

# Boston Groundwater Trust

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Christian Simonelli

October 30<sup>th</sup>, 2017

Gerald Autler, Senior Project Manager  
Boston Planning & Development Agency  
One City Hall Square  
Boston, MA 02201-1007

Subject: Exchange South End Project Notification Form (PNF) Comments

Dear Mr. Autler:

Thank you for the opportunity to comment on the Exchange South End Project Notification Form (PNF) located in the South End. The Boston Groundwater Trust was established by the Boston City Council to monitor groundwater levels in sections of Boston where the integrity of building foundations is threatened by low groundwater levels and to make recommendations for solving the problem. Therefore my comments are limited to groundwater related issues.

The project is located in the Groundwater Conservation Overlay District (GCOD) established under Article 32 of the Zoning Code. As stated in the document and confirmed at the scoping session the project is proposed to be designed and constructed to comply with the requirements of Article 32.

Compliance with the GCOD requires both the installation of a recharge system and a demonstration that the project cannot cause a reduction in groundwater levels on site or on adjoining lots. As stated in the document the lowest building floor will be about 25 ft. below groundwater levels and excavations of up to 40 ft. below ground surface will be required for foundation and below grade construction. The document also states that the building foundation walls will be fully waterproofed and designed to resist hydrostatic pressures. A permanent, perimeter groundwater cut-off wall will be installed around the below grade garages and will extend into the impervious marine clay soils underlying the Site. The groundwater cut off wall will serve to both, limit seepage into a sub slab pressure relief system, and maintain groundwater levels outside of the below grade garage. This system which is a commonly used design and construction methodology results in no impacts to groundwater levels. Groundwater level monitoring with a system of observation wells will be used to demonstrate no impact to area groundwater levels. The wells will be installed prior to construction and monitored throughout below grade garage construction.

Before the GCOD zoning approval can be put in place, the proponent must provide the BPDA and the Trust a letter stamped by a professional engineer registered in Massachusetts that details how it will accomplish what is stated in the document and meets the GCOD requirement for no reduction in groundwater levels on site or on adjoining lots. The groundwater level data should be furnished to the Trust and the Agency on a weekly basis. In the event that groundwater levels drop below the observed pre-construction baseline levels during construction, provisions must be in place to halt construction and dewatering until the cause is found and remedied.

I look forward to continuing to work with the proponent and the Agency to assure that this project can have only positive impacts on area groundwater levels.

Very truly yours,

A handwritten signature in cursive script that reads "Christian S. Simonelli".

Christian Simonelli  
Executive Director

CC: Kathleen Pederson, BPDA  
Maura Zlody, EEOS