

# Harnett County Department of Public Health

## Improvement Permit

A building permit cannot be issued with only an Improvement Permit

ISSUED TO: KB Home Raleigh PROPERTY LOCATION: Thomas Gage  
 SUBDIVISION Birchwood Grove LOT # 181  
 NEW  REPAIR  EXPANSION  Site Improvements required prior to Construction Authorization Issuance:  
 Type of Structure: SFD (48'x37')  
 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: [Signature] Date: 11/18/22 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: KB Home Raleigh PROPERTY LOCATION: 38 Thomas Gage  
 SUBDIVISION Birchwood Grove LOT # 90  
 Facility Type: SFD (48'x37')  New  Expansion  Repair  
 Basement?  Yes  No Basement Fixtures?  Yes  No  
 Type of Wastewater System\*\* Pump 25% Reduction Sytsem (Initial) Wastewater Flow: 360 GPD  
 (See note below, if applicable ) Pump to 25% Reduction (Repair)

**Installation Requirements/Conditions**

Septic Tank Size <u>1000</u> gallons	Number of trenches <u>1</u>	Trench Spacing: <u>9</u> Feet on Center
Pump Tank Size <u>1000</u> gallons	Exact length of each trench <u>260</u> feet	Soil Cover: <u>6</u> inches
	Trenches shall be installed on contour at a	(Maximum soil cover shall not exceed
	Maximum Trench Depth of: <u>18</u> inches	<u>36"</u> above the trench bottom)
	(Trench bottoms shall be level to +/-1/4"	
	in all directions)	

Pump Requirements: \_\_\_\_\_ ft. TDH vs. \_\_\_\_\_ GPM \_\_\_\_\_ inches below pipe  
 Aggregate Depth: \_\_\_\_\_ inches above pipe  
 Conditions: Permit based on proposal from applicants LSS \_\_\_\_\_ inches total

**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

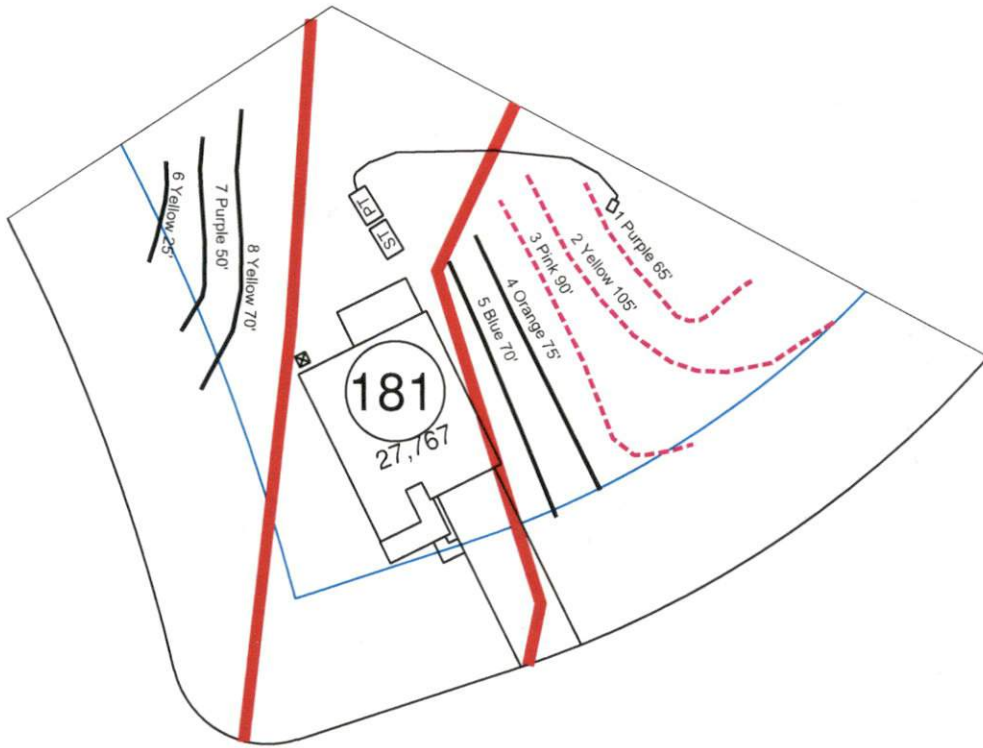
Authorized State Agent: [Signature] Date: 11/18/22  
 Construction Authorization Expiration Date: 11/18/27

# SITE SKETCH

REMS

11/18/22

- \*Keep tanks and drain lines 10' from property lines.
- \*Not a survey.
- \*Not a guarantee of a septic permit.
- \*Keep supply lines >5' from property lines.
- \*Some lines are flagged longer in the field than lengths indicate.
- \*No grading septic area.



