

CITY OF NEWTON
Department of Public Works
ENGINEERING DIVISION

MEMORANDUM

To: Alderman Mark Laredo, Land Use Committee Chairman

From: John Daghlian, Associate City Engineer

Re: Special Permit – Washington Place

Date: June 30, 2016

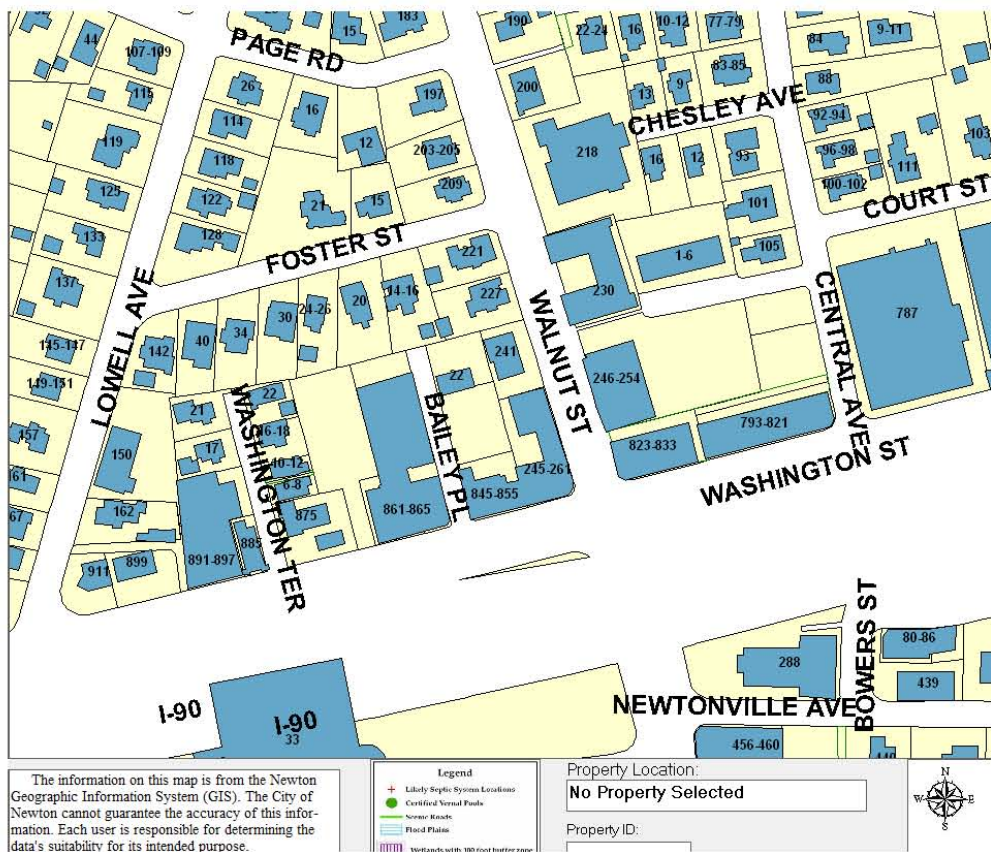
CC: James Mcgonagle, Commissioner DPW
Ted Jerdee, Director of Utilities
Lou Taverna, PE City Engineer
Nadia Khan, Committee Clerk
Alexandria Ananth, Chief Planner
Michael Gleba, Sr. Planner

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

*Washington Place
Washington Street at Walnut Street
Newton, MA
Prepared by: Bohler Engineering
Dated: 5-5-'16*

Executive Summary:

This application entails the demolition of the block of buildings from the corner of Washington Street at Walnut Street to the existing Sunoco gas station at #875 Washington Street, and towards the north to #241 Walnut Street, and residential dwellings along the easterly side of Washington Terrace [See map below].



The site is relatively flat and is approximately 98% impervious surfaces (buildings & pavement). The engineer of record has designed a stormwater collection and infiltration system to substantially reduce runoff from the site, in conformance with the Department of Environmental Protection (DEP) and DPW Stormwater Policy. The existing site has little to no stormwater water quality control; the proposed improvements will address and meet or exceed the DEP's Stormwater Standards that include groundwater recharging & proper operations and maintenance of stormwater facilities. Some of the details need to be fined tuned to meet the City standards and requirements.

