



North Carolina Onsite Wastewater Contractor Inspector Certification Board
Authorized Onsite Wastewater Evaluator Permit Option for Non-Engineered Systems
Notice of Intent (NOI) to Construct

☒ New ☐ Expansion ☐ Repair ☐ Relocation ☐ Relocation of Repair Area

Owner or Legal Representative Information:

Name: Cates Building

Mailing address: 639 Executive Place Ste. 400 City: Fayetteville State: NC Zip: 28305

Phone: 910-709-9801 Email: pam@cavinessandcates.com

Authorized Onsite Wastewater Evaluator Information:

Name: Mike Eaker Certification #: 10013E

Mailing address: PO Box 9321 City: Fayetteville State: NC Zip: 28311

Phone: 910-822-4540 Email: Mike@southeasternsoil.com



Site Location Information:

Site address: 402 Black Duck Lane, Lillington, NC 27546

Tax parcel identification number or subdivision lot, block number of property: Ducks Landing Lot 79

0527-51-6308.000 County: Harnett

System Information:

Wastewater System Type: Accepted (25% Reduction)

Daily Design Flow: 360 gpd

Saprolite System: ☐ Yes ☒ No Subsurface Operator Required: ☐ Yes ☒ No

Water Supply Type: ☐ Private Well ☒ Public Water Supply ☐ Spring ☐ Other: _____

Facility Type:

☒ Residential 3 # Bedrooms 6 Maximum # of Occupants

☐ Business Type of Business and Basis for Flow: _____

☐ Public Assembly Type of Public Assembly and Basis for Flow: _____

Required Attachments:

☒ Plat or Site Plan

☒ Evaluation of Soil and Site Features by Licensed Soil Scientist

Attest: On this the 14 day of May, 2025 by signature below I hereby attest that the information required to be included with this NOI to Construct is accurate and complete to the best of my knowledge. Furthermore, I hereby attest that I have adhered to the laws and rules governing onsite wastewater systems in the state of North Carolina.

This NOI shall expire on 14 day of May, 2030.

Signature of Authorized Onsite Wastewater Evaluator: _____

Signature of Owner or Legal Representative: _____

Disclosure: The owner may apply for a building permit for the project upon submitting a complete NOI to Construct and the fee required (if any) to the local health department. An onsite wastewater system authorized by an authorized onsite wastewater evaluator shall be transferable to a new owner with the consent of the authorized onsite wastewater evaluator.

Local Health Department Receipt Acknowledgement:

Signature of Local Health Department Representative: _____ Date: _____

Southeastern Soil & Environmental Associates, Inc.

P.O. Box 9321
Fayetteville, NC 28311
Phone/Fax (910) 822-4540
Email mike@southeasternsoil.com

May 14, 2025

Ms. Pamela Geddie
Cates Building, Inc.
639 Executive Place, Suite 400
Fayetteville, NC 28305

Re: Soil/site evaluation for subsurface waste disposal (GS 130A-336.2) AOWE, Ducks Landing, Lot 79, PIN 0527-51-6308.000, 402 Black Duck Lane, Lillington, Harnett County, North Carolina

Dear Ms. Geddie,

A soil/site evaluation has been conducted on the aforementioned property at your request. The purpose of the investigation was to determine if soils were suitable or provisionally suitable for a subsurface waste disposal system (conventional, accepted and innovative) to serve a proposed single-family residence (3-bedroom home). All ratings and determinations were made in accordance with "Onsite Wastewater Rules, 15A NCAC 18E". **This LSS evaluation is being submitted to meet the requirements of GS 130A-336.2 (AOWE).**

The soil evaluation was completed on March 13, 2025. Hand auger borings were advanced under moist soil conditions. The site essentially lies on a linear slope landscape (5-6% slope). Soil borings conducted in most of this area consisted of 3 or more inches of loamy sand underlain by sandy loam, sandy clay loam and/or silty clay loam to 48 or more inches below the soil surface. Soil wetness and/or parent material (greater than 50%) was not observed shallower than 36 inches below the soil surface (initial system) and 37 inches (repair system). All other soil characteristics were suitable to at least 48 inches.

