HARNETT COUNTY HEALTH DEPARTMENT
ENVIRONMENTAL HEALTH SECTION
307 W. CORNELIUS HARNETT BLVD.
LILLINGTON, NC 27546
910-893-7547 PHONE
910-893-9371 FAX

Application for Repair

EMAIL ADDRESS: rongabriel62@gmail.com

NAME Ron Gabriel PHONE NUMBER (919) 608-9847

PHYSICAL ADDRESS 5269 Cokesbury Road, Fuquay Varina, NC 27526

MAILING ADDRESS *(IF DIFFFERENT THAN PHYSICAL)* 2007 Simca Court, Apex, NC 27502

IF RENTING, LEASING, ETC., LIST PROPERTY OWNER NAME _____

N/A	A		1.57 acres
SUBDIVISION NAME	LOT #/TRACT #	STATE RD/HWY	SIZE OF LOT/TRACT

Type of Dwelling: [✓] Modular [ ] Mobile Home [ ] Stick built [ ] Other _____

Number of bedrooms 3 [ ] Basement

Garage: Yes [ ] No [✓] Dishwasher: Yes [✓] No [ ] Garbage Disposal: Yes [ ] No [✓]

Water Supply: [ ] Private Well [ ] Community System [✓] County

Directions from Lillington to your site: S. Main Street toward E. Harnett Street. Left on McKinney Pkwy, left on 401 N. Left on Kipling Road, continue on Cokesbury Road, destination will be on left.

* WORK WILL DONE BY RICKY HOLLAND W/ PRECISION SEPTIC *

In order for Environmental Health to help you with your repair, you will need to comply by completing the following:

1. The outlet end of the tank and the distribution box will need to be uncovered and property lines flagged. After the tank is uncovered, property lines flagged, underground utilities marked, and the orange sign has been placed, you will need to call us at **910-893-7547 to confirm that your site is ready for evaluation.**
Your system must be repaired within 30 days of issuance of the Improvement Permit or the time set within receipt of a violation letter. (Whichever is applicable.)

By signing below, I certify that all of the above information is correct to the best of my knowledge. False information will result in the denial of the permit. The permit is subject to revocation if the site plan, intended use, or ownership changes.

