

Subsurface Wastewater Disposal System Design Packet

Cedar Pointe LOT 27 305 Deodora Lane Cameron NC, 28326 PIN: 9574-11-0151

4/17/25

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PAC-ONE, PLLC

Subsurface Wastewater Disposal System Design Packet

Date: 4/17/25

Proposed for a:

4 -bedroom residential dwelling

Located at:

305 DEODORA LANE, CAMERON NC 28326

DESIGNED BY:

Steve Bristow

920 Garner Rd, Selma NC 27576

Email: stevebristow57@gmail.com

Phone: (919)906-4737

Session Law 2022-11 (S372) Introduction Letter

This information contained within this packet concerns a soils and subsurface wastewater evaluation conducted by:

Stephen W. Bristow (LSS#1167) of Permit Acquisition Company - One, PLLC

for the property hereafter described as:

305 DEODORA LANE, CAMERON NC 28326

at the behest	of:			
Owner Print:	SDH RA	LEIGH LLC	•	
Owner Signat	ture:	Will S	Smith	
Owner's Repr	esentative	(if any):	Will Smith	
Date:	4/17/	25		
	No.	-6		

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).

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

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





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

Application for Services

This application, in conjunction with the common form established in G.S. 130A-335(a3) and (a5), is optional for local health departments to be used for applications submitted in accordance with G.S. 130A-335(a2), (a3), and (a5). [hereinafter, G.S. 130A-335(a3) and (a5) permits referred to as (a2) Improvement Permit and (a2) Construction Authorization]

Applying for: [a2] Improvement Permit [a2] Construction Author	rization (a2) Repair/Construction Authorization	
If applying for a Construction Authorization, please indicate desire Accepted Conventional Innovative Other		
	ation ☐ Change of Use ☐ Repair iring Permit Requested (plat provided, defined in G.S.130A-334(7a☐ No	
Applicant: SDH RALEIGH LLC	Owner: SDH RALEIGH LLC	
Mailing Address: 3412 Apex Peakway	Mailing Address: 3412 Apex Peakway	
City: APEX	City: APEX	
State: NC Zip: 27502	State: NC Zip: 27502	
Phone #:	Phone #:	
Email:	Email:	
If the answer to any of the following questions is "yes", applicar	nt must attach supporting documentation.	
Yes No Does the site contain any jurisdictional	wetlands?	
Yes No Is any wastewater going to be generated on the site other than domestic sewage?		
Yes No Is the site subject to approval by any other public agency?		
Yes No Are there any easements or right of wa	ys on this property?	
·	S. 130A-335(a2), (a3), (a5), and (a6), attached to this application authorization pursuant to G.S. 130A-335(a2),(a3), and (a5).	
•	ted right of entry to the property indicated on this application to	
conduct necessary inspections to determine compliance with ap		
the application for an Improvements Permit and/or Construction		
then the Improvement Permit and Construction Authorization	444705	
Applicant Signature:	Date: 4/17/25	
Owner's Signature:	Date:	

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 \$
	IMPROVEM	IENT PERMIT FOR G.S. 130A-335	5(a2)
County: HARNETT			
PIN/Lot Identifier: 95	74-11-0151		
Issued To: SDH RA			
Property Location: 30	05 DEODORA LANE, CA	MERON NC 28326	
Subdivision (if applicab	ole) Cedar Pointe	LOT 27	Block: Section:
LSS Report Provided: Y			
If yes, name and licens	e number of LSS: Stephen W Bri	istow # 1167	
New 🔳	Expansion	System Relocation	Change of Use
Facility Type: SFD			
Number of bedrooms:	4 Number of Occupants: 8	Other:	
Design Wastewater Str	rength: Domestic	☐ High Strength ☐ Industria	al Process Wastewater
		Proposed LTAR (Initial):6 Pro	
Proposed Wastewater	System Type*: Ilb	(Initial) Pump Req	quired: 🗌 Yes 🔳 No 🗌 May be required
Proposed Wastewater	System Type*: Ilb	(Repair) Pump Req	uired: 🗌 Yes 🔳 No 🔲 May be required
*Please include system	ı classification for proposed wastew	vater system types in accordance with Rule .	.1301 Table XXXII
Effluent Standard:	■ DSE ☐ HSE ☐ NSF/ANSI 40	☐ TS-I ☐ TS-II ☐ RCW	
Saprolite System (Initia	al): 🗌 Yes 🔳 No Saprolite	e System (Repair): 🔲 Yes 🔳 No	
			inches of fill to system area provide a fill plan)
			6 inches of fill to system area provide a fill plan)
		Usable Depth to LC (Repair) ^x : 48	
			Measured on the downhill side of the trench
• .	, , ,	se specify details:	
		☐ Shared well ■ Municipal Supply	
Drainfield location mee	ets requirements of Rule .0508: Yes	S No Drainfield location meets r	requirements of Rule .0601: Yes 🔳 No 🗌
Permit valid for: 🔳 Fiv	e years [site plan submitted pursua	ant to GS 130A-334(13a)] No expiration	on [plat submitted pursuant to GS 130A-334(7a)]
Permit conditions:			
	Flow product on this sandy soil site or this 9064737 for an at site meeting to change		
		480gpd flow can be use for this installation.	

Licensed Soil Scientist Print Name: Steve Bristow #1167

Licensed Soil Scientist Signature: _ Stan Buter

Date: 4/17/25



Permit/File #:	
Permit/File #:	

This Section for Local Health Department Use Only

Initial submittal received:		by	
_	Date	Initials	
G.S. 130A-335(a3) states the following:			
When an applicant for an Improvement Permit submits to a local health depart department, the common form developed by the Department, and a soil evaluation, within five business days of receiving the application, conduct a completeness Permit includes all of the required components. If the local health department shall notify the applicant of the components needed to complete the Improvement department to cure the deficiencies in the Improvement Permit. The local health is complete within five business days after the local health department received act within any period set out in this subsection, the applicant may treat the fair common form for use as the Improvement Permit.	nation pursuant to so review of the subm determines that the ment Permit. The ap th department shall tes the additional info	ubsection (a2) of this section, the section, the section of completed. A determination of completed in the section of completed in the section of the sectio	he local health department shall, eteness means that the Improvement plete, the local health department information to the local health to whether the Improvement Permit the local health department fails to
The review for completeness of this Improvement Permit was Permit is determined to be:	conducted in a	ccordance with G.S. 130A	1-335(a3). This Improvement
☐ Incomplete (If box is checked, information in this section i	s required.)		
The following items are missing:			
	9 3	→ /~	W
Copies of this were sent to the LSS and the Applicant on	Date		- W
State Authorized Agent:		Date	- 18
☐ Complete			2 14
State Authorized Agent:		Date	? <u>//</u> 8
This Improvement Permit is issued pursuant to G.S. 130A-335 attached here. The issuance of this permit in no way guarant for checking with appropriate governing bodies in meeting the plate, or the intended use changes. The Improvement Permit is permit is subject to compliance with the provisions of 15A NOT the Department, the Department's authorized agents, and the any liabilities, duties, and responsibilities imposed by statute evaluations, submittals, or actions from a licensed soil scientification.	tees the issuand neir requirement shall not be affor CAC 18E and to the local health of e or in common	te of other permits. The ts. This permit is subject ected by a change in own the conditions of this permits shall be dis law from any claim arisi	permit holder is responsible to revocation if the site plan, nership of the site. This rmit. charged and released from ng out of or attributed to
mprovement Permit Expiration Date:			

