

# 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

## PROPERTY INFORMATION

Project Name:	26 Comm Park Ln, Angier
Site Address:	26 Comm Park Ln, Angier, NC 27501
S/D Name and Lot#	210 Commercial Park Lot 6
PIN:	0673-24-0911
Size (Acre)	0.64 acre
County:	Harnett

## APPLICANT INFORMATION

Name:	Dept of Interiors, Inc.
Mailing Address:	PO Box 396, Fuquay-Varina, NC 27526
Telephone Number:	919-669-7292
E-mail Address:	deptofinteriorsinc@yahoo.com

**The LSS Evaluation attached to this application is to be used to produce, design, and construct features for permitting in accordance with SL 2018-114 Section 11.(c).**

\_\_\_\_\_  
Authorized Signature

\_\_\_\_\_  
Title

\_\_\_\_\_  
Date

(Please legibly print name here: \_\_\_\_\_ )

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18 June 2021

Eric Kara  
Dept of Interiors, Inc.  
PO Box 396  
Fuquay-Varina, NC 27526

Reference: LSS Evaluation (SL 2018-114)  
26 Comm Park Ln, Angier, NC

Dear Mr. Kara,

A site investigation was conducted on 9 June 2021 for the above referenced property, which is located at 26 Comm Park Lane off of NC 210 N in Harnett County, North Carolina. The purpose of the investigation was to determine the ability of this lot to support a subsurface sewage waste disposal system and 100% repair area for a proposed business with a maximum of eight employees or a proposed daily flow of 200 gallons. Public water supplies will be utilized. At the time of the investigation, the site had been cleared, the lot corners marked, and the building footprint pinned.

**This LSS Evaluation is being submitted pursuant to and meets the requirements of SL 2018-114 Section 11.(c).** The evaluation of soil conditions and site features is provided in accordance with G.S. 130A-335. All 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.

## SOIL INVESTIGATION

The soils were evaluated under moist soil conditions through the advancing of auger borings. Soils at the site appeared to be formed from sedimentary parent. The soils indicated as provisionally suitable for subsurface sewage waste disposal systems are so rated due to clayey textured subsoil layers (Figure 1). The subsoils were observed to be well drained, friable sandy clay loams and extended to greater than 42 inches below ground surface (see attached soil/site evaluation form). These soils appear adequate to support long-term acceptance rates of 0.5 gal/day/sqft for conventional drainlines.

## SEPTIC SYSTEM DESIGN

Adequate amounts of usable soils were observed on this lot to support an initial septic system and 100% repair area. Initial and repair septic systems have been designed for the proposed business utilizing a design daily flow of 200 gallons. A 1000 gallon (at minimum) septic tank and an approved septic effluent filter is required. A 1000 gallon (at minimum) pump tank will be required to lift effluent to the nitrification field. The long term application rate used to design both the initial and repair drainfields was 0.5 gal/day/ft<sup>2</sup>.

The initial septic system is proposed as a pump driven system to two 50-ft long accepted status drainlines utilizing a 25% reduction in total drainline length. The drainlines should be installed on contour with maximum trench bottom depths at 24 inches below surface.

The repair septic system is proposed as a pump driven system to two 50-ft long accepted status drainlines utilizing a 25% reduction in total drainline length. The drainlines should be installed on contour with maximum trench bottom depths at 24 inches below surface.

Conformance to all regulatory setbacks shall be maintained. The minimum horizontal setback from a septic system to a property line is 10 ft, to a building foundation is 5 feet, and to a water line is 10 feet. All drainlines shall be installed on nine foot centers or greater, as flagged at the site.

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 the 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 3 to 5 years by a professional contractor. Promptly repair leaky fixtures to avoid hydraulically overloading the septic system. Disposal of oils, fats, and grease into the septic system should be avoided because they could clog drainlines and conveyance pipes. Protect the tanks and nitrification field from vehicular traffic. A list of other useful suggestions can be found at <https://content.ces.ncsu.edu/septic-system-owners-guide>

**CONCLUSION**

This report and the attached septic system design information will need to be submitted to the Local 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*

