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

30 September 2020

Mr. Mike Krasuski

Reference: Preliminary Soil Investigation

Magnolia Crest Subdivision Lot 11; NC PIN 0655-54-6022

Dear Mr. Krasuski,

A site investigation has been conducted for the above referenced property, located at 301 Curragh Cove, Harnett County, North Carolina. The purpose of this investigation was to determine the site's ability to support a subsurface sewage waste disposal system and repair area for a four-bedroom home. All sewage disposal ratings and determinations were made in accordance with "Laws and Rules for Sewage Treatment and Disposal Systems, 15A NCAC 18A .1900". 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 improvement permit for all residences will need to be obtained from the Health Department that specifies the proposed home size and location, and the design and location of the septic system to be installed.

SOIL INVESTIGATION

The soils were evaluated under moist soil conditions through the advancing of auger borings. A portion of this lot was observed to be underlain by soils rated as provisionally suitable for subsurface sewage waste disposal (Figure 1). These provisionally suitable soils were observed to be firm sandy clay loam to greater than 36 inches and will support long term acceptance rates of 0.4 gal/day/sqft. The unsuitable soil area is so rated due to regulatory setbacks to surface waters and stormwater diversions.

SEPTIC SYSTEM DESIGN

An initial septic system and repair area have been designed for a design flow of 480 gallons per day utilizing a long term application rate of 0.4 gal/day/ft². The initial septic system is proposed as a gravity driven system to two 150-foot long accepted status drainlines (25% reduction). The drainlines should be installed on contour with trench bottom depths at 18 inches below surface. The repair septic system is proposed as the same. A diagram of the septic system layout can be found at Figure 2.

Potential septic system drainlines have been demonstrated with various colored pin flags that are located on the lot. It is important that you do not disturb the septic system area. It is recommended that a staked line or protective fence be placed around the system prior to construction to eliminate any potential damage to the soil or the layout of the system.

SYSTEM MAINTENANCE

It is recommended that care be taken to preserve the life of your septic system. The septic tank, pump tank, and distribution boxes should be kept accessible for pumping and adjustment. Your septic system should be inspected periodically and the septic tank pumped out every 2 to 5 years by a professional contractor. Practicing water conservation in the home, such as promptly repairing leaky fixtures and running washing machines and dishwashers only when full, will help to avoid overloading the septic system. Also, disposal of oils, fats, and grease into the septic system should be avoided because they could clog drainlines and conveyance pipes. A list of other useful suggestions can be found at https://content.ces.ncsu.edu/septic-system-owners-guide

This report and the attached septic system design information will need to be submitted to the County Health Department for review and the permitting process. I appreciate the opportunity to provide this service and hope to be allowed to assist you again in the future. If you have any questions or need additional information, please contact me at your convenience.

Sincerely,

Krissina B. Newcomb

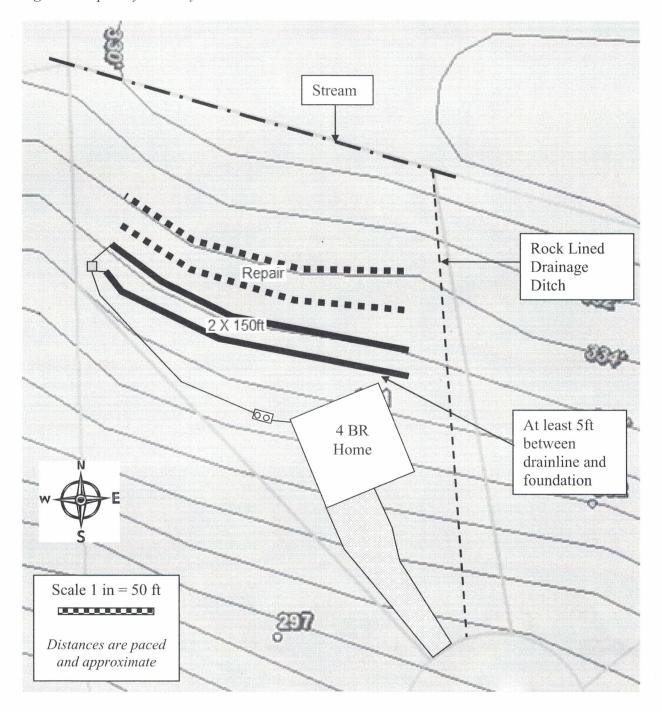
Rissina B. Newcomb

Hal Owen

Licensed Soil Scientist

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Figure 2. Septic System Layout



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Figure 1. Soil map showing Septic Suitability

