



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: James Rumley

Name: Caruso Homes

Mailing address: 110 Horizon Drive - Suite 320 City: Raleigh State: NC Zip: 27615

Phone: 240-886-3229

Email: jrumley@carusohomes.com

Authorized Onsite Wastewater Evaluator Information:

Name: Alex Adams

Certification #: AOWE# 10021E

Mailing address: 1676 Mitchell Road City: Angier State: NC Zip: 27501

Phone: 919-414-6761

Email: alexadams@bcsoil.com

Site Location Information:

Site address: Lot #19 (Magnolia Acres) 11 Little Gem Ln - Fuquay-Varina NC 27501

Tax parcel identification number or subdivision lot, block number of property: PIN# 0623-92-7758

County: Harnett

System Information: Accepted Status

Wastewater System Type: Type III (b)

Daily Design Flow: 360 gallons/day

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 Siteplan

☒ Evaluation of Soil and Site Features by Licensed Soil Scientist

Attest: On this the 10th day of April 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 10 day of April 2030.

Signature of Authorized Onsite Wastewater Evaluator: Alex Adams

Signature of Owner or Legal Representative: James Rumley

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: \_\_\_\_\_

**Adams Soil Consulting, PLLC**  
**1676 Mitchell Road**  
**Angier, NC 27501**  
**919-414-6761**  
**alexadams@bcsoil.com**

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April 10, 2025  
Project #2110

*"This AOWE/PE submittal is pursuant to and meets the requirements of G.S. 130A-336.2*

RE: Magnolia Acres -Lot #19 – 11 Little Gem Ln. – Fuquay-Varina, NC - 3-bedroom  
Single Family Residence (PIN# 0623-92-7758)

To whom it may concern:

Adams Soil Consulting (ASC) conducted a preliminary soil evaluation on the above referenced parcel to determine the areas of soils which are suitable for subsurface wastewater disposal systems (conventional & LPP). The soil/site evaluation was performed using hand auger borings during moist soil conditions based on the criteria found in the State Subsurface Rules 15ANCAC 18E. From this evaluation, ASC is providing the attached septic system design for a new single-family home sized for a 360 gallon/day septic system.

The suitable soils found on the subject property were somewhat variable in the initial and repair areas. The area designated for the initial/primary septic system (see attached septic plan) was found to contain soils with greater than 24 inches in depth before a restrictive horizon was encountered.

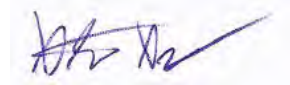
The initial and primary septic fields for the new home were sized based on a flow rate of 360 gallons/day and utilizing Accepted Status system for the initial and a PPBPS repair system. Any unauthorized site disturbance, filling, soil removal, or layout changes may result in the permit being revoked.

The septic installer contractor shall install the repair (if needed) system on contour, see attached site plan for the primary system and repair. No underground utilities, water lines, or sprinkler systems shall be placed into the initial or repair septic areas. Installation must meet all state and local county regulations for septic system installation. The trenches must be installed in the same location as the site plan. If flags trench flags are missing at the time of installation, they must be remarked by Adams Soil Consulting staff. Contact Alex Adams at 919-414-6761. A preconstruction conference is required with the septic installer prior to construction activities at least 14 days in advance of construction activities.

This report does not guarantee the future function of any waste water disposal system installed.

If you have any questions regarding the findings on the attached site plan or in this report, please feel free to contact me anytime.

Sincerely,



Alex Adams  
NC Licensed Soil Scientist #1247  
AOWE Certification: 10021E



# Magnolia Acres

## Lot 19

### 3 BR

### Harnett County

\*House footprint to be field staked by surveyor and system verified prior to any construction

