

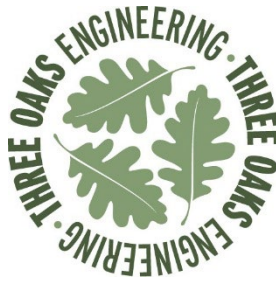
RECONNAISSANCE SOIL & SITE EVALUATION

Old Mill Road
Harnett County, NC
Three Oaks Job # 22-7118

Prepared For:

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October 24, 2022



Evan T. Morgan



INTRODUCTION & SITE DESCRIPTION

A Reconnaissance Soil & Site Evaluation was performed on an approximately 13-acre portion of a 40-acre parcel located on Old Mill Road in Harnett County, NC (PIN: 0644-67-4092.000). Three Oaks Engineering (Three Oaks) was retained to evaluate the soil and site conditions to determine areas suitable for on-site subsurface wastewater system for single-family residences. The property was evaluated in accordance with North Carolina statutes for waste disposal (“Laws and Rules for Sewage Treatment and Disposal Systems”, amended December 6, 2018).

The site is fallow field with interspersed woods. The property will be served by public water.

INVESTIGATION METHODOLOGY

The field survey was conducted on October 19, 2022, by Evan T. Morgan, LSS. Soil borings were advanced with hand-augers and soil color determined using a Munsell Soil Color Chart. Observations of the landscape as well as soil properties (depth, texture, structure, soil wetness, restrictive horizons, etc.) were recorded. Soil borings were described per the USDA-NRCS, *Field Book for Describing and Sampling Soils, Version 3.0*. Soil borings and site features were located using a hand-held GPS with sub-meter accuracy. Soil borings were flagged with blue flagging.

FINDINGS

Fourteen (14) soil borings were advanced, and their locations noted on Figure 1.

Provisionally Suitable for Conventional Type Systems. Profiles rated as Provisionally Suitable for Conventional Type Systems may include accepted, innovative, shallow-conventional, and prefabricated permeable block panel systems. These are generally the most desirable systems to install. These soils appeared adequate to potentially support a long-term acceptance rate (LTAR) of 0.3 GPD/sq-ft.

DISCUSSION

An area of Provisionally Suitable for Conventional Type Systems was identified throughout the evaluation area and encompasses approximately 256,000 sq-ft. Approximately 8,000 to 10,000 sq-ft of usable soils will be required to support a four-bedroom, 480 gallon per day (GPD), initial system and repair area utilizing a LTAR of 0.3 GPD/sq-ft. A curtain drain is recommended for systems installed in these soils.

