

North Lakes Soil Consulting, PLLC 3325 Jones Lakes Road Fuquay-Varina, NC 27526 john@northlakessoil.com 910-539-5439

Acknowledgement of A2 Soil & Site Evaluation by North Lakes Soil Consulting, PLLC for issuance of an Improvement Permit (IP).

Address/Subdivision Lot#: 0 JOHNSONVILLE SCHOOL RD, CAMERON, NC 28326

PIN: <u>9566-75-9854.000</u>

For Improvement Permit (IP) issuance:

"The LSS/LG evaluation(s) attached to this application is to be used to issue an Improvement Permit in accordance with G.S. 130A-335(a2) and (a3)."

For Construction Authorization (CA) issuance:

"The plans or evaluations attached to this application are to be used to issue a Construction Authorization in accordance with G.S. 130A-335(a2), (a5) and (a6)."

Owner:	Shor	(dina)	
Owner's re	epresentative:		
Date:		12/9/24	

Permit/File #:	



ROY COOPER · Governor

KODY H. KINSLEY · Secretary

MARK BENTON · Chief Deputy Secretary for Health

SUSAN KANSAGRA • Assistant Secretary for Public Health

Division of Public Health

Submittal Includes:	(a2) Improvement Permit	(a2) Construction Authorization	Fee \$	
	IMPROVEME	NT PERMIT FOR G.S. 130A-335	i(a2)	
County: Harnett		_		
PIN/Lot Identifier: 956	66-75-9854			
Issued To: Brandon	a & Alicia Raines			
		d, Cameron, NC 28326		
Subdivision (if applicab	le)	Lot #:	Block:	Section:
LSS Report Provided: Y	es No 🗌			
If yes, name and license	e number of LSS: John Kase, N	NCLSS# 1323		
New 🔳	Table 1988	System Relocation	Change of Use	<u> </u>
Facility Type: Single	-Family Residence			
Number of bedrooms:	2 Number of Occupants: 4	Other:		
	ength: Domestic		al Process Wastewater	
Proposed Design Daily	Flow: 240 GPD	Proposed LTAR (Initial): 0.400 Pr	oposed LTAR (Repair)	0.400
Proposed Wastewater	System Type*: IIB - Accepted (25% Reduction)	- Shallow Placement w/ cover Initial) Pump Rec	quired: 🗌 Yes 🔳 No	May be required
Proposed Wastewater	System Type*: IIB - Accepted (25% Reduction)	- Shallow Placement w/ cover (Repair) Pump Req	uired: Yes No	■ May be required
*Please include system	classification for proposed wastewa	ter system types in accordance with Rule	.1301 Table XXXII	
Effluent Standard:	DSE HSE NSF/ANSI 40	TS-I TS-II RCW		
Saprolite System (Initia	il): 🗌 Yes 🔳 No Saprolite S	System (Repair 🔳 Yes 🗌 No		
Fill System (Initial):	Yes No If yes, specify: New	Existing (when adding more than 6	inches of fill to system	n area provide a fill plan)
		Existing (when adding more than		
		Usable Depth to LC (Repair)x: 26		
		nch Depth (Repair)‡: 13 #		
		specify details:		
		■ Shared well		
Drainfield location mee	ets requirements of Rule .0508: Yes	■ No Drainfield location meets	requirements of Rule .	0601: Yes 🔳 No 🗌
Permit valid for: Fiv	e years [site plan submitted pursuan	nt to GS 130A-334(13a)] No expiratio	n [plat submitted purs	uant to GS 130A-334(7a)]
Maintain all required No grading should b When grading the lot, no	d setbacks pursuant to 15A NCAC be completed within the areas res	te Plan changes or the intended use of 18E SECTION .0600 – LOCATION (erved for the initial and repair septic af the areas reserved for septic. There should be	OF WASTEWATER areas.	SYSTEMS.
Licensed Soil Scientist F	Print Name: John Kase			SED SON
Licensed Soil Scientist S	21111		Date: 12/2/	2024

The LSS evaluation is being submitted pursuant to and meets the requirements of G.S. 130A-335(a2).