Ronald Gabriel 4.20.2020

Signature Date

Updated Survey attached

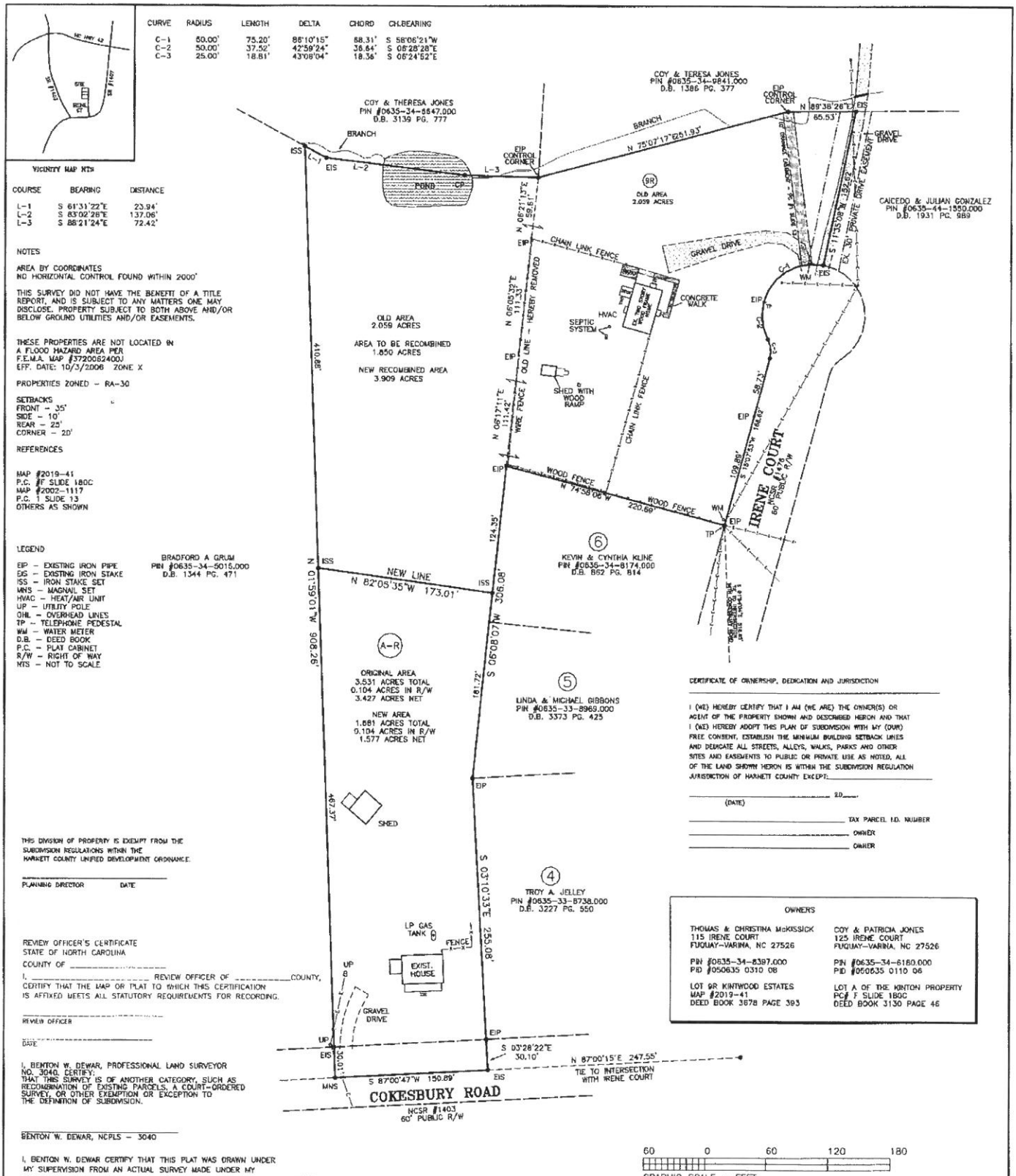
HOMEOWNER INTERVIEW FORM

It is important that you answer the following questions for our inspectors. Please do not leave any blanks if possible, and answer all questions to the best of your ability. Thank You.

Have you received a violation letter for a failing system from our office? [ ] **YES** [✓] **NO**
Also, within the last 5 years have you completed an application for repair for this site? [ ] **YES** [✓] **NO**

Year home was built (or year of septic tank installation) 1994
Installer of system
Septic Tank Pumper } See attached septic permit
Designer of System

1. Number of people who live in house? 2 **# adults** ____ **# children** 2 **# total**
2. What is your average estimated daily water usage? ____gallons/month or day ____county water. **If HCPU please give the name the bill is listed in** N/A - just purchased home
3. If you have a garbage disposal, how often is it used? [ ] **daily** [ ] **weekly** [ ] **monthly**
4. When was the septic tank last pumped? ? How often do you have it pumped? ?
5. If you have a dishwasher, how often do you use it? [ ] **daily** [ ] **every other day** [✓] **weekly**
6. If you have a washing machine, how often do you use it? [ ] **daily** [ ] **every other day** [✓] **weekly** [ ] **monthly**
7. Do you have a water softener or treatment system? [ ] **YES** [✓] **NO** Where does it drain? ____
8. Do you use an "in tank" toilet bowl sanitizer? [ ] **YES** [✓] **NO**
9. Are you or any member in your household using long term prescription drugs, antibiotics or chemotherapy?] [ ] **YES** [✓] **NO If yes please list** ____
10. Do you put household cleaning chemicals down the drain? [ ] **YES** [✓] **NO** If so, what kind? ____
11. Have you put any chemicals (paints, thinners, etc.) down the drain? [ ] **YES** [✓] **NO**
12. Have you installed any water fixtures since your system has been installed? [ ] **YES** [✓] **NO** If yes, please list any additions including any spas, whirlpool, sinks, lavatories, bath/showers, toilets ____
13. Do you have an underground lawn watering system? [ ] **YES** [✓] **NO**
14. Has any work been done to your structure since the initial move into your home such as, a roof, gutter drains, basement foundation drains, landscaping, etc? **If yes, please list** ____
15. Are there any underground utilities on your lot? **Please check all that apply:**
    [ ] **Power** [ ] **Phone** [✓] **Cable** [ ] **Gas** [ ] **Water**
16. Describe what is happening when you are having problems with your septic system, and when was this first noticed?
    Septic inspection done - septic tank and distribution box needs to be replaced.
17. Do you notice the problem as being patterned or linked to a specific event (i.e., wash clothes, heavy rains, and household guests?) [ ] **YES** [✓] **NO If Yes, please list** ____



BENTON W. DEWAR AND ASSOCIATES
PROFESSIONAL LAND SURVEYOR
5920 HONEYCUTT ROAD
HOLLY SPRINGS, NC 27540
PH. # (919) 552-9813
FAX # (919) 557-2255

RECORDED IN MAP #2019-_____HARNETT COUNTY REG.

RECOMBINATION SURVEY FOR

THOMAS & CHRISTINA McKISSICK
115 IRENE COURT - FUQUAY-VARINA, NC 27526
PIN #0635-34-6180.000
PIN #0635-34-8397.000

COY & PATRICIA JONES
5269 COKESBURY ROAD - FUQUAY-VARINA, NC 27526

BUCKHORN TOWNSHIP
HARNETT COUNTY - NORTH CAROLINA

DATE: 9-3-2019
SCALE: 1" = 60'

LAYER 3
19-62S
OSBORNE/19/650

HARNETT COUNTY HEALTH DEPARTMENT
ENVIRONMENTAL HEALTH SECTION

№07625

CERTIFICATE OF COMPLETION / OPERATIONAL PERMIT

Name: (owner) James D. Jones & Linda F. Jones ☑ New Installation ☐ Septic Tank

Property Location: SR# 1403 ☐ Repairs ☑ Nitrification Line

Subdivision Robert Kutos Lot # A.

TAX ID# _____ Quadrant # _____

Contractor: Odell Johnson Registration # 78

Basement with Plumbing: ☐ Garage: ☐

Water Supply: ☐ Well ☑ Public ☐ Community

Distance From Well: 50 ft.

Following are the specifications for the sewage disposal system on above captioned property.

Type of system: ☐ Conventional ☐ Other _____

Size of tank: Septic Tank: _____ gallons Pump Tank: _____ gallons

Subsurface Drainage Field: No. of ditches 4 exact length of each ditch 100 ft. width of ditches 5 ft. depth of ditches 18-24 in.

