

**Boston Water and  
Sewer Commission**



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October 8, 2013

Mr. John FitzGerald  
Senior Project Manager  
Economic Development  
Boston Redevelopment Authority  
One City Hall Square  
Boston, MA 02201-1007

Re: Boston Garden, West End  
Project Notification Form

Dear Mr. FitzGerald:

The Boston Water and Sewer Commission (Commission) has reviewed the Project Notification Form (PNF) for the Boston Garden project in the West End neighborhood of Boston. The Commission previously commented on the Environmental Notification Form (ENF) for this project on June 12, 2013. The Commission restates the ENF comments for the benefit of the Boston Redevelopment Authority. This letter provides the Commission's comments on the PNF.

The Boston Properties Limited Partnership and Boston Garden Development Corporation, the proponent, is proposing to develop a vacant 2.8 acre site at 80 Causeway Street into a mixed use development which will include four levels of retail/flex office space, 497 residential units, an approximately 306 room hotel, and 668,000 square feet of office space. The residential, hotel and office space will be located in three separate buildings, the tallest of which will have a maximum height of 600 feet, and each building will have lobby space at the ground level. The project will add approximately 800 below grade parking spaces. The site is bounded by Causeway Street to the south, the TD Garden to the north, the pedestrian connection from Causeway Street to North Station and the TD Garden to the west and Interstate 93 to the east.

Water demand for the proposed project is 250,000 gallons per day (gpd) and sewage generation is 226,680 gpd.

The Commission owns and maintains the following water mains adjacent to the project site: on Causeway Street, a 12-inch high service water main and a 16-inch low service water main.

The Commission owns and maintains the following sanitary sewer pipes adjacent to the project site: an 18-inch sanitary sewer which turns into a 24-inch sanitary sewer on Causeway Street.



The Commission owns and maintains the following storm drain pipes adjacent to the project site: a 12-inch storm drain which turns into a 36-inch by 60-inch storm drain on Causeway Street.

The Commission's has the following comments regarding the PNF:

#### General

1. All new or relocated water mains, sewers and storm drains must be designed and constructed at Boston Properties Limited Partnership's expense. They must be designed and constructed in conformance with the Commission's design standards, Water Distribution System and Sewer Use Regulations, and Requirements for Site Plans. To assure compliance with the Commission's requirements, the proponent must submit a site plan and a General Service Application to the Commission's Engineering Customer Service Department for review and approval when the design of the new water and wastewater systems and the proposed service connections to those systems are 50 percent complete. The site plan should include the locations of new, relocated and existing water mains, sewers and drains which serve the site, proposed service connections as well as water meter locations.
2. The Department of Environmental Protection, in cooperation with the Massachusetts Water Resources Authority and its member communities, are implementing a coordinated approach to flow control in the MWRA regional wastewater system, particularly the removal of extraneous clean water (e.g., infiltration/ inflow (I/I)) in the system. In this regard, DEP has been routinely requiring proponents proposing to add significant new wastewater flow to assist in the I/I reduction effort to ensure that the additional wastewater flows are offset by the removal of I/I. Currently, DEP is typically using a minimum 4:1 ratio for I/I removal to new wastewater flow added. The Commission supports the DEP/MWRA policy, and will require Boston Properties Limited Partnership to develop a consistent inflow reduction plan. The 4:1 requirement should be addressed at least 90 days prior to activation of water service and will be based on the estimated sewage generation provided on the project site plan. The proponent's I/I mitigation must remove I/I in the vicinity of the proposed project and in the pipes tributary to those used by the project.
3. The design of the project should comply with the City of Boston's Complete Streets Initiative, which requires incorporation of "green infrastructure" into street designs. Green infrastructure includes greenscapes, such as trees, shrubs, grasses and other landscape plantings, as well as rain gardens and vegetative swales, infiltration basins, and paving materials and permeable surfaces. The proponent must develop a maintenance plan for the proposed green infrastructure. For more information on the Complete Streets Initiative see the City's website at <http://bostoncompletestreets.org/>



