

August 25, 2020

John Daghlian, Associate City Engineer City of Newton Department of Public Works 1000 Commonwealth Avenue Newton Centre, MA 02459

RE: Response to Comments

Special Permit – 1158 Beacon Street

Dear Mr. Daghlian,

Fuss & O'Neill has prepared this letter to address comments received in a memorandum from your office addressed to Council Rick Lipof, Land Use Committee Chairman, dated July 13, 2020. The comments are listed in *italics* followed by our responses.

Executive Summary

For clarity, these comments have been numbered based upon the order in which they appear in the referenced memorandum.

- 1. The site improvements also include removal of approximately 1,200 square feet of asphalt at the rear (southern) portion of the parking lot and installing a sediment forebay and infiltration basin to capture and treat stormwater runoff from the rear portion of the roof and parking lot; this will improve stormwater quality coming off the site and reduce quantity. This system will have an overflow pipe connected to the City's drainage system on Beacon Street. The design methodology for the sizing of this system is acceptable, however; the design storm for the City is 8.78 -inches or rain [not 8.62-inches] the analysis will have to be recalculated.
 - Our HydroCAD analysis has been revised for the 100-yr storm to an intensity of 8.78-inches of rain to meet the City's requirement.
- 2. The drainage system for the front portion for the parking lot includes new deep sump catch basin, area drain, and pipes that ultimately connect to the City's drainage system in Beacon Street with modifications. To enhance water quality from this system; I will require that the two solid pipes discharging from the new [catch basins & area drain] to the new manhole be converted to perforated pipe encased in crushed stone to allow for infiltration before the final connection to the City system, this is a standard policy to infiltrate to the maximum practicable extent then allow for the overflow connection.

108 Myrtle Street Suite 502 Quincy, MA 02171 t 617.282.4675 800.286.2469 f 617.481.5885

www.fando.com

Connecticut
Maine
Massachusetts
New Hampshire
Rhode Island
Vermont



Callouts have been added to sheet CG-101 and a new detail have been added to sheet CD-505 to indicate these pipes to be perforated pipe.

3. Finally, the drainage calculations need to be computed for both volume and rate of runoff for the 100-year storm of 8.78 inches over a 24-hour period.

Runoff volumes have been added to the Pre- vs Post- Tables for the drainage analysis.

4. Prior to final approval [Building permit] of the overflow connection, the engineer of record needs to submit hydraulic calculation to ensure that there is adequate capacity in the City's drainpipe in Beacon Street from the point of connection to the next downstream manhole.

Hydraulic calculations are included in the Stormwater Management Report. Currently runoff from the site is being directed to Washington Street. The proposed stormwater system maintain the existing conditions drainage pattern and since post-development peak runoff and volumes are presenting a decrease when compared with pre-development no additional runoff is expected to get to the Town drainage system in Washington St.

5. Additionally, a Closed-Circuit Television (CCTV) inspection will be required for Pre & Post Construction and must be witnessed by the Engineering Division, video copies shall be provided for review.

Acknowledged...

6. In accordance to Chapter 29 Sections 157-166: Updates to building sewer, water service pipes will be required if Substantially remodeled or rehabilitated: When a dwelling or building is (1) renovated and/or gutted more than fifty percent (50%).

This requirement is noted; however, substantial renovations of the nature described are not anticipated to the building as part of this project.

7. The site plan shows some curb installation and modification along the easterly driveway apron and grass strip, the plan does not show the water meter pit that is near this driveway apron and within the grass strip, the meter pit (see attached) should be located on final construction plans to avoid any damage to the unit.

The water meter pit has been located on the plans and callouts have been added to indicate the contractor is to protect the meter pit as depicted on sheet CP-101. No construction activities are anticipated to conflict with the existing meter pit.



8. Beacon Street was paved in 2018, any excavation within the roadway will require compliance with the DPW Pavement Restoration Policy for 5 Year Moratorium Streets, which includes milling and paving curb line to curb line for the limits of construction.