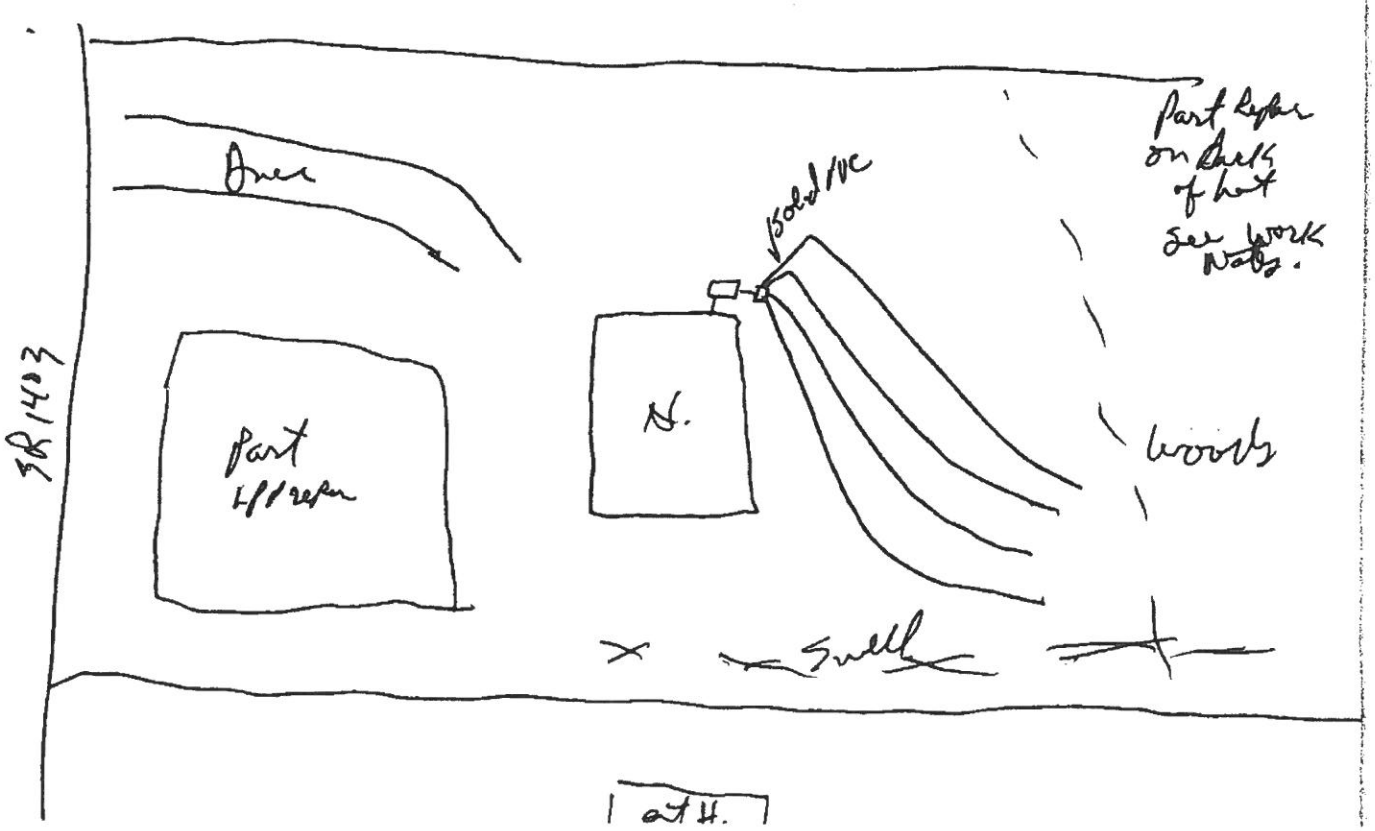
French Drain: _____ Linear feet

PERMIT NO. 08338

Date: 08-05-94

Inspected by:: [signature] B.S

Environmental Health Specialist



Ambassador Inspections
P.O. Box 337
Bunn, NC 27508
ambassadorinspections1@outlook.com
919-339-5633

Good evening Allison,

I did the leak test 5269 Cokesbury Rd., Fuquay Varina, NC 27609. The septic tank leaked three inches in 24 hours. The septic tank has a leak and needs to be replaced. If you have any questions please feel free to give me a call or e-mail me.

