

# Harnett County Department of Public Health

## Improvement Permit

A building permit cannot be issued with only an Improvement Permit  
 PROPERTY LOCATION: 1010 Wise Rd

ISSUED TO: Mildred Tart SUBDIVISION \_\_\_\_\_ LOT # \_\_\_\_\_

NEW  REPAIR  EXPANSION  Site Improvements required prior to Construction Authorization Issuance: \_\_\_\_\_

Type of Structure: DWMH (28'x56')

Proposed Wastewater System Type: 25% Reduction System

Projected Daily Flow: 360 GPD

Number of bedrooms: 3 Number of Occupants: 6 max

Basement  Yes  No

Pump Required:  Yes  No  May be required based on final location and elevations of facilities

Type of Water Supply:  Community  Public  Well Distance from well \_\_\_\_\_ feet

Permit valid for:  Five years  No expiration

Permit conditions: \_\_\_\_\_

Authorized State Agent: *REYS* Date: 5/16/22 SEE ATTACHED SITE SKETCH

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. 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.

## Construction Authorization

(Required for Building Permit)

The construction and installation requirements of Rules .1950, .1952, .1954, .1955, .1956, .1957, .1958, and .1959 are incorporated by references into this permit and shall be met. Systems shall be installed in accordance with the attached system layout.

ISSUED TO: Mildred Tart PROPERTY LOCATION: 1010 Wise Rd

SUBDIVISION \_\_\_\_\_ LOT # \_\_\_\_\_

Facility Type: \_\_\_\_\_  New  Expansion  Repair

Basement?  Yes  No Basement Fixtures?  Yes  No

Type of Wastewater System\*\* \_\_\_\_\_ (Initial) Wastewater Flow: 360 GPD

(See note below, if applicable ) \_\_\_\_\_ (Repair)

Installation Requirements/Conditions	Number of trenches _____	
Septic Tank Size _____ gallons	Exact length of each trench _____ feet	Trench Spacing: _____ Feet on Center
Pump Tank Size _____ gallons	Trenches shall be installed on contour at a	Soil Cover: _____ inches
	Maximum Trench Depth of: _____ inches	(Maximum soil cover shall not exceed
	(Trench bottoms shall be level to +/- 1/4"	36" above the trench bottom)
	in all directions)	
Pump Requirements: _____ ft. TDH vs. _____ GPM		Aggregate Depth: _____ inches below pipe
		_____ inches above pipe
		_____ inches total

Conditions: See Attached for all specifications Permit issued under  
SL 2018-114 Section 11.(c)

**WATER LINES (INCLUDING IRRIGATION) MUST BE 10FT. FROM ANY PART OF SEPTIC SYSTEM OR REPAIR AREA.**  
**NO UTILITIES ALLOWED IN INITIAL OR REPAIR DRAIN FIELD AREA.**

\*\*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 Signature: \_\_\_\_\_ Date: \_\_\_\_\_

This Construction Authorization is subject to revocation if the site plan, plat, or the intended use changes. The Construction Authorization shall not be transferred when there is 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. SEE ATTACHED SITE SKETCH

Authorized State Agent: *REYS* Date: 5/16/22  
 Construction Authorization Expiration Date: 5/16/27

# 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


## PROPERTY INFORMATION

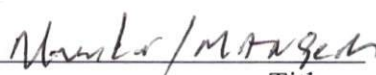
Project Name:	1010 Wise Road
Site Address:	1010 Wise Road, Dunn, NC 28334
S/D Name and Lot#	
PIN:	1536-59-1626.000
Size (Acre)	1.00
County:	Harnett

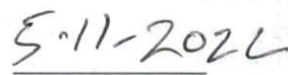
## APPLICANT INFORMATION

Name:	EJ Womack, WOM2 Developers LLC
Mailing Address:	2785 Raven Rock Rd Lillington, NC 27546
Telephone Number:	(919) 775-3600
E-mail Address:	countryfairhomes@mail.com

**The LSS Evaluation attached to this application is to be used to produce, design, and construct features for permitting in accordance with SL 2018-114 Section 11.(c).**

  
Authorized Signature

  
Title

  
Date

(Please legibly print name here: )

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3 May 2022

EJ Womack  
2785 Raven Rock Rd  
Lillington, NC 27546h

Reference: LSS Evaluation (SL 2018-114)  
1010 Wise Road, Dunn, NC; PIN 1536-59-1626.000

Dear Mr. Womack,

Site investigations were conducted in March and April 2022 for the above referenced property, which is located at 1010 Wise Road, Harnett County, North Carolina. The purpose of the investigation was to determine the ability of this lot to support a subsurface sewage waste disposal system and 100% repair area for a typical three-bedroom home. Public water supplies will be utilized.

