WILTON PUBLIC WORKS DEPARTMENT

(203) 563-0152



TOWN HALL ANNEX 238 Danbury Road Wilton, Connecticut 06897

MEMORANDUM

TO: Mike Conklin, Director, Environmental Affairs

FROM: Stephen Santacroce, PE, Senior Civil Engineer 5.5.

CC: Frank Smeriglio, PE, Director of Public Works/Town Engineer

Aleksandra Moch, Soil & Wetlands Scientist

DATE: January 12, 2024

RE: Old Driftway, LLC – 0 Mountain Road – Proposed Single Family Residence

- WET#2905(S)

The Department of Public Works reviewed revised drawings and materials dated December 13, 2023, received by the Department of Public Works on December 20, 2023, as well as revised plans and materials dated January 9, 2024, received on January 9, 2024. The revised materials were submitted in response to our review letter dated December 13, 2023. Below are the original comments, and our **latest review (January 12, 2024) in bold**. Based on the review at this time, the following items shall be addressed in order for the DPW to continue the review:

General Items

- It is our opinion that the proposed construction of the driveway (including, but not limited to, the concrete box culverts, concrete infiltration galleries, grading, and walls, ect.) is not feasible without obtaining temporary construction easements, as well as permanent grading easements from neighboring properties.
 - Engineer responded, however, this issue has not been adequately addressed.
- 2. Provide details for the proposed concrete box culverts for our review and comment. This issue is not resolved. A detail has been provided, but the size of the text needs to be increased so that it can be reviewed.
- All trees within the Town Right-of-Way shall be located on the site plans. Depict which
 trees are proposed for removal, and obtain preliminary approval by the Town of Wilton
 Tree Warden.

A tree inventory has been provided by the applicant. This issue is not resolved because the applicant needs to coordinate with the Tree Warden for preliminary approval, prior to DPW approval.

- 4. With adjacent owners permission, locate trees adjacent to right of way and have a tree professional review proposed activity and its potential effects on the trees. Many of the trees identified are in close proximity to adjacent properties or on the property line. Permission from adjacent property owners is required for removal of the trees. Roots of trees located on adjacent properties may also be affected due to proposed grading for the access driveway. There are trees located on the plan that will be affected by the proposed driveway and retaining wall that have not been noted for removal, some of which are on or over the property line. This issue is still not resolved.
- 5. The proposed access driveway will cause significant disturbance to the wetlands vernal pool habitat. As it states in the Environmental Assessment prepared by Aleksandra Moch, a 100 foot vernal pool envelope should be preserved, and a 750 foot wide area around the vernal pool is considered "critical terrestrial habitat", within which development should be limited. Town of Wilton Environmental Affairs department to review.

Applicant is currently coordinating this issue with the conservation commission.

6. The plans must be reviewed by the Town of Wilton Fire Marshall for emergency vehicle access and egress to / from the proposed house. It appears that there are sections of the proposed driveway that are 8 feet wide.

Applicant to submit response to the Fire Marshal for final review of plans. The DPW has not received a letter of approval from the Fire Marshal.

7. For record tracking purposes, please provide the following:

Existing pervious surface Area (sqft)

Existing impervious surface area directly connected to the water course (sqft)

Existing impervious surface area not connected to the water coarse (sqft)

Proposed pervious surface area (sqft)

Proposed impervious surface area disconnected from the water course (sqft) Proposed impervious surface area directly connected to the water course (sqft) (Definition of "directly connect" verses "disconnect" is as defined in the State MS4 program.)

Addressed.

- 8. Provide a schedule and notes regarding the maintenance of the proposed pervious pavement. Provide detail of process material beneath pervious asphalt.

 Addressed, a maintenance schedule has been provided.
- Sight lines exiting the driveway shall be depicted on the plans. Sight lines distance shall exceed the intersection sight distance for the posted 25 mph speed limit. Please note, starting point for sight line shall be 10 feet back from edge of road. Any trees proposed to be removed shall be reviewed with the Tree Warden.
 Addressed.

- 10. Notes regarding the method of rock removal and related specifications should be added to the plans.
 - Addressed. A note has been added stating that rock removal will be by means of chipping, within limited working hours only.
- 11. The stormwater runoff from the lower portion of the proposed driveway must be captured and attenuated. There shall be no increase in runoff to Mountian Road and / or other neighboring properties for the proposed condition.
 - See comments 13 & 14 below regarding the proposed use of concrete galleries to control the stormwater runoff.
- Existing and proposed peak stormwater runoff quantities must be shown for the 2-year through 25-year storm events.
 Addressed.
- 13. The proposed 24" concrete gallery closest to Mountain Road is in conflict with the proposed retaining walls. In general, the stormwater galleries are in close proximity to the neighboring property. This creates concerns for construction feasibility as well as with stormwater bleed out from the galleries into neighboring properties. The second part of this comment has not been addressed; the stormwater galleries are in close proximity to the neighboring property. This creates concerns for construction feasibility relating to Item 1, as well as with stormwater bleed out from the galleries into neighboring properties.
- 14. Ledge is known to be present throughout the accessway, and may be an issue for installation and proper function of the proposed stormwater infiltration galleries. According to Test Pit 2, ledge was encountered at 24", putting it at an elevation of approximately 580.0 Concrete galleries are proposed adjacent to TP2, with a bottom elevation of 580.5 as noted on the plans. Generally a 24" vertical separation is required from bottom of galleries to ledge. Additionally, since groundwater will not infiltrate in areas with ledge rock, stormwater bleed out into the downstream neighboring property is a concern.
- 15. Provide a detail of the proposed retaining walls. The proposed walls are in close proximity to the property line; the detail should demonstrate how the walls will be constructed without encroaching on the neighboring property.
 A detail has been provided for the retaining walls. Based on the detail provided, it appears that the drain pipe outlet may encroach on adjacent properties.
- 16. As proposed on the plans, stormwater will back up through the coarse particle separators that outlet into the concrete galleries. Currently it appears that the stormwater will overflow from each gallery through the catch basins upstream of the coarse particle separators.
 - The coarse particle separators will not function as intended in this case.

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- 17. Provide manufacturer's detail of the coarse particle separators as well as size calculations by the manufacturer.
 - Size calculations should be provided to ensure that the separators will function as intended.
- 18. The existing condition time of concentration should be calculated using a wooded condition.

Addressed.

- 19. Depict footing drain discharge location. Discharge pipe shall not drain to the surface and potentially flow into the roadway or onto neighboring properties. Engineer to evaluate this additional discharge flow and design infiltration units accordingly. Addressed.
- 20. The existing contours shown on the latest revised plans dated January 9, 2024 are conflicting with each other and / or previously used existing contours. The plans should be revised accordingly and the proposed grading should be adjusted.
- 21. Prior to the issuance of a Certificate of Occupancy, a certified as-built drawing and certified letter signed by a Professional Engineer indicating that all work was completed in accordance with the design plans shall be submitted to the Town of Wilton.

Based on the amount of items listed above, additional items may be added depending on responses to the above.

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