



Application for Services

This application, in conjunction with the common form established in G.S. 130A-335(a3) and (a5), is optional for local health departments to be used for applications submitted in accordance with G.S. 130A-335(a2), (a3), and (a5). [hereinafter, G.S. 130A-335(a3) and (a5) permits referred to as (a2) Improvement Permit and (a2) Construction Authorization]

Applying for:

- (a2) Improvement Permit (a2) Construction Authorization (a2) Repair/Construction Authorization

If applying for a Construction Authorization, please indicate desired system type(s):

- Accepted Conventional Innovative Other Any

- New Construction Expansion System Relocation Change of Use Repair
5-Year Expiration Requested (site plan provided) Non-Expiring Permit Requested (plat provided, defined in G.S.130A-334(7a)
Requesting DHHS review? (systems >3000 GPD or IPWW) Yes No

Applicant: Alan Williams
Mailing Address: 810 W. Ketchie Street
City: China Grove
State: NC Zip: 28023
Phone #: 239-537-5011
Email: abwrbw@gmail.com

Owner: Alan Williams
Mailing Address: 810 W. Ketchie Street
City: China Grove
State: NC Zip: 28023
Phone #: 239-537-5011
Email: abwrbw@gmail.com

If the answer to any of the following questions is "yes", applicant must attach supporting documentation.
Does the site contain any jurisdictional wetlands?
Is any wastewater going to be generated on the site other than domestic sewage?
Is the site subject to approval by any other public agency?
Are there any easements or right of ways on this property?

I understand that the documentation and fees, as required in G.S. 130A-335(a2), (a3), (a5), and (a6), attached to this application are to be used to issue an Improvement Permit and/or Construction Authorization pursuant to G.S. 130A-335(a2),(a3), and (a5). I understand that authorized county and state officials are granted right of entry to the property indicated on this application to conduct necessary inspections to determine compliance with applicable laws and rules. I understand that if the information in the application for an Improvements Permit and/or Construction Authorization is falsified, changed, or the site is altered, then the Improvement Permit and Construction Authorization shall become invalid.
Applicant Signature: Date: Jan 29, 2024
Owner's Signature: Date: Jan 29, 2024



NC DEPARTMENT OF HEALTH AND HUMAN SERVICES

ROY COOPER • Governor
KODY H. KINSLEY • Secretary
MARK BENTON • Chief Deputy Secretary for Health
SUSAN KANSAGRA • Assistant Secretary for Public Health
Division of Public Health

Submittal Includes: [x] (a2) Improvement Permit [x] (a2) Construction Authorization [] Fee \$ _____

IMPROVEMENT PERMIT FOR G.S. 130A-335(a2)

County: Rowan

PIN/Lot Identifier: 114 152

Issued To: Alan Williams

Property Location: 1140 Miller Road, China Grove, NC 28023

Subdivision (if applicable) _____ Lot #: _____ Block: _____ Section: _____

LSS Report Provided: Yes [x] No []

If yes, name and license number of LSS: Larry Thompson, LSS

New [x] Expansion [] System Relocation [] Change of Use []

Facility Type: Single-Family Residence

Number of bedrooms: 3 Number of Occupants: 6 Other: _____

Design Wastewater Strength: [x] Domestic [] High Strength [] Industrial Process Wastewater

Proposed Design Daily Flow: 360 GPD Proposed LTAR (Initial): 0.3 Proposed LTAR (Repair): 0.3

Proposed Wastewater System Type*: Gravity Flow Accepted Type IIb (Initial) Pump Required: [] Yes [x] No [] May be required

Proposed Wastewater System Type*: Gravity Flow Accepted Type IIb (Repair) Pump Required: [] Yes [x] No [] May be required

*Please include system classification for proposed wastewater system types in accordance with Rule .1301 Table XXXII

Effluent Standard: [x] DSE [] HSE [] NSF/ANSI 40 [] TS-I [] TS-II [] RCW

Saprolite System (Initial): [] Yes [x] No Saprolite System (Repair): [] Yes [x] No

Fill System (Initial): [] Yes [x] No If yes, specify: [] New [] Existing (when adding more than 6 inches of fill to system area provide a fill plan)

Fill System (Repair): [] Yes [x] No If yes, specify: [] New [] Existing (when adding more than 6 inches of fill to system area provide a fill plan)

Usable Depth to LC (Initial)*: 39 Usable Depth to LC (Repair)*: 39 * Limiting Condition

Max. Trench Depth (Initial)*: 27 Max. Trench Depth (Repair)*: 27 * Measured on the downhill side of the trench

Artificial Drainage Required: [] Yes [x] No If yes, please specify details: _____

Type of Water Supply: [x] Private well [] Public well [] Shared well [] Municipal Supply [] Spring [] Other: _____

Drainfield location meets requirements of Rule .0508: Yes [x] No [] Drainfield location meets requirements of Rule .0601: Yes [x] No []

Permit valid for: [x] 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: Larry Thompson, LSS

Licensed Soil Scientist Signature: _____ Date: 01-29-24

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: _____ 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:

Copies of this were sent to the LSS and the Applicant 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 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 15A NCAC 18E 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

Re-submittal of Improvement Permit

LHD USE ONLY: This IP resubmittal received: _____ by _____
Date *Initials*

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:

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 _____
Date

State Authorized Agent: _____ Date: _____

Complete

State Authorized Agent: _____ Date: _____



Permit/File #: _____

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

County: Rowan

Pre-Construction Conference Required: Yes No

PIN/Lot Identifier: 114 152

Issued To: Alan Williams

Property Location: 1140 Miller Road, China Grove, NC 28023

AOWE/PE Plans/Evaluations Provided: Yes No If yes, name and license number of AOWE/PE: Larry Thompson (AOWE 10016E)

Facility Type: Single-Family Residence

Number of bedrooms: 3 Number of Occupants: 5 Other: _____

New Expansion Repair System Relocation Change of Use

Basement? Yes No Basement Fixtures? Yes No

Crawl Space? Yes No Slab Foundation? Yes No

Type of Wastewater System* Gravity Flow Accepted Type IIb (Initial) Gravity Flow Accepted Type IIb (Repair)

**Please include system classification for proposed wastewater system types in accordance with Rule .1301 Table XXXII*

Design Daily Flow: 360 GPD Wastewater Strength: Domestic High Strength Industrial Process WW

Session Law 2014-120 Section 53, Engineering Design Utilizing Low-flow Fixtures and Low-flow Technologies? Yes No
(if yes, please provide engineering documentation)

Effluent Standard: DSE HSE NSF/ANSI 40 TS-I TS-II RCW

Type of Water Supply: Private well Public well Shared well Municipal Supply Spring Other: _____

Installation Requirements/Conditions

Septic Tank Size: 1,000 gallons Total Trench/Bed Length: 300 feet Trench/Bed Spacing: 9 feet on center

Trench/Bed Width: 36 inches LTAR: 0.3 gpd/ft² Usable Depth to LC (Initial)*: 39 ^{xLimiting condition}

Soil Cover: 6 inches Slope Corrected Maximum Trench/Bed Depth*: 27 inches ^{* Measured on the downhill side of the trench}

Pump Tank Size (if applicable): N/A gallons Requires more than 1 pump? Yes No

Pump Requirements: _____ ft. TDH vs. _____ GPM Grease Trap Size (if applicable): N/A 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 [.0204(g)]: Yes No Declaration of Restrictive Covenants: Yes No

Easement, Right-of-Way, or Encroachment Agreement Required [.0301(b)]: Yes No

Management Entity Required: Yes No Minimum O&M Requirements: _____

Permit conditions:

The requirements of 15A NCAC 18E are incorporated by reference into this permit and shall be met. Systems shall be installed in accordance with the attached site sketch. ***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 15A NCAC 18E, or 15A NCAC 18A-1900, as applicable, and to the conditions of this permit.

AOWE/PE Print Name: Larry Thompson, LSS, AOWE

AOWE/PE Signature: _____ Date: 01-29-24

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

See attached site sketch

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 required.)

The following items are missing: _____

Copies of this were sent to the AOWE/PE and the Applicant on _____
Date

State Authorized Agent: _____ Date: _____

Complete

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

Re-submittal of Construction Authorization

LHD USE ONLY: This CA resubmittal received: _____ by _____
Date *Initials*

The following items are being resubmitted pursuant to G.S. 130A-335(a5) for issuance of the Construction Authorization:

I, _____ hereby attest that the information required to be included with this re-submittal
Authorized Onsite Wastewater Evaluator (Print Name)
is accurate and complete to the best of my knowledge and that the proposed Construction Authorization meets all applicable federal, State, and local laws, regulations, rules, and ordinances.

Signature of Authorized On-Site Wastewater Evaluator *Date*

The section below is for Local Health Department use after submittal of items noted as missing above.

LHD Follow-up Completeness Review of Construction Authorization

The review for completeness of this Construction Authorization re-submittal 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 required.)

The following items are missing:

Copies of this were sent to the AOWE/PE and the Applicant on _____
Date

State Authorized Agent: _____ Date: _____

Complete

State Authorized Agent: _____ Date: _____

DOCUMENTATION TO AUTHORIZE AN OWNER'S LEGAL REPRESENTATIVE

Applications for permits require the "signature of the owner or owner's legal representative" (15A NCAC 18A .1937). If the owner does not sign the application himself or herself, they can submit any one of the following documents to designate their legal representative:

- 1. Power of Attorney
- 2. Real Estate Contract
- 3. Estate executor
- 4. Bankruptcy trustee
- 5. Court ordered guardianship

In the absence of the above documentation, the property owner may provide the local health department with documentation that designates a legal representative. A property owner may:

- 1. Complete this form to document his or her legal representative, or
- 2. Provide their own form that contains the information in this form.

If there are multiple property owners, then all property owners must sign the form that designates a legal representative.



By signing a form that designates a legal representative for purposes of ISA NCAC 18A .1937, the property owner authorizes that representative to act on their behalf in matters pertaining to the application and permitting process, including signing or receiving any application, document or permit. The owner retains full responsibility to meet all permit conditions specified by the local health department.

I, Alan Williams, am the legal owner(s) of the property located at 1140 Miller Road, China Grove, NC 28023, identified as PIN (Parcel Identification Number) 114 152, located in Rowan County, North Carolina.