Based on soil borings and site conditions, the site would be designated suitable for a pump to a shallow accepted subsurface waste disposal drainfield (0.50 gal/day/ft² LTAR; initial system). There is enough suitable soil area to allow for a pump to a porous panel block (50% reduction) subsurface septic system repair (0.40 gal/day/ft²). A map showing the approximate location of the site and proposed septic layout accompanies this report. **[Note: No grading, rutting or other soil disturbance can occur in or near the proposed septic area. Any grading can alter the findings of this report and render the site unusable. As such, we recommend the builder protect the proposed septic areas with rope, flagging, fencing, etc.]**

Design Summary

- Pump to Accepted product with d-box (195', see septic layout)
- 360 gal/day flow rate (3BR)
- 22" maximum trench depth
- 0.50 gpd/ft² LTAR (initial) and 0.4 gpd/ft² (repair)
- 1000-gallon septic and pump tank (**certified watertight**)
- Pump to produce 21.33 gal/min @ 14.0 feet TDH
- Pump dose 90 gallons (4.5-inch drawdown)
- **French Drain to be installed on the 78/79 property line (see map)**
- No grading, rutting or filling in septic areas
- No vertical cuts (greater than 2') within 15' of septic lines/areas
- Keep tanks and drainlines 10' from property lines
- Keep supply line 5 or more feet from property lines
- **Install in dry soil conditions**
- Maintain natural contours when clearing the lots
- Direct gutter water away from septic system
- **AOWE must preapprove Licensed installer**
- **Preconstruction conference required 2 weeks prior to installation of septic**
- **Contractor to provide 2 week's notice prior to installation**

During site construction, it is important not to impact and suitable or provisionally suitable soil areas with activities such as excavation or filling. Only the vegetation should be removed in the areas of the proposed septic drainfields to prevent any disturbance of naturally occurring soil. We recommend all lot clearing activity be delayed until the local health department issues a permit.

To the extent possible, we have identified the soil types that will impact the flow of wastewater on this site and have provided a professional opinion as to the best septic system layout. This report does not guarantee that the proposed septic system will properly function for any specific length of time.

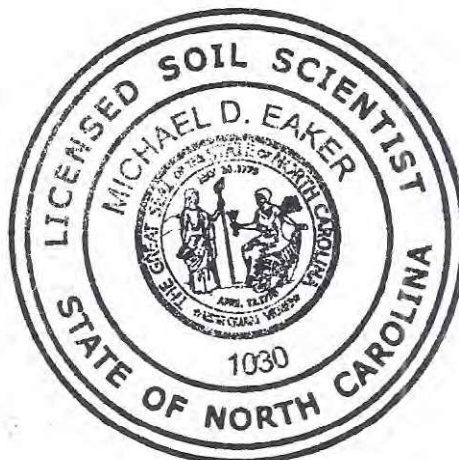
Sincerely,



Mike Eaker

NC Licensed Soil Scientist # 1030

NC Authorized Wastewater Evaluator 10013E



SOUTHEASTERN SOIL & ENVIRONMENTAL ASSOC., INC.

PROPOSED SUBSURFACE WASTE DISPOSAL SYSTEM DETAIL SHEET

SUBDIVISION: Ducks Landing

LOT 79

INITIAL SYSTEM: Accepted 25% Reduction

REPAIR: PPBPS-Horizontal

DISTRIBUTION: Pump to D. Box

DISTRIBUTION Pump to Serial

BENCHMARK: 100.0

LOCATION IRON LOT 78/79 FC

NO. BEDROOMS: 3

LTAR I) 0.5 R) 0.4

SEPTIC TANK SIZE 1000 Gallons

PUMP TANK SIZE 1000 Gallons

	<u>LINE</u>	<u>FLAG COLOR</u>	<u>ELEVATION</u>	<u>LENGTH</u>
Initial	1	B	96.40	65
	2	R	95.90	65
	3	L	95.70	65
				195
Repair	4	P	95.20	70
	5	L	94.40	75
	6	O	93.80	80
				225

