

November 25, 2019

Mr. Patrick Reffett Director of Planning & Inspections Town of Hamilton 577 Bay Road Hamilton, MA 01936

Ref.: T0947

Re: Peer Review – Stormwater Management Evaluation 59-63 Willow Street

Dear Mr. Reffett:

On behalf of the Town of Hamilton, TEC, Inc. (TEC) has reviewed documents as part of the stormwater management engineering peer review for a Site Plan application related to a proposed mixed-use development at 59-63 Willow Street in Hamilton, Massachusetts. The project consists of constructing 2,400 square feet (SF) of commercial space and 18 apartment units in one building. The site is currently occupied with a single-family dwelling.

The following documents were received as part of our review:

- Site Plan Review Application for 59-63 Willow Street, compiled by Mann & Mann, PC, dated September 16, 2019
- Permit Site Development Plans for 59-63 Willow Street, prepared by Meridian Associates, revision dated October 28, 2019
- Stormwater Analysis and Calculations for 59-63 Willow Street, prepared by Meridian Associates, revision dated September 16, 2019

TEC completed a review of these documents for the Town of Hamilton, performed a field visit to observe the existing conditions at the site, and prepared an evaluation of the proposed stormwater management system. The following provides a summary of the comments we compiled during our analysis:

- 1. The project proposes to utilize a combination of proprietary separators and infiltration basins to collect, treat, and recharge stormwater created by new impervious area.
- 2. TEC concurs with the limits of the study area defined by Meridian Associates. The design accounts for stormwater flow from offsite abutting properties.
- 3. The large infiltration basin at the southern portion of the property is designed to collect runoff from the 100-year storm event without overtopping. The 100-year storm event is equivalent to 6.5-inches of stormwater within 24 hours.

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- 4. The project proposes an onsite septic system to handle sewer flows associated with the proposed project. The proximity of the septic system and stormwater management system should be reviewed by the Hamilton Board of Health for conformance with Title 5 requirements.
- 5. TEC recommends the installation of a fence surrounding the infiltration basin to prevent access for anyone other than maintenance personnel.
- 6. The Applicant has provided a Long-Term Operations and Maintenance Plan which is consistent with the recommendations in the Massachusetts Stormwater Handbook.
- 7. TEC recommends that the Water Quality Vortex Treatment Units be inspected four times per year and cleaned four times per year or whenever the depth of sediment is greater than or equal to 50% of the depth of the sump storage.
- 8. The site plans provide a construction detail for an erosion control sock; however no erosion control is shown on sheets 3 and 4. A majority of the site is internally draining, however TEC recommends the installation of an erosion control sock to clearly demarcate the limit of work.
- 9. Infiltration Basin #2 will serve as a temporary sedimentation basin during construction. Heavy equipment should be limited from working within this area as much as possible to prevent compaction of soil material. Upon completion of site work, TEC recommends the top 12-inches of soil be excavated from the basin bottom to remove all silt and fines that have accumulated. The basin bottom should then be built up to grade with a clean sand material.

Please do not hesitate to contact me directly if you have any questions concerning our peer review at 978-794-1792. Thank you for your consideration.

Sincerely, TEC, Inc. *"The Engineering Corporation"*

Peter F. Ellison, PE Director of Strategic Land Planning

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