See attached site sketch



Permit/File #:

Re-submittal of Improvement Permit

	LHD USE ONLY: This IP resubmittal received:	Date	by	
Γhe following i	items are being resubmitted pursuant to G.S. 130A-	-335(a3) for issuance	of the Improvement Permit	:
	S LUE S	ATF	g)	
s accurate and	hereby attest t Scientist (Print Name) complete to the best of my knowledge and that the I laws, regulations, rules, and ordinances.		required to be included wit ment Permit meets all app	
Signatur	re of Licensed Soil Scientist		Date	
.HD Follow-ເ	The section below is for Local Health Department up Completeness Review of Improvemen		tems noted as missing above	,
	completeness of this Improvement Permit re-subn Permit is determined to be:	nittal was conducted	in accordance with G.S. 13	0A-335(a3). This
•	e (If box is checked, information in this section is re	equired.)		
The following it	tems are missing:	M AIDE	Ø .	
Copies of this w	vere sent to the LSS and the Applicant on			
State Authorize	ed Agent:		Date:	
☐ Complete				
State Authorize	ed Agent:		Date:	



Permit/File #:	
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CONSTRUCTION AUTHORIZATION FOR G.S. 130A-335(a2)

County: Harnett		Conference Required: Yes ■ No □
PIN/Lot Identifier: 95	74-11-0151	
Issued To: SDH RA	LEIGH LLC	
	5 DEODORA LANE, CAMERON NC 28326	
AOWE/PE Plans/Evalua	tions Provided: Yes 🔳 No 🗌 If yes, name and license numb	ber of AOWE/PE: Steve Bristow # 10012E
Facility Type: SFD		
Number of bedrooms:	4 Number of Occupants: 8 Other:	
■ New	Expansion Repair System Relocation	☐ Change of Use
Basement?	Yes No Basement Fixtures?	Yes No
Crawl Space?	Yes No Slab Foundation?	Yes No
Type of Wastewater Sy	stem* IIb (Initial)	IIb (Repair)
*Please include system	classification for proposed wastewater system types in accorda	ance with Rule .1301 Table XXXII
Design Daily Flow: 48	O GPD Wastewater Strength: ■ Domest	tic High Strength Industrial Process WW
	Section 53, Engineering Design Utilizing Low-flow Fixtures and Lingineering documentation)	Low-flow Technologies?
Effluent Standard:	DSE HSE NSF/ANSI 40 TS-I TS-II R	RCW
Type of Water Supply:	Private well Public well Shared well I Munic	icipal Supply Spring Other:
Installation Requireme	nts/Conditions	
Septic Tank Size: 1200	gallons Total Trench/Bed Length: 200 feet Tre	ench/Bed Spacing: 9 feet on center
Trench/Bed Width: 36	inches LTAR: gpd/ft² Usable Dep	pth to LC (Initial) ^x : 48 xLimiting condition
Soil Cover: 6 inche	s Slope Corrected Maximum Trench/Bed Depth [‡] : 35	inches * Measured on the downhill side of the trench
Pump Tank Size (if app	icable): gallons Requires more than 1 pum	np? 🗌 Yes 🔲 No
Pump Requirements: _	ft. TDH vs GPM Grease Trap Size (if applica	able): gallons
Distribution Method: [Serial D-Box or Parallel Pressure Manifold(s)	LPP Other:
Artificial Drainage Requ	uired: Yes 🗌 No 🗹 If yes, please specify details:	037/3/19
Legal Agreements (If the	ne answer is "Yes" to any type of legal agreements, please attac	ch a copy of the agreement.)
Multi-party Agreement	Required [.0204(g)]: ☐ Yes ■ No Declar	ration of Restrictive Covenants:
	y, or Encroachment Agreement Required [.0301(b)]: 🗌 Yes 🛭	■ No
Management Entity Re	quired: 🗌 Yes 🔳 No Minimum O&M Requirements:	DEL
Installer must call 919-90	w product on this sandy soil site or this permit is void if chambers are us 064737 for an at site meeting to change this permit at installation. r- any tank that is State approved for 480gpd flow can be use for this ins	
The requirements of 1	5A NCAC 18E are incorporated by reference into this permit ar	nd shall be met. Systems shall be installed in accordance

with the attached site sketch. This Construction Authorization is subject to revocation if the site plan, plat, or the intended use changes. The Construction Authorization shall not be affected by a change in ownership of the site. This Construction Authorization is subject to compliance with the provisions of 15A NCAC 18E, or 15A NCAC 18A .1900, as applicable, and to the conditions of this permit.

AOWE/PE Print Name:

Steve Bristow 10012E

Date: 4/17/25

This AOWE/PE submittal is pursuant to and meets the requirements of G.S. 130A-335(a2) and (a5).

See attached site sketch

Beyised January 2024 with the attached site sketch. This Construction Authorization is subject to revocation if the site plan, plat, or the intended use changes. The

AOWE/PE Print Name: Steve Brist	ow 10012E		
AOWE/PE Signature:	ister	Date: 4/17/25	