Best regards,

Robert Smith

Ambassador Inspections

Ambassadorinspections1@outlook.com

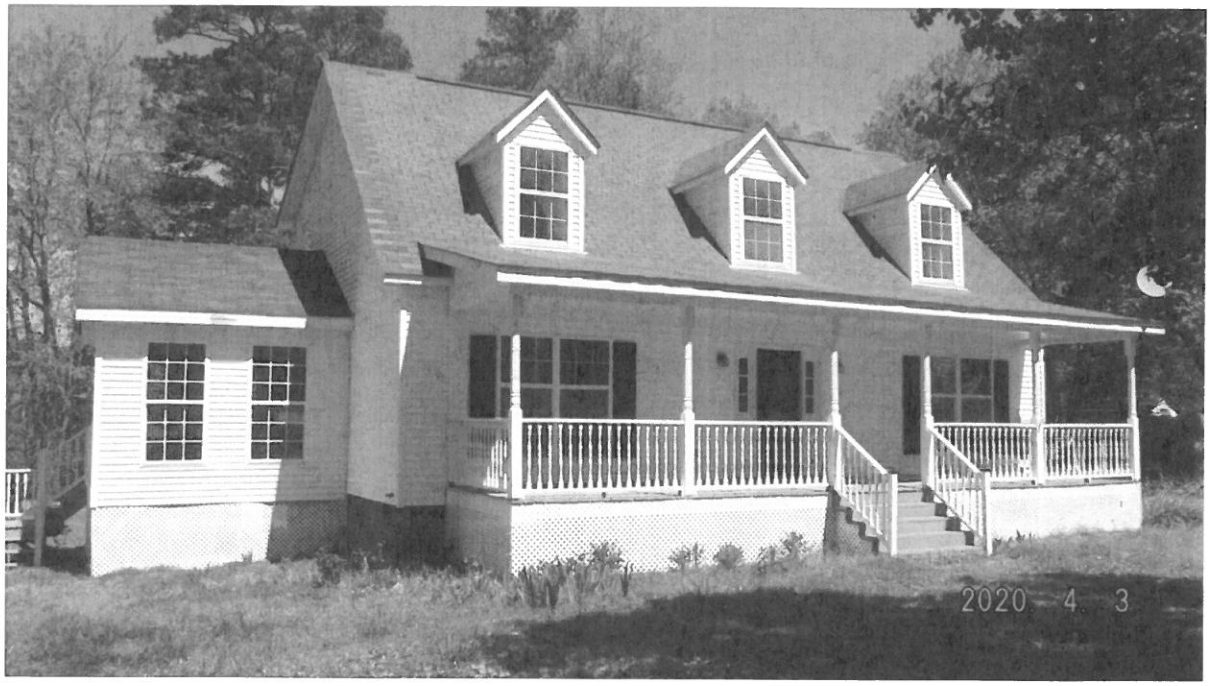
919-339-5633

Advantage Inspection

4020-300 Wake Forest Rd. Raleigh, NC 27609 Ph# 919-850-2526

SEPTIC SYSTEM EVALUATION

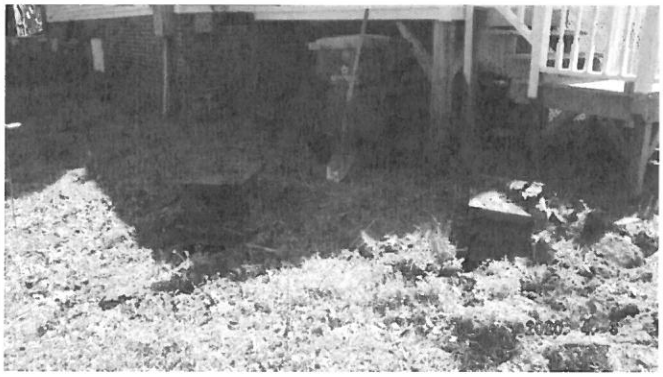
Date: April 3, 2020
Report for: Ronald & Leanne Gabriel
Inspection address: 5269 Cokesbury Road, Fuquay Varina, NC 27526
Realtor: Allison Griffith (eXp - Marti Hampton Team)
Home Built: 1994



The following photo log and inspection dissertation provide visual and procedural inspection information at the time of the inspection. Please skip to the conclusion in the report to see any repairs and/or suggestions that may be considered necessary.

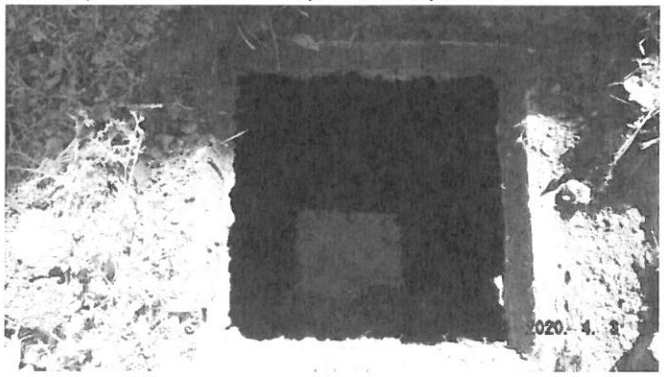
PHOTO LOG:

Septic tank location.

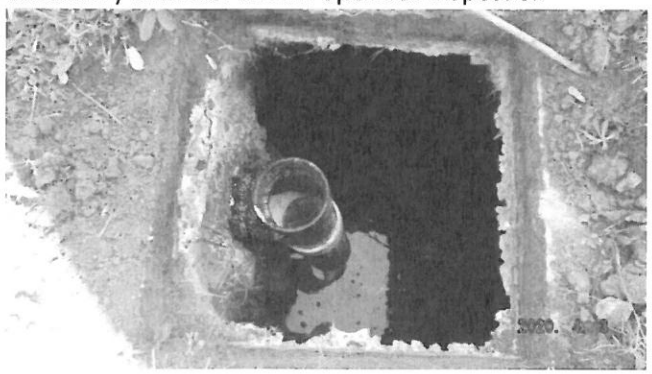


Inlet drainpipe shown not fully extending into the septic tank and roots shown at inlet pipe penetration

