CLA Engineers, Inc.

Civil • Structural • Survey

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February 20, 2025

Meredith Badalucca, Assistant Planner Town of Montville 310 Norwich-New London Tpke., Uncasville, CT 06382 Via Email: <u>mbadalucca@montville-ct.org</u>

RE: Site Plan Application 25SITE2 Review 145 Route 32 & 18 Powerhouse Road ("Madison Place") CLA-7873G

Dear Meredith:

CLA Engineers, Inc. (CLA) has received the application materials for the above referenced project located on the Town Form Repository:

https://www.townofmontville.org/form-repository/25-site-2-145-route-32-multi-familydevelopment/

CLA has performed a review of the application documents and offer the following comments:

<u>Plans</u>

- 1. Is there potential for units to be occupied while subsequent phases are constructed? If so, traffic, parking, and pedestrian safety should be addressed.
- 2. Construction phasing and erosion and sedimentation control phasing should be clarified. The phase 1 level spreader appears to conflict with the temporary sediment trap location. Will all erosion & sedimentation controls be installed as part of phase 1 and remain in place for the duration of the project?
- 3. How will garbage trucks access the refuse enclosure?
- 4. Will the parking and driveway areas be curbed?
- 5. The Applicant should verify the width of the ADA parking space. It should match the detail provided.
- 6. Test pits should be labeled.
- 7. Test pit depth relative to the infiltration system bottoms should be addressed. Both systems may be proposed deeper than the test pits were excavated.
- 8. Pretreatment should be provided for all inlet piping into the infiltration chambers. Pretreatment measures should treat the water quality flow (WQF). If filter inserts are proposed they should be called out on the plans and details.
- 9. Clean-outs to grade should be provided at the ends of the perforated pipe for the level spreaders.
- 10. Indicate level spreader pipe sizes and stone specifications. Coordinate the plans and details.

- 11. Clean-outs should be provided for the infiltration systems.
- 12. The stormwater galleys should be rated for H-20 loading for the cover indicated on the plans.
- 13. The grit/particle separators should have access covers to grade.
- 14. Trench repair details for work in Powerhouse Road should be provided in accordance with the Town Road Standards.
- 15. References to the erosion and sedimentation control manual should be updated to the 2024 manual.
- 16. The minimum anti-tracking apron length should be 50'. A minimum width should be specified.
- 17. Clearing limits should be shown on the erosion and sedimentation control plan.
- 18. Grading in the vicinity of the level spreaders appears to be in the 2:1-3:1 range. Slope stabilization measures (i.e. erosion control matting) should be provided on this slope.
- 19. Grading for the emergency access drive should be reviewed.
- 20. A photometric plan should be provided.

Engineering Report

- 21. Watershed maps with time of concentration travel paths should be provided.
- 22. Stormwater calculations should include the 100-year storm.
- 23. A comparison between the existing and post development runoff volume should be provided.
- 24. A Type D storm distribution should be used in accordance with the Stormwater Quality Manual.
- 25. Please identify and describe what each of the subcatchments are in the Hydrocad Analysis (i.e. it is not clear what 4S represents vs. 3S & 4S, and how they relate.
- 26. The gallery elevations, inverts, and pipe sizes don't correspond with the plans.
- 27. Soil permeability data should be provided. Will the galleries drain between storms?
- 28. Relatively small diameter pipes have been proposed from the drainage system, in particular from the Powerhouse Road driveway north to the galleries. Calculations should be provided showing that the pipes will have adequate capacity and cleansing velocities.

Thank you for the opportunity to provide this review. Please feel free to call me at our office or email <u>khaubert@claengineers.com</u> with any questions.

Very truly yours, **CLA Engineers, Inc.**

GC Hannel

Kyle Haubert, P.E.