

CITY OF NEWTON
Department of Public Works
ENGINEERING DIVISION

MEMORANDUM

To: Council Gregory Schwartz, Land Use Committee Chairman

From: John Daghlian, Associate City Engineer

Re: Special Permit – #189-198 Adams St & 19 Quirk Court

Date: June 8, 2018

CC: Barney Heath, Director of Planning
Jennifer Caira, Chief Planner
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
Showing Proposed Conditions at #189-193 Adams Street & 19 Quirk Court
Prepared By: VTP Associates Inc.
Dated: February 23, 2018
Revised: April 23, 2018*

Executive Summary:

This application entails the demolition of an existing two-half story building, and auxiliary buildings on two lots totaling 19,349 sq. ft. [0.44ac]. 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.

The current use is a soccer club, landscape company, storage yard, and storage garages. The new development is a multi-family residence consisting of 18-units on four stories. The site has access on Adams Street (which was reconstructed last year), and off Quirk Court & a 15' wide passageway along the northeast property line. Due to limited sight

distance I would recommend that the access on Quirk Court be restricted to one-way into the site.

The site is relatively flat, having a high point at elevation 53-feet near the southern property line and gently slopes towards the northeast at elevation 51-feet. The engineer has designed a stormwater collection system to capture and infiltrate all the runoff from the City's 100-year design storm of 8.87 –inches over a 24-hur period; one soil evaluation (test pit) was provided with the Stormwater report that confirms the soil map and design assumption, however should this permit be approved an additional soil test will be required for the system located beneath the ramp to the underground garage. An impervious barrier around its perimeter will be required for the large infiltration system proposed within the parking lot. The system will improve the overall stormwater quality and significantly reduce surface runoff from the site to the abutting properties and Adams Street. Clarification is needed however for the proposed pump chamber; the site plan is a bit convoluted. It appears that the proposed trench drain is within the garage; therefore it must be connected to the sanitary sewer via an MDC gas trap.

The Operations & Maintenance plan for the proposed stormwater improvements is acceptable, however; the O&M plan needs to add sweeping of the parking lot and ramp into a regular schedule to ensure long-term maintenance and performance of the system. Once approved the O&M shall be recorded with the Middlesex Registry of Deeds and incorporated into the condominium or Homeowners Association.

Since the site had various landscape equipment and vehicles a concern is contained soils, has a 21E environmental investigation been performed, if so a full report should be submitted to the Board of Health and Engineering. How will trash & recycling be addressed for this project? Snow storage areas should be identified on the plans.

The engineer of record has demonstrated via turning template that an aerial ladder fire truck can turn onto the property and access the rear portion of the building, but will eventually have to make a 3-point turn to exit. The engineer of record needs to demonstrate that automobiles can safely maneuver within the parking garage.

Finally as Adams Street was reconstructed last year, pavement restoration shall be from curb line to curb line milled & overlaid for the entire frontage. Any sidewalk & curb damaged shall be replaced in kind.

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. The Operations and Maintenance (O&M) plan for Stormwater Management Facilities needs to be updated to reflect the sweeping requirements from above 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 to 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.

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 have this work inspected may result in the delay of issuance of the Utility Connection Permit.
2. 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.

3. 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.***
4. 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, 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.
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

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 in 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, 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 be 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.