CITY OF NEWTON ENGINEERING DIVISION

MEMORANDUM

To: Alderman Ted Hess-Mahan, Land Use Committee Chairman

From: John Daghlian, Associate City Engineer

Re: Special Permit – 22-25 Beecher Terrace

Date: October 4, 2013

CC: Lou Taverna, PE City Engineer Linda Finucane, Associate City Clerk Alexandria Ananth, Sr. Planner

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

Proposed 4 Units 22 & 26 Beecher Terrace Newton, MA Prepared by: Greater Boston Surveying & Engineering Dated: March 25, 2013 Revised: October 4, 2013

Executive Summary:

The proposed 4 unit development is situated on two separate lots, if this Special Permit is approved, an Approval Not Required (ANR) Plan must be submitted to the Board of Survey combining the two lots into one lot under *Subdivision Control Law Massachusetts General Law Chapter 41 Sec. 81-P.*

As a Public benefit, the two concrete aprons that are totally destroyed at the Beecher Place & Beecher Terrace intersections should be replaced.

Drainage:

- 1. All infiltration systems shall have an impervious barrier on the downstream side of the system.
- 2. There is a proposed overflow pipe from the driveway at unit # 1 to the drain manhole in Beecher Terrace. The engineer of record needs to demonstrate why the overflow is warranted. If the overflow is allowed then prior to approval of the Building Permit a Closed Circuit Television (CCTV) inspection shall be performed and witnessed by

the Engineering Division. The applicant shall retain a contractor that specializes in CCTV inspection. The applicant shall contact the Engineering Division 48 hours in advance to schedule an appointment. At the end of the inspection the video or CD shall be given to the inspector. Furthermore, upon completion of the connection to the drainage system a Post – Construction video inspection shall also take place and witnessed as described above. This is required regardless of the connection point, the intent is to ensure that there are no downstream blockages or damaged pipe so that the contractor of record is not held accountable for preexisting conditions.

- 3. The proposed dry well details needs a 3" thick layer of peastone on top of the system, and then covered over with filter fabric.
- 4. 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 Homeowners Association documentation; and recorded at the Middlesex Registry of Deeds. A copy of the recording instrument shall be submitted to the Engineering Division.
- 5. In order to properly inspect and maintain the on-site drainage systems, \$10,000.00 should be provided to the Homeowners Association specifically earmarked for this purpose.
- 6. It is imperative to note that the ownership, operation, and maintenance of the proposed drainage system and all apparentness including but not limited to the drywells, catch basins, and pipes are the sole responsibility of the Homeowners Association.

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.

Sewer:

- 1. The profile does not indicate the slopes of the proposed or existing pipes this needs to be added. The minimum slope for a service is 2.0%, with a maximum of 10%.
- 2. The existing water & sewer services to the building shall be cut and capped at the main and be completely removed from the site and 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.
- **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 video taped 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.
- 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.
- 6. The sewer brought onto the site shall be considered a sewer service and NOT a main extension.

Water:

- 1. 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.
- 2. The hydrant detail is missing a dimension of 18" minimum clearance for the nozzle connection, this needs to be updated.
- 3. 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

<u>General</u>:

- 1. As of January 1, 2009, 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.
- 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.
- **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.
- 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.
- 7. All site work must be completed before a Certificate of Occupancy can be issued.

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.