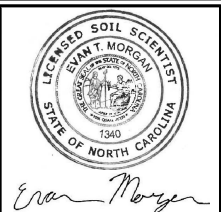
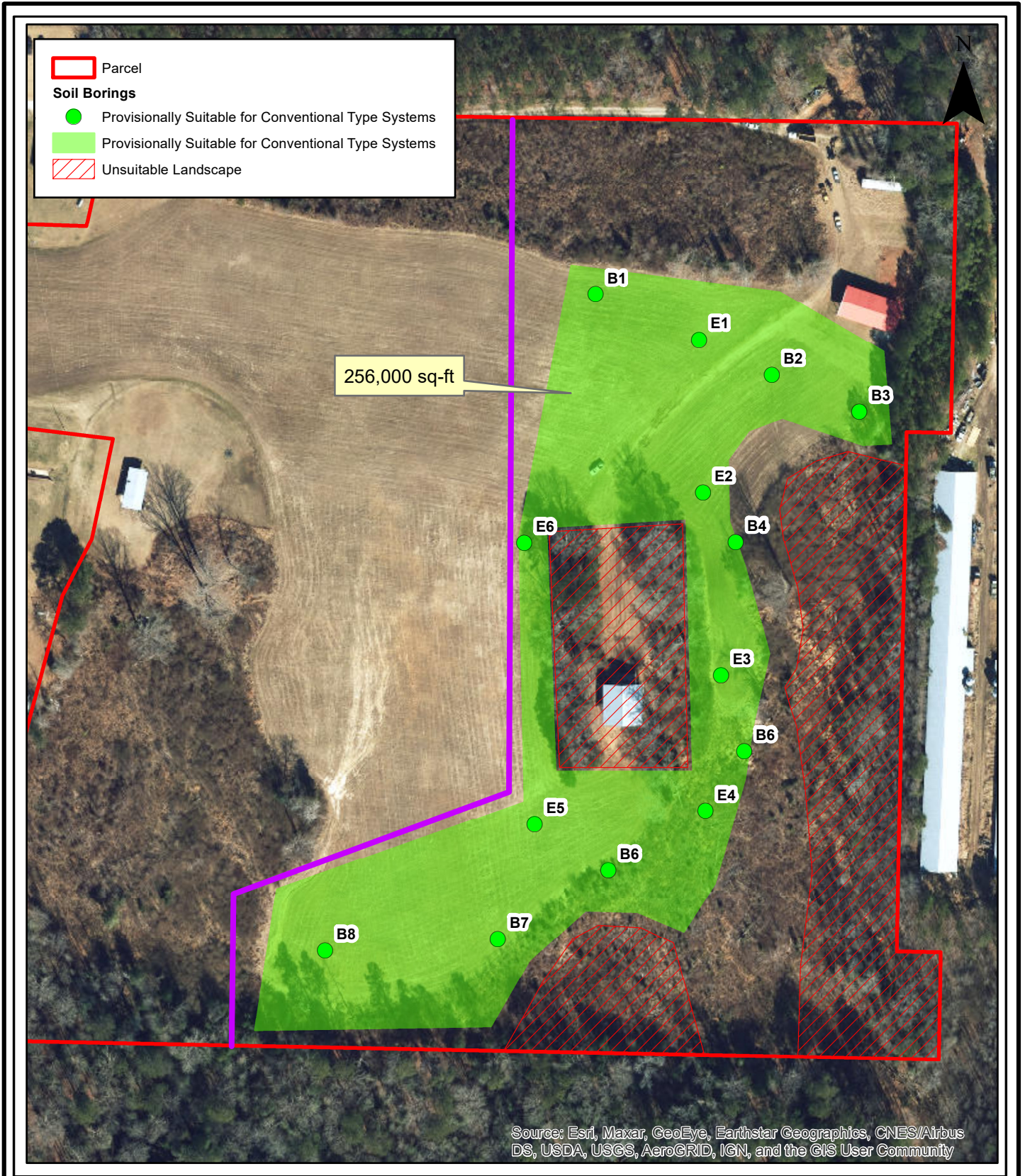
Areas of Unsuitable Landscape were observed and contain a concave drainageway and a cut/fill ad for hay storage that is unsuitable for septic drainfields to be installed in.

CONCLUSIONS

The findings presented herein represent Three Oaks’ professional opinion based on our Reconnaissance Soil and Site Evaluation and knowledge of the current laws and rules governing

on-site wastewater systems in North Carolina. Sufficient area of soil was identified to support a four-bedroom single-family residence with a conventional type of septic system. Three Oaks can assist with septic system layouts, design and permitting for a finalized home site.

Soils naturally change across a landscape and contain many inclusions. As such, attempts to quantify them are not always precise and exact. Due to this inherent variability of soils and the subjectivity when determining limiting factors, there is no guarantee that a regulating authority will agree with the findings of this report. Any concurrence with the findings of this report will be made by Harnett County at the time of Improvement Permit application.



**Reconnaissance Soil
& Site Evaluation**

Old Mill Road

Harnett County, North Carolina

Date: October 2022

Scale: 0 50 100 Feet

Job No.: 22-7118

Drawn By: ETM Checked By: MGW

Figure
1