BOSTON

GROUNDWATER TRUST

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Oct. 6, 2004

Nick Haney, Project Manager
Boston Redevelopment Authority
One City Hall Square, 9th Floor
Boston, MA 02201

Subject: The Clarendon

Dear Mr. Haney:

The Boston Groundwater Trust was established by City ordinance to monitor groundwater levels in parts of the city where reductions in those levels have led to deterioration of the wood pilings that support many of the structures built on filled land and to study and recommend potential solutions to the problem. As such, our comments are limited strictly to groundwater related issues.

The proposed project is planned for a location that has experienced substantial and consistent reductions in the "natural" groundwater level over time. Because of the maintained level of the Charles River, the "natural" groundwater level would be around 8 feet, measured against the Boston City Base. This was considered the likely level even before control of the river; therefore most pile s were cut off at or below an elevation of 5 feet to assure that they would remain wet and not deteriorate. The Boston Groundwater Trust monitors five observation wells in the immediate area of the proposed project. All have read consistently below 5 feet. The latest readings, taken last month, are as follows:

Well 22J-0366	3.10 ft
Well 22J-0419	0.61 ft
Well 22J-0442	4.24 ft (July reading, well head inaccessible in Sept)
Well 22J-0448	2.30 ft
Well 22J-0471	2.73 ft

If buildings in the area are built on wood piles cut off at the typical elevation, as we believe to be likely at least for the buildings on adjacent Stanhope Street, these readings are cause for substantial concern. Therefore, we ask that the following actions be required.

1. Construct an inventory of existing foundations that would document the vulnerability, if any, of nearby buildings to wood pile foundation deterioration. This inventory should include the significant buildings from the Historic Resource List included in the PNF, as well as the block of carriage house buildings on Stanhope Street.

2. Document the elevation and condition of existing wood pilings that exist under the current on site parking lot, as referenced in the PNF. This could give an indication of the effect over time of reduced water levels in the surrounding area.
3. Investigate and report on the potential causes of the reduced groundwater levels in the area, which are among the lowest found in the entire area monitored by the Trust.
4. Investigate and report on the condition of the basement of the building at 131 Clarendon Street which is to remain on site. In particular, report on any history of pumping water from the basement during dry conditions. It was reported during the review process for the renovations of the nearby YWCA

building that virtually continuous pumping had occurred there for many years. This can have the effect of drawing down groundwater levels over time, while at the same time increasing the load on area wastewater treatment facilities.

5. Assist to retrieve basement conditions, including pumping records from other nearby buildings with deep basements, many of which were formerly owned by the seller of much of the project site.
6. We acknowledge the beneficial intent of the proposed mitigation concept. It is critical that the performance criteria include a commitment to halt construction and correct the problem if the monitoring wells indicate drawdown.
7. We appreciate the commitment to provide the monitoring data for new and existing wells to the Trust during design and construction. Provision should be made so that data can continue to be collected by the Trust after construction ends.
8. Because the new construction, as well as the existing building at 131 Clarendon Street, include deep basements, we believe that there should be an ongoing effort to assure that no water is being pumped and the basements remain dry. There should be annual certifications to this effect by a professional engineer.
9. We applaud the proponent's intention to study the feasibility of recharging roof drainage into the ground. Recapture of rainwater that now spills off hard surfaces would go a long way toward restoring "natural" groundwater levels while reducing the load on area sewers and wastewater treatment facilities.

Very truly yours,

Elliott Laffer
Executive Director