CITY OF NEWTON Department of Public Works ENGINEERING DIVISION

MEMORANDUM

To: Council Marc Laredo, Land Use Committee Chairman

From: John Daghlian, Associate City Engineer

Re: Special Permit – 386-394 Watertown Street

Date: July 18, 2017

CC: Lou Taverna, PE City Engineer

Nadia Khan, Committee Clerk

Neil Cronin, Sr. Planner

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

Topographic Site Plan
Newton, MA
Showing Proposed Conditions at #386-394 Watertown Street
Prepared by: VTP Associates Inc.
Dated: June 12, 2017

Executive Summary:

This application entails the demolition of single story building and detached garage/storage building, and the construction of 9 unit residential building & commercial space on two lots totaling approximately 9,542 square foot (0.21 acre).



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The site is relatively flat and is approximately 69% impervious surfaces (buildings & pavement). The engineer of record has designed a stormwater collection and infiltration system to substantially reduce runoff from the site, and in conformance to the Department of Environmental Protection (DEP) and DPW Stormwater Policy. An operations and maintenance plan is needed to address long-term maintenance for the proposed infiltration system.

If the special permit is approved an Approval Not Required (ANR) plan will be needed in accordance to Massachusetts General Laws Chapter 41 Section 81P requiring the two separate lots be combined into one lot.

A turning template plan is needed to demonstrate the maneuverability of vehicles entering, parking and exiting the proposed covered parking lot; it show be a separate plan showing the support columns from the plaza above and building's structural supports that will be within the footprint of the parking area. Since the parking is on grade but beneath the plaza and residential units above, the Fire Department may require a fire suppression system for the covered parking spaces.

Egress from the site may be difficult due to limited sight distance of the existing buildings; for pedestrian safety, it may be prudent to install a warning light & audible alarm to warn pedestrians when vehicles are exiting the site.



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As a public benefit the sidewalk along the entire frontage should be updated to current standards.

The engineer of record needs to clarify how recycling and trash will be removed from the site since the proposed location of dumpster is beneath the building. Finally how and where will US mail be delivered, will it be a centralized mail box for the entire building?

Construction Management:

- 1. A construction management plan is needed for this project. At a minimum, it must address the following: staging site for construction equipment, construction materials, parking of construction worker's vehicles, phasing of the project with anticipated completion dates and milestones, safety precautions, emergency contact personnel of contractor. It shall also address any anticipated dewatering during construction, site safety & stability, and impact to abutting properties.
- 2. Stabilized driveway entrances are needed during construction which will provide a tire wash and mud removal to ensure City streets are kept clean.

Drainage:

- 1. An Operations and Maintenance (O&M) plan for Stormwater Management Facilities needs to drafted and submitted for review. Once approved the O&M must be adopted by applicant, 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.
- 2. 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, and pipes are the sole responsibility of the property owner(s).

Environmental:

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

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Sewer:

- 1. The existing water & sewer services to the building shall be cut and capped at the main and be completely removed from the main and the site then properly back filled. The Engineering Division must inspect this work; failure to having this work inspected may result in the delay of issuance of the Utility Connection Permit.
- 2. Watertown Street is a concrete roadway, restoration of the utility trenches shall be reinforced concrete as originally designed, with two-way epoxy coated rebar; the slab shall be cut back to either a 1/3 or half of the slab depending upon the alignment of the utility trench in relation with the slab(s).
- 3. With the exception of natural gas service(s), all utility trenches with the right of way shall be backfilled with Control Density Fill (CDF) Excavatable Type I-E, detail is available in the City of Newton Construction Standards Detail Book.
- 4. All new sewer service and/or structures shall be pressure tested or videotaped after final installation is complete. Method of final inspection shall be determined solely by the construction inspector from the City Engineering Division. All sewer manholes shall be vacuum tested in accordance to the City's Construction Standards & Specifications. The sewer service will NOT be accepted until one of the two methods stated above is completed. All testing MUST be witnessed by a representative of the Engineering Division. A Certificate of Occupancy will not be recommended until this test is completed and a written report is received by the City Engineer. This note must be added to the final approved plans.
- 5. All sewer manholes shall be vacuum tested in accordance to the City's Construction Standards & Specifications. The sewer service will NOT be accepted until one of the two methods stated above is completed. All testing MUST be witnessed by a representative of the Engineering Division. A Certificate of Occupancy will not be recommended until this test is completed and a written report is received by the City Engineer.

Water:

1. Fire flow testing is required for the proposed fire suppression system. The applicant must coordinate this test with both the Newton Fire Department and the Utilities Division; representatives of each department shall witness the testing,

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- test results shall be submitted in a write report. Hydraulic calculation shall be submitted to the Newton Fire Department for approval.
- 2. For water quality issues a fire hydrant will be required at the end of the proposed water main. This hydrant will be utilized for flushing out the main as required.
- 3. All water connections shall be chlorinated & pressure tested in accordance to AWWA and the City of Newton Construction Standards and Specifications prior to opening the connection to existing pipes.
- 4. Approval of the final configuration of the water service(s) shall be determined by the Utilities Division, the engineer of record should submit a plan to the Director of Utilities for approval

General:

- 1. All trench excavation contractors shall comply with Massachusetts General Laws Chapter 82A, Trench Excavation Safety Requirements, to protect the general public from unauthorized access to unattended trenches. Trench Excavation Permit required. This applies to all trenches on public and private property. *This note shall be incorporated onto the plans*
- 2. All tree removal shall comply with the City's Tree Ordinance.
- 3. The contractor 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 service, and drainage system installation. The utility is question shall be fully exposed for the inspector to view; backfilling shall only take place when the City's Inspector has given their approval. *This note should be incorporated onto the plans*
- 4. The applicant will have to apply for Street Opening, Sidewalk Crossing, and Utilities Connecting permits with the Department of Public Works prior to any construction. *This note must be incorporated onto the site plan*.
- 5. The applicant will have to apply for a Building Permits with the Department of Inspectional Service prior to any construction.
- 6. Prior to Occupancy Permit being issued, an As-Built Plan shall be submitted to the Engineering Division in both digital format and in hard copy. The plan should show all utilities and final grades, any easements and final grading, improvements and limits of restoration work. The plan shall also include profiles of the various new utilities, indicating rim & invert elevations, slopes of pipes, pipe material,

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and swing ties from permanent building corners. This note must be incorporated onto the final contract plans.

7. All site work including trench restoration must being completed before a Certificate of Occupancy is issued. *This note must be incorporated onto the site plan*.

Note: If the plans are updated it is the responsibility of the Applicant to provide all City Departments [Conservation Commission, ISD, 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 @ 617-796-1023.

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