks, including the Riverway and Fenway. This park system is already heavily used, and is in need of significant capital and operations improvements. The EIR should include an analysis of project impacts to the Emerald necklace, including parkways, and a proposed mitigation plan to ensure that park system does not deteriorate further with ever increasing use.

Stormwater Management

Stormwater drainage from the site flows, via the Boston Water and Sewer Commission’s municipal storm drain system, into the Muddy River, contributing to the impairments of this tributary to the Charles River. Restoration of the Muddy River is a priority for many stakeholders, including the Executive Office of Environmental Affairs, and major efforts at the local, state and federal level are underway to implement the Muddy River Restoration Project.

The successful restoration of the Muddy River cannot be done solely with end-of-pipe approaches, however. Source controls are needed throughout the Muddy River watershed, and redevelopment provides the best opportunity to implement better stormwater management. The ENF provides little analysis of stormwater volumes and quality; presents no alternatives analysis for approaches to managing stormwater runoff; and presents a recommended plan that adopts almost none of the available technologies and techniques for urban stormwater management.

We strongly urge you to require an assessment of the opportunities for improved stormwater management, with an emphasis on examining opportunities for recharge, green roof technologies, and other methods to improve water quality and, especially important,

reduce the volume of runoff to the Muddy river. Specifically, we suggest:

- 1 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;
- 2 Detailed information about any surface stormwater management features such as green roof technology, stormwater planters, rain gardens, permeable pavement or vegetated storage areas;
- 3 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;
- 4 An assessment of how the site could meet DEP's stormwater management policy in its entirety, not just "to the maximum extent practicable;"
- 5 A plan to minimize the primary pollutants of concern for the Muddy River, sediments and nutrients;
- 6 A maintenance plan for the stormwater management plan.

Groundwater

This project is proposed to have a 7 level underground parking garage and a system of tunnels connecting the adjoining campus buildings. While there are many significant aesthetic benefits to underground parking, there are important environmental issues both during and post- construction that need to be addressed. 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 EIR should include a thorough analysis of the potential impacts to groundwater, both during and after construction of this project. This effort should be coordinated closely with the Boston Groundwater Trust to ensure that there are no alterations to groundwater levels as a result of the project. The LMA is on the border of the City's "Groundwater Overlay District," and groundwater remains a potential source of baseflows to the Muddy River, so any changes to groundwater patterns in the area need careful review and planning. Investigations should include 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.

If the analysis shows there is 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 EIR should document a mitigation plan for any such alterations. In addition, the EIR 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 EIR 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 EIR.

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

Sincerely,

Pallavi Kalia Mande
Urban Restoration Specialist

cc: Dana Farber Cancer Institute
Medical Academic and Scientific Community Organization
Boston Parks and Recreation Department
Boston Groundwater Trust