Primary chamber shown open for inspection

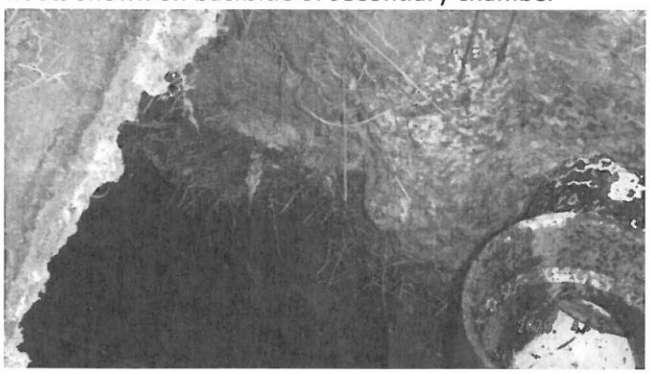


Secondary chamber shown open for inspection

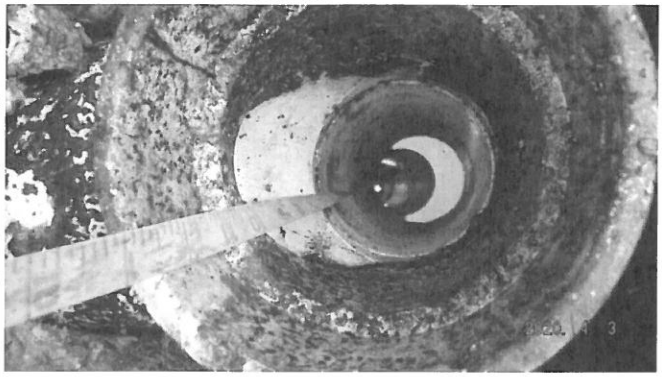


Lower effluent level shown

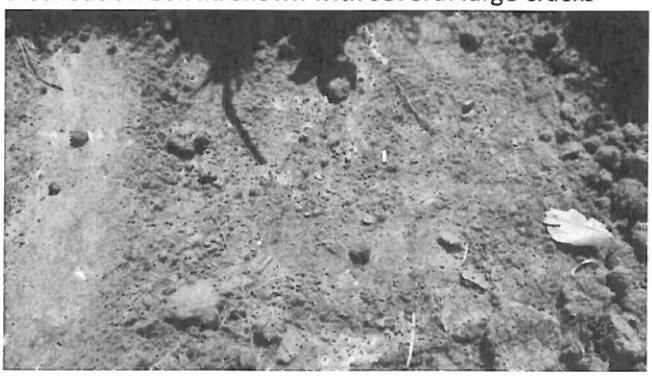
Roots shown on backside of secondary chamber



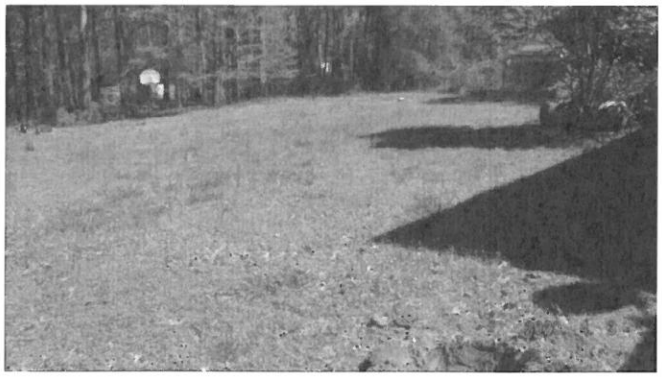
A lower effluent level shown



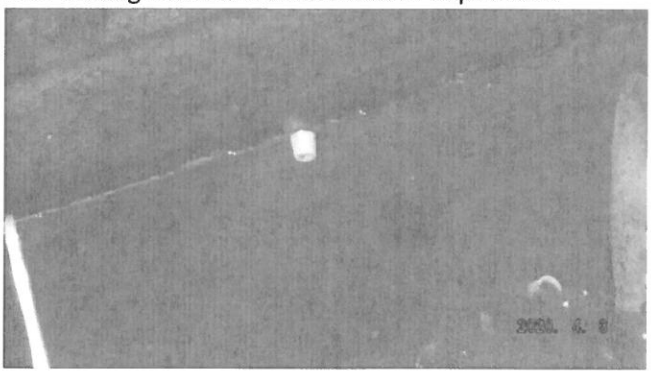
Distribution box lid shown with several large cracks



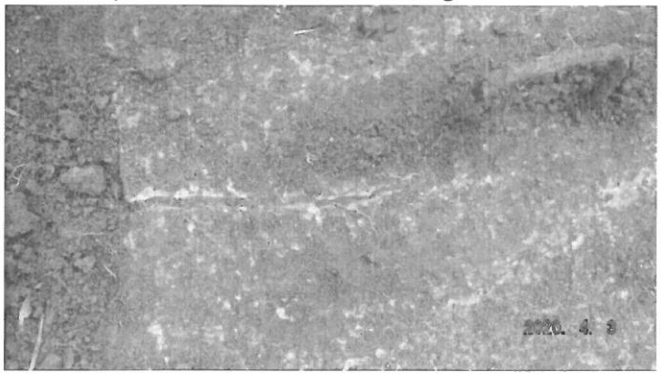
Area of drain field



Non-biodegradables shown inside of septic tank



Secondary chamebr lid shown with large crack



System Type: Conventional Gravity– Gravity feed distribution systems are the most commonly found/used septic systems and utilizes gravity alone to pass wastewater effluent from the septic tank to the drain field.

System Design: Listed as 3 bedrooms – Load requirements have been determined by information determined at the site inspection only – not by information provided on the originally issued installation permit (permit does not specify the number of bedroom or the size of the septic tank).

