



H+H Engineering Associates, LLC
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Via E-mail

February 27, 2023

Town of Simsbury
Planning and Land Use Department
933 Hopmeadow Street
Simsbury, CT 06070

Attn: George K. McGregor, AICP
Director of Community Planning and Development

RE: Vessel Multi-family Housing
Conservation Commission Application #22-29
446 Hopmeadow Street
Simsbury, CT 06070

Dear Mr. McGregor:

H+H Engineering Associates, LLC (H+H) is in receipt of the Town of Simsbury Engineering Department review comments dated February 13, 2023 regarding the Vessel Multi-family Housing development located at 446 Hopmeadow Street in Simsbury, CT 06070.

Those comments pertaining to the Conservation Commission Application #22-29 are noted below, followed by our response in italics:

1. Please provide the basis for providing 94 parking spaces to support the proposed 80-unit multi-family development. **Applicant responded 2/6/2023 with the basis of the parking calculation.**

Response:

Comment previously addressed. No further action required.

2. Two (2) 8-foot wide van accessible spaces are provided, whereas for a total of 76-100 total parking spaces, 4 total (3 standard+ 1 van) accessible parking spaces should be provided. Provide two additional accessible parking spaces for this project to comply with this requirement. **Applicant responded 2/6/2023 and will add accessible parking. However, one less space will be provided.**

Response:

A total of four accessible parking spaces are proposed. A total of 95 parking spaces are proposed.

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4. The stormwater report identifies infiltration rates in monitoring wells MW-1 and MW-2 as 40 in/hr. and 4 in/hr., respectively. The analysis halves these rates to serve as exfiltration design rates, which is consistent with the Connecticut DEEP Stormwater Quality Manual (CTSWQM). However, Engineering respectfully disagrees with the use of an exfiltration rate (20 in/hr.) given that Table 8-3 of CTSWQM states the maximum soil infiltration capacity for an infiltration basin is 5.0 in/hr. In regard to the recommended number of tests and resultant design assumptions, the CTSWQM states;

A minimum of three field tests and test pits or soil borings should be performed at each infiltration basin. The design of the basin should be based on the slowest rate obtained from the field tests performed at the site.

Please revise the analysis to comply with the recommendations of the CTSWQM by utilizing the slowest rate obtained from field tests on this site. Applicant responded 2/6/2023 with the intentions to perform additional field tests. **No additional action has occurred and comment remains unresolved.**

Response:

Additional test borings, test pits and permeability tests were conducted by the project Geotechnical Engineer on February 14, 2023. Based on a conversation with the Geotechnical Engineer, and the comments received from the Town Engineer, the Stormwater Management System has been revised accordingly. The design utilizes a maximum infiltration rate of 5.0 inches/hour for the practices that allow for subsurface infiltration (Stormwater Management Areas A, C, & D), and a maximum infiltration rate of 2.0 inches/hour for the bioretention basin. Additionally, a copy of the revised Geotechnical Report was submitted on February 24, 2023.

5. CB-5 has 2-feet of cover whereas Section 5 .2.1.g of the Town of Simsbury Highway Construction and Design Standards states "A minimum cover of 2.5 feet shall be provided for all drain pipes unless special designs, as approved by the Town Engineer, are utilized." Please revise accordingly. **Applicant responded 2/6/2023 and will revise with Class IV RCP.**

Response:

Comment previously addressed. No further action required.

6. Provide a detail for the modular block retaining walls. **Applicant responded 2/6/2023 and will add typical details to plan.**

Response:

The typical modular block retaining wall detail has been added to sheet 10 of 13.

9. Please confirm that a minimum 1 foot of free board is provided in all basins during the 100-year event.

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Response:

The basins have been revised to provide a minimum of 1-foot of freeboard between the top of the berm and 100-year water surface elevation. Enclosed herewith please find Figure 6 from the stormwater management report which has been updated accordingly.

10. Please provide information regarding the capture of floatables as it pertains to parking lot runoff and stormwater quality.

Response:

Each catch basin will have a minimum of a 2' sump, and the last catch basin in each catchment system will have a 4' sump and a trap hood installed. Sumps and outlet hoods provide a means of pre-treatment by preventing oil and debris from discharging into the subsurface infiltration system.

Per the 2004 Stormwater Quality Manual:

"Sumps provide storage volume for coarse sediments, provided that accumulated sediment is removed on a regular basis. Hooded outlets, which are covers over the catch basin outlets that extend below the standing water, can also be used to trap litter and other floatable materials. A recent study conducted in New York City demonstrated that catch basins equipped with hoods increase the capture of floatables by 70 to 80 percent over catch basins without hoods and greatly extend the cleaning interval without degraded capture performance (Pitt, 1999 in NRDC, 1999)."

The Drainage Structure Table on the Grading & Drainage plan has been updated to indicate the proposed sump depths of each structure, and the proposed trap hoods.

Additionally, H+H received review comments from the Office of Community Planning and Development, Water Pollution Control, and the Simsbury Fire District pertaining to the Planning and Zoning Commission site plan application. A summary of the site plan changes within the 100-foot upland review area are listed below:

1. The Concrete Dumpster Pad and Dumpster has been relocated.
2. A crushed stone apron was added to the east of the parking lot for emergency vehicle access to the Farmington Canal Heritage Trail.

If you have any questions, please feel free to contact me at 860-980-8008 (office) or 413-579-4488 (mobile).

Sincerely,

H+H Engineering Associates, LLC



Seamus Moran, P.E.
Principal

2/27/2023

Date

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