

Dolph Rotfeld Engineering Division

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MEMORANDUM

TO: Stephen Hunter, Planning Board Chairman

CC: Planning Board Members

Dan Roemer, Building Inspector Dan Pozin, Planning Board Attorney Valerie Monastra, Village Planner

FROM: Anthony Oliveri, P.E.

DATE: December 4, 2023

RE: Site Plan Review

22 Irvington Street

Village of Dobbs Ferry, New York

With regard to the above-mentioned project, this office has reviewed the following plans and submittals:

- Plans prepared by M.J. McGarvey P.E., P.C. last dated 7/8/2023
- Various Planning Board submission documents

This plan has not been reviewed by this office for compliance with the zoning code.

Project Description: Alteration of existing home including addition to second floor, and installation of sprinkler system.

Our preliminary comments are as follows:

- 1. Provide a signed and sealed topographic survey of the property.
- 2. The net increase/decrease of impervious coverage must be clearly noted and delineated on the plan.



3. A site plan with stormwater management and best management erosion control practices must be provided, see attached memo for "Retention Systems Requirements for Small Additions".

The applicant should provide annotated responses to each of the comments outlined herein with any subsequent submissions. We will be happy to continue our review once responses are provided.

Thank You



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MEMORANDUM

To

Edmond Manley

Building Inspector

From

George E. Pommer, P.E.

Vice President

Date

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December 8, 2017 (Updated from July 29, 2013)

Subject

Retention System Requirements for Small Additions

Village of Dobbs Ferry

As requested, we are providing recommendations for retention system design of new impervious areas less than or equal to 400 square feet or disturbance of existing impervious area of 400 square feet or less.

The design recommended is proposed to eliminate the requirement of deep test pits and percolation tests for small projects. The goal is to relieve the residents of burdensome testing, while maintaining adequate drainage for the Village. These recommendations are for small projects only, where the addition of impervious surface is less than or equal to 400 square feet. The Village Code, the NYS Stormwater Design Manual, and Westchester County Best Management Practice Manual should continue to be followed for all other projects.

Based on our knowledge and experience, please accept the following design as the minimum design required for applicants with small projects as described above.

1. The entire runoff volume should be calculated as shown below. The volume should be stored below the emergency overflow elevation.

Additions up to 400 sf

Runoff depth, d = 0.358 feet $(4.3 \text{ inches})^1$

Area, A = entire area that drains to retention system (cubic feet)

Runoff depth derived from TR-55 method. Values used are shown below:

¹⁰⁰ year storm event (7.5 inches)

CN(Pre) - 60 (2.96 inches) [B Soil, grass cover > 75%]

CN(Post)- 98 (7.26 inches) [Impervious]

Depth = 7.26-2.96 = 4.30 inches

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Required Storage Volume, $V = A \times d$

Additions/Renovation With No Additional Impervious Area

Runoff depth, d = 0.358 feet $(4.3 \text{ inches})^1$

Area, A = entire area that drains to retention system (cubic feet)

Required Storage Volume, $V = 0.50 \times A \times d$

- 2. An emergency overflow must be provided.
- 3. The following typical details should be provided:
 - a. A section(s) of the retention system(s) which includes the unit(s) material, ³/₄ inch stone, geotextile fabric, and emergency overflow. The emergency overflow may be an overflow outlet, surge pipe with splash block, etc.
 - b. Access manhole(s) with an opening a minimum of 24 inches.
 - c. Pretreatment system.
 - d. Cleanout port(s).

If, during the installation of the retention system, groundwater or rock is encountered, the Village must be contacted immediately.

If you have any questions or concerns, please contact me at your earliest convenience.

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