			Permit #:	
NC DEPARTMENT OF HEALTH AND HUMAN SERVICES	Division of Public Health	Secretary outy Secre Assistant	Secretary for Public Health	
	(a2) Construction Authorizatio			
IMPROVEMENT	FPERMIT FOR G.S. 130A-	-335(a2)		
County: PIN/Lot Identifier: Issued To:				
Property Location:				
Subdivision (if applicable)	Lot #:	Bl	ock: Section:	
LSS Report Provided: Yes No				
If yes, name and license number of LSS:				
New Expansion Proposed Structure:	System Relocation		Change of Use	
Number of bedrooms: Number of Occupants:				
		ustrial prod		
Proposed Design Daily Flow: GPD Pro				
Proposed Wastewater System Type*:				
Proposed Wastewater System Type*:				
*Please include system classification for proposed wastewater	system types in accordance with 2	15A NCAC	18A .1961 Table V(a)	
Saprolite System (initial): Yes No Saprolite System	tem (repair): 🗌 Yes 🔲 No			
Fill System (Initial): Yes No If yes, specify: New [Fill System (repair): Yes No If yes, specify: New [Usable Soil Depth (Initial): Usable Soil Depth Usable Soil Depth [Existing (when adding more th	han 6 inche		
Max. Trench Depth (Initial) [‡] : Max. Trench	Depth (Repair) [‡] :	[‡] Meas	ured on the downhill side of th	he trench
Artificial Drainage Required: Yes No If yes, please spe	ecify details:			
Type of Water Supply: Private well Public well S	Shared well 🗌 Municipal Supp	oly 🗌 Sp	pring Other:	
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:	P		Date:	
The LSS evaluation is being submitted p *See	oursuant to and meets the require attached site sketch*	rements of	G.S. 130A-335(a2).	
NC DEPARTMENT OF HEALTH A	ND HUMAN SERVICES • DIVISIO	ON OF PUI	BLIC HEALTH	
LOCATION: 5605 Six I MAILING ADDRESS: 1632	Forks Road, Building 3, Raleigh, N Mail Service Center, Raleigh, NC 2 TEL: 919-707-5854 • FAX: 919-84	IC 27609 27699-163		



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:

		ALL MAR	
Copies of this were sent to the LSS and the App	olicant on		
	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 Improvement Permit

LHD USE ONLY: This IP resubmittal received:		by
	Date	

The following items are being resubmitted pursuant to G.S. 130A-335(a3) for issuance of the Improvement Permit:

I, _______hereby attest that the information required to be included with this re-submittal Licensed Soil Scientist (Print Name) is accurate and complete to the best of my knowledge and that the proposed Improvement Permit meets all applicable federal, State, and local laws, regulations, rules, and ordinances.

Signature of Licensed Soil Scientist

Date

The section below is for Local Health Department use after submittal of items 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 ²
Soil Cover: inches Slope Corrected Maximum Trench/Bed Depth [‡] : inches [‡] Measured on the downhill side of the trench
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:
turini -
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: Adame 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	AV781	
State Authorized Agent:		Date:	
Complete		518	
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: _____

