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July 15th, 2025

Ledyard Inland Wetland and Watercourses Commission Town of Ledyard 741 Colonel Ledyard Highway Ledyard, CT 06339 ATTN: Justin DeBrodt, Chairman

Re: Proposed Residential Development; 19, 29, 39 Military Highway, Gales Ferry

Dear Mr. DeBrodt:

Bohler Engineering received a comment letter from CLA Engineers, dated July 15th, 2025. On behalf of Applicant 19, 29, & 39 Military Highway, Bohler has provided a test pit exhibit to display the test pits & boring locations that have been completed to date for stormwater & septic system designs. This was done over a several visits and was compiled of 16 Test Pits and 19 Borings spread throughout the entirety of the site.

Given the amount of existing data, any additional test pits and soil evaluations would normally be completed ahead of construction, to verify the conditions for which the design was based around still apply. This is done because it could take a year or two to get through the proper State approval process. This would ultimately be done in accordance with Chapter 10 of the 2024 CTDEEP Connecticut Stormwater Quality Manual. Any deviations or significant changes to the system as a result of the additional testing, would be required to come back before the Commission.

Where bedrock is encountered within the locations of the southwestern most basin, a minimum of 3 feet of native soil or filter media will be installed, as outlined in Chapter 10 and illustrated in Figure 13-17 of the Stormwater Quality Manual. The intent in this location had always been to blast away the rock in the vicinity and utilize it as structural fill on the eastern side of the site. This over excavation of rock within the basin limits would meet the intent of the Stormwater Quality manual.

Furthermore, the exfiltration rate of the infiltration basins and StormTrap infiltration system has been modeled at 3.2 inches per hour, although field observations identified an infiltration rate of 10-15 inches per hour. This modeled rate aligns with the recommendations provided in the Whitestone Report, which states:

"Whitestone recommends that the unfactored infiltration rate not exceed eight inches per hour and that a Factor of Safety (FoS) of at least 2.5 be applied to the rate for design purposes." Accordingly, the selected rate of 3.2 in/hr reflects a conservative design approach consistent with industry standards and the geotechnical recommendations. The rain garden has been designed using an infiltration rate of 0.5 inches per hour, which corresponds to the expected permeability of the proposed soil filtration media underlying the rain garden.

Also worth noting that all aboveground basins have the 1' of necessary freeboard in the 100-year storm, with spillways located with 6" of freeboard in the 100-year storm.

We trust the above as well as the attached information are sufficient for your review of the project. Should you have any questions or require additional information, please do not hesitate to contact me at (860) 333-8900. Thank you.



Sincerely, Bohler Engineering

Boul Jeff Bord, P.E.