

TO: Christopher Bradbury
Village Administrator

FROM: Dolph Rotfeld, P.E., BCEE

DATE: December 6, 2018

SUBJECT: North Ridge Street Residential Development
Subdivision and Site Plan Application

With regard to the above mentioned project, this office has received and reviewed the following:

1. Memo prepared by Ralph G. Mastromonaco, P.E., P.C., dated November 27, 2018;
2. Stormwater Report prepared by Ralph G. Mastromonaco, P.E., P.C., dated April 12, 2018;
3. Plans prepared by Ralph G. Mastromonaco, P.E., P.C., dated April 10, 2018, revised September 27, 2018.

As per the Village of Rye Brook Zoning Code, Chapter 209, "Site Plan Review", and in review of the materials listed above please see below for issue(s) that will need further response.

1. This office is of the opinion that the disturbance area will likely exceed the 1 acre threshold, requiring coverage under the NYSDEC General Permit for Stormwater discharges. This is evident by the grading plan and silt fence placement line.
2. Percolation tests must be performed to support the infiltration rates used in the stormwater model. The tests must be done in conformance with "*Stormwater Management, Westchester County, NY, Best Management Practices Manual Series*", or other accepted method. Notification must be made to the Village Building Department or this office for inspection. Test logs must be submitted for review demonstrating conformance with methodology used (24 hour soak, uniform percolation rates, proper depth). The locations of the percolation tests must be shown on the plan. Per Westchester County BMP, percolation tests must be performed at a depth of 6" below the bottom of each proposed infiltration practice. Percolation tests must be performed even if no percolation volume is considered.
3. Wherever infiltration practices are proposed test pits must be performed to confirm soil type and to determine the elevation of ledge rock and groundwater conditions (minimum 2 feet below infiltration practices). Test pit locations must be shown on the plan. If the minimum 2 foot separation is not possible, alternative methods to infiltration must be considered. Notification must be made to the Village Building Department or this office for inspection.

4. A consideration for water quality must be provided immediately upstream of any piped connection to the proposed infiltration basin and drywells. At a minimum the water quality practice must include a sump and a hooded outlet. Details must be provided.
5. Structure dimensions, invert elevation, and overflow elevation of drywells must be consistent among the details, plans, and the stormwater model. Please confirm drywell volume with respect to the details.
6. Site plan must include drywell structure and piping invert elevations. Drywell overflow elevation must be reconciled with discharge pipe invert elevation.
7. The improvements to the center lot (Lot 2) must be included in the stormwater model.
8. Please provide stormwater model for the 100-year storm event.
9. Drop curbs must be provided for each driveway with a minimum 1-inch reveal to prevent runoff from North Ridge Street from entering the driveways and new stormwater management systems. Details must be provided.
10. Please confirm drainage piping inverts and slopes where drainage pipes are proposed through retaining walls.
11. A cross-section must be provided through the tiered retaining walls. Existing and proposed grades must be shown on the cross-sections and depths of wall footings must also be included.
12. A discharge manhole must be provided on private property for the sanitary sewer forcemain of each lot, with the sanitary sewer service lateral continuing as a gravity connection to the Village's sanitary sewer system. Invert elevations, pipe sizes, material and slopes must be provided. The discharge manhole must not be installed in the public right of way.
13. A photometric plan must be provided demonstrating that adequate lighting will be provided in common driveway and parking areas, as well as along pedestrian paths. The photometric plan must also demonstrate that lighting intensities along property lines will not exceed one (1) foot-candle.
14. Guiderails must be provided on all driveway perimeter retaining walls.

As stated in previous memos by this office in response to earlier submissions, the following must be addressed:

It should be noted that no structural plans, details or calculations were submitted (or reviewed) for the retaining wall design as part of this application. Prior to the issuance of any permits the following must be provided for review:

- All retaining wall design calculations and plans must be signed and sealed by a licensed New York State professional engineer.
- Subgrade bearing capacity requirements must be specified on the plans.
- Backfill and compaction requirements must be included on the plans.

- The completed installation must be certified by a licensed New York State professional engineer to be in conformance with the approved plans and must include test results certified by a NYS certified testing lab including but not limited to:
 - Subgrade bearing capacity
 - Backfill gradation
 - Compaction
- Vehicular protection along the top of the wall (i.e. guiderail) including a design for point loading against the wall.

Traffic-related elements of the site plan were not part of the review by this office.

Plans have not been reviewed by this office for zoning compliance.

Once revised plans have been received this office will continue its review.