This Section for Local Health Department Use Only

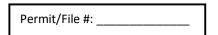
	Initial submittal received:	b	У
		Date	Initials
G.S. 130A-335(a5) states the follow	ing:		
Improvement Permit and Construction Author Department, and any necessary signed and sengineer or a person certified pursuant to Ald Department shall, within five business days of State Construction Authorization or Improvement Determines that the Construction Authorization Determined to components needed to components needed to components of the local health department of the project of the building permit for the project of the project of the project of the project of the local health department of the local health dep	orization application together, the persealed plans or evaluations conducted rticle 5 of Chapter 90A of the General of receiving the application, conduct a sent Permit and Construction Authorization or Improvement Permit and Construction Authorization or Improvement Permit and Construction Authorization of partment to cure the deficiencies in the shall make a final determination as to so days after the local health department out in this subsection, the applicant of the decision of completeness of the first the local health department fair pursuant to this subsection may requirement to this subsection for cause. Ususpend or revoke the Construction Authorization for cause.	mit fee charged by the lot by a person licensed pur Statutes as an Authorized completeness review of ation includes all of the retruction Authorization is in the Construction Authorization whether the Construction and the Construction are treat the failure to a the Construction Authority whether the failure to a the Construction Authority is to act within five busing the that the local health of Joon written request of the other than the request of the request of the other than the request of the	ation together, submits a Construction Authorization, or an ocal health department, the common form developed by the issuant to Chapter 89C of the General Statutes as a licensed of On-Site Wastewater Evaluator, the local health the submittal. A determination of completeness means that required components. If the local health department neomplete, the local health department shall notify the new construction Authorization. The applicant may submit ation or Improvement Permit and Construction on Authorization or Improvement Permit and Construction all information from the applicant. If the local health act as a determination of completeness. The applicant may reaction or Improvement Permit and Construction ress days. The Authorized On-Site Wastewater Evaluator or department revoke or suspend the Construction new Authorized On-Site Wastewater Evaluator or licensed then Permit and Construction pursuant to G.S.
The review for completeness of this	s Construction Authorization v	vas conducted in ac	cordance with G.S. 130A-335(a5). This
Construction Authorization is deter	mined to be:		
☐ Incomplete (If box is checked, i	nformation in this section is re	equired.)	
The following items are missing:			
Copies of this were sent to the AOV	VF/PF and the Applicant on	Jan Entra	
		Date	
State Authorized Agent:	2/4/1/1	12/25/18/03	Date:
	M. Vierlander		
☐ Complete			
State Authorized Agent:	W XV		Date of Issuance:
attached here. This Construction A Construction Authorization shall not to compliance with the provisions The Department, the Department' any liabilities, duties, and responsi plans, evaluations, preconstruction the General Statutes as a licensed Authorized On-Site Wastewater Ev	outhorization is subject to revo ot be affected by a change in of the Laws and Rules for Sew is authorized agents, and the libilities imposed by statute or in conference findings, submittengineer or a person certified valuator in GS 130A-335(a2), (the the status of th	ocation if the site plownership of the sivage Treatment and local health department in common law frostals, or actions from I pursuant to Article a5), and (a7). The Dand bear liability for e operations permit	ing the signed and sealed plans or evaluations an, plat, or the intended use changes. The te. This Construction Authorization is subject I Disposal and to the conditions of this permit. Inents shall be discharged and released from any claim arising out of or attributed to a 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 pursuant to GS 130A-337.



Permit/File #:

Re-submittal of Construction Authorization

	LHD USE ONLY: This CA resubm	nittal received:	Date	by	nitials	
The following in	tems are being resubmitted pursuant	t to G.S. 130A-335(a5	f) for issuance of	the Construct	ion Authorizatio	n:
		" STA	TE TO			
l,	8 3	hereby attest that the	e information red	uired to be in	ncluded with this	s re-submittal
is accurate and	nsite Wastewater Evaluator (Print Name) complete to the best of my knowled nd local laws, regulations, rules, an	dge and that the prop				
Signatur	e of Authorized On-Site Wastewater Evaluat	or		Date	N.	
	The section below is for Local Hea	Ith Department use afte	er submittal of iten	ns noted as mi	ssing above.	
LHD Follow-ւ	up Completeness Review of C	onstruction Author	orization			
	completeness of this Construction A on Authorization is determined to be		ittal was conduc	ted in accord	ance with G.S. 1	30A-335(a5).
☐ Incomplete (If box is checked, information in thi	is section is required.)				
The following it	ems are missing:					
		SE QUAM	AlDeks	9		
Copies of this w	ere sent to the AOWE/PE and the A		Pate			
State Authorize	d Agent:			Date	:	
☐ Complete						
State Authorize	d Agent:			Date	:	





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

County:	
PIN/Lot Identifier:	
Issued To:	
Additional Improvement Permit Conditions:	
THE SIAIE	
6/01	1.1
Al North	
8/47/89 9	
	Zanz-I () IN
	W 19#
Additional Construction Authorization Conditions:	
	1 -2 1 fg
W + 12 11 11	* //
QUAM VIDE	13



Permit #:	
-----------	--

Re-submittal of Construction Authorization

	LHD USE ONLY: This CA resubmittal received: _		by	
		Date	Initials	
The following it	tems are being resubmitted pursuant to G.S. 130A-3	35(a5) for issuance of	f the Construction Authoriz	zation:
	CT	AFF A		
l,	hereby attest th	nat the information re	equired to be included with	this re-submittal
is accurate and	nsite Wastewater Evaluator (Print Name) complete to the best of my knowledge and that the and local laws, regulations, rules, and ordinances.			
Signatur	re of Authorized On-Site Wastewater Evaluator		Date	
	The section below is for Local Health Department u	se after submittal of ite	ems noted as missing above.	
LHD Follow-ւ	up Completeness Review of Construction A	Authorization		
	completeness of this Construction Authorization re- on Authorization is determined to be:	-submittal was conduc	cted in accordance with G.	S. 130A-335(a5).
☐ Incomplete ((If box is checked, information in this section is requ	uired.)		
The following it	ems are missing:			
	ANO 30E OUA	M VIDER	19	
Copies of this w	vere sent to the AOWE/PE and the Applicant on	 Date		
State Authorize	d Agent:		Date:	
☐ Complete				
State Authorize	d Agent:		Date:	

V.2023.07

	Page <u>1</u> of
PROPERTY ID #:	9574-11-0151
COUNTY:	Harnett

SOIL/SITE EVALUATION for ON-SITE WASTEWATER SYSTEM (Complete all fields in full) OWNER: Smith Douglas Homes DATE EVALUATED: 4/12/25 ADDRESS: 3412 Apex Peakway Apex, NC, 27502 PROPOSED FACILITY: SFD PROPOSED DESIGN FLOW (.0400): 480gpd PROPERTY SIZE: .510 LOCATION OF SITE: 305 DEODORA LANE, CAMERON NC 28326 PROPERTY RECORDED: yes WATER SUPPLY: ✓ Public ☐ Single Family Well ☐ Shared Well ☐ Spring ☐ Other _ WATER SUPPLY SETBACK: na EVALUATION METHOD: ✓ Auger Boring ☐ Pit ☐ Cut TYPE OF WASTEWATER: ✓ Domestic ☐ High Strength ☐ IPWW R **SOIL MORPHOLOGY** OTHER PROFILE FACTORS o F L .0504 .0509 .0502(d) .0502 LANDSCAPE HORIZON .0505 **PROFILE** SLOPE .0503 .0503 **SOIL** .0506 .0507 POSITION/ **DEPTH** STRUCTURE/ CONSISTENCE/ WETNESS/ **SOIL** SAPRO RESTR CLASS CORRE **COLOR** DEPTH HORIZ & LTAR* SLOPE % **TEXTURE** MINERALOGY **CLASS CTION** (IN.) GR/SL VFR/NS/NP/SEXP 7.5YR 7/1 3 Suitable .72in Linear 48+ Slope 2% .65 17 SG/SL LO/FR/NS/NP/SEXP 10YR 5/3 1 48 GR/SL VFR/NS/NP/SEXP 5YR4/6 GR/SL 6 VFR/NS/NP/SEXP 7.5YR7/1 48+ Suitable .72 in Linear Slope 2% .65 25 SG/SL LO/FR/NS/NP/SEXP 7.5YR4/4 VFR/NS/NP/SEXP 48 GR/SL 5YR 4/6 4 GR/SL VFR/NS/NP/SEXP 10R 2/1 48+ Suitable .72in Linear

