SITE & SOIL EVALUATION

FOR SUBSURFACE WASTEWATER DISPOSAL

FOR

Bearwick Ct

Parcels 8175060, 8175061,8175062, & 8175063

Woodleaf, Rowan County. NC

April 22, 2025

PREPARED FOR:

Home Bridge Real Estate, LLC
115 Jornada Loop
Sante Fe, NM 87508

PREPARED BY:

Jacob Presley, LSS
PO Box 899
Dallas, NC 28034
Phone: 980-275-0352
Email: jbpresley03@yahoo.com

Background

Home Bridge Real Estate. LLC has requested the services of Jacob Presley to perform a Site & Soil Evaluation on a 4 lots in Rowan County Parcel #'s 8175060, 8175061, 8175062, and 8175063 located on Bearwick Ct, Woodleaf, NC. Home Bridge Real Estate requested the feasibility of the properties for housing utilizing subsurface wastewater disposal (septic systems) and wells. The property currently is owned by Home Bridge Real Estate, it is wooded, with a stream located near or along the south southeast portion of the properties. There is a gully with rip rap that appears to have been used for required erosion control during the development of the subdivision known as Covington Heights Section 2. This gully/drainageway appears to run near or along the property line dividing parcel 8175061 & 8175062. Property lines were not surveyed or marked. The evaluation was to perform recognizance and evaluate the soils with hand auger borings across the property for the potential of residential Subsurface Wastewater Disposal Suitability.

Methodology

Hand Auger borings were advanced across the site using a 2 ¾" hand auger. Eighteen borings were conducted across the 4 lots, and their locations flagged in the field using greenish yellow ribbon. Approximate Boring locations were mapped in the field using aerial photography, topography, and GIS data. All locations shown are shown in the Boring Location Sketch and are approximate. Soil characteristics described in the borings were landscape position and slope of location, horizon depths, structure, texture, consistence, mineralogy, soil wetness, soil depth, saprolite class if present, restrictive horizons, profile class, and long-term acceptance rate. Soils were described based on interpretations of the NC *Laws and Rules 15A NCAC Subchapter 18E - Wastewater Treatment and Disposal Systems.*

Topography was evaluated for Suitability, and slope determined using a Clinometer and GIS contour data. Unsuitable soil topography (drainageways) and a ditch running through the property were mapped approximately using available Rowan County GIS data and recognizance.

Findings

A total of 18 hand auger borings were described across the property except where topography and any required setbacks such as off the stream created Unsuitable areas. The approximate boring locations on the property are shown on the attached Boring Location Sketch.
Fourteen of the borings contained fill soils which were clay and clay loam texture. Fill is Unsuitable by North Carolina law with these types of textured soils. The other 4 borings contained soil wetness conditions (2 chroma mottles), Expansive Clay, and Unsuitable Saprolite textures.

Unsuitable topography is shown on the attached Boring Location Sketch and generally consists of drainageways along the stream and running toward the stream.
Jacob Presley also contacted Rowan County for any information they had for the properties regarding onsite subsurface wastewater system permitting. Only one (parcel 8175063) property was found in their records to have had a formal evaluation and it was denied a permit. That documentation has been attached to this report.

Summary and Recommendations

Jacob Presley was unable to identify any area that may be Suitable for Subsurface Onsite Wastewater System Disposal. A wastewater Engineer could be contracted to explore the option of an Engineered System (Engineered Option Permit) or explore the possibility of an NPDES surface discharge system. I am aware of some of these systems being permitted for individual residences, but it is very uncommon, and I do not have any advice other than to contact a Wastewater Engineer if you would like to explore that option. I have no recommendation on if those types of permits are even an option for these properties.

Conclusion

The findings presented herein represent Jacob Presley's professional opinion based upon the soil and site evaluation and knowledge of the current laws and regulations governing on-site wastewater systems in North Carolina. Due to the subjectivity of soil properties and how they can vary from one spot to another within feet, another Soil Scientist may have a different impression or solution for the properties but Jacob Presley is at this time not able to determine any Onsite Subsurface Wastewater Option that will meet state laws for these properties. Presley is not responsible or liable for any actions or financial decisions made on said property. This Preliminary Soil Evaluation was done based on interpretations of the rules governing NC wastewater treatment and disposal systems. Other qualified professionals may have different interpretations of the site and soil described herein. This report and attachments are solely for the use of Home Bridge Real Estate and are non transferable.

If you have any questions please contact Jacob Presley.

Sincerely,

Jacob Presley, LSS
980-275-0352
Jbpresley03@yahoo.com

Attachments:
Soil Boring Descriptions
Boring Location Sketch
County Permit Denial for Parcel 8175063

Parcel ID: 8175063, 8175062, 8175061 & 8175060
PIN: 5733-03-23-5411, 5733-03-23-4268,
PIN: 5733-03-23-3220, 5733-03-23-2
Lots 52, 53, 54, & 55

SOIL/SITE EVALUATION
for ON-SITE WASTEWATER SYSTEM

Owner: Home Bridge Real Estate, LLC
Address: 115 JORNADA LOOP, SANTE FE, NM 87508
Proposed Facility: 3 Bedroom House — Design Flow (.0400): 360 GPD
Location of Site: Bearwick Ct (Cul-de-sac), Woodleaf, NC 27054
Water Supply: [ ] Public [X] Individual [X] Well
Evaluation Method: [X] Auger Boring [ ] Pit
Type of Wastewater: [X] Sewage [ ] Industrial Process

Client: Owner
Date Evaluated: 12/2/2024 & 4/7/25
Property Size: 2.08 ac
Property Recorded: Unknown
[ ] Spring [ ] Municipal
[ ] Cut
[ ] Mixed

PROFILE #	.0502 Landscape Position/ Slope%	Horizon Depth (IN.)	SOIL MORPHOLOGY .0503 Structure/ Texture	SOIL MORPHOLOGY .0503 Consistence Mineralogy	b PROFILE FACTORS .0504 Soil Wetness/ Color	.0505 Soil Depth (IN.)	.0506 Sapro Class	.0507 Restr Horiz	General Comments	.0509 Profile Class & LTAR	.0502(d) Maximum Trench Bottom Depth for 3' Wide Trench Low Side
Boring 1	LS 4%	0 - 55	Fill	NA	NA	0	NA	NA		US	NA
Boring 2	HS 8%	0 - 6	sbk C	S P FI SEXP	10YR 7/2 at 18"	6	US	NA	10YR 8/1 mottles from parent material some weak structure did two borings for confirmation	US	NA
		6 - 53	mass C/CL	S P FI SEXP							
Boring 3	LS 6%	0 - 50	Fill	NA	NA	0	NA	NA		US	NA
Boring 4	LS 6%	0 - 48	Fill	NA	NA	0	NA	NA		US	NA
Boring 5	HS 4%	0 -55	Fill	NA	NA	0	NA	NA		US	NA
Boring 6	LS 4%	0 - 48	Fill	NA					slope drops steeply 20' from boring toward creek	US	NA
Boring 7	LS 6%	0 - 48	Fill	NA	NA	0	NA	NA		US	NA
Boring 8	LS 6%	0 - 48	Fill	NA	NA	0	NA	NA		US	NA