See attached site sketch





Permit/File #:	
N	

This Section for Local Health Department Use Only

	Initial submittal received:		by	
		Date	Init	
G.S. 130A-335(a3) states th	ne following:			
department, the common form de within five business days of receiv Permit includes all of the required shall notify the applicant of the co department to cure the deficienci is complete within five business d	ement Permit submits to a local health department peveloped by the Department, and a soil evaluativing the application, conduct a completeness revidence of components. If the local health department decomponents needed to complete the Improvements in the Improvement Permit. The local health lays after the local health department receives this subsection, the applicant may treat the failur rovement Permit.	on pursuant to subsectiview of the submittal. A termines that the Improst Permit. The applicant department shall make the additional information	ion (a2) of this sect determination of evement Permit is t may submit addit a final determinat on from the applice	ion, the local health department shall, completeness means that the Improvement incomplete, the local health department ional information to the local health ion as to whether the Improvement Permit ant. If the local health department fails to
The review for completene Permit is determined to be	ess of this Improvement Permit was co e:	nducted in accord	ance with G.S.	130A-335(a3). This Improvement
☐ Incomplete (If box is c	hecked, information in this section is r	equired.		
The following items are mi	ssing:			
	1 2	700		
	/			
Copies of this were sent to	the LSS and the Applicant on	Date		
				Date:
State Authorized Agent:				
State Authorized Agent: Complete State Authorized Agent:			_	Date:
☐ Complete		- C - C-4		Date:
Complete State Authorized Agent: This Improvement Permit attached here. The issuar for checking with appropriat, or the intended use opermit is subject to complete Department, the Departy liabilities, duties, and	is issued pursuant to G.S. 130A-335 (nee of this permit in no way guaranteriate governing bodies in meeting the changes. The Improvement Permit shiance with the provisions of 15A NCA artment's authorized agents, and the responsibilities imposed by statute of	a2) and (a3) using es the issuance of ir requirements. <u>Ti</u> all not be affected C 18E and to the c	other permits. his permit is su I by a change i conditions of th rtments shall b from any claim	I sealed LSS/LG evaluation(s) The permit holder is responsible bject to revocation if the site plan, nownership of the site. This his permit. The discharged and released from arising out of or attributed to
Complete State Authorized Agent: This Improvement Permit attached here. The issuar for checking with appropriat, or the intended use opermit is subject to complete Department, the Departy liabilities, duties, and	is issued pursuant to G.S. 130A-335 (nee of this permit in no way guaranteriate governing bodies in meeting the changes. The Improvement Permit shilliance with the provisions of 15A NCA artment's authorized agents, and the	a2) and (a3) using es the issuance of ir requirements. <u>Ti</u> all not be affected C 18E and to the c	other permits. his permit is su I by a change i conditions of th rtments shall b from any claim	I sealed LSS/LG evaluation(s) The permit holder is responsible bject to revocation if the site plan, nownership of the site. This his permit. The discharged and released from arising out of or attributed to
Complete State Authorized Agent: This Improvement Permit attached here. The issuar for checking with appropriat, or the intended use of permit is subject to composite Department, the Depany liabilities, duties, and evaluations, submittals, o	is issued pursuant to G.S. 130A-335 (nee of this permit in no way guaranteriate governing bodies in meeting the changes. The Improvement Permit shiance with the provisions of 15A NCA artment's authorized agents, and the responsibilities imposed by statute of	a2) and (a3) using es the issuance of a requirements. To all not be affected to the control of t	other permits. his permit is su I by a change i conditions of th rtments shall b from any claim	I sealed LSS/LG evaluation(s) The permit holder is responsible bject to revocation if the site plan, nownership of the site. This his permit. The discharged and released from arising out of or attributed to
Complete State Authorized Agent: This Improvement Permit attached here. The issuar for checking with appropriat, or the intended use of permit is subject to composite Department, the Depany liabilities, duties, and evaluations, submittals, o	is issued pursuant to G.S. 130A-335 (nee of this permit in no way guaranteriate governing bodies in meeting the changes. The Improvement Permit shilance with the provisions of 15A NCA artment's authorized agents, and the responsibilities imposed by statute or actions from a licensed soil scientist	a2) and (a3) using es the issuance of a requirements. To all not be affected to the control of t	other permits. his permit is su I by a change i conditions of th rtments shall b from any claim	I sealed LSS/LG evaluation(s) The permit holder is responsible bject to revocation if the site plan, nownership of the site. This his permit. The discharged and released from arising out of or attributed to
Complete State Authorized Agent: This Improvement Permit attached here. The issuar for checking with appropriat, or the intended use of permit is subject to composite Department, the Depany liabilities, duties, and evaluations, submittals, o	is issued pursuant to G.S. 130A-335 (nee of this permit in no way guaranteriate governing bodies in meeting the changes. The Improvement Permit shilance with the provisions of 15A NCA artment's authorized agents, and the responsibilities imposed by statute or actions from a licensed soil scientist	a2) and (a3) using es the issuance of a requirements. To all not be affected to the control of t	other permits. his permit is su I by a change i conditions of th rtments shall b from any claim	I sealed LSS/LG evaluation(s) The permit holder is responsible bject to revocation if the site plan, nownership of the site. This his permit. The discharged and released from arising out of or attributed to

See attached site sketch



Permit/File #:	
in amount of a fact that a fact the fact that the fact the fact that the fact that the fact that the fact that the	

Re-submittal of Improvement Permit

	LHD USE ONLY: This IP resubmittal re	eceived:	by	
The following it	eems are being resubmitted pursuant to G.S	S. 130A-335(a3) for issuance	ce of the Improvement Permit:	
is accurate and o	hereby icientist Print Name) complete to the best of my knowledge and laws, regulations, rules, and ordinances.		on required to be included with	
Signature	e of Licensed Soil Scientist		Date	
	The section below is for Local Health Dep	artment use after submittal c	of items noted as missing above.	
LHD Follow-u	p Completenes Review of Improv	vement Perm		
	ampletoness of this Improvement Dermit		ad in accordance with C.C. 120	4 225/-2\ Th:-
	ermit is determined to be:	re-submittal was conducte	ed in accordance with G.S. 130	A-335(a3). This
Improvement Pe			ed in accordance with G.S. 130	A-335(a3). INIS
Improvement Pe	ermit is determined to be:		ed in accordance with G.S. 130	A-335(a3). INIS
Improvement Pe	ermit is determined to be: (If box is checked, information in this sect		ed in accordance with G.S. 130	A-335(a3). INIS
Improvement Pe ☐ Incomplete The following ite	ermit is determined to be: (If box is checked, information in this sect	tion is required.	ed in accordance with G.S. 130	A-335(a3). INIS
Improvement Pe	ermit is determined to be: (If box is checked, information in this sect	tion is required. Date	Date:	
Improvement Pe	(If box is checked, information in this sections are missing: ere sent to the LSS and the Applicant on _	tion is required. Date		



Permit/File #:	