Kitchen Disposal: Not Installed - **A food waste disposal system is not recommended to be used with a septic system.**
Field Observations: The septic tank is located off the back-left of the house foundation and drain field site grades to the back of the lot at the field location.
Tank location: Approximately 12 feet away from the house.
Tank size: Guesstimated 1000 gallons concrete mid seam - typical in system designs servicing 3-bedroom homes
Water source: Metered Water
Property side setbacks: The septic tank and drain lines (nitrification field) are all visually confirmed as being located more than 10 feet from any properly line.
Repair Area: A repair area for this system is designated on the originally issued permit. A repair area is an area on the property reserved/designated for a future drain field in the event that the originally installed drain field fails.

Description.	Good	Comments	Fair	Poor
Field View (visual only observations) grade of yard	x	Grade to back section of lot per permit		
Rust / Cracks on tank Interior		Not Pumped not inspected		
Outlet		Repair	X	
Upper crust primary*		Non-biodegradables		3"
Upper crust secondary*	0"			
Lower sludge primary*			14"	
Lower sludge secondary*			7"	

*The Health Department recommends the combination of upper crust and lower level sludge to be maintained less than 1/3 the total volume of the primary chamber depth and that the lower level sludge to be more than 3 inches below the inlet to the secondary drain trap. **Preventive maintenance pumping of the septic tank is not considered necessary at this time. Maintenance pumping is recommended to be performed every four to five years.**

Observations & Recommendations:

1) The septic tank was located approximately 12 feet off the back-left of the house foundation. The primary chamber was excavated, opened and inspected. **Accumulated solids were measured as being high but still at an acceptable level.**
Note:

- **The septic tank inlet drainpipe was noted as not fully extending into the septic tank.**
- **Roots were noted as being present around the inlet drainpipe penetration.**
- **Non-biodegradables were noted as being present inside of the septic tank. Non-biodegradables do not decompose inside of the tank and remain in place unless removed. These solids can restrict flow and/or clog the outlet drain and/or drain lines if allowed to remain in the system.**

2) The secondary chamber was excavated, opened and inspected. **The secondary chamber lid was noted as having a large crack.** Accumulated solids were noted as being at an acceptable

level. A repair modification was noted at the outlet drain inside the secondary chamber. The outlet drain repair consists of a retrofitted plastic outlet drain trap assemble. This repair modification was required due to deterioration of the originally installed cement outlet baffle. The PVC (plastic) outlet drain assembly is secure to the tank. **The PVC (plastic) outlet drain assembly which typically incorporates an effluent filter was found not being installed in this system.**

Note:

- **Roots were noted as being present on the backside of the secondary chamber (See photo).**
- **A wire was noted as being placed right above the secondary chamber opening. It I suggested that the wire be relocated to prevent damage to the wire when excavating the secondary chamber.**

3) Water levels under normal conditions inside the septic tank would place the wastewater effluent level at the invert of the outlet drain (the bottom edge of the outgoing drainpipe) and typically, the outgoing drainpipe is installed at a lower elevation inside the septic tank than that of the incoming drainpipe. **The effluent level inside the septic tank was observed being as much as 18" inch lower than what normal conditions would be.** The home would have had to have been vacant for close to 18 months for the current effluent level to be considered attributed to naturally occurring evaporation alone. If this system is not verified as having been inactive for a very long period of time, leaking in the septic tank itself should be considered as the reason for the lower effluent level. The states way to determine if a tank is compromised is by performing a leak checking test in order to verify that structural integrity of the septic tank. Leak checking requires that the effluent level inside the tank needs to be filled back to a normal level and then checked after a 24- hour time period. Only a 1/2" reduction in water level is allowed to be present within this time period. If more than 1/2" in reduced lower effluent levels are present, the tank structural integrity is considered to be compromised and repair/replacement are considered to be required.

4) Probing for the distribution box in the known area of the drain field was successful and the distribution box was located but not opened for a visual inspection. **The distribution box lid was noted as having several large cracks all along the middle and not excavated or removed as it was suspected of breaking if attempted to remove.** The location of the distribution box was marked with an orange flag. A field distribution box distributes equal volumes of wastewater effluents to the typically installed multiple individual drain field lines. The known area of the drain field (the back section of lot per the permit) was walked to inspect for surface water. No evidence of prior or current adverse conditions of wastewater breaching the surface dirt grade was observed at the time of the inspection****but this is mostly inconclusive as the system has been vacant for an unknown period.**

5) The normal aging of this system will decrease the drain field's ability to dissipate wastewater effectively during periods of heavy loading. Over time drain fields will decrease in the effectiveness of dissipating wastewater effluent into the surrounding soils and is a naturally occurring aging process of the system. It should be expected that this system will provide service for as much as fifty years if properly maintained.

6) Limit any/all drive traffic in the known area of the septic tank and drain lines. The drain field works by absorbing water in the soils as well as by some evapotranspiration. The soils beneath the drain field lines need oxygen so that the microbes in the soil can treat the effluent from the drain field. Permanent structures build/placed over a drain field can restrict the oxygen flow into

the soil and will restrict the evapotranspiration process. Additionally, a big risk to placing structures over a drain field or allowing drive trafficking over the drain field is causing the lines to collapse. Also, the soil can compact around the trenches, which may not allow for percolation. Repairing the drain field or moving it may require an entirely new system depending on your system age and the regulations for your local authority. Do not place structures or drive vehicles over the known area of the septic system/drain field.
7) Limit use of the septic system to body waste only. Disposal of female hygiene products, contraceptives, latex gloves baby and facial makeup wipes large amounts of paper products and kitchen waste products or plastic can shorten expected drain field life expectance.
8) For more information about a septic system and the responsibilities associated with it, go to the following web site: http://www.soil.ncsu.edu/publications/Soilfacts/AG-439-13/index.htm