Description	Initial System	Repair System
Available Space (.0508)	**Unsuitable**	**Unsuitable**
System Type(s)	**NA**	**NA**
Site LTAR (gpd/sq ft)	**NA**	**NA**
Maximum Trench Depth	**NA**	**NA**

LICENSED SOIL SCIENTIST JACOB B. PRESLEY THE GREAT SEAL OF THE STATE OF NORTH CAROLINA 1283 STATE OF NORTH CAROLINA

Other Factors (.1946):
Soil Evaluation By: Jacob Presley, LSS
Others Present:
Site Classification (.0509): Unsuitable
Site Evaluation By: Jacob Presley, LSS
Others Present:

SOIL/SITE EVALUATION
for ON-SITE WASTEWATER SYSTEM
CONTINUED

PROFILE #	1940 Landscape Position/ Slope%	Horizon Depth (IN.)	SOIL MORPHOLOGY 1941		PROFILE FACTORS b				General Comments	Profile Class & LTAR	Maximum Trench Bottom Depth for 3' Wide Conventional Trench
			1941 Structure/ Texture	1941 Consistence Mineralogy	1942 Soil Wetness/ Color	1943 Soil Depth (IN.)	1956 Capra Class	1944 Restr. Horiz			
Boring 9	LS 6%	0 - 48	Fill	NA	NA	0	NA	NA	Fill is a clean fill, not much organics	US	NA
Boring 10	LS 10%	0 - 3	gr L	SS SP FR SEXP	10YR 7/2 at 8"	35	NA	NA		US	NA
		3 - 35	abk C	S VP FI EXP							
Boring 11	LS 6%	0 - 40	Fill	NA	NA	0	NA	NA	very little suitable topo in area	US	NA
Boring 12	LS 6%	0 - 40	Fill	NA	NA	0	NA	NA	very little suitable topo in area	US	NA
Boring 13	HS 8%	0 - 6	sbk C	S P FI SEXP	10YR 7/2 at 17"	6	US	NA	weak structure 10YR 8/1 mottles	US	NA
		6 - 30	mass C/CL	S P FI SEXP							
Boring 14	HS 8%	0 - 16	Fill	NA	10YR 7/2 at 17"	6	US	NA	too little depth of suitable soil for use	US	NA
		16 - 33	sbk C	S P FR SEXP							
		33 - 48	abk C	S VP VFI EXP							
Boring 15	LS 6%	0 - 36	Fill	NA	NA	0	NA	NA	Fill is a clean fill, not much organics	US	NA
Boring 16	LS 6%	0 - 48	Fill	NA	NA	0	NA	NA	Fill is a clean fill, not much organics	US	NA
Boring 17	LS 6%	0 - 36	Fill	NA	NA	0	NA	NA	Fill is a clean fill, not much organics	US	NA
Boring 18	LS 6%	0 - 36	Fill	NA	NA	0	NA	NA	Fill is a clean fill, not much organics	US	NA

Parcel ID: 8175063, 8175062,
PIN: 5733-03-23-5411, 5733-0
PIN: 5733-03-23-3220, 5733-0
Lots 52, 53, 54, & 55

COMMENTS: Near creek slope drops quickly and uneven topography along slope indicates fill placement. Drainage easement between lots 52 & 53. Actual drainageway/gully running between lots 53 & 54, contains rip rap.

Landscape Position
R-Ridge
SS-Shoulder Slope
LS-Linear Slope
FS-Foot Slope
NS-Nose Slope
HS-Head Slope
CC-Concave Slope
CV-Convex Slope
T-Terrace
FP-Flood Plain
D-Drainage Way

Group	Texture	.0901 LTAR
I	S-Sand	1.2 - 0.8
	LS-Loamy Sand	
II	SL-Sandy Loam	0.8 - 0.6
	L-Loam	
III	Si-Silt	0.6 - 0.3
	SiCL-Silty Clay Loam	
	CL-Clay Loam	
	SCL-Sandy Clay Loam	
	SiL-Silt Loam	
IV	SC-Sandy Clay	0.4 - 0.1
	SiC-Silty Clay	
	C-Clay	

Structure
sg-Single Grain
mass-Massive
cr-Crumb
gr-Granular
sbk-Subangular Blocky
abk- Angular Blocky
pl-Platy
pr-Prismatic

Consistence
Moist
VFR-Very Friable
FR-Friable
FI-Firm
VFI-Very Firm
EFI-Extremely Firm