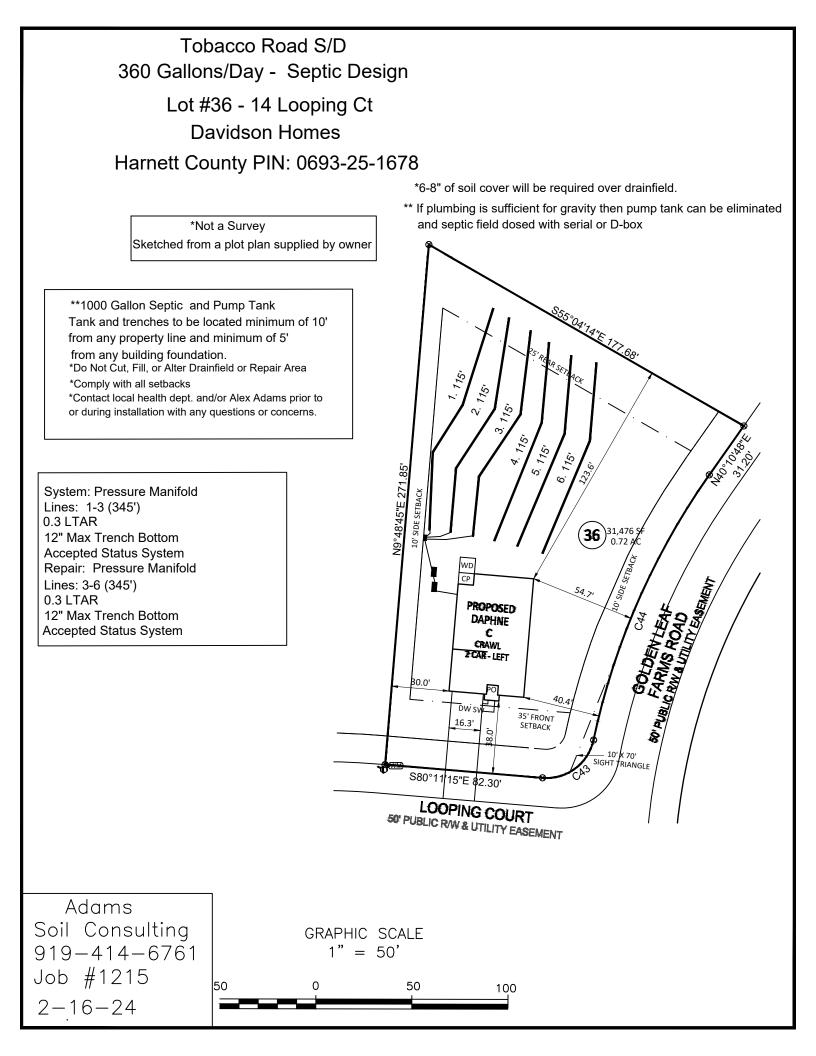
See attached site sketch

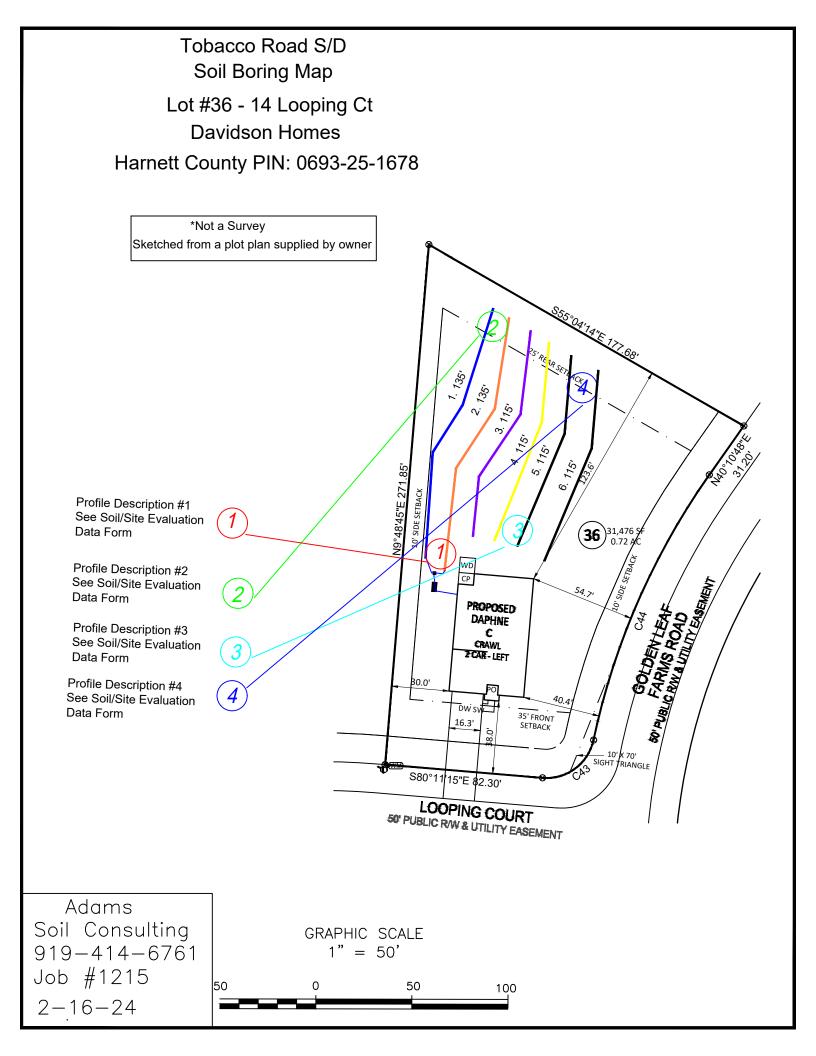


Permit #:

Re-submittal of Construction Authorization

	LHD USE ONLY: This CA resubmittal received:		by	_
		Date	Initials	
The following i	items are being resubmitted pursuant to G.S. 130A-33	5(a5) for issuance	of the Construction Author	ization:
	ST.	ATT	-12	
l,	hereby attest that	at the information	required to be included wit	h this re-submittal
	nsite Wastewater Evaluator (Print Name)			
	complete to the best of my knowledge and that the and local laws, regulations, rules, and ordinances.	proposed Construc	ction Authorization meets a	all applicable
	and local laws, regulations, rates, and orannances.			
Sianatu	re of Authorized On-Site Wastewater Evaluator	100	Date	
orginatur				
	The section below is for Local Health Department us	e after submittal of i	items noted as missing above	
		e ajter sasmittar oj i	icents noted as missing above.	
LHD Follow-u	up Completeness Review of Construction A	uthorization		
The review for	completeness of this Construction Authorization re-s	ubmittal was cond	luctod in accordance with (S 1204 225/25)
	on Authorization is determined to be:	Submittal was cond		1.3. 130A-333(a3).
Incomplete	(If box is checked, information in this section is requi	ired.)		
The following it	tems are missing:			
	JUL SE OLIA	M VIDEN	13	
Copies of this w	vere sent to the AOWE/PE and the Applicant on			
	,	Date		
State Authorize	ed Agent:		Date:	
Complete				
State Authorize	ed Agent:		Date:	





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