Krissina B. Newcomb

*Hal Owen*

Hal Owen  
Licensed Soil Scientist

SOIL/SITE EVALUATION  
FOR ON-SITE WASTEWATER SYSTEM

APPLICANT: Eric Kara, Dept of Interiors, Inc. OWNER:  AGENT:  PHONE: 919-669-7292  
 ADDRESS: PO Box 396, Fuquay-Varina, NC 27526  
 PROPOSED FACILITY: business PROPOSED DAILY FLOW (.1941): 200 gpd  
 LOCATION OF SITE: 26 Comm Park Ln, Angier PROPERTY SIZE: 0.64 Ac  
 COUNTY: Harnett PROPERTY ID # 0673-24-0911  
 WATER SUPPLY: On-Site Well , Community Well , Public , Other \_\_\_\_\_  
 EVALUATION METHOD: Auger Boring  Pit  DATE EVALUATED: 9 June 2021  
 EVALUATED BY: Hal Owen, LSS 1102, Steven Boor, Hayes Christenbury

PROFILE 1

HORIZON	DEPTH (IN)	MATRIX	MOTTLES	MOTTLES ABUNDANCE/ SIZE/CONTRAST	(a)(1) TEXTURE	.1941 (a)(2) STRUCTURE	(a)(3) MINEROLOGY	CONSISTENCE MOIST
	0-6				LS	2 M GR	NEXP	VFR
	6-38				SL	2 M GR	NEXP	VFR
	38-48				SCL	2 M SBK	NEXP	FR
.1940 LANDSCAPE POS./ SLOPE%			L - 1%	.1956 SAPROLITE CLASS			NA	
.1942 SOIL WETNESS CONDITION			>48"	.1944 RESTRICTIVE HORIZON			>48"	
.1943 SOIL DEPTH			>48"	PROFILE CLASSIFICATION & LTAR			PS 0.5 GPD/SF	
COMMENTS								

	INITIAL SYSTEM	REPAIR SYSTEM
.1945 AVAILABLE SPACE	400 sf trench bottom	400 sf trench bottom
SYSTEM TYPE	Accepted status	Accepted status
SITE LTAR (gpd/ft <sup>2</sup> )	0.5	0.5

.1946 OTHER FACTORS: \_\_\_\_\_  
 .1948 SITE CLASSIFICATION: Provisionally Suitable

COMMENTS: \_\_\_\_\_

**LEGEND OF ABBREVIATIONS FOR SITE EVALUATION FORM**

<p><b><u>LANDSCAPE POSITION</u></b>                  CC - Concave Slope                  CV - Convex Slope                  DS - Debris Slump                  D - Depression                  DW - Drainage Way                  FP - Flood Plain                  FS - Foot Slope                  H - Head Slope                  L - Linear Slope                  N - Nose Slope                  R - Ridge                  S - Shoulder Slope                  T - Terrace</p> <p><b><u>MINEROLOGY</u></b>                  SEXP - Slightly Expansive                  EXP - Expansive</p>	<p><b><u>TEXTURE GROUP</u></b></p> <p>I</p> <p>II</p> <p>III</p> <p>IV</p>	<p><b><u>TEXTURE CLASS</u></b></p> <p>S - Sand                  LS - Loamy Sand                  SL - Sandy Loam                  L - Loam                  SCL - Sandy Clay Loam                  CL - Clay Loam                  SiL - Silt Loam                  Si - Silt                  SiCL - Silt Clay Loam                  SC - Sandy Clay                  C - Clay                  SiC - Silty Clay                  O - Organic</p>	<p><b><u>.1955 LTAR (gal/day/sqft)</u></b></p> <p>1.2-0.8                  0.8 – 0.6                  0.6 – 0.3                  0.4 – 0.1                  none</p>
	<p><b><u>STRUCTURE</u></b>                  G - Single Grain                  M - Massive                  CR - Crumb                  GR - Granular                  SBK - Subangular Blocky                  ABK - Angular Blocky                  PL - Platy                  PR - Prismatic</p>	<p><b><u>MOIST CONSISTENCE</u></b>                  VFR - Very Friable                  FR - Friable                  FI - Firm                  VFI - Very Firm                  EFI - Extremely Firm</p> <p><b><u>MINERALOGY</u></b>                  NEXP - Non Expansive                  SEXP - Slightly Expansive                  EXP - Expansive</p>	<p><b><u>WET CONSISTENCE</u></b>                  NS - Non Stick                  SS - Slightly Sticky                  MS - Moderately Stick                  VS - Very Sticky                  NP - Non Plastic                  SP - Slightly Plastic                  MP - Moderately Plastic                  VP - Very Plastic</p>
<p><b><u>MOTTLES</u></b></p> <p>f - few                      1 - fine                      F - Faint                  c - common                2 - medium                D - Distinct                  m - many                    3 - coarse                    P - Prominent</p>			

