# CITY OF NEWTON Department of Public Works ENGINEERING DIVISION

### MEMORANDUM

To: Barney Heath, Director of Planning

From: John Daghlian, Associate City Engineer

Re: Administrative Site Plan Review – Newton Center for Active Living

Date: July 6, 2022

CC: Lou Taverna, P.E., City Engineer Carol Moore, City Clerk Jennifer Ciara, Deputy Director of Planner Katie Whewell, Chief Planner

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

Newton Center for Active Living 345 Walnut Street Prepared by: Pare Corporation Dated; June 15, 2022

#### *Executive Summary*:

This application entails the demolition of the existing Senior Center building and site elements, and construction of a new ~33,000 square foot facility to include a dining hall, multipurpose rooms, gymnasium, support spaces, lobby, art room, library, lounges, and a lobby. The existing site contains approximately 12,000 square feet of impervious surfaces with no stormwater management. The proposed design will capture and infiltrate 100% of the stormwater generated from the construction with an overflow connection to the Highland Avenue stormwater system. A new 31-stall parking lot will be constructed on the west side of the parcel with four ADA compliant stalls. Trees plantings, planting beds, terraces, and new pedestrian circulation are included in the proposed plans.

Soil investigation is needed in concert with the removal of the existing underground fuel storage tank. Based on the age of the system, the project should plan for the potential of remediation action items.

#### <u>Stormwater</u>:

The engineer of record indicates that the design encompasses a stormwater collection and infiltration system in accordance with the Massachusetts Department of Environmental Protection (DEP) Stormwater Management Standards and the Department of Public Works to mitigate any increase in rate for the [100-year storm event of 8.78 -inches]; however, calculations are needed to demonstrate that the reduction is for both volume as well the rate of runoff. The stormwater report does not have a complete breakdown for the City's design storm event of 8.78 inches over a 24-hour period pre & post conditions. A complete Hydrocad report will be required prior to any application for a Building Permit project site that should include calculations for reduction in phosphorus and total suspended solids. The system has an overflow connection to the City's drainage system within Highland Avenue. Any overflow connection to existing drainage system has to have a Pre & post Closed Circuit Television CCTV inspection witnessed by the DPW Construction Inspector, 48 hours prior notice is required.

The proposed Operations and Maintenance (O&M) Plan is acceptable for the design intent, it is imperative that the property owner [City of Newton] comply with the details of the O&M to ensure long-term performance and design intent. The O&M plan should be sent to the Utilities Division who would be the custodian of the required maintenance. I would recommend that the engineer of record provide the oversight of the scheduled maintenance and provide an annual report to the DPW.

#### Water Services:

- 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.

#### <u>Sewer</u>:

1. The sewer connection only shows a partial upgrade, the sewer service shall be updated from the main to the new building. A detailed profile is needed to show the proposed sewer service

with existing underground utilities within ten feet of the proposed alignment. The minimum slope for a service connection is 2% not 1% as proposed. A second sewer manhole needs to be identified on the plan to be able to verify the proposed invert and slope of the service connection. The profile shall clear indicate the proposed 6" SDR-35 PCV pipe from the new building to the main and associated details for tee-wye connection.

- 2. The contractor needs to notify the Engineering Division 48-hours in advance and schedule an appointment to have the drainage system, water & sewer services inspected. The system and utilities must be fully exposed for the inspector. Once the inspector is satisfied, the system & utilities may then be back filled. *This note must be incorporated onto the site plan.*
- 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 with 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 with 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. The new water and sewer services must be in-place <u>AND</u> accepted by the Engineering Division prior to the issuance of the Certificate of Occupancy. *This note must be added to the final approved plans.*
- 6. Finalized utility connection plan reflecting the above changes that meets the minimal design standards of the City of Newton must be submitted for approval by the contractor of record with appropriate Bonds & Insurance. The Engineering Division makes no representations and assumes no responsibility for the design(s) in terms of suitability for the particular site conditions or of the functionability or performance of any items constructed in accordance with the design(s). The City of Newton assumes no liabilities for design assumption, error or omissions by the Engineer of Record.
- 7. A detailed profile is needed which shows the existing water main, proposed water service, sewer main and proposed sewer service 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%. 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 main.

8. The 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. The sewer service will NOT be accepted until one of the two methods stated above is completed.

## <u>General</u>:

- 1. 5 Year Moratorium if at time of construction the roadway is under a 5-year moratorium, the roadway must be milled and paved gutter-to-gutter for a distance of 25 feet in each direction from the outermost trenches per the DPW Policy.
- 2. All tree removal shall comply with the City's Tree Ordinances.
- 3. 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. *This note shall be incorporated onto the plans.*
- 4. 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. *This note must be incorporated onto the site plan.*
- 5. The applicant will have to apply for a Street Opening & Utilities Connection Permits as well as a sidewalk crossing permit with the DPW. *This note must be incorporated onto the site plan.*
- 6. All site work being completed before a Certificate of Occupancy is issued.

# If any changes from the original approved design plan that are required due to unforeseen site conditions, the engineer of record shall submit a revised design & stamped and submitted for review and approval prior to continuing construction.

If you have any questions or concerns, please feel free to contact me @ 617-796-1023