County: Harnett
IMPROVEMENT PERMIT FOR G.S. 130A-335(a2)/SL2022-11
PIN/Lot Identifier: 0529-89-2009
Issued To: Davidson Homes
Property Location: 60 Single Barrel Court - Lillingtion, NC
Subdivision: Wellers Knoll Lot #: 14 Block: Section:
LSS Report Provided: Yes 🗸 No 🗌
If yes, name and license number of LSS: Alex Adams - LSS#1247
New Repair Expansion System Relocation Proposed Structure: SFH
Proposed Wastewater System Type: Type III (b) Type III (b) (Repair)
Fill System: Yes No If yes, specify: New Existing (when adding more than 6 inches of fill to system area please provide a fill plan)
Proposed Design Daily Flow: 360 GPD Proposed LTAR (Initial): 0.35 Proposed LTAR (Repair): 0.35
Design Wastewater Strength: ✓ domestic
Number of bedrooms: 4 Number of Occupants: 8 Other:
Pump Required: Yes No May be required based upon final location and elevations of facilities
Artificial Drainage Required: Yes No If yes, please specify details:
Type of Water Supply: Private well Public well Municipal Supply Spring Other:
Drainfield location meets requirements of Rule .1945: Yes 🗹 No 🗌
Drainfield location meets requirements of Rule .1950: Yes 🗹 No 🗌
Permit valid for: 🗹 Five years [site plan submitted pursuant to GS 130A-334(13a)] 🔲 No expiration [plat submitted pursuant to GS 130A-334(7a)]
Permit conditions:
Licensed Soil Scientist Print Name: Alex Adams
Licensed Soil Scientist Signature: North Date: 3124123
The LSS evaluation is being submitted pursuant to and meets the requirements of G.S. 130A-335(a2).
See attached site sketch

This Section for Local Health Department Use Only Initial submittal received: 3 2 2 5 by Mark Date Permit Number: 5 7 2303 000 0 G.S. 130A-335(a4) states the following: 'If a local health department fails to act on an application for an improvement permit submitted pursuant to subsection (a3) of the section within 10 business days of receipt of a complete application, the local health department shall issue the improvement permit.'
In accordance with G.S. 130A-335(a3) the improvement permit application is:
☐ 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 Owner on Date State Authorized Agent: Date:
Denied (See attached report.) Copies of this were sent to the LSS and the Owner on
State Authorized Agent: Date: Date:
Complete State Authorized Agent: Date of Issuance: 4-3-23
This Improvement Permit is issued pursuant to G.S. 130A-335 (a2), (a3), and (a4) 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 site is subject to revocation if the site plan, plat, or the intended use changes, or if information submitted in the application was falsified, inaccurate or misleading. 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 conditions of this permit. The location and identification of all property lines, easements, water lines, and other appropriate utilities shall be the responsibility of the owner.
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: 4-3-23

See attached site sketch

county: Harnott

County: Harnett
CONSTRUCTION AUTHORIZATION FOR G.S. 130A-335(a2)/SL2022-11
PIN/Lot Identifier: 0529-89-2009
Issued To: Davidson Homes
Property Location: 60 Single Barrel Court - Lillingtion, NC
AOWE/PE Plans/Evaluations Provided: Yes V No If yes, name and license number of AOWE/PE: Alex Adams - AOWE#10021E
Facility Type: SFH
✓ New
Basement? Yes No Basement Fixtures? Yes No
Type of Wastewater System** Type III (b) (Initial) Type III (b) (Repair
Design Daily Flow: 360 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
Septic Tank Size: 1000 gallons Total Trench/Bed Length: 270 feet Trench/Bed Spacing: 9 feet on center
**If applicable: I understand the system type specified is different from the type specified on the application. I accept the specifications of this permit. Owner/Legal Representative Print Name: Clinda Howell Owner/Legal Representative Signature: Date: 3/27/23
Pre-Construction Conference Required: Yes No Conditions:
The construction and installation requirements of Rules .1950, .1952, .1954, .1955, .1956, .1957, .1958, and .1959 are incorporated by reference

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

Date: 3/24/23

into this permit and shall be met. Systems shall be installed in accordance with the attached system layout.