February 16, 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)"

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

RE: Tobacco Road Subdivision - Lot #36 (14 Looping Ct) NC (Harnett County) for Davidson Homes

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 360 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 360 gallons/day and utilizing Accepted Status. 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





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

OWNER: Davidson Homes ADDRESS: 14 Looping Ct. - Lot 36 Tobacco Road PROPOSED FACILITY: Single Family, 3-bedroom PROPOSED DESIGN FLOW (.1949): 360gpd LOCATION OF SITE: 14 Looping Ct. - Lot 36 Tobacco Road WATER SUPPLY: Public Water EVALUATION METHOD: TYPE OF WASTEWATER: Auger Boring

APPLICATION DATE: DATE EVALUATED: 2-16-24 PROPERTY SIZE: ~0.72 acres

Sewage

P R O F I L	.1940 LANDSCAPE	.1940 LANDSCAPE HORIZON							
E #	POSITION/ SLOPE %	DEPTH (IN.)	.1941 STRUCTURE/ TEXTURE	.1941 CONSISTENCE/ MINERALOGY	.1942 SOIL WETNESS/ COLOR	.1943 SOIL DEPTH	.1956 SAPRO CLASS	.1944 RESTR HORIZ	PROFILE CLASS & LTAR
		0-8	GR/SL	FR/SEXP/NS	N/A	26"	N/A	N/A	PS/0.35
	Slope/3%	8-30	SBK/SCL	FI/SEXP/SS					
1					-				
					-				
	Linear	0.10				2012			
	Linear Slope/3%	0-10		FR/SEXP/NS	N/A	28"	N/A	N/A	PS/0.35
2	1 -	10-30	SBK/SCL	FI/SEXP/SS	-				
2					-				
					-				
	Linear	0-6	GR/SL	FR/SEXP/NS	32"	26"	N/A	N/A	PS/0.35
	Slope/3%	6-30	-	FI/SEXP/SS	-				
3									
		0-12	GR/SL	FR/SEXP/NS	32"	27"	N/A	N/A	PS/0.35
	Slope/3%	12-30	SBK/SCL	FI/SEXP/SS					
4					-				
					4				

