

NOVEMBER 21, 2023

Town of Lancaster Planning Board
Attn: Brian Keating, Director
Community Development and Planning
Town of Lancaster
701 Main Street
Lancaster, Massachusetts 01523

RE: Revised Stormwater Peer Review
Fort Pond Storage Units, 710 Fort Pond Road, Lancaster, Massachusetts

Dear Planning Board Members and Mr. Keating,

BSC Group, Inc. (BSC) is pleased to submit this peer review for the Lancaster Planning Board relative to the revisions made during construction to the stormwater management system design at the proposed Fort Pond Road Storage Units off Fort Pond Road and Shirley Road in Lancaster, Massachusetts. Our peer review evaluated if the revisions made from the previously approved design have any impacts on the project's compliance with applicable stormwater management requirements of the Town of Lancaster Stormwater Control Bylaw (Chapter 170), Town of Lancaster Zoning Bylaw (Chapter 220), Town of Lancaster Stormwater Management Rules and Regulations (Chapter 305), Massachusetts DEP's Stormwater Handbook (the Handbook), and standard engineering practices.

BASIS OF REVIEW

As part of our peer review, BSC reviewed the following documents:

- Fort Pond Road Storage Units Hydrology Revision Narrative, prepared by GRAZ Engineering, LLC (no date provided, but sent to BSC via email on November 14, 2023).
- Letter from GRAZ Engineering, LLC to Lancaster Planning Board with attachments, dated November 14, 2022, RE: *Fort Pond Storage Units - Peer Review Comment Responses* (reviewed for comparison purposes only).
- *Fort Pond Storage Units, 0 Shirley Road, Lancaster, Massachusetts, Map-5 Lot-54*, prepared by GRAZ Engineering, LLC., dated May 19, 2022, and revised 11/14/22 (reviewed for comparison purposes only).

PROJECT OVERVIEW

The Project, which previously received approvals from the Town of Lancaster Planning Board in 2022, proposes to construct a mini-storage facility consisting of five buildings and areas for portable storage containers. During the course of construction, it was determined that gutters, downspouts, and roof drains were not a viable option for the storage buildings. Changes were made to allow roof runoff to directly drain onto the surrounding pavement. As such, the Town has requested BSC review these revisions to ensure that all applicable stormwater regulations are still met.

PROJECT COMMENTS

1. By removing the gutters, downspouts, and roof drains, roof runoff will fall onto the surrounding pavement and flow easterly. This runoff, along with the direct flow onto these pavements, will flow through the forebay to Infiltration Basin 2.

- a. The forebay is adequately sized to handle the additional flows without any changes to the previously approved design.
 - b. As this roof runoff was previously designed to discharge into Infiltration Basin 2, the Basin is adequately sized for both infiltration and stormwater treatment purposes without any changes to the previous design.
 - c. We recommend the Board require a survey as-built including all site grades be provided prior to issuance of a certificate of occupancy to ensure that site grading has been performed so that all roof runoff is directed to Basin 2 as intended.
2. Is the roof of Building 5 (far west of the site) pitched towards the rear (west)? If so, how will this runoff be routed to Basin 2 as proposed?
 3. The revised runoff calculations show a slight increase to the previously approved post-development peak flow rate at the design point. However, this flow rate is still below the pre-development peak flow rate for the design point. As such, we concur with the conclusion that the project still complies with Stormwater Standard 2.
 4. As roof runoff will still be routed to Infiltration Basin 2 as previously approved, infiltration and TSS removal will not change from the previously approved levels and the project will maintain compliance with Stormwater Standards 3 and 4.
 5. The proposed revisions do not result in any changes to the project's compliance with any other Stormwater Standards or local requirements and can generally be viewed as a minor change to the previously approved stormwater management design.

We look forward to discussing this project with you further at the upcoming public hearings on the Project. Please feel free to contact me at (617) 896-4386 or drinaldi@bscgroup.com should you have any questions on the information in this report.

Sincerely,
BSC Group, Inc.



Dominic Rinaldi, PE
Senior Associate