BY Cameron Raynor

DATE 03/17/2025

TYPICAL PROFILE

THERE SHALL BE NO GRADING,

Initial 0-26 LS VFR GR

CUTTING, LOGGING OR OTHER SOIL

26-48 SCL FI SBK

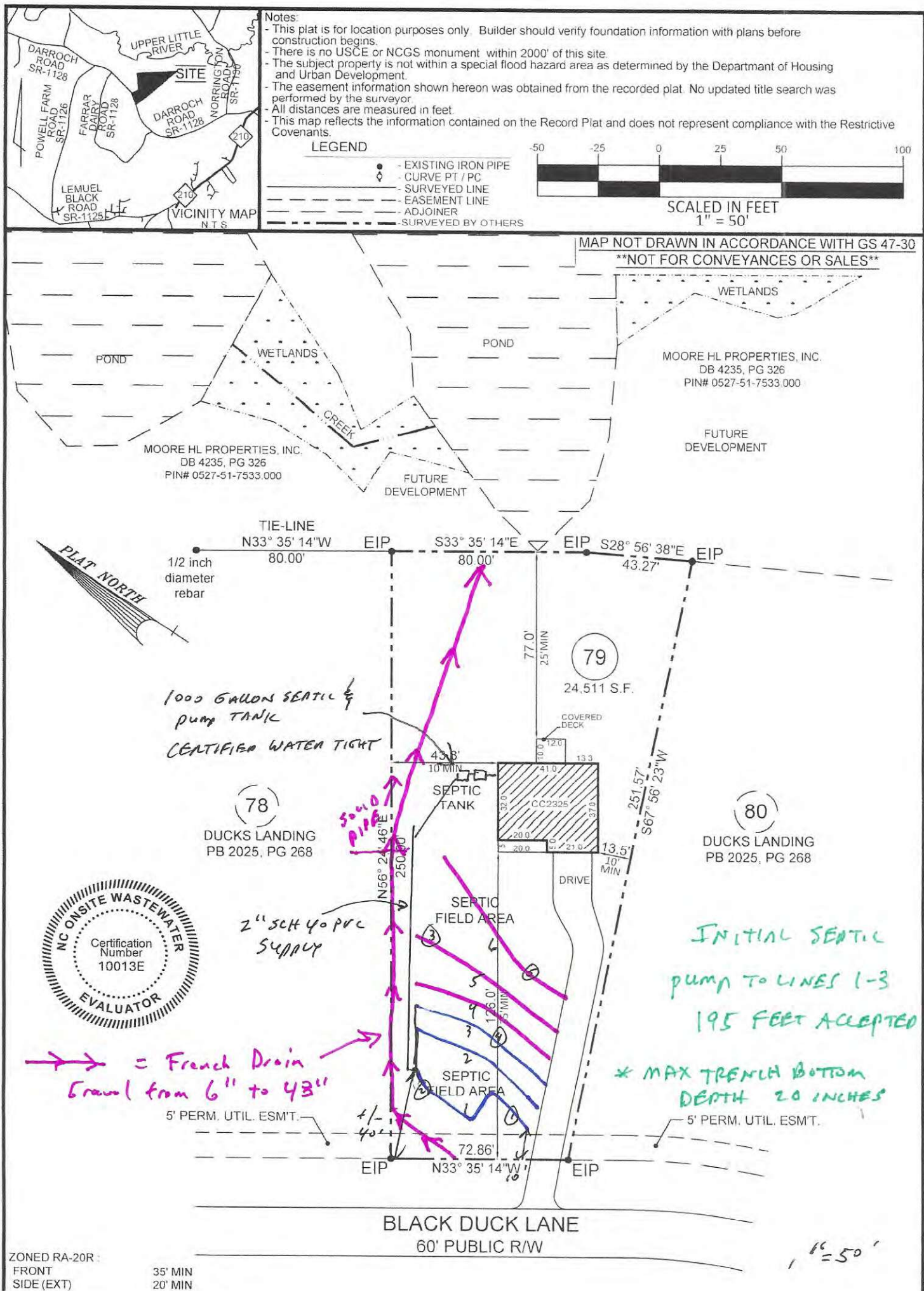
DISTURBANCE IN SEPTIC AREA

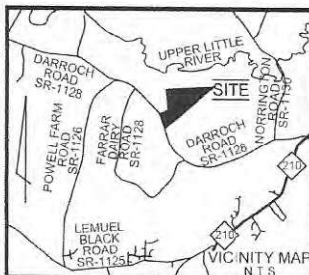
CR2>36"