I do hereby authorize (print legal representative/company name) Larry Thompson, LSS Thompson Environmental Consulting, Inc., to act as an agent on my behalf in applying for/signing/obtaining any of the documents described below.

- Application for Improvement Permit (IP) / Authorization to Construct (AC)
- Improvement Permit (IP) / Authorization to Construct (AC)
- Application for soil site evaluation (new/repair)
- Application/permit for private drinking water well/well abandonment
- Application for Compliance Inspection

I agree to abide by all decisions and/or conditions between the legal representative acting on my behalf and the Rowan County Department of Public Health, Environmental Health Division.

 <small>Alan Williams (Jan 29, 2024 10:37 EST)</small>	<u>Jan 29, 2024</u>	 <small>Angela Thompson (Jan 30, 2024 19:06 EST)</small>	<u>Jan 30, 2024</u>
Signature of Owner(s)	Date	Signature of Witness	Date

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).

**Residential Subsurface Wastewater
Treatment and Disposal System G.S. 130A-335(a2) Proposal**

for

**1140 Miller Road
China Grove, NC 28023**

Tax Parcel Number: 114 152
January 28, 2024

Prepared for:

Alan Williams
810 W. Ketchie Street
China Grove, NC 28023
239-537-5011



Prepared by:

Larry Thompson, REHS, LSS
Thompson Environmental Consulting, Inc.
PO Box 541
Midland, NC 28107-0541
Phone: 704-301-4881
larry@thompsonenv.com



Project Specifics

The following wastewater treatment and disposal system G.S. 130A-335(a2) proposal is submitted to Rowan County Environmental Health (RCEH) at the request of Alan Williams, who proposes to construct a new 3-bedroom single family residence at 1140 Miller Road, China Grove, North Carolina. The residence will be served by a private well.

Based upon a soil and site evaluation performed by TEC, it was determined that a sufficient amount of "Suitable" Group IV soils are available for the installation and repair of a **Gravity Flow Accepted System** for a 360 gallon-per-day residence at a 0.3 GPD/sq/ft long-term acceptance rate (LTAR).

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), and 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).

Location

From Salisbury, take US-29 S. to Grace Church Road. Turn right onto Grace Church Road, and left onto Miller Road. Property is located on the right in 1.8 miles.

References

Laws and Rules for Sewage Treatment and Disposal Systems, 15A NCAC 18E, Department of Environment and Natural Resources, Division of Environmental Health, On-Site Wastewater Section, January 1, 2024.

Accepted Wastewater System No. AWWWS-2005-02-R6; North Carolina Department of Environment and Natural Resources, Division of Environmental Health, On-Site Wastewater Section, August 21, 2015.

Primary Investigator's Credentials

NC Registered Sanitarian No. 1208
NC Licensed Soil Scientist No. 1287
NC Authorized Onsite Wastewater Evaluator No. 10016E
SC Certified Professional Soil Classifier No. 111
NC Subsurface Septic System Operator No. 22199
NC Grade IV Wastewater System Installer No. 1762
NC Certified Wastewater System Inspector No. 17621

Plans and Specifications

A. Septic Tank

1. The septic tank shall be state approved, watertight, structurally sound, and a minimum of 1,000 gallons in capacity.
2. The septic tank shall be fitted with an approved effluent filter.
3. It is the responsibility of the septic contractor to thoroughly inspect the septic tank prior to accepting delivery to assure that the tanks have had time to properly cure and are free of cracks or other structural deficiencies.
4. Plumbing outfall from the house should be held as high as practical to avoid the need for a pump.

B. Pipe, Fittings and Supply Line

1. All discharge piping, connectors, and supply lines should be made of SCH 40 PVC and fitted with pressure-rated couplings.
2. All joints must be properly “welded” utilizing the appropriate PVC cement for each application.

C. Distribution Method

1. Individual drainlines shall be fed via a distribution box.
2. Distribution box shall be water tested for equal flow at the time of the final inspection.

D. Drainfield Installation

1. The drainfield has been previously laid out on-site utilizing metal stemmed flags. The property owner/builder should mark this area and isolate it as much as possible from construction traffic
2. Under no circumstances shall any construction take place within the drainfield area while the soil is in a wet condition.
3. The specified system is an accepted wastewater system, specifically the Infiltrator Quick 4 chamber system or any other system with a state-approved 25% reduction in required drainline length.
4. **The drainfield consists of four (4) lateral trenches 3-foot wide by 75-ft long. The total trench length is 300 feet.**
5. **The maximum trench depth for this system shall be 27 inches.**
6. The laterals are to be installed on contour with the land, keeping the individual trench bottoms level from beginning to end.
7. The trenches should be left open for a final inspection by the health department.

E. Final Landscaping

1. The final soil cover over the drainfield shall be a minimum of 6 inches deep.
2. The drainfield shall be shaped to shed rainwater and be free from low spots.

3. The drainfield area should be planted with grass as soon as possible to prevent erosion. The soil should be properly tilled, limed (if necessary) and fertilized prior to planting. After applying grass seed, the area should be heavily mulched with straw or other suitable material.

