



Town of Brookline

Conservation Commission

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January 28, 2014

Chairman Jesse Geller
Zoning Board of Appeals
Brookline Town Hall
333 Washington St.
Brookline, MA 02445

Dear Chairman Geller and members of the Board of Appeals:

The Conservation Commission appreciates the opportunity to review the November 26, 2013 Comprehensive Permit Application for The Residences at South Brookline. We have considered the submittal by Chestnut Hill Realty and offer the following observations regarding the proposed plans.

The site plan appears in large measure to be quite similar to the last iteration. The overall extent of new impervious area remains consistent with the previous design. When this scale of change from pervious to impervious surface takes place there is strong concern regarding stormwater. How the site will handle runoff, whether the structures are sized appropriately, and questions of sustainability are key to ensuring downstream wetland resource areas are not adversely impacted by the proposed development. To that end it should be noted that this site, if not filed as a 40B project, would be subject to the Brookline Stormwater Bylaw, and quite possibly the Brookline Wetlands Bylaw, due to the amount of disruption and the amount of new stormwater runoff generated by the creation of the new impervious areas. It is with this in mind that the Commission undertook its review of the project.

There are three key issues the Commission has identified as areas of concern:

- 1) There is a heavy reliance on the use of pervious surfaces throughout the project proposed as a tool in managing the stormwater. The Commission applauds the use of these materials; however there is ample reason for concern. Pervious surfaces are by their nature high maintenance applications. As the name suggests they function by utilizing a combination of large pore spaces in the aggregate and a high volume of storage capacity under the paved surface to allow for water to infiltrate and be stored rather than surface flow to the stormwater system for catchment and discharge to the wetland resource area. The functionality of that type of system relies on a systematic and sustained approach to keep those pore spaces free and clear of sand, silts, and fines. These materials would prevent the water from infiltrating through the asphalt and cause the pervious aspect of their design to become nonfunctional. The

Commission is not questioning the commitment of the current owner to implement the appropriate measures on the site to ensure the system functions as designs. However, as time marches on and site managers change, and perhaps the property owner changes, there is real concern the maintenance needed to ensure the system works as designed will not be met. It is with these concerns in mind that the Commission has the following specific points regarding design and effectiveness of proposed controls:

- The vigorous execution of the Operation & Maintenance Plan (9.0) is critical in the functioning of the proposed systems given the sensitivity of downstream resources. Long-term rehabilitation in addition to regular O&M should be considered for many of the proposed controls.
 - Underdrains for porous pavement sections should not be located at or near the bottom of the stone reservoir course as shown on the design detail sheets (L801). The effectiveness of the stone reservoir to delay and infiltrate water into the sub-surface is compromised when the underdrain is located in the proposed configuration. It appears that modeling and analysis (section 2.0 of the Stormwater Report) was also conducted using a 2 foot stone bed; however the design detail (L801) shows a 1 foot stone bed for locations not on slopes. Corrections to the details/specifications and or modeling should be made.
 - Additional borings to verify seasonal high groundwater in locations with infiltration practices are recommended given the extent of the facilities and need for these facilities to function well to protect downstream resources.
- 2) Complaints from visitors and visual inspections still indicate occasional sewer contamination in the storm drain which discharges from Gerry Road into D. Blakely Hoar Sanctuary. Despite over a decade of investigation and the implementation of some new infrastructure, the problem persists. The Commission is strongly opposed to introducing any additional flow to this outlet until the matter of this illicit discharge has been resolved. This illicit discharge should be investigated, addressed, and follow up testing should be completed over a least two quarters of the year to confirm there is no further discharge of sewage before any new stormwater discharge is allowed.
- 3) There is an extensive list of waivers requested by the applicant as a component of the 40B application package. In any case, due to the extent of disturbance, the project will be subject to Federal EPA NPDES Construction permitting requirements. In addition, there are still a substantial number of applicable permits and standards the Commission feels may be applicable to this project. These permits and standards include:
- The Massachusetts Stormwater Performance Standards, as prescribed by state regulations promulgated under the authority of the Massachusetts Clean Waters Act, MGL Ch. 21, ss 26-53 and the Wetlands Protection Act, Ch. 131, s. 40, and by reference the final TMDLs for the upper Charles River Watershed (i.e., 65% reduction of phosphorus, and compliance with bacteria standards). The presence of the TMDL was not mentioned or addressed under the Massachusetts Stormwater Performance Standard 4.
 - The Massachusetts Clean Waters Act (Ch. 21, ss. 26-53).
 - The conditions in 314 CMR 4.00 - Massachusetts Surface Water Quality Standards.

- The conditions in 314 CMR 3.00 - Massachusetts Surface Water Discharge Permit Program.
- The Wetlands Protection Act (Ch. 131 s. 40) and its regulations, 310 CMR 10.00.
- The Massachusetts Endangered Species Act (MESA), MGL Ch. 313A and regulations at 321 CMR 10.00.
- The Massachusetts Environmental Policy Act (MEPA).

In addition, the Massachusetts Department of Environmental Protection (DEP) may require some or all of the following:

- A Stormwater Pollution Prevention Plan (SWPPP), which the permittee is required to submit to the Department within 14 days of such request. The Department may conduct an inspection of any facility covered by this permit to ensure compliance with state law requirements, including state water quality standards. The Department may enforce its certification conditions.
- Performance of water quality monitoring during the permit term if monitoring is necessary for the protection of public health or the environment as designated under the authority at 314 CMR 3.00.
- Measurable verification of the effectiveness of Best Management Practices (BMPs) and other control measures used in the stormwater management program, including water quality monitoring.

Thank you for the opportunity to review and comment on this submittal. Please do not hesitate to contact us with any questions or concerns you may have regarding this matter.

Sincerely,



Kate Bowditch, Chair

Cc: Mel Kleckner, Town Administrator