CONSTRUCTION AUTHORIZATION FOR G.S. 130A-335

County: Harnett	Pre-Construction Conferenc Required: Yes ☐ No ■		
PIN/Lot Identifier: 9566-75-9854			
Issued To: Brandon &	Alicia Raines		
Property Location: 0 Joh	nnsonville School Road, Cameron, NC 28326		
AOWE/PE Plans/Evaluation	ns Provided: Yes No I f yes, name and license number of AOWE/PE: Alan Clapp, 10017E		
Facility Type: Single-F	amily Residence		
Number of bedrooms: 2	Number of Occupants: 4 Other:		
■ New	pansion Repair System Relocation Change of Use		
Basement? Yes	■ No Basement Fixtures? Yes ■ No		
Crawl Space? Yes			
Type of Wastewater System	m* IIB - Accepted (25% Reduction) - Shallow Placement w/ cover (Initial) IIB - Accepted (25% Reduction) - Shallow Placement w/ cover (Repair)		
*Please include system cla	ssification for proposed wastewater system types in accordance with Rule .1301 Table XXXII		
Design Daily Flow: 240	GPD Wastewater Strength: ■ Domestic ☐ High Strength ☐ Industrial Process WW		
Session Law 2014-120 Sect (if yes, please provide engi	- 0		
Effluent Standard: 🔳 D	SE		
Type of Water Supply:	Private well Public well Shared well Municipal Supply Spring Other:		
Trench/Bed Width: 36 Soil Cover: 13 inches Pump Tank Size (if applicate Pump Requirements: Distribution Method: 5 Artificial Drainage Require Legal Agreeme (If the act Multi-party Agreement Received) Easement, Right-o Way, o	gallons Total Trench/Bed Length: 300 feet Trench/Bed Spacing: 9 feet on center inches TAR: 0.40 gpd/ft² Usable Depth to LC Initial)*: 26 **Limiting condition Slope Correcte Maximum Trench/Bed Depth*: 13 inches **Measured on the downhill side of the trench ole): 1000 gallons Requires more than 1 pump? Yes No No ft. TDH vs. GPM Grease Trap Size (if applicable): gallons gallons Gerial D-Box or Parallel Pressure Manifold(s) LPP Other: di Yes No If yes, please specify details: If yes, please specify details: If yes, please specify details: If yes No Declaration of Restrictive Covenants: Yes No No If yes No No No If yes No No No No No No No N		
Maintain all required se State approved tanks w Maintain the septic layo See additional permit c	pension or revocation if the Site Plan changes or the intended use changes, which significantly impact permit. at backs pursuant to 15A NCAC 18E SECTION .0600 – LOCATION OF WASTEWATER SYSTEMS. with cast in place inlet and outlet boots required for all septic and/or pump tanks. but until the system is installed. There will be a fee to re-flag the septic system layout. conditions attached.		
with the attached site ske Construction Authorizatio	tch. This Construction Authorization is subject to revocation if the site plan, plat, or the n shall not be affected by a change in ownership of the site. This Construction Authorization is subject to revocation if the site plan, plat, or the n shall not be affected by a change in ownership of the site. This Construction Authorization is a subject to revocation if the site plan, plat, or the n shall not be affected by a change in ownership of the site. This Construction Authorization is a subject to revocation if the site plan, plat, or the n shall not be affected by a change in ownership of the site. This Construction Authorization is a subject to revocation if the site plan, plat, or the n shall not be affected by a change in ownership of the site. This Construction Authorization is subject to revocation if the site plan, plat, or the n shall not be affected by a change in ownership of the site. This Construction Authorization is subject to revocation if the site plan, plat, or the n shall not be affected by a change in ownership of the site. This Construction Authorization is subject to revocation in the site of the site is not not necessarily in the site of the site is not necessarily in the site of the sit		

AOWE/PE Print Name: Alan Clapp

AOWE/PE Signature: Alan Clapp

Date: 12/2/2024

This AOWE/PE submittal is pursuant to and meets the requirements of G.S. 130A-335(a2) a

See attached site sketch

Certification

Number



Permit/File #:	

