Boston
Groundwater Trust

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November 3rd, 2014

Christopher Tracy, Project Manager
Boston Redevelopment Authority
One City Hall Square
Boston, MA 02201-1007

Subject: 135 Breman Street Expanded Project Notification Form

Dear Mr. Tracy:

Thank you for the opportunity to comment on the Expanded Project Notification Form for 135 Breman Street. The Boston Groundwater Trust (BGwT) was established by the Boston City Council to monitor groundwater levels in sections of the City where the integrity of building foundations, especially those supported by wood pilings, is threatened by lowered groundwater levels and to make recommendations for solving the problem. As such, my comments are restricted to groundwater related issues.

While the project is not located within the Groundwater Conservation Overlay District, it is in an area with very low groundwater levels and where existing buildings are supported on wood pilings. As stated in the EPNF and confirmed at the scoping session, a single level of below-grade parking will be constructed across the project site and after the completion is not anticipated to have adverse long-term effects on the regional groundwater levels. At the scoping session the proponent stated that the bottom of the slab shall be no lower than elevation 7 BCB. However, the project design includes underslab and perimeter drains below the bottom slab with a dedicated sump pit equipped with duplex pumps which causes some concern. In order to minimize the possibility that groundwater is drawn away from the site, it is important that project not employ underslab and perimeter drains with pumps. Instead the FEIR should state that the slab and foundation walls will be waterproofed. I was pleased that the proponent stated that there is high likelihood that the slab and the foundation walls will be waterproofed.

The proponent also stated that project excavation may extend to elevation 0 BCB and steel sheeting will be installed as part of the groundwater. As part of that construction a temporary earth support system consisting of steel sheet piling will be installed around the entire site to provide a groundwater cutoff. The proponent stated that this steel sheet piling will remain in place after construction. There is some concern however that backfilling to that depth can create a pathway for groundwater to drain to a lower aquifer. In order to mitigate that possibility the steel sheeting should be removed or impervious clay or flowable fill that contains bentonite should be used to ensure that no such path is created.

The site is in area with many wood piling supported buildings that are vulnerable to damage from low groundwater levels and have some of the lowest groundwater levels in the Trust's well network. In spite of significant investigations the cause of the low groundwater levels in this area remains unidentified. Any additional information on subsurface conditions that the proponent may discover would be very helpful.

As stated in the EPNF, additional geotechnical exploration and engineering is expected to be completed as the project design progresses. The proponent stated than an additional observation well may be installed on public property and ultimately be turned over to the Trust. I was pleased that the proponent agreed to share any relevant information discovered during their geotechnical exploration and engineering investigations through additional communications.

I look forward to working with the proponent and the Redevelopment Authority to assure that the project can have only positive impacts on groundwater levels in the area.

Very truly yours,

Christian S. Simonelli

Christian Simonelli
Executive Director

Cc: Kathleen Pederson, BRA
Maura Zlody, BED