**This LSS Evaluation is being submitted pursuant to and meets the requirements of SL 2018-114 Section 11.(c).** The evaluation of soil conditions and site features is provided in accordance with G.S. 130A-335. All ratings and determinations were made in accordance with "Laws and Rules for Sewage Treatment and Disposal Systems, 15A NCAC 18A .1900". This report represents my professional opinion as a Licensed Soil Scientist.

## SOIL INVESTIGATION

The soils were evaluated under moist soil conditions through the advancing of auger borings. This property was observed to be underlain by a mixture of soils that range from provisionally suitable to unsuitable for subsurface sewage waste disposal (Figure 1). The soils indicated as provisionally suitable were observed to be friable sandy clay loams and extended to greater than 36 inches below ground surface (see attached soil/site evaluation form). These soils appear adequate to support long-term acceptance rates of 0.45 to 0.6 gal/day/sqft for conventional or accepted status drainlines. The soils indicated as provisionally suitable for drip systems were observed to be firm sandy clays and extended to greater than 18 inches below ground surface (see attached soil/site evaluation form). These soils appear adequate to support long-term acceptance rates of 0.1 gal/day/sqft for subsurface drip dispersal systems. The unsuitable soil area is so rated due to setbacks from surface waters or mechanical disturbances. The ability to utilize alternative systems or make modifications to this area to allow for septic systems is minimal.

## SEPTIC SYSTEM DESIGN

Adequate amounts of usable soils were observed on this lot to support an initial septic system and 100% repair area. An initial septic system has been designed for the proposed single family residence containing three bedrooms and having a design daily flow of 360 gallons. The home does not have a basement. A 900 gallon (at minimum) septic tank and an approved septic effluent filter is required. There appears to be adequate fall from the house to the initial drainfield for a gravity driven system; however, a pump tank (900 gallon at minimum) should be added if gravity distribution cannot be demonstrated. The maximum trench bottom depth is 24 inches below surface.

The initial septic system is proposed as a gravity driven system to 210 linear feet of accepted status drainlines utilizing a 25% reduction in total drainline length. The long term application rate (LTAR) used to design the drainfield was 0.45 gal/day/ft<sup>2</sup>. A distribution box will be used to deliver effluent in parallel distribution to three 70-ft long drainlines installed on contour with maximum trench bottom depths at 24 inches below surface. The third drainline will be composed of two segments (lines 3 and 4 on diagram) connected by a step-down or drop box and totaling 70 feet.

The repair area is designated as a pretreatment subsurface drip disposal system located in the northwestern and northeastern corners. The long term application rate (LTAR) is proposed as 0.1 gal/day/ft<sup>2</sup>. The minimum area required for the disposal field is 3600 square feet. This site appears to have in excess of that. Drip dispersal lines should be installed on contour with maximum trench bottom depths at 6 inches below surface.

Conformance to all regulatory setbacks shall be maintained. The minimum horizontal setback from a septic system to a property line is 10 ft, to a building foundation is 5 feet, and to a water line is 10 feet. All drainlines shall be installed on nine foot centers or greater, as flagged at the site.

Potential septic system drainlines have been demonstrated with various colored pin flags that are located on the lot. **It is important that you do not disturb the septic system area.** It is recommended that a staked line or protective fence be placed around the system prior to construction to eliminate any potential damage to the soil or the layout of the system.

## SYSTEM MAINTENANCE

It is recommended that care be taken to preserve the life of the septic system. The septic tank, pump tank, and distribution boxes should be kept accessible for pumping and adjustment. Your septic system should be inspected periodically and the septic tank pumped out every 3 to 5 years by a professional contractor. Practicing water conservation in the home, such as promptly repairing leaky fixtures and running washing machines and dishwashers only when full, will help to avoid hydraulically overloading the septic system. Also, disposal of oils, fats, and grease into the septic system should be avoided because they could clog drainlines and conveyance pipes. A list of other useful suggestions can be found at <https://content.ces.ncsu.edu/septic-system-owners-guide>.

**CONCLUSION**

The soils on this property appear adequate to support a gravity initial septic system and drip dispersal repair area for a three bedroom residence.

