

HAL OWEN & ASSOCIATES, INC.

SOIL & ENVIRONMENTAL SCIENTISTS

P.O. Box 400, Lillington, NC 27546-0400

Phone (910) 893-8743 / Fax (910) 893-3594

www.halowensoil.com

Project Name: 90 Cotton Fields Lane; PIN 0643-26-6822; Lot 5 Cotton Farms SD

County: Harnett **LHD Reference:** SFD2306-0047

Provided to:


Name: Reese Construction

Address: 3720 Lucky Drive, Apex, NC 27539

I, Clint Reese, acknowledge receipt of the Licensed Soil Scientist Report which includes:

- Signed and sealed copy of the AOWE's report that includes the information in G.S. 130A-336.2(k)
- Operation and Management Program
- Authorization to Operate

I accept the septic system installation and understand that I will be responsible for continued adherence to the Operations and Management program established by the AOWE.


Signature

1/10/24
Date

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27 December 2023

Reese Construction
3720 Lucky Drive
Apex, NC 27539

Reference: LSS Report for Authorization to Operate (ATO)
90 Cotton Fields Lane, Fuquay Varina, Harnett Co., NC
PIN 0643-26-6822.000 Lot 5 Cotton Farms SD

Dear Reese Construction,

This LSS Report is being provided pursuant to and meets the requirements of G.S. 130A-336. This report is based on information provided by the property owner or their representative. Hal Owen & Associates, Inc. is not responsible for false or misleading information that may have been provided to us in pursuit of this permit, nor for concealed conditions on the property. Hal Owen & Associates Inc. does not warrant that the septic system will continue to function satisfactorily in the future.

The septic system for the above referenced property has been installed and was inspected by Hal Owen & Associates staff on 15 December 2023. The system has been installed in compliance with applicable NC General Statutes, Rules for Sewage Treatment and Disposal, and all conditions of the AOWE Permit. The system was installed within the design parameters of the Permit with some minor changes. Enclosed with this report are the *Septic System Final Inspection Report*, As-Built map (Figure 1), and *Operation and Management Program*.

Your next step is to sign a document confirming receipt of this report and acceptance of the installed system. Also sign and date the ATO form attached. You will need to submit these to the Local Health Department (LHD) along with this report and its attachments and pay the LHD fee. The LHD shall issue a certificate of occupancy upon receipt of a complete ATO.

I appreciate the opportunity to provide this service. If you have any questions or need additional information, please contact me at your convenience.



Sincerely,

A handwritten signature in black ink that reads "Hal Owen".

Hal Owen
Licensed Soil Scientist
Authorized Onsite Wastewater Evaluator

Contacts

SOIL SCIENTIST

Company Name	Hal Owen & Associates, Inc.
Mailing Address	PO Box 400, Lillington, NC 27546
Telephone Number	910-893-8743 Fax: 910-893-3594
E-mail Address	hal@halowensoil.com
Licensed Soil Scientist	Hal Owen, LSS#1102 and AOWE# 10036E
System Designer	Jocelyn Proulx
System Inspector	Jocelyn Proulx

INSTALLER

Company Name	David Brantley & Sons Inc
Mailing Address	37 Pine Ridge Rd, Zebulon, NC 27597
Telephone Number	(919) 404-9511
E-mail Address	
Installer & Certification #	Cory Brantley #1036

LOCAL HEALTH DEPARTMENT

Agency Name	Harnett County Environmental Health Department On-Site Wastewater Section
Mailing Address	307 W Cornelius Harnett Boulevard Lillington, NC 27546
Telephone Number	910-893-7547
E-mail Address	
LHD Application #	SFD2306-0047

Septic System Final Inspection Report

Facility Type	Single Family Residence
Wastewater Type	Domestic
Water Supply	Public
Design Wastewater Flow	360 gpd
Soil LTAR	0.3 gal/day/ft ²

Installation

Date	15 December 2023
System Inspector	Jocelyn Proulx
Installer	Cory Brantley

Septic Tank:

Volume (gallons)	1000
Brand and Tank ID#	Brantley DB1000 STB-502
Date of Manufacture	10/4/23
Certified watertight	NA
Distance to Structure	7 feet
Elevation of tank inlet	
Elevation of tank outlet	

Effluent Filter:

Make and Model	Simtech STF-110
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Distribution:

Supply Line Length to Distribution	5'
Supply Line Diameter	4" SCH40
Distribution Device:	none
Number of outlets (laterals)	serial

Drainfield:

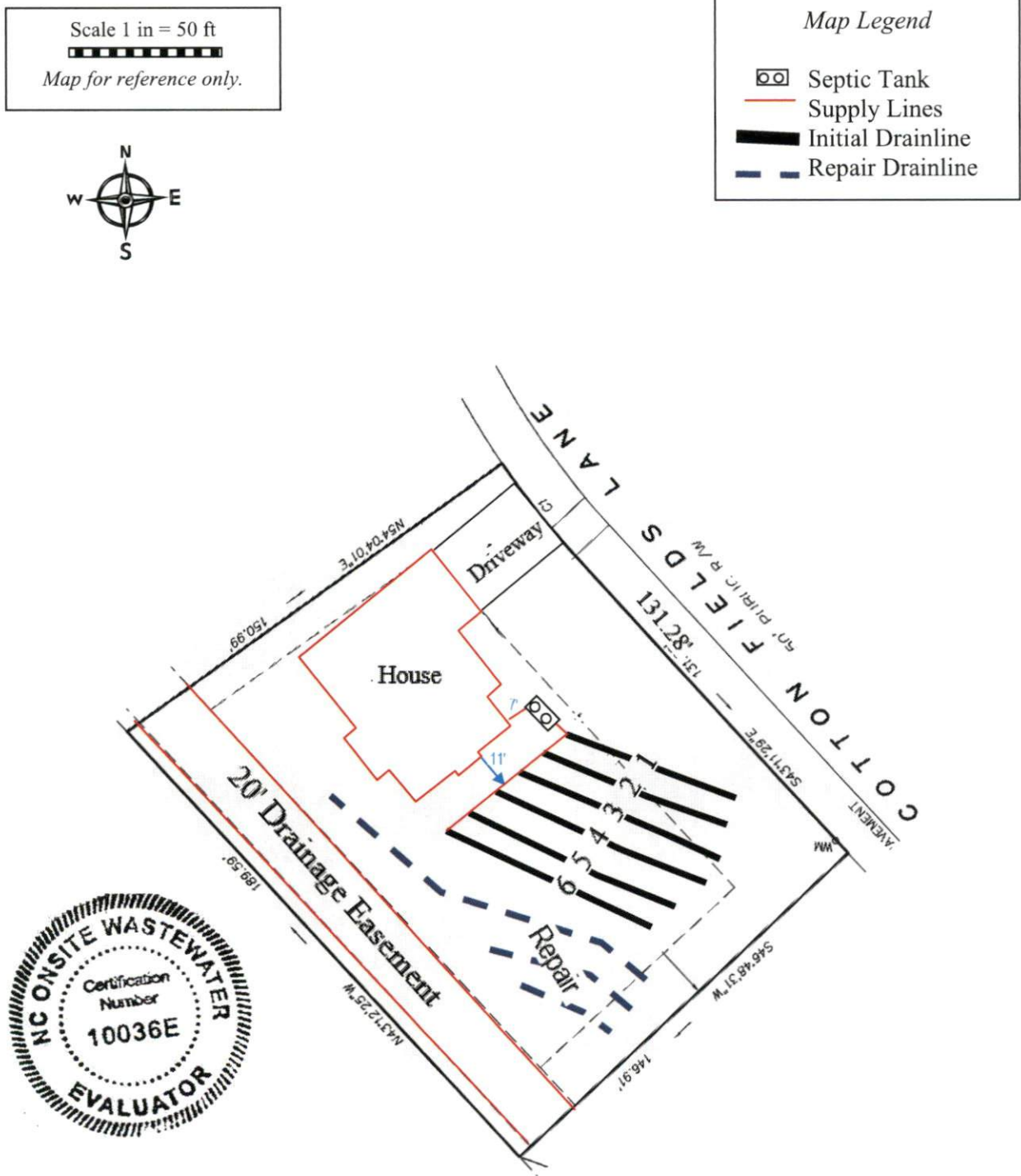
Type	Quick4 Plus™ Standard Low Profile (LP) Chamber
Distance to Structure	11'
Distance to Well	NA

Trench Depth	8"	Trench width	36"
Trench Spacing	9'	Aggregate	chamber
Reference Elevation		Rod Reading (ft)	
	<u>Length (ft)</u>	<u>Start</u>	<u>Middle</u> <u>End</u>
Line 1			
Line 2			
Line 3			
Line 4			
Line 5			
Line 6			
Total	400'		

All elevations are given as relative grade rod reading.

Notes:

Figure 1. As-built Septic System Installation







Operation and Management Program

In accordance with G.S. § 130A-336.2, the owner is responsible for continued adherence to the operations and management program. Septic systems safely treat and dispose of wastewaters produced in the bathroom, kitchen, and laundry. These wastewaters may contain disease-causing germs and pollutants that must be treated to protect human health and the environment. Septic systems must be properly used, operated, and maintained by the homeowner to assure the long-term performance of the system.

PERMIT CONDITIONS:

I. Performance: System shall perform in accordance with Rule .1961.

II. Monitoring: As required by Rule .1961.

III. Maintenance: Ground absorption sewage treatment and disposal systems shall be checked, and the contents of the septic tank removed, periodically from all compartments, to ensure proper operation of the system. The contents shall be pumped whenever the solids level is found to be more than 1/3 of the liquid depth in any compartment.