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM		
Available Space (.0508)	YES	YES		
System Type(s)	IIb	Ilb		
Site LTAR	.60	.60		
Maximum Trench Depth	35	35		
Comments: Note - 35in MTD because of slope correction				

30

48

3

28

48

GR/SL

SG/SL

GR/SL

GR/SL

SG/SL

VFR/NS/NP/SEXP

LO/FR/NS/NP/SEXP

VFR/NS/NP/SEXP

VFR/NS/NP/SEXP

LO/FR/NS/NP/SEXP

SITE CLASSIFICATION (.0509):

EVALUATED BY: Stephen W Bristow LSS 1167

OTHER(S) PRESENT:

7.5YR4/6

5YR 4/6

10R 2/1

7.5YR4/6

5YR 4/6

48+

OF WORTH OF

.60

Suitable

.60

.72in

Revised January 2024 Form SSE-24.2

Slope 2%

Linear Slope 2%

3

LEGEND

LANDSCAPE POSITION	SOIL GROUP	SOIL TEXTURE	CONVENTIONAL LTAR (gpd/ft ²)	SAPROLITE LTAR (gpd/ft ²)	LPP LTAR (gpd/ft ²)		ALOGY/ STENCE	STRUCTURE
CC (Concave slope)		S (Sand)		0.6 - 0.8		MOIST	WET	SG (Single grain)
CV (Convex Slope)	I	LS (Loamy sand)	0.8 - 1.2	0.5 -0.7	0.4 -0.6	Lo (Loose)	NS (Non-sticky)	M (Massive)
D (Drainage way)		SL (Sandy loam)		0.4 -0.6		VFR (Very friable)	SS (Slightly sticky)	GR (Granular)
FP (Flood plain)	П	L (Loam)	0.6 - 0.8	0.2 - 0.4	0.3 - 0.4	FR (Friable)	S (Sticky)	SBK (Subangular blocky)
FS (Foot slope)		SiL (Silt loam)		0.1 - 0.3		Fl (Firm)	VS (Very sticky)	ABK (Angular blocky)
H (Head slope)		SCL (Sandy clay loam)		0.05 - 0.15**		VFI (Very firm)	NP (Non-plastic)	PR (Prismatic)
L (Linear Slope)		CL (Clay loam)				EFI (Extremely firm)	SP (Slightly plastic)	PL (Platy)
N (Nose slope)		SiCL (Silty clay loam)					P (Plastic)	
R (Ridge/summit)	Ш	Si (Silt)	0.3 - 0.6		0.15 - 0.3		VP (Very plastic)	
S (Shoulder slope)		SC (Sandy clay)				SEXP (Slight	ly expansive)	
T (Terrace)		SiC (Silty clay)				EXP (Ex	pansive)	
TS (Toe Slope)	IV	C (Clay)	0.1 - 0.4	None	0.05 - 0.2			-
		O (Organic)	None					

^{*} Adjust LTAR due to depth, consistence, structure, soil wetness, landscape, position, wastewater flow and quality.

HORIZON DEPTH In inches below natural soil surface
DEPTH OF FILL In inches from land surface

RESTRICTIVE HORIZON Thickness and depth from land surface

SAPROLITE S(suitable) or U(unsuitable); Evaluation of saprolite shall be by pits.

SOIL WETNESS Inches from land surface to free water or inches from land surface to soil colors with chroma 2 or less - record Munsell color

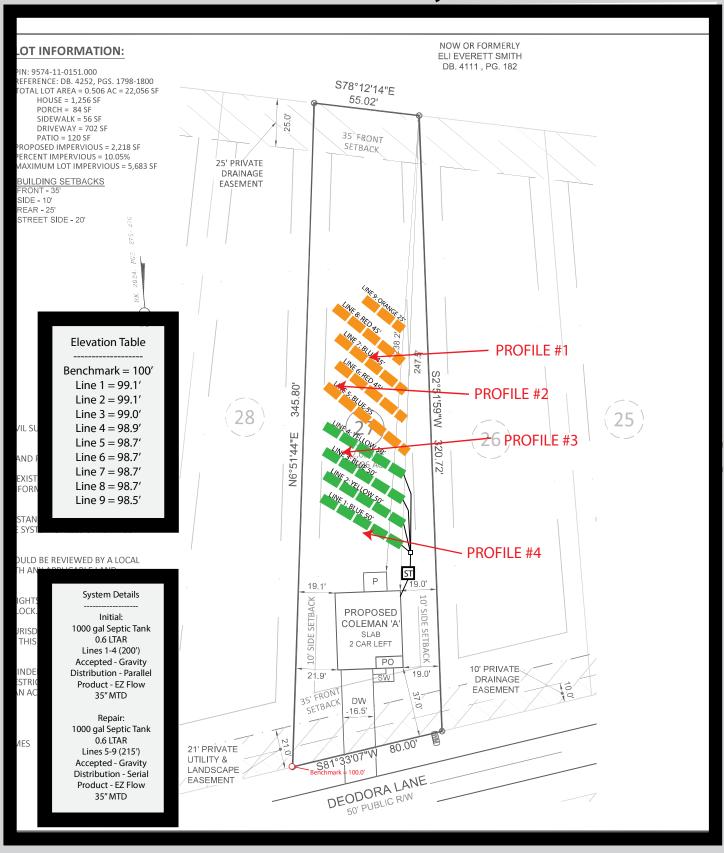
chip designation

CLASSIFICATION S (Suitable) or U (Unsuitable)