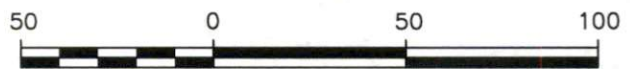
System: - - - - -  
 Repair: ————

System: Pressure Manifold  
 Lines: 1-3, (260')  
 Accepted Status System  
 0.35 Soil LTAR

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Repair: Pressure Manifold  
 Lines: 4-8, (290')  
 Accepted Status System  
 0.35 Soil LTAR

GRAPHIC SCALE  
 1" = 50'



Central Carolina Soil Consulting, PLLC  
 1900 South Main Street, Suite 110  
 Wake Forest, North Carolina 27587  
 Phone (919)569-6704 Fax (919)569-6703

3-Bedroom Septic Layout  
 Lot 181, Birchwood Subdivision  
 Harnett County, North Carolina

Job# : 3753
Drawn By : AH
Date : 11/14/2022
Revision:

**Birchwood S/D Lot 181  
TAP CHART**

Bench Mark			Elevation Head							2.80
Pump tank elev.			100.00	Pump elev.		94.60	Manifold elev.			97.40
line	color	rod read	Elevation	length	hole size	flow/tap	gal/day	trench area	LINE LTAR	
1	Purple	3.60	96.40	65	1/2in SCH 40	7.11	86.15	195	0.4418	
2	Yellow	3.90	96.10	105	3/4in SCH 40	12.5	151.46	315	0.4808	
3	Pink	4.10	95.90	90	3/4in SCH 80	10.1	122.38	270	0.4533	

	<b>total</b>	<b>feet =</b>	<b>260</b>	<b>gal/min =</b>	<b>29.71</b>	<b>LTAR =</b>	<b>0.3500</b>
						<b>LTAR + %5</b>	<b>0.3675</b>
<b>% of Dose Vol.</b>	75	<b>Des. Flow</b>	<b>360</b>			<b>(ltar W/ INOV)</b>	<b>0.4667</b>
<b>Dose Volume</b>	126.75	<b>Pump Run=</b>	<b>12.12</b>			<b>(ltar W/ INOV + 5%)</b>	<b>0.4900</b>
<b>Dose Pump Time</b>	4.27	<b>Tank Gal/IN</b>	<b>20</b>				
<b>Drawdown in Inches</b>	6.34						

**Birchwood S/D Lot 181  
Repair TAP CHART**

Bench Mark			Elevation Head							2.20
Pump tank elev.			100.00	Pump elev.		94.60	Manifold elev.			96.80
line	color	rod read	Elevation	length	hole size	flow/tap	gal/day	trench area	LINE LTAR	
4	Orange	4.20	95.80	75	1/2in SCH 40	7.11	90.00	225	0.4000	
5	Blue	4.60	95.40	70	1/2in SCH 40	7.11	90.00	210	0.4286	
6&7	Y/PU	4.30	95.70	75	1/2in SCH 40	7.11	90.00	225	0.4000	
8	Purple	4.90	95.10	70	1/2in SCH 40	7.11	90.00	210	0.4286	

	<b>total</b>	<b>feet =</b>	<b>290</b>	<b>gal/min =</b>	<b>28.44</b>	<b>LTAR =</b>	<b>0.3500</b>
						<b>LTAR + %5</b>	<b>0.3675</b>
		<b>Des. Flow</b>	<b>360</b>			<b>(ltar W/ Panel)</b>	<b>0.4667</b>
		<b>Pump Run=</b>	<b>12.66</b>			<b>(ltar W/ INOV + 5%)</b>	<b>0.4900</b>
		<b>Tank Gal/IN</b>	<b>20</b>				