Ndamo

Alex Adams

AOWE/PE Print Name:

AOWE/PE Signature: _

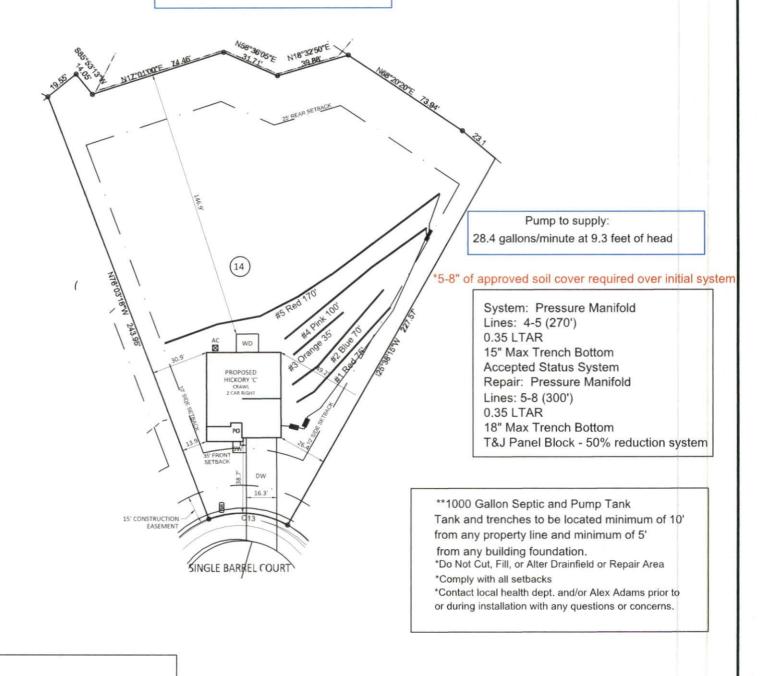
See attached site sketch

This Section for Local Health Department Us	e Only
Initial submittal received: 323 by	
Date	Initials
Permit Number: SFD 2303-000	10
G.S. 130A-335(a6) states the following: 'If a local health department fails to act on an submitted pursuant to subsection (a5) of the section within 10 business days of receipt department shall issue the construction authorization.'	
n accordance with G.S. 130A-335(a5) the construction authorization application is:	
Incomplete (If box is checked, information in this section is required.)	
The following items are missing:	
Conica of this ways count to the AOWE (DE and the Owns are	
Copies of this were sent to the AOWE/PE and the Owner on	
State Authorized Agent:	Date:
state Authorized Agent.	
Denied (See attached report.)	
Copies of this were sent to the AOWE/PE and the Owner on	
Date	
State Authorized Agent:	Date:
Complete	
State Authorized Agen (:) Marshant III 72HS	0.1()
State Authorized Agent:	Date of issuance:
This Construction Authorization is issued pursuant to G.S. 130A-335(a2), (a5), and (a evaluations attached here. This Construction Authorization is subject to revocation is changes, or if information submitted in the application was falsified, inaccurate or neshall not be affected by a change in ownership of the site. This Construction Author provisions of the Laws and Rules for Sewage Treatment and Disposal and to the condentification of all property lines, easements, water lines, and other appropriate ut Final landscaping shall be constructed to divert water and establish vegetative cover	if the site plan, plat, or the intended use nisleading. The Construction Authorization ization is subject to compliance with the ditions of this permit. The location and ilities shall be the responsibility of the owner.
The Department, the Department's authorized agents, and the local health department liabilities, duties, and responsibilities imposed by statute or in common law from plans, evaluations, preconstruction conference findings, submittals, or actions from the General Statutes as a licensed engineer or a person certified pursuant to Article Authorized On-Site Wastewater Evaluator in GS 130A-335(a2), (a5), and (a7). The Deagents, and the local health departments shall be responsible and bear liability for the obligations under State law or rule, including the issuance of the operations permit Construction Authorization Expiration Date:	n any claim arising out of or attributed to a person licensed pursuant to Chapter 89C of 5 of Chapter 90A of the General Statutes as an epartment, the Department's authorized heir actions and evaluations and other
See attached site sketch	

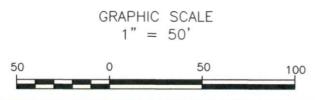
Wellers Knoll - Lot #14 360 Gallon/Day - Septic Design 60 Single Barrell Ct. - Lillingtion, NC Davidson Homes