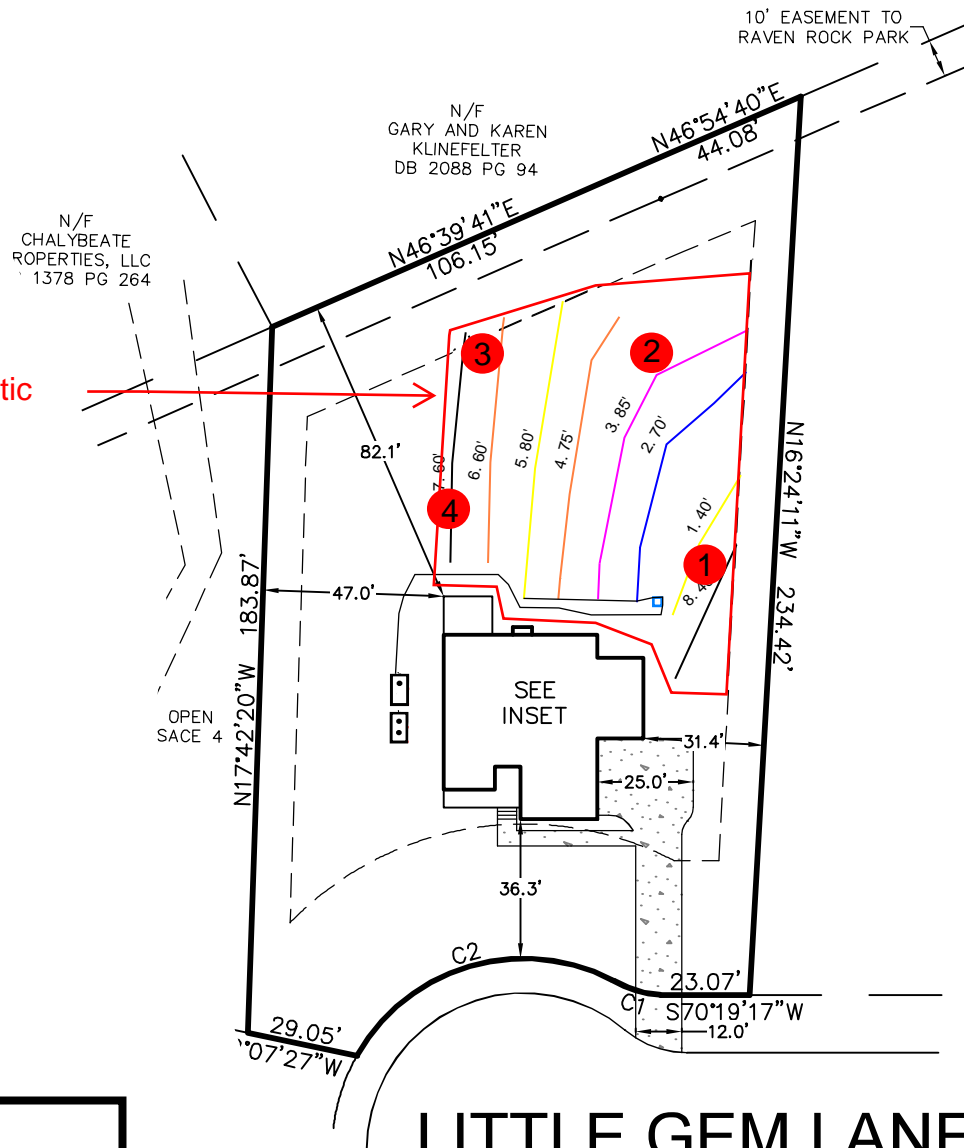
\*\*Septic area must not be altered by construction activities.

\*\*\*No cuts of 2' or greater within 15' of septic area

\*\*\*\* Recommend protective barrier around septic field during construction.

\*If plumbing is not sufficient a pump tank will be required to septic field

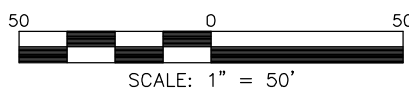
Area only to be disturbed for septic purposes.



