		Р	ermit #:		
NC DEPARTMENT OF HEALTH AND HUMAN SERVICES	ROY COOPER • Go KODY H. KINSLEY MARK BENTON • I SUSAN KANSAGR Division of Public H	Y • Secretary Deputy Secretar RA • Assistant Se ealth	•		
	(a2) Construction Authoriz		e \$		
IMPROVEMENT	PERMIT FOR G.S. 130	0A-335(a2)			
County:					
PIN/Lot Identifier:					
Issued To:					
Property Location:					
Subdivision (if applicable)	Lot #:	Block	k: Section:		
LSS Report Provided: Yes No					
If yes, name and license number of LSS:					
New Expansion		-	Change of Use		
Proposed Structure:					
Number of bedrooms:        Design Wastewater Strength:	high strength				
Proposed Design Daily Flow: GPD Prop Proposed Wastewater System Type*:					
Proposed Wastewater System Type*:					
*Please include system classification for proposed wastewater s					
Saprolite System (initial): Yes No Saprolite System		<i>intil 15/11/0/10</i>			
Fill System (Initial): Yes No If yes, specify: New		re than 6 inches o	of fill to system area provide a fill plan)		
Fill System (repair):   Yes   No   If yes, specify:   New					
Usable Soil Depth (Initial): Usable Soil Depth (Initial):					
Max. Trench Depth (Initial) <sup>‡</sup> : Max. Trench I			ed on the downhill side of the trench		
Artificial Drainage Required: Yes No If yes, please spe					
Type of Water Supply: Private well Public well S					
Drainfield location meets requirements of Rule .1945: Yes					
Permit valid for: Five years [site plan submitted pursuant to					
Permit conditions:					
Licensed Soil Scientist Print Name:					
Licensed Soil Scientist Signature:			Date:		
The LSS evaluation is being submitted p		quirements of G.			
NC DEPARTMENT OF HEALTH AN			IC HEALTH		
MAILING ADDRESS: 1632	Forks Road, Building 3, Raleig Mail Service Center, Raleigh, TEL: 919-707-5854 • FAX: 91	NC 27699-1632			

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AN EQUAL OPPORTUNITY / AFFIRMATIVE ACTION EMPLOYER



# 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 department an Improvement Permit application, the permit fee charged by the local health department, the common form developed by the Department, and a soil evaluation pursuant to subsection (a2) of this section, the local health department shall, within five business days of receiving the application, conduct a completeness review of the submittal. A determination of completeness means that the Improvement Permit includes all of the required components. If the local health department determines that the Improvement Permit is incomplete, the local health department shall notify the applicant of the components needed to complete the Improvement Permit. The applicant may submit additional information to the local health department to cure the deficiencies in the Improvement Permit. The local health department shall make a final determination as to whether the Improvement Permit is complete within five business days after the local health department receives the additional information from the applicant. If the local health department fails to act within any period set out in this subsection, the applicant may treat the failure to act as a determination of completeness. The Department shall develop a common form for use as the Improvement Permit.

The review for completeness of this Improvement Permit was conducted in accordance with G.S. 130A-335(a3). This Improvement Permit is determined to be:

Incomplete (If box is checked, information in this section is required.)

The following items are missing:

pl m h			
Copies of this were sent to the LSS and the Appli	cant on		
85-0	Date		
State Authorized Agent:		Date:	
Complete			
State Authorized Agent:		Date:	

This Improvement Permit is issued pursuant to G.S. 130A-335 (a2) and (a3) using the signed and sealed LSS/LG evaluation(s) attached here. The issuance of this permit by the Health Department in no way guarantees the issuance of other permits. The permit holder is responsible for checking with appropriate governing bodies in meeting their requirements. This permit is subject to revocation if the site plan, plat, or the intended use changes. The Improvement Permit shall not be affected by a change in ownership of the site. This permit is subject to compliance with the provisions of the Laws and Rules for Sewage Treatment and Disposal and to the conditions of this permit.