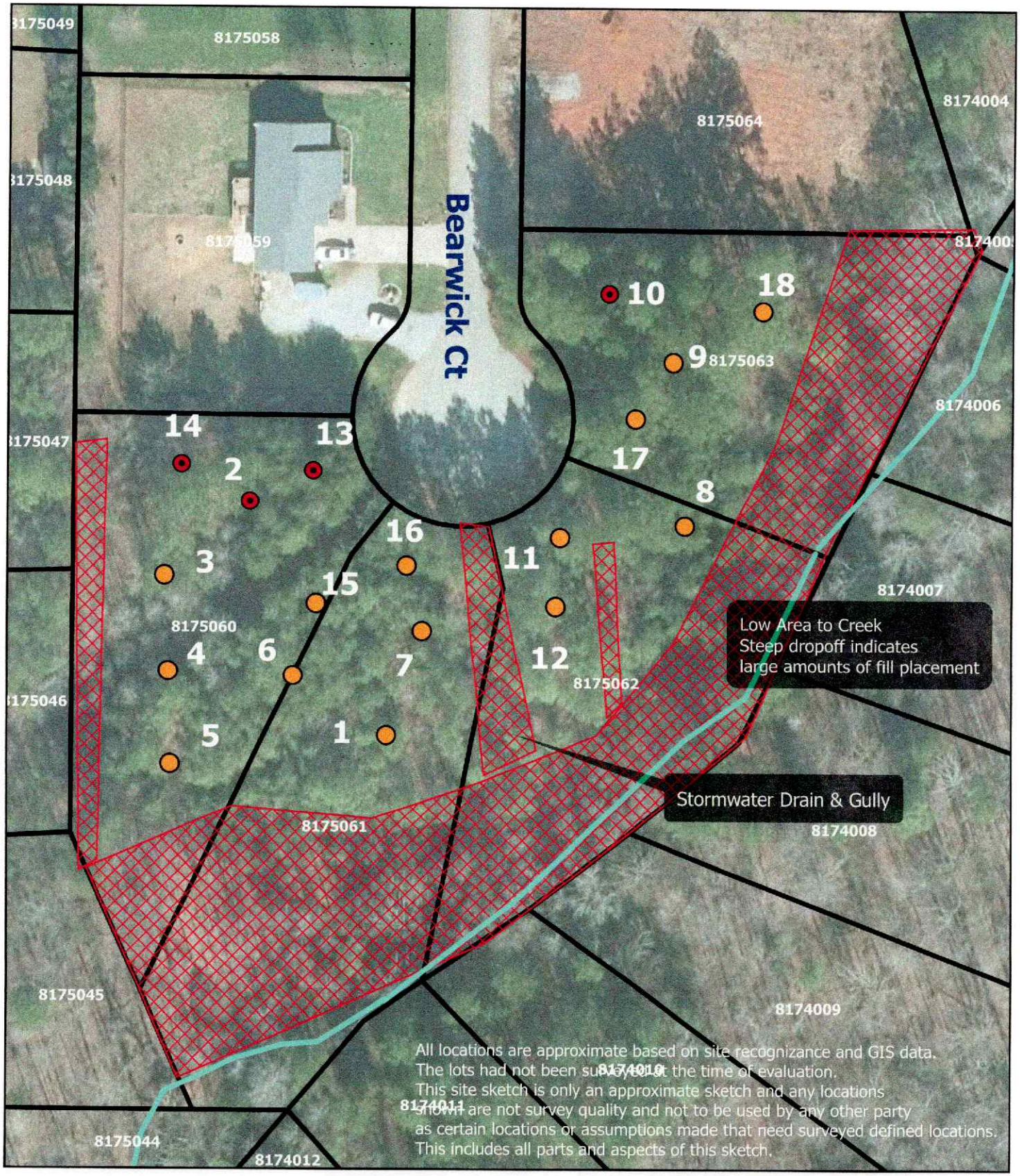
Consistence
Wet
SS-Slightly Sticky
S-Sticky
VS-Very Sticky
NP-Non-Plastic
SP-Slightly Plastic
P-Plastic
VP-Very Plastic

Mineralogy
SEXP-Slightly Expansive
EXP-Expansive

Classification
US-Unsuitable
S-Suitable
NA-Not Applicable

Sketch of Soil Evaluation Locations

SEE ATTACHED BORING LOCATION SKETCH



Legend

- Unsuitable Soil Borings
- Fill Borings (Unsuitable)
- Stream
- Unsuitable Topography
- Tax_Parcels

Bearwick Ct Soil/Septic System Evaluation
Parcels 8175060, 8175061,8175062, & 8175063
Woodleaf, Rowan County. NC
Soil Boring Location Sketch

N

Sketch By: JBP
Date: 4/8/2025

0 15 30 60 Feet

Leonard L. Wood, MS, MPH
Director

Telephone (704) 642-2000
FAX (704) 642-2003

Rowan County Department of Health

Environmental Health Division
402 North Main Street • Salisbury, NC 28144

November 9, 2004 # 817-5063

TO WHOM IT MAY CONCERN:

Re: Application for improvement permit for: Tax Map #817-5, Parcel #063

The Rowan County Health Department, Environmental Health Division, on October 6, 2004, evaluated the above-referenced property at the site designated on the plat/site plan that accompanies your improvement permit application. According to your application, the site is to serve a three bedroom residence with a design wastewater flow of 360 gallons per day. The evaluation was done in accordance with the law and rules governing wastewater systems in North Carolina General Statute 130A-333 and related statutes and Title 15A, Subchapter 18A, of the North Carolina Administrative Code, Rule .1900 and related rules.

Based on the criteria set out in Title 15A, Subchapter 18A, of the North Carolina Administrative Code, Rules .1940 through .1948, the evaluation indicated that the site is **UNSUITABLE** for a ground absorption sewage system. Therefore, your request for an improvement permit is **DENIED.** A copy of the site evaluation is enclosed. The site is unsuitable based on the following:

_____ Unsuitable soil topography and/or landscape position (Rule .1940)
X____ Unsuitable soil characteristics (structure or clay mineralogy) (Rule .1941)
X____ Unsuitable soil wetness condition (Rule .1942)
X____ Unsuitable soil depth (Rule .1943)
X____ Presence of restrictive horizon (Rule .1944)
X____ Insufficient space for septic system and repair area (Rule .1945)
_____ Unsuitable for meeting required setbacks (Rule .1950)
_____ Other (Rule 1946)_____

These severe soil or site limitations could cause premature system failure, leading to the discharge of untreated sewage on the ground surface, in surface waters, directly into ground water or inside your structure.

The site evaluation included consideration of possible site modifications, and modified, innovative or alternative systems. However, the Health Department has determined that none of the above options will overcome the severe conditions on this site. A possible option might be a system designed to dispose of sewage to another area of suitable soil or off-site to additional property.

For the reasons set out above, the property is currently **UNSUITABLE**, and an improvement permit shall not be issued for this site in accordance with Rule .1948 (c).

However, the site classified as **UNSUITABLE** may be classified as **PROVISIONALLY SUITABLE** if written documentation is provided that meets the requirements of Rule .1948 (d). A copy of this rule is enclosed. You may hire a consultant to assist you if you wish to try to develop a plan under which your site could be reclassified as **PROVISIONALLY SUITABLE.**

You have a right to an informal review of this decision. You may request an informal review by the soil scientist or environmental health supervisor at the local health department. You may also request an informal review by the N.C. Department of Environment and Natural Resources regional soils specialist. A request for informal review must be made in writing to the local health department.

You also have a right to a formal appeal of this decision. To pursue a formal appeal, you must file a petition for a contested case hearing with the Office of Administrative Hearings, 6714 Mail Center, Raleigh, N.C. 27699-6714. To get a copy of a petition form, you may write the Office of Administrative Hearings or call the office at 919 733 0926. The petition for a contested case hearing must be filed in accordance with the provision of North Carolina General Statutes 130A-24 and 150B-23 and all other applicable provisions of Chapter 150B. N.C. General Statute 130A-335 (g) provides that your hearing would be held in the county where your property is located.

Please note: If you wish to pursue a formal appeal, you must file the petition form with the Office of Administrative Hearings **WITHIN 30 DAYS OF THE DATE OF THIS LETTER.** The date of this letter is November 9, 2004. Meeting the 30 day deadline is critical to your right to a formal appeal. Beginning a formal appeal within 30 days will not interfere with any informal review that you might request. Do not wait for the outcome of any informal review if you wish to file a formal appeal.

