**Central Carolina Soil Consulting, PLLC**
**1900 South Main Street, Suite 110, Wake Forest, NC 27587**
**Office Number: 919-569-6704**

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Acknowledgment of Subsurface wastewater evaluation and septic design by Central Carolina Soil Consulting, PLLC. for Greenbrook S/D, Lot 23, for issuance of an IP and CA.

For Improvement Permit (IP) issuance:
**"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)."**

For Construction Authorization (CA) issuance:
**"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)."**

The LSS evaluation attached to this application was used to produce and design a subsurface wastewater septic system for permitting to obtain an IP and CA in accordance G.S. 130A-335(a2), (a3), (a5) and (a6).

Owner or Owner's Representative (print): _____

Owner or Owner's Representative (signature): _____

Date: _____

Permit/File #: _____

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:** ☑ **(a2) Improvement Permit** ☑ **(a2) Construction Authorization** ☐ **Fee $**_____

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

County: Franklin

PIN/Lot Identifier: 1833-81-5632

Issued To: ICG Homes

Property Location: 95 Greenbrook Way,

Subdivision (if applicable) Greenbrook Lot #: 23 Block: _____ Section: _____

LSS Report Provided: Yes ☑ No ☐

If yes, name and license number of LSS: Jason Hall, NC LSS #1248

New ☑ Expansion ☐ System Relocation ☐ Change of Use ☐

Facility Type: Single-Family Dwelling, 4-Bedroom

Number of bedrooms: 4 Number of Occupants: ≤8 Other: _____

Design Wastewater Strength: ☑ Domestic ☐ High Strength ☐ Industrial Process Wastewater

Proposed Design Daily Flow: 480 GPD Proposed LTAR (Initial): 0.3 Proposed LTAR (Repair): 0.3

Proposed Wastewater System Type*: IIb, Accepted (Initial) Pump Required: ☐ Yes ☑ No ☐ May be required

Proposed Wastewater System Type*: IIIe, PPBPS (Vertical) (Repair) Pump Required: ☐ Yes ☑ No ☐ May be required

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

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

Saprolite System (Initial): ☐ Yes ☑ No Saprolite System (Repair): ☐ Yes ☑ No

Fill System (Initial): ☐ Yes ☑ 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 ☑ 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)[x]: 48" Usable Depth to LC (Repair)[x]: 48" ***[x] Limiting Condition***

Max. Trench Depth (Initial)[‡]: 30" Max. Trench Depth (Repair)[‡]: 30" ***[‡] Measured on the downhill side of the trench***

Artificial Drainage Required: ☐ Yes ☑ No If yes, please specify details: _____

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

Drainfield location meets requirements of Rule .0508: Yes ☑ No ☐ Drainfield location meets requirements of Rule .0601: Yes ☑ No ☐

Permit valid for: ☑ 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 JASON M. HALL STATE OF NORTH CAROLINA

Licensed Soil Scientist Print Name: Jason Hall

Licensed Soil Scientist Signature: _____ Date: 04/21/2026

**The LSS evaluation is being submitted pursuant to and meets the requirements of G.S. 130A-335(a2).**

***See attached site sketch***

NC DEPARTMENT OF HEALTH AND HUMAN SERVICES
Division of Public Health

Permit/File #: _____

## *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: _____

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☐ 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***

NC DEPARTMENT OF HEALTH AND HUMAN SERVICES
Division of Public Health

Permit/File #: _____

# 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: _____

# Central Carolina Soil Consulting, PLLC

1900 South Main Street, Suite 110, Wake Forest, NC 27587
Office Number: 919-569-6704


April 21, 2026
Job #5453

ICG Homes
Attention: Mike Resar
4020 Wake Forest Road, Suite 306
Raleigh, NC 27609

RE: Preliminary soil/site evaluation for a single-family dwelling wastewater approval at Greenbrook Subdivision, Lot 23 (4-bedroom) in Franklin County pursuant to and meets the requirements of G.S. 130A-335(a2)."