The Department, the Department's authorized agents, and the local health departments shall be discharged and released from any liabilities, duties, and responsibilities imposed by statute or in common law from any claim arising out of or attributed to evaluations, submittals, or actions from a licensed soil scientist or licensed geologist pursuant to GS 130A-335(a2).

Improvement Permit Expiration Date: \_\_\_\_\_

\*See attached site sketch\*



Permit #: \_\_\_\_\_

	Re-submittal of Imp	rovement Per	mit	-
	LHD USE ONLY: This IP resubmittal received:	Date	by	
The following	items are being resubmitted pursuant to G.S. 130A-335	(a3) for issuance of	the Improvement Permit:	
		and the second		
is accurate and	hereby attest that Scientist (Print Name) complete to the best of my knowledge and that the p l laws, regulations, rules, and ordinances.		quired to be included with th ent Permit meets all applical	
Signatu	ire of Licensed Soil Scientist		Date	
	The section below is for Local Health Department use	after submittal of ite	ms noted as missing above.	

#### LHD Follow-up Completeness Review of Improvement Permit

The review for completeness of this Improvement Permit re-submittal was conducted in accordance with G.S. 130A-335(a3). This Improvement Permit is determined to be:

Date

Incomplete (If box is checked, information in this section is required.)

The following items are missing:

Copies of this were sent to the LSS and the Applicant on \_\_\_\_\_

State Authorized Agent: \_\_\_\_\_

Complete

State Authorized Agent: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_



Permit #: \_\_\_\_\_

### CONSTRUCTION AUTHORIZATION FOR G.S. 130A-335(a2)

County:
PIN/Lot Identifier:
Issued To:
Property Location:
AOWE/PE Plans/Evaluations Provided: Yes 🗌 No 🗌 If yes, name and license number of AOWE/PE:
Facility Type:
New       Expansion       Repair       System Relocation       Change of Use
Basement? Yes No Basement Fixtures? Yes No
Type of Wastewater System*(Initial)(Repair)
*Please include system classification for proposed wastewater system types in accordance with 15A NCAC 18A .1961 Table V(a)
Design Daily Flow: GPD Wastewater Strength: domestic high strength industrial process
Session Law 2014-120 Section 53, Engineering Design Utilizing Low-flow Fixtures and Low-flow Technologies? 🗌 Yes 🗌 No (if yes, please provide engineering documentation)
Installation Requirements/Conditions
Septic Tank Size: gallons Total Trench/Bed Length: feet Trench/Bed Spacing: feet on center
Trench/Bed Width: inches LTAR: gpd/ft <sup>2</sup>
Soil Cover: inches Slope Corrected Maximum Trench/Bed Depth <sup>‡</sup> : inches * <i>Measured on the downhill side of the trench</i>
Aggregate Depth:inches above pipeinches below pipeinches total
Pump Tank Size (if applicable): gallons Requires more than 1 pump? 🗌 Yes 🗌 No
Pump Requirements:ft. TDH vs GPM Grease Trap Size (if applicable): gallons
Distribution Method: Serial D-Box or Parallel Pressure Manifold(s) LPP Other:
Artificial Drainage Required: Yes 🗌 No 🗌 If yes, please specify details:
Legal Agreements (If the answer is "Yes" to any type of legal agreements, please attach a copy of the agreement.)
Multi-party Agreement Required [.1937(h)]: Yes No
Easement, Right-of-Way, or Encroachment Agreement Required [.1938(j)]: 🗌 Yes 🗌 No
Declaration of Restrictive Covenants: 🗌 Yes 🗌 No
Pre-Construction Conference Required: Yes 🗌 No 🗌
Conditions:
Coron - B
The construction and installation requirements of Rules .1950, .1952, .1954, .1955, .1956, .1957, .1958, and .1959 are incorporated by reference
into this permit and shall be met. Systems shall be installed in accordance with the attached system layout.
AOWE/PE Print Name: Expiration Date:
AOWE/PE Signature: Date: Date:
This AOWE/PE submittal is pursuant to and meets the requirements of G.S. 130A-335(a2) and (a5).