Maintenance

F. In General

1. The homeowner must maintain the drainfield area through periodic mowing. The drainfield must not be allowed to become overgrown.
2. The septic tank should be pumped every 4 years or when the solids within the septic tank reach an elevation equivalent to 25 percent of the tank's volume. In some situations, the tanks may need to be pumped more frequently. If using a garbage disposal, it is recommended that the homeowner has the septic and pump tanks cleaned out annually.
3. When cleaning the effluent filter, the filter should be removed, and the accumulated debris will be washed back into the septic tank – not onto the lawn.
4. Any damp areas, leakages, or malfunctions in the drainfield area should be addressed immediately.
5. Divert gutter downspouts and surface water runoff away from the septic and pump tanks.

Design Specifics

Daily Design Flow:	360 GPD – 3 bedroom house
Septic Tank Size:	1,000 Gallons (minimum)
Effluent Loading Rate:	0.3 GPD per sq. ft.
Drainfield Type:	Accepted (25% Reduction)
Distribution Method:	Distribution Box
Number of Trenches:	(4) 3-ft Wide x 75 Feet Long
Total Trench Length:	300 Linear Feet
Maximum Trench Depth:	27 Inches
Required Soil Cover:	6 Inches

Repair Option

Effluent Loading Rate:	0.3 GPD per sq. ft.
Drainfield Type:	Accepted (25% Reduction)

1140 Miller Road

Required Linear Footage:	300 Linear Feet
Available Linear Footage:	302 Linear Feet
Maximum Trench Depth:	27 Inches
Final Soil Cover Requirement:	6 Inches