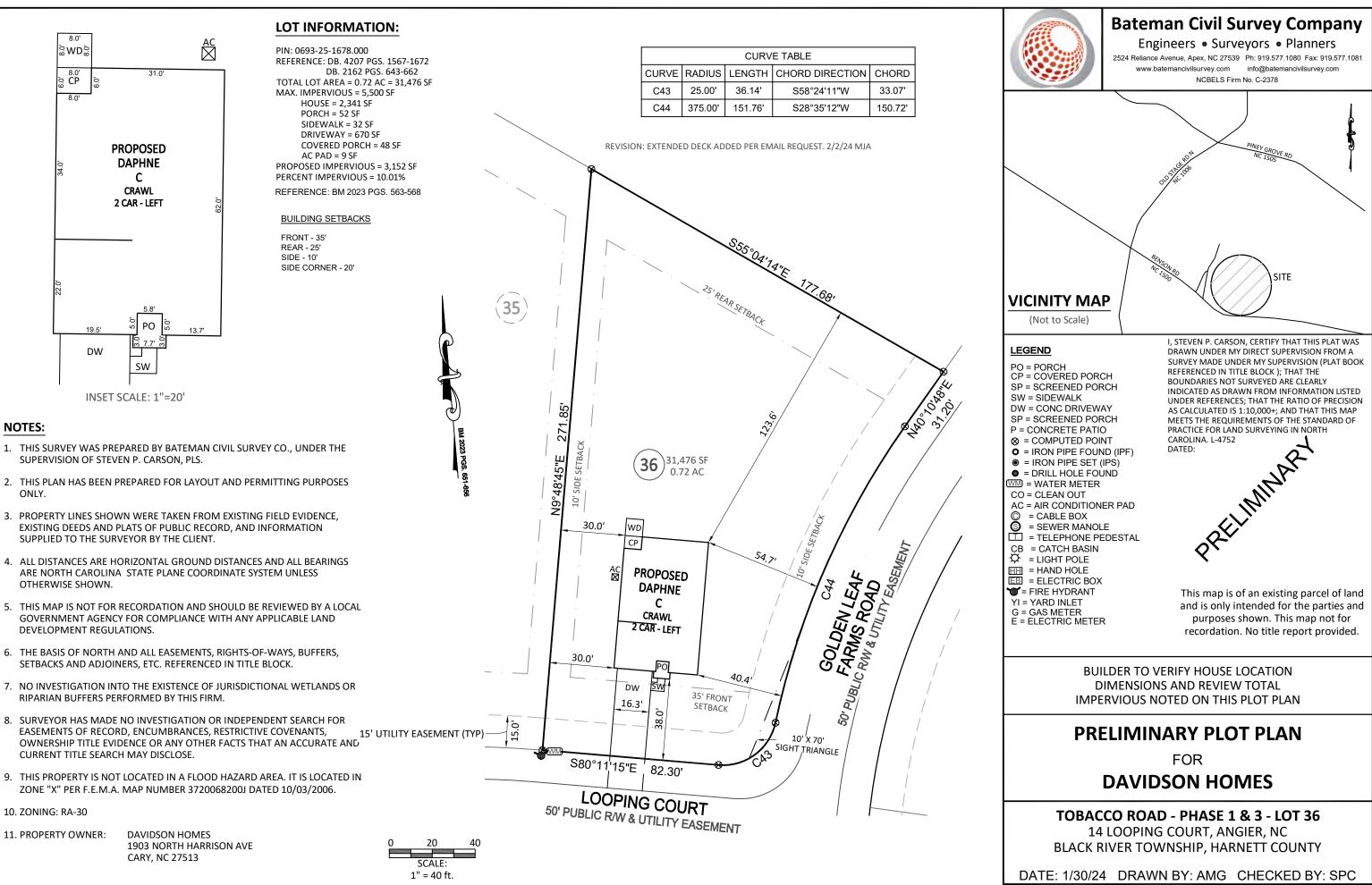
DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM	OTHER FACTORS (.1946):
Available Space (.1945)	>5,000 ft ²	>5,000 ft ²	SITE CLASSIFICATION (.1948): PS
System Type(s)	Type III (b)	Type III (b)	EVALUATED BY:A. Adams OTHER(S) PRESENT:
Site LTAR	0.35	0.35	
COMMENTS			