Dear Mr. Resar:

Central Carolina Soil Consulting, PLLC conducted a preliminary soil evaluation on the aforementioned lot to determine the areas of suitable soils that are suitable for subsurface wastewater disposal systems (conventional, Accepted & Innovative). **"The LSS evaluation is being submitted pursuant to and meets the requirements of G.S. 130A-335(a2)."** The soil/site evaluation was performed using auger borings in April 2026, under dry soil conditions, based on the criteria found in the State Subsurface Rules, 15A NCAC 18E "Wastewater Treatment and Dispersal Systems". From this evaluation, CCSC laid out and located the septic layout and gps'd for site plan drawing purposes. **Please note that the lot lines must be clearly marked by your surveyor prior to system installation by your installer to verify all setbacks before digging.**

**Based on the findings during the field evaluation, the area on the attached map has at least 48 inches (initial) and 48 inches (repair) of suitable soils for a modified conventional septic system. The assigned LTAR for the initial system site is 0.3 gpd/ft$^2$ with a maximum depth of 30 inches on the downhill side of the trench for the initial system installation of the drain lines due to slope correction. The assigned LTAR for the repair system site is 0.3 gpd/ft$^2$ with a maximum depth of 30 inches on the downhill side of the trench for the repair system installation of the drain lines due to slope correction.**

The lot is proposed to have a 4-bedroom system for the house. A septic system field layout was completed based on the house location and property lines surveyed in the field.

The proposed Initial system for the house is a Gravity to serial distribution using lines 6-10 totaling 400 feet accepted product. The repair system for the house is a Gravity to serial distribution using lines 1-5,11-13 totaling 324 feet of T&J Panel Block product (vertical).

**Tanks:** (All tanks must meet requirements set forth in 15A NCAC 18E .0801)
Minimum tank capacities: 1,000 for septic tank with risers. The tank should also have pressed in rubber boots on both the inlets and the outlets of the tank, along with having secondary safety lids or devices on all the openings.

**Septic Installation:**
The septic system for the lot should be installed during dry soil conditions. The septic system should be installed on contour while maintaining all required setbacks. **Lot lines must be clearly marked by your surveyor prior to system installation so your installer can verify all setbacks before digging.**

**Setbacks:** (see septic design page for locations)

- **Septic and Pump Tanks** (see septic design)
  - 10' minimum from property lines
  - 5' minimum from house
- **Septic Lines** (see septic design)
  - 10' minimum from property lines
  - 5' minimum from house
- **Manifold's and D-Box's** (see septic design)
  - 10' minimum from property lines
- **Supply Lines** (see septic design)
  - 5' minimum from property lines
- **Utilities**
  - Water (10' minimum for all septic components)

**Grading:**
No grading should be completed within the initial and repair septic areas that change the natural grade of the area. There should be no cutting or filling within the septic areas as well. When grading the lot, no cuts of 2' or greater should be within 15' of the septic areas. If a cut is required near the septic area, keep the cut around 6-8 inches in depth.

**HOUSE:**

- Initial System: Gravity to Serial Distribution, lines 6-10 totaling 400' (see layout)
- Repair System: Gravity to Serial Distribution, lines 1-5,11-13 totaling 324' (see layout)
- 480 gal/day flow rate (4-bedroom)
- 1,000-gallon septic tank
    - with risers and pressed in rubber boots on both the inlet and outlet ends and a secondary lid in each tank opening
- 30" max trench depth on the downhill side for the Initial System
- 30" max trench depth on the downhill side for the Repair System
- 0.3 LTAR for Initial
- 0.3 LTAR for Repair
- No grading/filling septic areas
- No cuts >2' within 15' of septic areas
- Keep tanks and drain lines 10' from property lines
- Keep supply line >5' property lines
- Install in dry soil conditions
- Maintain natural contours when clearing the lot

This letter discusses the location of provisionally suitable soils for subsurface wastewater disposal systems and does not guarantee the future function of any wastewater system on sites. Central Carolina Soil Consulting, PLLC is a professional consulting firm specializing in soil delineations and designs for on-site wastewater disposal systems.

If you have any questions regarding the findings on the attached map or in this report, please feel free to contact me at any time. Thank you for allowing Central Carolina Soil Consulting to perform this site evaluation for you.