If you file a petition for a contested case hearing with the Office of Administrative Hearings, you are required by law (N.C. General Statute 150B-23) to send a copy of your petition to the North Carolina Department of Environment and Natural Resources. Send the copy to: Office of General Counsel, N.C. Department of Environment and Natural Resources, 1601 Mail Service Center, Raleigh, N.C. 27699-1601. Do **NOT** send the copy of the petition to your local health department. Sending a copy of your petition to the local health department will **NOT** satisfy the legal requirement in the N.C. General Statute 150B-23 that you send a copy to the Office of General Counsel, NCDENR.

You may call or write the local health department if you need any additional information or assistance.

Sincerely,

Jeff Link, R.S.
Environmental Health Specialist

JL

SOIL/SITE EVALUATION WORKSHEET

Date: 10/6/04 Phone: _____

Owner/Applicant: Michelle Minter, 1099 Bearwick Ct. Woodlake N.C.

Property Location: Lot # 55 Covington Est.

Property Size: .5 acres Source of Water: Private Structure: HSE No. Bedrooms: 3

Participants: Kevin Rogers, SC

Persons Contacted: Phyllis Smith Floyd Echeek

Soil Factors	Area 1	Area 2	Area 3	Area 4	Area 5	Area 6	Area 7	Area 8	Area 9	Area 10
1. % Slope & Topography										
Soil Depth										
2. Horizon I Depth	Filled	0-4"	0-3"	0-4"	Filled					
Texture & Group		SL	SL	SL						
Consistence		FRI	FRI	FRI						
Structure										
Horizon II Depth		4-14"	3-15"	4-18						
Texture & Group		C	C	C						
Consistence		V Firm	V Firm	Firm						
Structure										
Horizon III Depth		Saprolite + SW								
Texture & Group										
Consistence										
Structure										
Horizon IV Depth										
Texture & Group										
Consistence										
Structure										
Horizon V Depth										
Texture & Group										
Consistence										
Structure										
3. Restrictive Horizon										
4. Depth to Soil Wetness										

5. Available Space S PS (U) 6. Application Rate 7. Site Class S PS (U)

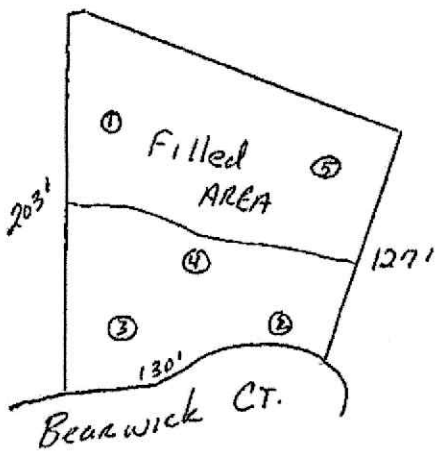
Comments: Property unusable due to soils & Fill on half of lot

OVER FOR MAP

U-Unsuitable S-Suitable PS-Provisionally Suitable

RCHD 3/95

Lot # 55



Rowan County Health Dept. Map

SITE & SOIL EVALUATION

FOR SUBSURFACE WASTEWATER DISPOSAL

FOR

Glenbriar Ct

Parcels 8175042, & 8175043

Woodleaf, Rowan County. NC

April 22, 2025

PREPARED FOR:

Home Bridge Real Estate, LLC
115 Jornada Loop
Sante Fe, NM 87508

PREPARED BY:

Jacob Presley, LSS
PO Box 899
Dallas, NC 28034
Phone: 980-275-0352
Email: jbpresley03@yahoo.com

Background

Home Bridge Real Estate. LLC has requested the services of Jacob Presley to perform a Site & Soil Evaluation on 2 lots in Rowan County Parcel #'s 8175042, and 8175043 located on Glenbriar Ct, Woodleaf, NC. Home Bridge Real Estate requested the feasibility of the properties for housing utilizing subsurface wastewater disposal (septic systems) and wells. The property currently is owned by Home Bridge Real Estate, it is wooded, with a stream located near or along the south border of the properties. The properties are at the south end of the Glenbriar Ct Cul-de-sac There is a drainage ditch with rip rap that appears to have been used for required erosion control during the development of the subdivision known as Covington Heights Section 2. This drainageway appears to run near or along the property line dividing the two parcels and only runs approximately 15' downslope from the pavement. Property lines appeared to be surveyed and marked by someone previously. The evaluation was to perform recognizance and evaluate the soils with hand auger borings across the property for the potential of residential Subsurface Wastewater Disposal Suitability.

Methodology

Hand Auger borings were advanced across the site using a 2 ¾" hand auger. Eleven borings were conducted across the 2 lots, and their locations flagged in the field using greenish yellow ribbon. Approximate Boring locations were mapped in the field using the property line markings assumed to have been done by a surveyor previously, aerial photography, topography, and GIS data. All locations shown are shown in the Boring Location Sketch and are approximate. Soil characteristics described in the borings were landscape position and slope of location, horizon depths, structure, texture, consistence, mineralogy, soil wetness, soil depth, saprolite class if present, restrictive horizons, profile class, and long-term acceptance rate. Soils were described based on interpretations of the NC *Laws and Rules 15A NCAC Subchapter 18E - Wastewater Treatment and Disposal Systems.*

Topography was evaluated for Suitability, and slope determined using a Clinometer and GIS contour data. Unsuitable soil topography (drainageways) and a stream running along the south property line were mapped approximately using available Rowan County GIS data and recognizance.

Findings

A total of 11 hand auger borings were described across the property except where topography and any required setbacks such as off the stream created Unsuitable areas. The approximate boring locations on the property are shown on the attached Boring Location Sketch. Soil mineralogy was variable with Expansive Clays depths varying from as shallow as 4" to 24". Soil wetness mottles were observed in all borings from 17 to 27" except for boring 1 were it was observed at 6" and had a 2 chroma matrix from 18" to boring completion at 36".

Unsuitable topography is shown on the attached Boring Location Sketch and generally consists of drainageways along the stream and running toward the stream.
Jacob Presley also contacted Rowan County for any information they had for the properties regarding onsite subsurface wastewater system permitting. Flagging on the properties was observed and it appeared that a soil scientist or county health specialist had did borings at some time on the property. Rowan County Environmental Health had no records of any work being done on the properties

Summary and Recommendations

Jacob Presley was unable to identify any area that may be Suitable for Subsurface Onsite Wastewater System Disposal. All 11 borings are considered Unsuitable, but some borings had depths that could possibly be reclassified as Suitable through an Engineered design with Suitable space and further evaluation. This would need to be determined by an Engineer or Authorized On-site Wastewater Evaluator. A wastewater Engineer could be contracted to explore the option of an Engineered System (Engineered Option Permit) or explore the possibility of an NPDES surface discharge system. I am aware of some of these systems being permitted for individual residencies, but it is very uncommon, and I do not have any advice other than to contact a Wastewater Engineer if you would like to explore that option. I have no recommendation on if those types of permits are even an option for these properties.