Other: _____

Subsurface system operator required? Yes _____ No X

If yes, see attached sheet for additional operation conditions, maintenance and reporting.

IV. Operation: _____

V. Other: _____

KNOW WHERE YOUR SEPTIC SYSTEM IS LOCATED

Your property has an onsite subsurface sewage waste disposal system. Familiarize yourself with the location of the system including the tanks, distribution devices, and disposal fields (including repair area). These areas shall be protected from excavation, building additions, outbuildings, pool construction, and soil disturbing activities. Prohibit vehicular traffic over the ground absorption field.

DAY-TO-DAY MANAGEMENT

Don't use too much water.

- ◆ The drainfield does not have unlimited capacity.
- ◆ Typical daily water use is 50 gallons per person.
- ◆ The soil drainfield usually has a maximum daily design capacity of 120 gallons per bedroom, even for short periods of time.
- ◆ Overloads can occur seasonally, daily, or on the weekend.
- ◆ Water conservation will extend the life of your system.
- ◆ Repair dripping faucets and toilets.

Limit disposal to sewage.

- ◆ Don't use your septic tank as a trash can for cigarette butts, tissues, sanitary napkins, cotton swabs, cat box litter, coffee grounds, or disposable diapers.
- ◆ Restrict the use of your garbage disposal. These add quite a lot of extra solids.
- ◆ Don't pour grease or cooking oil down the drain.
- ◆ Don't poison your system with harmful chemicals such as solvents, oils, paints, thinners, discarded medications, disinfectants, pesticides, poisons, and other substances.
- ◆ Save money. Commercial septic tank additives are usually not necessary.

Protect the system from physical damage (site maintenance).

- ◆ Keep the soil over the drainfield covered with vegetation to prevent soil erosion.
- ◆ Don't drive vehicles over the system.
- ◆ Avoid construction over the system and repair area.
- ◆ Don't cover the tank or drainfield with asphalt or concrete.
- ◆ Do not install irrigation systems over your drainfield as these could damage the system and/or hydraulically overload the soils.

Dispose of all wastewater in an approved system.

- ◆ Don't put in a separate pipe to carry wash waters to a side ditch or the woods. This is illegal.
- ◆ Don't connect pipes from air conditioners or ice makers to the septic system.

PERIODIC MAINTENANCE AND REPAIR

Home and yard (site maintenance):

- ◆ Protect and maintain the site of your septic tank and drainfield.
- ◆ In the drainfield area, cut down and remove trees that like wet conditions. This includes willows, elms, sweetgums, and some maples.
- ◆ Landscape the yard to divert surface waters away from the tank and drainfield. Eliminate depressional areas within the drainfield.
- ◆ Be sure that the water from the roof, gutters, and foundation drains does not flow over the system.
- ◆ Maintain drainage ditches, subsurface tiles, and drainage outlets so that water can flow freely from them.

Septic tank:

- ◆ Ensure tank risers remain accessible for measuring and pumping solids as well as cleaning the effluent filter.
- ◆ Measure how quickly sludge and scum accumulate in the tank. Pump septage when solids occupy 1/3 to 1/4 of the liquid capacity of the tank (frequency 1 to 3 years).

- ◆ Don't wait until your drainfield fails to have your tank pumped. By then, the drainfield may be ruined. With septic systems, an ounce of prevention is worth a ton of cure!

Table 1. Estimated septic tank inspection and pumping frequency (in years). Tank Size (gallons)

Tank Size (gallons)	Number of People Using the System				
	1	2	4	6	8
900	11	5	2	1	<1
1000	12	6	3	2	1
1250	16	8	3	2	1
1500	19	9	4	3	2

SIGNS OF POSSIBLE SEPTIC SYSTEM PROBLEMS

- ◆ Sewage backing up into your toilets, tubs, or sinks.
- ◆ Slowly draining fixtures, particularly after it has rained.
- ◆ The smell of raw sewage accompanied by soggy soil or sewage discharged over the ground or in nearby ditches or woods.
- ◆ Don't attempt to repair a failing system yourself. Get a repair permit and hire an experienced contractor.

REGULATIONS AND PRECAUTIONS:

- ◆ Please visit the North Carolina Wastewater Operator Certification Program for a complete listing of Certified Subsurface Wastewater Operators. <https://deq.nc.gov/about/divisions/water-resources/operator-certification/wastewater-operator-certification>
- ◆ Sewage contains germs that can cause diseases. Never enter a septic tank. Toxic and explosive gases in the tank present a hazard. Old tanks may collapse. Electrical controls present a shock and sparkhazard. Secure the septic tank lid so that children cannot open it.

For more information about septic systems, contact your county Extension agent or local health department. <https://content.ces.ncsu.edu/septic-system-owners-guide>