## LITTLE GEM LANE

50' PUBLIC R/W

INITIAL:  
Lines 2-5 (310')  
Accepted Status  
Pressure Manifold  
REPAIR:  
Lines 1, 6-8 (200')  
PPBPS  
Pressure Manifold



Adams  
Soil Consulting  
919-414-6761

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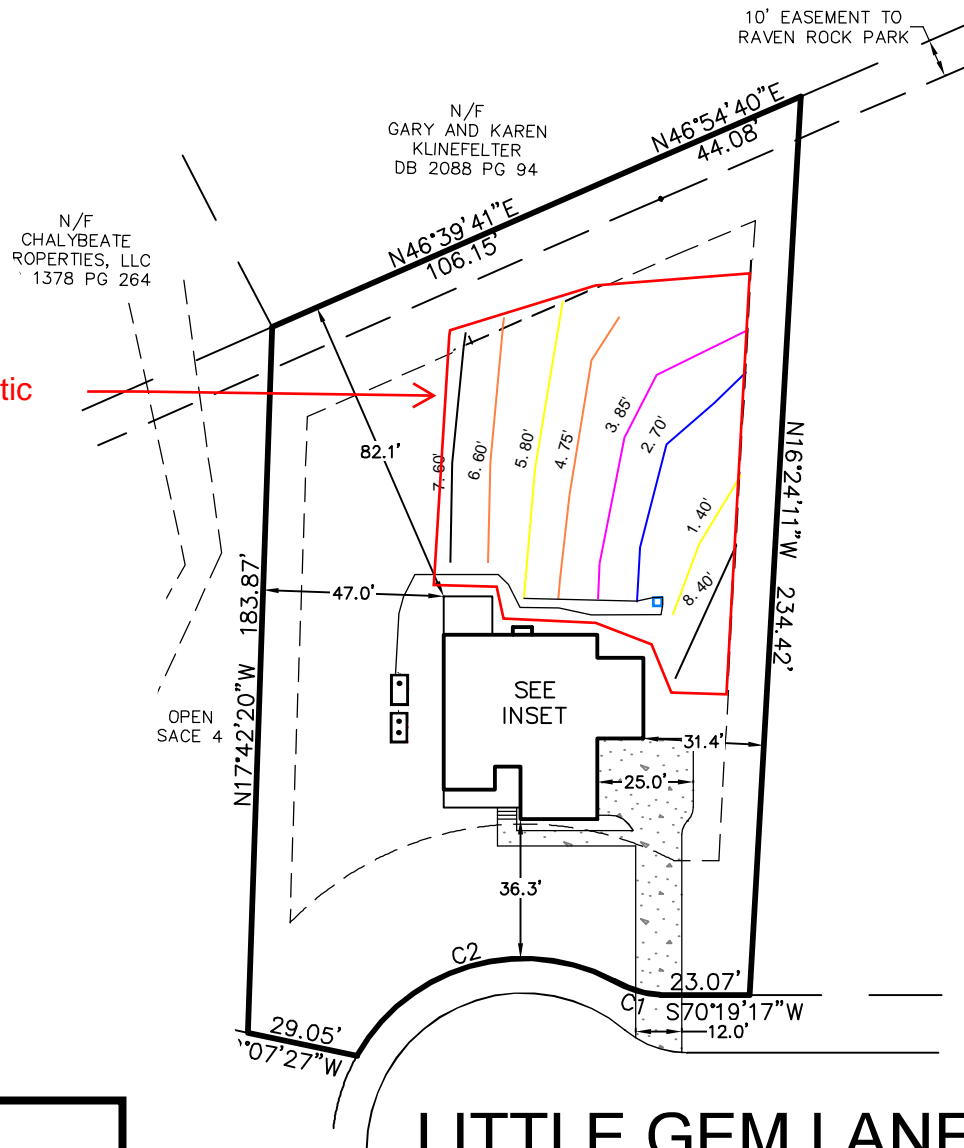
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## LITTLE GEM LANE

50' PUBLIC R/W

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**Lot 19 Magnolia Acres  
PRESSURE MANIFOLD DESIGN -Initial**

Caruso Homes

# of BDR: 3 Daily Flow: 360 gal/day L.T.A.R.: 0.3000 gal/day/sq.ft

Septic Tank: 1000 gals Pump Tank: 1000 gals Sq. Foot: 930 System Type: Accepted

Number of Taps: 4 Length of Trenches: 310 ft(See Tap Chart for Details)