\*See attached site sketch\*



Permit #:

## 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 and Construction Authorization together, submits a Construction Authorization, or an Improvement Permit and Construction Authorization application together, the permit fee charged by the local health department, the common form developed by the Department, and any necessary signed and sealed plans or evaluations conducted by a person licensed pursuant to Chapter 89C of the General Statutes as a licensed engineer or a person certified pursuant to Article 5 of Chapter 90A of the General Statutes as an Authorized On-Site Wastewater Evaluator, the local health department shall, within five business days of receiving the application, conduct a completeness review of the submittal. A determination of completeness means that the Construction Authorization or Improvement Permit and Construction Authorization includes all of the required components. If the local health department determines that the Construction Authorization or Improvement Permit and Construction Authorization is incomplete, the local health department shall notify the applicant of the components needed to complete the Construction Authorization or Improvement Permit and Construction Authorization. The applicant may submit additional information to the local health department to cure the deficiencies in the Construction Authorization or Improvement Permit and Construction Authorization. The local health department shall make a final determination as to whether the Construction Authorization or Improvement Permit and Construction Authorization is complete within five business days after the local health department receives the additional information from the applicant. If the local health department fails to act within any period set out in this subsection, the applicant may treat the failure to act as a determination of completeness. The applicant may apply for the building permit for the project upon the decision of completeness of the Construction Authorization or Improvement Permit and Construction Authorization by the local health department or if the local health department fails to act within five business days. The Authorized On-Site Wastewater Evaluator or licensed engineer submitting the evaluation pursuant to this subsection may request that the local health department revoke or suspend the Construction Authorization or Improvement Permit and Construction Authorization for cause. Upon written request of the Authorized On-Site Wastewater Evaluator or licensed engineer, the local health department shall suspend or revoke the Construction Authorization or Improvement Permit and Construction Authorization pursuant to G.S. 130A-23. The Department shall develop a common form for use as the Construction Authorization.

The review for completeness of this Construction Authorization was conducted in accordance with G.S. 130A-335(a5). This

Construction Authorization is determined to be:

Incomplete (If box is checked, information in this section is real	quired.)		
The following items are missing:			
Copies of this were sent to the AOWE/PE and the Applicant on	Date	A 761	
State Authorized Agent:		Date:	
Complete	1	519	
State Authorized Agent:		Date of Issuance:	

This Construction Authorization is issued pursuant to G.S. 130A-335(a2) and (a5) using the signed and sealed plans or evaluations attached here. 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 the Laws and Rules for Sewage Treatment and Disposal and to the conditions of this permit.

The Department, the Department's authorized agents, and the local health departments shall be discharged and released from any liabilities, duties, and responsibilities imposed by statute or in common law from any claim arising out of or attributed to plans, evaluations, preconstruction conference findings, submittals, or actions from a person licensed pursuant to Chapter 89C of the General Statutes as a licensed engineer or a person certified pursuant to Article 5 of Chapter 90A of the General Statutes as an Authorized On-Site Wastewater Evaluator in GS 130A-335(a2), (a5), and (a7). The Department, the Department's authorized agents, and the local health departments shall be responsible and bear liability for their actions and evaluations and other obligations under State law or rule, including the issuance of the operations permit pursuant to GS 130A-337.