This Section for Local Health Department Use Only

Initial submittal received:	by	/
	Date	Initials
G.S. 130A-335(a5) states the following:		
When an applicant for a Construction Authorization, or an Improvement Permit a Improvement Permit and Construction Authorization application together, the perport of the permit and any necessary signed and sealed plans or evaluations conducted engineer or a person certified pursuant to Article 5 of Chapter 90A of the General department shall, within five business days of receiving the application, conduct of the Construction Authorization or Improvement Permit and Construction Authorization or Improvement Permit and Construction Authorization of the components needed to complete the Construction Authorization additional information to the local health department to cure the deficiencies in the Authorization. The local health department shall make a final determination as to Authorization is complete within five business days after the local health department department fails to act within any period set out in this subsection, the applicant department fails to act within any period set out in this subsection, the applicant department fails to act within any period set out in this subsection of completeness of Authorization by the local health department or if the local health department fail licensed engineer submitting the evaluation pursuant to this subsection may request Authorization or Improvement Permit and Construction Authorization for cause. Leading the local health department shall suspend or revoke the Construction Authorization for cause. Leading the local health department shall suspend or revoke the Construction Authorization for cause. Leading the local health department shall suspend or revoke the Construction Authorization for cause. Leading leading the local health department shall suspend or revoke the Construction Authorization for cause. Leading l	rmit fee charged by the lood by a person licensed purson Statutes as an Authorized a completeness review of the truction Authorization is in or Improvement Permit and the Construction Authorization are treceives the additional may treat the failure to act the Construction Authorization act within five busineses that the local health during Upon written request of the uthorization or Improvement	cal health department, the common form developed by the suant to Chapter 89C of the General Statutes as a licensed on-Site Wastewater Evaluator, the local health the submittal. A determination of completeness means that required components. If the local health department incomplete, the local health department shall notify the ad Construction Authorization. The applicant may submit ation or Improvemen Permit and Construction in Authorization or Improvemen Permit and Construction all information from the applicant. If the local health at as a determination of completeness. The applicant may ation or Improvement Permit and Construction is stays. The Authorized On-Site Wastewater Evaluator or epartment revoke or suspend the Construction is e Authorized On-Site Wastewater or licensed
The review for completeness of this Construction Authorization v	was conducted in acc	ordance with G.S. 130A-335(a5). This
Construction Authorization is determined to b		
☐ Incomplete (If box is checked, information in this section is re	equired	
The following items are missing:		
Copies of this were sent to the AOWE/PE and the Applicant on _		
State Authorized Agent:	Date	Date:
State Authorized Agent.		
☐ Complete		
State Authorized Agent:		Date of Issuance:
This Construction Authorization is issued pursuant to G.S. 130A attached here. This Construction Authorization is subject to rev Construction Authorization shall not be affected by a change in to compliance with the provisions of the Laws and Rules for Sev	ocation if the site pla ownership of the sit	an, plat, or the intended use changes The e. This Construction Authorization is subject
The Department, the Department's authorized agents, and the any liabilities, duties, and responsibilities imposed by statute or plans, evaluations, preconstruction conference findings, submit the General Statutes as a licensed engineer or a person certified Authorized On-Site Wastewater Evaluator in GS 130A-335(a2), (agents, and the local health departments shall be responsible a obligations under State law or rule, including the issuance of the	r in common law from tals, or actions from d pursuant to Article (a5), and (a7). The Do nd bear liability for t	m any claim arising out of or attributed to a person licensed pursuant to Chapter 89C of 5 of Chapter 90A of the General Statutes as an epartment, the Department's authorized their actions and evaluations and other



Permit/File #:	
-	

Re-submittal of Construction Authorization

	LHD USE ONL	Y: This CA resubmittal rece	ived:	by	Initials	
The following it	tems are being re	submitted pursuant to G.S. 1	30A-335(a5) for issuar	nce of the Const	ruction Authorizat	ion:
l,		hereby at	test that the informat	ion required to I	be included with th	nis re-submittal
	nsite Wastewater Evo					
		best of my knowledge and the gulations, rules, and ordinan		struction Author	ization meets all a	pplicable
rederal, state, a	ind local laws, re	guiations, rules, and ordinan	ces			
1	- 4				<u></u>	
Signatur	e of Authorized On-S	it Wastewater Evaluator		Date		
	The section be	elow is for Local Health Departi	ment use after submitta	l of items noted a	s missing above.	
LHD Follow-u	up Completen	ess Review of Construc	tion Authorizatio			
		this Construction Authorizat is determined to be:	ion re-submittal was c	onducted in acc	ordance with G.S.	130A-335(a5).
☐ Incomplete (If box is checked	, information in this section	is required.)			
The following it	ems are missing:					
THE TOHOWING IC	erris are missing.					
					-	
Copies of this w	ere sent to the A	OWE/PE and the Applicant of	Date			
State Authorize	d Agent:			r	Date:	
State Authorize	a Agent.					
Complete						
A				4	2-4	
State Authorize	a Agent:				Date:	