Conditions present at the time of the inspection:

- The septic tank was not pumped at the time of the inspection. It is not possible to inspect or report on physical conditions with regard to the septic tank interior below the wastewater effluent levels or to fully determine the condition of the drain field lines due to being installed below the surface dirt grade.
- The home has been vacant for an unknown period, so the system was not inspected under normal operating conditions. Any speculation about the operating efficiency of the system is inconclusive when the system has been inactive for more than thirty days**

Conclusion:

Septic system was fully evaluated at the time of the inspection. **Adverse** conditions were shown to be present in the system itself that require further evaluation and/or repairs to be made by a qualified contractor or subsequent observation that warrants further evaluation by the local health department**

Adverse Inspection Observations:

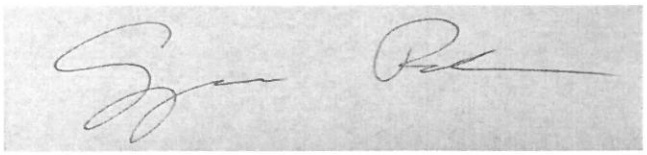
- **The septic tank inlet drainpipe was noted as not fully extending into the septic tank.**
- **Roots were noted as being present around the inlet drainpipe penetration.**
- **Non-biodegradables were noted as being present inside of the septic tank. Non-biodegradables do not decompose inside of the tank and remain in place unless removed. These solids can restrict flow and/or clog the outlet drain and/or drain lines if allowed to remain in the system.**
- **The secondary chamber lid was noted as having a large crack (see photo).**
- **Roots were noted as being present on the backside of the secondary chamber (See photo).**
- **The effluent level inside the septic tank was observed being as much as 18" inches lower than what normal conditions would be.**
    - **Note:** A procedural method of "leak checking" is used to validate the septic tank structural integrity is compromised.
- **The distribution box lid was noted as having several large cracks along the center. Further evaluation/excavation was not completed due to concerns that more extensive damage might occur if an attempt to remove the lid was completed. At minimum the distribution box lid should be replaced with a new one and with**

checking the structural integrity of the entire distribution box should be evaluated to determine if the component warrants repairs.

The following preventative maintenance suggestions are recommended to be followed:

- **Preventative maintenance pumping of the accumulated solids is not necessary now but will be within the very near future depending on the demands placed on the system. It is suggested that pumping of the septic tank be provided as a point of sale repair request alone.**
- **A wire was noted as being placed right above the secondary chamber opening. It I suggested that the wire be relocated to prevent damage to the wire when excavating the secondary chamber.**
- Keep the landscape at the septic field location free of large shrubs/trees and mowed. This will prevent root intrusion into the drain lines and help promote transpiration of the effluent being dispersed from the system.
- It is suggested that a preventative maintenance treatment of a root killer be added in the septic system to kill off any root mass intruding into the drain lines. Any products (specified for septic system use) that consist mostly of copper sulfate will kill off existing roots and prevent further root growth from growing in and around the drain lines.

Please note that suggestions are not a "required repair". Suggestions are a means to improve on the system's ability to process wastewater in the home based on more recent requirements mandated in newer system installation or as a personal safety concern alone. Inspections cannot require an older system (even if more recent repairs have been noted) to be brought up to installation standards other than what was require at the time of the original installation and/or noted repairs currently existing in the system. Suggestions are only provided so that the current service provider can be aware of ways to improve/enhance the operation of the existing system in order to extend the useful life of the system.



4/3/2020

NCOWCICB State License # 5035I
North **C**arolina **O**nsite **W**astewater **C**ontractor **I**nspector **C**ertification **B**oard

Disclaimer:

Because of the visual nature of this septic system, it is not possible to inspect or report on physical conditions with regard to the septic tank interior below the waste water effluent levels if the inspection was performed without pumping of the septic tank or the drain field lines due to being installed in the sub surface dirt grade. The inspector can only address those areas that are readily accessible at the time of the inspection. A septic system inspection is a "snapshot" of the system at the time of the inspection; it is designed to educate a buyer or seller about the system, not to replace the obligation of a home seller to disclose known defects. Observations made may require speculation on the part of the inspector in the analysis of how the system has been provided for and what the expectations of the system may be. A septic system inspection is not a guarantee or warranty of the condition of the system; neither is it a guarantee that conditions will not change in the future. Advantage does not make any representation to the "life expectancy" of the tank or the system. Our inspection is based on a one-time field observation and recommendation. We recommend that appropriately licensed professionals carry out all repairs. Your real estate contract may include this as a stipulation as well. We also recommend that the buyer retain all repair work orders, receipts and guarantees for future reference. If Advantage Inspection performs are inspection of the system after repairs are completed, the

repair work orders, and receipts must e made available to the inspector at the time of the re inspection. Some repairs, such as back flushing of the septic drain lines, cannot be confirmed visually, and at times the repair receipts are the only indication of the nature and suitability of the repair. Please ensure that relevant repair receipts will be available for view by your septic system inspector during the re inspection, if asked to perform.

*This evaluation/inspection meets the requirements of the state and local environmental health service agencies with respect to required observations and/or notation of limitations present at the time of the inspection.

** Only an official of Environmental Health Services Department can qualify a system as being failed.

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

October 18, 2019
Project #836

Benton W. Dewar and Associates
Professional Land Surveyor
5920 Honeycutt Road
Holly Springs, NC 27540

RE: Preliminary soil/site evaluation for the recombination survey for Coy Jones located at 5269 Cokesbury Road in Harnett County, NC.

