

June 10, 2021

Mr. George Noewatne, Director of Public Works & Engineering
Town of Cheshire
84 South Main Street
Cheshire, CT 06410

Dear Mr. Noewatne:

Barton & Loguidice, LLC has received the following information:

- Plan set for Whispering Oaks, An Age Restricted Planned Residential Development, 648 Wallingford Road, Cheshire, Connecticut dated March 24, 2021 and revised through 6/7/21 prepared by Kratzert, Jones & Associates;
- Storm Drain Computations, Water Quality Volume calculations;
- Response letter.

Our review excludes the proposed sanitary sewer design. Final approval of the sanitary sewer will be per the WPCA review. We offer the following comments:

1. One soil test pit was conducted near the area of the proposed stormwater basin and revealed that the bottom of the proposed basin at elevation 305.2 is below the elevation of observed mottling therefore we expect it to be into the existing seasonally high groundwater. We recommend that it be a condition of approval that the construction of the stormwater basin be reviewed with town staff to determine if any design modifications are required based on field conditions at the time of construction. Available volume of storage for stormwater attenuation must only be included above groundwater elevation.
2. Individual roof infiltration systems shall also be installed above observed mottling/groundwater elevations. The majority of the soil testing confirms general suitability, however, it is recommended that the proposed roof infiltration locations be reviewed by town staff during construction to confirm the suitability of the existing conditions.
3. Verify the proposed height of the sediment forebay riprap filter berm. There is a discrepancy between the detail and the water quality calculations. It appears that the sediment forebay is intended to be a permanent pool below the groundwater elevation determined by test pit #7. It is recommended that the hydraulic gradeline be reviewed for the proposed storm drainage pipe systems using the 10 year stormwater basin elevation as tailwater to ensure adequate clearance from structure grates.
4. Please clarify what drainage area is included in the submitted Water Quality Volume (WQV) calculation. There are two areas of the site which do not drain to the stormwater basin, WQV calculations and associated treatment were not provided for these areas. Verify the volume that is available for treatment as submitted as the volume within the basin above the outlet pipe would not be appropriate for treatment.

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5. It appears that additional area will now drain to Wallingford Road and the existing pitch of the roadway in the area of the westernmost proposed access drive is very flat. We recommend that it be a condition of approval that the construction of the proposed intersection with Wallingford Road be reviewed with town staff during construction to determine if any design modifications are required to ensure that adequate flow be maintained in the north gutter of the roadway to the existing catch basins to prevent any ponding of water.
6. Please revise the location of the proposed tree between units 21 and 23 to allow access to the basin.
7. A note should be added to the plans to ensure that the proposed grading in the rear of units 36, 38 and 40 continues to allow the off-site property to drain toward the subject parcel. A note should also be added along the eastern property line for the area in the rear of units #10, 12, 14 and 16 to ensure that this area is graded to direct stormwater flow to the north and south rather than toward this property line.
8. A note should be added to the plans to provide appropriate discharge of the footing drains and to prevent flow from directing toward the property lines.

If you have any questions regarding the above comments, please contact me at (860) 633-8770.

Sincerely,

A handwritten signature in blue ink that reads "Denise P. Lord". The signature is written in a cursive, flowing style.

Denise P. Lord, P.E.
Lead Engineer