

HAL OWEN & ASSOCIATES, INC.

SOIL & ENVIRONMENTAL SCIENTISTS

P.O. Box 400, Lillington, NC 27546-0400

Phone (910) 893-8743 / Fax (910) 893-3594

www.halowensoil.com

08 June 2026

Angelo DeLuke
Maplewoods Construction

Reference: Preliminary Soil Investigation
6716 Valley Woods Lane
Cary, NC; Wake Co.
PIN 0733759460

Dear Mr. DeLuke,

A site investigation has been conducted for the above referenced property, located on the northern side of Valley Woods Lane in Wake County, North Carolina. The purpose of this investigation was to determine the site's ability to support subsurface wastewater dispersal systems.

All sewage disposal ratings and determinations were made in accordance with the Rules for "Wastewater Treatment and Dispersal Systems", 15A NCAC 18E. This report represents my professional opinion as a Licensed Soil Scientist but does not guarantee or represent permit approval for any lot by the Local Health Department. An application for an approved wastewater system shall be made to the Local Health Department that specifies the proposed building size and location and the design and location of the wastewater system to be installed.

The soils were evaluated under moist soil conditions through the advancing of auger borings. This evaluation included observations of topography and landscape position, soil morphology (texture, structure, clay mineralogy, organics), soil wetness, soil depth, and restrictive horizons. Soil units shown on the attached map represent dominant soil types with similar profiles but may include minor components of contrasting soil types.

The soils shown as suitable on the attached map are adequate to support subsurface wastewater dispersal systems. Due to clayey textured subsoil characteristics, you should expect that 100 to 120 feet of accepted status (25% reduction) drainline, or 65 to 80 feet of prefabricated permeable block panel (50% reduction, PPBP) type drainline would be required for the initial system per bedroom in any proposed residence.

The unsuitable soil area is so rated due to inadequate soil depth to excessive soil wetness conditions and/or unsuitable landscape position. Subsurface wastewater dispersal systems cannot be placed in this area. Some of this area will likely support building foundations, and homes could be sited in this area.

Several streams were noted and GPS located while on site (see attached map). These streams all have a 50-foot setback in which no part of any septic system may be placed. Some adjacent wetlands were located around the southernmost stream. The wetlands and streams appear to be jurisdictional; Current environmental regulations require a Clean Water Act §404 permit from the US Army Corps of Engineers and a matching §401 water quality certification from the NC Division of Water Resources for any activity that impacts jurisdictional waters; which includes filling, draining, and mechanized land clearing of the area. It is encouraged that you use care and good judgment when working in or around wetland areas. Additional information about regulatory requirements and permitting can be provided at your request.

The streams located onsite may be subject to the riparian buffer rules. The site is located in the Jordan Lake Buffer Area, and riparian zones adjacent to streams or ponds documented by the NRCS soil survey or USGS 7.5 Minute series topographic map are subject to the [state riparian buffer protection program](#) (15A NCAC 2B). The NC Division of Water Resources establishes a 50 ft riparian buffer adjacent to each stream bank (Zone 1 is the first 30 ft of the buffer and Zone 2 is the outer 20 ft) and restricts activities in these buffers. The County Soil Survey shows an unnamed intermittent stream crossing the middle of the site and one along the northern property boundary.

The buffer rule identifies specific activities, such as road crossings, that are potentially “deemed allowable”, “allowable upon authorization”, or “allowable with mitigation upon authorization” within the buffer. These activities are permitted either through the local government or NCDWR. Uses not listed in the rule are prohibited and a variance would be required to conduct that activity. In addition, riparian buffers and/or setbacks to open water may be established by local ordinances (municipalities or counties) and/or stormwater programs.

The soils underlying this property appear adequate to support the subsurface wastewater dispersal system needs of a three- or four-bedroom residence. A five-bedroom residence does appear possible; however, it will likely require the use of PPBP type drainlines for both the initial and repair systems. This type of drainline product is more expensive than conventional products, costing about \$50 per linear foot. I appreciate the opportunity to provide this service and trust that you will feel free to call on me again in the future. If you have any questions or need additional information, please contact me at your convenience.



Sincerely,

A handwritten signature in black ink that reads "Britt Wilson". The signature is fluid and cursive, with the first and last names clearly legible.

Britt Wilson
Licensed Soil Scientist

Legend

-  Boundary
-  Stream
-  Wetland
-  Stream Septic Setback
- Soil Units
-  Suitable
-  Unsuitable



Valley Woods Lane



0 60 120 ft



Hal Owen & Associates Inc.
PO Box 400, Lillington, NC 27546
www.halowensoil.com
919-893-8743

6716 Valley Woods Ln
Cary, NC; Wake Co.
PIN 0733759460

08 June 2026

Preliminary
Soil Map for Septic Suitability

For reference only. Not a survey.