Sincerely,

Jason Hall
NC Licensed Soil Scientist #1248
AOWE certification number 10004E

LICENSED SOIL SCIENTIST
JASON M. HALL
THE GREAT SEAL OF THE STATE OF NORTH CAROLINA
1248
STATE OF NORTH CAROLINA

Encl: Soil Map & septic layout

# Central Carolina Soil Consulting, PLLC

1900 South Main Street, Suite 110, Wake Forest, NC 27587



PROPERTY ID #: 1833-81-5632

COUNTY: Franklin

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

(Complete all fields in full)

OWNER: ICG Homes DATE EVALUATED: 04/17/2026

ADDRESS: 4020 Wake Forest Road, Suite 306 Raleigh, NC 27609

PROPOSED FACILITY: single-family dwelling PROPOSED DESIGN FLOW (.0400): 480 gal/day PROPERTY SIZE: 0.84 Acres

LOCATION OF SITE: 95 Greenbrook Way, (Greenbrook S/D, Lot 23) PROPERTY RECORDED: Yes

WATER SUPPLY: ☑Public ☐Single Family Well ☐Shared Well ☐Spring ☐Other _____ WATER SUPPLY SETBACK: _____

EVALUATION METHOD: ☑ Auger Boring ☐ Pit ☐ Cut TYPE OF WASTEWATER: ☑ Domestic ☐ High Strength ☐ IPWW

| PROFILE # | .0502 LANDSCAPE POSITION/ SLOPE % | HORIZON DEPTH (IN.) | SOIL MORPHOLOGY | | OTHER PROFILE FACTORS | | | | .0509 PROFILE CLASS & LTAR* | .0502(d) SLOPE CORRECTION |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | .0503 TEXTURE/ STRUCTURE | .0503 CONSISTENCE/ MINERALOGY | .0504 SOIL WETNESS/ COLOR | .0505 SOIL DEPTH | .0506 SAPRO CLASS | .0507 RESTR HORIZON | | |
| 1 | L, ~10% | A, 0-6 | SL, GR | VFR, NS, NP | | | | | | 3.6" |
| | | Bt, 6-30 | C, SBK | FI, SS, SP, SEXP | | S | | | S, 0.3 | |
| | | BC, 30-48 | CL, SBK | FR, SS, SP, SEXP | | S | | | S, 0.3 | |
| 2 | L, ~10% | A, 0-4 | SL, GR | VFR, NS, NP | | | | | | 3.6" |
| | | Bt, 4-40 | C, SBK | FI, SS, SP, SEXP | | S | | | S, 0.3 | |
| | | BC, 40-48 | CL, SBK | FR, SS, SP, SEXP | | S | | | S, 0.3 | |
| 3 | L, ~10% | A, 0-6 | SL, GR | VFR, NS, NP | | | | | | 3.6" |
| | | Bt, 6-48 | C, SBK | FI, SS, SP, SEXP | | S | | | S, 0.3 | |

| DESCRIPTION | INITIAL SYSTEM | REPAIR SYSTEM |
|---|---|---|
| Available Space (.0508) | yes | yes |
| System Type(s) | IIb, Accepted | IIIe, PPBPS |
| Site LTAR | 0.3 | 0.3 |
| Maximum Trench Depth | 30" on downhill side | 30" on downhill side |

