

January 2, 2019

Eva Schweber, Planner
City of Plattsburgh
41 City Hall Place
Plattsburgh, NY 12901

RE: 3 Circle Grove Review

Dear Ms. Schweber,

We received the project materials dated November 20, 2018 from Robert M. Sutherland P.C. (RMS) on behalf of Michael Racine at 3 Circle Grove. The review materials provided include a letter report discussing site drainage, S1.0 Site Grading Plan, Block Retaining Wall Sliding Analysis, HydroCAD Stormwater Reports, and the NRCS Soils information for the project site. Per our Agreement, we have reviewed the project's poured concrete retaining walls, site grading, and stormwater runoff for conformance with Federal, State, and Local regulations. GPI offers the following comments:

Retaining Wall Comments:

1. Please provide calculations for the cast-in-place concrete retaining walls for review.
2. Cast-in-place concrete wall details do not indicate reinforcement cover, hook lengths or strength of concrete.
3. Please provide call outs for all reinforcement and toe and heel dimensions.
4. Please expand the calculations for the concrete block retaining wall. Calculations should include all assumptions and basis of design. Walls design should show checks for sliding, overturning and bearing.
5. Please confirm that sloping backfill has been considered in the block wall analysis.

Grading and Stormwater Comments:

1. Additional contours and spot shots are needed along the south and rear faces of the house to ensure positive drainage away from the structure.
2. The stormwater discharge location at the southern point of the property includes a note that directs the contractor to regrade as necessary to promote drainage down the existing swale. We recommend once the drainage system has been constructed, someone from the City should inspect the site to make sure that stormwater is being directed such that it does not discharge onto the adjacent landowner's property.
3. A note should be added to the plans indicating how and whom will be responsible for maintaining the drainage outlet emitter. Concern is if it is not maintained properly, then positive drainage may be compromised.
4. An infiltration rate of 1.5 inches/hour was used in the HydroCAD model. Please clarify how the infiltration rate was determined.

5. The stone is modeled with a 50% void ratio in the infiltration trench. The industry standard void ratio for stone is 40% and the HydroCAD model should be updated accordingly. Additionally, it appears that 2-4" pipes are modeled, however only 1 is shown on the detail to be provided and the other is being abandoned. The applicant should ensure the 10-year storm event does not cause runoff to reach the bottom of the 2'x2' block retaining wall. Once the model has been updated, the pre versus post should be checked again to make sure that the post condition is less than or equal to the existing condition.
6. Please consider moving the landscape shrub row along the 2'x2' block retaining wall to the top of embankment along the 193 contour. This would provide increased screening to the neighboring property and reduce any root conflicts with the drainage stone and retaining wall.
7. Although this was not included in our scope, the driveway section includes Items 402.127202 (Top Course) and 402.197902 (Binder Course). The most recent version of NYSDOT Standard Specifications no longer specifies these items. We suggest specifying Items 402.128203 (Top Course) and 402.198903 (Binder Course).

If you have any questions, please contact me by office phone: (518) 898-9528; or cell phone: (518)641-9192 or via e-mail at fmastroianni@gpinet.com.

Sincerely,

GPI/Greenman-Pedersen, Inc.



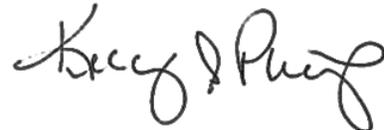
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