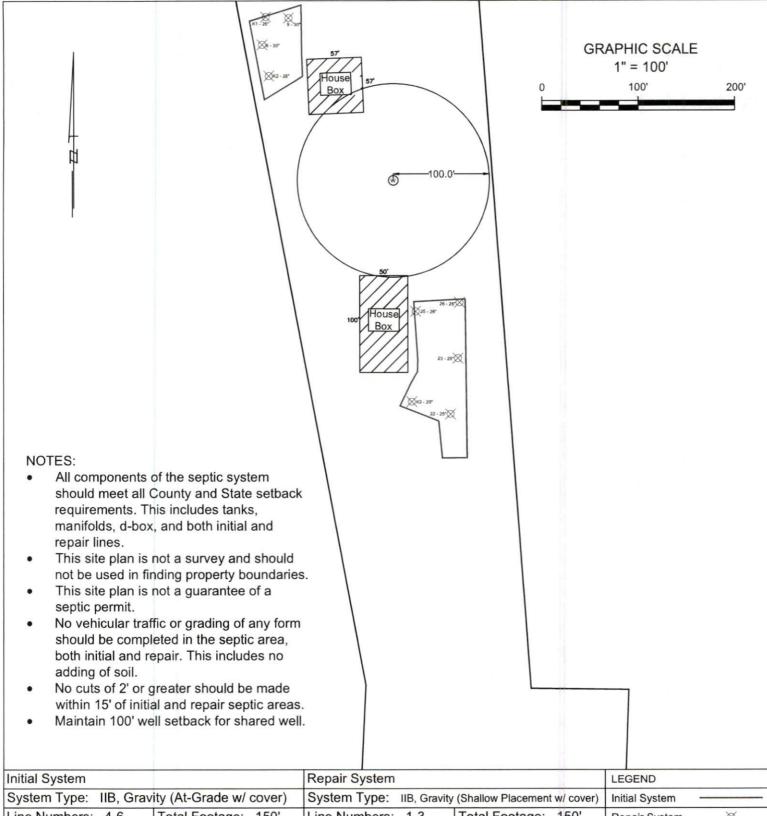
Permit/File #:	
----------------	--

ADDENDUM TO G.S. 130A-335(a2) SUBMITTAL

County: Harnett
PIN/Lot Identifier: 9566-75-9854
Issued To: Brandon & Alicia Raines
Additional Improvement Permit Conditions: 1.) It is recommended to construct protective fencing around the soil area to protect from grading, compaction, and construction traffic.
2.) Storage of materials, cuts and fill over septic area could result in revocation of the permit.
3.) Maintain the septic layout until the system is installed. There will be a fee to re-flag the septic system layout.
4.) This system is designed for domestic strength effluent only. No garbage disposals, garbage grinders, floor drains, water softener backwash, fats, oils, greases (FOG).
Additional Construction Authorization Conditions: 1.) Install system per 15A NCAC 18E .0901 (g) and .0800.
2.) Use septic and pump tanks as required per 15A NCAC 18E .0805.
3.) Maintain the septic layout until the system is installed. Make sure property lines are marked prior to installation. Contact NC 811 prior to any digging.
4.) For a 25% chamber system, I recommend placing #5 or #57 clean, washed gravel placed over the chamber louvers to offer structural support,
decreased settling, prevent soil intrusion on trench bottom and allow venting of the chambers. Use a High Flow Splash Plate at each End Cap receiving effluent if pumping to a chamber system.
5.) Soil cover above the original grade shall be placed over the entire dispersal field and shall extend laterally five feet beyond the trenches.
6.) Final soil cover over the dispersal field shall be a minimum of six inches deep after settling. The finished grade over the tanks and dispersal field shall be sloped to shed surface water.
7.) On level sites, the final grade of the dispersal field shall be crowned at one-half percent grade as measured from the centerline of the dispersal field.
8.) Surface water runoff, including stormwater, gutter drains, or downspouts, shall be diverted away from the wastewater system. No depressions shall be allowed over the dispersal field area.
9.) Install system during dry conditions (when no smearing of trench walls occurs and at least 3 days after the most recent measurable rain event). Install system in area noted at the trench depth specified.
10.) It is recommended to regularly operate the system at 50-60% of daily design peak flow to maintain the system at optimum performance.
11.) It is recommended to remove all maples, sweet gums, and willow oaks in the vicinity of the drainfield due to the propensity for roots growing into the drainfield lines.
12.) It is recommended to straw and seed septic area after installation to establish a stable cover and prevent soil erosion.

OWNER/A LOCATION COUNTY: PROPOSI WATER S	APP. NAME: IN OF SITE:	NSULTING, PLLC Alicia Raines-Mary Her	3	OIL/SITE EVALUAT	ION SHEET				
COUNTY: PROPOSI	N OF SITE:		O D D D D D D D D D D D D D D D D D D D				Sheet #:		1
PROPOSI WATER S	:		mis		SUBDIV./LOT#				
PROPOSI WATER S TYPE OF		Johnsonville School Ro	ad, Cameron						
WATER S		Hamett	PROPERTY ID #:	9566-75-9854		DATE EV	ALUATED	: '	10/23/24&11/16
TYPE OF	ED FACILITY:	SFR	PROPOSED DESIGN	FLOW (.0400):	240 gpd	PROPER	TY SIZE:	12.36 acre	es
	SUPPLY:	Shared Well		WATER SUPPLY	SETBACK:	100'			
P	WASTEWATER		Domestic		EVALUATION MET	EVALUATION METHOD: Auger			
R			SOIL MORP	PHOLOGY	PRO	OTHER FILE FACTO	DRS		
O F I L E	.0502 LANDSCAPE POSITION/ SLOPE %	HORIZON DEPTH (IN.)	.0503 STRUCTURE/ TEXTURE	.0503 CONSISTENCE/ MINERALOGY	.0504	.0505 SOIL DEPTH	.0506 SAPRO CLASS	.0507 RESTR HORIZ	.0509 PROFILE CLASS & LTAR
		0-18	SL - GR	VFR/NS/NP					
	FS	18-27	CL - SBKw	FR/SS/SP		1			
K-1	.0502(d)	27-30	CL - SBKw	FR/SS/P	2.5Y 7/2@27"		N.O	N.O	S-0.4
Ī	SLOPE					- 1			
	1.1"	0-15	SL - GR	VFR/NS/NP					
	FS	15-26	SCL - SBKw	FR/SS/SP					
K-2 3%	26-30	SCL - SBKw	FR/SS/SP	2.5Y 7/2@26"		N.O	N.O	S-0.4	
Ī	SLOPE					-			
	1.1"	0-14							
ļ	FS	14-30	SL - GR SCL - SBKw	VFR/NS/NP FR/SS/SP		1	N.O N.O	O N.O	S-0.4
8	3%	30	SCL - SBKW	FR/SS/SP	2.5Y 7/2@30"				
	.0502(d) SLOPE CORRECTION		SOL - SBKW	1100001	2.01 772@00				
D.	1.1"								
	EQ	0-14	SL - GR	VFR/NS/NP					
ľ	FS 3%	14-30	SCL - SBKw	FR/SS/SP					
.0502(d) SLOPE	30	SCL - SBKw	FR/SS/SP	2.5Y 7/2@30"	+ 1	N.O	N.O	S-0.4	
	1.1"								
DESCRIP	THE RESERVE TO A STREET WATER CO.	INITIAL SYSTEM	REPAIR SYSTEM	SITE CLASSIFICA	ATION (.0509):	Suitable			
	Space (.0508):	Suitable	Suitable	EVALUATED BY:		John Kas	se		
System Ty		Accepted	Accepted	OTHER(S) PRES		Mary He			
Site LTAR		0.400	0.400						
Maximum	Trench Depth:	13"	13"						
Saprolite S	System:	No	No						

