

# BOSTON

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## GROUNDWATER TRUST

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Oct. 7, 2004

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Elliott Laffer

Mr. Armindo Goncalves  
Assistant Director, Community Development  
Boston Redevelopment Authority  
One City Hall Square  
Boston, MA 02201-1007

Subject: Forsyth Institute

Dear Mr. Goncalves:

These comments are offered in response to the Project Notification Form filed for this proposed expansion project.

The Boston Groundwater Trust was established by city ordinance to monitor groundwater levels in areas of the city where wood piling foundations are vulnerable to deterioration and subsequent foundation failure because of falling groundwater levels and to suggest solutions to the problem. As such, our comments are restricted to groundwater related issues.

The Forsyth Institute is located in an area that has long been of critical concern because of groundwater related issues. Several buildings on or near Hemenway Street in the immediate area have either been demolished or required underpinning because of deteriorated pilings. The Trust currently has nine functional groundwater wells that it monitors along Hemenway Street. At the most recent reading, in September, all nine wells showed levels below the five foot BCB level that is often the minimum to keep the piles water covered.

We request that the applicant be required to install groundwater monitoring wells around the construction site to monitor groundwater levels adjacent to the site during construction. Should these readings drop below an agreed level, construction should stop until the problem is remedied. Well readings should be made available to the Trust before and during construction, and the wells should be turned over to the City for continued monitoring by the Trust after construction is complete.

The project raises two particular concerns. First is the loss of recharge through the now permeable ground that will be covered by the building. This concern is increased by the permeable surface that was lost when parkland was inadvertently turned into a parking lot after the last building expansion in the 1960's. Systems should be put in place, whether through opening up currently covered land or through an engineered recharge system, to assure

that there is at least the same amount of recharge as would naturally occur through the existing parkland including that section of the parking lot that belongs to the parks department, assuming that section to be unpaved.

The second concern is potential leakage into underground structures. The current building has a deep basement. We request that there be a certification by a registered professional engineer that there is no water leakage into the basement and no dry weather pumping of water from the basement. The new structure will include a parking garage extending 39 feet underground. After project completion, we request annual certification, again by a registered professional engineer, that neither the original basement nor the new garage is leaking, and that no dry weather pumping has occurred from either structure. Dry weather pumping not only causes groundwater drawdown, it also leads to an increased load on the BWSC wastewater handling system and increased costs for ratepayers.

Maintaining an adequate groundwater level is critical to preserving the historic areas that make Boston such an attractive, interesting, and economically viable place. Each project in the affected area must do its part to solve the problem.

Very truly yours,

Elliott Laffer  
Executive Director