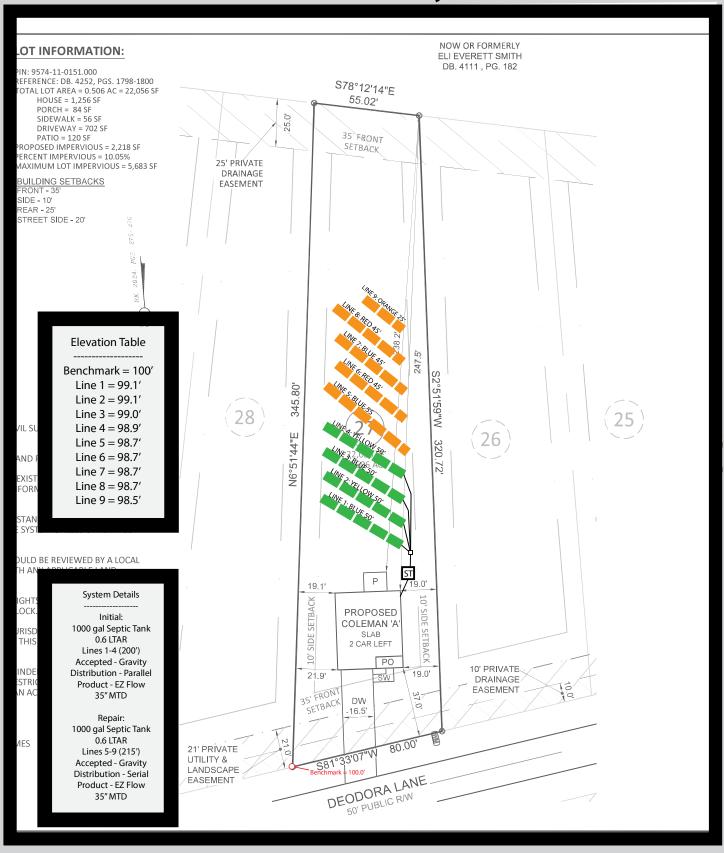
Show profile locations and other site features (dimensions, reference or benchmark, and North).



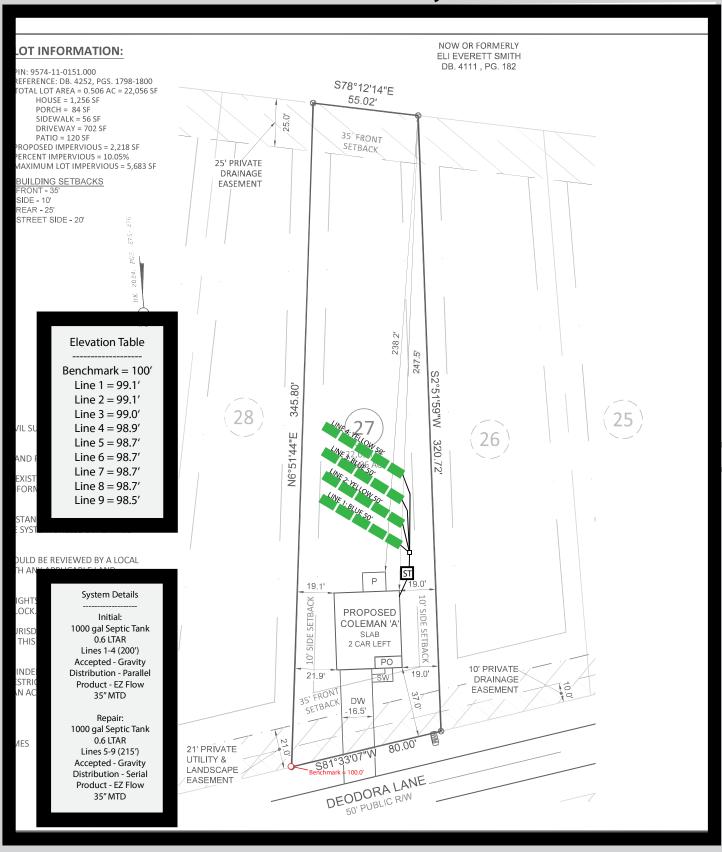
^{**}Sandy clay loam saprolite can only be used with advanced pretreatment in accordance with 15A NCAC 18E .1200.



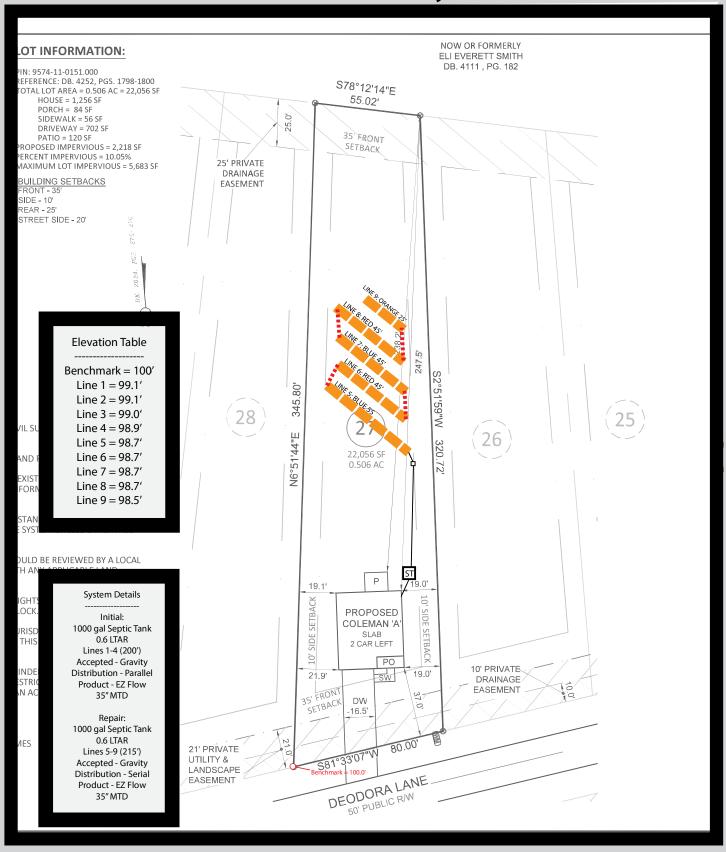














SYSTEM DETAIL OVERVIEW

CEDAR POINTE LOT 27

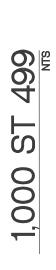
Initial System

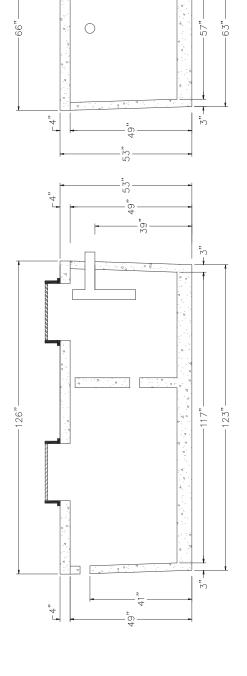
Design Criteria	
Number of bedrooms	4
Design Flow	480 gal/day
Soil L.T.A.R.	0.6 gal/day/sqft
System Detail	
Trench Depth	35"
Total Trench Length	200'
Distribution	Parallel
System Components	
Trench Product	EZ Flow
Septic Tank	1000 gal
Effluent Filter	Polylok PL-68 (or approved equivalent)