			RESIDE		KESSUKE IVI.		DESIGN		
		Davidson Ho	omes						
Tobacco Road L	ot 36								
# of BDR:	<u>3</u>	Daily Flow:	360	gal/day	L.T.A.R.:	0.3000	gal/day/sq.ft		
		-		-					
Septic Tank:	1000	gals	Pump Tank:	<u>1000</u>	gals	Sq. Foot:	<u>1035</u>	System Type:	Accepted
-		-	-		-	-			
Number of Taps:		<u>4</u>	Length o	f Trenches	: <u>345</u>	ft(See Ta	p Chart for Det	ails)	
Depth of Trenche	es:	<u>12</u>	in	Ma	nifold Length:	<u>42</u>	in		
Manifold Diamet	er:	<u>4in sch 80pv</u>	C	Tap Config	guration: 6 in s	pacing	<u>1</u>	side(s) of mar	nifold
Supply Line: leng	gth:	<u>50</u>	ft		Diameter:	<u>2</u>	in sch 40pvc		
Friction Loss + F	itting L	.oss:	<u>1.33</u>	ft(supply I	line length + 70	for fitting	gs in pump tan	ik)	
Design Head:		<u>2</u>	ft	Elevation	Head:	<u>6.00</u>	ft		
Total Head:	<u>9.33</u>	ft		Pu	Imp to Deliver:	<u>21.33</u>	gals/min at	<u>9.33</u>	ft head
Dosing Volume:		<u>157</u>	gals,						
Drawdown:	157	gals divided	l by	<u>21.4</u>	gals/in =	<u>7.3</u>	inches		
		_							

RESIDENTIAL PRESSURE MANIFOLD DESIGN

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								
Benchmark	0	is = 100.00	set at				Design Head:	2			
Pump tank elev.		8	92.00	Pump elev.	87.00		Manifold elev.	93.00			
line	color	rod read	Elevation	length	hole size	flow/tap	gal/day	trench area	LINE LTAR	# of Panels (PPBPS)	Spacing of Panels (in)
1		8.00	92.00	115	1/2in SCH 40	7.11	120.00	345	0.3478		
2		8.30	91.70	115	1/2in SCH 40	7.11	120.00	345	0.3478		
3		8.60	91.40	115	1/2in SCH 40	7.11	120.00	345	0.3478		
			Total Feet =	345	colimin –	24.22			0.3000		
			Feet Required =		gal/min = Velocity =	21.33 2.04		<u>LTAR =</u> (Itar + 5%)	0.3000		
Total # of Panels (F			reet Kequireu =	Des. Flow	360	2.04		(Itar w/25% red)	0.4000		
% of Dose Vol.		70		Pump Run=				(Itar + 5%)	0.4000		
Dose Volume		157		Tank Gal/IN	21.4			(101 + 576)	0.4200		
Dose Pump Time		7.36		Elev. Head	6.00						
Drawdown in Inche		7.3		Liev. neau	0.00						
Comments:		1.0									



REFERENCE: BM 2023 PGS. 651-656 BCS# 230746 SCALE: 1" = 40'