			Standa	rd Abbrevia	ations			
LANDSCAPE POSITION	GROUP	SOIL TEXTURE	CONVENTIONAL LTAR	SAPROLITE	LPP LTAR	MINERALOGY/ CONSISTENCE	STRUCTURE	
CC (Concave Slope)		S (Sand)	0.8 - 1.2	0.6 - 0.8	0.4 - 0.6	SEXP (Slightly Expansive)	G (Single Grain)	
CV (Convex Slope)	1	LS (Loamy Sand)	0.0 - 1.2	0.5 - 0.7	0.4 - 0.6	EXP (Expansive)	M (Massive)	
D (Drainage Way)	100						GR (Granular)	
FP (Flood Plain)		SL (Sandy Loam)	0.6 - 0.8	0.4 - 0.6	0.3 - 0.4	MOIST	SBK (Subangular Blocky)	
FS (Foot Slope)		L (Loam)	0.6 - 0.8	0.2 - 0.4	0.3 - 0.4	VFR (Very Friable)	WSBK (Weak Subangular Blocky)	
H (Head Slope)	NEW T	Plants of the same of				FR (Friable)	ABK (Angular Blocky)	
L (Linear Slope)		SiL (Sitt Loam)		0.1 - 0.3		FI (Firm)	PL (Platy)	
N (Nose Slope)		SCL (Sandy Clay Loam) CL (Clay Loam)	1	0.05 - 0.15*		EFI (Extremely Firm)	PR (Prismatic)	
R (Ridge/Summit)	III		0.3 - 0.6	N/A	0.15 - 0.3		MA-RCF (Massive Rock Controlled Fabric)	
S (Shoulder Slope)		SiCL (Silty Clay Loam)	1			WET	AR (Auger Refusal)	
T (Terrace)		Si (Silt)				NS (Non-Stick)		
TS (Toe Slope)	150 - 25	THE PARTY OF THE PARTY				SS (Slightly Sticky)	OTHER	
	SC (Sandy Clay)			S (Sticky)	NO (Not Observed)			
	IV	SiC (Silty Clay)	0.1 - 0.4	N/A	0.05 - 0.2	VS (Very Sticky)		
		C (Clay)				NP (Non-plastic)		
	125-10		Place of the last			SP (Slightly Plastic)		
	O (Organ	nic)	N/A	N/A	N/A	P (Plastic)		
	The Land		The little			VP (Very Plastic)		
NOTES:					77.1 II 11			
SAPROLITE*	*Sandy c	*Sandy clay loam saprolite can only be used with advanced pretreatment in accordance with 15A NCAC 18E .1200.						
HORIZON DEPTH	In inches	In inches below natural soil surface						
DEPTH OF FILL	In inches	In inches from land surface						
RESTRICTIVE HORIZON	Thicknes	Thickness and depth from land surface						
SAPROLITE	S (suitab	S (suitable) or U (unsuitable)						
SOIL WETNESS	Inches fro	om land surface to free water	er or inches from land	surface to soil	colors with chi	roma 2 or less - record Munsell	color chip designation	
CLASSIFICATION	S (Suitab	S (Suitable) or U (Unsuitable)						
Long-term Acceptance Rate (L'	TAR): gal/day/ft	2						



Initial System	Repair System	LEGEND
System Type: IIB, Gravity (At-Grade w/ cover)	System Type: IIB, Gravity (Shallow Placement w/ cover)	Initial System ————
Line Numbers: 4-6 Total Footage: 150'	Line Numbers: 1-3 Total Footage: 150'	Repair System 💢
Accepted Status System (25% Reduction)	Accepted Status System (25% Reduction)	
Soil LTAR: 0.40	Soil LTAR: 0.40	ST 1000 Gallon Min. Septic Tank
13" Maximum Trench Depth	13" Maximum Trench Depth	PT 1000 Gallon Min. Pump Tank