HEALTH DEPARTMENT USE ONLY.

Repair

DESIGNS DO NOT GURANTEE FUNCTIONALITY





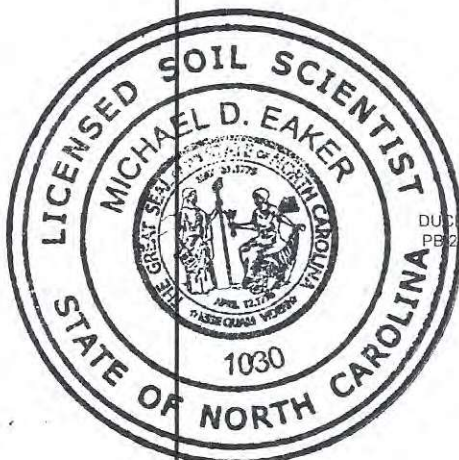
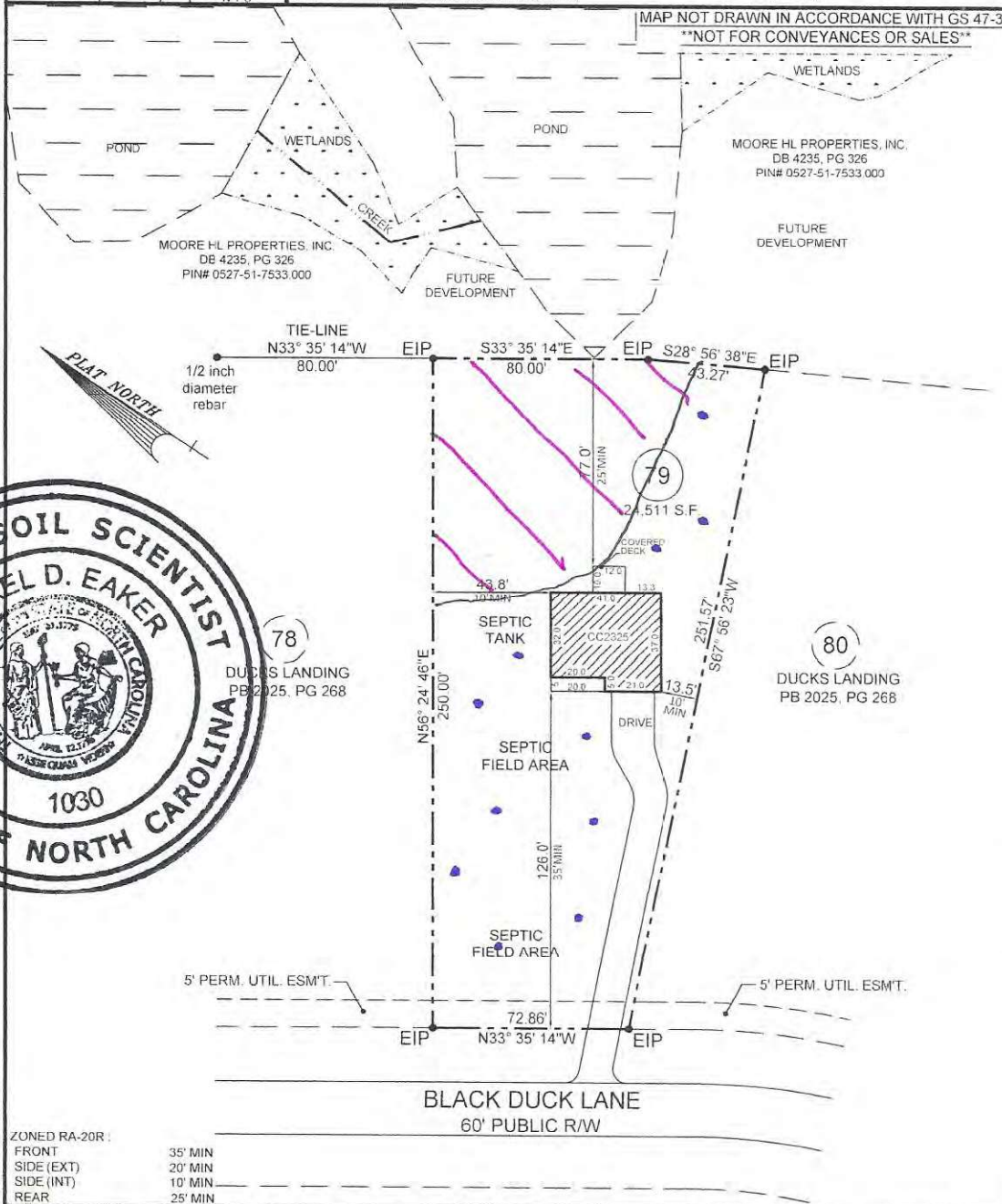
Notes

