

RE: Preliminary soil/site suitability evaluation performed on a 0.5 acre lot on Elfman Dr. in Harnett County, NC.

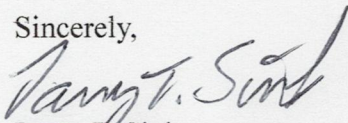
A preliminary soil/site suitability evaluation was performed on the above mentioned lot on September 26, 2025 at your request to determine areas of usable soils and favorable site conditions that have potential for subsurface wastewater treatment and disposal systems. The tract was traversed and observations were made of land forms (slopes, drainage patterns, past use, etc.) as well as soil conditions (depth, texture, structure, seasonal wetness, restrictive features, etc.) through the use of hand auger borings. This site was evaluated during dry soil conditions. The criteria used is that contained in 15ANCAC 18A.1900 "Laws and Rules for Sewage Treatment and Disposal Systems".

FINDINGS: This preliminary soil/site suitability evaluation confirmed a good potential for a single family residence. There is a high level of confidence that this lot will support the installation of a subsurface conventional septic system. This lot is located in the edge of the Sand Hills Region of Harnett County, NC. The usable soils on this lot are similar to the Ailey soil series and they are considered provisionally suitable for subsurface conventional septic systems with 24 to 30 plus inches of usable soil material. The usable textures of loamy sand to sandy clay loam will have a LTAR range of 0.4 to 0.7 gallons per square foot per day. The size of a subsurface drain field is determined by the: 1; the design flow from the source (120 gallons per bedroom per day in residences) and 2; the long term acceptance rate (LTAR) of the soil which is based on the hydraulic conductivity of the soil which is a function of the soil's texture, mineralogy, structure, and porosity. Since this lot is wooded and small, then any potential house site with usable soils should remain undisturbed by heavy equipment until authorized by the local health department and determined to be the site for the septic system drainfield and repair. An additional consideration in the overall design of the drain field is the required setbacks from various elements such as wells (50ft.), streams and ponds (50ft.), property lines (10ft.), etc. This lot has about 80 percent of usable soils, and the remaining 20 percent in the back portion of the lot is unsuitable soils. These unsuitable soils are similar to the Gilead soil series and they have soil wetness and expansive clay before 18 inches.

This report discusses the general location of potentially usable soils and favorable site conditions for on-site subsurface wastewater treatment and disposal systems and does not constitute or imply any approval or permit as needed by the client from the local health department.

I was hired for my professional and experienced knowledge in these matters.

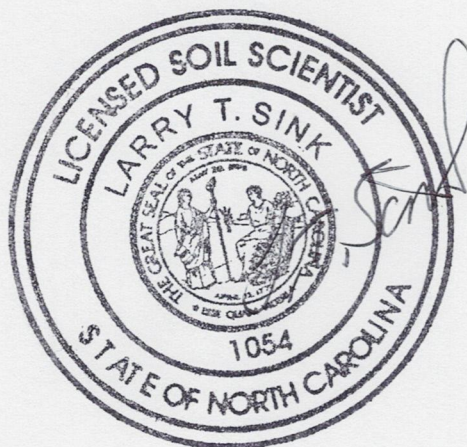
Sincerely,



Larry T. Sink

NC Licensed Soil Scientist #1054

Soils sketch map included



PRELIMINARY SOIL/SITE SUITABILITY
EVALUATION SKETCH MAP ON A 0.5 AC.
TRACT ON ELFMAN DR. IN HARNETT COUNTY, NC
PS - Provisionally Suitable Soils For Subsurface
Septic Systems.
UN - Unsuitable Soils

FOR: LNCE Solutions LLC
Sept. 27, 2025