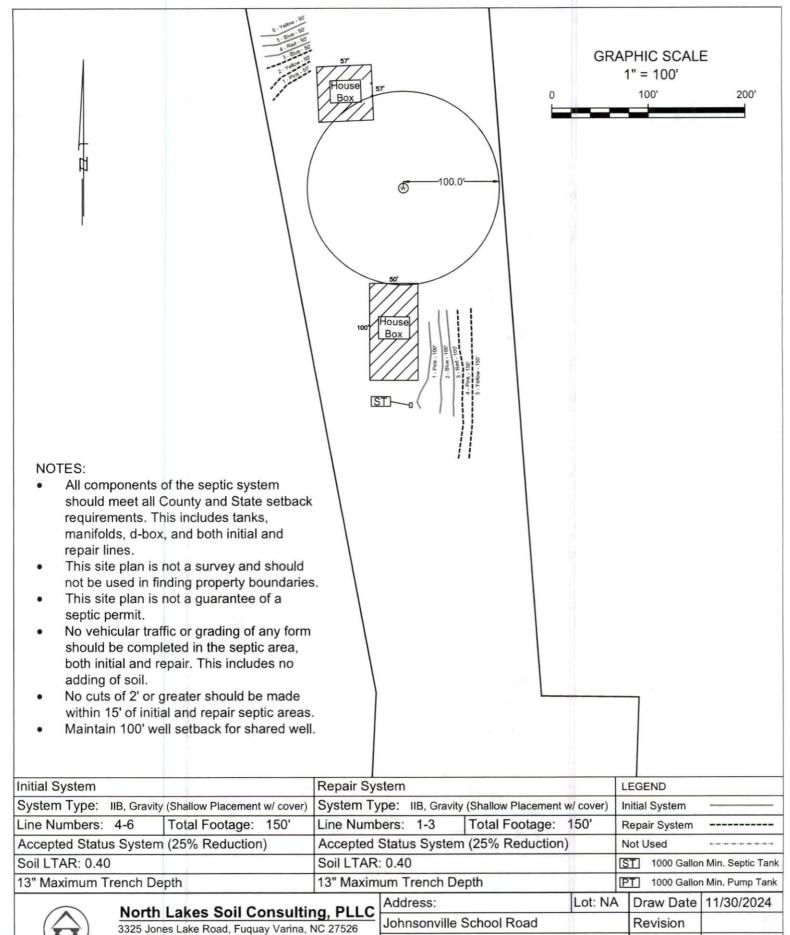
North Lakes Soil Consulting, PLLC

3325 Jones Lake Road, Fuquay Varina, NC 27526

Phone: (910) 539-5439 Email: john@northlakessoil.com

Address:	Lot: NA	Draw Date	11/30/2024
Johnsonville School Road		Revision	The state of the s
Harnett County, NC		Revision	
Septic System Layout: Initial & I	Repair	Drawn By	JMM
Bedroom Count: 2-Bedroom		Project #: 2	4-035

4-035 BM		Johnso	H LAKES SOIL CO Layout Stakin	DNSULTING, PLLC					
		Johnso	Layout Stakin						
				ig officer					
				ad - Harnett County					
		, ropossa i		Residence (2-Bedroom)					
			ton omgio i anni	rissiasinos (2 Doursonn)					
DIVI	4.7								
	4.7					FLAGGED LINE	DESIGN LINE		
LAG COLOR	BS (ft)		FS (ft)			LENGTH (ft)	LENGTH (ft)		
Pink			4.2			50	50		
Yellow			4.6			50	50		
Blue			5.0			50	50		
Red			5.3			50	50		
Blue			5.6			50	50		
Yellow			6.2			50	50		
					Total: MAXIMUM TRENCH	300	300		
ESIGN LINE LENGTH (ft)	SOIL LTAR (GPD/FT2)	SYSTEM TYPE	DESIGN LTAR* (GPD/FT2)	DRAINFIELD PRODUCT TYPE	DEPTH (Inches)	DISTRIBUTION METHOD	DESIGN FLOW (GPD)		
				Accepted (25% Reduction)					
150	0.400	IIB	0.400	Shallow Placement w/ cover	13"	Gravity - Parallel	240		
				Accepted (25% Reduction)					
150	0.400	IIB	0.400	Shallow Placement w/ cover	13"	Gravity - Parallel	240		
TBM is assume All measures in Nitrification line	ed to be 100.00 feet. es are demonstrat								
Santa caracida por		System Lines (1-3	5)						
7) Maximum trench depth is calculated on the downhill side of the trench and accounts for slope correction.									
	ESIGN LINE LENGTH (ft) 150 TBM - Back Ho TBM is assume All measures in Nitrification line Initial System L BS, FS indicate Maximum trend	ESIGN LINE SOIL LTAR (GPD/FT2) 150 0.400 TBM - Back House Corner TBM is assumed to be 100.00 All measures in feet. Nitrification lines are demonstrate Initial System Lines (4-6), Repair BS, FS indicate rod readings. Maximum trench depth is calcular	ESIGN LINE Red Blue Yellow Soll LTAR (GPD/FT2) SYSTEM TYPE 150 0.400 IIB TBM - Back House Corner TBM is assumed to be 100.00 All measures in feet. Nitrification lines are demonstrated on contour via colonitial System Lines (4-6), Repair System Lines (1-3 BS, FS indicate rod readings. Maximum trench depth is calculated on the downhile	ESIGN LINE SOIL LTAR (GPD/FT2) 150 0.400 150 150 0.400 1B 0.400 1B 0.400 1B 0.400 1B 0.400 TBM - Back House Corner TBM is assumed to be 100.00 All measures in feet. Nitrification lines are demonstrated on contour via colored pin flags. Initial System Lines (4-6), Repair System Lines (1-3) BS, FS indicate rod readings. Maximum trench depth is calculated on the downhill side of the trench	ESIGN LINE SOIL LTAR (GPD/FT2) SYSTEM TYPE (GPD/FT2) Accepted (25% Reduction) 150 0.400 IIB 0.400 Shallow Placement w/ cover TBM - Back House Corner TBM Is assumed to be 100.00 All measures in feet. Nitrification lines are demonstrated on contour via colored pin flags. Initial System Lines (4-6), Repair System Lines (1-3) BS, FS indicate rod readings.	ESIGN LINE SOIL LTAR (GPD/FT2) SYSTEM TYPE DESIGN LTAR* (GPD/FT2) Accepted (25% Reduction) Teper (Inches) 150 0.400 IIB 0.400 Shallow Placement w/ cover 13* TEM - Back House Corner TEM is assumed to be 100.00 All measures in feet. Nitrification lines are demonstrated on contour via colored pin flags. Initial System Lines (4-6), Repair System Lines (1-3) BS, FS indicate rod readings. Maximum trench depth is calculated on the downhill side of the trench and accounts for slope correction.	LAG COLOR Pink Pink Pink Pink Pink Pink Pink Pink		



