May 7th, 2019

Tim Czerwienski, AICP Project Manager
Boston Planning & Development Agency
One City Hall Square
Boston, MA 02201-1007

Subject: 1252-1270 Boylston Street Project Notification Form (PNF) Comments

Dear Mr. Czerwienski:

Thank you for the opportunity to comment on the 1252-1270 Boylston Street Project Notification Form (PNF) which is located in the Fenway. The Boston Groundwater Trust (BGwT) 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. The document states pursuant to the requirements of Article 32 of the Code – and as applicable for sites located within the GCOD – the Project will infiltrate more than 1.00 inch of rainfall across the portion of the Project Site occupied by the proposed improvements.

GCOD requires both the installation of a recharge system to capture one (1) inch of rainfall across the portion of the Project Site and a demonstration that the project cannot cause a reduction in groundwater levels on site or on adjoining lots. The PNF states that based on the proposed scope of the Project, and the anticipated subsurface conditions described above, it is anticipated that the Project will be founded on the existing outwash deposit with a foundation system consisting of a waterproofed structural mat foundation. The Project may include below-grade levels which are benched into the Project Site. Construction of the foundations and below-grade parking structure will require excavation depths anticipated to be up to 30 feet below the Boylston Street ground surface (approx. Elevation +19 BCB). The below-grade levels will be waterproofed. Excavation will be conducted within an engineered lateral earth support system, such as a steel sheet pile wall system, which will be designed to provide excavation support, limit ground movements outside the excavation to protect adjacent facilities, and maintain groundwater levels outside the excavation by creating a groundwater “cutoff” between the excavation and the surrounding area.
The lateral earth support system will be designed to be installed into the clay stratum to isolate the excavation and future below-grade garage from the groundwater table. Due to the depth of excavation, the lateral earth support system will be supported by an internal bracing system or external bracing system such as tiebacks. Pre-excavation will be performed along the building perimeter to remove obstructions prior to installing the excavation support system.

In addition to waterproofing the structure, foundation walls, and elevator pits these precautions should assure that no path is created that will allow groundwater to drain from the upper trapped aquifer to a lower aquifer. Also under no circumstances should underdrains or sumps be part of the foundation design and construction.

The proponent should establish a groundwater level monitoring program prior to, during, and after construction. The purpose of the program is to establish, document, and maintain baseline groundwater water levels throughout the entire construction period. The Project team shall coordinate with the Trust and confirm which observation wells will be monitored and reported. The groundwater level data should be furnished to the Trust and the Agency on a weekly basis.

The document states that prior to the issuance of a building permit, the Proponent will provide the BPDA, BWSC, and Boston Groundwater Trust with a letter detailing the elements of the Project which successfully achieve the critical GCOD requirement of no reduction in groundwater levels onsite or on adjoining lots. The letter will be stamped by a professional engineer, who is registered in Massachusetts.

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,

Christian Simonelli
Executive Director

CC: Kathleen Pederson, BPDA
Maura Zlody, EEOS