4. Boston Properties Limited Partnership should be aware that the US Environmental Protection Agency issued a draft Remediation General Permit (RGP) for Groundwater Remediation, Contaminated Construction Dewatering, and Miscellaneous Surface Water Discharges. If groundwater contaminated with petroleum products, for example, is encountered, Boston Properties Limited Partnership will be required to apply for a RGP to cover these discharges.
5. The project sites are located adjacent to Boston's Groundwater Conservation Overlay District (GCOD). The district is intended to promote the restoration of groundwater and reduce the impact of surface runoff. Projects constructed within the GCOD are required to include provisions for retaining stormwater and directing the stormwater to the groundwater table for recharge.
6. Boston Properties Limited Partnership is advised that the Commission will not allow buildings to be constructed over any of its water lines. Also, any plans to build over Commission sewer facilities are subject to review and approval by the Commission. The project must be designed so that access, including vehicular access, to the Commission's water and sewer lines for the purpose of operation and maintenance is not inhibited.
7. It is Boston Properties Limited Partnership's responsibility to evaluate the capacity of the water, sewer and storm drain systems serving the project site to determine if the systems are adequate to meet future project demands. With the site plan, Boston Properties Limited Partnership must include a detailed capacity analysis for the water, sewer and storm drain systems serving the project site, as well as an analysis of the impacts the proposed project will have on the Commission's water, sewer and storm drainage systems.

#### Water

1. Boston Properties Limited Partnership must provide separate estimates of peak and continuous maximum water demand for residential, commercial, industrial, irrigation of landscaped areas, and air-conditioning make-up water for the project with the site plan. Estimates should be based on full-site build-out of the proposed project. Boston Properties Limited Partnership should also provide the methodology used to estimate water demand for the proposed project.
2. Boston Properties Limited Partnership should explore opportunities for implementing water conservation measures in addition to those required by the State Plumbing Code. In particular, Boston Properties Limited Partnership should consider outdoor landscaping which requires minimal use of water to maintain. If Boston Properties Limited Partnership plans to install in-ground sprinkler systems, the Commission recommends



that timers, soil moisture indicators and rainfall sensors be installed. The use of sensor-operated faucets and toilets in common areas of buildings should be considered.

3. Boston Properties Limited Partnership is required to obtain a Hydrant Permit for use of any hydrant during the construction phase of this project. The water used from the hydrant must be metered. Boston Properties Limited Partnership should contact the Commission's Operations Division for information on and to obtain a Hydrant Permit.
4. The Commission is utilizing a Fixed Radio Meter Reading System to obtain water meter readings. For new water meters, the Commission will provide a Meter Transmitter Unit (MTU) and connect the device to the meter. For information regarding the installation of MTUs, Boston Properties Limited Partnership should contact the Commission's Meter Department.

#### Sewage / Drainage

1. In conjunction with the Site Plan and the General Service Application Boston Properties Limited Partnership will be required to submit a Stormwater Pollution Prevention Plan. The plan must:
  - Identify specific best management measures for controlling erosion and preventing the discharge of sediment, contaminated stormwater or construction debris to the Commission's drainage system when construction is underway.
  - Includes a site map which shows, at a minimum, existing drainage patterns and areas used for storage or treatment of contaminated soils, groundwater or stormwater, and the location of major control structures or treatment structures to be utilized during the construction.
  - Specifically identify how the project will comply with the Department of Environmental Protection's Performance Standards for Stormwater Management both during construction and after construction is complete.
2. Developers of projects involving disturbances of land of one acre or more will be required to obtain an NPDES General Permit for Construction from the Environmental Protection Agency and the Massachusetts Department of Environmental Protection. Boston Properties Limited Partnership is responsible for determining if such a permit is required and for obtaining the permit. If such a permit is required, it is required that a copy of the permit and any pollution prevention plan prepared pursuant to the permit be provided to the Commission's Engineering Services Department, prior to the commencement of construction. The pollution prevention plan submitted pursuant to a NPDES Permit may



Requirements for Site Plans, available by contacting the Engineering Services Department, include requirements for separators.

Thank you for the opportunity to comment on this project.

Yours truly,

John P. Sullivan, P.E.  
Chief Engineer

JPS/ah

c: Michael A. Cantalupa, Boston Properties Limited Partnership  
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