Harnett County, NC

Septic System Layout: Initial & Repair

Bedroom Count: 2-Bedroom

Revision

Drawn By JMM

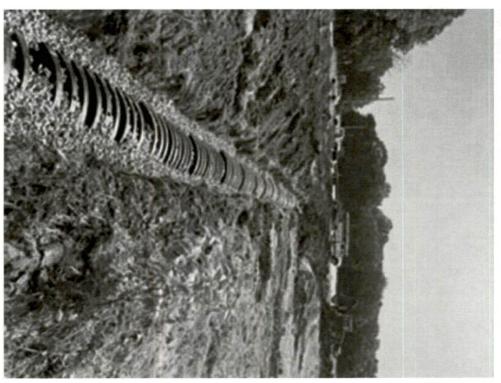
Project #: 24-035



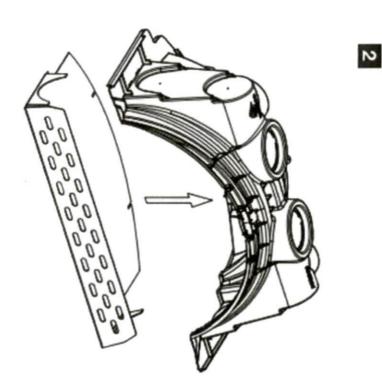
Phone: (910) 539-5439

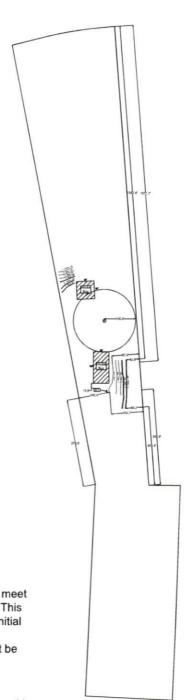
Email: john@northlakessoil.com

Gravel over Chamber Trench Louvers Detail:



High Flow Splash Plate and End Cap:





NOTES:

- All components of the septic system should meet all County and State setback requirements. This includes tanks, manifolds, d-box, and both initial and repair lines.
- This site plan is not a survey and should not be used in finding property boundaries.
- This site plan is not a guarantee of a septic permit.
- No vehicular traffic or grading of any form should be completed in the septic area, both initial and repair. This includes no adding of soil.
- No cuts of 2' or greater should be made within 15' of initial and repair septic areas.
- Maintain 100' well setback for a shared well.

	GRAPHIC SCAL	E.
	1" = 200'	
0	200'	400"
_		

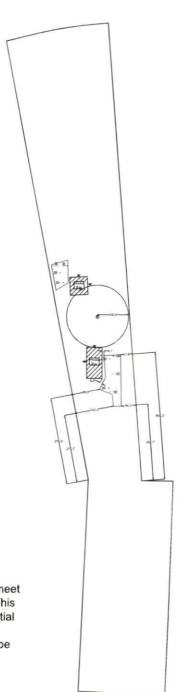
Initial System	Repair System	LEGEND Initial System	
System Type: IIB, Gravity (Shallow Placement w/ cover)	System Type: IIB, Gravity (Shallow Placement w/ cover)		
Line Numbers: 4-6 Total Footage: 150'	Line Numbers: 1-3 Total Footage: 150'	Repair System	
Accepted Status System (25% Reduction)	Accepted Status System (25% Reduction)	Not Used	
Soil LTAR: 0.40	Soil LTAR: 0.40	ST 1000 Gallon Min. Septic Tank	
13" Maximum Trench Depth	13" Maximum Trench Depth	PT 1000 Gallon Min. Pump Tank	



North Lakes Soil Consulting, PLLC 3325 Jones Lake Road, Fuquay Varina, NC 27526

Phone: (910) 539-5439 Email: john@northlakessoil.com

Address:	Lot: N/A	Draw Date	11/30/2024
Johnsonville School Road		Revision	
Harnett County, NC		Revision	- 5
Septic System Layout: Initial & Repair		Drawn By	JMM
Bedroom Count: 2-Bedroom		Project #: 2	4-035



NOTES:

- All components of the septic system should meet all County and State setback requirements. This includes tanks, manifolds, d-box, and both initial and repair lines.
- This site plan is not a survey and should not be used in finding property boundaries.
- This site plan is not a guarantee of a septic permit.
- No vehicular traffic or grading of any form should be completed in the septic area, both initial and repair. This includes no adding of soil.
- No cuts of 2' or greater should be made within 15' of initial and repair septic areas.
- · Maintain 100' well setback for a shared well.

	GRAPHIC SCAL	E
	1" = 200'	
0	200'	400

Initial System		Repair System LEGEND	
System Type: IIB, Grav	ty (Shallow Placement w/ cover)	System Type: IIB, Gravity (Shallow Placement w/ cover) Usable Soil Area	
Line Numbers: 4-6	Total Footage: 150'	Line Numbers: 1-3 Total Footage: 150' Soil Boring Location	E
Accepted Status System (25% Reduction)		Accepted Status System (25% Reduction)	
Soil LTAR: 0.40		Soil LTAR: 0.40 ST 1000 Gallon Min. Sept	tic Tank
13" Maximum Trench Depth		13" Maximum Trench Depth PT 1000 Gallon Min. Pum	p Tank



North Lakes Soil Consulting, PLLC 3325 Jones Lake Road, Fuquay Varina, NC 27526

Phone: (910) 539-5439 Email: john@northlakessoil.com

Address:	Lot: N/A	Draw Date	11/30/2024
Johnsonville School Road	Revision		
Harnett County, NC	Revision		
Septic System Layout: Initial &	Drawn By	JMM	
Bedroom Count: 2-Bedroom	Project #: 24-035		