

July 18, 2023 Project #4488

Tennelina LLC C/O Jay Chekansky 1107 Edgewood Ave Kannapolis, NC 28081

RE: Detailed Soil/Site Evaluation on Property Located at Doster Road, Union County, PIN: Doster Road (Approx. 5.19 acres)

Mr. Chekansky,

This report details the findings of a detailed site and soil evaluation performed on the tract referenced above. The evaluation was conducted at the clients written request to determine the site's suitability for the installation of sub-surface wastewater disposal systems to serve domestic strength wastewater. This evaluation was for residential wastewater applications. Any other type of use may require additional testing and/or stricter setbacks. This report does not address systems receiving more than 3,000 gallons per day of flow.

The evaluation was conducted by Ryan P. Smith, North Carolina Licensed Soil Scientist on Monday, July 17, 2023. The evaluation was conducted during moist soil conditions with the use of a hand-auger to determine soil suitability for on-site sewage disposal systems in accordance with 15A NCAC 18A .1900 "Laws and Rules for Sewage Treatment and Disposal Systems". Characteristics that affect the suitability of sub-surface systems include soil depth to expansive clay, seasonal high-water table, rock, and unusable saprolite. Topography and slope also affect the suitability of an area for septic systems. The evaluation of these components was conducted on the site. The level of the evaluation was detailed for this tract.

We traversed this tract and observed landforms (slope, drainage patterns, past use, etc.) as well as soil conditions (depth, texture, structure, seasonal wetness, restrictive horizons, etc.) through the use of hand auger borings. From these observations, an evaluation of the site, relative to subsurface disposal of wastewater, was developed. We did not observe areas that would accommodate one or more subsurface septic systems on this tract. Based on the state regulations for onsite wastewater, the borings we conducted were unsuitable to expansive clay mineralogy, depth to unsuitable parent material and/or soil wetness indicators. The attached soils map shows the GPS locations of our borings on the tract.

This report discusses the general location of potentially usable soils for on-site wastewater disposal and the soil and site limitations on the property that exists at the time of the evaluation. Piedmont Environmental Associates, PA ("Piedmont") provides professional consulting specializing in the practice of soil science and wastewater management. Piedmont is therefore hired for its professional opinion regarding these matters. Laws and rules governing wastewater treatment and disposal are forever evolving and subject to the interpretation and opinion of individuals which are employed by local and state agencies that govern these laws and rules. Due to this fact, Piedmont cannot guarantee in any way that any area located in the field, shown on a sketch, or discussed with the client will be permitted by any of these agencies. It is for this reason that Piedmont strongly recommends to anyone considering a financial commitment on any piece of property be completely aware of all permit requirements on that property before purchase and obtain those permits prior to a final financial commitment. We are pleased to be of service in this matter. If you have any further questions, please feel free to call (336)260-3564

Sincerely,



Ryan P. Smith NC Licensed Soil Scientist # 1327 Piedmont Environmental Associates, P.A.

Attachment I

.1950 Location of Sanitary Sewage Systems

50 Lo	ocation	of Sanitary Sewage Systems		
(c)	Every	Every sanitary sewage treatment and disposal system shall be located at least the minimum		
	horizo	norizontal distance from the following:		
	(1)	Any private water supply source including a well or spring	100 feet	
	(2)	Any public water supply source	100 feet	
	(3)	Streams classified as WS-I	100 feet	
	(4)	Water classified as S.A.	100 feet	
		from mean high water mark		
	(5)	Other coastal waters	50 feet	
		from mean high water mark		
	(6)	Any other stream, canal, marsh, or other surface waters	50 feet	
	(7)	Any Class I or Class II reservoir	100 feet	
		from normal pool elevation		
	(8)	Any permanent storm water retention pond	50 feet	
		from flood pool elevation		
	(9)	Any other lake or pond	50 feet	
		from normal pool elevation		
	(10)	Any building foundation	5 feet	
		Any basement	15 feet	
	(12)	Any property line	10 feet	
		Top of slope of embankments or cuts of 2 feet or more		
	. ,	vertical height	15 feet	
	(14)	Any water line	10 feet	
		Drainage systems:		
	. ,	(A) Interceptor drains, foundation drains and storm water diversions		
		(i) upslope	10 feet	
		(ii) sideslope	15 feet	
		(iii) downslope	25 feet	
		(B) Groundwater lowering ditched and devices	25 feet	
	(16)	any swimming pool	15 feet	
	(10)	any swimming poor	13 1661	

(17) any other nitrification field (except repair area)

in no case, less than 50 feet.

- Ground absorption, sewage treatment and disposal systems may be located closer than 100 feet from a private well supply, except springs and uncased wells located downslope and used as a source of drinking water, repairs, space limitations and other site-planning considerations but shall be located the maximum feasible distance and,
- (c) Nitrification fields and repair areas shall not be located under paved areas or areas subject to vehicular traffic. If effluent is to be conveyed under areas subject to vehicular traffic, ductile iron or its equivalent pipe shall be used. However, pipe specified in Rule .1955 (e) may be used if a minimum of 30 inches of compacted cover is provided over the pipe.

Note: Systems over 3000 GPD or an individual nitrification fields with a capacity of 1500 GPD or more have more restrictive setback requirements, see .1950 (a) (17) (d) for specifics.