Repair System

Design Criteria	_
Number of bedrooms	4
Design Flow	480 gal/day
Soil L.T.A.R.	0.6 gal/day/sqft
System Detail	
Trench Depth	35"
Total Trench Length	215'
Distribution	Serial
System Components	
Trench Product	EZ Flow
Septic Tank	1000 gal
Effluent Filter	Polylok PL-68 (or approved equivalent)

ΙίοΙ		Master Set		finataller•gmail.com
SHEET NUMBER		Revision 3	CORY BRANTLEY	F8x 919-573-0443
		Revision 2	CONTACT:	Zebulon, NC 27597 Office 252-478-3721
1900 TS 000,1		Revision 1	DATE: April 11, 2014	37 Pine Ridge Rd. 37 Pine Ridge Rd.
	April 11, 2014	Original Submittal	37 Pine Ridge Rd.	
	DATE	REVISION NO.	PREPARED FOR: David Brantley & Sons	





NON TRAFFIC BEARING



PL-68 Filter and Tee

PL-68 is much more than just an effluent filter. The housing can also be used as an inlet baffle (tee) or an outlet baffle. The housing is designed to accept Polylok's snap in gas deflector to deflect gas bubbles away from the tee and to keep the solids in the tank.

Features:

- Offers 68 linear feet of 1/16" filter slots, which significantly extends time between cleaning.
- Accepts 3/4" PVC handle.
- Locks in any 360° position when used with PL-68 Tee.
- PL-68 Housing can be used as an inlet or outlet tee.
- Gasket prevents bypass.

PL-68 Installation:

Ideal for residential waste flows up to 800 gallons per day (GPD). Easily installs in any new or existing 4" outlet tee.

- 1. Locate the outlet of the septic tank.
- 2. Remove the tank cover and pump tank if necessary.
- 3. Glue the filter housing to the outlet pipe, or use a Polylok Extend & Lok if not enough pipe exists.
- 4. Insert the PL-68 filter into tee.
- 5. Replace and secure the septic tank cover.

PL-68 Maintenance:

The PL-68 Effluent Filter will operate efficiently for several years under normal conditions before requiring cleaning. It is recommended that the filter be cleaned every time the tank is pumped, or at least every three years.

- 1. Do not use plumbing when filter is removed.
- 2. Pull PL-68 out of the tee.
- 3. Hose off filter over the septic tank. Make sure all solids fall back into septic tank.
- 4. Insert filter back into tee/housing.

Related Products:

PL-68 Filter Concrete Baffle Extend & LokTM

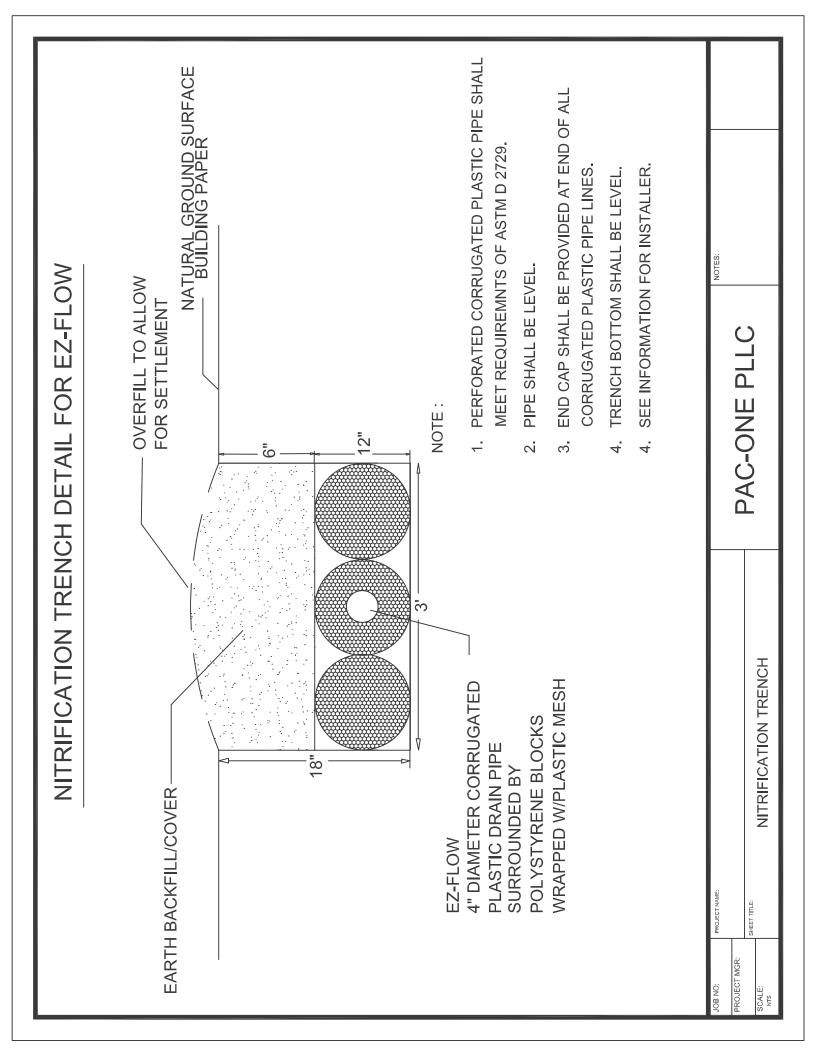


Extend & Lok™ Easily installs into existing tanks.



to 110mm Pipe

to SDR 35



INFORMATION FOR THE CONTRACTOR

The permit should be read very carefully prior to bidding. The following are details that must be considered by the contractor prior to and during installation:

- Tanks shall be approved by NCDHHS and certification supplied by the manufacturer.
- The installer shall be responsible to the owner for placement of the tanks and to ensure that final grades are returned to the original grade, with exception of added structural features.
- The supply trench shall be compacted to eliminate cavities left during initial fill placement without damage or displacement of pipe or fittings.
- Installation of the system shall be during dry conditions in order to protect the soil structure.
- All fittings shall be pressure rated fittings.
- All joints shall be cleaned with PVC pipe cleaner and a heavy-bodied PVC pipe glue applied to weld all joints.
- Where required by the regulating County Health Department, post installation inspections by the Engineer or his representative must be scheduled **5 week days** in advance.
- Trenches shall be carefully excavated so the bottom is level for the entire length and width of the trench. If the trench bottom level needs adjusting after excavation it must be done by removing high points rather than filling low points. It is extremely important to insure that trenches are not over-excavated during initial trenching. All fine grading within the trench will be done by hand with a shovel. No loose material will be left in the trench.
- All pipe openings in the tanks shall be properly filled with press boot seal. This also applies to the joints around the riser.
- All tanks shall be properly back filled and compacted to prevent settlement.
- Earth dams, constructed of relatively impervious material, shall be installed at the beginning and end of each lateral.
- No heavy equipment shall be used on the field during or after installation.
- Elevations at pin flag locations should be checked by the contractor prior to beginning trench excavation.
- Pump tank riser shall be 6" above grade, control panel shall be 18" above grade.
- -Septic tank shall have specified effluent filter or approved equivalent.