This report and the attached septic system design information will need to be submitted to the Harnett County Health Department for review and the permitting process. I appreciate the opportunity to provide this service and hope to be allowed to assist you again in the future. If you have any questions or need additional information, please contact me at your convenience.



Sincerely,

*Krissina B. Newcomb*

Krissina B. Newcomb

*Hal Owen*

Hal Owen  
Licensed Soil Scientist

SOIL/SITE EVALUATION  
FOR ON-SITE WASTEWATER SYSTEM

APPLICANT: EJ Womack OWNER:  AGENT:  PHONE: (919) 775-3600  
 ADDRESS: 2785 Raven Rock Rd Lillington, NC 27546  
 PROPOSED FACILITY: single family residence PROPOSED DAILY FLOW (.1941): 360 gpd  
 LOCATION OF SITE: 1010 Wise Rd, Dunn PROPERTY SIZE: 1.0 Acres  
 COUNTY: Harnett PROPERTY ID #: 1536-59-1626.000  
 WATER SUPPLY: On-Site Well , Community Well , Public , Other \_\_\_\_\_  
 EVALUATION METHOD: Auger Boring  Pit   
 EVALUATED BY: Hal Owen, LSS 1102, and Britt Wilson DATE EVALUATED: 30 March 2022

**PROFILE 1**

HORIZON	DEPTH (IN)	MATRIX	MOTTLES	MOTTLES ABUNDANCE/ SIZE/CONTRAST	(a)(1) TEXTURE	.1941 (a)(2) STRUCTURE	(a)(3) MINEROLOGY	CONSISTENCE MOIST
A	0-9	10YR 5/4	7.5YR 4/6	f3D	SL	WSBK		Fr
E	9-12	10YR 7/3			SL	WSBK		Fr
B1	12-15	10YR 3/2			SL	WSBK		Fr
B2	15-31	10YR 6/4			SL	MSBK		Fr
Bt1	31-39	10YR 6/6	7.5YR 5/6	c1F	SCL	MSBK		Fi
Bt2	39-48+	10YR 6/6	7.5YR 5/6	m1D	C	MSBK		Fi
			5YR 5/8	f1D				
			2.5YR 5/6	c1P				
			10YR 6/2	c1P				
			10YR 7/1	c1P				
.1940 LANDSCAPE POS./ SLOPE%			<2%	.1956 SAPROLITE CLASS			NA	
.1942 SOIL WETNESS CONDITION			39 inches	.1944 RESTRICTIVE HORIZON			NA	
.1943 SOIL DEPTH			48+	PROFILE CLASSIFICATION & LTAR			0.6- PS	

**PROFILE 2**

HORIZON	DEPTH (IN)	MATRIX	MOTTLES	MOTTLES ABUNDANCE/ SIZE/CONTRAST	(a)(1) TEXTURE	.1941 (a)(2) STRUCTURE	(a)(3) MINEROLOGY	CONSISTENCE MOIST
A	0-11	10YR 5/4			SL	WSBK		Fr
E	11-13	10YR 6/4		f1D	SL	WSBK		Fr
Bt1	13-26	10YR 5/6	2.5YR 4/6	f1d	SC	MSBK		Fi
		c1D	5YR 5/8					
Bt2	26-34	10YR 5/6	2.5YR 4/8	c1P	C	MSBK		Fi
			5YR 5/8	c1D				
			10YR 7/1	c1P				
Bt3	34-42	10YR 7/1	10R 3/6	m1P	C	MSBK		Fi
			5YR 5/8	c1P				
.1940 LANDSCAPE POS./ SLOPE%			<2%	.1956 SAPROLITE CLASS			NA	
.1942 SOIL WETNESS CONDITION			26 inches	.1944 RESTRICTIVE HORIZON			NA	
.1943 SOIL DEPTH			42+	PROFILE CLASSIFICATION & LTAR			0.35- PS mod or alt	

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**PROFILE 3**

HORIZON	DEPTH (IN)	MATRIX	MOTTLES	MOTTLES ABUNDANCE/ SIZE/CONTRAST	.1941			CONSISTENCE MOIST
					(a)(1) TEXTURE	(a)(2) STRUCTURE	(a)(3) MINEROLOGY	
A	0-9	10YR 5/4			SL	WSBK		Fr
E	9-14	10YR 7/3			SL	WSBK		Fr
B1	14-18	10YR 3/2			C	WSBK		Fr
.1940 LANDSCAPE POS./ SLOPE%			<2%	.1956 SAPROLITE CLASS			NA	
.1942 SOIL WETNESS CONDITION			14 inches	.1944 RESTRICTIVE HORIZON			NA	
.1943 SOIL DEPTH			18	PROFILE CLASSIFICATION & LTAR			0.1- PS for drip	