Depth of Trenches: 12 in Manifold Length: 42 in

Manifold Diameter: 4in sch 80pvc Tap Configuration: 6 in spacing 1 side(s) of manifold

Supply Line: length: 120 ft Diameter: 2 in sch 40pvc

Friction Loss + Fitting Loss: 3.59 ft(supply line length + 70' for fittings in pump tank)

Design Head: 2 ft Elevation Head: 6 ft

Total Head: 11.59 ft Pump to Deliver: 28.44 gals/min at 11.59 ft head

Dosing Volume: 141 gals,

Drawdown: 141 gals divided by 21.4 gals/in = 6.6 inches

Simplex Control Panel required; elapsed time meter and cycle counter required; Floats to be determined by type of pump tank used. A septic tank filter is required.

**TAP CHART**

Benchmark	Q	is = 100.00	set at	Pump elev.	90.00	Design Head:	2				
Pump tank elev.	18	95.00		Manifold elev.	1.00						
line	color	rod read	Elevation	length	hole size	flow/tap	gal/day	trench area	LINE LTAR	# of Panels (PPBPS)	Change in Spacing of Panels (in)
2	Blue			70	1/2in SCH 40	7.11	90.00	210	0.4286		
3	Purple			85	1/2in SCH 40	7.11	90.00	255	0.3529		
4	Orange			75	1/2in SCH 40	7.11	90.00	225	0.4000		
5	Yellow			80	1/2in SCH 40	7.11	90.00	240	0.3750		

Total Feet = 310 gal/min = 28.44  
Feet Required = 300 Velocity = 2.72

Total # of Panels (PPBPS)

% of Dose Vol. 70

Dose Volume 141

Dose Pump Time 4.96

Drawdown in Inches 6.6

Comments:

Des. Flow

Pump Run= 12.66

Tank Gal/IN 21.4

Elev. Head 6

LTAR = 0.3000  
(ltar + 5%) 0.3150  
(ltar w/25% red) 0.4000  
(ltar + 5%) 0.4200

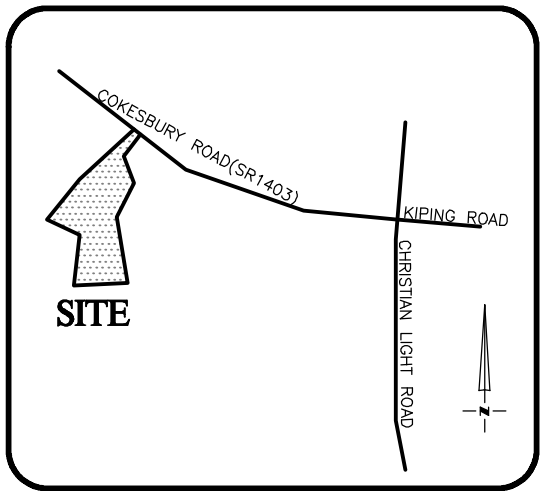
SOIL/SITE EVALUATION for ON-SITE WASTEWATER SYSTEM  
(Complete all fields in full)

OWNER: Caruso Homes DATE EVALUATED: 4/10/2025  
ADDRESS: \_\_\_\_\_  
PROPOSED FACILITY: Single Family 3 BR PROPOSED DESIGN FLOW (.0400): 360 gpd PROPERTY SIZE: .62 Acres  
LOCATION OF SITE: 11 Little Gem Way, Fuquay Varina NC 27526 PROPERTY RECORDED: Y  
WATER SUPPLY: ☒ Public ☐ Single Family Well ☐ Shared Well ☐ Spring ☐ Other \_\_\_\_\_ WATER SUPPLY SETBACK: \_\_\_\_\_  
EVALUATION METHOD: ☒ Auger Boring ☐ Pit ☐ Cut TYPE OF WASTEWATER: ☒ Domestic ☐ High Strength ☐ IPWW