Harnett County PIN: 0529-89-2009

*Not a Survey Sketched from a plot plan supplied by owner



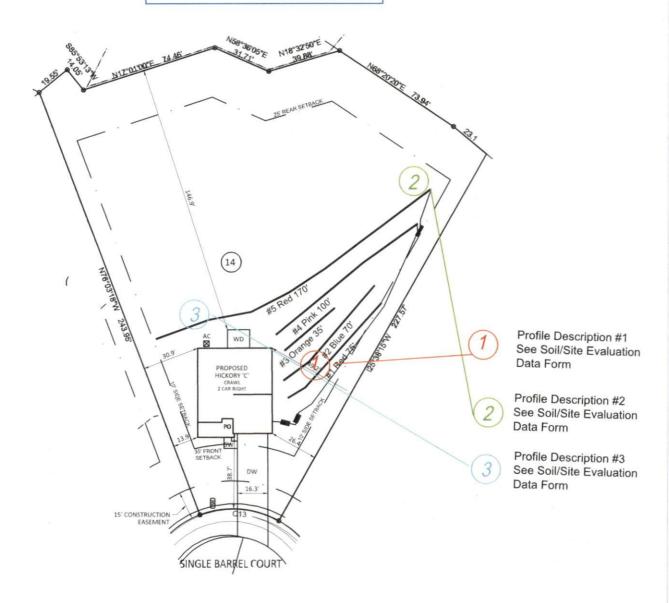
Adams
Soil Consulting
919-414-6761
Job #1623



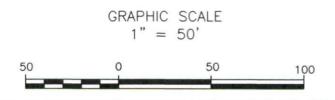
Wellers Knoll - Lot #14 Soil Boring Location Map 60 Single Barrell Ct. - Lillingtion, NC Davidson Homes

Harnett County PIN: 0529-89-2009

*Not a Survey Sketched from a plot plan supplied by owner



Adams Soil Consulting 919-414-6761 Job #1623







SOIL/SITE EVALUATION for ON-SITE WASTEWATER SYSTEM

(Complete all fields in full)

Harnett County Government Complex

307 W. Cornelius Harnett Boulevard APPLICATION DATE: DATE EVALUATED: 3-16-23

ph: 910-893-7547

www.harnett.org

OWNER: Davidson Homes

ADDRESS: 60 Single Barrell Ct.

PROPOSED FACILITY: Single Family, 4-bedroom PROPOSED DESIGN FLOW (.1949): 360gpd LOCATION OF SITE: 60 Single Barrell Ct.

PROPERTY SIZE: ~1.25 acres

WATER SUPPLY: Public Water

fax: 910-893-9371

EVALUATION METHOD: Auger Boring

TYPE OF WASTEWATER: Sewage

P R O F I L E	.1940 LANDSCAPE	HORIZON	SOIL MORPHOLOGY (.1941)		OTHER PROFILE FACTORS				
		POSITION/ SLOPE %	DEPTH (IN.)	.1941 STRUCTURE/ TEXTURE	.1941 CONSISTENCE/ MINERALOGY	.1942 SOIL WETNESS/ COLOR	.1943 SOIL DEPTH	.1956 SAPRO CLASS	.1944 RESTR HORIZ
	Linear	0-20	GR/SL	FR/SEXP/NS	35"	N/A	N/A	N/A	PS/0.35-0.4
1	Slope/3%	20-38	SBK/SCL	FI/SEXP/SS					
1					-				
	Linear Slope/3%	0-14	GR/SL	FR/SEXP/NS	36"	N/A	N/A	N/A	PS/0.35-0.4
		14-36	SBK/CL	FI/SEXP/SS					
2									
	Linear	0-8	GR/SL	FR/SEXP/NS	28"	N/A	N/A	N/A	PS/0.35-0.4
	Slope/3%	8-36	SBK/CL	FI/SEXP/SS					
3									
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	1



PRESSURE MANIFOLD DESIGN

Wellers Knoll

www.harnett.org

Name: Davidson Homes

P.I.N. #:

D#: Harnett County Government Complex

307 W. Cornelius Harnett Boulevard

Address: 60 Single Barrell Ct

Subdiv:

Lot#: 14

Lillington, NC 27546

of BDR:

3 Daily Flow: gal/day

L.T.A.R.:

gal/day/sq.ft 0.35

ph: 910-893-7547

Septic Tank: 1000 gals

Pump Tank:

360

1000

gals

Sq. Foot:

810

Stone Depth:

fax: 910-893-9371

Number of Taps:

2

Length of Trenches:

270

ft(See Tap Chart for Details)

in

Depth of Trenches:

15

in

Manifold Length:

30

Manifold Diameter: 4in sch 80pvc

Tap Configuration: 6 in spacing

side(s) of manifold

Supply Line: length:

100

1.06

Diameter:

in sch 40pvc

Friction Loss + Fitting Loss:

ft(supply line length + 70' for fittings in pump tank)

Design Head:

Elevation Head:

4.50

Total Head:

7.56 ft

Pump to Deliver:

15.58

gals/min at

7.56

ft head

Dosing Volume:

132

gals,

Drawdown: 132 gals divided by

20 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, or equal is required.

