CITY OF NEWTON Department of Public Works ENGINEERING DIVISION

MEMORANDUM

To: Jennifer Steel, Senior Environmental Planner

From: John Daghlian, Associate City Engineer

Re: Notice of Intent – 528 Boylston Street

Date: July 30, 2024

CC: Lou Taverna, PE City Engineer

In reference to the above site, I have the following comments for a plan entitled:

Notice of Intent Application For Toll Brothers Inc. 528 Boylston Street Newton, MA Prepared by: Bohler Revised: 4-1-2024

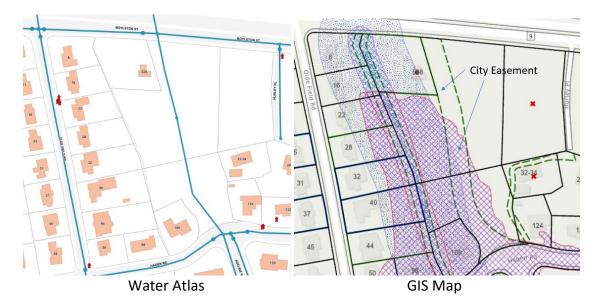
Executive Summary:

This permit application entails demolition of existing buildings and construction of a proposed 6-story apartment building and three levels of subterrain parking & surface parking on three lots totaling 5.82 acres [253,519.2 square foot]. The overall site has 322-feet of frontage along the north on Boylston Street (a MassDOT jurisdictional road), bound on the east by Hurley Place, to the south by residential homes, and to the west by Paul Brook a perennial stream (see plan below).



If this permit is approved an Approval Not Required [ANR] plan will be required in accordance with Massachusetts General Laws Chapter 41 Section 81P requiring the separate lots to be combined into one lot.

The submitted site plan shows a 12-inch City water main that traverses the property from north to south direction. An existing 45-ft wide easement formerly known as Adeline Road (a paper street) the proposed site plan does not indicate that there is a City Easement as shown on the GIS map.

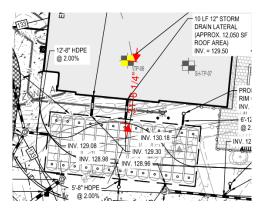


Drainage:

Currently the site has little to no stormwater controls. The engineer of record has designed a stormwater collection and infiltration system in accordance with the DEP & the DPW

Stormwater Management Regulations for the City's 100-year storm event of 8.78-inches over a 24-hour period.

The proposed system will include one rain garden and three (3) subsurface infiltration basins. These infiltration system will receive stormwater runoff from the driveway and roof of the new building and infiltrate the collected volume. The City requires test pits to be performed within 25-feet of each infiltration system, the proposed infiltration system #P2 was just over 31-feet, prior to any Building Permit application the DPW will require a test pit within this required limit.



The hydrology report including Total Suspend Solids (TSS) & Phosphorus reduction calculations for the proposed infiltration systems which will enhance storm water quality and reduce stormwater runoff from the site.

The following is a breakdown of Activities with the jurisdiction of the Conservation Commission

Activity Within the Paul Brook RFA	Impacts to 0-100 ft Inner RFA (sf)	Impacts to 100-200 ft Outer RFA (sf)	Total RFA (sf)
Impacts to Natural Area: Vegetation clearing for drain lines, outlet protection, pedestrian path, retaining walls, and access drive.	0	3,332	3,332
Impacts to Natural Area: Proposed Revegetation	2,524	6,163	8,687
Total Impacts to Natural RFA	2,524	9,495	12,019
Impacts to Disturbed Area	0	105	105
Impacts to Degraded Area: No Change to Existing Characteristics.	677	16,892	17,569
Revegetated Disturbed Area	333	1,682	2,015
Revegetated Degraded Area (Impact Offset): Degraded Area Converted into Vegetation	11,071	4,251	15,322
Total Impacts to Previously Disturbed or Degraded RFA	12,081	22,930	35,011
Total Impacts	14,605	32,425	47,030

Table 1 – Summary	of Estimated Riverfront Impacts

Note: Excludes approximately 511 sf of existing disturbed riverfront area located outside the proposed limit of work.