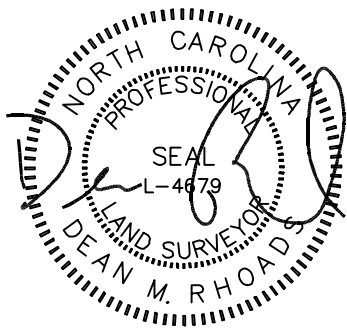
P R O F I L E  #	.0502 LANDSCAPE POSITION/ SLOPE %	HORIZON DEPTH (IN.)	SOIL MORPHOLOGY		OTHER PROFILE FACTORS				.0509 PROFILE CLASS & LTAR*	.0502(d) SLOPE CORRE CTION
			.0503 STRUCTURE/ TEXTURE	.0503 CONSISTENCE/ MINERALOGY	.0504 SOIL WETNESS/ COLOR	.0505 SOIL DEPTH	.0506 SAPRO CLASS	.0507 RESTR HORIZ		
1	Shoulder 8%	0-35	GR/LS	VFR,SEXP,NS	N.O	35"	SL Sap 35-48	N.O	U/P.S .3	3"
		35-48	M Sap	Fr,SEXP,NS						
2	Shoulder 8%	0-14	GR/LS	VFR,SEXP,NS	N.O	14"	SL Sap 14-39	N.O	U/P.S .3	3"
		14-39	M Sap	Fr,SEXP,NS						
3	Linear 19%	0-8	GR/SL	VFR,SEXP,NS	N.O	34"	N.O	N.O	U/P.S .3	7"
		8-34	Wk C	FI, S, Sexp						
4	Linear 19%	0-8	GR/SL	VFR,SEXP,NS	N.O	36"	N.O	N.O	P.S .3	7"
		8-36	Wk C	FI, S, Sexp						

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM	SITE CLASSIFICATION (.0509): U/P.S EVALUATED BY: Bobby Weaver/Alex Adams OTHER(S) PRESENT: _____
Available Space (.0508)	S	S	
System Type(s)	III B	III B	
Site LTAR	.3	.3	
Maximum Trench Depth	12"	12"	

Comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

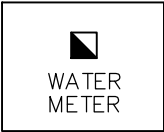


VICINITY MAP  
Not To Scale



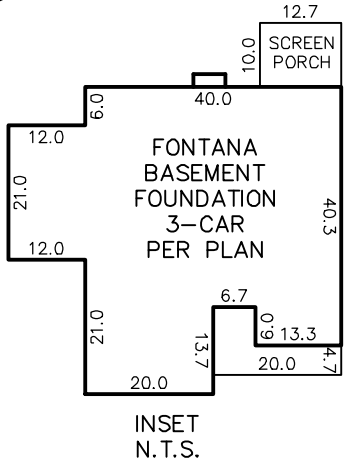
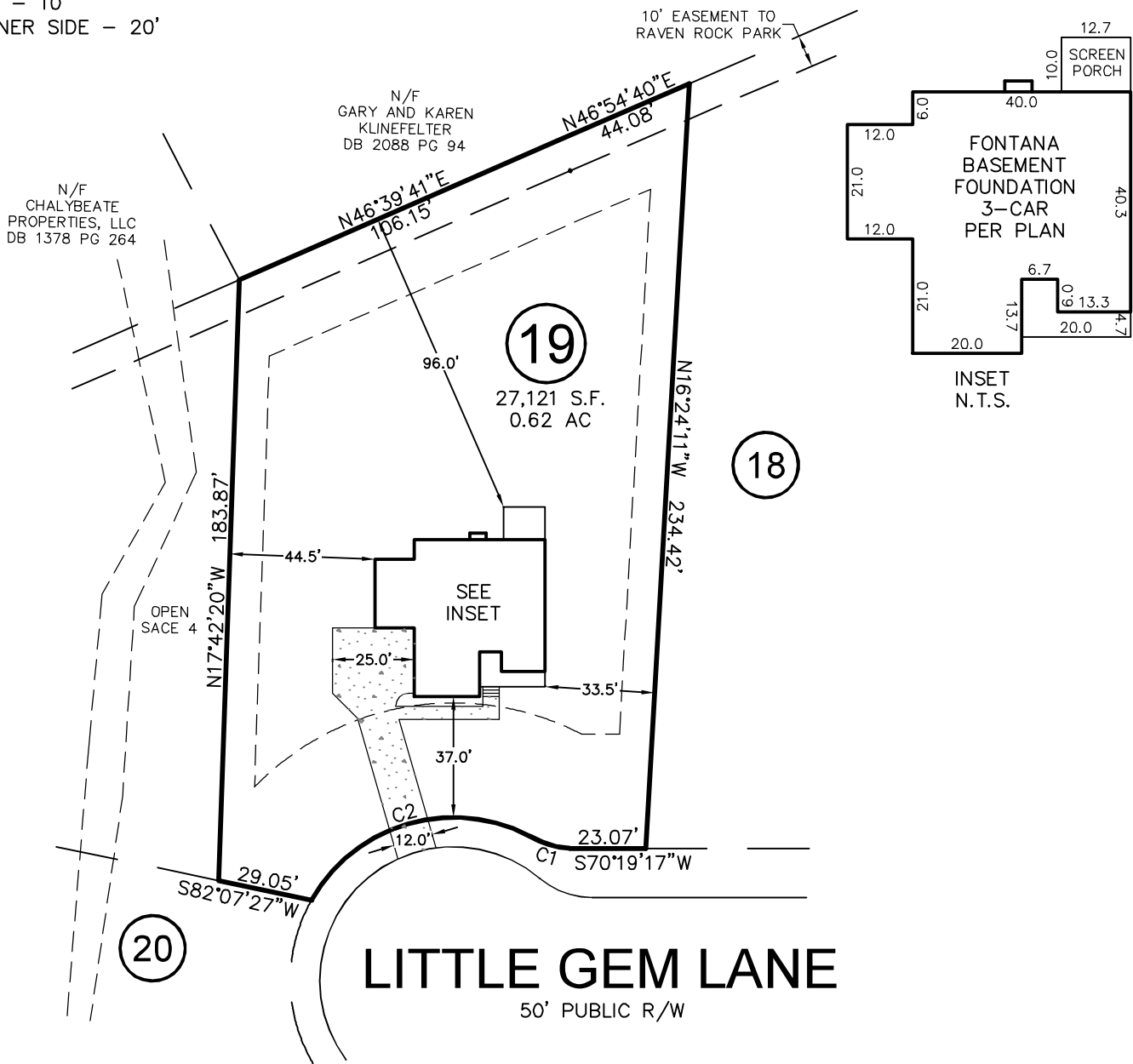
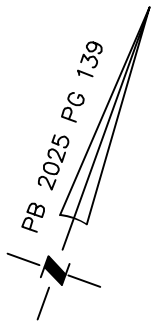
IMPERVIOUS SURFACE AREA	
DESCRIPTION	AREA
HOUSE w/PORCH	2,112 S.F.
SC PORCH/MISC	136 S.F.
DRIVEWAY & WALKS	1,183 S.F.
TOTAL (PROPOSED)=	3,431 S.F.
*TOTAL (ALLOWED)=	3,850 S.F.

\*PB 2025 PG 139



SETBACKS: (ZONE RA-30)

FRONT - 35'  
REAR - 25'  
SIDE - 10'  
CORNER SIDE - 20'

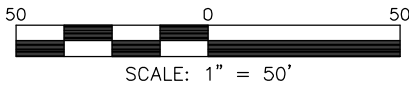


CURVE	RADIUS	ARC LENGTH	CH LENGTH	CH BEARING
C1	28.71'	13.15'	13.03'	N87°19'44"E
C2	49.91'	76.83'	69.46'	S53°56'19"W

THIS PROPERTY MAY BE SUBJECT TO ANY AND ALL APPLICABLE DEED RESTRICTIONS, EASEMENTS, RIGHT-OF-WAY, UTILITIES AND RESTRICTIVE COVENANTS WHICH MAY BE OF RECORD OR IMPLIED