Construction Authorization Expiration Date: \_\_\_\_\_

\*See attached site sketch\*



Permit #: \_\_\_\_\_

# **Re-submittal of Construction Authorization**

	LHD USE ONLY: This CA resubmittal received:	Date	by	Initials	
The following	Litems are being resubmitted pursuant to G.S. 130A-335	5(a5) for issuance	of the Const	ruction Authori	zation:
	TZ -	TT	20-		
١,	hereby attest that	the information	required to b	be included wit	h this re-submittal
	Onsite Wastewater Evaluator (Print Name)				
	I complete to the best of my knowledge and that the p	proposed Constru	iction Author	ization meets a	ll applicable
federal, State, a	and local laws, regulations, rules, and ordinances.				
	<u> </u>	<u> </u>		<u>~ 10</u>	
Signatu	ire of Authorized On-Site Wastewater Evaluator		Date		
	The section below is for Local Health Department use	after submittal of	items noted a	s missing above.	
LHD Follow-	up Completeness Review of Construction Au	Ithorization			
	completeness of this Construction Authorization re-su on Authorization is determined to be:	ıbmittal was cono	ducted in acc	ordance with G	.S. 130A-335(a5).
Incomplete	(If box is checked, information in this section is require	ed.)			
The following it	tems are missing:				
	SSE QUAN	1 VIDER	19		
Copies of this v	were sent to the AOWE/PE and the Applicant on	Date	_		
State Authorize	ed Agent:		_ C	Date:	
Complete					
State Authorize	ed Agent:		[	Date:	

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

August 19, 2024 Project #1215

"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 in accordance with G.S. 130A-335 (a2), (a5), and (a6)"

RE: Tobacco Road Subdivision - Lot #31 – 180 Looping Ct., Angier NC (Harnett County) for Davidson Homes (PIN#0693-15-2416)

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 480 gallon/day septic design.

The suitable soils found on the subject property were relatively consistent 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.

Please find the attached wastewater soil/site evaluation forms for specific soil properties found in the initial and repair areas as well as assigned soil long term acceptance rate (LTAR). Numerous soil borings were made throughout the property and representative soil profile descriptions for the primary septic field and repair area are provided. A location sketch for profile descriptions is also attached. The initial and primary septic fields were sized based on a flow rate of 480 gallons/day and utilizing Accepted Status 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 primary and repair (if needed) system on contour, see attached site plan for the primary system and repair

locations. No underground utilities, water lines, or sprinkler systems shall be placed into the initial or repair septic areas. Installation must meet all state and Harnett County regulations for septic system installation. The trenches must be installed in the same location as the site plan. If the installation is in question at the time of installation call me (Alex Adams) at 919-414-6761.

This report discusses the location of provisionally suitable soils identified on the property and does not guarantee the future function of any waste water disposal system installed.