The moratorium requirements are acknowledged, the approximate limit of milling and paving within Beacon Street has been revised on the plans accordingly as depicted on sheet CS-101.

Drainage

1. A test pit and percolation test will be required within 25-feet of the proposed infiltration basin, this must be performed by the engineer of record, witnessed by the Engineering Division, and completed before applying for a Building permit. The soil logs shall be submitted with the Building permit.

Test pits and percolation tests were performed on Monday, August 10, 2020. A copy of the soil logs is attached to this letter.

2. The proposed Operations & Maintenance [O&M] plan for the proposed system is acceptable, however the plan did not include a parking lot sweeping schedule, this needs to be added. The plan identifies snow storage area, however; it is directly in front of the infiltration basin, signage is needed within this are to indicate no dumping of snow within the infiltration basin. Once the final O&M is submitted and approved; it must be registered at the Middlesex Registry of Deeds, proof of the recording instrument shall be submitted to the Engineering Division.

A sweeping schedule has been added to the O&M plan as requested. In addition, signage has been added to the plans in front of the infiltration basin indicating "No Dumping" of snow or any other potential illicit discharges.

3. It is imperative to note that the ownership, operation, and maintenance of on-site drainage system and all appurtenances including but not limited to infiltration basins, catch basins, trench drains, and pipe(s) are the sole responsibility of the property owner(s).

Acknowledged.

General Comments

1. All trench excavation shall comply with Massachusetts General Law Chapter 82A, Trench Excavation Safety Requirements, and OSHA Standards to protect the general public from unauthorized access to



unattended trenches or excavations. Trench Excavation Permit is required prior to any construction. This applies to all trenches on public and private property. This note shall be incorporated onto the final plans.

Acknowledged. Note has been added to Sheet CN-101.

2. All tree removal shall comply with the City's Tree Ordinance.

Acknowledged. Note has been added to Sheet CN-101.

3. The contractor of record 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 services 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 Engineer's Inspector has given their approval. This note shall be incorporated onto the final plans.

Acknowledged. Note has been added to Sheet CN-101.

4. The applicant shall apply for a Building Permit with the Inspectional Services Department prior to ANY construction.

Acknowledged.

5. Before requesting a Certificate of Occupancy, an As Built plan shall be submitted to the Engineering Division in both digital and paper format. The plan shall show all utilities and final grades, any easements and improvements and limits of restoration. The plan shall include profiles of the various new utilities including but not limited to rim & invert elevations (City of Newton Datum), slopes of pipes, pipe materials, and swing ties from permanent building corners. The as built shall be stamped by both a Massachusetts Registered Professional Engineer and Registered Professional Land Surveyor. Once the As built plan is received the Engineering Division shall perform a final site inspection and then make a determination to issue a Certificate of Occupancy. This note shall be incorporated onto the final plans.

Acknowledged. Note has been added to Sheet CN-101.

6. All site work including trench restoration, sidewalk, curb, apron and loam border (where applicable) shall be completed before a Certificate of Occupancy is issued. This note shall be incorporated onto the final plans.

Acknowledged. Note has been added to Sheet CN-101.



7. The contractor of record shall contact the Newton Police Department 48-hours in advanced and arrange for Police Detail to help residents and commuters navigate around the construction zone.

Acknowledged.

8. If any changes from the final approved design plan that are required due to unforeseen site conditions, the contractor of record shall contact the design engineer of record and submit revised design and stamped full scale plans for review and approval prior to continuing with construction.

Acknowledged.

If you have any questions or need additional information regarding any of the above comments, please contact me at (617) 282-4675, x5341.

Sincerely,

Matthew Skelly, PE, PTOE

Project Manager

Enclosures:

- 1. Revised Permitting Plans (separately bound)
- 2. Revised Stormwater Management Report (separately bound)
- 3. Soil Boring Logs (separately bound)