Conclusion

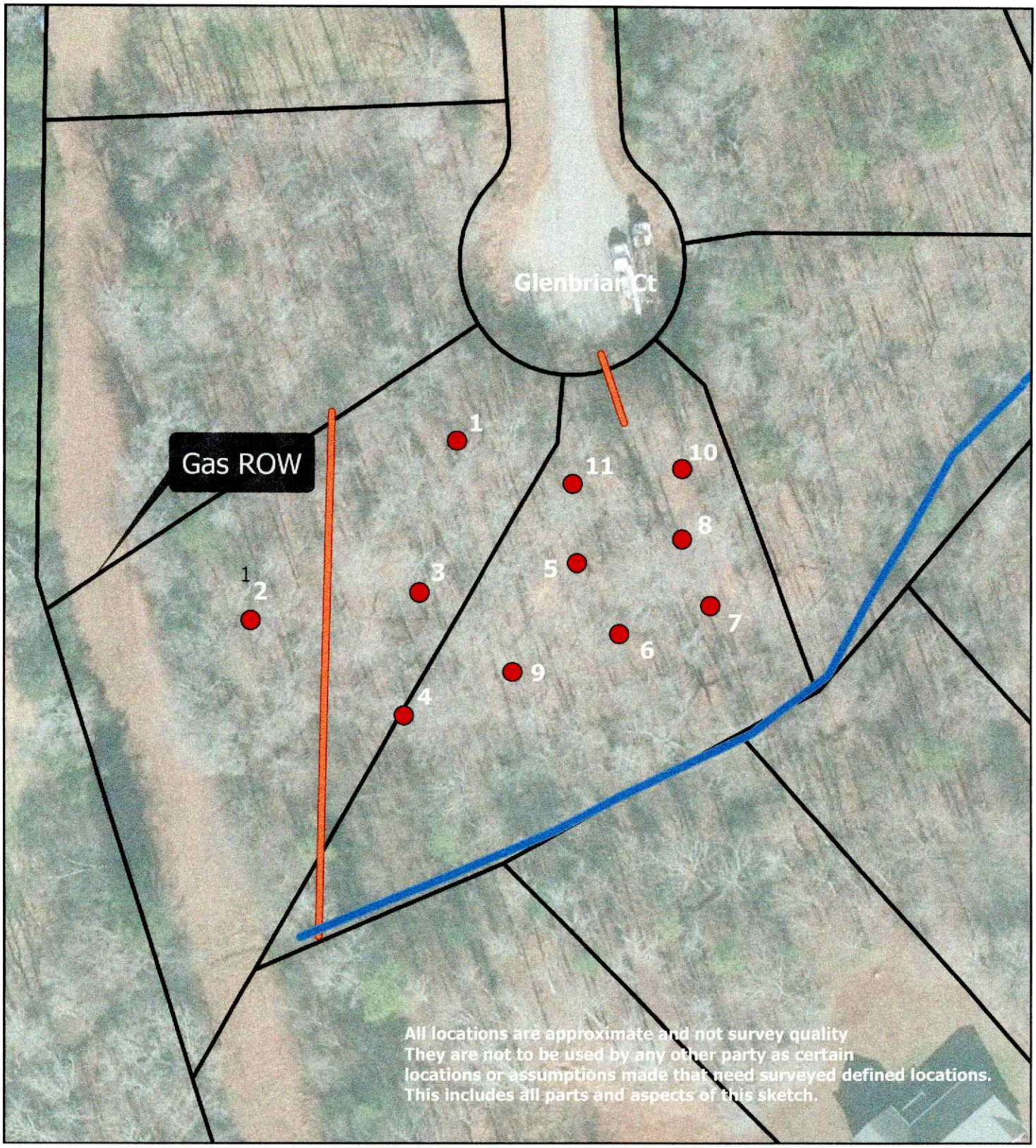
Based on the evaluation the site should be considered Unsuitable for Subsurface Onsite Wastewater Systems at this time. The findings presented herein represent Jacob Presley's professional opinion based upon the site evaluation and knowledge of the current laws and regulations governing on-site wastewater systems in North Carolina. Due to the subjectivity of soil properties and how they can vary from one spot to another within feet, another Soil Scientist may have a different impression or solution for the properties, but Jacob Presley is at this time not able to determine any Onsite Subsurface Wastewater Option that will meet state laws for these properties. Jacob Presley is not responsible or liable for any actions or financial decisions made on said property. This Preliminary Soil Evaluation was done based on interpretations of the rules governing NC wastewater treatment and disposal systems. Other qualified professionals may have different interpretations of the site and soil described herein. This report and attachments are solely for the use of Home Bridge Real Estate and are non transferable.

If you have any questions please contact Jacob Presley.

Sincerely,

Jacob Presley, LSS
980-275-0352
Jbpresley03@yahoo.com

Attachments:
Soil Boring Description
Boring Location Sketch



Legend

- Usuitable Boring
- Stream
- Drainageway
- Tax_Parcels

Glenbriar Ct Soil/Septic Evaluation
Parcels 8175042 @ 8175043
Woodleaf, Rowan County, NC
Soil Boring Location Sketch

Sketch By: JBP
Date: 4/8/25

N

0 15 30 60 Feet

Parcel ID: 8175042 & 8175043
PIN: 5733-03-12-9819 & 5733-03-22-0819
Lots 31 & 32

SOIL/SITE EVALUATION
for ON-SITE WASTEWATER SYSTEM

Owner: Home Bridge Real Estate, LLC
Address: 115 JORNADA LOOP, SANTE FE, NM 87508
Proposed Facility: 3 Bedroom House
Design Flow (.0400): 360 GPD
Location of Site: 1280 & 1295 Glenbriar Ct, Woodleaf, NC 27054
Water Supply: [ ] Public [X] Individual [X] Well
Evaluation Method: [X] Auger Boring [ ] Pit
Type of Wastewater: [X] Sewage [ ] Industrial Process

Client: Owner
Date Evaluated: 12/2/2024 & 4/4/25
Property Size: 1.42 ac
Property Recorded: Unknown
[ ] Spring [ ] Municipal
[ ] Cut
[ ] Mixed