Possible pumps:

Hydromatic:

Goulds:

Myers:

Zoeller: Model 151

Other:

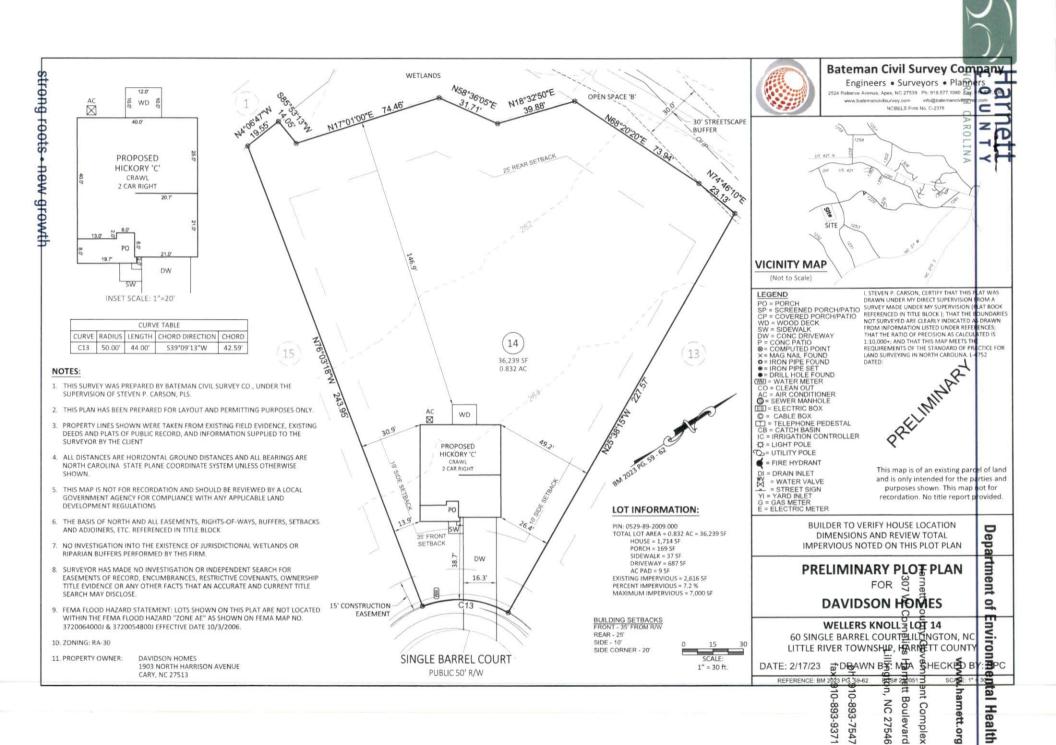
TAP CHART

Bench Mark	0	is = 100.00	set at EIP				Design Head:	2	
Pump tank elev.		4.5	95.50	Pump elev.	90.50		Manifold elev.	95.00	
line	color	rod read	Elevation	length	hole size	flow/tap	gal/day	trench area	LINE LTAR
4	Pink	6.0	94.00	100	1/2in SCH 80	5.48	126.62	300	0.422
5	Red	6.4	93.60	170	3/4in SCH 80	10.1	233,38	510	0.458
		pl	feet =	270	gal/min =	15.58		LTAR =	0.35
% of Dose Vol.		75		Des. Flow	360			(Itar + 5%)	0.37
Dose Volume		132		Pump Run=	23.11			(Itar W/ INOV)	0.47
Dose Pump Time		8.45		Tank Gal/IN	20			(Itar + 5%)	0.49
Drawdown in Incl	hes	6.6		Elev. Head	4.50				
Supply Line Leng	ıth	100							

Hydraulic Profile

Comments:

Manifold Elevation	95.00	100
Pump tank elev.	95.50	2
Pump elev	90.50	0



Adams Soil Consulting, PLLC 1676 Mitchell Road Angier, NC 27501 919-414-6761

alexadams@bcsoil.com

March 24, 2023 Project #1623

"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: 60 Single Barrell 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 18A .1900 "Laws and Rules for Sewage Treatment and Disposal Systems". From this evaluation, ASC is providing the attached 3-bedroom 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 Johnston 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