Mr. Dewar,

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 sketched the boundary between the suitable soils and unsuitable soils onto preliminary plat map of the property supplied by Benton W. Dewar and Associates, Professional Land Surveyor. The suitable soils shown on the accompanying soil map are suitable for conventional type septic systems.

At the time of evaluation, the lot contained an occupied single-family dwelling serviced by a gravity septic system. There was not sign of any septic system failure. Additionally, the recombined lot would allow for greater than 8,000 ft^2 of provisionally suitable soil that could be used for a septic system repair should a repair be needed in the future.

The specific septic system and loading rate for the lot will be permitted by the Harnett County Health Department. The areas for the proposed septic field shall not be impacted by home sites, pools, garages and shall not be mechanically altered from the natural lay of the land.

The lot will require a detailed soils evaluation by the Harnett County Health Department prior to issuance of any permits for a repair septic system. A septic system design/ layout may be required before a permit can be issued on the above referenced lot demonstrating available space for the repair septic areas. I can offer these services if requested. Due to the subjective nature of the permitting process and the variability of naturally occurring soils, Adams Soil Consulting cannot guarantee that areas delineated as suitable for on-site wastewater disposal systems will be permitted by the governing agency. The accompanying soil map is

preliminary in nature, no further assumptions or subdivision should be made without a more detailed evaluation. Please give me a call if you have any questions. If you have any questions regarding the findings on the attached map or in this report, please feel free to contact me anytime. Thank you allowing me to perform this site evaluation for you.

Sincerely,

Alex Adams
NC Licensed Soil Scientist #1247
Encl: Soil Map

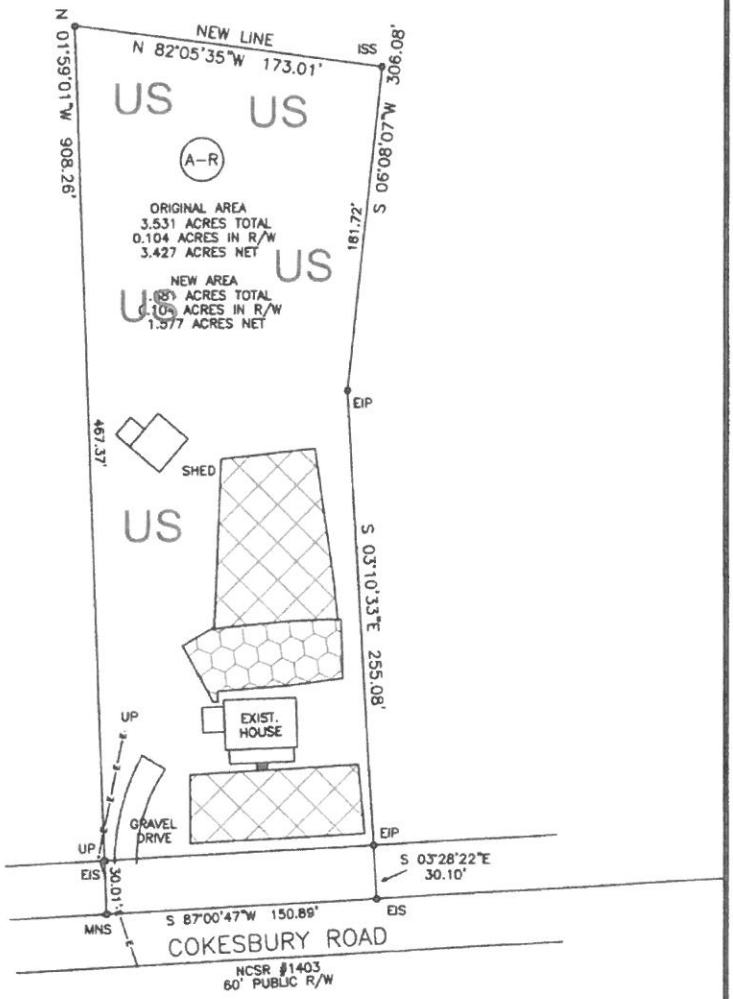
Preliminary Soils Evaluation
Coy Jones
5269 Cokesbury Road
Harnett County, NC

Legend

Areas contain soils with 30 inches or more of useable material and have potential for conventional, modified conventional, LPP or ultra-shallow conventional septic systems. There may be inclusion of soils 24-29 inches to a restrictive horizon that will have potential for LPP septic systems.

Approximate location of existing gravity septic system.

US Unsuitable areas or areas not evaluated



LICENSED SOIL SCIENTIST
ALEX A. ADAMS
1247
STATE OF NORTH CAROLINA

*Preliminary Soils Evaluation
*Soil boundary was sketched onto a preliminary map of the property supplied by the client's surveyor.
*Not a Survey.
*Septic system setbacks listed below for new lots.
1) 10' from property lines.
2) 100' from wells for primary systems.
3) 50' from surface waters (streams, ponds, lakes).
*Any mechanical disturbances such as grading, cutting and filling of the suitable soil areas can render areas unsuitable for future septic systems.
*See accompanying report for additional information.
*Due to Soil Variability, Adams soil consulting cannot guarantee that the areas shown as suitable will be permitted by the local Health Department.

*Not a Survey
(sketched from a Preliminary Plat)

GRAPHIC SCALE
1" = 100'

100 0 100 200

Adams
Soil Consulting
919-414-6761
Project #836