PROFILE #	.0502 Landscape Position/ Slope%	Horizon Depth (IN.)	SOIL MORPHOLOGY .0503 Structure/ Texture	SOIL MORPHOLOGY .0503 Consistence Mineralogy	b PROFILE FACTORS .0504 Soil Wetness/ Color	.0505 Soil Depth (IN.)	.0506 Sapro Class	.0507 Restr Horiz	General Comments	.0509 Profile Class & LTAR	.0502(d) Maximum Trench Bottom Depth for 3' Wide Trench Low Side
Boring 1	HS 6%	0 - 4	gr SL	SS SP FR SEXP	10 YR 6/2 at 6"	36	NA	NA	10YR 6/2 matrix 18 - 36"	US	NA
		4-18	sbk SIC	S VP FI EXP							
		18 - 36	abk SC	S P VFI EXP							
Boring 2	HS 8%	0 - 6	gr SL	SS SP FR SEXP	10YR 6/2 at 23"	42	NA	NA		US	NA
		6 - 42	sbk C	VS VP VFI EXP							
Boring 3	HS 8%	0 - 5	gr L	SS SP FR SEXP	10YR 6/2 at 19"	5	NA	NA		US	NA
		5 - 36	abk/mass C	S VP FI EXP							
		36 - 48	mass CL/C	S VP FI EXP							
Boring 4	NS 8%	0 - 4	gr L	SS SP FR SEXP	10YR 6/2 at 17"	24	NA	NA		US	NA
		4 - 24	abk C	S VP FI EXP							
		24 - 48	mass CL/C	S VP FI EXP							
Boring 5	LS 8%	0 - 4	gr SL	SS SP FR SEXP	10 YR 7/1 @ 20"	36	NA	NA		US	NA
		4 - 15	abk C	S P FI SEXP							
		15 - 36	abk C	S VP FI EXP							
Boring 6	LS 8%	0 - 9	sbk SCL	S SP FR SEXP	10YR 7/2 @ 27"	22	US	NA		US	NA
		9 - 22	abk C	S P FI SEXP							
		22 - 38	abk/mass C	S VP FI EXP							
Boring 7	LS 8%	0 - 4	gr L	S SP FR SEXP	10YR 6/2 @ 17"	36	NA	NA		US	NA
		4 - 16	abk C	S P FI SEXP							
		16 - 36	abk C	S VP FI EXP							

LICENSED SOIL SCIENTIST
1283
STATE OF NORTH CAROLINA

Other Factors (.1946):
Soil Evaluation By: Jacob Presley, LSS
Others Present:
Site Classification (.0509):
Site Evaluation By:
Others Present:

Department of Environment, Health, and Natural Resources
Division of Environmental Health
On-site Wastewater Section

Parcel ID: 8175042 & 817504З
PIN: 5733-03-12-9819 & 5733-
Lots 31 & 32

SOIL/SITE EVALUATION for ON-SITE WASTEWATER SYSTEM CONTINUED

PROFILE #	1940 Landscape Position/ Slope%	Horizon Depth (IN.)	SOIL MORPHOLOGY 1941		b PROFILE FACTORS				General Comments	Profile Class & LTAR	Maximum Trench Bottom Depth for 3' Wide Conventional Trench
			1941 Structure/ Texture	1941 Consistence Mineralogy	1942 Soil Wetness/ Color	1943 Soil Depth (IN.)	1956 Sapro Class	1944 Restr Horiz			
Boring 8	LS 8%	0 - 4	gr L	S SP FR SEXP	10YR 7/1 @ 20"	24	US	NA		**US**	**NA**
		4 - 24	abk C	S P FI SEXP							
		24 - 36	mass C	S VP VFI EXP							
Boring 9	LS 8%	0 - 5	gr L	S SP FR SEXP	10YR 7/1 @ 17"	22	US	NA		**US**	**NA**
		5 - 22	abk C	S P FI SEXP							
		22 - 36	mass C	S VP VFI EXP							
Boring 10	LS 8%	0 - 5	gr L	S SP FR SEXP	10YR 7/1 @ 17"	5	NA	NA		**US**	**NA**
		5 - 28	abk/mass C	S VP VFI EXP							
Boring 11	LS 8%	0 - 4	gr L	S SP FR SEXP	10YR 6/2 @ 24"	5	NA	NA		**US**	**NA**
		4 - 23	sbk C	S P FI SEXP							
		23 - 33	abk C	S VP FI SEXP							

Parcel ID: 8175042 & 8175043
PIN: 5733-03-12-9819 & 5733-
Lots 31 & 32

COMMENTS:

Landscape Position
R-Ridge
SS-Shoulder Slope
LS-Linear Slope
FS-Foot Slope
NS-Nose Slope
HS-Head Slope
CC-Concave Slope
CV-Convex Slope
T-Terrace
FP-Flood Plain
D-Drainage Way

Group	Texture	.0901 LTAR
I	S-Sand	1.2 - 0.8
	LS-Loamy Sand	
II	SL-Sandy Loam	0.8 - 0.6
	L-Loam	
III	Si-Silt	0.6 - 0.3
	SiCL-Silty Clay Loam	
	CL-Clay Loam	
	SCL-Sandy Clay Loam	
	SiL-Silt Loam	
IV	SC-Sandy Clay	0.4 - 0.1
	SiC-Silty Clay	
	C-Clay	

Structure
sg-Single Grain
mass-Massive
cr-Crumb
gr-Granular
sbk-Subangular Blocky
abk- Angular Blocky
pl-Platy
pr-Prismatic

Consistence
Moist
VFR-Very Friable
FR-Friable
FI-Firm
VFI-Very Firm
EFI-Extremely Firm

Consistence
Wet
SS-Slightly Sticky
S-Sticky
VS-Very Sticky
NP-Non-Plastic
SP-Slightly Plastic
P-Plastic
VP-Very Plastic

Mineralogy
SEXP-Slightly Expansive
EXP-Expansive

Classification
US-Unsuitable
S-Suitable
NA-Not Applicable

Sketch of Soil Evaluation Locations

SEE ATTACHED BORING LOCATION SKETCH

SITE & SOIL EVALUATION

FOR SUBSURFACE WASTEWATER DISPOSAL

FOR

1267 Glenbriar Ct

Parcels 8175045

Woodleaf, Rowan County. NC

April 23, 2025

PREPARED FOR:

Home Bridge Real Estate, LLC
115 Jornada Loop
Sante Fe, NM 87508

PREPARED BY:

Jacob Presley, LSS
PO Box 899
Dallas, NC 28034
Phone: 980-275-0352
Email: jbpresley03@yahoo.com

Background

Home Bridge Real Estate. LLC has requested the services of Jacob Presley to perform a Site & Soil Evaluation on a lot in Rowan County Parcel #' 8175045, located on Glenbriar Ct, Woodleaf, NC. Home Bridge Real Estate requested the feasibility of the properties for housing utilizing subsurface wastewater disposal (septic systems) and wells. The property currently is owned by Home Bridge Real Estate, it is wooded, with a stream located near the south east border of the property. There is a ditch running across the property (See Boring Location Sketch). Property lines were surveyed and the steam branch also. The evaluation was to perform recognizance and evaluate the soils with hand auger borings across the property for the potential of residential Subsurface Wastewater Disposal Suitability.