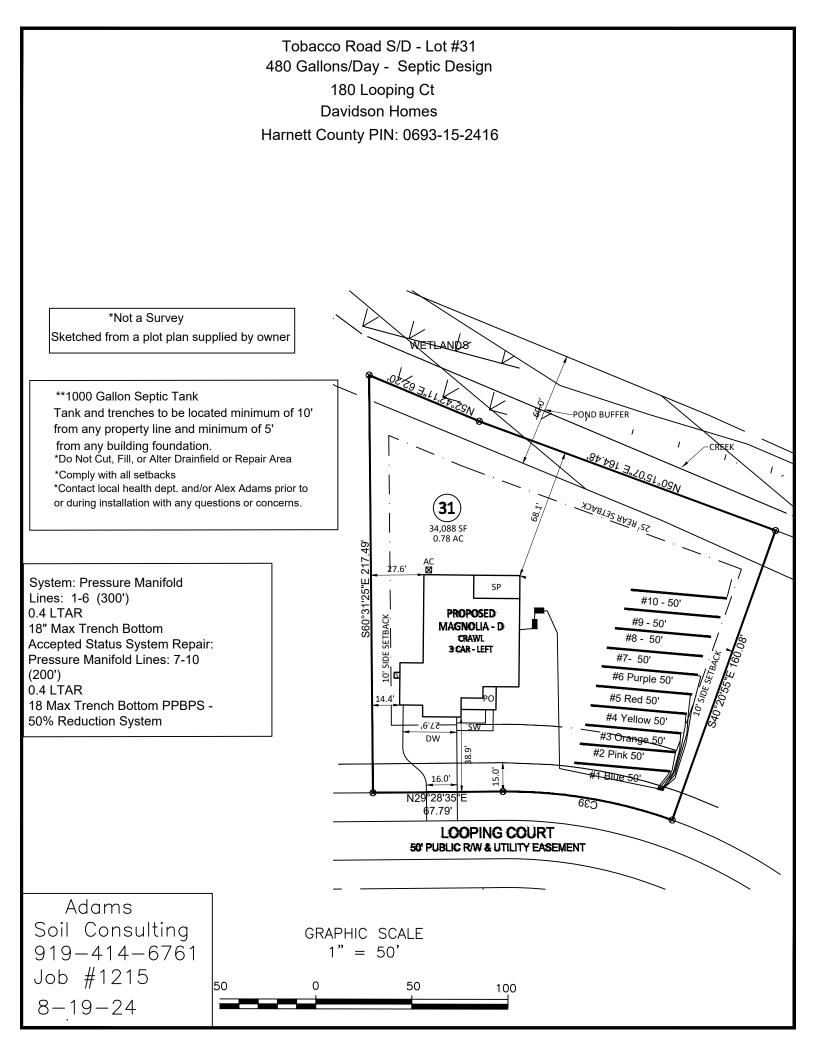
If you have any questions regarding the findings on the attached map or in this report, please feel free to contact me anytime.

