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March 6, 2024 – Revised May 28, 2024

Sara Lundy, Chair
Montville Planning & Zoning Commission
310 Norwich-New London Tpke
Uncasville, CT 06382

Re: Black Ash Estates Re- Subdivision
Black Ash Rd. and
Old Colchester Rd.
Montville, CT

Dear Sara:

I am writing to you in regards to your above referenced 13 lot subdivision. The subdivision layout has been designed to minimize potential onsite and offsite drainage impacts due to development.

The lot design encourages overland sheet flow in three major directions (see attached Overall Drainage Map for reference). The western portion of the site slopes to a large onsite wetland system that drains southerly via culverts under Black Ash Road. Similarly, the central portion of the site also drains to a large onsite wetland that also discharges southerly via culverts under Black Ash Road. The eastern portion of the site slopes southeasterly towards abutting properties that front on the north side of Black Ash Road.

Design elements included in the creation of this development include minimizing impervious areas, maximizing wooded areas, keeping wetlands and upland review areas undisturbed and in their existing vegetated state. Other low impact design elements include and encouraging runoff via overland sheet flow and maximizing infiltration within these areas. All proposed roof downspouts are to discharge into underground infiltration drywells. All storm runoff from driveway areas are to be treated in infiltration trenches or rain gardens. These Low Impact Development design features

will treat pollutants, maximize infiltration, retain runoff and discourage point discharges of storm water runoff.

Per town engineer recommendations, the following measures have been added to the design plans:

- Lot 9. All proposed activity is north of existing stonewall that runs east to west through the lot and is the highpoint of the site. All developed areas on this lot will drain to the north and west, away from abutting properties.
- Lot 10. Grading notes have been added along the western property line to ensure that drainage runoff from developed areas will slope to the south towards Lot 9 onsite wetlands.
- Lot 11. The rain garden for Lot 11 driveway has been increased in size to retain up to a 10 year (5.5" precipitation) 24 hour storm event. A proposed stonewall has been added along the southern property line to further retain and diffuse runoff from the developed portion of this lot.
- Lot 12. The rain garden treating driveways serving Lots 11 & 12 has been increased in size to retain up to a 10 year (5.5" precipitation) 24 hour storm event. A proposed stonewall has been added along the downslope side of the rain garden to provide additional runoff retention and diffuse any runoff from the developed portion of this lot. The existing stonewall along the southern property line will continue to diffuse and retain runoff sheet flow during larger storm events.
- Lot 13. The rain garden for Lot 11, 12 & 13 driveway has been increased in size to retain up to a 10 year (5.5" precipitation) 24 hour storm event.

The re-subdivision design plans include a site specific erosion and sedimentation control plan, design calculations for rain gardens and infiltration trenches, and a long term operation and maintenance plan for these design elements.

It is my professional opinion that the development of this project as designed will not result in any significant impacts to drainage runoff onsite or offsite.

If you have any comments or questions, please do not hesitate to contact me.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Wesley J. Wentworth', with a long horizontal stroke extending to the right.

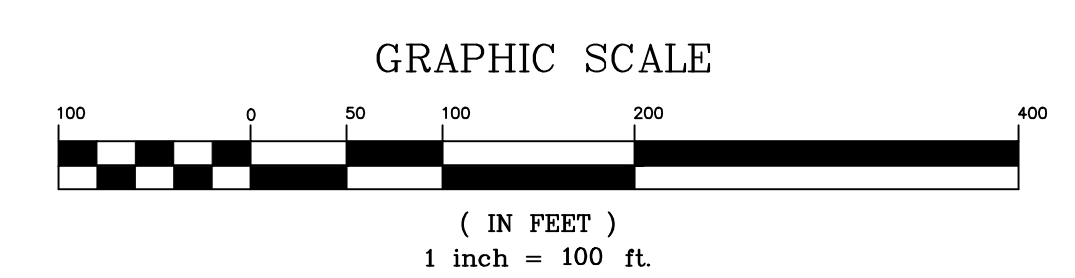
Wesley J. Wentworth

P.E. , Soil Scientist



LEGEND

PROPOSED IRON PIN	●
WETLAND UPLAND REVIEW LIMIT	—●—
PROPERTY LINE	—
BUILDING SETBACK LINE	- - -
STONEWALL	—○—
FENCE	—x—
EXISTING CONTOUR	- - - 434 - - -
DRAINAGE AREA DIVIDE	- - -
OVERLAND FLOW DIRECTION	→

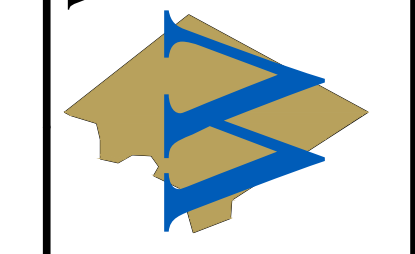


I HEREBY DECLARE TO THE BEST OF MY KNOWLEDGE AND BELIEF THAT THIS PLAN IS SUBSTANTIALLY CORRECT.

Wesley J. Wentworth

WESLEY J. WENTWORTH
P. E. # 20360

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OVERALL DRAINAGE MAP
BLACK ASH ESTATES RESUBDIVISION
PREPARED FOR
PACHAUG CAPITAL, LLC
BLACK ASH ROAD & OLD COLCHESTER ROAD
MONTVILLE, CONNECTICUT

REV. 5-28-24 TOWN COMMENTS

DATE: 8-22-23
SCALE: 1"=100'
SHEET 1 OF 1
MAP NO. 23-024-1DC