SITE CLASSIFICATION (.0509): Suitable

EVALUATED BY: Jason Hall, Parker Coats

OTHER(S) PRESENT: _____

Comments: _____

# LEGEND

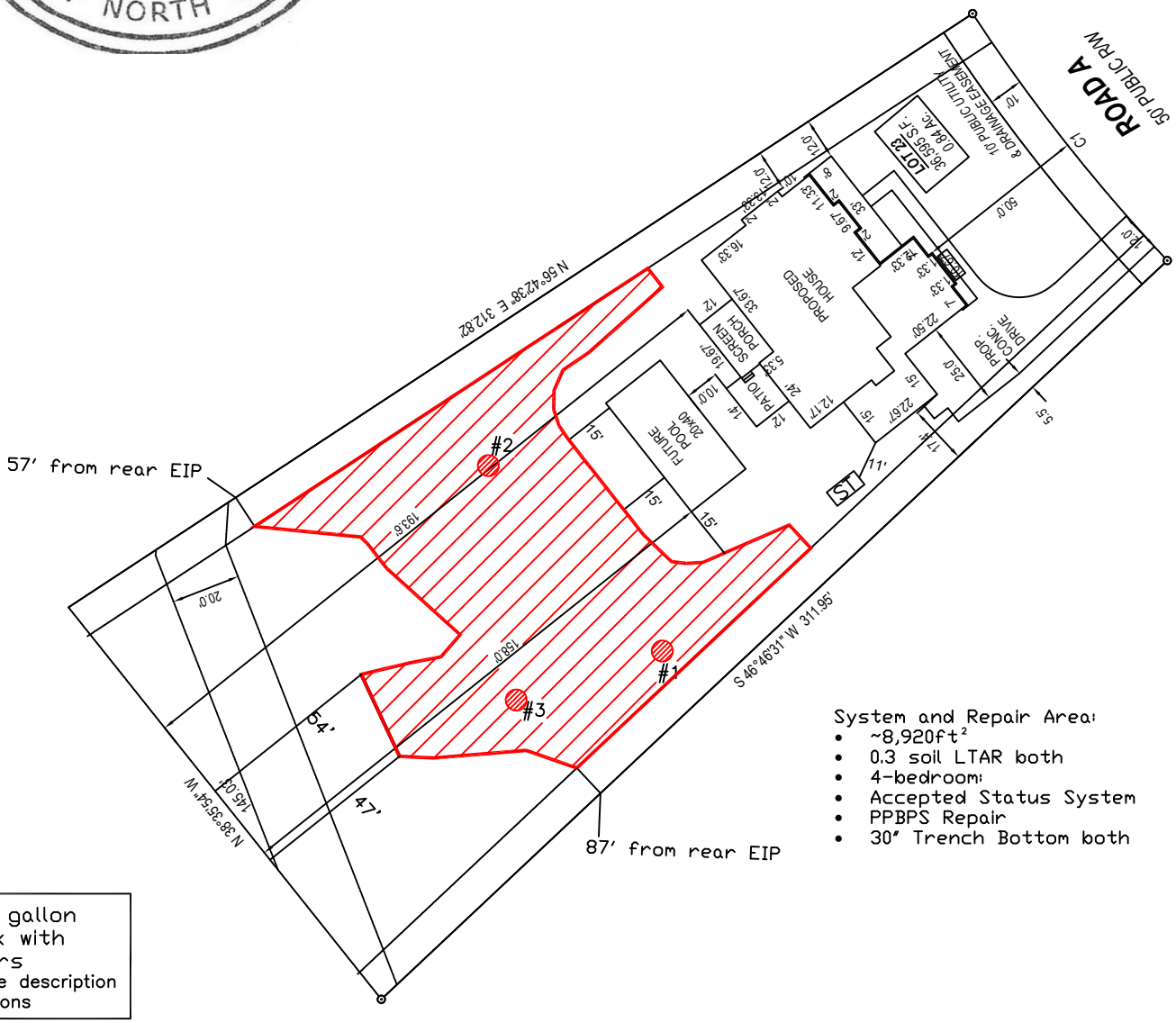
| LANDSCAPE POSITION | SOIL GROUP | SOIL TEXTURE | CONVENTIONAL LTAR (gpd/ft²) | SAPROLITE LTAR (gpd/ft²) | LPP LTAR (gpd/ft²) | MINERALOGY/ CONSISTENCE | | STRUCTURE |
|---|---|---|---|---|---|---|---|---|
| CC (Concave slope) | I | S (Sand) | 0.8 - 1.2 | 0.6 - 0.8 | 0.4 -0.6 | **MOIST** | **WET** | 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 | | EFI (Extremely firm) | SP (Slightly plastic) | PL (Platy) |
| N (Nose slope) | | SiCL (Silty clay loam) | | | | | P (Plastic) | |
| R (Ridge/summit) | | Si (Silt) | | | | | VP (Very plastic) | |
| 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 or auger borings. |
| *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) |

LICENSED SOIL SCIENTIST
JASON M. HALL
1248
STATE OF NORTH CAROLINA

*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.
*No adding soil within septic area
*No rutting-up septic area
*No cuts of >2' within 15' of septic areas




System and Repair Area:
- ~8,920ft²
- 0.3 soil LTAR both
- 4-bedroom
- Accepted Status System
- PPBPS Repair
- 30" Trench Bottom both

ST = 1000 gallon tank with risers
#2 = profile description locations

GRAPHIC SCALE
1" = 50'
50 0 50 100


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


Soil Map
Lot 23, Greenbrook Subdivision
Franklin County, North Carolina

| | |
|---|---|
| Job#: | 5453 |
| Drawn By: | PC |
| Date: | 04/21/2026 |
| Revision: | |