	INITIAL SYSTEM	REPAIR SYSTEM
.1945 AVAILABLE SPACE	1200 sf trench bottom (conventional) 900 sf trench bottom (25% reduction)	3600 sf trench bottom (drip)
SYSTEM TYPE	Accepted status (25% reduction)	Pretreatment drip dispersal
SITE LTAR (gpd/ft <sup>2</sup> )	0.45	0.1

.1946 OTHER FACTORS:

.1948 SITE CLASSIFICATION: Provisionally Suitable

COMMENTS:

**LEGEND OF ABBREVIATIONS FOR SITE EVALUATION FORM**

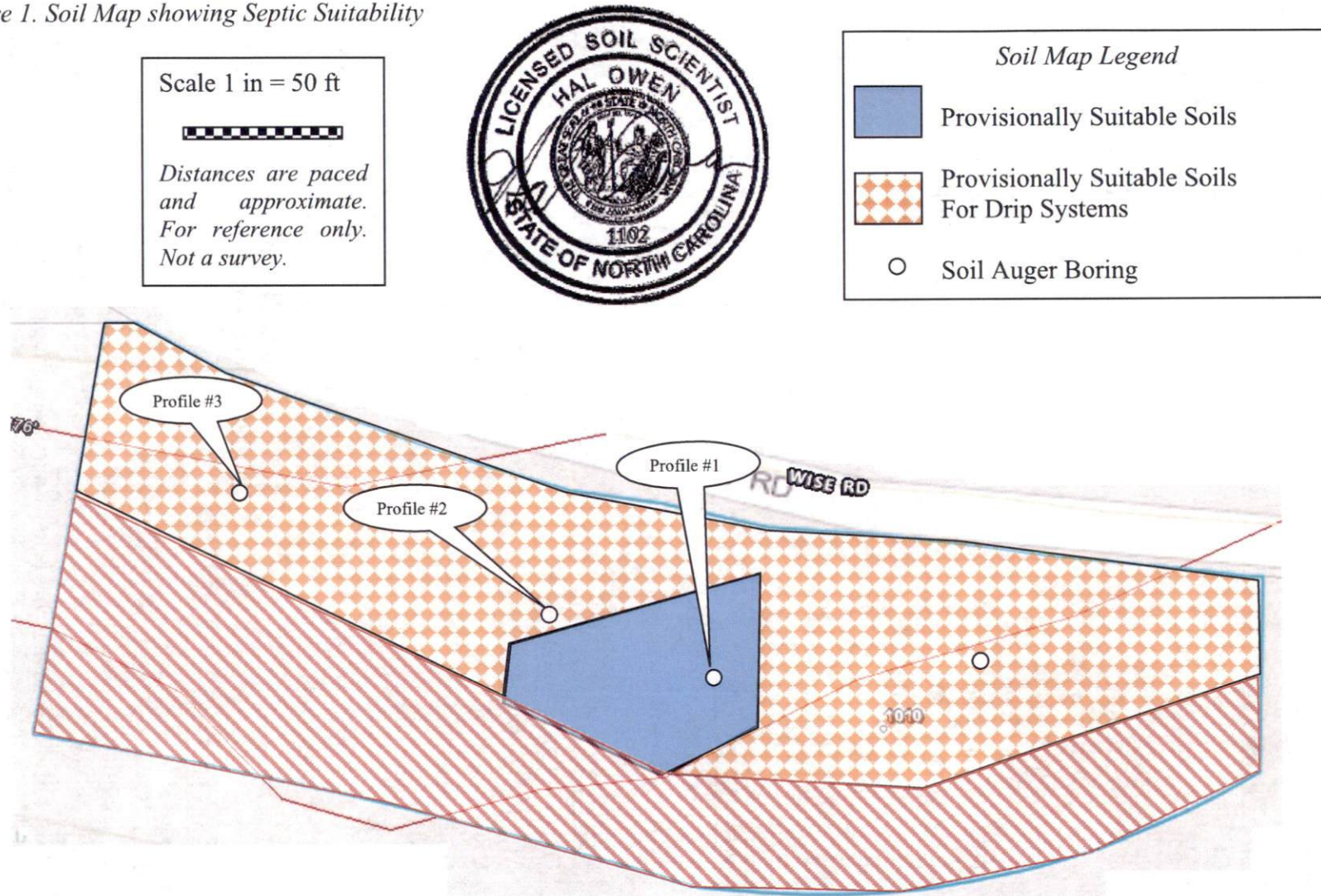
<p><b><u>LANDSCAPE POSITION</u></b>                  CC - Concave Slope                  CV - Convex Slope                  DS - Debris Slump                  D - Depression                  DW - Drainage Way                  FP - Flood Plain                  FS - Foot Slope                  H - Head Slope                  L - Linear Slope                  N - Nose Slope                  R - Ridge                  S - Shoulder Slope                  T - Terrace</p> <p><b><u>MINEROLOGY</u></b>                  SEXP - Slightly Expansive                  EXP - Expansive</p>	<p><b><u>TEXTURE GROUP</u></b></p> <p>I</p> <p>II</p> <p>III</p> <p>IV</p>	<p><b><u>TEXTURE CLASS</u></b></p> <p>S - Sand                  LS - Loamy Sand</p> <p>SL - Sandy Loam                  L - Loam</p> <p>SCL - Sandy Clay Loam                  CL - Clay Loam                  SiL - Silt Loam                  Si - Silt                  SiCL - Silt Clay Loam</p> <p>SC - Sandy Clay                  C - Clay                  SiC - Silty Clay</p> <p>O - Organic</p>	<p><b><u>.1955 LTAR (gal/day/sqft)</u></b></p> <p>1.2-0.8</p> <p>0.8 – 0.6</p> <p>0.6 – 0.3</p> <p>0.4 – 0.1</p> <p>none</p>
	<p><b><u>STRUCTURE</u></b>                  G - Single Grain                  M - Massive                  CR - Crumb                  GR - Granular                  SBK - Subangular Blocky                  ABK - Angular Blocky                  PL - Platy                  PR - Prismatic</p>	<p><b><u>MOIST CONSISTENCE</u></b>                  VFR - Very Friable                  FR - Friable                  FI - Firm                  VFI - Very Firm                  EFI - Extremely Firm</p> <p><b><u>MINERALOGY</u></b>                  NEXP - Non Expansive                  SEXP - Slightly Expansive                  EXP - Expansive</p>	<p><b><u>WET CONSISTENCE</u></b>                  NS - Non Stick                  SS - Slightly Sticky                  MS - Moderately Stick                  VS - Very Sticky</p> <p>NP - Non Plastic                  SP - Slightly Plastic                  MP - Moderately Plastic                  VP - Very Plastic</p>
<p><b><u>MOTTLES</u></b></p> <p>f - few                      1 - fine                      F - Faint                  c - common                2 - medium                D - Distinct                  m - many                    3 - coarse                    P - Prominent</p>			

