

CITY OF NEWTON
Department of Public Works
ENGINEERING DIVISION

MEMORANDUM

To: Council Rick Lipof, Land Use Committee Chairman

From: John Daghlian, Associate City Engineer

Re: Special Permit – 103 Cabot Street

Date: July 24, 2020

CC: Barney Heath, Director of Planning
Jennifer Caira, Deputy Director
Lou Taverna, PE City Engineer
Nadia Khan, Committee Clerk
Neil Cronin, Chief Planner
Michael Gleba, Sr. Planner

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

Proposed Site Plan
103 Cabot Street

Prepared by: Amoskeag Engineering Consultants PLLC

Dated: June 6, 2020

Executive Summary:

This permit entails a proposed 26'x26' garage in the back yard of this lot having 12,960 square feet (0.29 acre). The site is bound on the north, east, & west by residential homes and has approximately 102.77 feet of frontage. The property has high point at elevation 95-feet near the easterly property line and slopes towards the west to a low elevation of 84-feet. The plan indicates some stormwater improvements; however, a drainage report was not provided for evaluation. The design includes the removal of asphalt driveway and replacement with a pervious paver system, however the DPW *does not* give credit for pervious pavers as they seldom properly maintained to have a long term "pervious" attribute. A detailed drainage report is needed the proposed infiltration systems shall have a 2-foot vertical separation between the bottom of the system and the seasonal high estimated groundwater elevation.

A retaining wall is also proposed along the north & west side of the pervious paver system construction details of this wall are needed.

Drainage:

1. A Pre & Post Construction drainage analysis is required. All stormwater runoff from the site shall be captured on-site and infiltrated in accordance with the Massachusetts Department of Environmental Protection standards and the City of Newton Department of Public Works policy. This policy states that stormwater runoff shall be retained from the 100-year storm event of 8.78-inches over a 24-hour period and shall be infiltrated to the maximum practicable extent. Pre & Post watershed maps (at a proper scale that is legible) are required that delineate control points and limits of the sub-basins. On-site soil evaluation is required to determine the seasonal high groundwater elevation, soil types and to identify any and all unsuitable soils (such as ledge, clay, peat, fill and others). On site soil testing that will include test pit(s) within 25 -feet of each proposed system and percolation test(s) must be schedule and witnessed by a representative of the Engineering Division. Soil logs shall be submitted on the site plan or drainage report and shall be certified by a Massachusetts Licensed Soil Evaluator and/or Professional Civil Engineer.
2. An Operations and Maintenance (O&M) plan for the long-term maintenance of the proposed stormwater management facilities needs to be drafted and submitted for review. Once approved the O&M must be adopted by the applicant/property owner, incorporated into the deeds; and recorded at the Middlesex Registry of Deeds. A copy of the recording instrument shall be submitted to the Engineering Division.
3. It is imperative to note that the ownership, operation, and maintenance of the proposed drainage system and all appurtenances including but not limited to the drywells, catch basins, trench drains, and pipe(s) are the sole responsibility of the property owner(s).
4. The infiltration systems need to have filter fabric over the entire system, then a 3" layer of peastone and finally covered with filter fabric.

General:

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 drainage system installation. The system(s) 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. 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.

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.