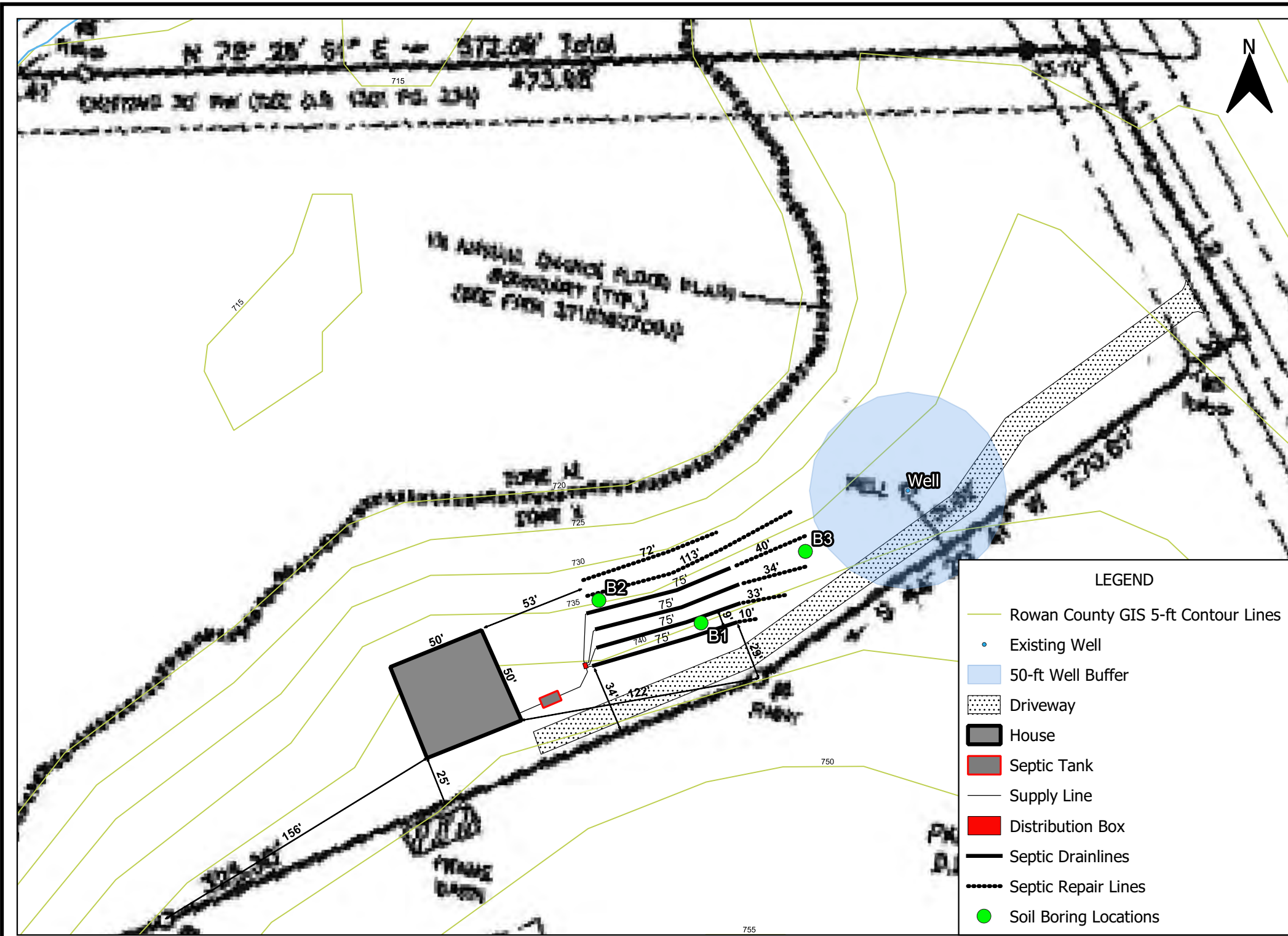


FIGURE 1

Prepared For:
Alan Williams

Proposed Septic Layout

Rowan Parcel: 114 152
1140 Miller Road
China Grove, NC 28023

Rowan County



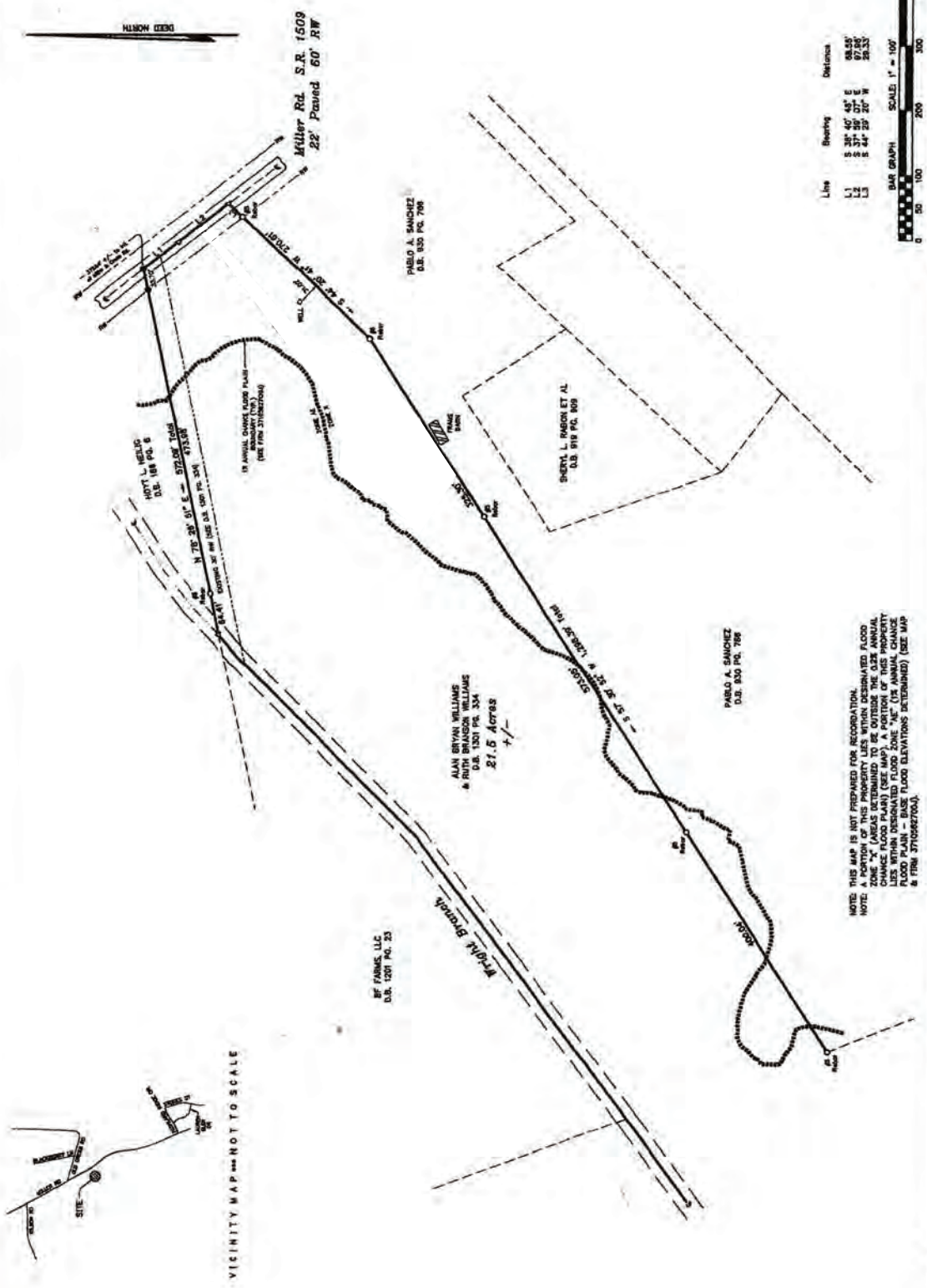
TEC Job No.
24-08

Date:
January 2024





VICINITY MAP NOT TO SCALE



Line	Bearing	Distance
L1	S 28° 47' 45" E	98.53'
L2	S 37° 25' 27" E	97.25'
L3	S 44° 25' 20" N	25.32'



PARTIAL PROPERTY SURVEY FOR:
Alan Bryon Williams & Ruth Branson Williams

SCALE: 1" = 100'
 DATE: 5-2-2018
 COUNTY: NORTH CAROLINA
 DISTRICT: 101
 SHEET: 101 OF 101

BY: RICHARD L. SHULDSBURGER, P.L.L.C.
 DATE: 5-2-18

LEGEND:
 Existing Stone
 New Cont. Mon.
 Ex. Iron Cont. member
 New Iron (6" dia)
 Point (not set)
 Ex. Nail
 Cont. Iron
 Right-of-Way

Surveyor's Certificate:
 I certify that this map was prepared under my supervision and that the description recorded in Book 1307, Page 3347, of the Surveys for Record is a true and correct description of the land shown thereon. The standards of accuracy are 1:10,000; and that this map meets the requirements of the Standards of Practice for Land Surveying in North Carolina (21 NCAC 06.18007) This is the day of May, 2018.