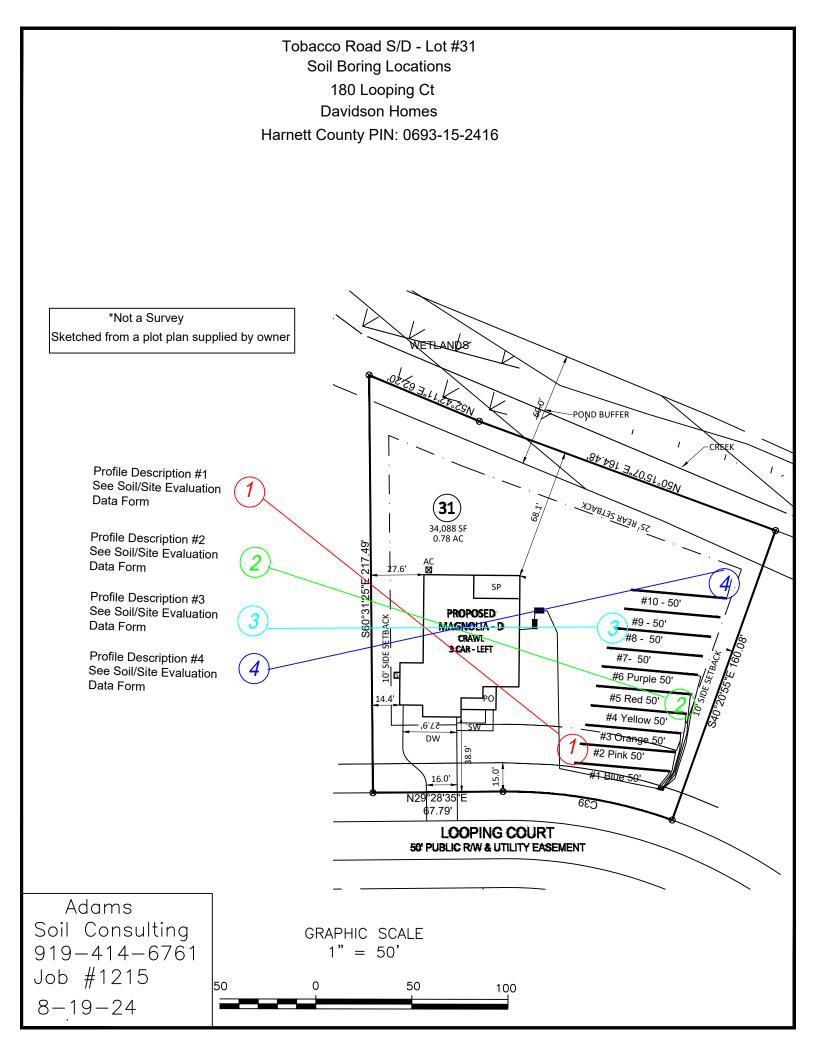
Sincerely,

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









#### Lot 31 - Tobacco Road PRESSURE MANIFOLD DESIGN -Initial SYSTEM

# of BDR: <u>4</u>	Daily Flow:	<u>480</u>	gal/day	L.T.A.R.:	<u>0.4000</u>	gal/day/sq.ft		
Septic Tank: 1000	gals	Pump Tank:	<u>1000</u>	gals	Sq. Foot:	<u>900</u>	System Type:	Accepted
Number of Taps:	<u>6</u>	Length of	Trenches	: <u>300</u> 1	t(See Tap	Chart for Deta	ils)	
Depth of Trenches:	<u>18</u>	in	Man	ifold Length:	<u>54</u>	in		
Manifold Diameter:	4in sch 80pv	<u>/c</u>	Tap Conf	iguration: 6 in	spacing	<u>1</u>	side(s) of manifo	old
Supply Line: length:	<u>75</u>	ft		Diameter:	<u>2</u>	in sch 40pvc		
Friction Loss + Fittin	g Loss:	<u>5.81</u>	ft(supply	line length + 7	'0' for fittin	ngs in pump ta	nk)	
Design Head:	<u>2</u>	ft	Elevation	Head:	<u>6.00</u>	ft		
Total Head: <u>13.81</u>	ft		Pun	np to Deliver:	<u>42.66</u>	gals/min at	<u>13.81</u> ft	head
Dosing Volume:	<u>137</u>	gals,						
Drawdown: 137	_gals divide	d by	<u>21.4</u>	gals/in =	<u>6.4</u>	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.

			т		RT						
Benchmark	<u>0</u>	is = 100.00	set at				Design Head:	2			Change in
Pump tank elev.		2	95.00	Pump elev.	90.00		Manifold elev.	96.00		# of Panels	Spacing of
line	color	rod read	Elevation	length	hole size	flow/tap	gal/day	trench area	LINE LTAR	(PPBPS)	Panels (in)
1		5.00	95.00	50	1/2in SCH 40	7.11	80.00	150	0.5333		
2		5.50	94.50	50	1/2in SCH 40	7.11	80.00	150	0.5333		
3		6.00	94.00	50	1/2in SCH 40	7.11	80.00	150	0.5333		
4		6.50	93.50	50	1/2in SCH 40	7.11	80.00	150	0.5333		
5		7.00	93.00	50	1/2in SCH 40	7.11	80.00	150	0.5333		
6		7.50	92.50	50	1/2in SCH 40	7.11	80.00	150	0.5333		
			Total Feet =	300	gal/min =	42.66		LTAR =	0.4000		
			Feet Required =	300	Velocity =	4.08		(ltar + 5%)	0.4200		
Total # of Panels (	(PPBPS)			Des. Flow	<u>480</u>			(Itar w/25% red)	0.5333		
% of Dose Vol.		70		Pump Run=	11.25			(Itar + 5%)	0.5600		
Dose Volume		137		Tank Gal/IN	<u>21.4</u>						
Dose Pump Time		3.20		Elev. Head	6.00						
Drawdown in Inch	es	6.4									
Comments:											