The Engineering Division concours with the findings of the Alternative Analysis. A significant portion of the site is currently impervious, the proposed redevelopment is to restore these areas to a naturally vegetated area. This will enhance stormwater quality and enhance local wildlife habitat. Although on-site restoration is not required since it does not exceed the standard of 310 CMR 10.58(5) (c), (d) or (e) the applicant is proposing restoration of more than 15K square feet of previously degraded area, and approximately 25K square feet of additional mitigation in areas of the Riverfront. Paul Brook that is a concrete lined channel is in need of cleaning of fallen debris, overgrown plants, and silts the limits of the channel should be part of the restoration plan.



Paul Brook looking south

Compensatory Flood storage:

As a result of the proposed project within the Bordering Land Subjected to flooding, the design results in approximately 3,279 cubic feet of fill within the floodplain, to offset this loss there will be 9,304 cubic feet of storge added resulting a net increase of onsite flood storage of (+6,025 cubic feet). This compensatory volume shall have an unrestricted hydraulic connection to the same waterway (Paul Brook). The plan sheets for the Compensatory flood storge for elevations from 124' - 127.5' need to be stamped by a Professional Engineer as do the sheets labeled Existing Disturbance within the 200-ft Riverfront Area EX-1 & Proposed Disturbance within the 200-ft Riverfront Area EX-2.

<u>O&M Plan</u>:

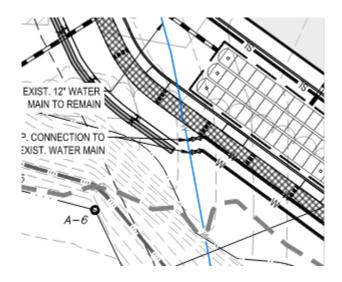
The proposed long-term Operations & Maintenance (O&M) plan is acceptable for the design intent, should this permit be approved the O&M plan must be recorded at the Middlesex Registry of Deeds as a stand-alone document prior to the issuance of a Building Permit and adopted by the applicant and follow annual reporting requirements to the DPW. The budget appears to be in line with current cost associated with retaining professional services & needed equipment. The Operation & Maintenance Plan EX-1 (draft dated 4-1-'24) was not stamped by a Professional Engineer.

The final O&M should also add the following statement at the beginning of the plan: "Annual inspection logs shall be submitted to the DPW Engineering Division as required to maintain certification of compliance under Newton's NPDES MS4 Permit."

As the site disturbance will be greater than 1-acre a Stormwater Pollution Prevention Plan (SWPPP) will be required prior to any construction, in addition to a NPDES Construction General Permit.

Additional Comments:

- The NOI did not address the potential need for dewatering when excavating for the three-level underground parking garage. This should be addressed within a construction management plan prior to applying for a Building Permit. The plan should indicate how water will be extracted, filtered and then discharge onsite so that the pumped water does not affect Paul Brook or any of the downstream abutters.
- 2. The proposed stormwater infiltration system (3P) located within the driveway is within +/-4 feet of the existing City water main. The engineer of record needs to ensure that the water main will be properly shored and prevent any undermining of the active water main during excavation of the proposed foundation of the six-story building and three story subterrain parking levels the contractor of record shall submit construction means & methods as how the water main will be protected and stable while remining operational and under pressure.



3. Additionally, the footprint of the proposed building and associated utilities appears to be within the City's easement, the Registered Professional Land Surveyor of record

should identify the City easement limits on a land plan and verify the proposed placement of the building's footprint & utilities to ensure no that there is no encroachment. If an encroachment is evident for the building footprint or utilities a License Agreement will be required.