Richard L. Shuldsburger, P.L.L.C.

Thompson Environmental Consulting, Inc.

PO Box 541
Midland, NC 28107

Sheet 1 of 1

PROPERTY ID #: 141132
COUNTY: Rowan

**SOIL/SITE EVALUATION
for ON-SITE WASTEWATER SYSTEM**

OWNER: Alan Williams
ADDRESS: _____
PROPOSED FACILITY: Res PROPOSED DESIGN FLOW (.1949): 360 gpd
LOCATION OF SITE: 1140 Miller Road
WATER SUPPLY: Private Public Well Spring Other _____
EVALUATION METHOD: Auger Boring Pit Cut

DATE EVALUATED: 1-5-24
PROPERTY SIZE: 20.55 ac
PROPERTY RECORDED: _____

TYPE OF WASTEWATER: Sewage Industrial Process Mixed

P R O F I L E #	.1940 LANDSCAPE POSITION/ SLOPE %	HORIZON DEPTH (IN.)	SOIL MORPHOLOGY (.1941)		OTHER PROFILE FACTORS				PROFILE CLASS & LTAR
			.1941 STRUCTURE/ TEXTURE	.1941 CONSISTENCE/ MINERALOGY	.1942 SOIL WETNESS/ COLOR	.1943 SOIL DEPTH	.1956 SAPRO CLASS	.1944 RESTR HORIZ	
1	LS 15%	0-6	SBK/CC	FR/SS/SP/CL	-	1/8"	-	-	S 0.3
		6-35	SBK/CC	FR/SP/CL					
		35-48	SBK/CC	FR/SS/SP/CL					
2	LS 15%	0-5	SBK/CC	FR/SS/SP/CL	-	1/5"	-	-	S 0.3
		5-33	SBK/CC	FR/SP/CL					
		33-45	SBK/CC	FR/SS/SP/CL					
		45-4	M/L	FR/NS/SP/CL					
3	LS 12%	0-8	SBK/CC	FR/SS/SP/CL	-	1/5"	-	-	S 0.3
		8-36	SBK/CC	FR/SP/CL					
		36-45	SBK/CC	FR/SS/SP/CL					
		45-4	M/L	FR/NS/SP/CL					
4									

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM
Available Space (.1945)	<u>IS</u>	<u>PS</u>
System Type(s)	<u>Accepted</u>	<u>Accepted</u>
Site LTAR	<u>0.3</u>	<u>0.3</u>

OTHER FACTORS (.1946): _____
SITE CLASSIFICATION (.1948): Surbler
EVALUATED BY: L. Thompson
OTHER(S) PRESENT: _____



COMMENTS: _____
The LSS evaluation is being submitted pursuant to and meets the requirements of G.S. 130A-335(a2).
Updated February 2014

LEGEND

LANDSCAPE POSITION	SOIL GROUP	SOIL TEXTURE	CONVENTIONAL LTAR (gpd/ft ²)	SAPROLITE LTAR (gpd/ft ²)	LPP LTAR (gpd/ft ²)	MINERALOGY/ CONSISTENCE		STRUCTURE
						MOIST	WET	
CC (Concave slope)	I	S (Sand)	0.8 - 1.2	0.6 - 0.8	0.4 - 0.6	MOIST	WET	SG (Single grain)
CV (Convex Slope)		LS (Loamy sand)		0.5 - 0.7		Lo (Loose)	NS (Non-sticky)	M (Massive)
D (Drainage way)	II	SL (Sandy loam)	0.6 - 0.8	0.4 - 0.6	0.3 - 0.4	VFR (Very friable)	SS (Slightly sticky)	GR (Granular)
FP (Flood plain)		L (Loam)		0.2 - 0.4		FR (Friable)	S (Sticky)	SBK (Subangular blocky)
FS (Foot slope)	III	SiL (Silt loam)	0.3 - 0.6	0.1 - 0.3	0.15 - 0.3	FI (Firm)	VS (Very sticky)	ABK (Angular blocky)
H (Head slope)		SCL (Sandy clay loam)		0.05 - 0.15**		VFI (Very firm)	NP (Non-plastic)	PR (Prismatic)
L (Linear Slope)		CL (Clay loam)		None		EFL (Extremely firm)	SP (Slightly plastic)	PL (Platy)
N (Nose slope)		SiCL (Silty clay loam)					P (Plastic)	VP (Very plastic)
R (Ridge/summit)		Si (Silt)						
S (Shoulder slope)	IV	SC (Sandy clay)	0.1 - 0.4	0.05 - 0.2	SEXP (Slightly expansive)			
T (Terrace)		SiC (Silty clay)			EXP (Expansive)			
TS (Toe Slope)		C (Clay)						
		O (Organic)	None					

* Adjust LTAR due to depth, consistence, structure, soil wetness, landscape, position, wastewater flow and quality.