THIS DRAWING DOES NOT REFLECT AS-BUILT INFORMATION

**PRELIMINARY PLAT**  
NOT FOR RECORDATION, CONVEYANCES, OR SALES.



SCALE: 1" = 50'

**RESIDENTIAL  
LAND SERVICES, PLLC.**

1917 Evans Road  
Cary, North Carolina 27513  
Phone (919) 378-9316  
Firm License # P-0873

**HOUSE LOCATION PLOT PLAN**

FOR  
#11 LITTLE GEM LANE  
LOT 19, MAGNOLIA ACRES SUBDIVISION  
Hector's Creek Township, Harnett County, North Carolina  
PROPERTY OF: CARUSO HOMES  
MAP BOOK 2025 PAGE 139 DEED REFERENCE

DRAWN: JWW

SURVEYED: N/A

CHECKED: DMR

DATE: MARCH 28, 2025





# CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

1/22/2025

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.

**IMPORTANT:** If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Wade Associates, LLC 250 Pollock St.  New Bern NC 28560	CONTACT NAME: Angela Sensenig PHONE (A/C, No, Ext): (252) 631-5269 E-MAIL ADDRESS: asensenig@wadeict.com INSURER(S) AFFORDING COVERAGE INSURER A: Lloyd's of London INSURER B: INSURER C: INSURER D: INSURER E: INSURER F:	FAX (A/C, No): (252) 649-2443 NAIC # A1122J
INSURED Alex Adams, DBA: Adams Soil Consulting 1676 Mitchell Rd.  Angier NC 27501		

## COVERAGES

CERTIFICATE NUMBER: 25-26

REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES SO INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURER NA ABOVE OR THE POLICY PRODUCER IN CONNECTION WITH THE INSURANCE CONTRACT OR OTHER CONTRACT OR OTHER SERVICE PROVIDED TO THE POLICY PRODUCER OR THE POLICY PRODUCER BY THE POLICY PRODUCER OR THE POLICY PRODUCER BY THE POLICY PRODUCER.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
	COMMERCIAL GENERAL LIABILITY CLAI S- A <input type="checkbox"/> OCC R <input type="checkbox"/> N/LA R AT LI IT APPLI S P R: <input type="checkbox"/> POLICY <input type="checkbox"/> PRO-CT <input type="checkbox"/> LOC OTH R:						ACH OCC RR NC A A TOR NT PR IS S ( a occurrence) P (Any one person) P RSONAL A IN RY N RALA R AT PRO CTS - CO P/O PA
	AUTOMOBILE LIABILITY ANY A TO ALL O N A TOS HIR A TOS SCH L A TOS NON-O N A TOS						CO BIN SIN L LI IT ( a accident) BO ILY IN RY (Per person) BO ILY IN RY (Per accident) PROP RTY A A (Per accident)
	UMBRELLA LIAB EXCESS LIAB OCC R CLAI S- A R T NTION						ACH OCC RR NC A R AT
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRI TOR/PARTN R/ C TI O IC R/ B R CL (Mandatory in NH) If yes describe under SCRIPTION O OP RATIONS below	Y/N <input type="checkbox"/>	N/A				P R STAT T OTH- R .L. ACH ACCI NT .L. IS AS - A PLOY .L. IS AS - POLICY LI IT
A	Errors & Omissions			PSN0040221161	1/31/2025	1/31/2026	ach Occurrence eneral Aggregate \$1,000,000 \$1,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

## CERTIFICATE HOLDER

## CANCELLATION

\*FOR INFORMATIONAL PURPOSES ONLY\*

XXXXXXXXXXXXXXXXXXXXXXXXXXXX  
XXXXXXXXXXXXXXXXXXXXXXXXXXXX  
XXXXXXXXXXXXXXXXXXXXXXXXXXXX  
XXXXXXXXXXXXXXXXXXXXXXXXXXXX

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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ACORD 25 (2014/01)

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INS025 (201401)