Give Horizon Depth in inches below natural soil surface and Fill Depth in inches above land surface.  
 Depth to Soil Wetness: inches below land surface to free water or to soil colors with chroma 2 or less.  
 Classification S – Suitable PS – Provisionally Suitable U – Unsuitable

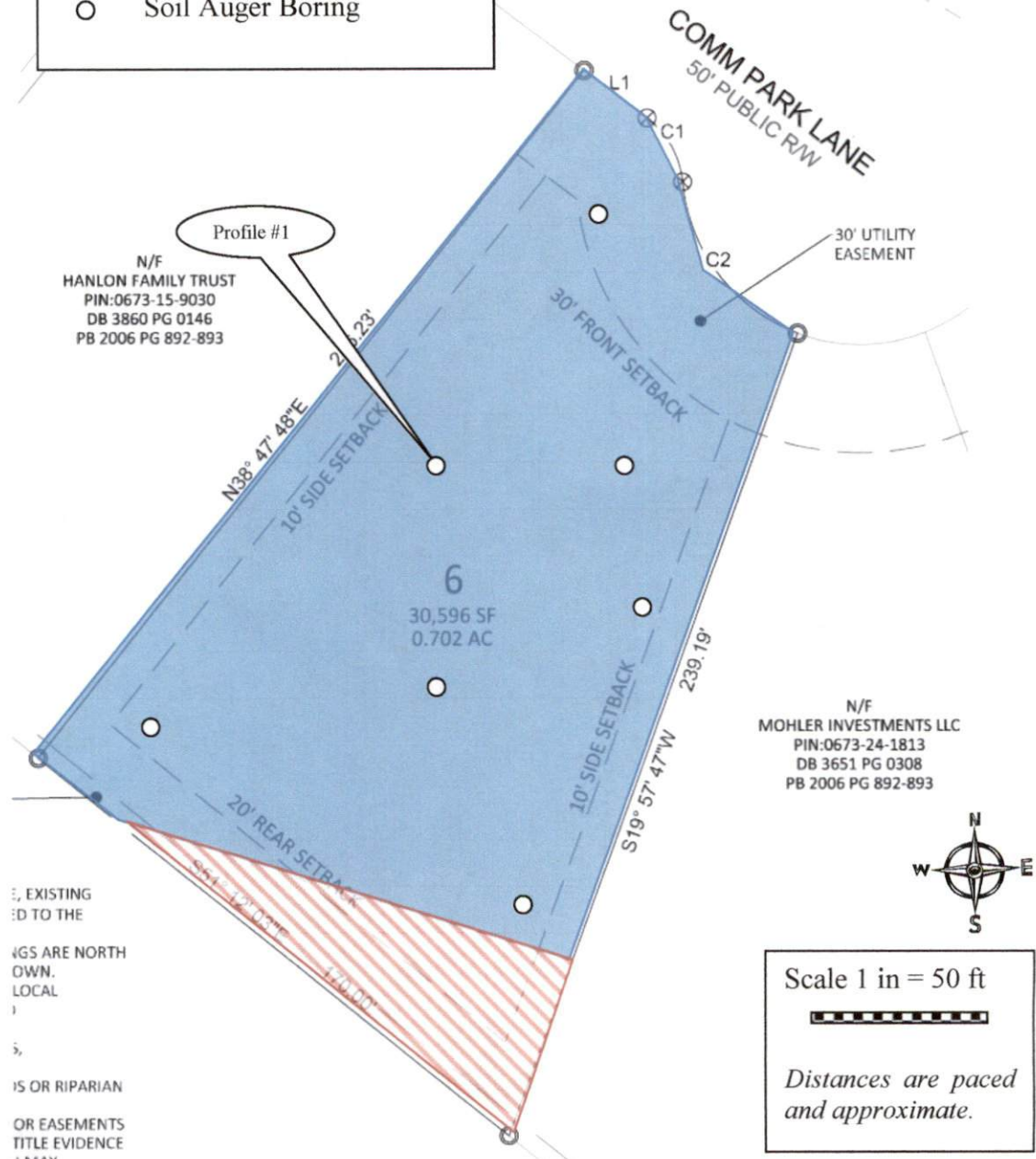
LSS Evaluation (SL 2018-114)  
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 18 June 2021

Figure 1. Soil Map showing Septic Suitability



*Soil Map Legend*

- Provisionally Suitable Soils
- Unsuitable Soils
- Soil Auger Boring



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Scale 1 in = 50 ft

Figure 2. Septic system design and layout