The applicant wishes to construct 3 mixed use buildings that include a retail component on the ground level, followed up with residential units on the 2nd to 5th floor levels. Surface parking will be provided in back of the proposed buildings, and one level of underground parking is proposed via an access ramp along a driveway off Walnut Street. As part of the proposed development, Bailey Place (a private way off Washington Street) will be eliminated to allow the new building placement. Two curb cuts off Washington Terrace will allow for a looped circulation of the proposed parking lot.

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

The DPW and Planning Department are working with the neighborhood on traffic improvements within vicinity of this project; we ask that the developers work with the City to enhance the final design of this intersection. Some of the improvements that are being considered are: consolidation of parking meters, bus stop enhancements, ADA enhancements to curb cuts and sidewalks, and upgrading traffic and pedestrian crossing signals.

I&I Contribution:

This project site is within the Sanitary Sewer Basin “B” which has on going Infiltration & Inflow (I&I) issues, if this project is to be approved the DPW will request an 8:1 reduction contribution from the developer to be applied towards on-going I & I removal, based on Title 5 flow rates and type of use as proposed, the following is a breakdown based on Title 5 flow rates.

Type of Use	Square Footage	Per 1,000	Flow Rate Gal/Day	# of Seats	# Bedrooms	Total Daily Flow
Commercial	32,120	32.12	75	-		2,409
Restaurant	7,625	7.63	35	177		267
Office Space	2,150	2.15	75			161
Residential			110		245	26,950

Total for Project **29,787** Gallon per day

Requested Contribution calculation:

$\$8.40/\text{Gallon (transmission \& treatment cost)} \times 8 \times 29,787 \text{ Gallon} =$ **\\$2,001,695**

Regardless of this project the water main within Walnut Street is scheduled for cleaning and relining as part of the City’s ongoing water works improvements.

Construction Management:

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. Stabilized driveway entrances are needed during construction which will provide a tire wash and mud removal to ensure City streets are kept clean.

Prior to applying for a Building Permit the following items must be addressed:

Drainage:

1. An on-site soil evaluation needs to be performed to obtain the seasonal high groundwater elevation, percolation rate in accordance to Title V. This information must be submitted with the drainage study. The locations of these tests need to be shown on the site plan and must be performed within 25-feet of a proposed system.
2. When a connection to the City's drainage system is proposed, 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. 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).
4. Due to the large number of infiltration units involved with the stormwater system, and proximity to the property line, two separate rows of impervious barriers will be required to encapsulate the on-site system.

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.
3. Since the total site disturbance is over an acre, a Phase II General Construction (NPDES) Permit will need to be filed with DEP & EPA. A Stormwater Pollution Prevention Plan (SWPPP) will need to be developed.

Sewer:

1. A detailed profile is needed which shows the existing water main, proposed water service(s), sewer main and proposed sewer service(s) with the slopes and inverts labeled to ensure that there are no conflicts between the sewer services and the water service. The minimum slope for a service is 2.0%, with a maximum of 10%. Pipe material shall be 6" diameter SDR 35 PVC pipe within 10' of the dwelling then 4" pipe per Massachusetts State Plumbing Code. In order to verify the slopes and inverts of the proposed service connection, two manholes of the existing sanitary sewer system need to be identified on the plan with rim & invert elevations. The crown of the service connection & the sewer man need to match.
2. 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. *This note must be added to the final approved plans.*
3. Use City of Newton Details in lieu of the details submitted they are in PDF format on the City's website.
4. 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. *This note must be added to the final approved plans.*
5. 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.*
6. 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.*

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, test results shall be submitted in a write report. Hydraulic calculation shall be submitted to the Newton Fire Department for approval.
2. 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. *This note must be added to the final approved plans.*
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.
4. Dedicated domestic and fire suppression services connections are required for the units.

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. Due to the total square footage of the building, a scale massing model will be needed.
4. 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.*
5. 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.*
6. The applicant will have to apply for a Building Permits with the Department of Inspectional Service prior to any construction.

7. Prior to Occupancy permit 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, and swing ties from permanent building corners. *This note must be incorporated onto the final contract plans.*
8. 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.