System Specifics:

- System uses EZ-Flow drain line.
- Repair uses EZ-Flow drain line.

Miscellaneous errors and omissions

Markel has over 35 years of experience providing miscellaneous errors and omissions insurance. Our leadership has a wealth of knowledge and expertise in protecting small business owners from litigation stemming from actual or perceived negligence. Our underwriting team has crafted policies that fit your specific needs, while our seasoned, in-house claims professionals will help you successfully navigate a loss or claim should you need their assistance.

Reporting new professional liability claims

New Claims can be reported in writing by website, email, fax, or regular mail. Please refer to your specific policy for all relevant reporting requirements.

To report a new claim, visit markelinsurance.com/file-a-claim and select "BOP/Miscellaneous errors and omissions/Workers compensation" from the drop down. You can also email newclaims@markelcorp.com and include the following:

- Policy number
- Insured and claimant names with contact details
- · Date of loss
- Location and description of loss
- All pertinent documentation available (incident report, police report, witness information, photos, etc.)

General claims questions

For information about an already reported Professional Liability claim, email: markelclaims@markelcorp.com, or contact your assigned claim examiner directly.

Additional contact information:

(800) 362-7535 or (800) 3 MARKEL (855) 662-7535 or (855) 6 MARKEL

Markel Claims Department, P.O. Box 2009, Glen Allen, VA 23058-2009

While your policy is primarily designed to protect against a variety of professional errors and omissions claims, it may also provide protection for other specific exposures such as pollution claims, disciplinary proceedings, third party discrimination claims, subpoena and public relations expenses, among others. Contact your agent for more information, or if you have reported a Claim, your assigned examiner.

Risk management and loss prevention

Policyholders have access to loss control and risk management resources that can assist in a better understanding of potential hazards within their operation and ways to reduce claims.

Here's a sample of the many services available:

- Exposure assessments
- Loss analysis tools
- Safety videos
- Safety training materials
- Regulatory program guidance

Designed Protection® for professional service providers and associations – professional service providers hotline

Our panel of Risk Management experts is available to discuss general risk management related concerns and questions. Please visit **markelcorp.com/riskmanagement** and under "Designed Protection®" click "Click here," enter your policy number, then select "Professional Service Providers Hotline" to access our panel of experts.

Visit our website at:

markelinsurance.com/risk-management-home.

For more information about any of Markel's loss control services, contact us at (888) 500-3344 or email losscontrol@markelcorp.com.

For more information about our programs, risk management articles, and FAQs, please visit **markelinsurance.com**. To pay your bill or view policy documents, please visit **portal.markelinsurance.com**.





CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 11/26/2024

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

th	IPORTANT: If the certificate holder in terms and conditions of the policy ertificate holder in lieu of such endor	certai	n pol							
PROD	DUCER				CONTAC NAME:	T Angela :	Sensenig			
Wad	le Associates, LLC				PHONE (A/C. No	.Ext): (252)	631-5269	FAX (A/C, No):	(252) 649	-2443
250	Pollock St.					SS: asensen:	ig@wadeict	com		
						INS	URER(S) AFFOR	DING COVERAGE		NAIC #
New	Bern NC 2	3560			INSURE	RA:Starsto	ne Specia	lty Insurance Comp	any	44776
INSU	RED				INSURE	RB:Builder	s Mutual	Insurance Company		10844
Per	mit Acquistion Company One	PLLC	:		INSURE	RC:				
920	Garner Rd				INSURE	RD:				
					INSURER E :					
Sel	ma NC 2	7576			INSURE	RF:				
CO	VERAGES CE	RTIFIC	CATE	NUMBER: 24-25				REVISION NUMBER:		
IN Ce	THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.									
INSR LTR	TYPE OF INSURANCE		SUBR WVD			POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMIT	s	
	X COMMERCIAL GENERAL LIABILITY							EACH OCCURRENCE	\$	1,000,000
A	CLAIMS-MADE X OCCUR							DAMAGE TO RENTED PREMISES (Ea occurrence)	\$	100,000
		_		SSEP0476240AEM		11/22/2024	11/22/2025	MED EXP (Any one person)	\$	10,000
		_						PERSONAL & ADV INJURY	\$	1,000,000
	GEN'L AGGREGATE LIMIT APPLIES PER:							GENERAL AGGREGATE	\$	2,000,000
	X POLICY PRO- JECT LOC							PRODUCTS - COMP/OP AGG	\$	2,000,000

		1	1				LACIT OCCURRENCE	Ψ	
A	CLAIMS-MADE X OCCUR						DAMAGE TO RENTED PREMISES (Ea occurrence)	\$	100,000
				SSEP0476240AEM	11/22/2024	11/22/2025	MED EXP (Any one person)	\$	10,000
							PERSONAL & ADV INJURY	\$	1,000,000
	GEN'L AGGREGATE LIMIT APPLIES PER:						GENERAL AGGREGATE	\$	2,000,000
	X POLICY PRO- JECT LOC						PRODUCTS - COMP/OP AGG	\$	2,000,000
	OTHER:							\$	
	AUTOMOBILE LIABILITY						COMBINED SINGLE LIMIT (Ea accident)	\$	
	ANY AUTO						BODILY INJURY (Per person)	\$	
	ALL OWNED SCHEDULED AUTOS AUTOS						BODILY INJURY (Per accident)	\$	
	HIRED AUTOS NON-OWNED AUTOS						PROPERTY DAMAGE (Per accident)	\$	
								\$	
	UMBRELLA LIAB OCCUR						EACH OCCURRENCE	\$	
	EXCESS LIAB CLAIMS-MADE	1					AGGREGATE	\$	
	DED RETENTION \$							\$	
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY						X PER OTH- STATUTE ER		
	ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED?	N/A					E.L. EACH ACCIDENT	\$	500,000
В	(Mandatory in NH)			69KOUB-5N24039-7-24	11/14/2024	11/14/2025	E.L. DISEASE - EA EMPLOYEE	\$	500,000
	If yes, describe under DESCRIPTION OF OPERATIONS below						E.L. DISEASE - POLICY LIMIT	\$	500,000
A	Errors & Omissions			SSEP0476240AEM	11/22/2024	11/22/2025	Each Occurrence		\$1,000,000
							General Aggregate		\$2,000,000

							General Aggregate	\$2,000,00
DESC	RIPTION OF OPERATIONS / LOCATIONS / VEHICLES	(ACO	RD 10	1, Additional Remarks Schedule, may be atta	ched if more space	ce is required)		

CERTIFICATE HOLDER CANCELLATION	ı

Smith Douglas Homes 3412 Apex Peakway Apex, NC 27502 SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

N Whitsett/RACHEL

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MARKEL INSURANCE COMPANY

10275 West Higgins Road, Suite 750 Rosemont, IL 60018 (800) 431-1270

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Coverage afforded by this policy is provided by the Company (Insurer) and named in the Declarations.