**Sandy clay loam saprolite can only be used with advanced pretreatment in accordance with 15A NCAC 18E .1200.

HORIZON DEPTH In inches below natural soil surface

DEPTH OF FILL In inches from land surface

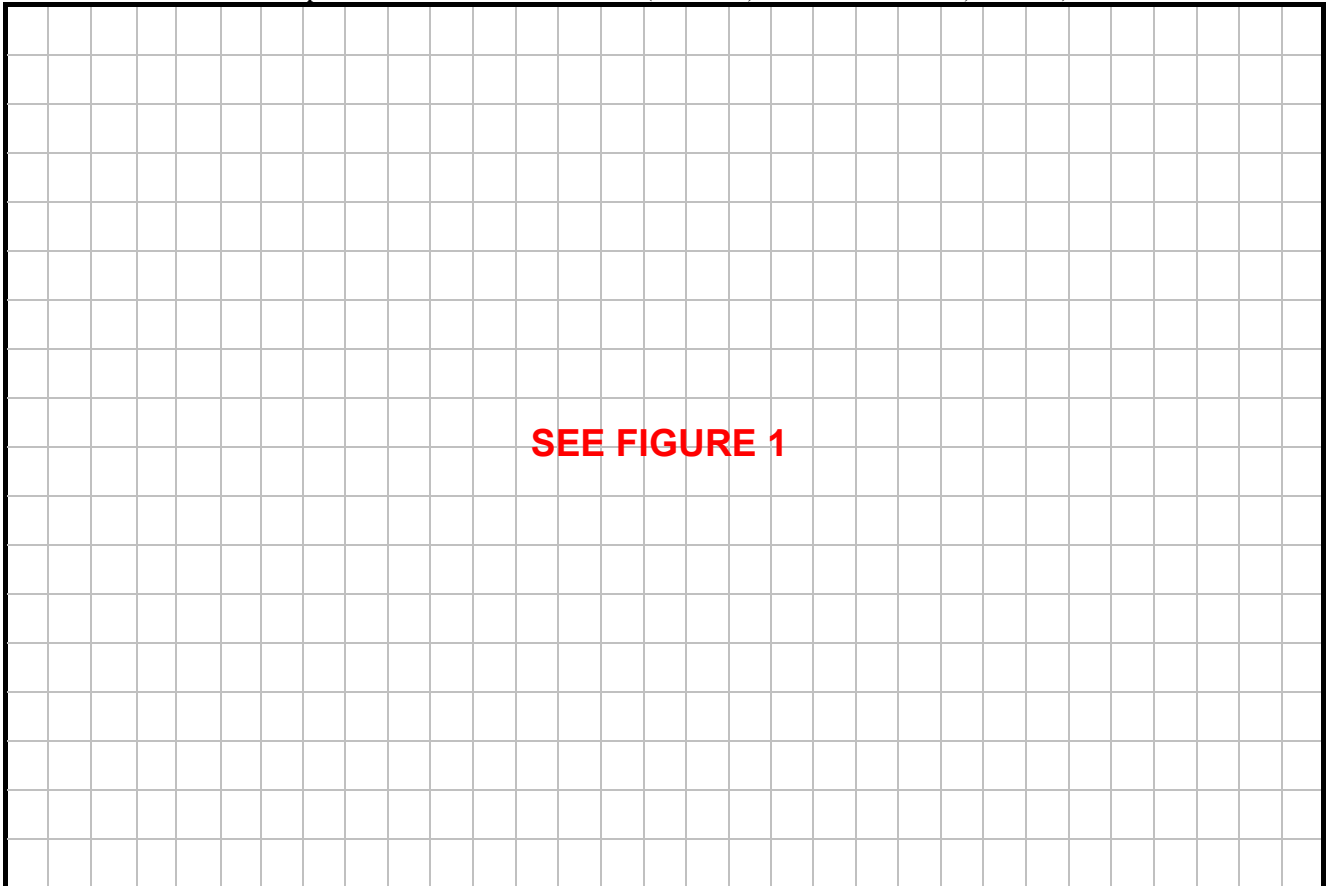
RESTRICTIVE HORIZON Thickness and depth from land surface

SAPROLITE S(suitable) or U(unsuitable); Evaluation of saprolite shall be by pits.

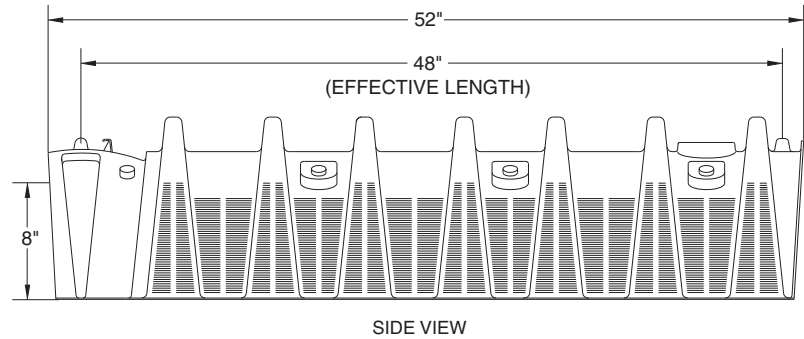
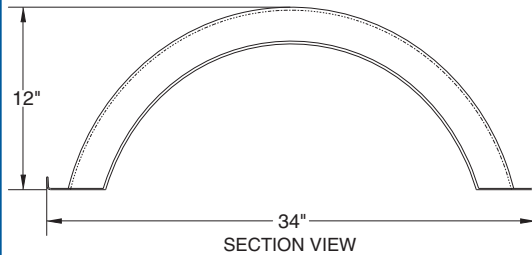
SOIL WETNESS Inches from land surface to free water or inches from land surface to soil colors with chroma 2 or less - record Munsell color chip designation