4. Ledge outcrop is evident along the eastern property line which may indicate blasting and or hammering may be required, with on-site rock crushing operations. Further Geotechnical investigation should be performed to obtain an accurate understanding and limits of subterranean ledge specifically within the building's footprint. Any potential blasting on site needs to ensure no damage is ensured to the existing water main. A blasting permit will be needed from the Newton Fire Department.

Construction Management:

- A construction management plan is needed for this project. At a minimum, it must address the following: staging site for construction materials and equipment, parking for construction workers vehicles, phasing of the project with anticipated completion dates and milestones, safety precautions, emergency contact personnel of the general contractor. It shall also address anticipated dewatering during construction, potential blasting, site safety & stability, siltation & dust control and noise impact to abutters.
- 2. Stabilized driveway construction entrance(s) will be required for the duration of the construction which will provide a truck wash to prevent tracking of mud and silt onto City streets.
- 3. Catch basins within and downstream of the construction zone will be required to have siltation control installed for the duration of the project and must be identified on the site plan.

<u>Environmental</u>:

- 1. Has a 21E Investigation and report been performed on the site, if so, copies of the report should be submitted to the Newton Board of Health and Engineering Division.
- 2. Are there any existing underground oil or fuel tanks? Have they been removed, if they have been, evidence of the proper removal should be submitted to the Newton Fire Department and the Board of Health.

<u>General:</u>

- 1. All trench excavation shall comply with Massachusetts General Law Chapter 82A, Trench Excavation Safety Requirements, and OSHA Standards to protect the general public from unauthorized access to unattended trenches or excavations. Trench Excavation Permit is required prior to any construction. This applies to all trenches on public and private property. *This note shall be incorporated onto the final plans.*
- 2. All tree removal shall comply with the City's Tree Ordinance.
- 3. The contractor of record is responsible for contacting the Engineering Division and scheduling an appointment 48-hours prior to the date when the utilities will be made available for an inspection of water services, sewer services and drainage system installation. The utility in question shall be fully exposed for the Inspector to view, backfilling shall only take place when the City Engineer's Inspector has given their approval. *This note shall be incorporated onto the final plans.*
- 4. The applicant shall apply for a Building Permit with the Inspectional Services Department prior to ANY construction.
- 5. Before requesting a Certificate of Occupancy, an As Built plan shall be submitted to the Engineering Division in both digital and paper format. The plan shall show all utilities and final grades, any easements and improvements and limits of restoration. The plan shall include profiles of the various new utilities including but not limited to rim & invert elevations (City of Newton Datum), slopes of pipes, pipe materials, and swing ties from permanent building corners. The as built shall be stamped by both a Massachusetts Registered Professional Engineer and Registered Professional Land Surveyor. Once the As built plan is received the Engineering Division shall perform a final site inspection and then make a determination to issue a Certificate of Occupancy. *This note shall be incorporated onto the final plans*.
- 6. All site work including trench restoration, sidewalk, curb, apron and loam border (where applicable) shall be completed before a Certificate of Occupancy is issued. *This note shall be incorporated onto the final plans.*
- 7. The contractor of record shall contact the Newton Police Department 48-hours in advanced and arrange for Police Detail to help residents and commuters navigate around the construction zone.
- 8. If any changes from the final approved design plan that are required due to unforeseen site conditions, the contractor of record shall contact the design engineer of record and

submit revised design and stamped full scale plans for review and approval prior to continuing with construction.

- 9. The applicant will have to obtain MassDOT permits for improvements to the existing sidewalk along Boylston Street and modification of the driveway apron in accordance with Ordinance NO. B-42.
- 10. A preconstruction meeting should be scheduled with the DPW and prior to any construction activity.

Note: If the plans are updated it is the responsibility of the applicant to provide all City Departments [ISD, Conservation Commission, Planning and Engineering] involved in the permitting and approval process with complete and consistent plans.

If you have any questions or concerns, please feel free to contact me at 617-796-1023.