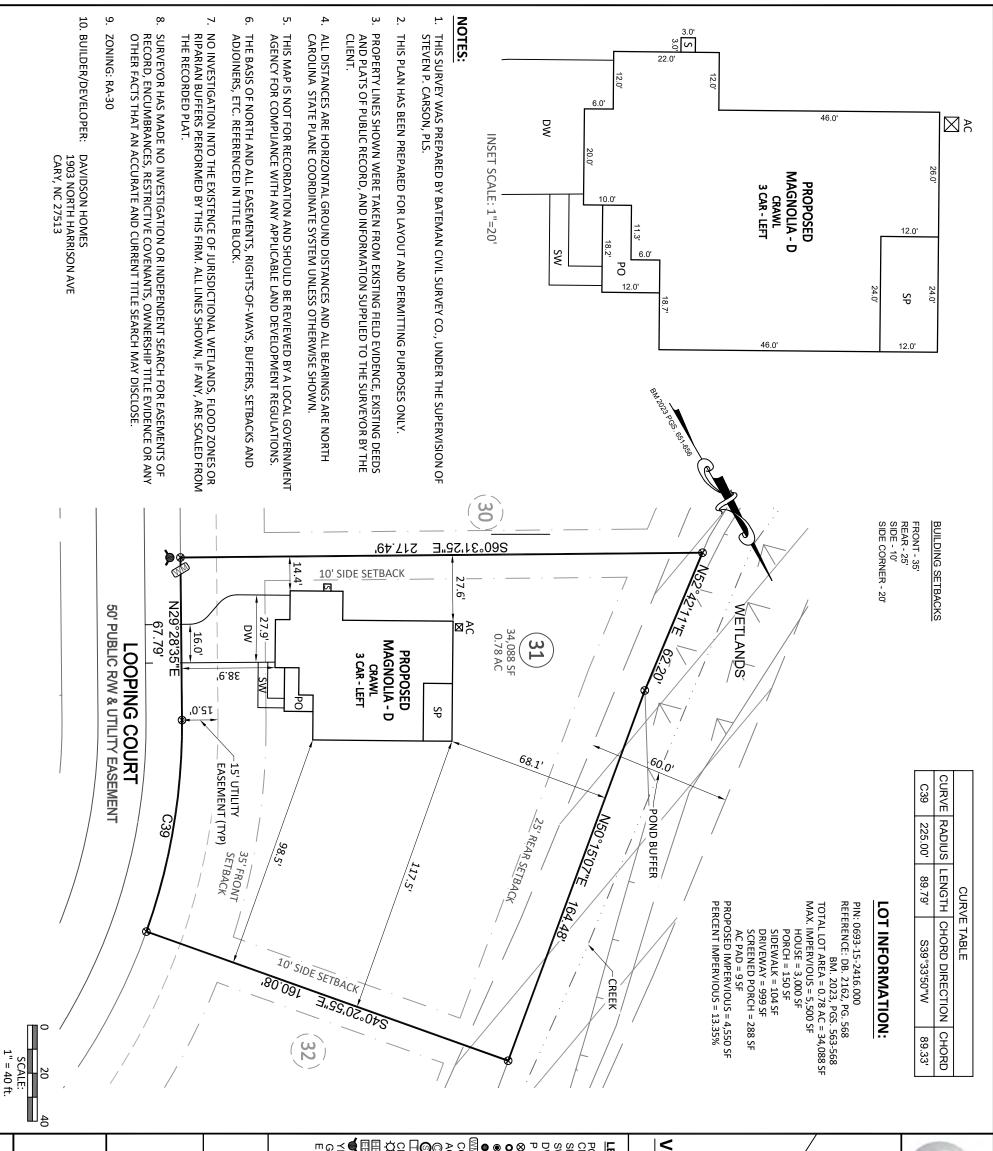
#### SOIL/SITE EVALUATION for ON-SITE WASTEWATER SYSTEM (Complete all fields in full)