Methodology

Hand Auger borings were advanced across the site using a 2 ¾" hand auger. 5 borings were conducted across the lot, and their locations flagged in the field using greenish yellow ribbon. Approximate Boring locations were mapped in the field using the property line markings done by a surveyor, aerial photography, topography, and GIS data. All locations shown are shown in the Boring Location Sketch and are approximate. Soil characteristics described in the borings were landscape position and slope of location, horizon depths, structure, texture, consistence, mineralogy, soil wetness, soil depth, saprolite class if present, restrictive horizons, profile class, and long-term acceptance rate. Soils were described based on interpretations of the NC *Laws and Rules 15A NCAC Subchapter 18E -Wastewater Treatment and Disposal Systems.*

Topography was evaluated for Suitability, and slope determined using a Clinometer and GIS contour data. Unsuitable soil topography (drainageway, ditch, and slope change) and a stream running along the south property line were mapped approximately using measurements from surveyed property lines and recognizance.

Findings

A total of 5 hand auger borings were described across the property except where topography and any required setbacks such as off the stream created Unsuitable areas. The approximate boring locations on the property are shown on the attached Boring Location Sketch. Soil mineralogy was variable with Expansive Clays depths described in borings C, D, and E from 20 to 22".

Soil wetness mottles (2chroma) was observed in all borings C & E at 26 and 31".

Unsuitable topography is shown on the attached Boring Location Sketch and consists of a >2' ditch running across the parcel, a natural drainageway, a steep slope change below a terrace and a stream.

Flagging on the properties was observed, along with boring holes and it appeared that a soil scientist or county health specialist had did borings at some time on the property. Rowan County Environmental Health had no records on file of any work being done on the property.

Summary and Recommendations

Jacob Presley was unable to identify any area that may be Suitable for Subsurface Onsite Wastewater System Disposal. Allthough there was some borings that indicated useable soils, the topography, size of lot, unsuitable drainageway, ditch, and setbacks from stream did not allow for enough Suitable space for a septic system to serve a residence. Potential septic lines were marked in the field in the useable area and only 190' of potential 3' wide septic trenches were available. The required amount of trenches for system and repair based on the soil evaluation is 480' for a 2 bedroom utilizing a 25% reduction system and repair.
A wastewater Engineer could be contracted to explore the option of an Engineered System (Engineered Option Permit) or explore the possibility of an NPDES surface discharge system. I am aware of some of these systems being permitted for individual residencies, but it is very uncommon, and I do not have any advice other than to contact a Wastewater Engineer if you would like to explore that option. I have no recommendation on if those types of permits are even an option for this property.

Conclusion

Based on the evaluation the site should be considered Unsuitable for Subsurface Onsite Wastewater Systems at this time. The findings presented herein represent Jacob Presley's professional opinion based upon the site evaluation and knowledge of the current laws and regulations governing on-site wastewater systems in North Carolina. Due to the subjectivity of soil properties and how they can vary from one spot to another within feet, another Soil Scientist may have a different impression or solution for the properties, but Jacob Presley is at this time not able to determine any Onsite Subsurface Wastewater Option that will meet state laws for these properties. Jacob Presley is not responsible or liable for any actions or financial decisions made on said property. This Preliminary Soil Evaluation was done based on interpretations of the rules governing NC wastewater treatment and disposal systems. Other qualified professionals may have different interpretations of the site and soil described herein. This report and attachments are solely for the use of Home Bridge Real Estate and are non-transferable.

If you have any questions please contact Jacob Presley.

Sincerely,

Jacob Presley, LSS
980-275-0352
Jbpresley03@yahoo.com

Attachments:
Soil Boring Descriptions
Boring Location Sketch

Parcel ID: 8175045
Lot 34

SOIL/SITE EVALUATION
for ON-SITE WASTEWATER SYSTEM

Owner: Home Bridge Real Estate, LLC
Address: 115 JORNADA LOOP, SANTE FE, NM 87508
Proposed Facility: 3 Bedroom House
Design Flow (.0400): 360 GPD
Location of Site: 1267 Glenbriar Ct, Woodleaf, NC 27054
Water Supply: [ ] Public [X] Individual [X] Well
Evaluation Method: [X] Auger Boring [ ] Pit
Type of Wastewater: [X] Sewage [ ] Industrial Process

Client: Owner
Date Evaluated: 4/10/25
Property Size: 0.51 acres
Property Recorded: Unknown
[ ] Spring [ ] Municipal
[ ] Cut
[ ] Mixed

PROFILE #	.0502 Landscape Position/ Slope%	Horizon Depth (IN.)	SOIL MORPHOLOGY .0503 Structure/ Texture	.0503 Consistence Mineralogy	b PROFILE FACTORS .0504 Soil Wetness/ Color	.0505 Soil Depth (IN.)	.0506 Sapro Class	.0507 Restr Horiz	General Comments	.0509 Profile Class & LTAR	.0502(d) Maximum Trench Bottom Depth for 3' Wide Trench Low Side
Boring A	HS 4%	0 - 3	gr L	SS SP FR SEXP	>48"	40	US	NA	space is very limited due to drainage feature and significant slope change	PS IV 0.25	27"
		3 - 21	sbk C	S P FI SEXP							
		21 - 40	abk/sbk CL	SS P FI SEXP							
		40 - 48	mass L/Cl Sap								
Boring B	HS 5%	0 - 4	gr L	SS SP FR SEXP	>42"	30	US	NA		PS IV 0.225	16" need cover
		4 - 20	sbk C	S P FI SEXP							
		20 - 30	abk/sbk CL	SS P FI SEXP							
		30 - 42	mass CL Sap	SS SP FI SEXP							
Boring C	HS 6%	0 - 3	gr L	SS SP FR SEXP	10YR 7/2 @ 31"	36	NA	NA		US drip?	NA
		3 - 22	sbk C	S P FI SEXP							
		22 - 36	abk C	S VP VFI EXP							
Boring D	LS 6%	0 - 6	gr CL	SS SP FR SEXP	>36"	36	NA	NA	soil in clay was very wet, no recent rain event known of	US drip?	NA
		6 - 22	sbk C	S P FI SEXP							
		22 - 36	sbk C	S VP VFI EXP							
Boring E	HS 6%	0 - 3	gr L	SS SP FR SEXP	10YR 7/2 @ 26"	36	NA	NA	dug in drainageway to see if possibly useable with curtain drain upslope	US	NA
		3 - 20	sbk C	S P FI SEXP							
		20 - 36	abk C	S VP VFI EXP							

LICENSED SOIL SCIENTIST
JACOB B. PRESLEY
THE GREAT SEAL OF THE STATE
STATE OF NORTH CAROLINA

Other Factors (.1946):
Soil Evaluation By: Jacob Presley, LSS
Others Present:
Site Classification (.0509):
Site Evaluation By:
Others Present:

Parcel ID: 8175045
Lot 34

COMMENTS: Due to ditch and drainage feature, along with creek and significant slope changes there was not useable space as determined by Jacob Presley