Give Horizon Depth in inches below natural soil surface and Fill Depth in inches above land surface.  
 Depth to Soil Wetness: inches below land surface to free water or to soil colors with chroma 2 or less.  
 Classification S – Suitable    PS – Provisionally Suitable    U – Unsuitable



LSS Evaluation (SL 2018-114)  
1010 Wise Road, Dunn, NC; PIN 1536-59-1626.000  
3 May 2022

Figure 1. Soil Map showing Septic Suitability




LSS Evaluation (SL 2018-114)  
 1010 Wise Road, Dunn, NC; PIN 1536-59-1626.000  
 3 May 2022

Daily Flow (gal/day)= 360  
 Lines flagged at site on 9-ft centers.

Line #	Color	Relative Elevation (ft)	Drainline Length(ft)
1	W	95.31	70
2	R	95.14	70
3	Y	94.85	41
4	B	94.62	28
<b>Pump Tank:</b>			
<b>Benchmark</b>		<b>100.00</b>	

Scale 1 in = 50 ft



Distances are paced and approximate. For reference only. Not a survey.



**Initial System**

Gravity to 3 X 70ft (X 3ft)  
 Accepted status drainlines (Lines 1-4)  
 (step-down between lines 3 and 4)  
 Installed on contour at 18 to 24 inches  
 LTAR 0.45 gal/day/sqft

**Repair System**

Subsurface Drip Dispersal  
 Installed on contour at 6 inches  
 LTAR 0.1 gal/day/sqft

\*drainlines must be at least 9ft on center, 10ft from property line, 5ft from foundations

Figure 2. Septic system design and layout