OWNER: Davidson Homes LLCAADDRESS:DPROPOSED FACILITY: Single Family, 4-bedroomPROPOSED DESIGN FLOW (.1949): 480 gpdPHLOCATION OF SITE:180 Looping Ct, Angier, NC, 27501PHWATER SUPPLY:Public WaterEVALUATION METHOD:Auger BoringTYPE OF WASTEWATER:Sewage

APPLICATION DATE: DATE EVALUATED: 06/15/2024 PROPERTY SIZE: ~1.01 Acres

P R O F I L	.1940 LANDSCAPE HORIZON		SOIL MORPHOLOGY (.1941)		FA				
E #	POSITION/ SLOPE %	DEPTH (IN.)	.1941 STRUCTURE/ TEXTLSE	.1941 CONSISTENCE/ MINERALOGY	.1942 SOIL WETNESS/ COLOR	.1943 SOIL DEPTH	.1956 SAPRO CLASS	.1944 RESTR HORIZ	PROFILE CLASS & LTAR
	Linear	0-30	GR/LS	VFR,NS,NP,SEXP	N/A	N/A	N/A	N/A	P.S .4
	Slope/5%	30-40	SBK/SCL	FR,SS,SP,SEXP					
1									
	Linear	0-18	GR/LS	VFR,NS,NP,SEXP	N/A	N/A	N/A	N/A	U/P.S .4
	Slope/5%	18-36	SBK/SCL	FR,SS,SP,SEXP					
2									
	Linear	0-18	GR/SL	VFR,NS,NP,SEXP	N/A	N/A	N/A	N/A	P.S .4
	Slope/5%	18-36	SBK/SCL	FR,SS,SP,SEXP					
3									
	Linear	0-26	GR/LS	VFR,NS,NP,SEXP	N/A	N/A	N/A	N/A	U/P.S .4
	Slope/5%	26-32	SBK/SCL	FR,SS,SP,SEXP					

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM	OTHER FACTORS (.1946):
Available Space (.1945)	S	s	SITE CLASSIFICATION (.1948): PS
System Type(s)	Type III G	Type III G	EVALUATED BY:A. Adams OTHER(S) PRESENT:
Site LTAR	0.4	0.4	
COMMENTS:	-	-	



TOBACCO ROAD - PHASE 1 & 3 - LOT 31       180 LOOPING COURT, ANGIER, NC       BLACK RIVER TOWNSHIP, HARNETT COUNTY       DATE: 7/24/24     DRAWN BY: SLA     CHECKED BY: SPC       REFERENCE: BM 2023 PGS. 651-656     BCS# 230746     SCALE: 1" = 40"	PRELIMINARY PLOT PLAN FOR DAVIDSON HOMES	BUILDER TO VERIFY HOUSE LOCATION DIMENSIONS AND REVIEW TOTAL IMPERVIOUS NOTED ON THIS PLOT PLAN	This map is of an existing par and is only intended for the p purposes shown. This map recordation. No title report (	© = CABLE BOX 9 = SEWER MANOLE 9 = SEWER MANOLE 11 = TELEPHONE PEDESTAL 12 = CATCH BASIN 12 = LIGHT POLE 14 = HAND HOLE 14 = HAND HOLE 15 = ELECTRIC BOX 15 = ELECTRIC BOX	Ó L	BOUNDER NDICA AS CA PRACT	FRED PORCH	(Not to Scale)	CIONERD CIONERD	Bateman Civil Survey Company         Engineers • Surveyors • Planners         2524 Reliance Avenue, Apex, NC 27539         Www.batemancivilsurvey.com         info@batemancivilsurvey.com         NCBELS Firm No. C-2378
<b>1</b> Υ Υ: SPC Ε:1 <sup>™</sup> = 40'			rcel of land parties and p not for provided.		•	ARLY ARLY ATION LISTED OF PRECISION AT THIS MAP ANDARD OF ANDARD OF	IIS PLAT WAS DN FROM A N (PLAT BOOK			npany ners <sup>ney.com</sup>