- This plat is for location purposes only. Builder should verify foundation information with plans before construction begins.
- There is no USCE or NCGS monument within 2000' of this site.
- The subject property is not within a special flood hazard area as determined by the Department of Housing and Urban Development.
- The easement information shown hereon was obtained from the recorded plat. No updated title search was performed by the surveyor.
- All distances are measured in feet.
- This map reflects the information contained on the Record Plat and does not represent compliance with the Restrictive Covenants.

LEGEND

- EXISTING IRON PIPE
- CURVE PT / PC
- SURVEYED LINE
- EASEMENT LINE
- ADJOINER
- SURVEYED BY OTHERS

50 25 0 25 50 100
SCALED IN FEET
1" = 50'



ZONED RA-20R:
FRONT 35' MIN
SIDE (EXT) 20' MIN
SIDE (INT) 10' MIN
REAR 25' MIN

= SUITABLE SOIL
 = UNSUITABLE SOIL

- PLOT PLAN FOR -
CATES BUILDING, INC.
- SUBDIVISION -
DUCKS LANDING

ANDERSON CREEK TOWNSHIP
HARNETT COUNTY
NORTH CAROLINA

MAY 12, 2025
SCALE 1" = 50'
FIELD BOOK:

REFERENCE
PB 2025, PG 268

HARNETT COUNTY NORTH CAROLINA REGISTRY

ENGINEERS
PLANNERS
SURVEYORS
MOORMAN, KIZER & REITZEL, INC.

115 broadfoot ave.
p.o. box 53774
fayetteville, n.c. 28305
phone 910-484-5191
fax 910-484-0398
LICENSE # F-0106

PROF SURVEYOR NO L-3196 REUSED 05-12-25



SOIL/SITE EVALUATION
for ON-SITE WASTEWATER SYSTEM
(Complete all fields in full)

OWNER: Cates Building

ADDRESS: 639 Executive Pl Ste 400 Fayetteville, NC 28305

PROPOSED FACILITY: SFD

PROPOSED DESIGN FLOW (.1949): 360

LOCATION OF SITE: Black Duck Lane (Ducks Landing SD Lot 79)

APPLICATION DATE

DATE EVALUATED:

PROPERTY SIZE: 24,511 S.F.