In **Witness Whereof**, the company (insurer) has caused this policy to be executed and attested and countersigned by a duly authorized representative of the company (insurer) identified in the Declarations.

Kathleen Anne Sturgeon By W. Salus

Secretary

President

MJIL 1000 06 10 Page 1 of 1



MARKEL INSURANCE COMPANY

NOTICE TO POLICYHOLDERS CLAIM REPORTING

Please immediately report a new claim under this policy to:

newclaims@markel.com

For general claims inquiries after a claim has been reported, please email:

markelclaims@markel.com

In order for us to expedite the handling of your claim and quickly refer it to the appropriate party, please have the following information available:

- Claim number (or report as new)
- Your name, contact information and position with the Named Insured
- Date of loss
- Policy number and insured name
- Details of loss

Our address and additional contact information are as follows:

Markel Claims P.O. Box 2009 Glen Allen, VA 23058-2009 Phone: 800-362-7535 (800) 3MARKEL

Fax: 855-662-7535 (855) 6MARKEL

Markel understands the importance of having knowledgeable claims professionals prepared to answer your questions with personal attention and expertise. With claims professionals located across four times zones, you are sure to find the claims assistance you need -- when you need it.

PLEASE REFER TO THE POLICY FOR ANY NOTICE AND REPORTING PROVISIONS AND DUTIES IN THE EVENT OF LOSS OR DAMAGE TO COVERED PROPERTY.

MPIL 1074 07 14 Page 1 of 1



MARKEL INSURANCE COMPANY

U.S. TREASURY DEPARTMENT'S OFFICE OF FOREIGN ASSETS CONTROL ("OFAC") ADVISORY NOTICE TO POLICYHOLDERS

No coverage is provided by this Policyholder Notice nor can it be construed to replace any provisions of your policy. You should read your policy and review your Declarations page for complete information on the coverages you are provided.

This Notice provides information concerning possible impact on your insurance coverage due to directives issued by OFAC. Please read this Notice carefully.

The Office of Foreign Assets Control (OFAC) administers and enforces sanctions policy, based on Presidential declarations of "national emergency". OFAC has identified and listed numerous:

- · Foreign agents;
- Front organizations;
- Terrorists;
- · Terrorist organizations; and
- Narcotics traffickers;

as "Specially Designated Nationals and Blocked Persons". This list can be located on the United States Treasury's web site – https://www.treasury.gov/ofac.

In accordance with OFAC regulations, if it is determined that you or any other insured, or any person or entity claiming the benefits of this insurance has violated U.S. sanctions law or is a Specially Designated National and Blocked Person, as identified by OFAC, this insurance will be considered a blocked or frozen contract and all provisions of this insurance are immediately subject to OFAC. When an insurance policy is considered to be such a blocked or frozen contract, no payments nor premium refunds may be made without authorization from OFAC. Other limitations on the premiums and payments also apply.

Markel Insurance Company



PROFESSIONAL LIABILITY INSURANCE DECLARATIONS

Claims Made and Reported Coverage: The coverage afforded by this policy is limited to liability for only those Claims that are first made against the Insured during the Policy Period or the Extended Reporting Period, if exercised, and reported to Markel Insurance Company during the Policy Period or the Extended Reporting Period, if exercised, or within 60 days after the expiration of the Policy Period or the Extended Reporting Period, if exercised.

Notice: This policy contains provisions that reduce the Limits of Liability stated in the policy by the costs of legal defense and permit legal defense costs to be applied against the deductible, unless the policy is amended by endorsement. Please read the policy carefully.

POLICY NUMBER: MEO1642-05 RENEWAL OF POLICY: MEO1642-04

NAMED INSURED: Permit Acquisition Company-One LLC

BUSINESS ADDRESS: 920 Garner Road Selma, NC 27576

POLICY PERIOD: From 11/22/2023 to 11/22/2024

12:01 A.M. Standard Time at address of Insured stated above.

IN RETURN FOR THE PAYMENT OF THE PREMIUM, AND SUBJECT TO ALL THE TERMS OF THIS POLICY, THE COMPANY AGREES WITH THE NAMED INSURED TO PROVIDE THE INSURANCE AS STATED IN THIS POLICY.

PROFESSIONAL SERVICES: soil science

2. LIMITS OF LIABILITY

Professional Liability Coverage

Α.	Each Claim:	\$2,000,000
В.	Policy Aggregate:	\$2,000,000

Additional Payments

A.	Contingent Bodily Injury And Property Damage	\$100,000
B.	Pollution	\$10,000
C.	Pre-Claim Assistance Expenses	\$20,000
D.	Sexual Abuse	\$10,000
E.	Third Party Discrimination	\$25,000

Supplementary Payments

Α.	Disciplinary Proceeding	\$25,000	per Polic	y Period
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В.	Loss Of Earnings And Expense Reimbursement	\$10,000
C.	Public Relations Expenses	\$5,000
D.	Subpoena And Record Request Assistance	\$5,000

Producer Number, Name and Mailing Address

98496

Wade Associates, LLC. - New Bern

PO Box 1209

Davidson, NC, 28036

MDST 1000 07 17 Page 1 of 2

3. DEDUCTIBLE

 A. Each Claim:
 \$1,000

 B. Aggregate:
 \$3,000

4. RETROACTIVE DATE: 11/22/2019

5. PREMIUM RATE: Flat PREMIUM BASE: Flat

6. PREMIUM FOR POLICY PERIOD

Minimum: \$560
Deposit: \$560
Adjusted Annual Premium: \$560

- 7. PREMIUM PERCENTAGE FOR EXTENDED REPORTING PERIOD: ADDITIONAL PERIOD:
- 8. FORMS AND ENDORSEMENTS ATTACHED AT POLICY INCEPTION:

See MDIL 1001 attached.

These declarations, together with the Coverage Form and any Endorsement(s), complete the above numbered policy.

Countersigned: 08/30/2023 (Date)	By: John K Clark
	Authorized Representative Signature

MDST 1000 07 17 Page 2 of 2