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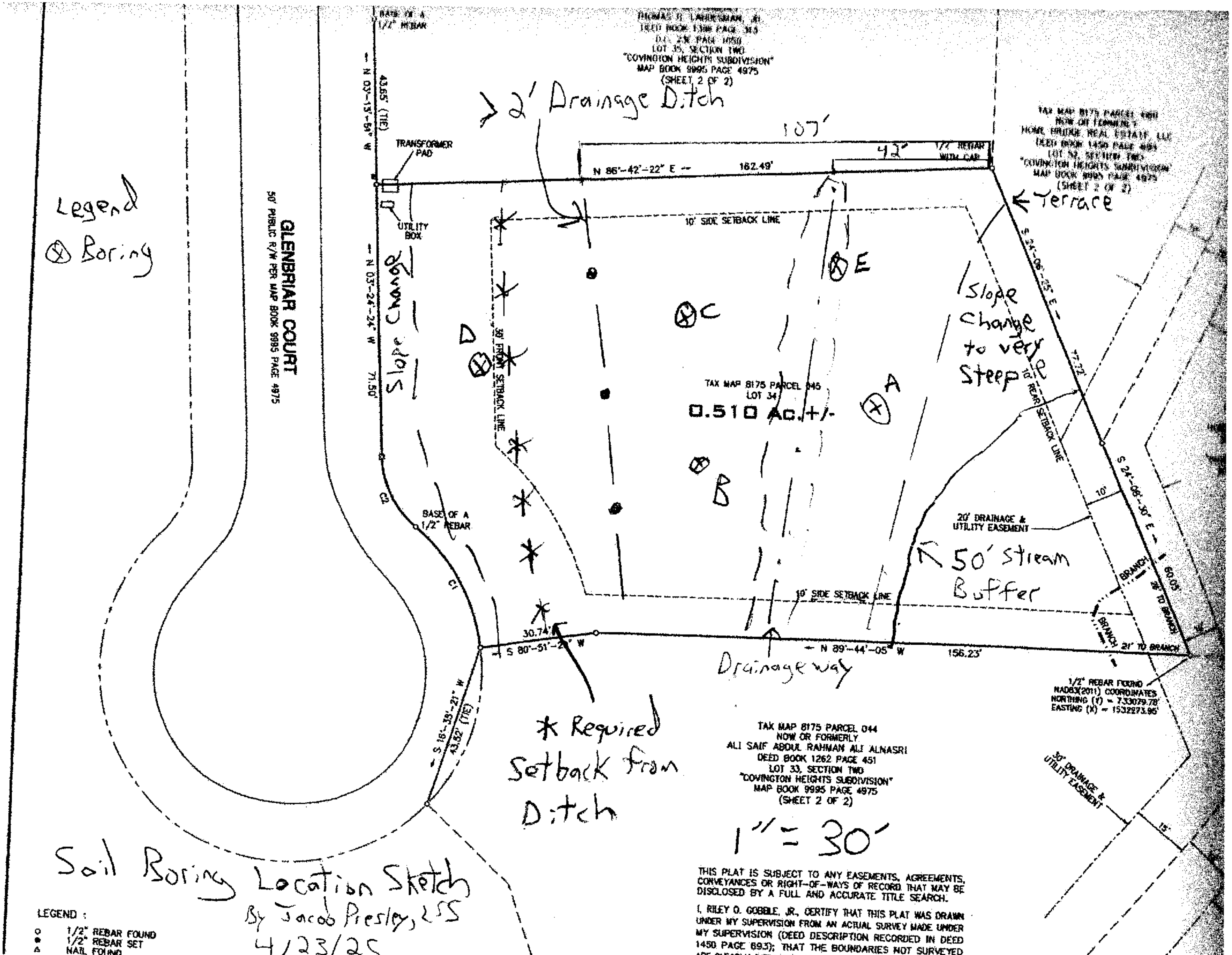
Sketch of Soil Evaluation Locations

SEE ATTACHED BORING LOCATION SKETCH



Soil Boring Location Sketch
By Jacob Presley, LSS
4/23/25
Legend
⊗ Boring
GLENBRIAR COURT
50' PUBLIC R/W PER MAP BOOK 9995 PAGE 4975
THOMAS G. LANDESMAN, JR.
DEED BOOK 1306 PAGE 313
LOT 35, SECTION TWO
"COVINGTON HEIGHTS SUBDIVISION"
MAP BOOK 9995 PAGE 4975
(SHEET 2 OF 2)
2' Drainage Ditch
107'
42'
1/2" REBAR WITH CAP
N 86°-42'-22" E
162.49'
TRANSFORMER PAD
UTILITY BOX
N 03°-13'-59" W
43.65' (TIE)
N 03°-24'-24" W
71.50'
10' SIDE SETBACK LINE
30' FRONT SETBACK LINE
10' REAR SETBACK LINE
Slope Change
Slope Change to very Steep
Terrace
TAX MAP 8175 PARCEL 045
LOT 34
0.510 Ac.+/-
A
B
C
D
E
BASE OF A 1/2" REBAR
C1
C2
20' DRAINAGE & UTILITY EASEMENT
50' Stream Buffer
10'
S 24°-06'-30" E
60.05
26' TO BRANCH
BRANCH
21' TO BRANCH
30.74'
S 80°-51'-29" W
N 89°-44'-05" W
156.23'
Drainage way
* Required Setback from Ditch
S 16°-35'-21" W
43.52' (TIE)
1/2" REBAR FOUND
NAD83(2011) COORDINATES
NORTHING (Y) = 733079.78'
EASTING (X) = 1532273.95'
TAX MAP 8175 PARCEL 044
NOW OR FORMERLY
ALI SAIF ABDUL RAHMAN ALI ALNASRI
DEED BOOK 1262 PAGE 451
LOT 33, SECTION TWO
"COVINGTON HEIGHTS SUBDIVISION"
MAP BOOK 9995 PAGE 4975
(SHEET 2 OF 2)
30' DRAINAGE & UTILITY EASEMENT
15'
1" = 30'
LEGEND :
1/2" REBAR FOUND
1/2" REBAR SET
NAIL FOUND
THIS PLAT IS SUBJECT TO ANY EASEMENTS, AGREEMENTS, CONVEYANCES OR RIGHT-OF-WAYS OF RECORD THAT MAY BE DISCLOSED BY A FULL AND ACCURATE TITLE SEARCH.
I, RILEY O. GOBBLE, JR., CERTIFY THAT THIS PLAT WAS DRAWN UNDER MY SUPERVISION FROM AN ACTUAL SURVEY MADE UNDER MY SUPERVISION (DEED DESCRIPTION RECORDED IN DEED 1450 PAGE 693); THAT THE BOUNDARIES NOT SURVEYED ARE CLEARLY INDICATED AS DRAWN FROM INFORMATION ...