PROPERTY RECORDED:

WATER SUPPLY: ☐ Private ☒ Public ☐ Well ☐ Spring ☐ Other

EVALUATION METHOD: ☒ Auger Boring ☐ Pit ☐ Cut TYPE OF WASTEWATER: ☒ Sewage ☐ Industrial Process ☐ Mixed

P R O F I L E #	.1940 LANDSCAPE POSITION/ SLOPE %	HORIZON DEPTH (IN.)	SOIL MORPHOLOGY (.1941)		OTHER PROFILE FACTORS				PROFILE CLASS & LTAR
			.1941 STRUCTURE/ TEXTURE	.1941 CONSISTENCE/ MINERALOGY	.1942 SOIL WETNESS/ COLOR	.1943 SOIL DEPTH	.1956 SAPR O CLASS	.1944 RESTR HORIZ	
1	L 5%	0-10	GR/LS	VFR/NEXP	CR2>48"	N/A	N/A	N/A	S 0.5
		10-24	GR/LS	VFR/NEXP	10YR 6/4				
		24-48	SBK/SICL	FI/SEXP	10YR 5/8				
2	L 5%	0-3	GR/LS	VFR/NEXP	CR2>36"	N/A	N/A	N/A	S 0.5
		3-12	GR/SL	FR/NEXP	10YR 6/4				
		12-36	SBK/SCL	FI/SEXP	10YR 5/8				
		36-48	SBK/SCL	FI/SEXP	10YR 5/8 10YR 7/2 10%				
3	L 5%	0-3	GR/LS	FR/NEXP	CR2>48"	N/A	N/A	N/A	S 0.4
		3-15	GR/LS	VFR/NEXP	10YR 6/4				
		15-26	GR/SL	FR/NEXP	10YR 7/3				
		26-48	SBK/SCL	FI/SEXP	10YR 5/8				
4	6%	0-16	GR/LS	FR/NEXP	CR2>48"	N/A	N/A	N/A	S 0.5
		16-23	GR/LS	FR/NEXP	10YR 6/4				
		23-48	SBK/SCL	FI/SEXP	10YR 5/8				

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM	OTHER FACTORS (.1946): N/A SITE CLASSIFICATION (.1948): SUITABLE EVALUATED BY: M. EAKER OTHER(S) PRESENT: B.C. RAYNOR
Available Space (.1945)	YES	YES	
System Type(s)	ACCEPTED	PANEL BLOCK	
Site LTAR	0.5	0.4	

COMMENTS:

(Continuation Sheet-Complete all field in full)

DEPARTMENT OF HEALTH AND HUMAN SERVICES
DIVISION OF PUBLIC HEALTH
ENVIRONMENTAL HEALTH SECTION
ON-SITE WATER PROTECTION BRANCH

PROPERTY ID #: 0527-51-7533 (LOT 79)
DATE OF EVALUATION: 03/13/2025
COUNTY: Harnett

COMMENTS: _____



Travelers 1st Choice+[®]

**DESIGN PROFESSIONALS LIABILITY COVERAGE
DECLARATIONS**

POLICY NO. 108040737

Travelers Casualty and Surety Company of America
Hartford, Connecticut
(A Stock Insurance Company, herein called the Company)

Important note: This is a claims-made policy. To be covered, a claim must be first made against an insured during the policy period or any applicable extended reporting period.

This policy is composed of the Declarations, the Professional Liability Coverage, the Professional Liability Terms and Conditions, and any endorsements attached thereto.

ITEM 1	NAMED INSURED: SOUTHEASTERN SOIL AND ENVIRONMENTAL ASSOCIATES DBA: Principal Address: PO BOX 9321 FAYETTEVILLE, NC 28311-9084
ITEM 2	POLICY PERIOD: Inception Date: May 1, 2025 Expiration Date: May 1, 2026 12:01 A.M. standard time both dates at the Principal Address stated in ITEM 1.
ITEM 3	ALL NOTICES PURSUANT TO THE POLICY MUST BE SENT TO THE COMPANY BY EMAIL, FACSIMILE, OR MAIL AS SET FORTH BELOW: Email: BSIclaims@travelers.com Fax: 1-888-460-6622 Mail: Travelers Bond & Specialty Insurance Claim P.O. Box 2989 Hartford, CT 06104-2989 Overnight Mail: Travelers Bond & Specialty Insurance Claim One Tower Square, MN06 Hartford, CT 06183 For questions related to claim reporting or handling, please call 1-800-842-8496.