CLASSIFICATION S (Suitable) or U (Unsuitable)

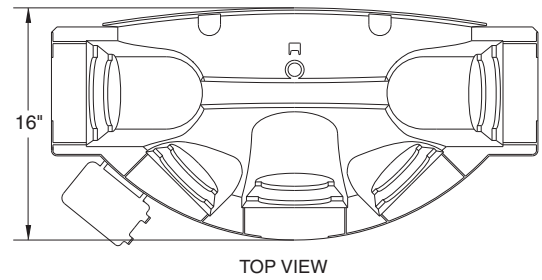
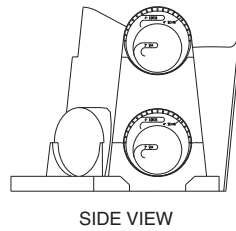
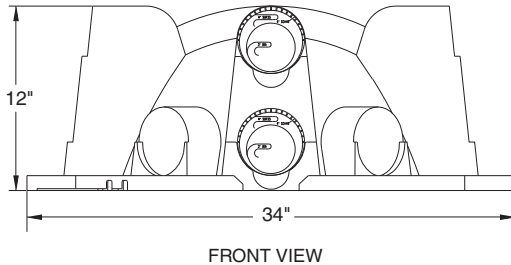
Show profile locations and other site features (dimensions, reference or benchmark, and North).



Quick4 Standard Chamber



MultiPort End Cap



Quick4 Standard Chamber Nominal Specifications

Size (W x L x H)	34" x 52" x 12"
Effective Length	48"
Invert Height	8"

MultiPort End Cap Nominal Specifications

Size (W x L x H)	34" x 16" x 12"
Invert Height	8" or 1.25"

INFILTRATOR SYSTEMS, INC. STANDARD LIMITED WARRANTY

(a) The structural integrity of each chamber, end plate, wedge and other accessory manufactured by Infiltrator ("Units"), when installed and operated in a leachfield of an onsite septic system in accordance with Infiltrator's instructions, is warranted to the original purchaser ("Holder") against defective materials and workmanship for one year from the date that the septic permit is issued for the septic system containing the Units; provided, however, that if a septic permit is not required by applicable law, the warranty period will begin upon the date that installation of the septic system commences. To exercise its warranty rights, Holder must notify Infiltrator in writing at its Corporate Headquarters in Old Saybrook, Connecticut within fifteen (15) days of the alleged defect. Infiltrator will supply replacement Units for Units determined by Infiltrator to be covered by this Limited Warranty. Infiltrator's liability specifically excludes the cost of removal and/or installation of the Units.

(b) THE LIMITED WARRANTY AND REMEDIES IN SUBPARAGRAPH (a) ARE EXCLUSIVE. THERE ARE NO OTHER WARRANTIES WITH RESPECT TO THE UNITS, INCLUDING NO IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

(c) This Limited Warranty shall be void if any part of the chamber system is manufactured by anyone other than Infiltrator. The Limited Warranty does not extend to incidental, consequential, special or indirect damages. Infiltrator shall not be liable for penalties or liquidated damages, including loss of production and profits, labor and materials, overhead costs, or other losses or expenses incurred by the Holder or any third party. Specifically excluded from Limited Warranty coverage are damage to the Units due to ordinary wear and tear, alteration, accident, misuse, abuse or neglect of the Units; the Units being subjected to vehicle traffic or other conditions which are not permitted by the installation instructions; failure to maintain the minimum ground covers set forth in the installation instructions; the placement of improper materials into the system containing the Units; failure of the Units or the septic system due to improper siting or improper sizing, excessive water usage, improper grease disposal, or improper operation; or any other event not caused by Infiltrator. This Limited Warranty shall be void if the Holder fails to comply with all of the terms set forth in this Limited Warranty.

Further, in no event shall Infiltrator be responsible for any loss or damage to the Holder, the Units, or any third party resulting from installation or shipment, or from any product liability claims of Holder or any third party. For this Limited Warranty to apply, the Units must be installed in accordance with all site conditions required by state and local codes; all other applicable laws; and Infiltrator's installation instructions.

(d) No representative of Infiltrator has the authority to change or extend this Limited Warranty. No warranty applies to any party other than the original Holder.

The above represents the Standard Limited Warranty offered by Infiltrator. A limited number of states and counties have different warranty requirements. Any purchaser of Units should contact Infiltrator's Corporate Headquarters in Old Saybrook, Connecticut, prior to such purchase, to obtain a copy of the applicable warranty, and should carefully read that warranty prior to the purchase of Units.

INFILTRATOR®
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Environmental Onsite Wastewater Solutions™

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